32.—MANUFACTURES

[Data in this section relate to continental United States. For additional statistics regarding food manufacturing industries and mineral manufacturing industries see sections on Farm Animals and Animal Products, Farm Crops and Foodstuffs, and Mining and Mineral Products]

GENERAL NOTE.—Prior to 1899 census statistics of manufactures were collected decennially and from then to 1919 every five years. Beginning with 1921 data are being collected every two years. For the census of 1899 and previous censuses data were collected for both factories and hand and neighborhood industries. For the census years 1904 to 1919, inclusive, factories having products valued at $500 or more were included, but the statistics beginning 1921 (except as to certain major items shown for that year in Table 727 only), relate only to establishments having products valued at $5,000 or more. However, in 1921, establishments having products valued at $500 or more but less than $5,000, while constituting 21.6 per cent of the total number of establishments, employed only six-tenths of 1 per cent of the total number of wage earners, and had an output of only three-tenths of 1 per cent of the total value of products.

The statistics for automobile repairing, collected for 1914 and 1919, have been excluded from Tables 726 to 730. Data for "Coffee and spices, roasting and grinding," have been included, except for 1925, for which year such data were not tabulated for the United States as a whole; and data for "Poultry killing, dressing, and packing, wholesale" are included for all years except 1927, for which year this industry was not canvassed. In Table 726, data for central-administrative-office employees have been excluded for 1923 and later years. The figures for 1914, 1919, and 1921, however, include such data.

Figures for wages, cost of materials, etc., and value of products are greatly affected by changes in the buying power of money or, in other words, by the general levels of prices and wages. Figures of total cost of materials, etc., and total value of products for many individual industries, for all groups of industries, and especially for all industries combined, involve much duplication. This is due to the use of products of a given establishment as material for another in the same or a different industry.

No. 726.—MANUFACTURES: SUMMARY, 1849 TO 1931

	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	Horsepower	Salaries	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture
	In thousands				In millions of dollars				
Factories and hand and neighborhood industries:									
1849	123	(1)	957	(2)	(1)	237	555	1,019	464
1859	140	(1)	1,311	(2)	(1)	379	1,032	1,886	854
1869	252	(1)	2,054	[3] 2,346	(1)	620	1,991	3,386	1,395
1879	254	(1)	2,733	[3] 3,411	(1)	948	3,397	5,370	1,973
1889	355	(1)	4,252	[3] 5,939	(1)	1,891	5,162	9,372	4,210
1899	512	(1)	5,306	[3] 10,098	(1)	2,321	7,344	13,000	5,657
Factories, excluding hand and neighborhood industries and establishments with products valued at less than $500:									
1899	208	364	4,713	(4)	381	2,008	6,576	11,407	4,831
1904	216	520	5,468	[3] 13,488	574	2,610	8,500	14,794	6,294
1909	268	790	6,615	[3] 18,675	939	3,427	12,143	20,672	8,529
1914	273	963	7,024	[3] 22,421	1,274	4,068	14,359	24,217	9,858
Factories, excluding establishments with products valued at less than $5,000:									
1914	177	[5] 963	6,896	[5] 22,291	[5] 1,274	[5] 4,068	14,278	23,988	9,710
1919	214	[5] 1,438	9,000	[5] 29,328	[5] 2,881	[5] 10,462	37,233	62,042	24,809
1921	196	1,146	6,947	(2)	2,563	8,202	25,321	43,653	18,332
1923	196	1,269	8,778	33,094	2,806	11,009	34,706	60,556	25,850
1925	187	1,256	8,384	35,773	2,922	10,730	35,936	62,714	26,778
1927	192	1,301	8,350	38,826	3,230	10,849	35,133	62,718	27,585
1929	211	1,359	8,839	42,931	3,595	11,621	38,550	70,435	31,885
1931	175	(2)	6,523	(2)	(2)	7,186	21,484	41,350	19,867

[1] No comparable data.
[2] Not called for on schedule.
[3] Figures include purchased power other than electric.
[4] Data approximately the same as given for factories and hand and neighborhood industries, as the amount of horsepower used in the latter is small.
[5] Includes data for all establishments reporting products valued at $500 or more. This item was not tabulated separately for establishments reporting products valued between $500 and $5,000.

Source: Bureau of the Census, Department of Commerce.

No. 727.—MANUFACTURES: ESTABLISHMENTS, CLASSIFIED BY VALUE OF PRODUCTS [1]

NOTE.—See general note, p. 692. Data by size of establishments were not compiled for 1927 and 1931

Class of establishments according to value of products	Establishments		Wage earners		Value of products	
	Number	Per cent distribution	Average number	Per cent distribution	Amount	Per cent distribution
Less than $5,000:						
1929	(2)		(2)		(2)	
1925	(2)		(2)		(2)	
1923	(2)		(2)		(2)	
1921	[3] 53,999		[3] 40,924	0.6	[3] $136,926,075	0.3
1919	60,215		41,252	.5	151,631,298	.2
1914	95,408		127,495	1.8	228,653,956	.9
$5,000 and over:						
1929	210,959	100.0	8,838,743	100.0	70,434,863,443	100.0
1925	187,390	100.0	8,384,261	100.0	62,713,713,730	100.0
1923	196,309	100.0	8,778,156	100.0	60,555,998,200	100.0
1921	196,267	100.0	6,946,570	99.4	43,653,282,833	99.7
1919	214,383	100.0	9,000,059	99.5	62,041,795,316	99.8
1914	177,110	100.0	6,896,190	98.2	23,987,860,617	99.1
$5,000 to $20,000:						
1929	69,423	32.9	202,958	2.3	771,417,436	1.1
1925	55,876	29.8	156,373	1.9	628,373,403	1.0
1923	61,981	31.6	189,738	2.2	697,996,736	1.1
1921	71,075	36.2	224,852	3.2	782,977,433	1.8
1919	79,699	37.2	227,977	2.5	866,086,290	1.4
1914	86,587	48.9	423,829	6.0	893,459,166	3.7
$20,000 to $100,000:						
1929	75,225	35.7	693,155	7.8	3,587,697,276	5.1
1925	68,951	36.8	660,309	7.9	3,272,196,872	5.2
1923	72,370	36.9	718,746	8.2	3,426,433,520	5.7
1921	72,251	36.8	746,024	10.7	3,330,350,409	7.6
1919	75,627	35.3	773,701	8.6	3,487,756,280	5.6
1914	56,557	31.9	995,743	14.2	2,540,949,405	10.5
$100,000 to $500,000:						
1929	44,153	20.9	1,672,983	18.9	10,023,771,653	14.2
1925	42,209	22.5	1,675,911	20.0	9,576,090,022	15.3
1923	42,075	21.4	1,721,266	19.6	9,496,592,898	15.7
1921	38,027	19.4	1,629,573	23.3	8,405,758,540	19.2
1919	39,447	18.4	1,712,854	18.9	8,929,364,110	14.4
1914 [4]	30,147	17.0	3,000,612	42.7	8,759,391,117	36.2
$500,000 to $1,000,000:						
1929	10,395	4.9	1,121,547	12.7	7,294,860,945	10.4
1925	9,771	5.2	1,131,439	13.5	6,870,112,293	11.0
1923	9,556	4.9	1,134,897	12.9	6,752,818,172	11.1
1921	7,581	3.9	966,559	13.8	5,296,720,583	12.1
1919	9,197	4.2	1,112,815	12.3	6,457,485,019	10.4
1914	(5)		(5)		(5)	
$1,000,000 and over:						
1929	11,763	5.6	5,148,100	58.3	48,757,116,133	69.2
1925	10,583	5.7	4,760,229	56.7	42,366,941,140	67.5
1923	10,327	5.2	5,013,509	57.1	40,182,156,874	66.4
1921	7,333	3.7	3,379,562	48.4	25,837,475,868	59.0
1919	10,413	4.9	5,172,712	57.2	42,301,103,617	68.0
1914	3,819	2.2	2,476,006	35.3	11,794,060,929	48.7

[1] To make the percentages for the number of establishments comparable, those for all 6 years have been based on the number of establishments reporting products valued at $5,000 or more. The percentages for wage earners and value of products, however, have not been similarly adjusted, the comparability of these percentages having been affected very slightly by the omission of small establishments in 1923, 1925, and 1929.

[2] No data for establishments with products under $5,000 in value have been tabulated for 1923, 1925, and 1929.

[3] The data for the 53,999 establishments in the "Less than $5,000" class are not included in other tables showing statistics for 1921.

[4] Figures include data for the $500,000 to $1,000,000 class.

[5] Data included with the $100,000 to $500,000 class.

Source: Bureau of the Census, Department of Commerce

No. 728.—MANUFACTURES: PRIME MOVERS, MOTORS, AND GENERATORS, NUMBER AND RATED CAPACITY

NOTE.—See general note, p. 692. No data for prime movers were collected for 1931

Year, division, and industry group	Establishments reporting power equipment	Prime movers and electric motors driven by purchased energy									Electric motors driven by energy generated in establishments reporting		Electric generators	
		Aggregate horsepower	Steam engines and turbines		Internal combustion engines		Water wheels and water turbines		Electric motors driven by purchased energy					
			Number	Horsepower	Number	Horsepower	Number	Horsepower	Number	Horsepower	Number	Horsepower	Number	Kilowatts
United States:														
1929	193,969	42,931,061	77,225	17,361,926	11,288	1,233,853	6,523	1,559,618	2,724,843	22,775,664	852,432	12,376,376	17,270	7,793,875
1927	174,118	38,825,681	73,382	16,923,931	12,664	1,170,774	7,594	1,598,666	2,151,675	19,132,310	790,810	11,219,979	19,028	7,345,685
1925	167,649	35,772,628	82,176	16,916,856	14,362	1,186,116	8,393	1,800,828	1,724,180	15,868,828	772,445	10,254,745	23,635	6,887,045
1923	173,475	33,094,228	90,057	16,700,993	15,721	1,224,262	9,293	1,803,310	1,445,003	13,365,663	616,422	8,821,551	(1)	(1)
1929														
New England	16,953	4,686,822	5,828	1,680,519	600	35,738	2,546	742,398	299,089	2,228,167	140,722	1,336,725	2,557	1,010,837
Middle Atlantic	58,812	11,623,682	17,003	4,904,163	2,372	340,381	1,434	248,183	808,620	6,130,955	256,518	3,618,960	4,718	1,955,256
East North Central	42,845	12,602,451	16,694	5,173,593	2,182	409,876	1,008	240,792	812,193	6,778,190	262,181	4,314,421	4,749	2,564,287
West North Central	16,614	2,210,192	5,096	763,032	923	76,394	242	84,658	163,371	1,286,108	37,307	512,188	1,155	387,545
South Atlantic	19,011	4,318,015	12,388	1,744,461	1,827	152,423	384	153,562	255,163	2,267,569	73,840	1,050,273	1,439	778,208
East South Central	9,395	1,999,354	6,962	934,783	1,170	40,090	138	10,096	95,196	1,014,385	26,844	338,983	760	294,894
West South Central	9,919	1,749,555	6,438	860,613	1,227	118,041	17	820	73,906	770,081	16,118	371,123	928	280,322
Mountain	3,974	938,689	1,784	445,035	345	22,400	65	7,386	33,927	463,868	10,308	248,163	339	181,273
Pacific	16,446	2,802,301	5,032	855,727	642	38,510	189	71,723	183,378	1,836,341	28,594	535,540	625	341,254
Food and kindred products	53,457	4,607,913	15,268	1,459,719	3,807	213,859	1,870	102,360	356,621	2,831,975	67,938	642,530	2,854	475,695
Textiles and their products	25,706	4,145,998	3,942	1,572,940	207	18,746	1,560	397,639	486,793	2,156,673	160,246	1,044,623	2,546	973,891
Forest products	24,912	3,674,204	22,057	2,308,514	2,179	64,396	532	48,951	161,803	1,252,343	75,085	900,862	2,038	634,028
Paper and allied products	2,940	3,166,804	3,202	1,316,808	108	19,136	1,725	871,408	68,591	959,452	53,177	1,248,776	1,499	968,021
Printing, publishing, and allied industries	24,072	649,441	417	40,088	207	3,150	5	7	255,791	606,196	8,468	31,002	167	22,615
Chemicals and allied products	6,940	2,312,295	4,619	1,032,488	500	31,369	84	20,289	102,966	1,228,149	53,939	553,039	1,130	451,509
Products of petroleum and coal	1,369	1,755,258	10,104	1,066,904	651	72,954	9	2,300	26,509	613,100	22,031	604,471	463	332,507
Rubber products	509	821,312	370	245,031	10	838	20	3,080	33,266	572,363	11,832	240,921	134	150,569
Leather and its manufactures	4,014	436,342	1,000	188,973	65	5,570	33	6,105	59,127	235,694	15,781	119,994	545	110,021
Stone, clay, and glass products	7,938	2,854,402	2,965	932,769	1,520	97,796	77	25,080	96,430	1,798,757	29,615	312,862	1,019	579,134
Iron, steel, and products, excl. machinery	6,503	9,200,822	6,092	4,778,047	566	610,967	159	19,662	222,667	3,792,146	130,512	4,106,875	1,573	1,761,940
Nonferrous metals and their products	6,522	1,570,217	834	501,330	154	8,645	55	7,194	97,620	1,053,048	23,635	343,572	446	252,357
Machinery, excl. transportation equipment	12,634	3,647,343	2,161	753,381	801	59,674	278	18,855	393,554	2,815,433	101,601	793,463	1,389	480,461
Transportation equipment—air, land, water	2,516	2,271,192	1,353	521,417	220	11,596	19	29,531	196,548	1,708,648	49,949	481,682	440	310,072
Railroad repair shops	1,965	1,153,147	1,892	437,538	102	4,424	5	150	47,460	711,035	19,766	278,247	562	179,664
Miscellaneous	11,972	664,371	949	205,979	191	10,733	92	7,007	119,097	440,652	28,807	173,457	465	111,391

[1] Not called for on schedule.

Source: Bureau of the Census, Department of Commerce.

No. 729.—SUMMARY BY 16 GENERAL GROUPS OF INDUSTRIES

NOTE.—Figures for 1919 include establishments with products under $5,000 in value, see general note, p. 692

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
All industries	1931	175,325	6,523,026	7,185,971	21,483,678	41,350,465	19,866,787	(1)
	1929	210,959	8,838,743	11,620,973	38,549,580	70,434,863	31,885,284	42,931,061
	1927	191,866	8,349,755	10,848,803	35,133,137	62,718,347	27,585,210	38,825,681
	1925	187,390	8,384,261	10,729,969	35,935,648	62,713,714	26,778,066	35,772,628
	1923	196,309	8,778,156	11,009,298	34,705,698	60,555,998	25,850,300	33,094,228
	1921	196,267	6,946,570	8,202,324	25,321,055	43,653,283	18,332,228	(1)
	1919	274,598	9,041,311	10,461,786	37,288,732	62,193,426	24,904,694	29,327,669
1. Food and kindred products.	1931	48,796	650,591	736,958	5,526,680	8,247,734	2,721,055	(1)
	1929	56,320	753,247	902,143	8,632,283	12,023,589	3,391,306	4,607,913
	1927	49,787	679,520	823,388	8,113,433	11,015,860	2,902,427	4,134,973
	1925	48,113	664,760	793,681	7,748,678	10,418,536	2,669,858	3,881,952
	1923	51,847	682,137	795,571	6,990,846	9,524,051	2,533,204	3,723,025
	1921	52,113	626,618	746,266	6,122,933	8,267,130	2,144,197	(1)
	1919	69,423	733,664	774,724	10,252,631	12,748,348	2,495,718	3,203,106
2. Textiles and their products.	1931	23,750	1,420,808	1,238,179	3,019,986	5,849,032	2,829,046	(1)
	1929	27,404	1,707,798	1,733,031	5,103,846	9,243,303	4,139,457	4,145,998
	1927	26,843	1,694,416	1,759,958	4,922,716	8,950,473	4,027,757	4,173,438
	1925	24,450	1,628,283	1,654,814	5,349,925	9,126,155	3,776,230	3,986,522
	1923	26,763	1,715,293	1,743,798	5,394,441	9,462,282	4,067,841	3,783,401
	1921	25,955	1,509,738	1,472,352	3,801,090	6,956,465	3,155,375	(1)
	1919	28,451	1,610,003	1,481,143	5,379,388	9,210,933	3,831,545	3,248,364
3. Forest products	1931	16,171	516,793	448,702	783,711	1,687,746	904,035	(1)
	1929	26,912	876,383	939,383	1,586,183	3,591,765	2,005,582	3,674,204
	1927	20,169	864,508	931,921	1,636,647	3,462,925	1,826,278	3,332,457
	1925	21,926	921,266	978,472	1,725,351	3,689,127	1,963,776	3,472,970
	1923	21,678	931,816	962,595	1,666,395	3,633,386	1,966,991	3,336,236
	1921	21,398	703,360	670,462	1,197,628	2,456,857	1,259,229	(1)
	1919	41,201	864,001	859,872	1,368,341	3,113,460	1,745,119	3,409,746
4. Paper and allied products.	1931	2,883	194,581	214,337	758,010	1,357,582	599,572	(1)
	1929	3,126	233,393	287,331	1,092,722	1,892,251	799,529	3,166,804
	1927	2,972	224,437	272,154	1,082,363	1,785,998	703,634	2,813,694
	1925	2,727	221,502	263,097	919,657	1,546,814	627,157	2,574,707
	1923	2,685	219,026	250,144	878,764	1,456,970	578,206	2,313,562
	1921	2,600	184,756	202,703	669,070	1,071,800	402,730	(1)
	1919	2,677	208,115	212,724	720,908	1,250,445	529,537	1,967,446
5. Printing, publishing, and allied industries.	1931	24,918	316,769	538,011	581,021	2,497,214	1,916,194	(1)
	1929	27,522	357,988	636,371	766,484	3,170,140	2,403,656	649,441
	1927	25,433	328,603	586,183	755,038	2,859,860	2,104,823	569,528
	1925	23,826	315,264	542,419	694,577	2,596,871	1,902,294	486,087
	1923	23,114	307,993	492,906	665,654	2,315,318	1,649,664	429,967
	1921	22,777	282,500	434,728	663,300	2,078,764	1,415,464	(1)
	1919	33,747	301,934	351,998	587,294	1,764,387	1,177,093	379,236
6. Chemicals and allied products.[2]	1931	7,485	231,463	264,721	1,268,973	2,673,325	1,404,352	(1)
	1929	8,278	280,868	354,393	1,970,713	3,759,405	1,788,691	2,312,295
	1927	7,541	253,436	317,908	1,803,085	3,351,892	1,548,808	1,848,309
	1925	7,282	244,812	296,526	1,830,592	3,211,230	1,380,639	1,748,481
	1923	7,197	246,527	288,834	1,702,944	2,933,562	1,230,617	1,654,228
	1921	7,348	199,596	224,333	1,352,904	2,225,917	873,013	(1)
	1919	10,732	329,053	364,884	2,269,338	3,803,753	1,534,414	1,720,521
7. Products of petroleum and coal.	1931	1,317	120,146	182,368	1,551,734	2,264,817	713,083	(1)
	1929	1,497	147,216	229,050	2,546,840	3,647,748	1,100,908	1,755,258
	1927	1,418	141,655	217,485	2,262,699	3,060,226	797,527	1,513,314
	1925	1,582	136,366	210,034	2,356,583	3,230,009	873,425	1,241,877
	1923	1,650	138,330	212,882	1,981,370	2,778,888	797,518	1,092,914
	1921	1,560	115,006	180,452	1,760,805	2,372,039	611,235	(1)
	1919	1,684	131,759	185,599	1,635,920	2,289,170	653,250	709,597

[1] Not called for on schedule.
[2] The comparability of the figures for 1919 with those for later years is affected by the decrease in the legal manufacture of alcoholic beverages resulting from the enactment of the national prohibition act.

No. 729.—Summary by 16 General Groups of Industries—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
8. Rubber products	1931	453	99,259	112,596	252,867	614,265	361,398	(1)
	1929	525	149,148	207,306	578,678	1,117,460	538,783	821,312
	1927	516	141,997	198,074	660,370	1,225,077	564,707	790,622
	1925	530	141,869	191,286	721,730	1,260,805	539,075	659,691
	1923	529	137,868	182,084	501,163	958,518	457,355	605,634
	1921	496	103,273	123,613	377,879	704,903	327,024	(1)
	1919	477	158,549	193,763	594,344	1,138,216	543,872	429,273
9. Leather and its manufactures.	1931	3,702	272,757	262,130	666,200	1,189,876	523,676	(1)
	1929	4,285	318,472	359,461	1,132,022	1,906,201	774,179	436,424
	1927	4,272	316,081	364,537	1,088,816	1,869,615	780,799	419,843
	1925	4,252	314,128	355,419	1,013,013	1,764,017	751,005	413,331
	1923	4,880	344,745	388,811	1,083,647	1,880,828	797,181	413,332
	1921	4,827	280,363	314,652	934,825	1,545,207	610,382	(1)
	1919	6,423	350,079	364,036	1,714,904	2,613,217	898,313	383,390
10. Stone, clay, and glass products.	1931	6,408	222,856	248,860	316,468	925,318	608,850	(1)
	1929	8,515	328,417	432,817	526,340	1,561,415	1,035,075	2,854,402
	1927	8,673	350,017	464,273	594,774	1,612,549	1,017,774	2,709,131
	1925	8,478	353,036	467,012	603,427	1,640,652	1,037,225	2,348,157
	1923	8,317	351,692	453,567	573,472	1,563,121	989,648	1,936,054
	1921	8,347	252,990	307,065	428,259	1,033,091	604,832	(1)
	1919	12,599	302,810	332,726	422,611	1,111,746	689,135	1,584,917
11. Iron and steel and their products, not including machinery.	1931	5,965	597,953	705,125	1,806,370	3,277,406	1,471,035	(1)
	1929	6,640	880,882	1,380,987	3,862,873	7,137,928	3,275,056	9,200,822
	1927	6,340	834,967	1,263,812	3,544,615	6,197,595	2,652,980	8,322,730
	1925	6,063	850,783	1,283,841	3,734,085	6,460,222	2,726,138	7,518,726
	1923	6,353	892,185	1,324,173	4,152,741	6,827,670	2,674,929	7,259,009
	1921	6,251	571,426	730,875	2,140,171	3,455,541	1,315,370	(1)
	1919	7,617	857,764	1,243,726	3,423,280	5,887,844	2,464,564	6,429,697
12. Nonferrous metals and their products.	1931	6,310	208,855	240,177	862,187	1,449,262	587,074	(1)
	1929	7,522	314,741	443,467	2,465,444	3,597,058	1,131,614	1,570,217
	1927	6,761	272,667	383,185	1,783,213	2,677,107	893,894	1,226,411
	1925	7,006	276,616	382,652	1,948,438	2,839,550	891,112	1,162,140
	1923	7,501	297,798	395,079	1,767,638	2,637,160	869,522	1,171,192
	1921	7,853	212,680	256,893	886,265	1,408,059	521,795	(1)
	1919	10,441	304,768	359,171	1,737,234	2,519,032	781,798	953,109
13. Machinery, not including transportation equipment.	1931	11,184	686,706	786,936	1,195,166	3,364,864	2,169,698	(1)
	1929	12,955	1,091,269	1,634,166	2,694,380	7,043,380	4,349,001	3,647,343
	1927	11,982	883,508	1,284,133	2,053,942	5,348,724	3,294,782	2,995,296
	1925	11,807	858,843	1,225,359	1,985,367	5,020,281	3,034,914	2,714,377
	1923	12,147	907,707	1,253,743	1,891,524	4,727,818	2,836,294	2,300,443
	1921	12,395	662,277	832,783	1,361,163	3,235,075	1,873,912	(1)
	1919	14,821	998,484	1,240,487	1,973,458	4,768,673	2,795,216	2,060,325
14. Transportation equipment, air, land, and water.	1931	2,058	373,759	468,609	1,736,928	2,898,626	1,161,698	(1)
	1929	2,550	583,355	943,222	3,683,148	6,047,209	2,364,061	2,271,192
	[3] 1927	2,537	494,905	803,298	2,907,949	4,693,972	1,786,022	2,027,686
	1925	2,778	559,578	908,488	3,389,101	5,451,753	2,062,652	1,888,961
	1923	3,873	606,328	963,939	3,394,505	5,333,479	1,938,975	1,624,468
	1921	4,273	405,773	591,334	1,803,011	3,018,154	1,215,143	(1)
	1919	6,768	858,582	1,259,014	3,200,602	5,627,263	2,426,661	1,453,804
15. Railroad repair shops.	1931	2,167	309,034	435,248	298,824	740,763	441,939	(1)
	1929	2,297	398,156	637,311	548,344	1,269,917	721,573	1,153,147
	1927	2,309	428,672	648,908	545,492	1,289,695	744,203	1,110,821
	1925	2,363	457,755	668,192	563,646	1,332,679	769,033	942,248
	1923	2,348	523,430	772,968	631,358	1,520,093	888,734	798,005
	1921	2,326	418,285	671,956	506,571	1,267,343	760,771	(1)
	1919	2,368	515,709	726,690	547,829	1,354,446	806,617	644,875
16. Miscellaneous industries.	1931	11,758	300,696	303,015	858,553	2,312,635	1,454,081	(1)
	1929	14,612	417,410	500,534	1,359,280	3,426,095	2,066,815	664,289
	1927	14,313	440,366	529,587	1,377,985	3,316,780	1,938,795	837,428
	1925	14,207	439,400	508,677	1,351,478	3,125,011	1,773,533	732,401
	1923	15,427	475,281	528,205	1,429,234	3,002,855	1,573,621	701,177
	1921	15,748	417,929	441,860	1,315,180	2,556,937	1,241,757	(1)
	1919	25,169	516,037	511,230	1,460,650	2,992,492	1,531,842	750,263

[1] Not called for on schedule.
[3] The decrease in the 1927 figures was chiefly due to practical ceasing of operations of a large company for a few months of the year.

Source: Bureau of the Census, Department of Commerce.

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES

NOTE.—The figures given in this table do not represent exactly the numbers of wage earners, values of products, etc., assignable to the classes of commodities from which the industries derive their names, as it is necessary for census purposes to classify each establishment as a whole in some one industry, according to its product of chief value, although in many cases a single establishment manufactures two or more classes of commodities. The figures for cost of materials and value of products for each group and each subgroup include considerable duplication due to the use of the products of one industry as the materials for another, and in some cases similar duplication occurs within an industry. No data for horsepower were collected for 1931. For totals for all industries and for 16 great groups see Table 729. Five census years have been shown for all industries that reported $200,000,000 or more in value of products or over 50,000 wage earners in 1929, and three census years for other industries, except as indicated by footnotes

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
FOOD AND KINDRED PRODUCTS								
Animal products, total.	1931	11,922	171,093	208,922	2,671,813	3,353,725	681,912	----------
	1929	12,761	201,745	262,186	4,263,957	5,148,496	884,539	1,091,228
	1927	11,774	189,645	249,881	3,815,254	4,563,036	747,782	965,363
	1925	11,863	189,933	245,304	3,752,515	4,498,931	746,416	875,878
	1923	12,576	205,058	255,860	3,260,761	3,977,645	716,884	785,494
Butter	1931	3,367	15,667	18,623	393,228	463,472	70,245	----------
	1929	3,527	19,097	24,198	635,874	746,418	110,544	164,413
	1927	3,519	20,096	25,533	637,337	739,011	101,674	145,973
	1925	3,493	17,758	22,263	603,397	683,593	80,196	126,872
	1923	3,653	20,312	24,950	549,558	640,474	90,916	126,351
Cheese	1931	2,371	2,964	3,564	54,081	68,072	13,991	----------
	1929	2,758	3,401	4,588	92,727	110,645	17,918	24,739
	1927	2,738	3,520	4,897	100,788	118,448	17,660	20,976
Condensed and evaporated milk	1931	485	6,121	7,256	109,397	148,598	39,201	----------
	1929	535	7,065	8,796	163,787	209,110	45,323	85,258
	1927	464	7,390	9,191	159,680	200,086	40,406	63,969
	1925	402	7,118	8,391	140,041	171,247	31,206	53,937
	1923	378	8,293	10,126	153,996	187,111	33,115	48,300
Ice cream	1931	2,948	17,819	25,416	110,504	268,515	158,011	----------
	1929	3,150	22,399	33,803	155,964	328,414	172,450	230,882
	1927	2,961	21,927	33,108	150,602	301,645	151,043	206,315
	1925	2,700	23,043	33,457	140,864	286,176	145,312	189,328
	1923	2,762	23,132	32,435	145,307	259,967	114,660	169,730
Meat packing, wholesale.	1931	1,209	106,707	134,530	1,839,260	2,180,823	341,564	----------
	1929	1,277	122,505	165,867	2,974,128	3,434,654	460,526	524,989
	1927	1,250	119,095	161,584	2,663,740	3,057,216	393,475	489,576
	1925	1,269	120,422	159,355	2,625,192	3,050,286	425,094	441,516
	1923	1,397	132,792	167,569	2,176,010	2,585,804	409,794	382,127
Poultry killing, dressing, and packing, wholesale.[1]	1931	497	6,982	5,944	77,667	97,560	19,893	----------
	1929	485	7,769	7,285	106,866	130,161	23,296	13,500
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments.	1931	741	6,242	8,366	59,272	84,333	25,060	----------
	1929	681	5,897	8,850	81,372	108,246	26,875	25,755
	1927	505	4,967	7,464	60,216	81,548	21,333	19,980
Canned and preserved fish, crabs, shrimps, oysters, and clams.	1931	304	8,591	5,222	28,404	42,352	13,948	----------
	1929	348	13,612	8,799	53,240	80,849	27,609	21,692
	1927	337	12,650	8,106	42,892	65,082	22,191	18,574
Vegetable products and beverages, total.	1931	36,874	479,498	528,036	2,854,867	4,894,009	2,039,143	----------
	1929	43,559	551,502	639,957	4,368,326	6,875,093	2,506,767	3,516,685
	1927	38,013	489,875	573,506	4,298,179	6,452,824	2,154,645	3,169,610
	1925	36,250	474,827	548,377	3,996,163	5,919,606	1,923,443	3,006,074
	1923	39,271	477,079	539,711	3,730,085	5,546,406	1,816,321	2,937,531
Canned and dried fruits and vegetables; preserves, jellies, fruit butters, pickles, and sauces.	1931	2,535	80,184	54,001	322,005	513,001	190,996	----------
	1929	2,997	98,866	74,979	462,062	750,342	288,280	224,097
	1927	2,436	80,924	62,310	355,186	572,346	217,160	189,831
	1925	2,403	85,866	67,427	385,573	616,071	230,497	187,490
	1923	2,438	72,534	57,153	298,969	515,316	216,347	175,714
Chocolate and cocoa products, not including confectionery.	1931	55	5,677	6,649	50,045	87,346	37,301	----------
	1929	59	6,249	7,778	79,549	119,541	39,991	63,236
	1927	69	6,427	7,339	90,423	122,723	32,300	62,742
Coffee and spices, roasting and grinding.[2]	1931	917	8,719	9,741	195,532	271,495	75,963	----------
	1929	928	9,053	10,606	332,150	424,345	92,195	45,465
	1927	784	8,195	9,537	284,653	384,281	99,629	42,542
	1923	729	9,665	10,016	224,843	297,528	72,684	37,358

[1] Because of a change in classification, no comparable figures can be shown for earlier years.
[2] No data were compiled for 1925, except for San Francisco, Calif.

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
FOOD AND KINDRED PRODUCTS—Contd.								
Confectionery	1931	1,566	51,262	42,153	144,748	284,157	139,409	
	1929	2,021	63,501	56,443	215,192	393,270	178,077	112,644
	1927	1,908	63,163	56,081	218,373	391,927	173,555	110,595
	1925	1,931	63,600	55,235	205,433	379,081	173,649	100,455
	1923	2,014	63,485	54,882	202,719	366,256	163,537	91,455
Chewing gum	1931	35	2,147	2,464	16,824	51,340	34,516	
	1929	37	2,265	2,733	23,231	60,160	36,929	10,350
	1927	40	2,524	2,727	27,168	62,001	34,834	10,097
Flavoring extracts and flavoring sirups.	1931	626	5,204	6,877	48,575	119,238	70,663	
	1929	642	5,041	7,071	55,518	129,086	73,568	33,838
	1927	500	5,011	7,134	51,091	107,219	56,129	27,963
Flour and other grain-mill products.	1931	2,412	22,840	27,298	461,091	598,041	136,950	
	1929	4,022	27,028	35,072	868,873	1,060,269	191,397	641,456
	1927	4,035	29,982	37,559	972,711	1,148,760	176,049	641,608
	1925	4,413	31,988	39,700	1,125,379	1,298,015	172,636	669,910
	1923	5,232	35,194	41,704	885,972	1,048,578	162,606	709,856
Bread and other bakery products.	1931	17,718	183,161	239,331	505,477	1,190,048	684,571	
	1929	20,785	200,841	274,562	737,100	1,526,111	789,011	355,523
	1927	18,129	171,995	236,226	693,236	1,394,700	701,464	284,244
	1925	17,684	160,411	219,606	668,017	1,268,195	600,178	227,286
	1923	18,739	162,613	214,579	574,521	1,122,906	548,386	193,186
Feeds, prepared, for animals and fowls.[1]	1931	796	8,449	9,402	162,734	209,921	47,187	
	1929	750	10,223	12,822	327,920	402,753	74,833	170,482
	1927	447	7,632	9,703	244,676	299,793	55,117	115,855
Macaroni, spaghetti, vermicelli, and noodles.	1931	309	4,764	4,474	20,311	36,225	15,914	
	1929	353	5,072	5,384	27,336	47,074	19,738	24,448
	1927	353	4,587	5,071	27,434	45,353	17,919	21,406
Oleomargarine and other margarines, not made in meat-packing establishments.	1931	32	1,043	1,352	15,269	22,818	7,548	
	1929	41	1,534	2,264	30,890	46,522	15,632	6,670
	1927	36	1,502	2,258	27,145	39,282	12,137	8,746
Food preparations, not elsewhere classified.	1931	782	8,939	9,120	90,171	147,546	57,375	
	1929	862	10,616	11,658	96,388	171,861	75,473	36,716
	1927	674	10,294	11,387	98,249	166,965	68,716	34,773
Corn sirup, corn sugar, corn oil, and starch.	1931	43	6,652	7,963	54,034	98,723	44,690	
	1929	35	6,730	9,873	104,285	165,984	61,699	84,686
	1927	26	6,972	10,490	90,906	134,461	43,555	81,003
Peanuts, walnuts, and other nuts, processed.	1931	153	7,606	2,998	29,413	40,568	11,155	
	1929	169	7,933	3,080	39,529	49,609	10,079	16,193
	1927	144	7,376	3,287	45,890	55,950	10,059	13,956
Rice cleaning and polishing.	1931	55	1,503	1,276	31,813	40,360	8,547	
	1929	60	1,589	1,449	38,444	48,794	10,350	22,901
	1927	60	1,524	1,546	46,481	54,130	7,649	23,012
Shortenings (other than lard), vegetable cooking oils, and salad oils.	1931	50	3,692	4,011	99,841	115,302	15,461	
	1929	40	2,712	3,004	139,031	154,553	15,522	36,647
	1927	33	2,655	2,624	137,079	148,468	11,389	33,462
Sugar, beet	1931	67	6,241	7,548	62,325	85,673	23,348	
	1929	82	7,496	10,021	70,960	108,553	37,592	146,393
	1927	79	7,402	9,710	79,017	104,927	25,910	142,023
Sugar, cane, not including products of refineries.	1931	68	2,032	1,333	10,008	13,981	3,973	
	1929	70	2,319	1,642	12,223	18,326	6,103	66,779
	1927	53	971	639	5,830	8,009	2,179	45,705
Sugar refining, cane	1931	19	11,855	15,547	335,933	395,303	59,370	
	1929	21	13,912	17,850	438,399	507,389	68,990	98,637
	1927	21	13,996	17,707	551,594	597,446	45,851	86,979
	1925	21	14,502	18,955	549,896	606,633	56,737	89,098
	1923	20	15,254	20,044	681,880	726,242	44,361	72,682
Malt	1931	27	540	866	13,920	19,242	5,322	
	1929	28	590	1,057	18,924	23,603	4,679	18,098
	1927	23	500	904	17,187	20,274	3,087	15,390

[1] Because of a change in classification, no comparable figures can be shown for earlier years.

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
FOOD AND KINDRED PRODUCTS—Contd.								
Vinegar and cider	1931	137	848	885	4,249	7,506	3,257	----------
	1929	172	979	1,022	6,016	10,450	4,434	8,674
	1927	158	1,123	1,236	5,858	10,755	4,897	7,562
Cereal preparations	1931	111	7,018	9,005	69,427	141,583	72,157	----------
	1929	121	6,488	8,876	101,472	175,223	73,752	66,291
	1927	77	6,028	8,417	91,748	155,563	63,815	50,979
Beverages	1931	4,250	23,905	30,082	76,045	212,567	136,522	----------
	1929	5,154	28,281	38,314	103,026	270,324	167,298	149,166
	1927	4,769	26,972	36,101	95,430	242,694	147,264	153,731
	1925	4,210	27,384	36,053	98,466	237,761	139,295	168,865
	1923	4,514	29,274	37,689	99,572	228,730	129,158	221,292
Ice, manufactured	1931	4,111	25,217	33,656	35,078	192,027	156,949	----------
	1929	4,110	32,184	42,399	39,808	210,952	171,144	1,077,295
	1927	3,159	22,120	32,611	40,816	184,795	143,979	965,406
	1925	3,077	24,915	35,046	44,725	186,969	142,244	923,134
	1923	3,097	26,852	35,040	46,664	164,662	117,998	845,012
TEXTILES AND THEIR PRODUCTS								
Textile-mill products, total.[3]	1931	6,111	886,979	744,568	1,495,283	2,964,558	1,469,275	----------
	1929	6,974	1,096,163	1,052,971	2,820,993	5,043,171	2,222,178	3,843,398
	1927	7,244	1,119,733	1,099,735	2,762,674	4,933,282	2,170,607	3,906,023
	1925	7,470	1,110,209	1,066,262	3,234,035	5,342,617	2,108,583	3,748,885
	1923	7,816	1,164,638	1,122,751	3,213,272	5,527,557	2,314,285	3,556,440
Cotton goods	1931	1,140	329,962	219,680	404,855	805,792	400,937	----------
	1929	1,281	424,916	324,289	898,029	1,524,177	626,148	2,269,346
	1927	1,347	467,596	380,910	871,592	1,567,401	695,809	[4] 2,328,830
	1925	1,366	445,184	353,883	1,077,153	1,714,368	637,215	2,236,363
	1923	1,375	471,503	396,603	1,147,372	1,901,126	753,753	2,153,299
Cotton small wares	1931	174	12,826	11,617	19,693	41,991	22,298	----------
	1929	202	15,281	15,449	33,636	65,170	31,534	27,308
	1927	220	14,958	15,333	32,222	64,820	32,598	29,205
Lace goods	1931	42	6,043	6,289	6,123	19,162	13,040	----------
	1929	42	6,854	7,670	10,112	29,237	19,125	10,466
	1927	43	6,482	7,585	11,392	27,298	15,906	11,309
Knit goods	1931	1,706	178,011	149,589	284,053	585,677	301,624	----------
	1929	1,888	208,488	210,714	456,701	899,717	443,016	181,879
	1927	1,869	190,283	188,163	424,099	816,620	392,521	177,216
	1925	1,987	186,668	168,683	453,926	809,960	356,034	176,630
	1923	2,323	194,244	168,272	484,020	848,177	364,157	183,675
Silk and rayon goods	1931	1,211	109,225	97,409	212,847	422,772	209,925	----------
	1929	1,491	130,467	137,547	412,181	731,200	319,019	220,225
	1927	1,648	127,643	140,054	445,391	750,124	304,733	221,249
	1925	1,659	132,509	142,734	484,123	808,979	324,857	212,609
	1923	1,598	125,234	126,849	479,038	761,322	282,284	206,020
Woolen goods	1931	381	42,878	42,999	83,050	157,356	74,305	----------
	1929	460	58,474	66,014	165,882	290,939	125,057	195,247
	1927	471	61,790	72,156	172,700	301,309	128,609	191,703
	1925	503	67,056	82,436	219,618	361,524	141,906	193,080
	1923	513	72,408	87,314	201,548	364,288	162,740	180,657
Worsted goods	1931	240	76,659	74,584	195,617	338,887	143,270	----------
	1929	264	88,485	98,138	336,649	536,067	199,418	372,536
	1927	288	92,571	101,666	329,408	516,670	187,262	364,422
	1925	329	98,168	108,835	400,784	596,266	195,483	377,215
	1923	338	122,144	135,671	421,184	698,271	277,086	357,808
Felt goods, wool, hair, or jute.	1931	53	4,430	5,072	12,918	28,192	15,274	----------
	1929	54	5,540	7,531	26,224	45,466	19,242	25,655
	1927	50	5,452	6,653	23,289	41,895	18,606	23,479
Hats, wool-felt	1931	9	1,543	1,390	2,283	5,432	3,149	----------
	1929	14	2,028	2,315	4,678	9,056	4,377	2,811
	[4] 1927	12	2,113	2,190	4,490	8,807	4,317	2,405
Hats, fur-felt	1931	138	14,084	16,538	29,509	59,616	30,107	----------
	1929	159	16,539	22,503	55,298	102,004	46,706	19,894
	[4] 1927	139	15,896	22,855	51,053	99,185	48,132	20,517

[3] Figures for 1929 and prior years include "Flax and hemp, dressed," treated as a quasi-agricultural industry at the census for 1931.
[4] Revised; revision not carried into total.

No. 730.—Manufactures: Summary for Individual Industries—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
TEXTILES AND THEIR PRODUCTS—Contd.								
Carpets and rugs, wool, other than rag.	1931	61	22,903	24,109	38,876	88,204	49,328	----------
	1929	67	32,623	40,014	86,651	176,915	90,264	65,205
	1927	65	32,829	42,041	85,602	166,888	81,287	65,828
Wool shoddy	1931	40	1,069	1,122	3,332	5,952	2,620	----------
	1929	50	1,762	2,109	10,127	15,345	5,218	15,940
	1927	55	1,679	1,916	7,981	12,597	4,616	15,353
Wool pulling	1931	14	640	915	5,359	7,378	2,019	----------
	1929	18	596	907	10,917	13,648	2,731	1,847
	1927	18	524	769	12,466	14,640	2,174	2,403
Wool scouring	1931	21	1,377	1,968	1,160	4,640	3,480	----------
	1929	21	1,302	1,771	3,022	6,241	3,220	8,241
	1927	25	1,386	1,982	3,010	6,662	3,652	7,935
Cordage and twine	1931	117	11,087	8,627	24,402	47,557	23,155	----------
	1929	123	14,489	12,834	54,573	91,455	36,882	73,021
	1927	116	15,084	13,674	56,105	89,172	33,067	74,924
Jute goods	1931	20	3,785	2,881	5,824	12,791	6,967	----------
	1929	20	4,931	4,276	11,968	21,870	9,902	35,079
	1927	23	5,358	4,987	11,802	23,186	11,384	36,210
Linen goods	1931	14	1,567	1,417	2,510	5,226	2,716	----------
	1929	16	2,195	2,185	5,214	9,737	4,522	11,006
	1927	18	2,530	2,545	5,409	10,377	4,968	11,473
Mats and matting, grass and coir.	1931	6	311	258	297	875	578	----------
	1929	7	467	440	685	1,692	1,007	1,293
	1927	7	422	398	669	1,537	868	1,425
Haircloth	1931	13	400	417	1,395	2,425	1,030	----------
	1929	13	450	527	2,551	3,855	1,305	1,113
	1927	16	385	480	2,689	3,616	927	1,312
Dyeing and finishing textiles.	1931	666	67,603	76,577	161,099	322,187	161,088	----------
	1929	732	79,327	94,245	235,712	465,821	230,108	304,057
	1927	743	73,851	91,697	210,681	406,047	195,366	287,212
	1925	697	70,749	83,983	220,678	408,515	187,837	252,701
	1923	713	63,414	72,525	199,156	366,623	167,467	204,128
Cloth sponging and refinishing.	1931	45	576	1,107	81	2,447	2,366	----------
	1929	46	902	1,457	88	3,361	3,273	800
	1927	52	736	1,502	161	3,458	3,297	933
Wearing apparel made from purchased fabrics, *total.*	1931	13,837	472,168	433,473	1,299,110	2,488,861	1,189,751	----------
	1929	16,195	536,561	596,659	1,867,042	3,536,041	1,668,999	137,880
	1927	15,486	501,656	578,152	1,771,890	3,391,881	1,619,990	126,723
	1925	*14,883*	*466,846*	*534,823*	*1,174,618*	*3,243,849*	*1,502,231*	*119,744*
	1923	16,904	499,413	568,139	1,852,229	3,443,940	1,591,711	132,317
Clothing (except work clothing), men's youths', and boys', not elsewhere classified.	1931	2,945	121,964	115,041	263,675	551,416	287,741	----------
	1929	3,691	149,868	179,769	440,505	901,104	460,599	40,325
	1927	3,562	146,099	184,613	447,245	932,182	484,937	34,351
	1925	3,491	141,511	179,045	471,501	946,274	474,773	33,207
	1923	4,024	158,173	207,252	483,927	1,016,722	532,795	40,250
Clothing (work, including sheep-lined and blanket-lined coats, but not including shirts), men's.	1931	468	33,088	20,452	51,929	88,569	36,639	----------
	1929	511	38,201	26,647	83,552	138,450	54,898	11,492
	1927	556	40,612	29,946	85,134	147,289	62,155	11,218
Clothing, men's, buttonholes.	1931	26	222	176	34	313	279	----------
	1929	32	292	314	61	574	513	104
	1927	40	412	429	98	918	820	132
Shirts	1931	781	57,755	33,152	81,379	166,840	85,461	----------
	1929	863	59,830	43,428	116,678	228,322	111,643	17,040
	1927	907	57,216	42,998	129,744	241,650	111,906	14,916
	1925	840	49,864	35,674	129,754	225,963	96,209	13,884
	1923	934	51,672	37,943	139,354	241,331	101,977	14,050
Furnishing goods, men's, not elsewhere classified.	1931	573	24,034	17,339	54,221	98,918	44,697	----------
	1929	598	26,588	23,009	83,632	150,964	67,332	7,036
	1927	534	25,183	22,070	82,839	145,474	62,635	7,190
Collars, mens'	1931	16	2,048	1,419	2,788	6,684	3,897	----------
	1929	15	2,952	2,263	3,630	8,740	5,110	1,281
	1927	24	3,270	2,967	5,867	13,264	7,398	3,131

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
TEXTILES AND THEIR PRODUCTS—Contd.								
Gloves and mittens, cloth or cloth and leather combined, made from purchased fabrics.	1931	106	7,101	3,319	8,912	14,539	5,627	----------
	1929	125	9,279	5,914	19,289	29,883	10,594	3,702
	1927	131	10,296	6,670	17,392	30,202	12,810	4,112
Suspenders, garters, and other elastic woven goods, made from purchased webbing.	1931	71	3,257	2,443	9,995	17,165	7,170	----------
	1929	91	4,341	3,971	17,906	30,473	12,567	1,180
	1927	91	4,061	3,529	16,260	26,985	10,726	983
Hats and caps, except, felt and straw, men's.	1931	379	3,459	3,662	8,173	16,867	8,694	----------
	1929	576	5,826	7,694	16,908	35,901	18,993	1,796
	1927	568	6,300	9,126	20,702	41,214	20,512	1,999
Clothing, women's, not elsewhere classified.	1931	7,046	173,890	189,187	704,259	1,292,253	587,994	----------
	1929	8,082	187,500	243,851	934,414	1,709,581	775,167	35,291
	1927	7,588	154,459	211,350	809,520	1,494,401	684,881	30,287
	1925	6,127	126,466	175,045	724,299	1,293,705	569,406	24,316
	1923	7,046	133,195	176,446	809,561	1,406,684	597,123	27,704
Corsets and allied garments.	1931	204	13,977	11,496	31,694	71,923	40,229	----------
	1929	213	13,664	12,446	36,035	76,802	40,767	6,048
	1927	222	13,778	12,402	35,394	77,218	41,824	7,819
Handkerchiefs	1931	88	4,761	3,221	10,255	18,798	8,543	----------
	1929	105	6,014	4,636	16,343	29,554	13,211	2,409
	1927	115	6,659	5,264	18,205	31,588	13,383	2,665
Millinery	1931	1,134	26,612	32,565	71,795	144,575	72,780	----------
	1929	1,293	32,206	42,715	98,090	195,693	97,604	10,176
	1927	1,148	33,311	46,788	103,490	209,495	106,005	7,920
Other articles made from purchased fabrics, total.	1931	3,802	61,661	60,138	225,593	395,613	170,019	----------
	1929	4,235	75,074	83,402	415,811	664,091	248,280	164,720
	1927	4,113	73,027	82,071	388,151	625,310	237,159	140,692
	1925	2,097	51,228	53,729	374,272	539,689	165,417	117,893
	1923	2,043	51,242	52,908	328,941	490,785	161,844	94,644
Awnings, tents, sails, and canvas covers.	1931	913	5,351	6,397	15,106	31,697	16,591	----------
	1929	1,002	7,162	8,559	25,328	49,238	23,909	4,995
	1927	963	6,543	8,229	24,410	47,929	23,520	4,850
Bags, other than paper, not made in textile mills.	1931	189	11,985	9,111	79,173	104,991	25,818	----------
	1929	202	11,828	9,645	144,275	170,176	25,900	19,159
	1927	181	11,164	9,548	136,748	162,950	26,201	15,754
Belting, other than leather and rubber, not made in textile mills.	1931	8	193	180	553	1,138	586	----------
	1929	9	255	299	1,328	2,789	1,461	1,648
	1927	11	343	411	1,490	3,212	1,722	1,457
Embroideries	1931	732	5,561	6,330	4,538	20,224	15,687	----------
	1929	813	6,622	7,868	6,609	25,287	18,678	2,279
	1927	1,069	8,964	10,962	7,960	32,419	24,459	2,930
Trimmings (not made in textile mills) and stamped art goods for embroidering.[1]	1931	520	6,212	6,853	13,824	30,308	16,485	----------
	1929	639	7,934	9,762	20,783	45,180	24,397	3,068
Horse blankets, fly nets, and related products.	1931	9	387	228	618	1,134	516	----------
	1929	14	582	498	1,471	2,895	1,424	1,375
	1927	16	660	574	1,878	3,379	1,501	1,421
Flags and banners	1931	48	782	639	1,329	2,754	1,425	----------
	1929	54	938	794	1,771	3,836	2,065	577
	1927	46	1,046	898	2,282	4,536	2,254	700
Regalia, robes, vestments, and badges.	1931	81	1,422	1,444	2,129	5,689	3,560	----------
	1929	77	1,757	1,825	3,227	7,927	4,700	1,105
	1927	76	1,675	1,760	3,019	7,691	4,672	1,015
Hat and cap materials, men's.	1931	95	1,935	2,077	6,554	11,010	4,456	----------
	1929	112	2,564	2,876	17,305	25,031	7,726	5,164
	1927	96	2,762	2,659	15,672	23,339	7,668	5,158
Nets (fish) and seines	1931	13	572	438	1,283	2,682	1,399	----------
	1929	19	903	769	3,789	6,164	2,375	1,155
	1927	21	869	776	3,348	5,401	2,053	1,162

[1] Because of a change in classification, no comparable figures can be shown for earlier years.

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
TEXTILES AND THEIR PRODUCTS—Contd.								
House-furnishing goods, not elsewhere classified.	1931	914	14,195	12,047	52,022	86,821	34,799	----------
	1929	964	15,794	16,150	76,625	127,602	50,977	16,866
	1927	548	11,691	10,947	52,705	87,677	34,972	12,997
Carpets and rugs, rag	1931	51	1,003	918	1,026	3,332	2,306	----------
	1929	94	1,529	1,562	1,659	5,511	3,852	2,416
	1927	110	1,633	1,678	1,636	5,890	4,254	2,005
Linoleum	1931	6	2,895	3,595	7,866	22,984	15,118	----------
	1929	7	5,544	8,560	27,489	57,250	29,761	51,647
	1927	7	5,364	8,177	24,216	47,442	23,227	41,432
Oilcloth	1931	9	1,229	1,811	8,256	13,986	5,730	----------
	1929	9	1,412	2,144	14,925	23,107	8,183	5,017
	1927	8	1,072	1,746	11,819	17,642	5,824	3,565
Artificial leather	1931	21	1,941	2,477	9,083	15,195	6,112	----------
	1929	17	2,590	3,956	22,268	32,961	10,693	14,650
	1927	19	2,730	4,007	21,828	34,228	12,400	14,467
Asphalted-felt-base floor covering.	1931	15	1,946	2,734	9,151	19,993	10,842	----------
	1929	14	2,345	3,501	14,279	31,889	17,610	11,092
	1927	12	2,442	3,695	16,186	34,101	17,914	8,904
Upholstering materials, not elsewhere classified.	1931	46	899	810	2,860	5,329	2,469	----------
	1929	53	1,410	1,317	7,046	11,234	4,188	3,915
	1927	39	1,080	1,162	6,556	9,673	3,117	4,482
Waste	1931	132	3,153	2,049	10,223	16,344	6,120	----------
	1929	136	3,905	3,316	25,633	36,014	10,381	18,592
	1927	118	3,494	2,853	23,049	33,377	10,328	14,529
FOREST PRODUCTS								
Basic industries, total.	1931	6,010	225,831	163,833	167,715	463,117	295,402	----------
	1929	14,164	460,482	437,840	432,337	1,314,763	882,426	1,997,963
	1927	8,723	453,131	431,496	508,680	1,259,370	750,690	1,795,875
	1925	10,286	497,803	473,085	593,935	1,468,427	874,492	2,064,631
	1923	10,671	531,545	492,617	584,802	1,534,991	950,188	1,944,962
Excelsior	1931	61	927	683	1,412	2,983	1,571	----------
	1929	66	1,241	1,219	2,440	5,009	2,569	10,667
	1927	64	1,272	1,181	2,547	4,821	2,274	10,930
Lumber and timber products, not elsewhere classified.	1931	4,996	196,647	155,870	160,511	443,629	283,118	----------
	1929	12,915	419,084	421,585	419,603	1,273,472	853,869	1,985,301
	1927	7,510	413,946	413,362	493,959	1,214,646	720,687	1,781,734
	1925	9,207	467,090	456,716	579,475	1,421,162	841,687	2,049,500
	1923	9,393	495,932	475,962	573,064	1,494,462	921,398	1,932,091
Turpentine and rosin	1931	953	28,257	7,280	5,793	16,506	10,713	----------
	1929	1,183	40,157	15,036	10,294	36,282	25,988	1,995
	1927	1,149	37,913	16,953	12,173	39,903	27,730	3,211
Wood-reworking industries, total.	1931	4,430	75,574	78,144	157,063	310,678	153,615	----------
	1929	6,081	114,640	142,566	337,264	655,345	318,080	787,660
	1927	5,582	117,905	149,783	359,316	672,336	313,020	727,274
	1925	5,727	132,115	169,154	440,457	798,288	357,831	680,399
	1923	5,159	125,966	156,707	441,284	783,751	342,467	575,740
Planing-mill products (including general millwork), not made in planing mills connected with sawmills.	1931	3,453	54,493	58,552	125,760	235,681	109,920	----------
	1929	4,849	90,134	116,423	296,008	553,583	257,575	677,998
	1927	4,561	96,589	126,140	321,443	581,634	260,190	630,674
	1925	4,761	111,329	146,592	403,227	710,861	307,635	597,103
	1923	4,215	103,008	133,329	401,174	692,784	291,610	493,424
Window and door screens and weather strip.	1931	207	2,564	2,971	5,713	13,539	7,826	----------
	1929	280	4,034	4,958	10,513	24,452	13,939	14,034
	1927	214	3,661	4,806	9,304	22,643	13,339	11,520
Wood turned and shaped and other wooden goods, n. e. c.[5]	1931	719	17,020	14,602	23,907	55,710	31,804	----------
	1929	894	18,712	18,617	28,429	69,620	41,191	88,398
	1927	748	15,937	16,333	26,064	60,530	34,466	77,425
Lasts and related products.	1931	51	1,497	2,020	1,683	5,747	4,065	----------
	1929	58	1,760	2,569	2,315	7,690	5,375	7,230
	1927	59	1,718	2,504	2,505	7,529	5,024	7,655

[5] Owing to a change in classification data for 1931 are not strictly comparable with data for prior years.

No. 730.—Manufactures: Summary for Individual Industries—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
FOREST PRODUCTS—Continued								
Wooden-container industries, total.	1931	1,490	43,277	33,056	73,825	139,016	65,192	----------
	1929	1,769	54,971	51,078	129,656	235,178	105,522	196,844
	1927	1,648	56,124	52,721	134,471	235,578	101,107	192,489
	1925	1,762	57,961	55,671	142,775	249,612	106,837	192,281
	1923	1,872	62,121	58,271	154,804	265,501	110,696	200,457
Boxes, wooden, except cigar boxes.	1931	675	22,864	17,572	39,705	74,667	34,962	----------
	1929	792	30,554	29,194	74,082	135,026	60,944	137,261
	1927	748	30,797	29,250	75,797	133,993	58,195	135,637
Boxes, cigar, wooden	1931	92	3,777	2,564	3,473	8,859	5,386	----------
	1929	118	4,374	3,508	5,238	12,459	7,221	5,518
	1927	136	4,577	3,925	5,621	12,909	7,288	5,478
Cooperage	1931	500	8,208	7,663	24,333	39,143	14,810	----------
	1929	586	10,691	11,706	41,516	64,842	23,326	33,885
	1927	528	11,455	12,937	43,821	66,947	23,126	33,553
Baskets and rattan and willow ware, not including furniture.	1931	223	8,428	5,257	6,314	16,347	10,033	----------
	1929	273	9,353	6,671	8,820	22,851	14,031	20,180
	1927	236	9,295	6,608	9,231	21,729	12,498	17,821
Furniture and related industries, total.[6]	1931	3,495	138,438	138,603	243,152	538,021	294,870	----------
	1929	4,184	209,019	263,629	462,676	1,036,659	573,983	547,199
	1927	3,593	203,338	258,300	426,644	969,968	543,324	488,660
	1925	3,601	195,643	244,886	418,235	951,170	532,935	434,238
	1923	3,434	182,014	222,461	372,545	851,801	479,256	369,484
Furniture, including store and office fixtures.[6]	1931	3,148	127,605	125,972	217,896	482,289	264,393	----------
	1929	3,778	193,399	242,832	426,454	948,116	521,662	503,970
	1927	3,228	188,143	238,240	392,099	885,204	493,106	455,881
	1925	3,239	181,016	225,298	384,875	868,720	483,845	402,719
	1923	3,047	168,157	204,566	342,443	776,847	434,404	344,954
Refrigerators and refrigerator cabinets, excl. of mechanical refrigerating equipment.	1931	155	7,128	8,525	20,080	40,825	20,744	----------
	1929	188	9,784	13,182	26,451	60,483	34,032	28,493
	1927	165	9,551	12,617	25,095	58,163	33,068	24,216
Billiard and pool tables, bowling alleys, and accessories.	1931	32	592	613	1,396	3,761	2,366	----------
	1929	40	1,390	1,863	3,238	8,821	5,583	6,402
	1927	34	1,184	1,550	2,394	7,112	4,718	2,335
Mirror and picture frames.	1931	160	3,113	3,492	3,780	11,146	7,367	----------
	1929	178	4,446	5,752	6,532	19,238	12,705	8,334
	1927	166	4,460	5,893	7,056	19,489	12,432	6,228
Other allied products, total.	1931	746	33,673	35,065	141,957	236,913	94,957	----------
	1929	714	37,270	44,269	224,250	349,821	125,571	144,538
	1927	623	34,010	39,620	207,537	325,673	118,136	128,159
	1925	550	30,836	35,675	129,949	221,629	91,680	101,421
	1923	542	30,170	32,539	112,960	197,342	84,382	105,097
Caskets, coffins, burial cases, and other morticians' goods.	1931	399	11,932	14,225	28,519	69,810	41,291	----------
	1929	414	13,033	16,411	39,350	88,282	48,932	39,609
	1927	340	11,665	14,421	33,327	74,891	41,563	31,105
Cork products	1931	31	3,018	3,027	6,617	14,877	8,260	----------
	1929	35	3,842	4,209	12,603	23,023	10,421	14,829
	1927	27	3,185	3,560	9,395	17,369	7,974	11,683
Matches	1931	19	3,369	3,493	10,875	18,473	7,597	----------
	1929	21	3,760	4,118	12,526	20,351	7,825	17,997
	1927	19	3,905	4,131	11,884	24,906	13,022	17,607
Pulp goods and molded composition products.[1]	1931	86	5,654	6,105	10,805	27,239	16,435	----------
Wood preserving	1931	211	9,700	8,214	85,141	106,514	21,374	----------
	1929	199	13,077	14,940	147,703	190,945	43,242	57,913
	1927	193	12,259	13,726	141,555	184,558	43,003	50,606

[1] Because of a change in classification, no comparable figures can be shown for earlier years.
[6] Includes "Hammocks," formerly treated as a separate industry, for all years and also includes, for 1927 and later years, sewing machine cases, formerly a part of the industry "Sewing machines, cases, and attachments."

No. 730.—Manufactures: Summary for Individual Industries—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
PAPER AND PAPER PRODUCTS								
Paper and pulp, total. [7]	1931	854	107,902	126,886	495,089	851,530	356,442	----------
	1929	883	128,049	173,078	723,361	1,206,114	482,754	2,968,431
	1927	929	123,360	162,002	724,111	1,138,090	413,979	2,642,806
	1927	*764*	*123,360*	*162,002*	*615,556*	*1,029,535*	*413,979*	*2,642,806*
	1925	763	123,842	160,146	605,860	971,882	366,022	2,427,010
	1923	746	120,677	151,477	573,727	907,347	333,620	2,178,623
Paper [1]	1931	650	87,683	104,042	384,420	684,971	300,551	----------
	1929	685	103,320	140,398	574,608	967,186	392,578	[8] 2,968,431
	1927	710	98,566	130,475	572,786	919,891	347,106	[8] 2,642,806
Pulp (wood and other fiber).[1]	1931	204	20,219	22,844	110,668	166,559	55,891	----------
	1929	198	24,729	32,679	148,753	238,928	90,176	(8)
	1927	219	24,794	31,527	151,325	218,198	66,873	(8)
Converted paper products, total.[5]	1931	2,029	86,679	87,452	262,921	506,052	243,130	----------
	1929	2,243	105,344	114,253	369,361	686,137	316,775	198,373
	1927	2,043	101,077	110,152	358,252	647,908	289,656	170,888
	1925	1,964	97,660	102,951	313,797	574,932	261,135	147,697
	1923	1,939	98,349	98,667	305,037	549,623	244,586	134,939
Bags, paper, exclusive of those made in paper mills.	1931	95	6,336	6,423	33,427	54,291	20,864	----------
	1929	95	6,970	6,661	43,238	64,621	21,383	13,416
	1927	88	6,463	6,394	40,735	57,490	16,755	9,336
Boxes, paper, not elsewhere classified.	1931	1,214	46,722	44,085	113,251	217,872	104,621	----------
	1929	1,249	55,654	57,110	159,840	294,253	134,414	80,064
	1927	1,219	56,398	57,701	168,464	306,555	138,091	81,300
	1925	1,229	57,148	57,172	151,712	281,944	130,232	76,185
	1923	1,216	56,855	53,966	144,079	264,209	120,129	61,687
Card cutting and designing.	1931	72	2,041	2,408	6,674	15,953	9,279	----------
	1929	70	2,338	2,725	9,286	19,648	10,362	3,909
	1927	60	2,024	2,707	7,544	16,871	9,327	3,915
Cardboard, not made in paper mills.	1931	12	520	599	1,656	3,594	1,938	----------
	1929	13	609	819	2,665	5,629	2,964	1,549
	1927	9	658	849	2,868	5,581	2,713	1,779
Envelopes	1931	162	8,924	9,658	22,452	46,943	24,491	----------
	1929	171	10,367	11,527	29,928	61,287	31,359	13,077
	1927	153	9,745	10,755	28,973	56,006	27,033	11,391
Wall paper	1931	50	3,734	3,994	9,150	20,194	11,044	----------
	1929	56	4,705	5,732	13,480	30,008	16,527	12,740
	1927	53	4,811	5,981	14,612	30,059	15,447	13,343
Paper goods, not elsewhere classified.	1931	424	17,902	20,285	76,311	147,205	70,894	----------
	1929	436	20,227	23,810	100,369	182,648	82,279	67,145
	1927	340	14,837	17,765	78,797	140,948	62,151	42,955
PRINTING, PUBLISHING, AND ALLIED INDUSTRIES								
Printing and publishing, total.	1931	21,970	254,461	437,425	511,219	2,206,977	1,695,758	----------
	1929	24,360	281,119	506,290	660,029	2,760,196	2,100,167	544,588
	1927	22,558	262,740	474,639	664,528	2,521,208	1,856,680	482,295
	1925	21,072	252,515	440,427	612,060	2,283,304	1,671,244	409,121
	1923	20,471	247,384	400,486	587,109	2,030,615	1,443,505	358,019
Printing and publishing, book and job.[5]	1931	11,656	134,302	210,755	210,973	787,825	576,852	----------
	1929	12,712	150,649	251,577	266,749	1,006,557	739,907	211,448
	1927	11,466	142,347	241,810	253,056	920,251	667,195	194,718
	1925	10,338	134,559	221,425	230,691	820,553	589,862	170,096
	1923	10,094	130,819	202,315	221,377	747,486	526,110	153,334

[1] Because of a change in classification, no comparable figures can be shown for earlier years.
[5] Owing to a change in classification data for 1931 are not strictly comparable with data for prior years.
[7] The separation of the industry "Paper and pulp" into the "Paper" and "Pulp (wood and other fiber)" industries for 1927 resulted in counting as 2 establishments each mill which manufactured both paper and pulp and in a duplication in the statistics as combined. The figures for 1927 to 1931, are, therefore, not strictly comparable with those for earlier years. Figures in italics have been adjusted for comparison with 1925 and 1923, counting as a single unit mills manufacturing both pulp and paper.
[8] Figures shown for paper represent the combined total for paper and pulp.

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
PRINTING, PUBLISHING, AND ALLIED INDUSTRIES—Con.								
Printing and publishing, music.	1931	103	656	970	965	10,903	9,938	----------
	1929	124	810	1,314	1,542	15,240	13,698	956
	1927	119	994	1,678	1,658	15,882	14,223	1,343
Printing and publishing, newspaper and periodical.	1931	10,211	119,503	225,699	299,280	1,408,248	1,108,968	----------
	1929	11,524	129,660	253,399	391,738	1,738,299	1,346,561	332,184
	1927	10,973	119,399	231,151	409,814	1,585,076	1,175,262	286,234
	1925	10,625	117,001	217,541	379,541	1,447,661	1,068,120	237,662
	1923	10,267	115,646	196,804	363,480	1,268,502	905,022	203,454
Industries allied to printing and publishing, total.	1931	2,948	62,308	100,586	69,802	290,237	220,435	----------
	1929	3,162	76,869	130,081	106,454	409,943	303,489	104,853
	1927	2,875	65,863	111,544	90,509	338,652	248,143	87,233
	1925	2,754	62,749	101,991	82,517	313,567	231,050	76,966
	1923	2,643	60,609	92,420	78,545	284,703	206,158	71,948
Bookbinding and blank-book making.	1931	1,050	21,216	25,356	21,392	79,780	58,388	----------
	1929	1,108	24,754	31,779	30,755	102,783	72,029	21,741
	1927	1,063	21,909	28,281	25,875	87,327	61,452	19,038
Engravers' materials	1931	21	275	444	1,166	2,319	1,153	----------
	1929	19	313	448	1,795	3,129	1,335	1,493
	1927	17	178	294	1,289	2,169	879	864
Engraving, steel, copper-plate, and wood, and plate printing.	1931	432	6,995	9,503	6,425	27,425	21,001	----------
	1929	483	10,272	14,813	11,947	47,901	35,954	8,560
	1927	416	8,681	12,177	10,313	39,713	29,400	6,939
Engraving (other than steel, copperplate, or wood), chasing, etching, and diesinking.	1931	133	1,467	2,048	1,440	5,607	4,168	----------
	1929	189	2,240	3,212	2,583	10,934	8,351	2,965
	1927	173	1,805	2,612	2,078	7,931	5,853	2,028
Photo-engraving, not done in printing establishments.	1931	617	10,095	24,990	7,408	56,020	48,611	----------
	1929	654	12,353	31,831	11,003	77,382	66,379	9,349
	1927	611	11,033	28,381	10,790	69,207	58,417	9,366
Lithographing	1931	364	16,215	25,723	26,607	87,433	60,827	----------
	1929	376	18,979	32,022	38,992	121,014	82,022	35,471
	1927	309	16,348	27,466	32,704	97,050	64,346	28,541
Stereotyping and electrotyping, not done in printing establishments.	1931	223	4,857	10,917	3,590	24,582	20,991	----------
	1929	230	6,487	13,771	6,547	35,617	29,070	21,347
	1927	197	4,502	10,273	4,677	25,549	20,872	16,888
Printing materials, not including type or printing ink.	1931	90	781	1,201	1,466	5,795	4,329	----------
	1929	84	1,004	1,649	2,185	8,579	6,394	2,709
	1927	70	882	1,402	2,034	7,022	4,988	2,339
Type founding	1931	18	407	403	309	1,275	966	----------
	1929	19	467	556	648	2,604	1,956	1,218
	1927	19	525	658	749	2,684	1,935	1,230
CHEMICALS AND ALLIED PRODUCTS								
Chemicals and allied products, other than animal, vegetable, and compounded oils, total.	1931	6,876	216,269	252,513	1,048,825	2,399,668	1,350,843	----------
	1929	7,599	260,829	336,816	1,579,431	3,289,289	1,709,858	1,980,145
	1927	6,760	228,674	294,090	1,409,190	2,855,979	1,446,789	1,528,092
	1925	6,509	222,112	275,579	1,374,950	2,651,375	1,276,425	1,464,454
	1923	6,424	226,710	271,444	1,316,282	2,472,610	1,156,328	1,388,993
Ammunition and related products.	1931	20	5,873	4,993	11,014	28,366	17,353	----------
	1929	21	7,223	8,273	19,842	43,809	23,967	17,061
	1927	20	7,602	8,266	20,945	45,602	24,657	17,175
Explosives	1931	78	4,733	5,572	19,519	46,258	26,739	----------
	1929	95	5,614	8,488	31,764	72,540	40,775	51,612
	1927	100	5,803	8,131	36,894	72,490	35,596	38,239
Fireworks	1931	37	1,350	1,097	1,406	3,722	2,317	----------
	1929	50	1,811	1,931	2,465	6,584	4,119	1,746
	1927	36	1,564	1,395	2,624	5,885	3,261	1,300

No. 730.—Manufactures: Summary for Individual Industries—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
CHEMICALS AND ALLIED PRODUCTS—Continued								
Baking powders, yeast, and other leavening compounds.	1931	45	2,881	4,798	20,746	47,027	26,281	----------
	1929	48	3,006	4,847	22,598	52,337	29,738	42,788
	1927	47	3,032	4,794	24,619	[4] 55,716	[4] 31,097	42,816
Bluing	1931	20	95	94	402	1,179	777	----------
	1929	20	105	107	469	1,365	896	169
	1927	20	155	151	594	1,674	1,080	363
Bone black, carbon black, and lampblack.	1931	62	1,039	1,344	5,022	9,535	4,513	----------
	1929	77	1,915	2,583	9,096	20,170	11,074	11,268
	1927	67	1,553	2,047	6,571	14,262	7,691	8,065
Blacking, stains, and dressings.	1931	156	1,501	1,666	6,941	20,343	13,402	----------
	1929	170	1,617	1,959	8,345	24,682	16,337	3,317
	1927	176	1,716	2,181	9,186	22,548	13,363	4,005
Candles	1931	23	713	711	2,481	5,396	2,915	----------
	1929	20	781	923	3,251	6,686	3,436	1,971
	1927	17	709	761	2,959	6,351	3,392	996
Chemicals, not elsewhere classified.[9]	1931	558	48,522	66,360	246,068	533,175	287,107	----------
	1929	551	62,199	94,680	363,577	738,048	374,472	854,358
	1927	492	52,347	78,275	296,677	572,091	275,414	576,285
	1925	751	57,890	83,537	282,712	570,310	287,598	546,797
	1923	773	77,254	103,301	328,597	655,275	326,678	592,023
Cleaning and polishing preparations.	1931	388	2,449	2,969	16,979	48,007	31,028	----------
	1929	429	2,713	3,356	19,399	50,780	31,381	10,609
	1927	341	2,403	2,988	15,220	41,234	26,015	8,485
Drug grinding	1931	23	661	711	5,457	9,159	3,702	----------
	1929	26	677	841	5,675	9,669	3,994	5,277
	1927	25	659	820	5,684	9,205	3,522	4,662
Druggists' preparations.	1931	392	9,476	10,552	32,208	109,448	77,240	----------
	1929	429	10,688	12,452	43,776	124,778	81,003	19,448
	1927	373	10,138	11,942	40,499	110,309	69,810	15,919
Patent or proprietary medicines and compounds.	1931	1,298	13,475	14,885	68,416	254,514	186,098	----------
	1929	1,522	16,434	18,781	94,770	318,907	224,137	44,538
	1927	1,282	15,071	16,667	84,641	278,243	193,602	34,082
	1925	1,279	14,802	15,592	84,790	247,564	162,774	33,840
	1923	1,363	17,353	16,915	88,802	237,494	148,692	29,998
Perfumes, cosmetics, and other toilet preparations.	1931	663	10,748	10,446	46,556	158,175	111,618	----------
	1929	815	13,109	13,763	58,299	193,441	135,142	12,150
	1927	705	10,463	10,965	52,765	161,246	108,480	10,431
Tanning materials, natural dyestuffs, mordants and assistants, and sizes.	1931	116	1,962	2,390	15,521	26,469	10,948	----------
	1929	126	2,419	3,114	25,336	39,836	14,500	22,575
	1927	122	2,414	2,971	23,074	35,677	12,603	29,172
Fertilizers	1931	599	14,551	12,146	106,481	154,350	47,869	----------
	1929	638	20,926	17,884	159,801	232,511	72,710	166,984
	1927	621	18,612	17,650	138,143	190,385	52,242	156,274
	1925	587	19,644	17,743	137,808	206,773	68,965	152,193
	1923	573	18,572	16,365	127,980	183,089	55,108	161,774
Compressed and liquefied gases.	1931	349	2,844	3,896	10,135	41,806	31,672	----------
	1929	354	3,390	5,378	14,529	52,190	37,661	85,293
	1927	313	3,212	4,948	11,749	50,547	38,799	70,489
Glue and gelatin	1931	72	2,559	3,325	15,460	27,516	12,055	----------
	1929	74	2,993	4,236	18,978	32,458	13,480	23,584
	1927	61	3,226	4,524	19,223	31,196	11,973	24,763
Mucilage, paste, and other adhesives, except glue and rubber cement.	1931	69	282	350	1,889	3,621	1,732	----------
	1929	84	414	547	3,669	6,638	2,970	2,564
	1927	80	502	679	4,270	7,945	3,675	2,219
Grease and tallow, not including lubricating greases.	1931	238	4,067	5,225	17,533	29,241	11,708	----------
	1929	297	5,475	7,862	40,142	61,608	21,466	41,686
	1927	247	5,052	7,403	38,272	56,280	18,008	34,069

[4] Revised; revision not carried into total.
[9] Includes "Compressed and liquefied gases" prior to 1927 and also includes "Rayon" for 1923.

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
CHEMICALS AND ALLIED PRODUCTS—Continued								
Ink, printing	1931	171	2,247	3,479	14,532	32,188	17,656	----------
	1929	147	2,448	3,957	19,205	42,760	23,545	20,300
	1927	123	2,288	3,665	16,054	37,734	21,680	18,901
Ink, writing	1931	23	347	363	1,463	3,535	2,073	----------
	1929	29	416	480	1,993	4,595	2,602	847
	1927	24	491	576	2,209	5,342	3,133	743
Alcohol, ethyl, and distilled liquors.	1931	27	997	1,331	13,132	21,741	8,608	----------
	1929	30	1,484	2,131	35,046	54,285	19,239	13,577
	1927	28	1,180	1,705	19,310	33,971	14,661	7,261
Liquors, vinous	1931	14	96	119	381	949	568	----------
	1929	24	186	278	609	2,448	1,839	1,188
	1927	13	150	177	1,206	2,693	1,487	999
Paints and varnishes	1931	1,039	22,521	29,425	193,737	350,726	156,989	----------
	1929	1,063	29,211	42,245	334,132	568,976	234,844	180,315
	1927	1,006	28,061	40,185	307,724	519,010	211,285	163,187
	1925	923	25,490	35,420	293,943	470,736	176,793	143,111
	1923	826	22,818	29,871	248,955	404,135	155,180	114,281
Rayon and allied products.	1931	32	38,735	38,231	36,181	132,632	96,452	----------
	1929	29	39,106	44,697	33,335	149,546	116,211	195,844
	1927	19	26,341	28,649	25,748	109,888	84,141	122,406
Salt	1931	53	4,728	5,549	10,864	31,430	20,566	----------
	1929	58	5,458	6,735	14,188	37,869	23,681	57,711
	1927	58	5,961	7,117	14,664	34,329	19,665	55,928
Soap	1931	248	14,163	17,740	121,829	257,719	135,889	----------
	1929	282	14,363	18,995	180,353	310,192	129,839	65,856
	1927	256	13,432	19,716	172,244	287,060	114,816	62,025
	1925	272	15,406	18,526	184,874	278,273	93,400	56,697
	1923	270	17,002	20,776	173,546	276,403	102,857	74,820
Wood distillation and charcoal manufacture.	1931	63	2,654	2,745	6,474	11,440	4,966	----------
	1929	91	4,648	5,293	14,791	29,594	14,803	25,509
	1927	88	4,537	4,739	15,423	27,630	12,208	16,833
Animal, vegetable, and compounded oils, total.	1931	609	15,194	12,207	220,147	273,657	53,509	----------
	1929	679	20,039	17,577	391,282	470,116	78,834	332,150
	1927	781	24,762	23,818	393,895	495,913	102,018	320,217
	1925	773	22,700	20,946	455,642	559,856	104,214	284,027
	1923	773	19,817	17,390	386,662	460,951	74,290	265,235
Oil, cake, and meal, cottonseed.	1931	504	12,268	8,335	147,165	181,347	34,182	----------
	1929	553	15,825	11,203	249,020	298,376	49,356	284,395
	1927	547	18,434	14,259	220,038	276,338	56,300	270,500
	1925	535	16,215	11,412	244,315	295,685	51,369	239,005
	1923	511	12,745	7,908	197,515	226,388	28,873	223,742
Oils, essential	1931	12	128	199	2,707	3,505	798	----------
	1929	22	265	326	3,804	6,653	2,849	1,894
	1927	14	169	258	3,427	4,642	1,215	758
Oil, cake, and meal, linseed.	1931	28	1,837	2,278	50,306	62,883	12,576	----------
	1929	29	2,715	4,098	101,563	119,927	18,364	31,191
	1927	33	2,718	4,325	97,750	111,544	13,793	28,273
Oils, not elsewhere classified.[1]	1931	65	961	1,394	19,970	25,922	5,952	----------
	1929	75	1,234	1,950	36,896	45,160	8,264	14,670
PRODUCTS OF PETROLEUM AND COAL								
Coke-oven products	1931	112	14,383	22,134	162,793	226,509	63,716	----------
	1929	153	20,552	33,389	281,592	416,348	134,756	393,211
	1927	171	21,082	34,168	286,729	382,013	95,284	451,874
	1925	237	23,191	36,762	277,751	378,634	100,883	409,552
	1923	262	28,364	48,108	354,030	516,923	162,892	332,560

[1] Because of a change in classification, no comparable figures can be shown for earlier years.

No. 730.—Manufactures: Summary for Individual Industries—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
PRODUCTS OF PETROLEUM AND COAL—Continued								
Fuel briquettes	1931	23	301	357	3,035	4,568	1,533	--------
	1929	23	426	584	5,919	9,498	3,579	14,893
	1927	20	274	446	4,873	7,203	2,330	9,594
Gas, manufactured, illuminating and heating.	1931	638	34,523	49,442	152,580	467,751	315,172	--------
	1929	754	43,065	60,161	188,416	512,653	324,236	544,024
	1927	828	48,497	68,356	211,786	516,705	304,920	496,014
	1925	919	46,998	67,436	178,423	455,400	277,037	428,132
	1923	939	42,282	59,600	191,120	450,097	258,977	358,605
Lubricating oils and greases, not made in petroleum refineries.[1]	1931	168	2,115	2,960	22,809	41,704	18,895	--------
	1929	177	2,577	3,739	39,571	69,584	30,013	13,281
Petroleum refining	1931	376	68,824	107,474	1,210,517	1,524,285	313,768	--------
	1929	390	80,596	131,177	2,031,341	2,639,665	608,324	789,849
	1927	354	71,234	113,717	1,752,997	2,142,649	389,651	552,651
	1925	359	65,324	104,645	1,889,678	2,376,657	486,979	393,753
	1923	382	66,717	103,834	1,425,053	1,793,700	368,647	349,154
RUBBER PRODUCTS								
Boots and shoes, rubber.	1931	15	15,882	13,770	12,298	47,905	35,607	--------
	1929	22	25,659	29,945	34,396	102,538	68,141	62,603
	1927	22	26,848	32,079	43,373	124,608	81,235	68,359
Rubber tires and inner tubes.	1931	48	49,159	63,089	173,604	406,283	232,679	--------
	1929	91	83,263	127,082	429,607	770,177	340,570	463,257
	1927	109	78,256	120,064	499,221	869,688	370,467	451,724
	1925	126	81,640	120,614	559,940	925,002	365,062	403,227
	1923	160	73,063	108,623	365,165	644,194	279,029	370,551
Rubber goods, other than tires, inner tubes, and boots and shoes.	1931	390	34,218	35,738	66,965	160,077	93,112	--------
	1929	412	40,226	50,279	114,674	244,746	130,071	295,452
	1927	385	36,893	45,931	117,777	230,781	113,005	270,539
	1925	381	35,230	42,613	121,224	219,869	98,645	197,051
	1923	344	34,470	39,790	90,729	182,584	91,855	178,899
LEATHER AND ITS MANUFACTURES								
Leather: Tanned, curried, and finished.	1931	418	42,047	49,542	172,786	271,138	98,352	--------
	1929	471	49,932	63,414	337,598	481,340	143,742	229,660
	1927	494	52,924	67,887	331,985	494,256	162,271	220,530
	1925	531	52,263	65,834	296,953	452,186	155,233	215,678
	1923	597	59,703	73,784	321,750	488,898	167,148	230,187
Finished products of leather, total.[10]	1931	3,284	230,710	212,588,174	493,414,650	918,738,489	425,323,839	--------
	1929	3,814	268,540	296,046,979	794,424,398	1,424,860,695	630,436,297	206,704
	1927	3,778	263,157	296,649,530	756,331,737	1,375,359,513	618,527,776	199,313
	1925	3,721	261,865	289,585,303	716,059,086	1,311,831,400	595,772,314	197,653
	1923	4,284	285,947	315,893,186	775,366,657	1,405,477,550	630,110,893	190,611
Belting, leather	1931	178	1,640	1,968	7,302	14,522	7,220	--------
	1929	207	2,602	3,550	20,680	35,632	14,952	6,826
	1927	173	2,164	2,925	16,185	27,266	11,080	6,728
Boots and shoes, other than rubber.	1931	1,156	181,374	163,271	337,627	653,880	316,252	--------
	1929	1,341	205,640	222,408	515,055	965,923	450,867	140,329
	1927	1,357	203,110	225,090	494,553	944,714	450,161	138,706
	1925	1,460	206,992	225,788	481,632	925,383	443,751	139,569
	1923	1,606	225,216	250,346	527,457	1,000,078	472,621	128,550
Boot and shoe cut stock, not made in boot and shoe factories.	1931	191	8,584	8,148	64,132	79,734	15,602	--------
	1929	210	9,499	10,320	107,546	133,448	25,902	15,828
	1927	201	8,611	9,354	97,966	121,022	23,056	13,718
Boot and shoe findings, not made in boot and shoe factories.	1931	361	9,088	8,263	18,142	37,366	19,225	--------
	1929	382	10,376	11,058	31,964	58,625	26,661	20,259
	1927	379	9,950	11,202	31,862	57,433	25,571	18,021

[1] Because of a change in classification, no comparable figures can be shown for earlier years.

[10] Figures for 1929 and prior years revised to include data for "Whips," formerly a separate classification in the "Miscellaneous" group, but abandoned for 1931 and combined with "Saddlery and harness" under the title "Saddlery, harness, and whips," in the Leather group.

No. 730.—Manufactures: Summary for Individual Industries—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
LEATHER, ETC.—Continued								
Gloves and mittens, leather.	1931	227	7,884	7,554	13,136	28,024	14,887	----------
	1929	257	9,203	9,204	20,206	39,123	18,917	3,498
	1927	232	9,106	8,814	19,276	36,662	17,386	2,603
Pocketbooks, purses, and cardcases.	1931	260	8,747	9,793	22,601	43,147	20,546	----------
	1929	290	10,430	15,229	35,352	68,628	33,276	1,828
	1927	257	8,570	13,170	29,619	57,345	27,726	1,725
Saddlery, harness, and whips.	1931	185	1,974	1,926	5,268	9,339	4,071	----------
	1929	268	3,396	3,761	13,914	23,563	9,648	4,780
	1927	271	4,113	4,631	16,702	27,667	10,965	5,160
Trunks, suitcases, and bags.	1931	371	6,198	6,343	13,232	26,715	13,483	----------
	1929	467	11,359	13,757	31,694	63,969	32,275	10,220
	1927	495	10,345	13,035	29,128	59,959	30,830	9,001
Leather goods, not elsewhere classified.	1931	355	5,221	5,321	11,974	26,012	14,038	----------
	1929	392	6,035	6,760	18,013	35,951	17,938	3,196
	1927	413	7,188	8,379	21,540	43,292	21,752	3,651
STONE, CLAY, AND GLASS PRODUCTS								
Industries using stone as a material, total.	1931	3,762	84,787	107,105	165,666	463,441	297,774	----------
	1929	5,146	116,411	171,790	268,246	751,210	482,965	1,856,952
	1927	5,156	126,569	187,879	303,632	787,843	484,211	1,672,639
	1925	4,852	123,699	178,644	300,793	779,031	478,238	1,365,906
	1923	4,621	118,560	167,466	273,368	697,461	424,092	1,071,210
Concrete products	1931	1,432	9,253	10,728	22,373	53,192	30,819	----------
	1929	2,438	16,505	22,688	34,035	92,901	58,866	67,651
	1927	2,330	17,808	24,898	33,913	93,259	59,346	54,342
Marble, granite, slate, and other stone products.	1931	1,588	27,700	41,651	34,405	119,395	84,990	----------
	1929	1,881	37,817	63,041	57,638	192,164	134,526	305,915
	1927	1,978	40,474	68,491	66,328	201,181	134,853	295,174
Lime	1931	203	6,706	6,012	8,896	22,200	13,304	----------
	1929	237	8,554	9,476	13,908	35,816	21,908	90,276
	1927	260	10,903	12,191	17,269	41,587	24,318	84,195
Cement	1931	164	24,317	29,884	56,098	148,845	92,747	----------
	1929	174	33,368	48,849	95,242	267,509	172,267	1,183,989
	1927	161	36,322	53,111	120,012	293,565	173,553	1,069,390
	1925	145	38,437	53,912	114,169	300,895	186,726	871,650
	1923	133	35,091	49,708	100,767	264,098	163,332	642,840
Wall plaster, wallboard, insulating board, and floor composition.	1931	204	5,866	6,482	17,869	51,720	33,852	----------
	1929	236	7,462	10,080	28,313	70,663	42,350	142,354
	1927	221	10,014	14,412	31,998	83,856	51,858	116,230
Abrasive wheels, stones, paper, and related products.[1]	1931	73	4,614	5,540	11,727	31,647	19,919	----------
Asbestos products, other than steam packing or pipe and boiler covering.	1931	67	6,009	6,452	13,837	35,174	21,337	----------
	1929	67	8,092	10,777	25,408	56,164	30,756	40,458
	1927	62	6,337	8,376	21,518	44,156	22,639	26,525
Sand-lime brick	1931	31	322	357	461	1,268	806	----------
	1929	40	566	776	945	2,971	2,026	7,346
	1927	45	790	1,051	1,158	3,616	2,458	8,599
Industries using clay and other earths as materials, total.	1931	1,807	80,969	75,223	59,977	209,286	149,309	----------
	1929	2,370	133,668	158,476	122,823	441,270	318,447	641,300
	1927	2,598	148,850	182,466	159,264	488,559	332,295	707,248
	1925	2,688	150,953	189,012	155,937	502,770	346,833	700,775
	1923	2,734	151,176	185,282	155,034	497,812	342,778	613,862

[1] Because of a change in classification, no comparable figures can be shown for earlier years.

No. 730.—Manufactures: Summary for Individual Industries—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
STONE, CLAY, ETC.—Continued								
Clay products (other than pottery) and nonclay refractories.[11]	1931	1,264	51,128	44,368	36,969	127,336	90,367	----------
	1929	1,760	93,657	107,348	82,734	297,879	215,145	535,567
	1927	1,857	101,230	122,311	100,642	321,890	221,248	531,269
	1925	1,950	103,061	127,508	100,768	335,822	235,054	518,680
	1923	1,996	103,239	124,400	104,544	336,884	232,340	482,223
Pottery, including porcelain ware.	1931	275	27,023	26,981	16,393	65,866	49,473	----------
	1929	313	35,409	43,656	27,007	110,622	83,615	61,868
	1927	316	36,667	45,150	33,581	110,597	77,017	54,879
China firing and decorating, not done in potteries.	1931	21	220	236	551	1,128	577	----------
	1929	27	317	420	640	1,554	914	53
	1927	31	366	428	682	1,692	1,010	43
Graphite, ground and refined.	1931	9	183	183	976	1,962	986	----------
	1929	11	494	627	1,458	3,760	2,302	3,156
	1927	13	289	341	1,319	2,932	1,612	3,011
Minerals and earths, ground or otherwise treated.[1]	1931	88	1,090	1,127	3,817	7,295	3,478	----------
	1929	88	1,679	2,188	8,938	17,409	8,471	39,117
Statuary and art goods (except concrete), factory production.	1931	150	1,325	2,328	1,271	5,700	4,429	----------
	1929	171	2,112	4,236	2,045	10,045	8,000	1,539
	1927	136	2,028	4,404	2,415	10,187	7,772	1,137
Glass and manufactures of glass, total.	1931	839	57,100	66,531	90,824	252,592	161,767	----------
	1929	998	78,338	102,552	135,272	368,934	233,663	356,150
	1927	919	74,598	93,928	134,879	336,147	201,268	329,244
	1925	938	78,384	99,356	146,696	358,850	212,154	281,476
	1923	962	81,956	100,819	145,070	367,848	222,778	250,982
Glass	1931	229	49,917	57,882	73,575	216,265	142,690	----------
	1929	263	67,527	87,795	103,294	303,819	200,525	341,979
	1927	269	65,825	81,353	109,911	282,394	172,483	318,298
	1925	310	69,371	86,736	113,652	295,959	182,307	271,639
	1923	333	73,335	89,898	113,170	300,353	196,183	240,528
Mirrors and other glass products made of purchased glass.	1931	610	7,183	8,650	17,250	36,327	19,077	----------
	1929	735	10,811	14,757	31,978	65,116	33,138	14,171
	1927	650	8,773	12,575	24,967	53,753	28,785	10,946
IRON AND STEEL AND THEIR PRODUCTS, NOT INCLUDING MACHINERY								
Crude iron and steel and rolled products, total.	1931	526	278,206	357,645	1,091,015	1,714,214	623,199	----------
	1929	591	419,534	730,974	2,514,377	4,137,214	1,622,837	7,532,530
	1927	602	389,270	645,534	2,269,210	3,488,744	1,219,534	6,781,058
	1925	595	399,914	660,297	2,429,378	3,711,354	1,281,976	6,143,927
	1923	658	424,913	696,760	2,872,028	4,161,938	1,289,910	5,999,941
Blast-furnace products.	1931	80	13,572	19,259	259,132	311,371	52,240	----------
	1929	105	24,960	41,959	610,294	771,425	161,132	(12)
	1927	116	27,958	44,258	579,555	708,904	129,349	(12)
	1925	122	29,188	45,312	617,417	765,286	147,869	1,380,394
	1923	169	36,712	58,936	827,630	1,007,613	179,983	1,686,419
Steel works and rolling-mill products.	1931	446	264,634	338,387	831,884	1,402,843	570,959	----------
	1929	486	394,574	689,016	1,904,083	3,365,789	1,461,706	[13]7,532,530
	1927	486	361,312	601,275	1,689,655	2,779,840	1,090,185	[13]6,781,058
	1925	473	370,726	614,985	1,811,961	2,946,068	1,134,107	4,763,533
	1923	489	388,201	637,825	2,044,398	3,154,325	1,109,927	4,313,522

[1] Because of a change in classification, no comparable figures can be shown for earlier years.
[11] Figures for 1929 and prior years revised to include "Crucibles," abandoned as a separate industry classification for 1931.
[12] Not reported separately; included with "Steel-works and rolling-mill products."
[13] Combined total for "Blast-furnace products" and "Steel-works and rolling-mill products."

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
IRON AND STEEL, ETC.—Continued								
Other iron and steel products, total.[14]	1931	5,439	319,747	347,480	715,355	1,563,191	847,837	
	1929	6,049	461,348	650,013	1,348,497	3,000,714	1,652,217	1,668,292
	1927	5,738	445,697	618,278	1,275,405	2,708,850	1,433,445	1,541,672
	1925	5,468	450,869	623,544	1,304,707	2,747,327	1,442,621	1,374,799
	1923	5,695	467,272	627,412	1,280,713	2,665,732	1,385,019	1,259,068
Bolts, nuts, washers, and rivets, not made in rolling mills.[15]	1931	116	10,518	10,177	16,872	39,483	22,611	
	1929	117	16,175	22,116	44,212	102,392	58,180	66,343
	1927	115	13,614	17,324	38,302	75,876	37,574	57,403
Cast-iron pipe and fittings.	1931	78	16,066	14,559	20,977	47,938	26,960	
	1929	72	19,741	22,552	34,289	80,261	45,971	69,759
	1927	82	22,892	25,982	48,225	95,089	46,864	63,196
Doors, shutters, and window sash and frames, molding, and trim, metal.	1931	139	6,816	8,898	14,572	35,608	21,036	
	1929	148	9,557	17,065	30,178	72,160	41,982	25,027
	1927	117	8,050	15,564	25,602	65,280	39,678	20,626
Forgings, iron and steel, not made in plants operated in connection with steel works or rolling mills.[15]	1931	202	9,971	11,444	22,657	47,700	25,043	
	1929	218	20,882	34,505	71,607	156,249	84,641	147,491
	1927	219	15,594	23,540	52,102	105,036	52,934	127,975
Nails, spikes, etc., not made in wire mills or in plants operated in connection with rolling mills.[15]	1931	46	1,570	1,670	2,982	6,828	3,846	
	1929	55	2,027	2,553	5,956	12,855	6,899	9,096
	1927	56	2,100	2,670	5,157	11,753	6,597	8,073
Springs, steel, except wire, not made in plants operated in connection with rolling mills.[15]	1931	98	2,938	3,634	7,541	15,158	7,717	
	1929	86	5,842	9,314	25,372	46,672	21,300	24,318
	1927	94	5,758	8,913	24,599	43,821	19,222	22,263
Steel barrels, kegs, and drums.	1931	52	3,253	3,513	12,990	21,644	8,654	
	1929	53	4,110	5,769	21,947	37,825	15,878	15,289
	1927	39	2,853	3,936	14,736	24,105	9,369	11,229
Structural and ornamental metal work, not made in plants operated in connection with rolling mills.[15]	1931	1,302	37,510	47,875	131,649	238,033	106,384	
	1929	1,482	54,947	87,786	244,696	477,037	232,341	266,175
	1927	1,284	52,392	84,578	243,446	440,376	196,930	251,670
	1925	1,136	48,341	77,411	237,653	420,998	183,345	211,732
	1923	1,056	51,591	80,833	225,487	406,117	180,630	205,518
Wrought pipe, welded and heavy riveted, not made in plants operated in connection with rolling mills.[15]	1931	51	8,045	9,390	42,291	75,041	32,749	
	1929	50	11,417	18,762	70,120	124,659	54,538	68,630
	1927	44	11,083	16,066	55,779	98,186	42,407	53,938
Firearms	1931	24	4,264	4,711	2,501	10,611	8,110	
	1929	21	6,838	9,210	4,117	21,970	17,853	15,427
	1927	20	6,130	7,934	5,048	19,452	14,405	15,747
Galvanizing and other coating, not done in plants operated in connection with rolling mills.[15]	1931	60	1,011	1,170	1,639	4,060	2,391	
	1929	65	1,125	1,564	3,939	7,667	3,727	2,266
	1927	59	953	1,449	3,722	6,951	3,228	2,657
Hardware, not elsewhere classified.	1931	451	36,118	37,269	38,318	115,900	77,582	
	1929	485	52,306	67,702	76,480	229,478	152,997	112,705
	1927	485	47,834	60,827	71,877	208,254	136,377	99,674
	1925	476	52,349	65,562	77,503	225,053	147,550	98,278
	1923	473	52,205	63,471	80,598	215,960	135,362	84,006

[14] Figures for 1929 and prior years include "Iron and steel, processed," abandoned as a separate classification for 1931 and for that year included with "Foundry and machine-shop products, not elsewhere classified," in the machinery group.

[15] Similar products are manufactured to a considerable extent by departments of "Steelworks and rolling-mill products" industry. The figures here given refer only to establishments engaged primarily in the manufacture of the specified classes of products.

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
IRON AND STEEL, ETC.—Continued								
Plumbers' supplies, not including pipe or vitreous-china sanitary ware.	1931	238	19,688	20,440	26,003	70,936	44,933	----------
	1929	255	27,960	37,067	49,033	129,674	80,641	100,821
	1927	231	29,245	40,212	55,633	145,262	89,629	90,293
Safes and vaults	1931	25	2,044	2,176	4,073	11,607	7,534	----------
	1929	27	3,033	4,439	6,392	19,362	12,970	10,806
	1927	25	3,386	4,494	7,226	18,440	11,213	9,688
Screw-machine products and wood screws.	1931	275	12,047	13,478	16,142	43,698	27,556	----------
	1929	273	19,881	28,987	39,463	105,975	66,512	64,840
	1927	218	13,690	18,055	25,910	60,020	34,110	43,468
Steam and hot-water heating apparatus and steam fittings.	1931	238	28,996	29,558	29,704	102,501	72,797	----------
	1929	240	39,621	58,975	72,708	228,310	155,602	137,339
	1927	232	42,893	64,851	76,835	225,158	148,323	132,723
	1925	225	43,260	63,979	77,357	228,930	151,573	109,313
	1923	236	44,141	64,807	83,297	221,954	138,657	91,085
Stoves and ranges (other than electric), and warm-air furnaces.	1931	589	32,580	35,275	61,833	169,106	107,273	----------
	1929	609	46,616	65,147	100,747	271,747	171,000	113,100
	1927	564	45,180	64,327	93,096	258,286	165,190	100,009
	1925	564	46,514	66,299	95,873	264,303	168,430	94,126
	1923	588	49,812	68,331	102,568	268,262	165,694	87,664
Tin cans and other tinware, not elsewhere classified.[16]	1931	199	25,271	27,978	149,121	223,634	74,513	----------
	1929	232	31,497	38,173	194,987	296,901	101,915	77,332
	1927	236	29,721	35,001	169,421	253,479	84,057	64,005
	1925	221	29,901	34,392	175,779	260,360	84,581	48,728
	1923	241	30,511	32,816	135,980	215,971	79,991	41,252
Tools and cutlery:								
Cutlery (not including silver and plated cutlery) and edge tools.	1931	221	12,485	12,194	8,983	52,337	43,354	----------
	1929	239	14,991	17,651	14,789	78,661	63,872	49,886
	1927	230	15,832	18,892	18,180	76,688	58,508	43,419
Files	1931	26	3,016	2,719	1,221	7,316	6,095	----------
	1929	33	3,974	5,240	3,053	14,114	11,062	12,091
	1927	36	3,948	5,145	3,136	12,974	9,838	10,979
Saws	1931	78	3,005	3,084	4,035	11,572	7,537	----------
	1929	81	4,137	5,727	6,884	22,615	15,731	11,894
	1927	77	4,182	5,754	7,674	22,628	14,954	14,526
Tools, not including edge tools, machine tools, files, or saws.	1931	355	10,833	11,209	13,725	42,417	28,692	----------
	1929	534	19,305	25,808	32,111	99,462	67,352	65,965
	1927	405	16,447	20,941	28,058	76,607	48,549	57,024
Wire, drawn from rods	1931	82	14,476	17,179	45,187	83,370	38,183	----------
	1929	81	22,467	35,110	126,182	213,997	87,815	150,620
	1927	73	19,866	30,038	128,092	190,710	62,617	152,574
	1925	68	18,544	26,928	127,251	184,463	57,212	138,115
	1923	64	21,310	29,862	133,883	196,364	62,481	123,923
Wirework, not elsewhere classified.	1931	494	17,226	17,382	40,308	86,694	46,386	----------
	1929	547	22,388	27,912	68,144	146,805	78,661	48,864
	1927	512	21,697	26,439	63,003	128,536	65,443	45,858
NONFERROUS METALS AND THEIR PRODUCTS								
Smelting and refining, total.	1931	237	21,906	27,064	401,151	484,682	83,530	----------
	1929	250	36,046	56,447	1,344,040	1,519,642	175,601	618,485
	1927	228	34,087	50,515	935,014	1,086,153	151,138	481,441
	1925	238	37,194	54,793	1,070,193	1,244,506	174,313	479,412
	1923	205	37,634	55,095	924,228	1,060,440	136,213	460,321
Primary, total	1931	76	18,477	22,716	335,713	408,589	72,876	----------
	1929	75	30,981	49,239	1,199,025	1,345,800	146,775	596,081
	1927	69	30,510	44,800	807,242	942,735	135,493	465,164
	1925	71	32,992	47,948	912,064	1,067,125	155,061	455,496
	1923	88	35,146	51,510	830,090	952,734	122,644	446,047
Copper	1931	27	8,642	10,708	226,520	269,384	42,864	----------
	1929	26	14,544	23,952	920,351	994,784	74,432	412,244
	1927	26	13,924	20,582	527,764	609,299	81,535	323,799
	1925	26	15,588	22,642	573,190	665,177	91,986	321,909
	1923	29	16,777	25,459	554,100	625,433	71,333	332,943

[16] "Tin plate and terneplate" is treated as part of the "steel-works and rolling-mill products" industry.

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
NONFERROUS METALS, ETC.—Contd.								
Lead	1931	16	2,584	3,569	78,745	90,726	11,982	----------
	1929	19	4,819	7,577	203,914	232,115	28,201	50,936
	1927	18	5,398	7,690	202,859	225,138	22,279	48,298
	1925	17	6,115	9,002	254,881	283,043	28,162	47,219
	1923	20	6,194	8,768	207,315	227,735	20,420	42,377
Zinc	1931	33	7,251	8,439	30,449	48,479	18,030	----------
	1929	30	11,618	17,710	74,760	118,901	44,141	123,901
	1927	25	11,188	16,528	76,619	108,298	31,679	93,067
Secondary, total	1931	161	3,429	4,348	65,438	76,093	10,655	----------
	1929	175	5,065	7,208	145,015	173,842	28,827	22,404
	1927	159	3,577	5,715	127,772	143,418	15,646	16,277
Gold, silver, and platinum, refining and alloying.	1931	63	803	1,186	36,893	41,398	4,505	----------
	1929	69	931	1,634	61,570	67,959	6,389	4,230
	1927	57	801	1,435	58,877	62,647	3,770	4,288
Nonferrous metals other than gold, silver, and platinum, not from the ore.	1931	98	2,626	3,163	28,546	34,695	6,150	----------
	1929	106	4,134	5,574	83,445	105,883	22,438	18,174
	1927	102	2,776	4,280	68,894	80,771	11,876	11,989
Metals and manufactures of metals, total.	1931	6,073	186,949	213,113	461,036	964,580	503,544	----------
	1929	7,272	278,695	487,019	1,121,404	2,077,416	956,012	951,732
	1927	6,533	238,580	332,670	848,199	1,590,955	742,755	744,970
	1925	6,768	239,422	327,859	878,245	1,595,045	716,800	678,128
	1923	7,296	260,164	339,984	843,410	1,576,720	733,310	710,871
Aluminum manufactures.	1931	138	13,803	16,106	41,605	76,300	34,695	----------
	1929	150	21,210	29,693	94,036	153,457	59,421	107,846
	1927	139	14,798	20,892	79,839	123,557	43,719	71,907
Clocks, watches, time-recording devices, and materials and parts, except watchcases.	1931	75	16,213	15,686	12,880	45,563	32,683	----------
	1929	81	21,450	25,750	21,388	77,467	56,079	22,794
	1927	80	22,472	27,248	16,250	71,783	55,534	19,077
Collapsible tubes	1931	17	1,737	1,634	4,142	7,634	3,492	----------
	1929	17	1,821	1,782	5,386	8,913	3,527	2,272
	1927	17	1,984	1,918	7,104	11,351	4,247	2,846
Watchcases	1931	31	1,669	1,767	1,361	4,219	2,858	----------
	1929	40	3,404	4,626	4,631	13,491	8,860	5,581
	1927	40	3,360	4,326	5,311	13,725	8,414	4,121
Sheet-metal work, not specifically classified.	1931	1,762	19,365	25,158	56,342	116,443	60,101	----------
	1929	2,161	28,593	43,255	112,648	222,485	109,837	53,749
	1927	1,981	24,527	38,668	98,386	191,129	92,743	35,880
	1925	2,107	24,996	37,825	84,080	175,043	90,963	35,273
	1923	2,524	28,852	42,446	93,507	188,908	95,401	34,243
Fire extinguishers, chemical.	1931	25	571	617	1,796	4,453	2,656	----------
	1929	28	740	959	4,188	8,566	4,379	1,464
	1927	26	832	1,192	4,010	8,035	4,025	1,564
Stamped ware, enameled ware, and metal stampings; enameling, japanning, and lacquering.	1931	566	28,378	30,662	53,618	122,696	69,078	----------
	1929	582	40,000	50,092	87,639	204,306	116,667	98,184
	1927	476	30,853	38,172	68,880	150,936	82,056	73,619
	1925	465	31,254	38,277	79,737	160,992	81,255	68,121
	1923	412	36,552	44,348	86,340	176,371	90,031	71,053
Lighting equipment [17]	1931	523	14,790	18,150	30,312	75,050	44,738	----------
	1929	614	23,580	33,269	57,918	144,966	87,047	40,209
	1927	481	21,030	29,261	55,609	127,802	72,194	31,291
Needles, pins, hooks and eyes, and snap fasteners.	1931	46	5,354	5,667	4,842	20,342	15,500	----------
	1929	43	6,242	6,566	6,188	22,031	15,843	6,694
	1927	45	5,606	6,098	5,923	20,325	14,402	7,250
Nonferrous-metal alloys; nonferrous metal products, except aluminum, not elsewhere classified.	1931	1,056	48,913	55,109	195,338	331,439	136,101	----------
	1929	1,225	79,183	116,944	600,411	909,804	309,393	506,273
	1927	1,197	65,923	95,351	378,190	581,569	203,379	411,925
	1925	1,140	65,135	93,820	401,316	593,556	192,240	369,239
	1923	1,156	67,289	92,249	381,935	573,044	191,108	314,757
Gold leaf and foil	1931	48	865	631	1,015	2,217	1,202	----------
	1929	75	1,177	1,134	1,933	3,978	2,045	383
	1927	77	1,146	1,120	1,721	3,571	1,850	346

[17] Formerly "Gas and electric fixtures; lamps, lanterns, and reflectors."

No. 730.—Manufactures: Summary for Individual Industries—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
NONFERROUS METALS, ETC.—Contd.								
Jewelry [18]	1931	1,052	16,724	20,231	28,684	75,123	46,438	----------
	1929	*1,436*	*25,287*	*35,465*	*66,506*	*155,544*	*89,037*	----------
	1929	1,536	27,922	37,980	79,805	177,387	97,582	27,402
	1927	1,367	24,116	36,766	76,915	164,865	87,950	17,070
Jewelers' findings and materials.[1,18]	1931	99	1,899	2,343	7,121	11,976	4,855	----------
Silverware and plated ware.	1931	163	11,077	12,713	11,792	45,815	34,022	----------
	1929	179	15,735	22,578	26,886	85,882	58,997	36,224
	1927	178	16,719	23,945	31,377	87,424	56,047	25,211
Tin and other foils, not including gold foil.	1931	8	1,484	998	7,383	12,226	4,843	----------
	1929	7	1,710	1,856	13,548	20,955	7,406	18,642
	1927	10	1,658	2,084	15,350	20,952	5,602	18,770
Electroplating	1931	464	4,107	5,642	2,802	13,084	10,282	----------
	1929	534	5,928	9,537	4,799	23,728	18,929	24,015
	1927	419	3,556	5,629	3,335	13,930	10,595	14,090
MACHINERY, EXCEPT TRANSPORTATION EQUIPMENT								
Agricultural implements.	1931	219	17,529	19,106	32,244	84,288	52,044	----------
	1929	293	41,663	58,942	113,969	277,854	163,885	128,499
	1927	277	33,346	46,415	85,666	202,732	117,066	117,966
	1925	303	28,696	37,388	73,850	169,468	95,618	115,325
	1923	312	30,962	40,511	63,492	151,286	87,794	121,975
Cash registers, and adding, calculating, and card tabulating machines.	1931	41	12,176	14,982	5,269	56,474	51,205	----------
	1929	46	16,840	29,746	10,766	110,001	99,235	28,257
	1927	41	14,372	21,756	11,132	106,845	95,713	21,954
Electrical machinery, apparatus, and supplies.[19]	1931	1,379	180,106	204,488	337,125	995,010	657,886	----------
	1931	*1,567*	*214,734*	*237,753*	*423,511*	*1,179,408*	*755,897*	----------
	1929	1,802	328,722	456,378	971,018	2,300,916	1,329,898	893,519
	1927	1,777	241,566	336,239	645,762	1,637,307	991,545	661,168
	1925	1,739	239,921	323,835	636,692	1,540,002	903,310	589,398
	1923	1,671	234,892	305,455	548,627	1,293,002	744,375	480,268
Engines, turbines, tractors, water wheels, and windmills.	1931	204	34,130	39,234	82,515	193,963	111,448	----------
	1929	214	62,702	100,850	206,472	465,858	259,386	291,570
	1927	231	55,696	86,672	168,436	375,393	206,956	245,396
	1925	235	52,490	75,415	149,159	321,572	172,413	227,572
	1923	265	49,596	72,309	127,135	273,309	146,174	167,869
Foundry and machine-shop products, not elsewhere classified.[20,21]	1931	7,221	284,909	328,459	452,551	1,266,619	814,068	----------
	1929	8,605	454,441	697,509	1,038,066	2,791,462	1,753,396	1,804,886
	1927	*8,095*	*398,672*	*590,924*	*878,771*	*2,268,653*	*1,389,882*	*1,550,240*
	1927	8,380	403,939	601,023	883,652	2,291,543	1,407,891	1,561,934
	1925	8,203	403,832	600,022	894,406	2,264,376	1,369,970	1,446,458
	1923	8,531	448,777	642,431	936,231	2,337,073	1,400,842	1,234,326
Machine-tool accessories and machinists' precision tools and instruments.[1]	1931	718	17,533	26,559	16,320	69,033	52,713	----------
	1929	722	26,682	51,085	26,993	144,411	117,418	64,398
Machine tools [20]	1931	279	21,262	25,150	21,901	81,287	59,386	----------
	1929	280	47,391	76,410	64,284	244,578	180,294	141,778
	1927	*288*	*32,383*	*47,403*	*45,151*	*146,855*	*102,703*	*125,426*
	1927	355	35,269	52,366	46,115	159,513	113,398	131,670
	1925	329	30,831	46,711	43,826	144,202	100,376	118,819
	1923	350	33,373	47,337	40,977	137,206	96,229	109,196
Meters (gas, water, etc.) and gas generators.	1931	70	4,954	5,756	7,217	23,050	15,833	----------
	1929	72	6,101	8,932	15,187	40,623	25,436	11,029
	1927	58	5,915	8,792	15,501	36,715	21,124	10,427

[1] Because of a change in classification, no comparable figures can be shown for earlier years.

[18] Establishments classified in the "Jewelers' findings and materials" industry for 1931 were, for the most part, classified in the "Jewelry" industry in prior years; figures for the latter industry for 1931 are, therefore, not strictly comparable with those for prior years. Figures shown in italics have been adjusted for comparison with those for 1931.

[19] Prior to 1931 this industry covered radio apparatus and tubes included for 1931 in a new classification, "Radio apparatus and phonographs." Figures for 1931 are, therefore, not comparable with those for prior years; figures shown in italics have been adjusted for comparison with those for prior years.

[20] For 1929 and 1931 certain establishments, formerly classified in this industry were included in a new industry classification "Machine-tool accessories and machinists' precision tools and instruments." Figures for 1929 and 1931 are, therefore, not strictly comparable with those for prior years. Figures in italics have been adjusted for comparison with those for later years.

[21] Includes for 1931 "Iron and steel, processed," formerly treated as a separate industry in the "Iron and steel" group. Figures for prior years have not been revised to include such data.

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
MACHINERY, ETC.—Continued								
Pumps (hand and power) and pumping equipment.	1931	303	15,156	17,107	33,735	84,353	50,619	----------
	1929	322	23,106	34,920	66,802	164,009	97,207	82,403
	1927	278	18,671	27,119	52,765	130,591	77,826	64,763
Radio apparatus and phonographs.[22]	1931	217	36,490	35,146	88,403	193,143	104,740	----------
Refrigerators, mechanical.	1931	36	15,624	20,146	61,670	144,151	82,481	----------
	1929	34	16,883	26,196	72,413	161,566	89,153	44,953
	1927	22	11,285	17,712	42,651	96,514	53,862	32,551
Scales and balances	1931	54	2,814	3,233	3,644	14,561	10,917	----------
	1929	59	4,118	5,995	7,438	30,381	22,943	9,738
	1927	60	3,906	5,461	7,454	24,655	17,202	8,766
Sewing machines and attachments.	1931	34	8,090	8,792	6,091	20,148	14,057	----------
	1929	39	10,467	14,976	16,458	45,095	28,636	29,659
	1927	35	9,997	13,748	14,073	39,724	25,651	31,286
Textile machinery and parts.	1931	330	18,808	21,238	18,175	65,798	47,623	----------
	1929	376	27,019	37,836	36,556	122,439	85,882	66,539
	1927	367	26,154	36,481	36,181	116,921	80,740	64,532
Typewriters and parts	1931	20	10,924	10,328	3,785	22,057	18,271	----------
	1929	26	16,945	22,319	7,249	61,858	54,609	23,383
	1927	26	15,603	19,398	9,936	55,319	45,383	14,653
Washing machines, wringers, driers, and ironing machines, for household use.	1931	59	6,201	7,212	24,521	50,929	26,408	----------
	1929	65	8,189	12,072	40,707	82,330	41,623	26,732
	1927	75	7,789	10,950	34,528	70,244	35,716	20,697
TRANSPORTATION EQUIPMENT								
Motor vehicles, not including motor cycles.	1931	178	134,866	156,756	1,044,406	1,567,526	523,120	----------
	1929	244	226,116	366,579	2,401,512	3,722,793	1,321,282	713,912
	1927	264	187,910	321,664	1,889,426	2,848,443	959,017	725,674
	1925	297	197,728	341,210	2,108,192	3,198,123	1,089,931	509,758
	1923	351	241,356	406,730	2,147,463	3,163,328	1,015,865	435,545
Motor-vehicle bodies and motor-vehicle parts.	1931	940	150,649	193,770	516,945	945,407	428,461	----------
	1929	1,154	221,332	366,503	856,986	1,537,930	680,944	824,705
	1927	1,213	181,489	291,291	641,307	1,151,426	510,120	551,639
	1925	1,358	228,382	372,721	862,721	1,523,280	660,558	662,255
	1923	2,120	163,530	253,147	564,107	1,013,113	449,006	425,088
Motorcycles, bicycles, and parts.	1931	19	3,294	3,563	5,520	13,697	8,177	----------
	1929	21	4,392	6,264	11,281	23,895	12,613	11,124
	1927	29	3,897	5,442	10,174	21,454	11,280	10,753
Carriages, wagons, sleighs, and sleds.[23]	1931	75	1,431	1,389	2,918	6,179	3,261	----------
	1929	88	2,873	3,418	8,468	16,450	7,992	14,899
	1927	117	3,387	4,212	10,648	19,422	8,774	18,207
Carriages, and sleds, children's.	1931	59	4,159	4,479	7,091	16,769	9,679	----------
	1929	79	7,102	8,313	13,515	28,818	15,303	10,895
	1927	89	7,030	7,814	13,895	28,668	14,773	10,309
Aircraft and parts	1931	101	9,870	15,481	13,101	40,278	27,177	----------
	1929	132	14,710	21,924	27,368	71,153	43,785	16,505
	1927	70	4,422	6,857	7,517	21,162	13,645	6,031
Locomotives, other than electric, not made in railroad repair shops.	1931	16	5,443	5,590	14,871	22,119	7,248	----------
	1929	16	11,045	17,994	52,808	83,858	31,050	98,482
	1927	17	12,961	17,648	45,688	76,719	31,031	148,971
Cars, electric and steam railroad, not built in railroad repair shops.	1931	152	18,785	25,553	59,754	99,657	39,903	----------
	1929	147	40,015	63,387	223,889	328,220	104,331	238,455
	1927	135	38,031	60,625	209,113	312,509	103,396	236,415
	1925	141	50,393	77,247	266,054	390,771	124,718	243,934
	1923	139	80,590	129,178	413,660	604,351	190,690	250,102
Ship and boat building, steel and wooden, including repair work.	1931	518	45,262	62,028	72,322	186,993	114,671	----------
	1929	624	55,089	88,274	85,849	231,300	145,451	337,455
	1927	559	55,014	87,081	78,626	211,127	132,501	314,474
	1925	565	50,224	74,275	66,299	177,182	110,883	303,470
	1923	567	62,287	90,720	84,558	213,232	128,675	317,712

[22] No comparable data for prior years. Radio apparatus was formerly included in "Electrical machinery, apparatus, and supplies" and "Phonographs," was a separate industry in the "Miscellaneous industries" group.

[23] Includes for 1931 data for certain of the establishments making carriage, wagon, sleigh, and sled materials, formerly classified in a separate industry. The figures for prior years have not been revised to include such data.

No. 730. MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
RAILROAD REPAIR SHOPS								
Railroad repair shops, steam.[24]	1931	1,783	282,405	396,394	276,705	678,922	402,217	----------
	1929	1,851	368,681	590,203	515,562	1,184,435	668,873	1,076,723
	1927	1,794	397,088	600,517	515,070	1,205,191	690,120	1,037,464
	1925	1,842	425,234	619,834	533,908	1,248,867	714,959	934,830
	1923	1,801	488,505	723,742	599,377	1,433,680	834,303	735,635
Railroad repair shops, electric.[25]	1931	384	26,629	38,854	22,119	61,841	39,722	----------
	1929	446	29,475	47,109	32,781	85,482	52,700	76,424
	1927	515	31,584	48,392	30,421	84,504	54,083	73,357
MISCELLANEOUS INDUSTRIES								
Musical instruments, total.[26]	1931	230	10,093	11,152	10,762	32,207	21,444	----------
	1929	316	18,625	25,782	30,030	79,981	49,951	49,092
	1927	371	28,769	40,585	52,691	131,066	78,375	53,598
Musical instruments and parts and materials, not elsewhere classified.	1931	88	2,593	3,053	2,238	8,114	5,875	----------
	1929	106	3,176	4,581	3,825	14,274	10,449	6,060
	1927	99	4,018	5,737	4,641	17,892	13,251	5,356
Organs	1931	42	1,460	1,763	1,627	5,710	4,083	----------
	1929	62	2,389	3,604	3,091	11,323	8,232	4,740
	1927	63	2,770	4,364	4,494	15,439	10,944	4,332
Pianos	1931	50	4,737	5,157	5,892	15,293	9,401	----------
	1929	81	9,970	14,001	18,866	42,501	23,635	27,193
	1927	124	16,582	23,891	33,899	75,491	41,592	29,725
Piano and organ materials.	1931	50	1,213	1,178	1,005	3,090	2,085	----------
	1929	67	3,090	3,597	4,248	11,883	7,635	11,099
	1927	85	5,399	6,594	9,657	22,245	12,587	14,185
Tobacco manufactures, total.	1931	1,228	99,769	69,411	363,476	1,155,851	792,376	----------
	1929	1,788	116,119	94,579	429,272	1,246,242	816,969	64,984
	1927	2,156	129,299	105,251	420,667	1,163,768	743,102	52,385
	1925	2,623	132,132	111,558	425,769	1,091,001	665,232	42,075
	1923	3,672	146,337	120,462	515,865	1,044,192	528,327	43,515
Tobacco: Chewing and smoking, and snuff.	1931	125	11,441	8,673	66,873	169,113	102,240	----------
	1929	152	10,811	8,955	72,494	179,333	106,839	15,467
	1927	159	13,125	10,661	85,310	198,245	112,934	16,566
Cigars and cigarettes	1931	1,103	88,328	60,738	296,602	986,738	690,136	----------
	1929	1,636	105,308	85,623	356,778	1,066,909	710,131	49,517
	1927	1,997	116,174	94,589	335,356	965,524	630,168	35,819
	1925	2,445	117,108	99,373	331,351	874,815	543,464	24,534
	1923	3,466	130,036	107,723	369,491	821,227	451,735	24,894
Other industries, total.[27]	1931	10,300	190,924	222,452	484,315	1,124,577	640,262	----------
	1929	12,508	282,666	380,173	899,978	2,099,872	1,199,894	550,213
	1927	11,786	282,298	383,751	904,627	2,021,945	1,117,318	731,445
	1925	11,191	271,555	348,762	851,795	1,863,381	1,011,585	638,790
	1923	11,331	291,106	357,316	835,019	1,783,442	948,423	603,593

[24] Formerly classified as "Car and general construction and repairs, steam-railroad repair shops."
[25] Formerly classified as "Car and general construction and repairs, electric-railroad repair shops."
[26] The figures for 1929 and 1927 have been revised by subtracting the figures for "Phonographs," which has been abandoned as a separate industry, and included with "Radio apparatus and phonographs" for 1931.
[27] Figures for 1929 and prior years have been revised to exclude "Whips," abandoned as a separate industry for 1931, and included in "Saddlery, harness, and whips," in the "Leather and its manufactures," group. Data for "Phonographs," a separate industry in the subgroup, "Musical instruments," in the "Miscellaneous industries" group prior to 1931, have been added for 1929 and prior years. Figures for "Dairymen's supplies; creamery, cheese-factory, and butter-factory equipment; and poultrymen's and apiarists' supplies," and "Sandpaper, emery paper, and other abrasive paper and cloth," which were abandoned as separate industries and included in industries in other groups for 1931, are included in this group for 1929 and prior years. For 1931 the motion-picture industry was not treated as a manufacturing industry, but for years prior to 1931 was included with this subgroup.

No. 730.—Manufactures: Summary for Individual Industries—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
MISCELLANEOUS INDUSTRIES—Contd.								
Artificial and preserved flowers and plants.	1931	158	2,348	2,140	3,415	9,035	5,620	----------
	1929	191	3,216	3,218	5,527	14,425	8,898	625
	1927	190	4,715	5,050	7,889	19,576	11,688	541
Artists' materials	1931	65	838	891	2,137	5,823	3,686	----------
	1929	68	1,167	1,429	4,155	9,460	5,304	3,397
	1927	61	1,211	1,430	3,772	8,205	4,433	3,250
Brooms	1931	334	4,086	3,111	6,264	13,135	6,871	----------
	1929	407	4,542	4,169	9,648	19,166	9,519	4,672
	1927	394	4,450	4,275	9,176	18,445	9,269	4,401
Brushes, other than rubber.	1931	264	5,891	5,992	14,228	30,827	16,600	----------
	1929	303	7,261	7,963	21,688	45,549	23,861	11,915
	1927	302	7,673	8,244	22,553	47,844	25,291	12,093
Buttons	1931	212	8,224	6,661	8,303	21,525	13,221	----------
	1929	242	9,034	8,814	11,501	28,978	17,477	14,615
	1927	229	9,642	9,436	11,238	29,130	17,893	15,899
Carbon paper and inked ribbons.	1931	54	1,198	1,463	6,034	13,476	7,442	----------
	1929	57	1,251	1,702	7,991	17,295	9,304	3,642
	1927	49	1,078	1,514	6,020	13,793	7,773	3,267
Combs and hairpins, not made from metal or rubber.	1931	23	653	571	837	1,917	1,080	----------
	1929	24	656	641	1,007	2,482	1,476	1,015
	1927	36	1,259	1,249	1,873	4,437	2,564	1,591
Dentists' supplies and equipment, except instruments.	1931	84	3,874	3,949	9,362	24,005	14,643	----------
	1929	87	4,559	5,359	17,327	35,180	17,853	6,216
	1927	97	3,759	3,941	18,189	32,349	14,160	3,792
Feathers, plumes, and manufactures thereof.	1931	53	527	559	588	1,898	1,310	----------
	1929	39	257	310	386	1,141	755	100
	1927	38	322	397	534	1,438	904	103
Foundry supplies	1931	52	428	492	2,080	3,998	1,918	----------
	1929	59	853	1,256	5,535	10,459	4,924	9,396
	1927	65	941	1,200	6,539	11,635	5,096	11,113
Fur goods	1931	2,354	12,358	24,793	102,634	164,749	62,115	----------
	1929	2,855	15,752	33,330	176,107	277,593	101,486	5,511
	1927	2,756	16,640	37,671	195,323	299,615	104,292	5,655
	1925	2,000	16,556	35,164	159,316	254,266	94,950	4,985
	1923	1,758	14,439	27,923	126,162	198,043	71,881	4,299
Furs, dressed	1931	243	5,160	7,968	16,221	37,873	21,652	----------
	1929	248	5,167	8,596	18,649	40,237	21,588	10,769
	1927	172	5,540	10,361	7,072	27,681	20,609	12,467
Hair work	1931	52	267	288	311	1,184	874	----------
	1929	59	359	432	538	1,694	1,155	44
	1927	69	515	598	830	2,279	1,449	21
Hand stamps and stencils, and brands.	1931	288	2,496	3,371	2,395	10,045	7,651	----------
	1929	332	2,971	4,081	3,811	15,036	11,225	3,596
	1927	293	2,668	3,842	3,734	14,156	10,422	3,159
Hats, straw, men's	1931	50	2,823	2,784	7,253	13,892	6,639	----------
	1929	50	3,380	3,688	8,705	18,739	10,034	1,836
	1927	48	3,263	4,232	11,783	21,718	9,935	1,554
Instruments, professional and scientific, and gauges, except machinists' gauges.	1931	270	9,136	11,115	10,141	40,734	30,593	----------
	1929	276	16,876	22,682	28,411	89,746	61,335	22,816
	1927	280	16,414	22,289	28,880	87,783	58,903	25,587
Jewelry and instrument cases.	1931	92	1,398	1,414	1,941	4,919	2,978	----------
	1929	113	2,269	2,473	3,324	8,827	5,502	1,503
	1927	107	2,406	2,597	3,294	8,810	5,516	1,440
Lapidary work	1931	53	205	340	1,378	2,475	1,097	----------
	1929	100	506	1,002	8,235	11,942	3,708	474
	1927	92	547	1,221	9,133	12,352	3,218	513
Mattresses and bed springs, not elsewhere classified.	1931	781	13,622	14,702	37,509	77,508	39,999	----------
	1929	951	17,187	22,584	61,527	123,280	61,753	50,554
	1927	838	13,481	16,887	52,182	98,835	46,652	32,937

No. 730.—MANUFACTURES: SUMMARY FOR INDIVIDUAL INDUSTRIES—Continued

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
MISCELLANEOUS INDUSTRIES—Contd.								
Miscellaneous articles, not elsewhere classified.	1931	709	13,892	13,119	22,380	55,133	32,754	----------
	1929	835	19,113	19,465	35,657	86,649	50,992	11,713
	1927	617	17,259	18,636	35,002	83,918	48,916	11,401
Models and patterns, not including paper patterns.	1931	649	4,332	7,378	2,787	16,192	13,405	----------
	1929	804	6,778	13,234	5,314	30,621	25,307	12,378
	1927	693	5,584	10,545	4,659	23,495	18,836	11,465
Optical goods	1931	102	7,446	8,756	7,524	27,887	20,364	----------
	1929	117	9,701	12,634	11,859	40,562	28,703	15,626
	1927	96	7,596	9,561	8,865	32,757	23,892	12,401
Paving materials: Blocks (except brick and stone), and mixtures.[1]	1931	97	1,081	1,556	8,587	16,003	7,416	----------
	1929	126	2,375	3,731	13,589	29,275	15,687	30,393
Pencils, lead (including mechanical).	1931	26	3,459	3,177	5,202	13,959	8,757	----------
	1929	38	5,703	6,292	10,756	27,773	17,017	9,921
	1927	27	5,301	5,943	9,931	24,500	14,568	9,832
Pens, fountain and stylographic; pen points, gold, steel, and brass.	1931	68	3,945	4,364	7,219	23,799	16,579	----------
	1929	76	4,600	5,304	11,459	34,211	22,752	4,235
	1927	68	4,031	4,735	10,375	25,645	15,270	3,721
Photographic apparatus and materials and projection apparatus.	1931	110	10,609	13,082	20,868	79,506	58,639	----------
	1929	115	12,967	20,507	30,393	102,827	72,435	31,904
	1927	122	12,120	18,311	29,020	90,828	61,809	24,838
Pipes (tobacco)	1931	24	1,677	1,761	1,776	5,522	3,747	----------
	1929	24	1,680	1,961	1,749	5,558	3,808	2,276
	1927	23	1,807	2,279	2,723	7,274	4,551	1,928
Roofing, built-up and roll; asphalt shingles; roof coatings, other than paint.	1931	83	4,123	5,331	32,706	58,963	26,257	----------
	1929	102	6,027	8,952	61,392	103,506	42,115	33,791
	1927	100	7,255	10,713	67,328	123,210	55,883	41,740
Signs and advertising novelties.	1931	1,078	14,463	18,485	21,297	74,681	53,384	----------
	1929	1,239	20,000	27,901	35,701	118,044	82,343	19,627
	1927	813	16,907	24,044	30,892	98,481	67,589	15,325
Soda fountains and accessories.	1931	47	1,563	2,190	5,236	14,606	9,370	----------
	1929	54	2,764	3,922	10,490	24,510	14,020	5,271
	1927	48	2,838	4,223	10,391	23,929	13,538	5,042
Sporting and athletic goods, not including firearms or ammunition.	1931	217	10,176	11,219	20,099	49,257	29,159	----------
	1929	242	10,793	13,135	24,482	58,289	33,806	18,039
	1927	188	9,689	11,595	19,394	44,943	25,549	13,484
Stationery goods, not elsewhere classified.	1931	176	8,614	9,034	22,285	47,355	25,071	----------
	1929	203	11,078	12,430	32,178	74,062	41,884	11,523
	1927	194	8,987	9,792	27,016	56,987	29,971	8,891
Steam and other packing, pipe and boiler covering, and gaskets, not elsewhere classified.	1931	141	4,705	5,174	11,297	25,401	14,103	----------
	1929	171	7,266	9,660	21,596	45,433	23,837	30,881
	1927	159	5,946	7,905	19,794	43,045	23,250	29,810
Surgical and orthopedic appliances and related products.	1931	325	6,740	7,271	22,954	51,012	28,058	----------
	1929	363	7,910	8,922	36,005	71,607	35,602	13,407
	1927	335	7,310	8,371	30,764	60,623	29,860	9,662
Theatrical scenery and stage equipment.	1931	45	365	649	1,218	3,003	1,784	----------
	1929	55	547	992	2,098	5,508	3,409	618
	1927	39	561	1,380	2,330	5,745	3,415	998
Toys, games, and playground equipment.[23]	1931	380	13,231	12,380	21,515	53,601	32,086	----------
	1929	476	16,660	17,661	29,982	74,829	44,847	25,642
	1927	397	14,738	15,543	25,805	63,956	38,150	19,028
Umbrellas, parasols, and canes.	1931	93	1,852	1,611	5,136	9,115	3,979	----------
	1929	141	2,855	2,768	10,907	17,994	7,087	3,069
	1927	164	3,308	3,411	14,021	23,156	9,135	2,411
Window shades and fixtures.	1931	448	3,119	3,313	11,198	20,562	9,364	----------
	1929	482	4,708	5,624	19,785	36,965	17,179	8,389
	1927	386	4,733	5,856	21,065	37,082	16,016	8,679

[1] Because of a change in classification, no comparable figures can be shown for earlier years.
[23] Not including children's wheel goods or sleds.

Source: Bureau of the Census, Department of Commerce.

No. 731.—SUMMARY FOR ALL MANUFACTURING INDUSTRIES COMBINED: BY GEOGRAPHIC DIVISIONS AND STATES

NOTE.—Data for "Coffee and spices, roasting and grinding" are included for all years except 1925, for which year this industry was not tabulated for the United States as a whole, and data for "Poultry killing and dressing" are included for all years except 1927, for which year this industry was not canvassed. No data for establishments with products valued at less than $5,000 are included. Statistics for horsepower were not collected for 1931.

Division and State	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
United States	1931	175,325	6,523,026	7,185,971	21,483,678	41,350,465	19,866,787	----------
	1929	210,959	8,838,743	11,620,973	38,549,580	70,434,863	31,885,284	42,931,061
	1927	191,866	8,349,755	10,848,803	35,133,137	62,718,347	27,585,210	38,825,681
	1925	187,390	8,384,261	10,729,969	35,935,648	62,713,714	26,778,066	35,772,628
	1923	196,309	8,778,156	11,009,298	34,705,698	60,555,998	25,850,300	33,094,228
New England	1931	16,383	850,132	897,541	1,833,328	3,915,474	2,082,146	----------
	1929	18,272	1,098,514	1,346,392	3,158,416	6,398,215	3,239,798	4,686,822
	1927	17,745	1,098,748	1,328,650	3,048,863	6,028,475	2,979,612	4,566,155
	1925	18,173	1,122,216	1,339,310	3,203,911	6,140,063	2,936,153	4,349,191
	1923	19,081	1,254,496	1,472,315	3,290,156	6,419,975	3,129,820	4,151,136
Middle Atlantic	1931	56,556	1,961,778	2,353,194	6,401,882	12,966,973	6,565,091	----------
	1929	64,730	2,562,340	3,640,420	11,183,619	21,359,574	10,175,955	11,623,682
	1927	62,276	2,467,791	3,491,680	10,488,832	19,533,075	9,044,243	10,968,754
	1925	58,895	2,491,039	3,434,610	10,682,358	19,409,491	8,727,133	10,106,390
	1923	66,007	2,694,027	3,595,238	11,124,614	19,738,954	8,614,340	9,627,810
East North Central	1931	39,290	1,757,815	2,057,711	6,109,399	11,843,813	5,734,414	----------
	1929	46,396	2,542,176	3,738,804	11,689,799	21,663,289	9,973,490	12,602,451
	1927	43,671	2,309,860	3,340,801	10,525,393	18,988,400	8,463,007	11,056,846
	1925	42,888	2,342,799	3,345,894	10,764,884	19,026,814	8,261,929	10,047,780
	1923	43,978	2,387,049	3,333,621	10,166,125	17,821,694	7,655,569	9,023,688
West North Central	1931	15,134	365,220	406,432	2,012,162	3,198,724	1,186,562	----------
	1929	17,792	474,115	589,162	3,507,392	5,377,383	1,869,991	2,210,192
	1927	16,192	448,192	550,698	3,170,989	4,733,112	1,562,123	2,033,074
	1925	16,280	452,820	552,702	3,216,616	4,724,411	1,507,795	1,855,278
	1923	16,605	469,725	563,914	2,848,565	4,299,549	1,450,984	1,705,600
South Atlantic	1931	15,255	737,514	584,320	1,694,740	3,611,503	1,916,763	----------
	1929	20,860	912,247	825,903	2,811,055	5,269,276	2,458,221	4,318,015
	1927	17,029	879,060	794,265	2,487,871	4,631,952	2,144,081	3,805,038
	1925	16,576	838,834	757,051	2,549,391	4,532,146	1,982,755	3,384,030
	1923	17,049	832,016	729,859	2,438,631	4,238,237	1,799,606	3,047,501
East South Central	1931	6,125	262,426	208,975	615,466	1,171,025	555,559	----------
	1929	9,860	377,870	348,733	1,090,015	2,014,443	924,428	1,999,354
	1927	7,637	359,542	331,280	1,025,122	1,808,818	783,696	1,787,386
	1925	8,080	355,995	322,675	1,042,478	1,808,702	766,224	1,615,183
	1923	7,513	347,200	310,354	988,075	1,702,670	714,594	1,461,604
West South Central	1931	8,274	199,694	192,303	1,030,359	1,547,232	516,874	----------
	1929	10,576	297,743	316,475	1,851,630	2,802,092	950,462	1,749,555
	1927	8,208	267,142	281,156	1,644,155	2,399,410	755,255	1,419,558
	1925	7,887	265,160	267,875	1,722,382	2,546,506	824,124	1,316,629
	1923	7,947	267,111	265,332	1,375,838	2,091,624	715,786	1,269,347
Mountain	1931	3,652	70,040	88,083	366,799	578,974	212,175	----------
	1929	4,319	102,492	144,486	869,856	1,239,911	370,055	938,689
	1927	3,919	94,957	130,304	659,600	981,091	321,490	829,256
	1925	3,849	100,374	134,583	688,350	1,046,318	357,968	757,974
	1923	3,970	103,803	143,392	609,141	955,772	346,632	714,807
Pacific	1931	14,656	318,407	397,412	1,419,543	2,516,745	1,097,202	----------
	1929	18,154	471,246	670,599	2,387,799	4,310,681	1,922,882	2,802,301
	1927	15,189	424,463	599,969	2,082,311	3,614,013	1,531,702	2,359,614
	1925	14,762	415,024	575,269	2,041,255	3,455,241	1,413,986	2,269,169
	1923	14,158	420,472	591,387	1,851,431	3,257,540	1,406,109	1,886,942
New England:								
Maine	1931	1,235	56,308	55,187	142,292	259,505	117,213	----------
	1929	1,568	70,159	74,200	217,367	391,751	174,385	679,153
	1927	1,426	68,142	74,212	208,866	372,093	163,228	628,941
	1925	1,500	73,849	79,777	205,709	371,849	166,141	600,787
	1923	1,642	83,328	91,854	217,070	402,650	185,580	570,532

No. 731.—Summary for All Manufacturing Industries Combined: By Geographic Divisions and States—Continued

Division and State	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
New England—Contd.								
New Hampshire	1931	851	53,048	51,810	112,650	210,152	97,502	----------
	1929	1,075	65,511	70,514	186,402	332,535	147,132	402,147
	1927	1,028	65,482	72,803	182,106	327,528	145,422	376,373
	1925	1,038	66,658	71,725	192,253	327,401	135,147	370,740
	1923	1,078	75,314	79,074	185,754	333,125	147,370	352,656
Vermont	1931	702	18,726	20,923	37,417	80,603	43,186	----------
	1929	927	27,421	33,810	66,263	143,523	77,260	163,940
	1927	880	26,241	32,305	69,957	134,030	64,073	172,762
	1925	951	27,563	32,326	74,387	138,270	63,882	178,806
	1923	1,021	30,783	34,695	80,776	149,952	69,176	177,212
Massachusetts	1931	9,305	434,441	474,189	1,015,094	2,157,450	1,142,357	----------
	1929	9,872	557,494	694,805	1,681,433	3,392,162	1,710,729	2,068,521
	1927	10,037	578,068	705,930	1,678,812	3,317,852	1,639,039	2,130,503
	1925	10,027	591,438	716,156	1,773,698	3,405,672	1,631,974	2,013,017
	1923	10,519	667,172	799,363	1,835,013	3,570,543	1,735,530	1,931,787
Rhode Island	1931	1,473	95,435	96,036	198,494	409,816	211,322	----------
	1929	1,701	126,068	144,197	342,290	666,368	324,078	463,822
	1927	1,497	120,009	138,896	313,107	592,233	279,126	410,181
	1925	1,595	120,346	138,126	345,221	621,920	276,699	395,754
	1923	1,691	134,067	152,500	358,581	675,425	316,844	391,928
Connecticut	1931	2,817	192,174	199,396	327,381	797,948	470,568	----------
	1929	3,129	251,861	328,865	665,661	1,471,876	806,214	909,239
	1927	2,877	240,806	304,504	596,014	1,284,739	688,724	847,395
	1925	3,062	242,362	301,200	612,642	1,274,952	662,309	790,087
	1923	3,130	263,232	314,829	612,961	1,288,281	675,320	727,021
Middle Atlantic:								
New York	1931	34,604	848,352	1,105,559	3,140,407	6,554,250	3,413,843	----------
	1929	39,395	1,105,966	1,650,379	5,004,636	9,978,556	4,973,920	3,986,781
	1927	36,650	1,072,284	1,605,378	4,804,173	9,400,061	4,595,889	3,671,185
	1925	33,393	1,066,202	1,533,893	4,704,989	8,968,548	4,263,558	3,348,184
	1923	38,186	1,150,901	1,581,349	4,764,626	8,960,638	4,196,012	3,263,325
New Jersey	1931	7,178	334,691	402,027	1,147,304	2,307,336	1,160,032	----------
	1929	8,388	442,328	610,596	2,165,727	3,937,157	1,771,430	1,645,408
	1927	8,312	408,093	570,309	1,956,597	3,417,450	1,460,853	1,496,935
	1925	8,204	425,377	576,236	2,086,855	3,539,181	1,452,326	1,384,234
	1923	8,767	448,069	578,927	2,039,477	3,396,628	1,357,150	1,256,892
Pennsylvania	1931	14,774	778,735	845,607	2,114,172	4,105,387	1,991,215	----------
	1929	16,947	1,014,046	1,379,444	4,013,256	7,443,861	3,430,606	5,991,493
	1927	17,314	987,414	1,315,993	3,728,062	6,715,563	2,987,502	5,800,634
	1925	17,298	999,460	1,324,481	3,890,514	6,901,762	3,011,248	5,373,972
	1923	19,054	1,095,057	1,434,963	4,320,510	7,381,688	3,061,178	5,107,593
East North Central:								
Ohio	1931	9,877	506,960	593,025	1,589,840	3,116,016	1,576,176	----------
	1929	11,855	741,143	1,102,166	3,138,099	6,027,903	2,889,804	4,340,575
	1927	10,961	669,097	968,181	2,877,126	5,230,323	2,353,197	3,734,761
	1925	11,137	676,742	975,812	3,029,686	5,347,522	2,317,836	3,482,618
	1923	11,195	699,132	979,660	2,909,167	5,146,515	2,237,348	3,307,726
Indiana	1931	4,097	212,614	232,319	756,980	1,394,213	637,233	----------
	1929	5,091	314,698	418,771	1,403,431	2,539,894	1,136,463	1,858,735
	1927	4,726	280,717	375,218	1,227,169	2,153,479	926,311	1,602,113
	1925	4,772	280,854	365,003	1,257,961	2,125,023	867,062	1,420,989
	1923	4,909	291,131	374,510	1,190,070	2,031,675	841,605	1,372,007
Illinois	1931	13,188	484,195	589,805	1,790,135	3,528,946	1,738,812	----------
	1929	15,333	691,555	1,024,870	3,352,054	6,282,092	2,930,038	2,807,001
	1927	14,711	623,468	914,103	2,921,092	5,386,003	2,464,911	2,456,997
	1925	14,117	622,368	897,970	2,926,064	5,321,838	2,395,774	2,247,408
	1923	14,345	645,627	913,220	2,794,613	5,041,113	2,246,501	1,942,516
Michigan	1931	5,793	370,140	453,463	1,303,010	2,555,106	1,252,096	----------
	1929	6,686	530,035	840,505	2,589,374	4,656,718	2,067,344	2,356,746
	1927	5,800	488,856	760,602	2,346,678	4,244,941	1,898,263	2,214,747
	1925	5,600	515,494	792,225	2,466,426	4,373,186	1,906,760	1,887,750
	1923	5,697	503,308	769,071	2,270,773	3,882,192	1,611,419	1,471,550

No. 731.—Summary for All Manufacturing Industries Combined: By Geographic Divisions and States—Continued

Division and State	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
East North Central—Continued.								
Wisconsin	1931	6,335	183,906	189,099	669,434	1,199,532	530,097	----------
	1929	7,431	264,745	352,491	1,206,840	2,156,682	949,842	1,239,394
	1927	7,473	247,722	322,697	1,153,328	1,973,653	820,325	1,048,228
	1925	7,262	247,341	314,883	1,084,747	1,859,244	774,496	1,009,015
	1923	7,832	247,851	297,160	1,001,502	1,720,198	718,696	929,889
West North Central:								
Minnesota	1931	3,864	80,753	92,929	457,317	719,064	261,747	----------
	1929	4,315	103,414	132,418	768,218	1,173,214	404,995	606,704
	1927	3,886	98,833	123,619	726,391	1,066,727	340,336	584,328
	1925	3,888	100,614	123,767	770,724	1,101,856	331,132	508,021
	1923	3,900	103,964	125,531	647,323	962,775	315,452	460,128
Iowa	1931	2,776	60,956	68,402	356,007	560,811	204,804	----------
	1929	3,317	81,678	102,327	574,394	898,213	323,820	366,760
	1927	3,061	73,692	91,247	496,940	769,341	272,401	330,702
	1925	3,270	74,976	92,233	499,586	757,771	258,185	308,016
	1923	3,420	77,847	94,206	434,336	690,032	255,697	282,333
Missouri	1931	4,824	155,268	162,052	631,166	1,117,701	486,535	----------
	1929	5,765	202,879	240,369	1,139,658	1,917,155	777,497	717,978
	1927	5,422	195,378	230,017	1,004,709	1,665,173	660,464	656,269
	1925	5,114	194,959	230,691	980,459	1,607,161	626,702	590,485
	1923	5,291	196,694	228,015	944,083	1,547,189	603,106	553,397
North Dakota	1931	325	3,306	4,600	28,155	40,076	11,921	----------
	1929	373	4,024	5,687	39,684	55,322	15,637	19,756
	1927	307	3,260	4,808	34,271	47,003	12,732	16,167
	1925	320	3,261	4,575	32,307	44,632	12,325	16,711
	1923	340	3,552	5,134	30,704	42,145	11,441	16,730
South Dakota	1931	489	5,373	6,378	50,923	69,188	18,265	----------
	1929	615	6,535	8,132	75,016	97,698	22,681	31,297
	1927	472	5,551	6,786	63,620	83,001	19,381	24,676
	1925	504	5,151	6,208	46,942	63,433	16,491	21,463
	1923	489	5,146	6,211	33,673	47,321	13,648	16,458
Nebraska	1931	1,278	23,522	28,351	214,939	294,095	79,157	----------
	1929	1,491	28,212	36,881	364,175	484,168	119,994	169,210
	1927	1,277	26,110	34,296	326,917	420,296	93,379	141,506
	1925	1,306	27,200	36,021	348,397	443,309	94,912	133,708
	1923	1,379	31,267	39,761	314,027	415,057	101,030	120,999
Kansas	1931	1,578	36,042	43,720	273,655	397,768	124,133	----------
	1929	1,916	47,373	63,348	546,247	751,613	205,367	298,487
	1927	1,767	45,368	59,925	518,141	681,570	163,429	279,426
	1925	1,878	46,659	59,207	538,202	706,250	168,048	276,874
	1923	1,786	51,255	65,056	444,420	595,030	150,610	255,555
South Atlantic:								
Delaware	1931	383	17,202	18,830	46,199	91,143	44,944	----------
	1929	460	23,552	29,063	80,491	149,642	69,151	114,961
	1927	446	21,324	25,222	69,033	129,900	60,867	103,166
	1925	419	20,704	25,072	70,622	125,406	54,784	107,391
	1923	453	23,116	27,369	70,736	128,951	58,216	112,485
Maryland	1931	2,851	107,951	107,985	365,087	669,275	304,189	----------
	1929	3,231	131,099	148,835	696,986	1,119,082	422,097	659,823
	1927	3,205	126,700	141,903	564,120	943,411	379,290	579,713
	1925	3,184	125,787	138,591	568,591	926,252	357,660	544,558
	1923	3,168	128,826	136,286	569,035	903,446	334,411	497,945
Dist. of Columbia	1931	492	8,668	14,062	29,525	79,458	49,933	----------
	1929	547	9,752	15,513	36,200	88,973	52,773	44,916
	1927	503	9,519	15,669	36,099	90,390	54,291	39,471
	1925	538	9,753	15,320	33,504	83,577	50,073	37,508
	1923	600	9,823	14,796	32,870	73,108	40,238	31,846
Virginia	1931	2,275	103,045	90,559	258,841	611,524	352,683	----------
	1929	3,287	120,273	118,089	365,824	745,910	380,086	646,251
	1927	2,432	114,918	110,378	346,166	671,347	325,181	503,726
	1925	2,553	112,135	105,887	314,711	589,511	274,800	441,807
	1923	2,743	111,578	104,680	304,493	548,153	243,661	431,237

No. 731.—Summary for All Manufacturing Industries Combined: By Geographic Divisions and States—Continued

Division and State	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
South Atlantic—Contd.								
West Virginia	1931	1,125	64,702	73,916	147,669	310,536	162,866	----------
	1929	1,488	85,326	115,295	261,398	513,012	251,615	650,199
	1927	1,313	77,630	103,431	252,884	455,217	202,332	546,440
	1925	1,395	80,700	105,892	260,880	470,822	209,941	495,051
	1923	1,487	85,661	109,937	259,151	479,510	220,359	371,699
North Carolina	1931	2,557	179,282	118,684	405,508	1,026,565	621,057	----------
	1929	3,797	209,826	160,868	618,912	1,311,924	693,013	839,945
	1927	2,984	204,590	158,394	560,819	1,154,647	593,827	810,798
	1925	2,614	182,234	134,237	550,707	1,050,434	499,727	666,861
	1923	2,670	173,687	127,538	516,149	951,911	435,762	606,397
South Carolina	1931	1,044	87,010	50,926	116,154	225,503	109,349	----------
	1929	1,659	108,777	73,223	226,542	385,892	159,351	527,326
	1927	1,059	108,992	74,478	206,772	358,334	151,562	478,245
	1925	1,134	100,144	67,062	237,227	370,283	133,056	423,359
	1923	1,180	96,802	64,753	221,240	360,446	139,206	407,735
Georgia	1931	2,851	119,531	74,918	257,445	440,425	182,981	----------
	1929	4,179	158,774	110,435	427,805	722,454	294,649	641,899
	1927	3,175	154,168	108,118	360,262	609,918	249,656	565,899
	1925	2,876	141,173	99,210	399,351	648,852	249,501	523,334
	1923	3,058	137,476	92,144	381,769	604,453	222,684	449,888
Florida	1931	1,677	50,123	34,439	68,311	157,074	88,763	----------
	1929	2,212	64,868	54,582	96,898	232,386	135,488	192,695
	1927	1,912	61,219	56,672	91,716	218,790	127,075	177,580
	1925	1,863	66,204	65,780	113,796	267,009	153,213	144,161
	1923	1,690	65,047	52,357	83,188	188,258	105,071	138,269
East South Central:								
Kentucky	1931	1,621	56,229	54,432	152,360	298,324	145,964	----------
	1929	2,246	77,825	88,644	266,559	502,639	236,080	354,740
	1927	1,851	74,912	83,859	250,633	447,765	197,132	318,755
	1925	1,864	76,580	84,946	255,108	453,937	198,828	257,965
	1923	1,975	76,724	82,648	242,410	427,094	184,684	251,554
Tennessee	1931	1,948	92,660	74,056	233,722	446,182	212,460	----------
	1929	2,855	128,400	115,877	407,611	730,509	322,898	606,704
	1927	2,098	114,968	101,198	351,436	614,041	262,604	475,243
	1925	2,162	107,645	95,255	358,097	601,488	243,391	447,529
	1923	2,307	106,504	92,482	334,111	555,266	221,154	391,465
Alabama	1931	1,639	84,630	61,568	172,184	323,234	151,050	----------
	1929	2,848	119,559	102,005	302,253	560,378	258,125	785,330
	1927	2,355	119,093	105,489	317,493	550,372	232,879	779,156
	1925	2,349	116,599	101,243	325,684	552,824	227,140	697,998
	1923	1,996	109,620	95,205	323,666	541,729	218,063	640,892
Mississippi	1931	917	28,907	18,919	57,200	103,286	46,086	----------
	1929	1,911	52,086	42,208	113,592	220,918	107,325	252,580
	1927	1,333	50,569	40,734	105,559	196,641	91,081	214,232
	1925	1,705	55,171	41,231	103,588	200,453	96,865	211,691
	1923	1,235	54,352	40,019	87,888	178,582	90,693	177,693
West South Central:								
Arkansas	1931	1,017	25,161	19,023	53,871	98,323	44,452	----------
	1929	1,731	44,205	39,503	116,648	210,903	94,255	223,034
	1927	1,146	40,032	35,288	103,815	182,751	78,936	183,041
	1925	1,257	43,977	37,538	110,665	195,208	84,543	177,011
	1923	1,231	44,545	37,770	90,709	172,541	81,832	165,154
Louisiana	1931	1,609	57,090	47,949	253,856	384,970	131,113	----------
	1929	1,989	87,345	83,867	438,540	685,037	246,497	480,404
	1927	1,624	82,415	79,673	427,994	638,361	210,367	415,582
	1925	1,742	88,058	79,763	465,426	710,050	244,624	410,298
	1923	1,781	94,719	83,031	407,414	624,683	217,268	402,938
Oklahoma	1931	1,322	22,576	26,271	150,349	218,722	68,373	----------
	1929	1,658	31,695	41,277	306,501	455,905	149,404	223,257
	1927	1,373	27,932	35,785	269,418	371,718	102,300	185,480
	1925	1,282	26,333	34,211	301,147	403,295	102,148	156,826
	1923	1,242	25,489	33,069	230,263	315,208	84,946	152,956

No. 731.—Summary for All Manufacturing Industries Combined: By Geographic Divisions and States—Continued

Division and State	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture	Horsepower
				In thousands of dollars				
West South Central—Continued.								
Texas	1931	4,326	94,867	99,061	572,282	845,217	272,935	----------
	1929	5,198	134,498	151,827	989,940	1,450,246	460,307	822,860
	1927	4,065	116,763	130,409	842,927	1,206,580	363,653	635,455
	1925	3,606	106,792	116,363	845,144	1,237,952	392,809	572,798
	1923	3,693	102,358	111,462	647,452	979,192	331,740	548,299
Mountain:								
Montana	1931	475	9,590	12,680	73,776	103,731	29,955	----------
	1929	589	14,869	24,215	209,845	271,094	61,249	197,781
	1927	565	14,242	20,915	151,792	203,503	51,712	188,390
	1925	606	14,777	21,078	146,351	205,474	59,123	166,528
	1923	679	15,943	24,540	128,702	174,874	46,172	190,516
Idaho	1931	439	9,393	11,276	32,836	55,788	22,952	----------
	1929	562	15,648	22,452	51,864	96,352	44,489	105,787
	1927	470	13,513	18,971	47,927	86,256	38,329	89,830
	1925	490	15,794	20,709	53,152	96,990	43,838	82,552
	1923	510	16,347	22,886	43,134	87,429	44,295	72,146
Wyoming	1931	205	4,808	7,879	37,256	52,744	15,488	----------
	1929	248	6,258	10,255	62,720	96,348	33,628	46,677
	1927	229	5,577	9,066	63,741	85,368	21,627	40,191
	1925	224	6,333	10,526	76,073	107,985	31,911	28,721
	1923	246	7,510	12,502	69,695	110,632	40,937	23,959
Colorado	1931	1,359	24,788	29,635	107,131	183,469	76,338	----------
	1929	1,548	32,890	43,640	183,740	306,071	122,331	233,726
	1927	1,483	32,001	43,194	173,277	278,221	104,944	254,530
	1925	1,416	31,967	43,008	171,192	278,778	107,586	219,865
	1923	1,377	31,226	40,653	150,093	255,190	105,097	176,076
New Mexico	1931	196	2,842	3,575	6,971	13,269	6,298	----------
	1929	250	4,476	5,565	10,419	21,697	11,278	23,147
	1927	200	4,653	5,421	10,056	20,183	10,127	21,467
	1925	200	4,629	5,083	9,684	19,459	9,774	18,842
	1923	186	5,459	6,484	9,954	20,422	10,468	16,863
Arizona	1931	292	6,295	8,011	37,954	63,075	25,121	----------
	1929	348	10,550	15,075	167,714	200,002	32,289	180,637
	1927	300	8,967	12,133	77,799	117,624	39,825	100,641
	1925	294	9,127	11,506	92,271	138,781	46,511	102,127
	1923	283	9,008	12,635	80,993	123,377	42,384	128,531
Utah	1931	578	10,762	12,511	63,818	96,006	32,188	----------
	1929	651	15,601	19,699	157,902	214,629	56,727	123,737
	1927	556	13,585	16,689	120,567	163,118	42,551	112,233
	1925	517	15,077	18,200	127,543	177,225	49,681	124,735
	1923	585	14,945	18,344	114,183	161,607	47,424	78,733
Nevada	1931	108	1,562	2,516	7,057	10,891	3,835	----------
	1929	123	2,200	3,585	25,652	33,717	8,065	27,197
	1927	116	2,419	3,915	14,440	26,816	12,375	21,974
	1925	102	2,670	4,474	12,084	21,627	9,542	14,604
	1923	104	3,365	5,348	12,388	22,243	9,855	27,983
Pacific:								
Washington	1931	2,897	71,014	83,917	223,835	418,922	195,086	----------
	1929	3,672	114,830	160,671	428,413	795,562	367,149	814,891
	1927	3,344	104,468	145,931	389,885	677,914	288,029	680,408
	1925	3,216	105,893	146,225	372,759	659,340	286,581	748,110
	1923	3,029	111,663	156,435	372,044	678,543	306,499	593,330
Oregon	1931	1,709	42,267	47,504	120,888	231,880	110,993	----------
	1929	2,463	65,505	86,829	205,227	411,769	206,542	418,324
	1927	1,779	57,179	75,717	187,771	342,852	155,081	339,511
	1925	1,908	59,579	78,209	193,609	352,949	159,340	387,749
	1923	1,909	62,655	81,769	195,922	363,715	167,794	322,297
California [1]	1931	10,050	205,126	265,991	1,074,820	1,865,943	791,123	----------
	1929	12,019	290,911	423,099	1,754,158	3,103,350	1,349,191	1,569,086
	1927	10,066	262,816	378,321	1,504,655	2,593,247	1,088,592	1,339,695
	1925	9,638	249,552	350,835	1,474,887	2,442,952	968,065	1,133,310
	1923	9,220	246,154	353,183	1,283,465	2,215,281	931,817	971,315

[1] Data for the motion-picture industry are included in the figures for 1929 and earlier years, but not in those for 1931. California is the only State in which this industry contributed more than a fraction of 1 per cent of the total value of products.

Source: Bureau of the Census, Department of Commerce.

No. 732.—MANUFACTURES FOR INDUSTRIAL AREAS

NOTE.—The term industrial area signifies an area having as its nucleus as important manufacturing city and comprising the county in which the city is located, together with any adjoining county or counties in which there is great concentration of manufacturing industry. The industrial areas by constituent counties are as follows: Akron area—Summit County; Albany-Schenectady-Troy area—Albany, Rensselaer, and Schenectady Counties; Allentown-Bethlehem area—Lehigh and Northampton Counties; Baltimore area—Baltimore City and Baltimore County; Boston area—Essex, Middlesex, Norfolk, and Suffolk Counties; Bridgeport-New Haven-Waterbury area—Fairfield and New Haven Counties; Buffalo area—Erie and Niagara Counties; Chicago area—Cook, DuPage, Kane, Lake, and Will Counties, Ill., and Lake County, Ind.; Cincinnati area—Butler and Hamilton Counties, Ohio, and Campbell and Kenton Counties, Ky.; Cleveland area—Cuyahoga and Lorain Counties; Dayton area—Montgomery County; Detroit area—Oakland and Wayne Counties; Hartford area—Hartford County; Indianapolis area—Marion County; Kansas City area—Clay and Jackson Counties, Mo., and Wyandotte County, Kan.; Los Angeles area—Los Angeles County; Milwaukee area—Kenosha, Milwaukee, and Racine Counties; Minneapolis-St. Paul area—Dakota, Hennepin, and Ramsey Counties; New York City area—Bronx, Kings, New York, Queens, Richmond, and Westchester Counties, N.Y., and Bergen, Essex, Hudson, Middlesex, Passaic, and Union Counties, N. J.; Philadelphia area—Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pa., and Burlington, Camden, and Gloucester Counties, N. J.; Pittsburgh area—Allegheny, Beaver, Washington, and Westmoreland Counties; Providence-Fall River-New Bedford area—Providence County, R. I., and Bristol County, Mass.; Reading area—Berks County; Rochester area—Monroe County; St. Louis area—St. Louis City and St. Louis County, Mo.; and Madison and St. Clair Counties, Ill.; San Francisco-Oakland area—Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties; Scranton-Wilkes-Barre area—Lackawanna and Luzerne Counties; Seattle-Tacoma area—King and Pierce Counties; Springfield-Holyoke area—Hampden County; Toledo area—Lucas County; Wheeling area—Brooke, Hancock, and Ohio Counties, W. Va., and Belmont, Columbiana, and Jefferson Counties, Ohio; Worcester area—Worcester County; Youngstown area—Mahoning and Trumbull Counties, Ohio, and Lawrence and Mercer Counties, Pa.

[All figures except number of wage earners in thousands of dollars]

Area	Wage earners (average for the year)		Wages		Value of products		Value added by manufacture	
	1929	1931	1929	1931	1929	1931	1929	1931
United States	8,838,743	6,523,026	11,620,973	7,185,971	70,434,863	41,350,465	31,885,284	19,866,787
Total for areas	4,963,875	3,680,260	7,236,793	4,528,234	43,849,751	15,725,908	20,211,316	12,629,154
Akron area	67,298	42,995	107,254	55,092	599,053	325,276	281,393	190,310
Albany - Schenectady - Troy area	63,112	45,042	90,807	52,497	367,472	199,429	187,722	113,643
Allentown - Bethlehem area	58,483	44,809	76,490	45,584	396,185	209,785	191,019	102,422
Baltimore area	99,601	81,576	119,017	86,723	949,853	558,985	343,016	246,912
Boston area	235,652	228,134	371,695	264,102	1,950,418	1,310,199	973,869	677,198
Bridgeport - New Haven-Waterbury area	136,147	102,026	180,875	108,455	862,311	463,274	444,400	269,261
Buffalo area	115,212	78,614	171,674	99,953	1,157,752	680,217	493,502	301,692
Chicago area	550,903	382,852	869,218	500,331	5,558,331	3,097,673	2,548,490	1,488,673
Cincinnati area	114,068	80,264	157,584	93,780	933,291	543,306	439,058	253,885
Cleveland area	176,840	121,962	276,161	146,315	1,505,490	762,916	735,276	375,468
Dayton area	42,591	31,770	64,793	38,579	330,319	213,490	211,429	138,202
Detroit area	293,252	209,188	511,639	276,348	2,844,610	1,557,654	1,229,694	759,538
Hartford area	65,482	48,521	89,977	50,999	351,491	183,795	228,723	118,098
Indianapolis area	51,117	35,293	67,713	38,915	428,362	243,056	189,918	117,784
Kansas City (Missouri and Kansas) area	48,332	37,433	63,705	44,849	741,238	399,797	229,900	134,421
Los Angeles area	114,480	90,203	175,812	166,642	1,319,386	828,896	609,048	411,082
Milwaukee area	144,760	96,014	211,345	103,113	1,166,494	579,353	550,269	284,484
Minneapolis-St. Paul area	65,148	52,340	84,462	61,269	709,829	442,767	274,836	185,210
New York City area	918,206	715,134	1,416,881	980,836	9,424,295	6,162,828	4,510,597	3,158,028
Philadelphia area	376,009	293,409	510,541	340,180	2,981,046	1,874,935	1,431,487	939,780
Pittsburgh area	227,221	159,116	357,075	192,415	2,015,399	933,223	856,661	404,143
Providence-Fall River-New Bedford area	184,895	142,017	203,019	135,954	898,410	536,693	436,835	280,322
Reading area	47,350	38,726	61,879	38,287	229,028	128,615	124,831	70,421
Rochester area	63,248	47,117	88,898	54,542	420,611	270,316	252,737	174,555
St. Louis area	154,321	117,459	198,008	127,995	1,541,954	893,945	623,081	385,373
San Francisco-Oakland area	93,797	70,775	138,059	96,144	1,165,683	767,865	463,059	310,271
Scranton-Wilkes-Barre area	42,268	35,829	41,516	30,796	185,952	119,762	92,759	67,037
Seattle-Tacoma area	47,449	30,816	66,055	37,984	389,775	204,318	161,956	89,006
Springfield-Holyoke area	54,208	39,048	70,848	44,212	341,184	199,236	179,824	118,569
Toledo area	53,996	31,990	79,926	36,134	479,336	214,230	212,838	96,280
Wheeling area	45,906	34,342	70,729	44,505	319,433	199,318	140,067	88,438
Worcester area	83,620	65,111	105,060	69,166	462,225	279,034	243,517	149,755
Youngstown area	78,903	50,335	138,077	65,540	823,533	341,722	319,505	128,893

Source: Bureau of the Census, Department of Commerce.

No. 733.—INDEXES OF PRODUCTION OF MANUFACTURES AND MINERALS

NOTE.—The manufactures index covers 49 industries and the minerals index 8, prior to 1932. Indexes for 1932 exclude copper, data for which are not available for that year, and are, therefore, not strictly comparable with figures for earlier years. Both indexes have been adjusted for seasonal variations and for the number of working days in the month

[Monthly average 1923–1925=100]

Month	Manufactures							Minerals						
	1926	1927	1928	1929	1930	1931	1932	1926	1927	1928	1929	1930	1931	1932
January	109	106	107	120	105	83	71	91	115	103	116	110	89	77
February	107	107	110	119	107	86	68	95	117	102	119	108	87	78
March	106	108	109	120	104	87	64	106	120	105	109	98	89	84
April	106	108	109	122	104	87	61	108	106	105	114	104	91	79
May	106	110	108	123	101	87	58	104	109	106	117	104	87	67
June	108	108	109	127	97	82	58	107	106	102	114	102	87	63
July	108	107	110	125	92	82	57	108	101	102	116	100	86	64
August	110	106	111	122	89	78	59	109	106	105	115	96	79	65
September	111	104	114	121	89	75	66	110	104	107	118	94	78	70
October	111	102	116	119	86	71	65	113	103	111	116	95	83	74
November	108	101	118	110	85	71	63	118	102	114	110	92	81	75
December	105	102	120	101	82	73	64	119	102	111	116	93	84	76

No. 734.—MANUFACTURING PRODUCTION: INDEXES FOR GROUPS OF INDUSTRIES

NOTE.—Monthly average 1923–1925=100. The monthly figures are adjusted for the varying number of working days in each month and for the normal seasonal variations. In computing the indexes, the individual products and industries have been weighted in accordance with their relative importance

Year and month	Total [1]	Iron and steel	Textiles	Food products	Paper and printing	Lumber cut	Automobiles	Leather products	Cement	Nonferrous metals	Petroleum refining	Rubber tires and tubes	Tobacco products
1921	67	46	87	83	70	72	41	90	66	39	64	55	85
1922	86	82	99	94	85	87	66	102	76	69	74	77	89
1923	101	105	105	99	94	101	102	110	92	94	86	86	96
1924	94	89	91	103	99	98	91	94	100	99	99	98	99
1925	105	106	104	98	107	101	107	96	108	107	115	116	105
1926	108	113	104	97	114	98	108	98	110	112	127	116	112
1927	106	104	113	96	112	92	86	103	115	109	136	120	118
1928	112	119	107	98	119	91	110	103	118	115	152	144	124
1929	119	130	115	97	125	91	135	105	114	125	168	135	134
1930	95	94	91	93	113	64	85	94	108	97	161	100	131
1931	80	60	94	90	106	41	60	92	84	69	155	96	123
1932	63	31	83	87	91	25	35	92	51	(2)	139	78	111
1931													
January	83	71	86	94	107	48	63	81	85	77	141	94	124
February	86	74	95	92	109	44	68	89	86	79	146	92	133
March	87	77	97	87	110	49	67	94	91	76	150	97	131
April	87	71	96	95	109	48	77	103	94	73	159	96	132
May	87	67	97	89	111	48	78	107	94	73	161	115	135
June	82	61	96	83	107	47	65	99	93	68	159	108	132
July	82	58	100	87	109	42	60	98	90	65	160	114	121
August	78	50	99	88	105	38	52	102	83	65	161	94	118
September	75	45	100	93	104	36	40	95	79	65	159	80	118
October	71	45	93	92	100	33	26	81	75	64	158	76	111
November	71	51	89	91	99	27	36	77	67	59	155	84	113
December	73	42	88	97	99	28	66	82	61	62	149	88	113
1932													
January	71	43	89	93	101	26	45	85	65	(2)	140	92	124
February	68	41	86	90	98	22	35	89	56	(2)	141	85	114
March	64	34	82	84	99	26	28	92	53	(2)	136	73	109
April	61	32	65	91	93	27	35	89	46	(2)	144	70	109
May	58	29	59	89	90	28	45	84	46	(2)	146	72	110
June	58	25	63	83	85	26	47	82	52	(2)	146	107	118
July	57	25	69	81	86	25	33	77	50	(2)	141	89	114
August	59	23	90	83	84	23	23	84	48	(2)	135	68	108
September	66	28	104	95	88	23	24	93	54	(2)	133	64	111
October	65	31	99	89	91	24	16	94	55	(2)	137	68	104
November	63	31	92	83	87	21	31	89	53	(2)	138	73	104
December	64	27	91	84	86	23	60	85	43	(2)	132	67	112

[1] Includes data for some industries not shown separately in this table. Figures for 1932 are not strictly comparable with those for earlier years owing to the exclusion of copper (smelted), data for which are not available.

[2] Data not available.

Source of Tables 733 and 734: Federal Reserve Board.

No. 735.—TEXTILE MANUFACTURES: PRODUCTION

NOTE.—In general, most of the articles listed are finished products, but large quantities of partly finished products, especially yarn, made for sale to other establishments of the same or other branches of the textile industry are included. This involves considerable duplication in total value of products and in cost of materials

Product	Unit	Quantity (thousands of unit specified)			Value (thousands of dollars)		
		1927	1929	1931	1927	1929	1931
COTTON-GOODS AND SMALL-WARES[1]							
Total value					1,608,941	1,579,792	842,306
Sheetings	Sq. yard	1,857,476	1,693,167	1,359,686	167,888	146,181	76,906
Print cloth	do	1,583,861	1,703,025	1,586,339	109,826	121,423	74,505
Voiles	do	151,654	157,449	124,364	15,012	13,407	8,201
Lawns, nainsooks, cambrics, and similar muslins.	do	272,454	226,554	181,897	32,101	25,419	15,080
Tobacco, cheese, butter, bunting and bandage cloths.	do	660,424	617,411	587,147	19,298	18,100	9,776
Ginghams	do	290,619	147,120	56,313	37,129	17,717	4,611
Shirtings	do	378,530	317,046	273,178	55,437	45,771	24,350
Drills	do	347,776	324,041	184,646	40,668	39,701	15,132
Twills and sateens	do	413,997	284,117	201,434	50,336	37,441	16,774
Ticks and denims	do	313,401	292,302	234,527	60,150	58,537	29,186
Osnaburgs	do	164,976	145,745	109,081	17,900	18,211	8,059
Cotton flannel (canton flannel, flannelettes, and blanketings).	do	400,097	323,140	288,073	55,386	48,329	27,017
Tire duck	do	35,474	22,277	15,915	11,343	6,846	3,279
Ducks (except tire)	do	218,505	223,926	136,577	57,929	64,184	24,756
Tire fabrics (except tire duck)	Pound	167,188	233,129	123,561	69,631	104,875	37,971
Tapestries	Sq. yard	18,619	9,810	9,188	16,612	12,995	7,242
Plushes, velvets, velveteens	do	42,689	59,394	23,794	45,710	41,761	15,898
Corduroys	do	23,171	27,134	15,702	8,677	9,501	3,982
Towels, toweling, and washcloths.	do	169,997	169,694	158,378	42,611	33,037	24,108
Cotton table damask	do	33,523	35,868	20,524	6,751	8,383	3,651
Blankets	do	107,263	94,061	71,989	29,452	25,392	12,721
Bedspreads and quilts (crochet, marseilles, and satin).	do	71,283	52,902	55,927	18,950	16,396	8,643
Bags made from fabric woven by establishment.	do	17,558	10,486	3,400	3,271	2,032	712
Small wares					62,156	65,494	40,303
Yarns for sale	Pound	664,335	647,725	414,463	253,663	253,349	111,873
Thread	do	29,992	25,250	19,576	46,409	37,100	29,153
Batting, wadding, and mattress felts.	do	129,836	149,481	114,324	16,304	19,407	12,241
Cotton waste for sale	do	484,416	443,916	315,808	26,809	32,570	10,641
Other cotton products					231,532	256,233	185,535
LACE							
Total value					24,360	27,931	17,086
Nottingham lace curtains	Pair	5,661	6,113	4,518	10,797	11,250	6,868
Nottingham lace curtain nets	Lin. yard	19,197	14,313	6,282	5,518	4,675	1,831
Levers laces					6,263	8,756	7,305
Other lace products					1,782	3,250	1,082
KNIT GOODS							
Total value					801,427	881,176	573,630
Hose and half hose	Doz. pair	110,006	117,366	101,733	453,593	511,626	321,611
Gloves and mittens	do	5,036	3,728	421	13,270	8,897	1,811
Shirts and drawers	Dozen	8,619	8,802	7,959	38,961	37,670	25,258
Union suits	do	9,786	8,891	6,888	83,685	70,837	40,452
Bathing suits	do	740	1,021	963	15,857	22,084	12,859
Scarfs and shawls	do	188	127	58	2,215	1,163	554
Headwear	do	700	783	1,078	3,877	3,783	3,279
Neckties	do	1,810	628	131	5,853	1,717	327
Jersey cloth and tricollette	Sq. yard	[2] 42,564	75,521	108,340	[2] 34,971	45,375	31,523
Stockinette					957	1,234	297
Glove and shoe linings					4,773	4,655	1,053
Towels and towelings	Sq. yard	920	(3)	(3)	659	(3)	(3)
Other knit products					142,756	172,135	134,606

For footnotes, see p. 728.

No. 735.—Textile Manufactures: Production—Continued

Product	Unit	Quantity (thousands of unit specified)			Value (thousands of dollars)		
		1927	1929	1931	1927	1929	1931
SILK AND RAYON GOODS							
Total value					755,658	737,759	422,457
Broad silk:							
All silk	Sq. yard	385,530	424,607	386,294	376,919	385,773	209,838
Silk mixed	do	127,296	59,452	22,369	108,696	42,210	16,047
Velvets	do	5,484	9,651	7,346	11,909	25,112	12,233
Plushes	do	1,310	1,957	1,879	2,748	3,830	2,091
Upholstery and tapestry	do	3,705	3,403	3,834	8,303	6,122	2,586
Organzine, tram, and crêpe twist for sale.	Pound	11,409	12,121	9,753	70,247	69,740	32,177
Spun silk for sale	do	4,456	3,769	1,914	15,696	12,916	5,269
Machine twist	do	723	515	300	6,474	4,822	1,551
Sewing, embroidery, and other floss silks.	do	659	335	298	5,768	2,864	2,141
Ribbons					36,041	25,008	15,388
Fringes and gimps					7,508	7,839	4,075
Braids and binding					11,285	4,863	2,584
Other silk and rayon products					94,064	146,660	116,477
WOOLEN AND WORSTED GOODS[1]							
Total value					808,208	802,876	479,632
Suitings, dress goods, overcoatings, and cloakings.[4]	Sq. yard	414,320	354,295	295,005	459,453	432,258	268,659
All-wool woolen	do	136,635	135,354	116,352	167,484	155,938	94,858
All-wool worsted	do	173,754	166,211	146,742	231,998	238,669	155,044
Wool and cotton mixed	do	30,433	52,730	31,911	20,844	37,651	18,757
Cotton-warp woolen	do	46,609			24,785		
Cotton-warp worsted	do	26,889			14,342		
Domett flannels and shirtings	do	8,413	14,899	7,061	3,627	5,778	1,960
Satinets and linseys	do	3,974			1,282		
Blankets, all-wool	do	17,295	18,095	15,568	12,359	15,831	10,542
Horse blankets	do	1,069	394	211	631	212	93
Yarns for sale	Pound	145,763	159,474	141,763	184,024	199,758	129,144
Noils and wool waste for sale	do	48,520	46,368	35,594	18,526	15,597	7,242
Other woolen and worsted goods.					128,306	133,442	61,992
FELT GOODS[1]							
Total value					39,015	42,294	26,580
Felt cloths	Pound	6,401	7,075	4,992	15,009	17,113	11,596
Trimming and lining felts	do	3,708	6,147	4,483	3,122	3,889	2,497
Shoe and slipper felts	do	5,119	5,148	3,923	5,295	2,982	931
Boot and shoe linings	do	1,723	1,607	1,121	1,165	1,183	901
Hair felting	do	31,095	65,106	50,245	6,075	17,127	10,655
All other felts	do				8,348		
HATS, WOOL-FELT							
Total value					7,767	8,031	4,888
Hats	Dozen	376	400	177	5,033	4,410	1,905
Hat bodies and hats in the rough.	do	379	500	745	2,734	3,621	2,983
CARPETS AND RUGS							
Total value					163,289	174,287	86,403
Carpets	Sq. yard	16,872	27,385	13,257	40,778	61,788	25,192
Rugs, made of sewed strips	do	9,340	3,720	1,338	35,106	14,410	4,007
Rugs, woven whole	do	41,021	42,306	29,448	87,405	98,089	57,204
WOOL SHODDY							
Total value					10,737	13,354	5,197
Recovered wool fiber	Pound	41,149	60,108	34,514	10,737	13,354	5,197
HATS, FUR-FELT							
Total value					93,025	95,278	55,586
Hats	Dozen	2,013	1,770	1,306	73,084	70,809	39,899
Hat bodies and hats in the rough.	do	1,233	1,534	1,474	19,941	24,469	15,687

For footnotes, see p. 728.

No. 735.—Textile Manufactures: Production—Continued

Product	Unit	Quantity (thousands of unit specified)			Value (thousands of dollars)		
		1927	1929	1931	1927	1929	1931
CORDAGE AND TWINE AND JUTE AND LINEN GOODS							
Total value					130,004	135,989	67,445
Rope, cable, and cordage:							
Manila hemp	Pound	105,614	114,476	62,550	22,607	22,171	9,425
Sisal	do	30,712	27,381	22,380	4,439	3,972	2,269
Henneqnin	do	12,992	16,120	7,616	1,840	2,447	798
Cotton	do	27,404	28,096	20,842	7,602	8,299	4,115
Jute	do	12,256	35,827	18,685	1,884	4,860	1,944
Other	do	43,673	5,787	3,075	6,270	924	436
Twine, binder [5]	do	169,795	178,605	134,256	19,457	18,395	11,458
Twine, cotton	do	64,208	85,988	48,863	20,160	28,991	10,308
Twine, other	do	74,065	91,091	70,798	12,813	15,204	9,018
Yarns for sale	do	88,539	97,935	59,448	15,742	15,467	7,402
Linen thread	do	2,708	3,103	2,114	4,211	4,510	2,388
Linen woven goods					3,552	3,365	2,885
Jute bagging	Sq. yard	48,272	27,863	31,463	5,200	3,129	1,996
Other products					4,227	4,255	3,003
FLOOR COVERING, AND OIL-CLOTH							
Total value					95,702	109,327	54,663
Oilcloth (cotton back)	Sq. yard	105,284	125,677	93,095	18,763	23,640	13,626
Linoleum (jute back)	do	49,921	48,272	20,372	42,039	48,744	19,408
Floor covering (felt back)	do	111,793	117,970	87,576	34,900	36,943	21,629
ARTIFICIAL LEATHER							
Total value					29,165	31,346	15,007
Pyroxylin coated	Sq. yard	49,651	65,029	32,695	24,455	30,441	13,344
Other than pyroxylin coated	do	10,025	862	1,968	4,089	891	1,153
Kind not specified					622	14	509

[1] Figures for 1927 are not strictly comparable with those for 1929 and 1931; data for the several classes made as secondary products in other industries are included for 1929 and 1931, but not for 1927.
[2] Excludes cotton jersey which is included with "Other knit products."
[3] Included in other knit products.
[4] Data for other suitings such as mohair, mohair and cotton mixed, woolen-worsted, etc., are included in the figures for "Other woolen and worsted goods."
[5] Not including binder twine made in penal institutions as follows: For 1927, 57,808,454 pounds; 1929, 47,322,550 pounds; 1931, 52,161,200 pounds.

Source: Bureau of Census, Department of Commerce.

No. 736.—BOOTS AND SHOES (OTHER THAN RUBBER): Production

Note.—In thousands of pairs. Detailed value data were not collected at the censuses. For total value of products of the industry see Table 730, p. 708. Data for 1923 to 1932 compiled from monthly reports of manufacturers representing approximately 95 per cent of the total production in the United States for 1922 to 1928, and 98 per cent for 1929 to 1932

Year	Total	Men's [1]	Boys' and youths'	Women's	Misses' and children's	Infants'	Athletic and sporting (leather) [1]	Canvas and other textile	Not specified (including slippers)
1914	292,666	98,031	22,896	80,916	48,322	15,477	(2)	(2)	27,024
1919	331,225	95,017	26,504	104,813	48,538	16,669	586	11,056	28,042
1921	286,771	69,458	18,462	101,474	35,066	17,379	5,547	8,602	30,784
1923	351,114	100,283	22,239	109,676	40,136	27,015	6,434	8,347	36,984
1925	323,553	86,546	21,021	104,782	38,691	24,587	5,914	8,564	33,448
1926	324,514	86,644	21,111	110,447	38,577	24,041	5,318	4,790	33,586
1927	343,606	95,328	24,229	116,259	39,650	24,542	1,488	3,301	38,808
1928	344,351	90,970	23,032	123,753	37,135	23,835	1,547	3,760	40,319
1929	361,402	94,770	22,993	131,303	39,927	23,750	1,768	3,121	43,770
1930	304,170	77,147	18,530	112,629	32,037	18,558	1,728	2,593	40,948
1931	316,240	77,420	20,047	112,603	34,308	18,546	1,708	4,750	46,858
1932	313,290	74,493	18,100	113,944	33,600	15,653	1,111	6,132	50,256

[1] Figures beginning 1927 are not strictly comparable with earlier years owing to the fact that considerable quantities of heavy footwear now included with men's shoes were included with "Athletic and sporting shoes (leather)," prior to 1927.
[2] Not reported separately; included with "not specified, etc."

Source: Bureau of the Census, Department of Commerce.

No. 737.—LEATHER: Production by Principal Kinds

Note.—For value of products of the tanning industry see Table 730, p. 708

Kind	1925	1926	1927	1928	1929	1930	1931
Sole leather, cattle..1,000 backs, bends, sides	14,879	13,615	15,829	16,138	14,516	15,513	12,755
Belting leather..1,000 butts and butt bends	809	858	929	847	990	822	532
Harness leather.....1,000 sides	1,288	1,169	1,016	813	642	506	358
Bag, case, and strap leather.....do	1,175	1,183	1,105	812	947	751	624
Upholstery leather:[1]							
Whole-hide grains.....1,000 hides	463	405	354	321	273	186	201
Machine buffed.....do	163	196	148	149	141	53	47
Whole-hide splits.....1,000 pieces	832	807	938	709	672	388	393
Upper leather (other than patent):[1]							
Cattle (including kip side)...1,000 sides	15,338	15,476	13,459	11,485	12,610	11,112	12,084
Calf and kip.....1,000 skins	13,621	14,943	16,150	14,975	14,541	13,589	12,030
Goat and kid.....do	40,887	48,415	49,417	52,862	54,355	54,451	47,980
Cabretta.....do	2,412	2,344	1,551	2,064	1,672	1,972	1,770
Sheep and lamb.....do	14,124	13,973	14,849	16,952	17,752	10,955	12,307
Patent leather (other than upholstery):[1]							
Cattle (including kip side)...1,000 sides	8,628	7,459	8,388	7,831	5,954	4,626	4,501
Horse and colt.....1,000 half fronts	684	610	416	425	271	124	110
Goat and kid.....1,000 skins	991	504	430	734	302	495	159
Glove and garment leather:[1]							
Horse, colt, ass, and mule—							
Half fronts.....thousands	1,146	1,009	1,459	1,500	1,857	2,170	1,646
Shanks.....do	1,011	1,143	1,154	1,301	1,420	1,497	1,523
Cabretta.....1,000 skins	1,678	2,071	1,820	1,014	1,066	1,155	1,352
Sheep and lamb.....do	5,326	5,297	7,576	9,026	8,633	9,298	10,934
Fancy and bookbinders' leather:[1]							
Sheep and lamb.....1,000 skins	1,984	2,369	2,825	3,201	2,618	1,912	2,044
Goat and kid.....do	541	664	717	1,116	889	398	422
Splits (other than upholstery) finished and rough.....1,000 side splits	24,023	24,617	24,645	21,945	22,465	19,315	17,666

[1] Figures shown for principal kinds only.

Source: Bureau of the Census, Department of Commerce.

No. 738.—RUBBER PRODUCTS

Product	Unit	Quantity (thousands of unit specified)			Value (thousands of dollars)		
		1927	1929	1931	1927	1929	1931
Total value					1,226,479	1,111,631	612,412
Tires and inner tubes:							
Pneumatic—							
Motor-vehicle	Number	134,405	143,808	98,309	739,070	654,103	358,997
Motor cycle and bicycle	do	3,046	3,737	2,835	3,695	3,634	2,411
Solid and cushion—							
Truck	do		424	112	36,768	14,897	4,055
All other						4,276	1,403
Boots, rubber	Pair	5,362	5,454	1,971	16,746	16,141	4,775
Shoes and overshoes, rubber	do	71,577	51,357	27,145	90,994	64,883	26,378
Shoes, canvas, with rubber soles	do	28,810	43,954	28,082	25,456	30,335	17,155
Heels, for sale as such	do	318,346	292,719	248,257	25,504	17,927	11,648
Soles, including composition or fiber	do	40,820	46,189	59,609	9,341	8,960	8,388
Rubberized fabrics, sold as such or on hand:							
Automobile and carriage	Yard	17,363	22,408	10,425	11,048	11,864	5,398
All other	do	38,445	70,560	53,574	15,493	17,890	12,255
Belting					21,947	25,776	13,608
Hose and tubing					41,472	40,932	22,114
Packing					4,853	5,033	2,209
Druggists' and stationers' sundries					15,732	16,894	12,333
Hard-rubber goods					18,891	17,937	11,457
All other manufactures of rubber					122,096	136,242	87,843
Reclaimed rubber	Pound	330,436	363,696	216,509	27,373	23,906	9,985

Source: Bureau of the Census, Department of Commerce.

No. 739.—CHEMICALS: Products Made for Sale

NOTE.—In addition to quantities shown in the table, made for sale, large quantities of certain chemicals, especially acids, are made and consumed in further processes in the same establishment. There is considerable duplication in the total value of products due to the use of products sold by one establishment as materials for other establishments manufacturing chemicals. Tons are of 2,000 pounds

Product	Unit	Quantity (thousands of unit specified)			Value (thousands of dollars)		
		1927	1929	1931	1927	1929	1931
Total value					610,143	758,018	549,036
Acids:							
Acetic	Pound	46,296	66,364	62,586	5,049	6,890	3,537
Boric (boracic)	do	21,010	26,055	18,128	1,583	1,541	970
Carbonic	do	74,344	136,930	153,575	6,048	6,932	6,226
Citric	do	7,058	10,756	8,381	3,151	4,833	3,060
Hydrochloric (muriatic)	Ton	162	196	[1] 41	3,016	3,195	2,422
Mixed (sulphuric-nitric)	do	61	64	38	3,821	4,214	1,800
Nitric	do	29	35	[1] 31	3,559	3,495	3,382
Oleic	Pound	55,686	56,948	29,946	4,778	5,375	1,872
Phosphoric	do	22,397	34,674	[2] 19,096	1,682	2,073	761
Stearic	do	37,277	39,154	24,868	3,832	5,488	2,057
Sulphuric (basis 50° B)	Ton	4,972	5,816	4,230	42,886	45,573	33,075
Sulphuric reclaimed (50° B)	do	191	381	356	1,089	1,389	1,320
Tannic	Pound	1,297	1,449	2,404	593	504	668
Tartaric	do	5,781	4,906	5,181	1,811	2,060	1,463
Other acids					5,278	5,057	4,236
Alums	Ton	341	369	332	9,525	9,389	7,970
Aluminous abrasives	do	20	33	7	1,970	3,446	1,152
Other aluminum compounds					2,068	3,114	1,639
Coal-tar products:							
Crudes					24,862	26,370	20,778
Intermediates					22,844	25,594	18,907
Dyes and other finished products					58,350	78,688	63,403
Nitrogen compounds:							
Ammonia (aqua and liquor)	Pound	46,225	[3] 30,200	[3] 18,831	1,260	1,784	1,032
Ammonia (anhydrous)	do	45,115	173,349	127,099	4,011	10,673	8,044
Other ammonium compounds					6,325	3,507	3,419
Ferric ferrocyanide	Pound	4,104	4,803	3,507	1,365	1,446	1,134
Other cyanides					4,946	6,337	4,590
Other nitrogen compounds					8,178	14,590	15,264
From coke-oven operations not included in total value (Bureau of Mines)—							
Ammonium sulphate	Pound	1,225,625	1,350,154	905,245	23,905	24,174	11,469
Liquor (NH_3 equivalent)	do	49,011	51,762	33,982	2,335	2,687	1,390
Plastics:							
Pyroxylin	do	16,298	16,991	12,008	14,410	17,266	11,114
Finished articles of pyroxylin					6,801	10,522	6,545
Other plastics					6,992	11,946	10,188
Potassium compounds:							
Bitartrate (cream of tartar)	Pound	7,595	7,853	6,881	1,747	1,930	1,572
Iodide	do	528	444	380	1,897	1,487	1,291
Other					5,663	6,581	5,249
Sodium compounds:							
Bichromate and chromate	Ton	31	39	24	3,780	5,137	3,162
Biborate (borax)	do	65	92	80	5,079	3,280	2,432
Carbonates—							
Soda ash	do	1,466	814	1,509	29,939	34,649	22,493
Sal soda	do	55	58	50	1,371	1,523	1,319
Bicarbonate	do	121	140	128	3,647	4,062	3,731
Hydroxide (caustic)	do	547	725	634	29,193	36,089	26,565
Repacked caustic	do	21	17	23	4,128	3,612	3,857
Phosphates	do	97	146	146	6,985	8,965	8,146
Silicate	do	505	590	664	6,826	7,179	7,502
Sulphates—							
Salt cake	do	175	170	99	2,787	2,015	1,528
Glauber's salt	do	53	62	49	1,082	1,112	847
Thiosulphate (hypo)	do	24	25	24	993	906	969
Niter cake	do	120	83	31	625	1,023	564
Sulphide	do	38	33	23	1,692	1,407	1,033
Other					15,753	26,696	24,443

[1] Basis 100 per cent. [2] Basis 50 per cent. [3] Ammonia (NH_3) content.

No. 739.—Chemicals: Products Made for Sale—Continued

Product	Unit	Quantity (thousands of unit specified)			Value (thousands of dollars)		
		1927	1929	1931	1927	1929	1931
Miscellaneous:							
Barium compounds					1,607	2,234	1,526
Bismuth compounds					938	898	882
Calcium—							
Acetate	Ton	69	58	26	4,021	4,695	870
Arsenate	Pound	27,282	33,064	26,129	1,665	1,860	1,280
Carbide	Ton	202		128	9,398	(4)	8,024
Chloride	do	191	277	232	4,443	5,947	4,725
Hypochlorite	do	111	93	64	4,148	3,351	2,074
Phosphate	do	34	38	41	4,914	5,557	5,591
Other					2,658	14,728	2,188
Carbon bisulphide	Pound	44,972	71,010	83,045	2,160	2,860	3,200
Cobalt compounds and alloys					518	770	469
Copper sulphate (blue vitriol)	Pound	56,667	78,669	60,981	2,774	4,345	2,184
Ethyl acetate	Gallon	4,607	10,932	5,457	3,701	9,007	2,450
Ferro-alloys (not blast furnace)	Ton	197	247	146	17,049	28,655	13,200
Formaldehyde	Pound	26,447			2,432	(5)	(5)
Glycerin (glycero) refined	do	89,585	113,140	102,510	19,185	12,716	10,316
Hydrogen peroxide	do	21,443	6 8,509	6 12,854	1,506	2,372	3,293
Iron sulphate (copperas)	Ton	62	56	31	673	554	280
Lead arsenate	Pound	21,528	30,682	37,974	3,190	3,523	3,674
Silver nitrate	Ounce	4,897	5,647	5,597	1,957	2,016	1,199
Sulphur, refined	Ton	44	78	67	1,799	3,066	2,069
Tin, salt, and compounds					10,583	13,112	6,700
Vanillin	Pound	300	317	172	1,923	1,858	776
Zinc chloride	do	58,268	77,232	(5)	1,921	1,619	(5)
All other chemicals					130,776	184,503	140,542
Intergroup duplications					7 11,067	7 23,172	7 27,207

4 Included in "Other calcium compounds." 5 Included in "All other chemicals."
6 Basis 100 volumes.
7 Because of intergroup duplication the sum of the various products exceeds the total value of all products by this amount. For example, nitric acid is shown under "Acids" and is also included under "Other nitrogen compounds," likewise phenolic resins are included under "Coal-tar products" and under "Plastics."

No. 740.—NATURAL DYESTUFFS AND TANNING MATERIALS: Production

Product	Quantity (thousands of pounds)			Value (thousands of dollars)		
	1927	1929	1931	1927	1929	1931
Total value				30,929	33,615	24,090
Natural dyestuffs:						
Extracts	26,500	24,952	32,939	2,049	2,426	1,616
Ground, chipped, or dry	921			20		
Tanning extracts:						
Oak and chestnut	319,155	274,989	232,662	5,671	4,296	3,394
Hemlock	6,596	(1)	(1)	210	(1)	(1)
Sumac	5,525	5,279	5,809	277	344	370
Quebracho	124,557	100,067	76,469	3,010	3,229	1,857
Other				1,854	1,937	2,116
Other tanning materials				409	152	97
Mordants				959	1,173	866
Sizes:						
Dextrin	31,917	33,507	25,164	2,093	2,043	1,513
Rosin	157,691	201,290	143,924	5,869	6,109	2,903
Gum, other than rosin	16,042	20,138	22,330	920	1,401	1,211
Starches, glue, and other	30,980	42,361	29,560	2,405	3,612	2,425
Turkey red oil	15,580	24,261	13,550	1,560	2,542	1,291
Softeners and other assistants				3,622	4,351	4,431

1 Included with "Other."

Source of Tables 739 and 740: Bureau of the Census, Department of Commerce.

No. 741.—MISCELLANEOUS INDUSTRIES INVOLVING CHEMICAL PROCESSES: CENSUS STATISTICS OF PRODUCTS

NOTE.—Only major products of a fairly sharply defined character, and in general only those for which quantitative data are available are shown. See also chemicals (Table 739), petroleum refining (Table 711), manufactured gas (Table 702), etc. Semifinished products made for consumption in the same establishment are not included, except where otherwise stated, but there is some duplication in total value of products in certain branches, due to the use of such products as materials by other establishments in the same industry. Tons are of 2,000 pounds

Product	Quantity (thousands of unit specified)				Value (thousands of dollars)		
	Unit	1927	1929	1931	1927	1929	1931
BONE BLACK, CARBON BLACK, AND LAMPBLACK							
Total value					14,519	20,704	10,230
Bone black	Pound	59,359	54,277	33,214	2,524	2,490	1,288
Carbon black	do	198,429	283,806	280,907	10,955	17,028	8,621
Lampblack	do	8,800	10,765	3,424	1,040	1,185	321
FERTILIZERS							
Total value					173,810	222,731	140,718
Complete fertilizers	Ton	5,088	5,992	4,545	128,380	168,838	110,173
Superphosphates, including concentrated phosphates, for sale.	do	2,435	[1] 2,531	[1] 1,968	30,003	28,375	20,678
Other fertilizers	do	600	797	455	15,427	25,518	9,867
PAINT AND VARNISH							
Total value					527,109	574,880	362,064
Colors (pigments)	Pound	1,773,889	1,918,459	1,296,006	105,756	116,753	69,428
Paints in paste form	do	408,722	401,546	242,528	49,554	46,666	26,191
Ready mixed paints	Gallon	94,071	106,165	78,249	165,664	178,242	121,156
Water paints and kalsomine, dry or in paste.	Pound	122,456	155,811	122,823	6,321	7,093	5,265
Plastic paints	do	(2)	(2)	14,561	(2)	(2)	1,393
Varnishes, japans, lacquers, enamels, and allied products.					178,231	204,881	125,310
Quantity reported	Gallon	106,452	126,874	88,209	170,579	196,511	121,797
Quantity not reported					7,652	8,370	3,513
Fillers:							
Liquid	Gallon	566	495	204	722	683	236
Paste and dry	Pound	41,486	30,613	19,486	2,109	1,954	975
Putty	do	102,703	99,163	69,907	4,255	4,253	2,992
Bleached shellac	do	10,611	11,140	10,731	5,015	5,431	2,619
Stains, varnish	Gallon	2,413	2,160	1,726	4,712	4,381	2,542
Stains, other	do	3,834	3,534	3,038	4,771	4,541	3,957
SOAP							
Total value					249,219	286,756	238,062
Hard soaps	Pound	[3] 2,435,148	2,587,955	2,572,895	[3] 212,475	235,581	197,185
Toilet soaps	do	[3] 287,696	324,383	305,638	[3] 53,573	59,983	53,064
Soap chips	do	373,216	387,925	351,077	39,422	41,764	30,353
Laundry and foots soap	do	1,502,183	1,487,012	1,461,119	93,092	93,866	69,598
Granulated and powdered soaps	do	215,919	337,291	421,804	21,017	35,725	40,977
All other hard soaps	do	56,133	51,343	43,257	5,371	4,243	3,193
Soap powders, including commodities reported as cleansing and washing powders.		484,464	505,529	426,779	24,024	23,387	18,442
Soft soap	do	79,773	66,141	42,285	4,231	3,951	2,247
Liquid soap	do	24,934	35,263	33,627	3,241	3,497	2,421
Shaving soap, cream, and powder					(2)	10,794	11,553
Paste soap	Pound	30,459	40,526	31,623	2,259	3,010	1,976
Special soap articles	do	[4] 33,250	6,444	7,904	[4] 2,643	766	416
Soap stock or soap base	do	8,179	4,106	8,978	347	292	547
Soaps not reported by kind	do		49,513	34,441		5,478	3,275
COMPRESSED AND LIQUEFIED GASES							
Total value					61,864	71,293	56,706
Acetylene	Cu. ft.	682,481	969,534	611,076	16,196	16,554	12,912
Chlorine	Pound	180,163	289,855	255,511	6,678	7,113	5,248
Carbon dioxide (not solid)	do	74,344	136,930	153,575	6,048	6,932	6,226
Hydrogen	Cu. ft.	103,714	207,843	191,984	742	1,423	957
Oxygen	do	2,359,896	3,140,095	2,050,377	23,987	23,410	16,411
Nitrous oxide (laughing gas)	Gallon	66,392	109,812	94,607	810	1,196	923
Dry ice (solid carbon dioxide)	Pound	(2)	(2)	84,954	(2)	(2)	2,900
Other gases					7,403	14,665	11,129

[1] Basis, 16 per cent. available phosphoric acid.
[2] Data not reported separately.
[3] Figures include shaving soap.
[4] Due to a change in classification, figures are not strictly comparable with those for later years.

No. 741.—Miscellaneous Industries Involving Chemical Processes: Census Statistics of Products—Continued

Product	Quantity (thousands of unit specified)				Value (thousands of dollars)		
	Unit	1927	1929	1931	1927	1929	1931
DRUGGISTS' PREPARATIONS							
Total value					108,502	124,989	107,313
Caffeine	Pound	399	442	372	1,178	1,104	953
Codein	do	9	14	16	1,169	1,986	1,799
Morphine	do	11	8	8	1,391	1,081	856
Strychnine	do	28			190		
Nicotine	do	790			2,011	3,858	4,069
Other, including quinine and other cinchona alkaloids, and alkaloids not itemized.					1,215		
Biological products					18,411	16,850	14,821
Tinctures, fluid extracts, medicinal sirups, and other liquid preparations not otherwise accounted for.					38,612	49,487	33,596
Pills, tablets, powders, etc., not otherwise accounted for.					41,745	46,184	47,211
Pharmaceutical metals and their salts					2,580	4,439	4,008
PATENT AND PROPRIETARY MEDICINES							
Total value					184,073	211,840	175,800
For sale to the general public					140,679	154,899	123,393
Ethical specialties (dispensed on prescription).					43,394	56,941	52,407
PATENT AND PROPRIETARY COMPOUNDS							
Total value					84,132	101,913	78,076
Antiseptics					17,864	21,799	22,432
Liquid deodorants	Pound	[5] 6,378	[5] 10,871	[6] 4,893	[5] 1,517	[5] 3,451	[6] 599
Block and crystal deodorants	do	[5] 514	[5] 1,503	[6] 1,032	[5] 380	[5] 961	[6] 612
Powder deodorants	do	[5] 1,672	[5] 1,937	[6] 956	[5] 347	[5] 370	[6] 194
Other deodorants	do	[5] 630	[5] 638	[6] 247	[5] 329	[5] 251	[6] 95
Coal-tar disinfectants	do	23,231	21,774	21,790	3,825	4,637	3,696
Pine oil disinfectants	do	2,897	1,832	3,002	442	427	614
Chloride of lime and chlorine products	do	1,391	2,836	4,498	124	536	562
Other disinfectants	do	7,284	11,281	3,168	1,698	1,731	540
Germicides					2,237	2,483	1,469
Sprays, fly	Pound	18,408	36,685	32,359	6,101	9,323	9,258
Insect powder (pyrethrum)	do	2,731	5,542	4,739	1,772	2,447	1,851
Fluoride powders and mixtures	do	615	701	905	310	385	416
Moth repellants	do	3,680	2,364	5,206	1,104	800	1,551
Other household insecticides	do	14,197	8,955	9,027	3,621	2,123	1,698
Agricultural insecticides and fungicides.					8,782	10,340	6,964
Disinfectants and household insecticides, not reported by kind.						3,345	942
All other compounds					33,679	36,504	24,583
PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS							
Total value					178,474	201,689	166,257
Perfumes					15,302	19,198	10,351
Toilet waters					8,469	8,264	4,653
Creams					29,219	33,347	25,124
Rouges					11,492	12,309	10,730
Dentifrices					30,693	32,464	35,699
Hair tonics					11,639	10,339	7,384
Face powders					21,583	24,038	18,872
Talcum powders					8,003	8,344	8,418
Other toilet powders					3,097	2,340	2,543
All other toilet preparations					38,979	51,046	42,483
ICE, MANUFACTURED							
Total value					184,400	209,008	378,818
Ice:							
Ice industry	Ton	[7] 39,058	[7] 44,477	[7] 43,268	178,639	204,422	189,409
Can ice	do	38,865	44,357	42,258	177,765	203,915	184,821
Plate ice	do	193	120	97	874	507	420
Other industries	do	1,229	991	913	5,761	4,586	4,168

[5] For personal and other uses.
[6] For other than personal uses.
[7] In addition the following tonnages of ice manufactured in ice-cream establishments were reported by a part of the ice-cream industry only: 1927, 1,309,328 tons; 1929, 740,146 tons; 1931, 427,611 tons.

Source: Bureau of the Census, Department of Commerce.

No. 742.—PRINTING AND PUBLISHING: CENSUS STATISTICS

Publications	1923	1925	1927	1929	1931
	Value (thousands of dollars)				
Total	2,021,369	2,241,095	2,473,902	2,711,607	2,179,523
Newspapers and periodicals, printed and published or published only	1,154,786	1,321,611	1,459,688	1,580,565	1,293,777
Newspapers	803,497	892,094	977,648	1,073,119	886,523
Periodicals, other than newspapers	351,289	429,517	482,040	507,446	407,254
Subscriptions and sales	360,893	398,338	429,467	460,327	425,267
Advertising	793,893	923,273	1,030,221	1,120,238	868,510
Newspapers and periodicals, printed for publication by others	36,893	56,488	54,975	71,521	70,640
Books and pamphlets	178,474	201,708	232,920	257,012	232,535
Sheet music and books of music	14,163	14,133	17,147	16,538	12,204
General job printing, composition sold to the trade, ready prints, and paper patterns	637,053	647,155	709,173	785,971	570,367
	Aggregate circulation per issue				
Newspapers and periodicals:					
Daily	35,733,107	38,039,682	42,343,210	42,947,824	42,124,651
Sunday	24,511,693	25,630,056	27,695,859	29,011,648	27,453,465
Triweekly	431,504	400,730	468,534	311,777	215,604
Semiweekly	2,024,683	1,934,095	2,026,760	2,982,184	2,637,126
Weekly	47,860,508	50,815,443	55,985,413	53,378,350	46,954,782
Monthly	91,654,028	111,875,957	120,693,490	133,048,488	122,670,528
Quarterly	22,197,918	22,840,186	21,247,360	20,605,002	19,575,617
All other classes	7,629,173	8,450,308	8,156,399	11,514,355	8,353,006

No. 743.—ENGINES, WATER TURBINES, TRACTORS, AND LOCOMOTIVES

[Value in thousands of dollars]

Class	1923	1925	1927	1929	1931
Total	407,038	310,556	367,026	464,553	159,937
Steam engines	26,765	24,411	22,573	32,415	14,883
Reciprocating marine	1,170	636	1,703	5,137	493
Reciprocating stationary and portable	12,882	7,962	5,406		1,624
Stationary turbines	10,328	14,055	14,499	27,278	8,427
Marine turbines	(1)	(1)	965		4,339
Not reported as to type	2,385	1,758			
Internal-combustion engines (not including tractors)	110,752	117,894	141,161	166,633	68,279
Diesel and semi-Diesel type—					
Marine	14,013	7,353	7,062	11,430	4,876
Other		15,875	13,347	15,369	6,978
Other internal-combustion engines—					
Marine—					
Stationary	8,492	8,833	7,370	7,111	5,528
Detachable		2,561	5,553	7,852	2,352
Motor vehicle [3]	[3] 59,074	[3] 55,624	63,636	50,654	18,792
Other stationary and portable	29,173	27,648	34,699	49,251	15,973
Aircraft engines [4]			9,494	24,966	13,780
Tractors and traction engines	78,320	102,905	136,950	196,997	57,537
Tractors, internal-combustion	76,427	102,647	136,837	196,953	
Traction engines, steam	1,893	258	113	44	
Tractor trucks (semitractors)		(5)	2,172		
Water turbines	6,732	5,338	5,441	5,028	6,889
Engines and turbines not specified as to kind of power		[6] 13,707	414	675	
Locomotives, steam	184,469	46,301	58,315	62,805	12,349

[1] No data.
[2] Excluding engines built for installation in motor vehicles manufactured in the same establishments.
[3] Includes some aviation engines for 1923 and 1925 and a few motor-cycle engines for 1923.
[4] Excluding engines built for installation in aircraft manufactured in the same establishment. Data prior to 1927 included with motor vehicle and other stationary and portable engines (see footnote 3).
[5] Reported with "Engines and turbines," etc., to avoid disclosing operations of individual establishments.
[6] Reported as secondary products by establishments in other industries; tractor trucks also included.

Source of Tables 742 and 743: Bureau of the Census, Department of Commerce.

No. 744.—MACHINE TOOLS: Number and Value, by Kinds

Kind	Number		Value (thousands of dollars)	
	1929	1931	1929	1931
Machine tools, total value			186,374	58,712
Boring machines:				
Horizontal and vertical	416	84	2,296	795
Special types and combinations	(1)	(1)	3,917	1,124
Drilling machines:				
Horizontal, vertical, and radial	11,290	2,376	14,945	3,340
Combination vertical and horizontal, automatic, bench, and vertical universal head	(1)	(1)	2,349	2,065
Gear-cutting machines	2,216	(1)	8,980	3,569
Grinding machines	(1)	(1)	22,102	8,662
Lathes:				
Engine, except gap lathes	8,693	2,807	11,759	2,768
Automatic and hand-operated horizontal turret	8,260	(1)	31,334	6,026
Other	1,279	(1)	4,912	1,009
Milling machines	5,867	(1)	16,857	3,845
Planers	268	52	2,517	429
Portable tools (electric and pneumatic):				
Drills—				
Number reported	133,369	61,399	7,033	3,683
Number not reported		(1)		318
Grinders	56,844	14,986	3,547	1,032
Hammers	55,130	13,085	3,549	1,231
Other, including portable motor-driven garage equipment, etc.	(1)	(1)	5,639	5,779
Shapers (horizontal)	1,677	225	2,804	444
Threading machines (except for pipe)	(1)	595	2,792	1,010
All other machine tools			39,042	11,583

[1] Data incomplete.

Source: Bureau of the Census, Department of Commerce.

No. 745.—MACHINERY: Value of the Principal Classes Manufactured

Note.—Values in thousands of dollars. The various classes of machinery listed are products of a number of industries, such as "foundry and machine-shop products," "agricultural implements," "aircraft," "cash registers, adding and calculating machines," "dairymen's, poultrymen's, and apiarists' supplies," "electrical machinery, apparatus, and supplies," etc. This table is not an industry presentation, but a special presentation giving value of products for groups designated. The values are in part duplicated in other tables in this abstract, such as Tables 743, 744, 746, and 747

Class	1923	1925	1927	1929	1931
Agricultural machinery	82,130	93,222	129,595	167,673	49,954
Aircraft	9,077	8,102	14,505	51,508	22,405
Bakers' machinery and equipment	14,451	17,212	20,015	21,730	10,876
Blowers and fans	14,386	16,210	20,433	25,243	15,323
Bottling machinery	5,969	10,139	11,584	11,082	5,653
Clay-working machinery (brick, pottery, etc.)	5,508	5,298	4,308	4,492	1,671
Canning machinery	9,691	9,766	7,339	8,535	4,065
Cars and trucks, industrial and mining	17,919	24,267	21,741	26,886	10,188
Cash registers, adding, calculating, and card-tabulating machines, and typewriters	(1)	(1)	143,913	151,583	62,179
Cement and concrete machinery:					
Cement-making machinery	(1)	4,146	4,619	4,387	1,579
Cement and concrete-block machinery	(1)	1,461	656	1,147	417
Concrete mixers	13,602	12,620	12,674	11,405	4,357
Other cement and concrete machinery	(1)	5,604	2,584	2,985	1,041
Condensers	4,588	4,938	5,899	4,386	2,590
Confectionery and ice-cream machinery	5,029	5,143	5,682	3,674	3,809

Footnotes at end of table.

No. 745.—Machinery: Value of the Principal Classes Manufactured—Continued

[Values in thousands of dollars]

Class	1923	1925	1927	1929	1931
Conveying machinery:					
Bucket type	(1)	(1)	10,726	9,387	2,695
Belt type	(1)	(1)	10,520	14,206	7,153
Other	(1)	(1)	12,282	24,945	12,261
Cotton ginning machinery	7,175	12,808	9,543	11,760	2,630
Cranes (including hoists and derricks)	42,197	43,936	44,454	57,840	18,448
Dairy, cheese-factory, and butter-factory machinery	16,486	15,177	16,536	16,593	11,388
Dredging and excavating machinery:					
Power shovels	23,684	26,609	32,106	43,348	18,609
Other	16,622	19,232	19,776	17,397	11,578
Electrical machinery	128,384	202,146	203,995	253,594	[2] 138,425
Elevators and elevator machinery	52,516	47,430	43,152	44,044	20,035
Engines (steam or internal-combustion), tractors, and water wheels [3]	222,569	264,255	306,539	401,748	147,589
Flour-mill and grain-mill machinery	9,084	7,946	7,967	8,286	4,342
Gas machines and apparatus	(1)	6,242	5,082	5,408	1,794
Glass-making machinery	2,651	2,666	3,085	3,688	2,544
Hydraulic machinery (other than for dredging)	2,516	4,938	2,906	10,082	4,540
Laundry machinery	19,077	24,198	27,204	28,893	14,637
Lawn mowers	8,258	8,047	9,269	10,953	6,141
Leather-working machinery, other than shoe	2,575	2,222	2,000	1,249	816
Locomotives (steam and internal-combustion)	185,808	48,028	60,650	65,203	13,073
Machine tools	89,964	91,459	105,555	186,374	58,712
Metal-working machinery, other than machine tools	(1)	47,353	39,201	50,336	36,294
Meters, gas, water, and other liquids	23,397	24,502	24,978	25,694	14,393
Mining machinery (other than oil-well) including ore crushers	52,452	38,079	38,152	40,325	12,570
Motor cycles and bicycles	20,752	15,906	13,804	13,727	[4] 10,608
Motor vehicles, except motor cycles	2,611,735	2,946,821	2,540,714	3,412,056	1,387,517
Oil-mill machinery, cottonseed, and other	3,037	4,132	4,697	2,533	1,286
Oil-well machinery	52,158	47,299	62,126	89,067	23,105
Packing-house machinery	5,441	5,370	5,577	6,663	4,622
Paper-mill and pulp-mill machinery	18,736	21,209	27,098	30,456	15,793
Pneumatic machinery (other than pneumatic tools):					
Air compressors	27,762	29,473	29,319	39,683	15,210
Other pneumatic machinery	(1)	(1)	(1)	1,691	1,657
Printing machinery	68,630	68,055	53,240	64,860	32,324
Pumps (hand and power) and pumping equipment	[5] 92,815	121,299	129,127	144,947	72,026
Refrigerators, mechanical; Refrigerating and ice-making machinery	36,542	62,593	112,141	167,149	141,179; 16,642
Road-making machinery	24,264	26,297	27,728	30,694	27,006
Rubber-working machinery	6,849	10,164	9,951	13,552	4,425
Scales and balances	21,836	23,691	22,166	25,385	12,072
Sewing machines, cabinets, attachments, and parts	[6] 42,993	[6] 45,131	34,925	40,960	17,427
Shoe machinery	10,663	11,769	12,334	12,317	9,755
Slot-vending machines	3,777	4,202	7,059	8,821	5,861
Stokers, mechanical	14,095	9,420	10,213	14,054	8,310
Sugar-mill machinery	9,112	8,643	6,601	5,046	1,840
Textile machinery and parts	127,406	109,354	102,200	115,525	61,223
Transmission machinery	11,359	15,350	18,246	26,787	15,326
Vacuum cleaners (electric)	36,870	40,285	36,972	[7] 35,108	24,847
Washing machines, clothes wringers, driers, and ironing machines for domestic use	57,551	70,761	69,140	79,011	48,281
Well-drilling machinery, other than oil-well	1,074	1,843	1,545	1,463	1,530
Windmills	3,185	4,053	3,327	4,063	1,214
Woodworking machinery	44,447	39,620	29,569	35,151	11,057

[1] No comparable data.
[2] Includes value of motor parts.
[3] Excluding steam boilers made for sale as separate units.
[4] Includes value of motor cycle side cars and parts.
[5] Not strictly comparable with later years; includes power pumps and equipment only.
[6] Figures include sewing machine cases made for sale as such.
[7] Figures include both electric and other vacuum cleaners.

Source: Bureau of the Census, Department of Commerce.

No. 746.—ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES: VALUE OF PRODUCTS, BY CLASSES

[All figures except number and kilovolt-amperes in thousands of dollars]

Product	1923	1925	1927	1929	1931
Total value	1,249,021	1,397,709	1,515,230	1,918,733	987,642
Generators (not specified elsewhere):					
Direct current—					
Value	4,235	5,317	4,503	2,500	1,581
Alternating current—					
Number				2,360	1,053
Kilovolt-amperes (thousands)				3,869	1,310
Value	1,975	2,098	2,856	19,325	8,825
Synchronous condensers and frequency changers—	(1)	3,674	3,632		
Number	18,508	77.899	18,335	203	85
Kilovolt-amperes (thousands)				752,179	432
Value				4,241	2,547
Automotive generators for battery charging	54,007	56,221	58,128	28,210	10,584
Automotive starter motors				32,849	13,044
Self-contained power and lighting outfits	7,685	11,143	8,239	6,840	1,639
Transformers, induction-voltage regulators, and current-limiting reactors	59,115	62,153	66,804	84,032	42,742
Motor-generator sets and dynamotors	7,305	8,264	6,764	13,397	6,007
Control apparatus, railway, vehicle, motor, and other	33,177	31,303	34,181	44,289	22,186
Electric locomotives (mining, industrial, and railway)	8,865	10,331	9,858	17,706	(2)
Stationary motors (not fan), total	84,778	92,648	97,673	136,035	68,430
Fractional horsepower	23,939	28,249	33,903	51,252	33,648
One horsepower and over—					
Direct current	13,865	15,797	15,628	22,619	9,060
Alternating current	46,973	48,602	48,142	60,711	25,448
Not reported as to horsepower				1,453	275
Electric fans	9,583	10,654	10,352	10,196	8,984
Storage batteries, parts and supplies	92,843	110,212	97,808	109,601	65,736
Primary batteries	21,446	40,982	46,283	40,334	20,200
Primary battery parts and supplies	3,776	4,054	6,298		
Carbons: Electrodes for lighting and furnaces, brushes, and specialties	14,746	13,955	14,364	17,049	9,512
Incandescent lamps and X-ray tubes	71,966	73,558	87,933	85,320	70,502
Telegraph apparatus	2,086	2,922	5,561	166,293	113,170
Telephone apparatus	92,398	81,510	115,452		
Fire-alarm apparatus	2,640	3,490	3,611	4,030	2,377
Household apparatus and appliances:					
Vacuum cleaners, portable	35,982	39,971	36,222	35,108	24,847
Flatirons	8,199	7,998	7,917	8,018	5,070
Cooking utensils	5,486	7,921	11,668	13,341	8,250
Ranges, disk stoves, and hot plates	3,677	7,901	12,119	16,933	9,643
Air heaters, radiant and convector type	1,862	2,028	1,439	1,833	1,012
Electric-measuring instruments, meters, etc	26,959	29,678	33,272	36,813	22,715
Switchboards, panel boards, cabinets, circuit breakers, and switches	57,856	69,759	71,924	81,201	44,832
Magnetos	10,304	9,930	9,016	14,461	3,300
Spark plugs	13,660	13,878	13,372	20,244	15,800
Coils (ignitions)	7,808	7,837	8,467	9,502	3,734
Insulated wires and cables	184,472	210,617	210,048	312,592	120,789
Railway signals and attachments	4,466	14,030	22,340	22,572	10,583
Fuses and fuse blocks	9,245	10,393	10,891	14,036	7,761
Wiring devices	34,966	34,805	32,703	38,395	21,778
Lightning arresters and choke coils	3,834	5,961	6,327	6,515	3,257
Electric-railway line materials	8,796	4,240	5,446	3,261	1,718
Conduits and fittings	[3] 37,500	45,785	41,717	58,158	32,835
Electric signaling apparatus (other than railway)	7,142	5,081	6,365	8,218	4,505
All other	197,588	233,279	281,830	395,285	177,147

[1] No comparable data.
[2] Withheld to avoid disclosing approximations of data for individual establishments.
[3] Not strictly comparable with data for later years; includes underground conduits.

Source: Bureau of the Census, Department of Commerce.

No. 747.—FARM EQUIPMENT: PRODUCTION

NOTE.—For all wagons, see Table 750; for all tractors, see Table 723

Class	Number				Value (thousands of dollars)			
	1928	1929	1930	1931	1928	1929	1930	1931
All products, total value					524,255	606,622	507,002	214,391
Plows and listers					32,159	42,365	37,830	12,084
Moldboard plows	552,107	656,859	501,743	[1] 173,601	15,512	20,346	15,754	[1] 3,715
Disk plows	25,952	46,504	38,106	9,406	3,119	7,145	6,263	1,573
Listers	38,645	[2] 48,576	60,157	11,539	1,646	[2] 2,085	2,898	568
Other plows	16,268	18,622	6,726	8,877	2,396	1,136	389	223
Attachments and parts, incl. plow stocks and steel plow shapes					9,486	11,653	12,526	6,005
Harrows, rollers, pulverizers, and stalk cutters					14,687	16,813	13,815	5,868
Disk harrows	134,127	138,849	113,764	46,853	7,491	8,712	7,377	3,070
Spike-tooth harrow sections	283,612	339,192	275,677	102,838	1,963	2,307	1,968	727
Spring-tooth harrow sections	133,029	126,306	104,159	44,018	1,509	1,445	1,175	491
Stalk cutters	10,456	11,696	11,487	2,297	396	439	415	86
Other, incl. attachments and parts					3,328	3,910	2,880	1,494
Planting and fertilizing machinery					26,505	31,145	26,087	10,862
Corn planters, one and two row	59,569	74,778	64,595	35,926	2,775	3,425	3,214	1,727
Combined corn and cotton planters	45,715	93,959	95,438	15,383	1,048	2,565	2,671	508
Combined listers and drills	5,289	7,004	15,323	2,031	430	604	951	140
Grain drills	73,434	70,408	46,796	11,380	8,736	10,035	6,480	1,420
Broadcast seeders	72,275	[3] 14,081	72,654	51,323	618	[3] 350	546	296
Manure spreaders	62,559	61,000	47,722	19,707	7,364	7,190	5,525	2,102
Other, incl. attachments and parts					5,534	6,976	6,700	4,669
Cultivators and weeders					15,864	22,857	21,892	8,595
1-horse	159,173	202,755	156,134	57,999	834	979	756	296
1-row	129,379	166,948	139,808	49,324	4,730	5,906	4,918	1,715
2-row	37,567	54,505	44,659	10,405	3,191	4,487	3,684	874
Hand cultivators (wheeled hoes)	133,214	153,434	171,213	160,360	413	459	500	429
Other cultivators and weeders	93,108	120,476	151,846	55,108	4,013	6,249	8,134	3,145
Attachments and parts					2,683	4,777	3,900	2,136
Harvesting machinery					67,291	87,713	62,145	19,955
Grain binders	67,099	65,069	[4] 46,166	15,356	10,610	10,661	[4] 7,787	2,451
Combines (harvester—thresher)	25,392	36,957	24,409	5,907	35,693	50,684	32,739	9,194
Corn binders	21,174	15,246	13,566	([5])	2,943	2,142	1,922	([5])
Potato diggers	19,930	12,767	10,055	4,700	1,290	789	723	335
Other harvesting machinery	27,213	32,434	25,112	13,713	5,456	5,398	6,651	2,904
Attachments and parts					11,299	18,039	12,323	5,071
Haying machinery					16,058	18,711	17,186	7,089
Mowers	121,935	126,360	117,601	43,312	6,503	7,050	6,466	2,378
Rakes	87,644	98,870	82,892	[5] 27,459	3,647	4,121	3,397	[5] 1,011
Loaders	24,895	24,920	28,222	10,042	2,034	1,991	2,277	828
Other haying machinery	9,028	11,113	16,730	9,433	479	612	1,296	562
Attachments and parts					3,395	4,937	3,750	2,310
Machines for preparing crops for market or use					33,466	30,103	20,760	12,048
Threshers	19,261	14,571	9,090	4,451	16,861	12,774	7,114	3,371
Ensilage and fodder cutters	14,740	11,530	9,811	5,123	2,099	1,768	1,454	637
Corn shellers	48,915	40,378	32,517	16,853	1,493	1,573	897	540
Corn huskers and shredders	1,423	972	599	631	711	460	266	293
Hay presses	3,674	3,460	3,068	1,627	1,082	1,106	1,065	588
Feed grinders and crushers	101,335	101,592	69,564	44,538	2,540	3,215	2,896	2,847
Other machines	163,336	108,638	69,725	33,402	1,705	2,483	1,516	1,189
Attachments and parts					6,975	6,724	5,236	2,583
Tractors					191,978	227,633	205,657	75,573
Wheeled types	152,266	195,980	176,075	61,940	113,876	141,653	123,291	42,602
Tracklaying type, all sizes	19,203	27,101	20,222	7,089	48,211	53,602	48,242	13,316
Garden tractors	4,465	5,895	6,161	2,675	822	908	1,102	590
Attachments and parts					29,070	31,470	33,022	19,065
Horse-drawn vehicles					9,974	8,813	4,948	1,977
Farm wagons	57,081	40,687	24,243	10,316	4,946	3,790	2,073	755
Farm trucks	62,889	60,969	39,746	16,043	2,521	2,518	1,585	623
Buggies	4,269	2,589	1,462	491	403	222	138	39
All other (incl. 2-wheeled carts)	12,587	10,022	3,582	1,854	260	251	117	54
Attachments and parts					1,844	2,032	1,035	506
Miscellaneous equipment					116,273	120,469	96,682	60,340
Stalls, stanchions, and stock pens					2,877	3,125	2,582	1,400
Stock tanks and waterers	353,583	361,026	317,797	204,406	2,022	2,087	1,988	1,174
Cream separators (hand)	[6] 203,857	[6] 172,187	105,553	64,426	[6] 9,673	[6] 7,695	4,709	2,372
Internal-combustion engines	140,833	146,690	92,948	38,072	9,016	9,134	5,338	2,479
Windmills and windmill towers	149,923	132,166	94,061	46,663	5,573	5,411	3,554	1,652
Other, incl. attachments and parts					87,112	93,017	[6] 78,511	[6] 51,263

[1] Excludes 3-bottom and larger horse-drawn plows; included with "Other plows."
[2] Excludes 2-bottom tractor-drawn listers; included with "Other plows."
[3] Wheelbarrow and other hand broadcast seeders included with "Other."
[4] Includes rice binders.
[5] "Corn binders" and "Combination side rakes and tedders" included with "Other harvesting machinery" and "Other haying machinery," respectively, to avoid disclosing operations of individual establishments.
[6] Includes power cream separators.

Source: Bureau of the Census, Department of Commerce.

No. 748.—MUSICAL INSTRUMENTS, PARTS, AND MATERIALS: PRODUCTION

Product	Number			Value (thousands of dollars)		
	1927	1929	1931	1927	1929	1931
Musical instruments, parts, and materials, all industries, total value				127,351	76,829	30,258
Pianos:						
Upright	69,864	49,039	18,329	12,262	7,870	2,580
Upright, player	76,447	17,336	1,692	20,028	4,116	274
Upright, player, reproducing type	4,096	1,445	146	1,420	460	34
Grand—						
Baby	43,772	36,929	24,712	17,541	12,851	7,013
Baby, player	7,713	6,289	168	5,856	2,832	94
Parlor	8,757	7,767	5,517	5,320	4,160	2,378
Parlor, player	1,224	2,207	311	1,726	2,165	260
Concert	293	234	68	290	155	44
Automatic and electric	5,974	[1] 9,727	427	2,768	[1] 3,389	102
Organs:						
Pipe	2,471	1,799	917	16,782	11,153	5,283
Reed	3,091	2,703	1,279	385	375	168
Wind instruments:						
Brass		104,790	55,222	6,550	4,545	2,141
Wood		23,906	18,728	1,845	999	672
Stringed instruments				4,201	3,067	1,947
Percussion and other instruments (chimes, bells, xylophones, drums, traps, etc.)				2,715	2,913	1,847
Piano parts and materials				20,455	9,296	2,918
Organ parts and materials				[2] 1,810	1,095	460
Perforated music rolls				3,217	2,556	428
Parts and materials for musical instruments other than pianos and organs				2,180	2,830	1,612

[1] Includes data for a few pianos not reported as to kind.
[2] Includes the value of a small number of orchestrions not called for on schedule for 1929 and 1931

No. 749.—RADIO APPARATUS AND PHONOGRAPHS: PRODUCTION, 1931

NOTE.—Because of a new classification for 1931 for "Radio apparatus and phonographs," comparable data for all items in this table can not be shown for prior years. However, data for radio apparatus and phonographs have been published in previous issues of this publication under the "Electrical machinery, apparatus and supplies" and "Musical instruments and phonographs," industries, respectively. For available detailed statistics for earlier years, see reports of the Bureau of the Census

Product	Number	Value (1,000 dollars)
Radios, phonographs, and apparatus, all industries, total		[1] 195,382
Receiving sets, complete, total	(2)	117,837
Number reported	3,745,682	116,706
Number not reported		1,131
For the home	3,648,383	113,396
Automobile sets	96,145	3,076
Aircraft sets (incl. accessory equipment except batteries)	727	217
Television sets or kits, complete	427	17
Receiving sets for commercial use	(2)	272
All other receiving sets	(2)	395
Combined portable receiver and transmitter	(2)	465
Combination radio and phonograph units	73,603	6,310
Transmitters (including all associated equipment)	1,100	2,399
Phonographs, for mechanical and electrical reproduction, including cabinets and tubes	48,304	1,679
Phonographs, class not reported		821
Records	30,851,282	7,698
Needles	(2)	434
Public address and theater (not including motion-picture theater) sound-reproducing equipment, and home-talking-moving-picture combinations	(2)	4,512
Miscellaneous:		
Receiving-set chassis for sale separately as such [3]	405,942	7,863
Microphones (all types)	10,225	187
Loud speakers for sale separately as such [3]	(2)	4,648
Other apparatus and products (including dictating machines [4] and record blanks)		11,660
Receiving tubes for renewal purposes	24,318,052	13,714
Receiving tubes for initial equipment [3]	24,944,796	13,264
Transmitting tubes:		
Three-electrode and screen-grid	62,562	1,410
Light-sensitive (all sizes, all purposes); other, primarily for industrial control apparatus	(2)	449
Rectifier tubes	24,803	499

[1] Includes some duplication. See footnote 3. [2] Data incomplete.
[3] This item is duplicated in the total for all products, to the extent to which this product was sold to manufacturers of complete radio receiving sets for installation in such sets made within the year 1931.
[4] Dictating machines can not be shown separately without disclosing data for individual establishments.

Source of Tables 748 and 749: Bureau of the Census, Department of Commerce.

No. 750.—VEHICLES AND AIRCRAFT: PRODUCTION

Product	Number			Value (thousands of dollars)		
	1927	1929	1931	1927	1929	1931
MOTOR VEHICLES, INCLUDING CHASSIS						
Total	3,336,033	5,294,087	2,295,597	2,540,714	3,412,056	1,387,517
Passenger vehicles	2,826,274	4,388,315	1,921,435	2,175,545	2,825,701	1,146,091
Touring, open	211,278	146,444	21,377	113,305	78,293	12,526
Roadsters, runabouts, and sport (speedsters), open	197,880	298,401	103,947	116,100	151,109	47,741
Closed	2,408,148	3,917,370	1,786,393	1,918,158	2,537,938	1,059,550
Public conveyances (cabs, etc.)	8,968	26,100	9,718	27,982	58,361	26,274
Government vehicles (Federal, State, county, and municipal)	1,599	1,960	1,215	11,521	10,156	6,163
Business vehicles	329,673	391,593	245,735	258,404	277,352	164,101
Delivery cars	60,981	124,414	79,821	33,883	64,229	35,673
Trucks	266,492	261,523	164,225	220,050	205,772	125,062
All other	2,200	5,656	1,694	4,471	7,351	3,366
Chassis	178,487	512,219	127,212	95,244	298,847	71,162
Passenger	56,074	76,401	7,556	27,156	32,398	3,739
Business	122,413	435,818	119,656	68,088	266,449	67,423
MOTOR CYCLES, BICYCLES, AND PARTS						
Total value				19,402	21,198	13,285
Motor cycles	35,197	31,912	(1)	8,001	7,543	(1)
Bicycles	255,456	307,845	260,029	5,803	6,184	4,733
Parts, including value of motor-cycle side cars				5,598	7,472	[1] 8,552
CARS, STEAM AND ELECTRIC RAILROAD [2]						
Total value				332,270	347,396	105,410
Steam:						
Passenger (day coaches only)	967	342	104	22,621	6,817	2,926
Sleeping, baggage, express, etc., in passenger service	1,054	1,169	(3)	30,790	35,058	3,745
Box	19,645	34,168	3,038	45,319	80,989	6,345
Flat	1,656	2,845	(4)	2,838	5,150	(4)
Gondolas	10,479	12,644	876	20,023	29,401	1,514
Hopper	8,734	10,132	2,676	19,917	24,682	5,974
Refrigerator	9,004	5,165	3,328	25,633	20,031	9,973
Stock	1,016	2,469	5,093	1,882	4,744	11,204
Tank	5,455	3,290		10,449	6,140	
Other varieties	13,026	15,530		27,516	29,440	
Electric:						
Passenger	1,226	513	364	18,918	6,350	7,159
Other varieties	167	38		1,754	266	
All other products, including cars not reported by service, kind, or number, and repairs				104,611	98,329	56,570
CARRIAGES AND WAGONS						
Total value				15,413	14,633	4,227
Horse-drawn vehicles:						
Farm wagons and trucks	99,088	101,656	26,359	6,354	6,308	1,378
Business wagons, public conveyances, etc.	13,192	4,122	940	4,593	[5] 3,879	[5] 1,393
Carriages, buggies, and sulkies	7,633	3,597	711	687	347	68
Other conveyances	9,781	7,114	2,369	330	[6] 271	72
Handcarts and pushcarts	9,640	14,132	5,473	135	268	73
Wheelbarrows				3,314	3,560	1,243
AIRCRAFT						
Total value				20,950	70,334	40,428
Airplanes	1,888	6,522	2,382	12,225	46,848	17,896
Seaplanes	107	109	120	2,280	4,660	4,509
Parts and engines for sale as such				6,445	10,961	9,774
All other products, including repairs					7,865	8,249

[1] Motor cycles can not be shown separately without disclosing data for individual establishments. Value combined with that for "Parts" etc.
[2] Not including cars built or repair work done by railroad companies.
[3] Data incomplete.
[4] Included in "Other varieties."
[5] Includes $414,000 representing value (chiefly of lunch wagons) for which number was not reported for 1929; $281,000 (chiefly of dump wagons) for which number was not reported for 1931.
[6] Includes $17,000, value for which number was not reported.

Source: Bureau of the Census, Department of Commerce.

No. 751.—COTTON SPINDLES, COTTON CONSUMPTION, AND STOCKS

NOTE.—The statistics for 1915 to 1932 relate to the 12 months ended July 31 and those for prior years to the 12 months ended Aug. 31. South refers to cotton growing States. Consumption is expressed in running bales, counting round as half bales, except that all figures, 1840 to 1870, inclusive, and foreign cotton in all years are in equivalent 500-pound bales. The number of active spindles represents spindles operated for any time, however short, during the year, and is therefore an unsatisfactory measure of activity of the industry

Year	Cotton spindles (thousands)					Spindles using cotton with other fibers (thousands)	Cotton consumed, excluding linters[1] (thousands of bales)			
	Total in place	Active								
		Total	The South	New England	Other States		Total	The South	New England	Other States
1840	(2)	2,285	181	1,597	506	(2)	237	71	159	7
1850	(2)	3,998	265	2,959	775	(2)	576	78	431	67
1860	(2)	5,236	324	3,859	1,053	(2)	845	94	567	184
1870	(2)	7,132	328	5,498	1,306	(2)	797	69	551	177
1880	(2)	[3] 10,653	[3] 561	[3] 8,632	[3] 1,460	(2)	[3] 1,570	[3] 189	[3] 1,129	[3] 252
1890	(2)	14,384	1,570	10,934	1,880	(2)	2,518	539	1,502	477
1900	(2)	19,472	4,368	13,171	1,933	(2)	3,873	1,523	1,909	440
1905	(2)	23,687	7,631	14,203	1,853	(2)	[4] 4,279	[4] 2,140	[4] 1,753	[4] 386
1910	28,929	28,267	10,494	15,735	2,038	(2)	4,622	2,234	1,995	393
1915	32,841	31,964	12,956	17,101	1,908	395	5,597	3,027	2,149	421
1916	33,333	32,806	13,382	17,474	1,950	405	6,398	3,528	2,389	481
1917	34,221	33,889	14,156	17,761	1,972	453	6,789	3,888	2,415	486
1918	34,941	34,543	14,529	17,985	2,029	447	6,566	3,697	2,402	467
1919	35,443	34,931	14,846	18,066	2,019	429	5,766	3,199	2,165	402
1920	35,834	35,481	15,231	18,287	1,963	402	6,420	3,583	2,397	440
1921	36,618	36,047	15,709	18,388	1,951	336	4,893	2,997	1,614	282
1922	36,946	35,708	15,906	17,939	1,863	314	5,910	3,730	1,823	357
1923	37,409	36,260	16,310	18,054	1,896	289	6,666	4,248	2,049	369
1924	37,804	35,849	16,944	17,066	1,839	258	5,681	3,858	1,535	288
1925	37,929	35,032	17,292	15,975	1,765	251	6,193	4,220	1,639	334
1926	37,586	34,750	17,574	15,526	1,650	243	6,456	4,500	1,628	328
1927	36,696	34,410	17,894	14,995	1,521	235	7,190	5,194	1,675	321
1928	35,540	33,570	18,282	13,815	1,473	232	6,834	5,114	1,438	282
1929	34,820	32,417	18,541	12,537	1,339	207	7,091	5,392	1,448	251
1930	34,025	31,245	18,586	11,351	1,308	177	6,106	4,749	1,143	214
1931	32,673	28,980	18,073	9,655	1,251	117	5,263	4,148	937	179
1932	31,709	27,272	17,630	8,566	1,076	113	4,866	4,033	678	155

Yearly average or year	Consumption (thousands of bales)						Stocks in consuming establishments at end of year (thousands of bales)			
	Total, excluding linters	Domestic			Foreign	Linters	Total, excluding linters	Domestic	Foreign	Linters
		Total	Upland	Sea Island						
1906–1910	[5] 4,829	[5] 4,680	[6] 4,595	[6] 62	149	[7] 163	[5] 731	[5] 673	58	[7] 39
1911–1915	5,257	5,051	4,976	75	206	293	822	738	84	86
1916–1920	6,388	6,105	6,034	71	282	734	1,452	1,352	100	179
1921–1925	5,869	5,577	5,568	9	292	599	1,003	911	92	139
1926–1930	6,735	6,434	6,433	1	301	815	1,150	1,050	100	186
1915	5,597	5,375	5,296	79	222	412	1,401	1,292	109	199
1916	6,398	6,080	5,998	83	317	881	1,632	1,490	143	100
1917	6,789	6,470	6,376	94	318	870	1,502	1,408	94	113
1918	6,566	6,382	6,297	86	184	1,119	1,465	1,403	63	138
1919	5,766	5,590	5,539	51	176	458	1,303	1,253	51	267
1920	6,420	6,003	5,960	43	417	342	1,358	1,208	150	277
1921	4,893	4,677	4,658	19	216	516	1,111	1,021	90	201
1922	5,910	5,613	5,604	9	297	639	1,218	1,127	91	139
1923	6,666	6,322	6,316	6	344	646	1,100	981	118	127
1924	5,681	5,353	5,348	5	328	537	722	638	84	101
1925	6,193	5,917	5,914	4	276	659	866	787	79	129
1926	6,456	6,176	6,174	2	280	804	1,097	1,011	86	144
1927	7,190	6,880	6,879	1	310	806	1,405	1,325	80	199
1928	6,834	6,535	6,534	1	299	780	1,012	935	77	159
1929	7,091	6,778	6,777	1	313	879	1,052	932	120	187
1930	6,106	5,804	5,803	1	302	805	1,183	1,048	135	239
1931	5,263	5,084	5,083	1	179	714	996	922	74	254
1932	4,866	4,744	4,743	1	122	637	1,218	1,163	55	301

[1] Includes linters for 1840 to 1905.
[2] Figures not available.
[3] Cotton mills only.
[4] Does not include foreign cotton.
[5] Includes linters for 1906 to 1908.
[6] Average, 1907 to 1910.
[7] Average, 1909 and 1910.

Source: Bureau of the Census, Department of Commerce.

No. 752.—COTTON SPINDLE ACTIVITY AND CONSUMPTION, BY STATES

NOTE.—All data except the 1911-1915 average, which represents years ended Aug. 31, are for years ended July 31. Consumption includes both domestic and foreign cotton

Section and State	Cotton spindles in place (thousands)			Spindle hours (millions)			Cotton consumed, excluding linters (thousands of bales)				
	1930	1931	1932	1929-30	1930-31	1931-32	1911-1915 average	1926-1930 average	1929-30	1930-31	1931-32
United States	34,025	32,673	31,709	87,515	75,264	68,755	5,257	6,735	6,106	5,263	4,866
The South	19,122	19,109	19,138	61,878	54,483	53,613	2,740	4,990	4,749	4,147	4,033
New England	13,479	12,168	11,374	23,038	18,757	13,260	2,101	1,466	1,143	937	678
Other States	1,424	1,396	1,197	2,598	2,024	1,882	416	279	214	179	155
Alabama	1,862	1,854	1,871	5,833	5,323	5,556	275	563	584	520	532
Connecticut	1,090	1,074	1,067	2,219	1,926	1,391	127	101	90	75	53
Georgia	3,240	3,247	3,312	10,096	8,819	8,908	589	1,139	1,090	930	874
Maine	1,036	1,010	982	1,899	1,823	1,409	170	126	114	105	88
Massachusetts	7,828	6,693	6,168	13,212	10,181	6,689	1,269	823	627	491	340
New Hampshire	1,302	1,232	1,188	2,265	2,055	1,680	292	208	169	160	122
New Jersey	371	373	235	620	370	412	56	36	31	26	28
New York	696	665	617	1,257	1,009	904	199	139	101	84	70
North Carolina	6,229	6,231	6,192	19,208	16,681	15,251	840	1,534	1,421	1,252	1,183
Pennsylvania	98	98	98	177	182	139	48	23	17	15	11
Rhode Island	2,105	2,041	1,852	3,188	2,552	1,930	232	199	133	98	69
South Carolina	5,676	5,685	5,696	20,610	18,589	18,737	743	1,196	1,124	1,016	1,018
Tennessee	613	620	594	2,308	2,107	2,055	74	157	169	150	140
Virginia	688	679	678	1,826	1,367	1,648	85	120	120	96	116
All other States	1,190	1,171	1,159	2,789	2,280	2,046	258	371	315	245	222

Source: Bureau of the Census, Department of Commerce.

No. 753.—EXPLOSIVES: AMOUNTS (EXCLUDING EXPORTS) MANUFACTURED AND SOLD, CALENDAR YEARS

NOTE.—Black blasting powder in thousands of kegs of 25 pounds each; other figures in thousands of pounds. "Permissible" explosives are those approved by the Bureau of Mines as suitable for use in coal mines

Kind and use	1924	1925	1926	1927	1928	1929	1930	1931	1932
Black blasting powder	6,683	6,279	6,307	5,268	4,870	4,802	3,995	3,193	2,550
Railway and other construction work	341	382	301	249	317	275	289	303	208
Coal mining	5,625	5,297	5,444	4,503	4,036	4,082	3,427	2,711	2,252
Metal mining [1]	-------	138	114	86	84	91	56	46	18
Quarrying and nonmetallic mineral mining [1]	-------	240	236	231	202	183	153	114	59
Other mining	144	-------	-------	-------	-------	-------	-------	-------	-------
All other purposes	572	221	212	199	231	170	70	20	12
High explosives other than "permissible"	273,323	286,435	310,518	303,468	292,785	326,993	291,391	216,157	137,908
Railway and other construction work	40,647	39,916	44,982	48,253	50,767	60,060	78,362	74,964	53,860
Coal mining	36,608	26,947	35,229	34,173	30,077	31,752	28,148	19,965	16,173
Metal mining [1]	-------	102,623	110,374	102,122	96,088	108,939	91,161	57,431	29,409
Quarrying and nonmetallic mineral mining [1]	-------	71,501	76,186	78,506	74,820	79,505	68,334	48,568	29,263
Other mining	103,836	-------	-------	-------	-------	-------	-------	-------	-------
All other purposes	92,231	45,448	43,747	40,413	41,032	46,738	25,386	15,229	9,203
"Permissible" explosives	55,134	58,353	67,685	63,847	60,708	62,669	53,826	41,578	32,225
Railway and other construction work	265	263	242	216	158	154	214	431	369
Coal mining	52,147	52,256	65,143	60,942	57,261	60,244	52,378	40,611	31,533
Metal mining [1]	-------	3,533	216	191	231	165	183	10	35
Quarrying and nonmetallic mineral mining [1]	-------	838	581	536	1,243	370	502	230	93
Other mining	515	-------	-------	-------	-------	-------	-------	-------	-------
All other purposes	2,207	1,463	1,503	1,962	1,814	1,735	549	295	195

[1] Prior to 1925 included with "Other mining" and "All other purposes."

Source: Bureau of Mines, Department of Commerce.

No. 754.—FERMENTED LIQUORS AND DISTILLED SPIRITS PRODUCED

Year ended June 30—	Distilled spirits			Fermented liquors	Year ended June 30—	Distilled spirits			Fermented liquors
	Exclusive of fruit brandy	Fruit brandy	Total			Exclusive of fruit brandy	Fruit brandy	Total	
	1,000 tax galls.[1]	*1,000 tax galls.*[1]	*1,000 tax galls.*[1]	*1,000 barrels*[2]		*1,000 tax galls.*[1]	*1,000 tax galls.*[1]	*1,000 tax galls.*[1]	*1,000 barrels*[2]
1905	147,811	5,449	153,259	[3] 49,522	1924	136,682	847	137,530	[4] 4,891
1910	156,238	7,656	163,894	[3] 59,485	1925	166,951	548	167,498	[4] 5,119
1915	132,134	8,522	140,656	[3] 59,808	1926	203,166	644	203,810	[4] 4,856
1918	173,476	5,357	178,834	[3] 50,266	1927	185,133	338	185,472	[4] 4,382
1919	98,976	1,802	100,779	[3] 27,713	1928	170,103	412	170,515	[4] 4,161
1920	99,616	1,649	101,265	[3] 9,231	1929	202,059	1,194	203,254	[4] 3,866
1921	86,366	1,531	87,896	[4] 9,220	1930	194,841	415	195,257	[4] 3,681
1922	81,086	1,077	82,163	[4] 6,348	1931	169,574	820	170,394	[4] 3,137
1923	123,208	1,417	124,626	[4] 5,269	1932	149,760	631	150,391	[4] 2,766

[1] In computing taxable gallons all fractional parts of a gallon less than one-tenth are excluded.
[2] Of not more than 31 gallons.
[3] Includes fermented liquors removed from breweries for export free of tax.
[4] This item represents cereal beverages containing less than one-half of 1 per cent alcohol by volume.

No. 755.—DENATURED ALCOHOL

Year ended June 30—	Alcohol produced at industrial alcohol plants[1]	Denaturing plants	Ethyl alcohol withdrawn for denaturation	Denatured alcohol produced		
				Completely denatured	Specially denatured	Total
	Proof gallons		*Proof gallons*	*Wine gallons*	*Wine gallons*	*Wine gallons*
1910	----------	12	10,605,871	3,076,925	3,002,103	6,079,027
1915	----------	23	25,411,719	5,386,647	8,599,822	13,986,469
1920	18,933,551	52	45,640,949	13,528,403	15,307,947	28,836,350
1921	85,068,776	67	38,812,139	12,392,595	9,996,230	22,388,825
1922	79,906,102	77	59,549,920	16,193,524	17,152,224	33,345,748
1923	122,402,850	76	105,819,405	27,128,230	30,436,913	57,565,143
1924	135,897,726	83	121,576,196	34,602,004	33,085,292	67,687,296
1925	166,165,518	91	148,970,221	46,983,970	34,824,303	81,808,273
1926	202,271,670	97	191,670,107	65,881,442	39,494,444	105,375,886
1927	184,323,017	94	170,633,437	56,093,748	39,354,928	95,448,677
1928	169,149,905	82	159,689,378	46,966,601	45,451,424	92,418,026
1929	200,832,051	77	182,778,966	52,405,452	54,555,006	106,960,458
1930	191,859,343	67	181,601,420	58,141,741	47,645,797	105,787,538
1931	166,014,346	60	149,303,439	49,136,201	37,172,741	86,308,941
1932	[2] 146,950,913	49	132,578,235	34,298,236	44,031,282	78,329,517

[1] Separate accounts for alcohol produced at industrial alcohol plants required commencing May 1, 1920.
[2] Includes alcohol produced in Puerto Rico.

No. 756.—LEAF TOBACCO: Amounts Consumed in the Manufacture of Cigars, Cigarettes, Chewing and Smoking Tobacco, and Snuff

NOTE.—**All figures in thousands of pounds.** Figures represent the equivalent in unstemmed leaf tobacco, of stemmed leaf or scraps, cuttings, and clippings. In the following table the tobacco used in the manufacture of cigars and cigarettes was converted on the basis of 3 pounds of stemmed leaf or scraps, etc., to 4 pounds of unstemmed beginning 1915 (conversion prior to 1915 was at the ratio of 3 to 5) and of tobacco and snuff beginning 1903. For 1896 to 1902, tobacco used in manufactured tobacco and snuff was shown only under two heads, namely "leaf" and "scraps." It is probable that stemmed leaf was included with unstemmed tobacco under the head of "leaf" without the one kind being converted to the equivalent in the other. The conversion ratio of 3 to 4 was applied only to "scraps" for these years. Data exclude tobacco used in bonded manufacturing warehouses. See Table 758

Calendar year or yearly average	Total	Cigars	Cigarettes	Tobacco and snuff	Calendar year	Total	Cigars	Cigarettes	Tobacco and snuff
1896–1900	359,053	87,851	16,235	254,967	1922	646,816	151,709	169,597	325,510
1901–1905	451,461	124,411	12,444	314,606	1923	689,036	159,753	200,395	328,889
1906–1910	524,193	139,206	22,079	362,908	1924	693,858	153,413	217,700	322,745
1911–1915	578,283	151,890	52,207	374,186	1925	718,426	149,001	244,315	325,109
1916–1920	650,460	155,312	130,320	364,828	1926	737,354	152,372	267,584	317,399
1921–1925	672,077	151,421	198,069	322,588	1927	744,288	152,510	290,464	301,314
1926–1930	762,540	149,240	312,533	300,767	1928	754,625	151,290	310,159	293,176
1918	692,014	149,837	146,056	396,121	1929	796,626	152,129	346,543	297,953
1919	648,384	151,504	166,783	330,097	1930	779,806	137,901	347,915	293,990
1920	639,982	168,597	146,907	324,478	1931	752,404	127,628	329,962	294,313
1921	612,251	143,228	158,336	310,687	1932[1]	674,896	106,024	291,969	276,903

[1] Estimates of the Bureau of Foreign and Domestic Commerce.

Source of Tables 754 to 756: Reports of the Commissioner of Internal Revenue, Treasury Department.

No. 757.—PRODUCTION OF MANUFACTURED TOBACCO

NOTE.—Compiled from monthly returns of manufacturers. Data relate to products manufactured in continental United States, excluding those manufactured in bonded manufacturing warehouses, which amounted to 18,689,484 cigars, in 1932. Large cigars are those weighing more than 3 pounds per thousand

Calendar year or yearly average	Tobacco and snuff (thousands of pounds)						Cigars (thousands)		Cigarettes (thousands)	
	Total	Plug	Twist	Fine cut	Smoking	Snuff	Large	Small	Large	Small
1901-1905	346, 841	[1] 175, 981	(1)	11, 903	138, 402	20, 556	6, 513, 095	716, 720	7, 143	3, 227, 602
1906-1910	413, 054	167, 460	13, 524	12, 525	192, 700	26, 845	6, 883, 272	1, 059, 501	16, 113	6, 192, 571
1911-1915	437, 346	158, 529	15, 017	10, 795	221, 865	31, 140	7, 087, 530	1, 053, 654	15, 695	14, 802, 416
1916-1920	456, 584	159, 869	14, 346	9, 758	237, 808	34, 805	7, 364, 937	810, 327	26, 026	41, 565, 670
1921-1925	409, 457	115, 445	10, 105	6, 972	239, 151	37, 785	6, 691, 913	557, 300	16, 704	65, 903, 991
1926-1930	**389, 244**	**99, 470**	**8, 374**	**5, 821**	**235, 421**	**40, 159**	**6, 360, 650**	**414, 044**	**10, 479**	**109, 361, 216**
1923	412, 777	120, 798	10, 665	7, 141	234, 944	39, 228	6, 950, 247	505, 305	18, 066	66, 715, 830
1924	414, 178	111, 477	9, 902	6, 781	246, 990	39, 029	6, 597, 677	530, 714	16, 054	72, 708, 989
1925	413, 873	111, 391	9, 750	7, 151	247, 740	37, 841	6, 463, 193	447, 089	17, 429	82, 247, 100
1926	410, 596	109, 766	9, 179	6, 985	246, 439	38, 227	6, 498, 641	412, 315	13, 240	92, 096, 974
1927	396, 324	103, 918	7, 988	6, 286	237, 934	40, 197	6, 519, 005	439, 419	11, 432	99, 809, 032
1928	386, 333	100, 646	8, 892	5, 186	231, 134	40, 475	6, 373, 182	415, 535	10, 403	108, 705, 505
1929	381, 200	96, 744	8, 188	5, 556	229, 585	41, 127	6, 518, 533	419, 880	9, 952	122, 392, 381
1930	**371, 766**	**86, 274**	**7, 624**	**5, 089**	**232, 013**	**40, 766**	**5, 893, 890**	**383, 070**	**7, 367**	**123, 802, 186**
1931	371, 237	76, 653	6, 377	4, 170	244, 182	39, 854	5, 347, 921	338, 997	5, 160	117, 064, 214
1932 [2]	348, 685	--------	--------	--------	[3] 312, 273	36, 412	4, 442, 891	281, 367	3, 561	103, 585, 889

State	Number of factories Jan. 1, 1932, making—			Production in 1931 (calendar year)				
	Tobacco and snuff [4]	Cigars	Cigarettes	Tobacco and snuff (1,000 pounds)	Cigars (thousands)		Cigarettes (thousands)	
					Large	Small	Large	Small
Total	**800**	**5, 982**	**108**	**371, 237**	**5, 347, 921**	**338, 997**	**5, 160**	**117, 064, 214**
California	28	203	10	146	70, 431	31	34	4, 146, 008
Connecticut	10	123	1	54	23, 237	--------	--------	3
Florida	4	295	2	4	542, 346	--------	--------	2, 077
Illinois	103	645	8	36, 341	40, 007	--------	153	98, 395
Indiana	36	147	--------	261	118, 453	--------	--------	--------
Kentucky	41	42	3	23, 686	153, 519	--------	--------	3, 924, 866
Louisiana	1	32	1	93	52, 829	--------	--------	4, 014
Massachusetts	24	353	8	395	66, 093	--------	14	2, 184
Michigan	28	162	2	9, 745	247, 134	--------	5	26, 409
Minnesota	26	129	--------	60	24, 167	--------	--------	--------
Missouri	12	134	2	44, 248	147, 521	--------	--------	101, 114
New Hampshire	3	61	--------	1	41, 797	--------	--------	--------
New Jersey	13	161	3	8, 205	712, 269	282	--------	4, 764, 768
New York	159	1, 224	43	2, 522	476, 083	13, 220	2, 564	864, 022
North Carolina	11	17	6	130, 986	10, 667	31, 067	2, 213	73, 469, 007
Ohio	67	369	--------	50, 846	352, 236	61	--------	--------
Pennsylvania	84	824	10	6, 429	1, 782, 904	9, 792	129	121, 456
Tennessee	16	20	--------	19, 806	2, 353	--------	--------	--------
Virginia	9	30	7	23, 813	226, 979	284, 540	49	29, 539, 890
West Virginia	7	53	1	10, 573	49, 517	5	--------	--------
All other	118	[5] 958	1	3, 024	207, 378	--------	--------	--------

[1] Twist included with plug prior to 1906. [2] Estimates based on sale of stamps by collectors' offices.
[3] Includes plug, twist, and fine cut. [4] Includes only those producing a taxable product.
[5] Figures include Hawaii.

Source: Annual Report of the Commissioner of Internal Revenue.

No. 758.—CONSUMPTION OF TOBACCO IN THE UNITED STATES

NOTE.—**All figures except per capita in thousands of pounds.** Data for tobacco used in manufacture in registered factories represent the equivalent in unstemmed leaf of all tobacco. See headnote, Table 756

Item	1926	1927	1928	1929	1930	1931	1932
Leaf tobacco consumed in manufacture:							
In registered factories	737, 354	744, 288	754, 625	796, 626	779, 806	752, 404	[1] 674, 896
In bond	19, 059	16, 073	28, 132	13, 267	4, 175	425	440
Manufactured tobacco imported:							
From Puerto Rico	2, 498	2, 081	2, 165	2, 043	2, 261	2, 307	1, 025
Other countries	3, 859	3, 498	3, 263	2, 682	2, 408	2, 458	2, 393
Exports of manufactured tobacco [2]	35, 960	28, 961	42, 702	33, 293	22, 251	16, 148	13, 501
Remaining for consumption	726, 810	736, 979	745, 483	781, 325	766, 399	741, 446	664, 228
Per capita consumption—pounds	6. 24	6. 24	6. 22	6. 43	6. 22	5. 98	5. 32

[1] Estimated.
[2] Includes shipments to Alaska, Hawaii, and Puerto Rico.

Sources: Leaf tobacco used in registered factories from reports of the Commissioner of Internal Revenue; leaf tobacco used in bonded factories from reports of the Division of Customs, Treasury Department.

No. 759.—PATENTS AND CERTIFICATES OF REGISTRATION ISSUED SINCE INITIATION OF THE PATENT SYSTEM

NOTE.—The number of patents granted prior to July 28, 1836, was 9,957

Calendar year or period	Patent applications [1]	Caveats filed [2]	Patents issued				Certificates of registration issued		
			Total	Patents	Designs	Reissues	Total	Trade-marks	Labels and prints
1836-1850 [3]	14,062	4,763	8,387	7,864	340	183			
1851-1860	44,302	9,571	25,087	23,140	1,025	922			
1861-1870	128,763	22,228	85,910	79,612	3,181	3,117	121	121	
1871-1880	206,436	29,350	138,355	125,520	7,535	5,300	10,395	8,017	2,378
1881-1890	352,475	25,012	217,821	207,850	8,357	1,614	14,660	10,636	4,024
1891-1900	410,049	21,199	234,956	220,840	13,374	742	18,794	16,903	[4] 1,891
1901-1905	253,417	9,168	148,291	143,791	3,953	547	18,590	12,768	5,822
1906-1910	307,187	8,880	175,618	171,560	3,297	761	36,375	32,060	4,315
1911-1915	350,937		194,387	186,241	7,295	851	32,381	27,369	5,012
1916-1920	368,236		207,108	197,644	8,486	978	35,364	30,681	4,683
1921-1925	426,597		217,525	203,977	12,326	1,222	81,566	71,159	10,407
1926-1930	459,163		234,857	219,384	13,796	1,677	96,729	83,536	13,193
1901	46,449	1,842	27,373	25,558	1,734	81	2,965	1,928	1,037
1902	49,641	1,851	27,886	27,136	640	110	2,931	2,006	925
1903	50,213	1,771	31,699	31,046	536	117	3,446	2,186	1,260
1904	52,143	1,808	30,934	30,267	557	110	3,569	2,158	1,411
1905	54,971	1,896	30,399	29,784	486	129	5,679	4,490	1,189
1906	56,482	1,885	31,965	31,181	625	159	11,933	10,568	1,365
1907	58,762	1,967	36,620	35,880	589	151	8,860	7,878	982
1908	61,475	2,110	33,682	32,757	757	168	6,029	5,191	838
1909	65,839	1,948	37,421	36,574	687	160	4,824	4,184	640
1910	64,629	970	35,930	35,168	639	123	4,729	4,239	490
1911	69,121		34,084	32,917	1,010	157	5,112	4,205	907
1912	70,976		37,731	36,231	1,342	158	5,896	5,020	876
1913	70,367		35,788	33,941	1,683	164	6,063	5,065	998
1914	70,404		41,850	39,945	1,715	190	7,874	6,817	1,057
1915	70,069		44,934	43,207	1,545	182	7,436	6,262	1,174
1916	71,033		45,927	43,970	1,759	198	8,087	6,791	1,296
1917	70,373		42,760	41,069	1,512	179	6,197	5,339	858
1918	59,615		39,941	38,569	1,207	165	4,912	4,001	851
1919	80,400		38,598	36,872	1,523	203	4,874	4,208	666
1920	86,815		39,882	37,164	2,485	233	11,294	10,282	1,012
1921	93,328		41,401	37,885	3,277	239	13,605	11,654	1,951
1922	88,930		40,297	38,414	1,627	256	14,992	12,793	2,199
1923	79,058		40,787	38,634	1,927	226	16,725	14,845	1,880
1924	80,756		45,500	42,594	2,671	235	17,562	15,749	1,813
1925	84,525		49,540	46,450	2,824	266	[5] 18,682	[5] 16,118	2,564
1926	86,028		47,627	44,750	2,602	275	[5] 21,819	[5] 19,246	2,573
1927	92,018		44,444	41,731	2,387	326	[5] 20,548	[5] 17,649	2,899
1928	92,598		45,899	42,376	3,188	335	[5] 19,084	[5] 16,191	2,893
1929	94,489		48,565	45,284	2,907	374	[5] 18,087	[5] 15,534	2,553
1930	94,030		48,322	45,243	2,712	367	[5] 17,191	[5] 14,916	2,275
1931	84,171		[6] 55,103	[6] 51,771	2,937	395	[5] 15,328	[5] 13,050	2,278
1932	71,517		[6] 56,856	[6] 53,519	2,944	393	[5] 13,196	[5] 11,300	1,896

[1] Figures include patents for inventions, designs, and reissues of patents.
[2] Caveat law repealed June 25, 1910.
[3] July 28, 1836, to Dec. 31, 1850.
[4] Registration of labels suspended from May 27, 1891, to June 9, 1896.
[5] Figures include 2,278 renewals in 1925, 4,282 in 1926, 3,063 in 1927, 2,049 in 1928, 1,008 in 1929, 1,665 in 1930, 1,643 in 1931, and 1,687 in 1932.
[6] Figures include 5 plant patents in 1931 and 46 in 1932 issued since the law passed May 23, 1930.

Source: Reports of the Commissioner of Patents.

33.—DISTRIBUTION—WHOLESALE AND RETAIL

No. 760.—WHOLESALE TRADE: By Type of Establishment, 1929

[All money figures in thousands of dollars]

Type of establishment	Number of establishments	Number of employees	Salaries and wages	Total expenses (incl. salaries and wages)	Net sales	Stocks on hand, end of year (at cost)
United States, total	**169, 702**	**1, 605, 042**	**3, 010, 130**	**6, 135, 625**	**69, 291, 548**	**5, 246, 740**
Wholesalers only	79, 840	912, 143	1, 713, 259	3, 447, 360	29, 556, 156	3, 382, 558
Wholesale merchants	70, 896	825, 279	1, 521, 226	3, 052, 504	24, 632, 464	2, 873, 786
Supply and machinery distributors	3, 432	33, 337	70, 157	130, 351	790, 835	126, 948
Some newer types of wholesalers	2, 156	11, 472	22, 550	42, 833	510, 838	21, 642
Cash and carry wholesalers	756	3, 208	5, 328	10, 171	178, 809	16, 321
Drop shippers (desk jobbers)	583	3, 421	8, 575	15, 794	242, 269	2, 522
Wagon distributors	817	4, 843	8, 647	16, 868	89, 761	2, 798
All other wholesalers	3, 356	42, 055	99, 327	221, 672	3, 622, 018	360, 183
Bulk tank stations	19, 587	79, 016	163, 200	337, 054	2, 101, 129	158, 532
Chain store warehouses	559	26, 442	40, 635	83, 829	1, 929, 681	98, 840
Manufacturers' sales branches	16, 515	306, 878	655, 010	1, 390, 633	14, 812, 196	968, 157
Auction companies	461	6, 997	5, 970	11, 267	373, 776	1, 978
Brokers	3, 689	11, 708	26, 642	53, 443	4, 037, 944	17, 822
Commission merchants	3, 478	24, 704	56, 702	109, 519	4, 672, 632	60, 305
Export agents	260	3, 244	6, 855	17, 649	398, 559	15, 979
Import agents	85	925	2, 381	5, 283	57, 158	3, 770
Manufacturers' agents	6, 987	28, 742	65, 835	121, 489	1, 775, 355	49, 504
Purchasing agents and resident buyers	167	1, 442	3, 674	7, 842	296, 306	7, 895
Selling agents	3, 260	26, 695	66, 270	126, 491	2, 622, 663	42, 927
Assemblers and country buyers	34, 145	116, 108	93, 526	203, 279	4, 652, 183	293, 497
All other	669	59, 998	110, 169	220, 487	2, 005, 810	144, 974

Source: Bureau of the Census, Department of Commerce.

No. 761.—WHOLESALE TRADE: By Kind of Business, 1929

[All money figures in thousands of dollars]

Kind of business	Number of establishments	Number of employees	Salaries and wages	Total expenses (incl. salaries and wages)	Net sales	Stocks on hand, end of year (at cost)
United States, total	**169, 702**	**1, 605, 042**	**3, 010, 130**	**6, 135, 625**	**69, 291, 548**	**5, 246, 740**
Amusement and sporting goods (except cameras and motion-picture equipment and supplies)	730	7, 818	15, 228	31, 313	161, 139	26, 427
Cameras and motion-picture equipment and supplies	716	13, 471	26, 982	55, 474	324, 261	18, 714
Automobiles and other motor vehicles	743	31, 595	64, 458	126, 872	1, 226, 347	87, 360
Automotive equipment	2, 153	25, 636	49, 939	90, 047	489, 797	67, 157
Automobile parts (new and used)	1, 049	7, 425	14, 260	26, 026	152, 777	20, 956
Tires and tubes	655	10, 148	25, 839	54, 018	386, 603	48, 221
Chemicals	1, 206	14, 624	39, 385	81, 929	888, 604	51, 795
Drugs and drug sundries (general line)	638	24, 023	42, 483	76, 718	575, 100	93, 709
Drugs and drug sundries (specialty)	849	8, 217	17, 611	48, 954	193, 898	37, 800
Paints, varnishes, lacquers, and enamels	1, 027	12, 571	28, 101	59, 327	304, 999	40, 885
Toilet articles and preparations	303	5, 997	12, 479	30, 346	96, 334	8, 570
Clothing and furnishings (other than millinery and footwear)	3, 971	35, 821	79, 157	156, 469	1, 432, 948	150, 461
Dry goods (general line)	1, 071	26, 333	52, 696	97, 848	889, 508	112, 515
Dry goods (specialty, other than specified)	417	3, 026	7, 143	12, 474	122, 812	10, 560
Millinery and millinery supplies	489	5, 268	9, 460	18, 338	116, 023	11, 334
Notions	1, 118	8, 251	17, 566	32, 439	203, 671	33, 542
Piece goods	2, 696	31, 430	84, 794	167, 564	2, 624, 281	237, 924
Shoes and other footwear	756	14, 931	31, 723	63, 524	560, 673	69, 436
Electrical goods (including appliances)	1, 901	39, 526	77, 333	135, 616	1, 363, 596	87, 719
Electrical equipment and supplies	991	9, 409	21, 640	42, 300	475, 639	29, 210
Radios and radio equipment	806	13, 044	28, 155	75, 795	491, 621	60, 394
Refrigerators (electric)	172	7, 950	12, 485	23, 409	104, 292	11, 709

No. 761.—Wholesale Trade: By Kind of Business, 1929—Continued

[All money figures in thousands of dollars]

Type of establishment	Number of establishments	Number of employees	Salaries and wages	Total expenses	Net sales	Stocks on hand end of year (at cost)
Cotton	5,234	13,277	20,569	90,323	3,061,610	173,738
Flowers and nursery stock	633	6,059	8,795	17,850	71,331	8,576
Grain	12,245	33,054	46,446	109,131	4,001,105	270,050
Hides, skins, and furs	1,689	7,309	15,116	36,813	557,897	63,417
Horses and mules	252	775	993	2,762	38,980	879
Live stock (other than horses and mules)	7,288	12,903	18,784	40,056	3,170,313	14,422
Silk (raw)	33	321	1,507	3,056	170,946	10,133
Tobacco (leaf)	1,003	39,625	17,303	35,233	469,142	154,969
Wool and mohair	403	2,459	5,838	16,129	334,061	40,129
Other farm products	1,693	3,133	3,594	7,682	155,650	7,616
Farm supplies (except feed and fertilizer)	410	6,164	8,851	18,476	139,735	24,419
Feed	1,284	9,040	15,072	34,846	571,068	22,748
Fertilizer and fertilizer materials	279	4,473	8,188	19,239	187,470	19,218
Confectionery and soft drinks	2,959	15,324	26,602	63,229	356,242	23,933
Dairy products	2,181	37,851	66,383	147,711	1,124,180	28,900
Poultry and poultry products	3,830	19,882	22,267	48,292	760,795	20,210
Dairy and poultry products	3,691	17,281	21,348	43,275	670,160	22,603
Fish and sea foods	1,448	15,896	21,709	49,112	243,682	10,939
Fruits and vegetables (fresh)	11,194	92,799	123,628	260,538	3,252,976	157,440
Meats and meat products	3,605	83,776	143,568	268,292	3,102,286	106,215
Boxes, shooks, and cooperage	205	1,143	2,163	4,046	49,668	3,094
Logs, railroad ties, piles, etc	537	2,635	3,143	6,030	59,562	5,405
Other forest products	278	2,126	4,413	7,518	96,190	4,814
Furniture	1,146	11,626	25,476	48,964	344,630	36,937
House furnishings	1,653	22,230	45,029	87,216	591,179	88,452
Musical instruments and sheet music	178	3,832	7,297	17,868	58,242	11,345
General merchandise	370	14,821	23,740	47,815	596,066	67,159
Groceries (general line)	6,900	104,882	179,861	335,083	5,203,417	451,931
Food and grocery specialties	7,094	79,450	145,819	354,118	4,333,905	189,948
Hardware (general line)	1,227	40,339	74,762	133,479	754,594	164,211
Hardware (specialty)	562	4,794	9,816	17,361	111,565	14,591
Iron and steel scrap	644	6,516	11,141	23,185	258,794	10,696
Junk and scrap	3,083	11,999	14,425	28,969	234,082	17,958
Waste rubber, rags, and paper	273	3,762	4,861	9,205	59,404	3,292
Jewelry	1,925	14,661	35,280	72,914	450,089	130,835
Optical goods	440	5,178	8,296	14,819	44,492	8,460
Leather and leather goods (general line)	84	695	1,460	2,995	18,366	3,610
Leather and leather belting	651	4,284	10,609	23,387	301,957	47,185
Luggage and leather goods	166	1,449	2,596	4,975	23,483	3,280
Saddlery and harness	38	401	659	1,285	7,196	2,084
Shoe findings and cut stock	613	2,147	4,379	9,430	106,229	12,634
Construction and building materials (other than metal and wood)	3,222	46,979	97,126	194,304	1,009,846	73,929
Lumber and mill work	2,291	24,874	51,625	96,518	1,134,206	98,037
Commercial equipment and supplies	1,804	17,814	36,990	62,214	250,929	28,570
Construction equipment and supplies	498	4,059	9,927	21,462	132,690	12,164
Farm machinery and equipment	560	15,315	28,730	54,839	385,838	67,876
Manufacturing, mining, and drilling machinery, equipment, and supplies	6,142	55,556	131,040	237,418	1,648,880	190,620
Professional equipment and supplies	1,000	13,672	25,800	45,956	207,816	36,055
Service equipment and supplies	1,439	11,340	23,560	46,343	201,098	28,471
Transportation equipment and supplies	412	3,340	10,902	21,118	230,879	9,661
Coal	1,343	14,111	33,170	69,521	1,160,290	43,023
Iron and steel (except scrap)	1,643	19,802	54,074	97,704	2,839,964	82,253
Metals and metal work (other than iron and steel)	634	7,534	19,665	38,355	1,599,846	52,584
Paper and paper products (general line)	1,568	22,017	47,638	84,628	679,014	61,046
Paper and paper products (specialty other than specified)	584	6,477	16,860	29,381	307,813	18,578
Stationery and stationery supplies	719	7,868	14,771	25,092	113,568	16,756
Wall paper	232	2,612	4,550	10,519	32,188	6,910
Petroleum and petroleum products	23,008	110,074	222,197	477,238	3,365,663	299,299
Plumbing equipment and supplies	2,151	30,327	63,120	120,447	701,746	106,325
Heating equipment and supplies	635	6,025	13,502	26,135	117,921	15,222
Tobacco and tobacco products (except leaf)	2,016	19,636	38,838	116,345	1,691,173	65,148
Books, periodicals, and newspapers	636	16,134	27,564	59,494	203,041	25,297
Oils and greases (animal and vegetable)	171	1,392	3,977	8,585	316,791	7,463
Rubber goods (general line)	92	4,479	9,070	17,605	121,220	19,395
Textiles and textile materials (other than dry goods)	1,299	11,843	27,361	53,232	831,884	65,596
Miscellaneous kinds of business	1,725	14,877	27,367	51,669	679,581	41,593

Source: Bureau of the Census, Department of Commerce.

No. 762.—WHOLESALE TRADE: Summary of All Wholesale Distributors and of Wholesalers Only, by Divisions and States, 1929

[All money figures in thousands of dollars]

Division and State	All wholesale trade					Wholesalers only				
	Number of establishments	Number of employees	Salaries and wages	Net sales	Stocks on hand, end of year (at cost)	Number of establishments	Number of employees	Salaries and wages	Net sales	Stocks on hand, end of year (at cost)
U. S.	169,702	1,605,042	3,010,130	69,291,548	5,246,740	79,840	912,143	1,713,259	29,556,156	3,382,558
New England	9,793	111,164	206,779	4,195,260	328,360	6,488	69,665	124,852	2,130,399	208,395
Me	987	7,545	11,311	189,975	22,973	521	4,834	7,845	104,864	14,734
N. H	326	2,456	3,692	61,414	6,231	199	1,600	2,156	30,969	4,206
Vt	308	1,933	2,899	57,393	5,432	133	1,368	2,034	36,520	4,122
Mass	6,066	72,929	145,958	3,065,856	221,505	4,069	43,860	85,027	1,557,140	143,473
R. I	737	8,029	14,820	300,072	23,781	571	5,672	10,241	167,653	15,720
Conn	1,369	18,272	28,099	520,551	48,438	995	12,331	17,548	233,222	26,141
Mid. Atlantic	38,197	432,307	969,544	23,390,807	1,649,126	26,002	264,060	573,976	10,311,721	1,146,648
N. Y	25,311	291,056	696,203	17,604,634	1,273,191	17,611	176,785	410,797	7,831,108	887,141
N. J	2,344	27,596	55,691	1,008,881	69,719	1,701	16,970	34,891	502,117	50,094
Pa	10,542	113,655	217,650	4,777,292	306,215	6,690	70,305	128,288	1,978,496	209,413
E. N. Central	32,185	353,398	687,611	14,028,413	906,483	14,890	192,668	373,387	5,432,606	581,068
Ohio	8,077	84,756	154,067	3,094,100	197,408	4,130	50,363	92,150	1,371,472	132,059
Ind	3,734	25,474	43,258	921,561	61,806	1,445	14,572	24,991	376,738	42,960
Ill	11,587	164,531	341,523	6,861,067	418,757	5,132	80,886	167,547	2,300,327	246,039
Mich	5,272	47,406	97,087	2,172,409	118,537	2,525	27,389	54,385	855,119	76,973
Wis	3,515	31,231	51,075	979,276	109,975	1,658	19,458	34,314	528,950	83,036
W. N. Central	28,954	196,508	331,098	8,709,122	715,032	7,181	106,128	181,577	3,022,890	469,108
Minn	5,521	37,708	62,656	1,716,944	152,376	1,683	22,209	36,323	681,384	95,508
Iowa	4,954	27,603	41,032	1,057,006	69,105	1,089	13,748	22,017	350,841	41,401
Mo	6,674	79,488	145,571	3,361,721	240,247	2,591	45,219	81,976	1,209,660	159,615
N. Dak	2,619	5,929	9,940	262,430	24,418	184	1,868	3,250	52,153	5,584
S. Dak	1,973	5,537	8,616	236,280	16,810	202	2,171	3,266	51,425	5,810
Nebr	2,890	17,268	28,106	1,054,064	58,561	596	8,933	15,573	280,423	35,673
Kans	4,323	22,975	35,177	1,020,677	153,515	836	11,980	19,171	397,003	125,517
S. Atlantic	15,652	140,227	200,123	4,657,675	360,267	7,183	74,334	109,985	1,951,501	213,645
Del	286	2,094	3,778	118,087	10,514	125	889	1,523	21,281	2,697
Md	2,205	22,468	33,065	741,367	49,522	1,229	15,790	21,350	348,388	36,312
D. C	496	7,575	13,700	261,083	14,305	330	4,107	7,212	98,179	9,066
Va	2,344	22,739	30,272	656,309	79,334	1,176	13,509	18,402	280,715	39,588
W. Va	1,132	10,339	19,303	346,339	29,530	626	7,169	13,345	181,817	22,995
N. C	2,413	24,476	25,823	717,432	63,826	1,037	9,305	12,441	267,917	30,623
S. C	1,539	7,726	10,535	333,528	17,524	539	3,824	5,829	148,002	12,632
Ga	3,183	22,735	36,896	1,016,496	62,220	1,076	11,026	16,772	415,437	37,587
Fla	2,054	20,075	26,751	466,535	33,482	1,045	8,715	13,109	189,765	22,144
E. S. Central	7,739	64,502	95,386	2,550,847	237,353	3,131	40,189	61,636	1,213,242	125,281
Ky	2,027	21,538	26,083	522,495	99,959	867	13,180	18,200	251,472	35,626
Tenn	2,256	22,485	35,124	1,068,981	68,735	967	14,191	23,118	558,474	48,430
Ala	1,743	13,733	23,650	574,145	44,603	785	9,050	14,927	275,088	27,262
Miss	1,713	6,746	10,528	385,226	24,055	512	3,768	5,391	128,208	13,963
W. S. Central	17,566	104,153	168,732	4,787,187	389,369	5,840	59,707	96,826	2,385,930	279,120
Ark	2,052	8,463	12,195	373,074	30,660	570	5,062	8,120	179,650	23,616
La	1,729	17,493	29,337	836,197	58,966	882	11,035	17,688	395,737	36,437
Okla	4,179	19,210	30,916	773,398	60,885	1,333	9,700	16,570	333,678	42,787
Tex	9,606	58,987	96,284	2,804,518	238,859	3,055	33,910	54,447	1,476,865	176,279
Mountain	5,795	34,680	55,657	1,198,946	104,749	1,960	19,561	33,132	518,258	67,889
Mont	1,249	4,436	6,991	158,545	19,026	268	2,357	3,744	60,584	11,083
Idaho	681	3,386	4,524	121,193	10,918	164	1,188	2,044	36,588	5,761
Wyo	283	905	1,855	34,661	4,215	91	452	891	15,892	2,655
Colo	2,075	14,628	23,947	539,626	37,449	813	9,018	14,936	224,381	23,439
N. Mex	317	1,355	2,331	53,547	4,744	97	720	1,256	26,882	3,586
Ariz	358	3,554	5,420	97,554	9,377	169	1,726	3,114	49,774	6,798
Utah	736	5,737	9,712	180,101	17,697	309	3,867	6,696	96,592	13,684
Nev	96	679	877	13,719	1,324	49	233	450	7,566	885
Pacific	13,821	168,103	295,200	5,773,290	556,000	7,165	85,831	157,890	2,589,809	291,405
Wash	2,631	30,391	51,101	1,147,136	79,573	1,370	15,637	29,367	482,532	55,176
Oreg	1,439	14,659	24,190	466,831	40,580	689	8,149	13,457	245,194	25,137
Calif	9,751	123,053	219,909	4,159,323	435,847	5,106	62,045	115,066	1,861,883	211,092

Source: Bureau of the Census, Department of Commerce.

No. 763.—WHOLESALE TRADE OF INDIVIDUAL CITIES OF 100,000 OR MORE INHABITANTS, 1929

[Net sales in thousands of dollars]

City	Number of establishments	Employees	Net sales
Akron, Ohio	201	2,628	105,532
Albany, N. Y	243	3,630	124,335
Atlanta, Ga	750	11,866	438,917
Baltimore, Md	1,589	18,465	651,096
Birmingham, Ala	423	6,540	254,204
Boston, Mass	3,653	48,704	2,357,017
Bridgeport, Conn	145	1,893	74,574
Buffalo, N. Y	1,166	14,548	671,765
Cambridge, Mass	121	2,659	55,755
Camden, N. J	65	815	19,388
Canton, Ohio	120	1,204	35,224
Chattanooga, Tenn	135	1,663	62,754
Chicago, Ill	6,702	138,657	5,870,166
Cincinnati, Ohio	1,326	17,252	729,814
Cleveland, Ohio	1,968	24,946	1,106,723
Columbus, Ohio	518	6,947	228,252
Dallas, Tex	809	12,662	729,157
Dayton, Ohio	237	3,133	112,669
Denver, Colo	934	10,564	395,958
Des Moines, Iowa	333	5,453	149,075
Detroit, Mich	2,136	26,510	1,540,060
Duluth, Minn	185	3,231	171,363
Elizabeth, N. J	75	665	51,161
El Paso, Tex	205	2,075	74,384
Erie, Pa	159	1,254	31,947
Evansville, Ind	184	1,964	61,096
Fall River, Mass	130	898	55,144
Flint, Mich	102	1,365	38,519
Fort Wayne, Ind	158	2,233	53,164
Fort Worth, Tex	240	3,426	276,844
Gary, Ind	38	286	10,053
Grand Rapids, Mich	416	3,938	152,630
Hartford, Conn	323	7,804	125,187
Houston, Tex	506	7,354	519,913
Indianapolis, Ind	730	9,769	436,596
Jacksonville, Fla	346	4,234	180,779
Jersey City, N. J	169	3,658	117,769
Kansas City, Kans	97	2,614	92,217
Kansas City, Mo	1,664	24,354	1,400,722
Knoxville, Tenn	135	2,082	53,448
Long Beach, Calif	127	1,207	33,893
Los Angeles, Calif	3,153	40,581	1,379,989
Louisville, Ky	528	9,664	267,679
Lowell, Mass	89	704	24,043
Lynn, Mass	119	830	17,231
Memphis, Tenn	628	9,449	652,877
Miami, Fla	247	1,727	48,753
Milwaukee, Wis	1,059	14,289	545,650
Minneapolis, Minn	1,316	17,423	846,458
Nashville, Tenn	225	3,103	129,897
Newark, N. J	643	9,652	393,420
New Bedford, Mass	167	1,193	35,837
New Haven, Conn	389	3,835	138,850
New Orleans, La	712	10,423	601,981
New York City (Greater New York)	19,618	237,291	15,631,148
Bronx Borough	375	4,690	187,913
Brooklyn Borough	1,818	19,332	699,107
Manhattan Borough	16,948	205,836	14,529,672
Queens Borough	400	7,023	202,715
Richmond Borough	77	410	11,740
Norfolk, Va	319	3,371	153,754
Oakland, Calif	390	5,712	129,170
Oklahoma City, Okla	464	6,605	287,932
Omaha, Nebr	647	9,466	704,088
Paterson, N. J	141	1,264	65,958
Peoria, Ill	215	2,698	98,759
Philadelphia, Pa	4,357	52,636	2,280,884
Pittsburgh, Pa	1,849	27,435	1,484,500
Portland, Oreg	867	11,526	383,432
Providence, R. I	577	6,427	246,423
Reading, Pa	203	1,853	56,148
Richmond, Va	416	7,143	233,611
Rochester, N. Y	401	4,219	94,923
St. Louis, Mo	1,940	40,769	1,430,981
St. Paul, Minn	462	8,030	221,746
Salt Lake City, Utah	334	4,515	130,332
San Antonio, Tex	343	4,715	133,820
San Diego, Calif	199	2,645	56,839
San Francisco, Calif	3,154	37,545	1,784,175
Scranton, Pa	279	3,218	111,866
Seattle, Wash	1,220	15,001	574,707
Somerville, Mass	31	958	32,993
South Bend, Ind	129	1,394	40,619
Spokane, Wash	256	4,473	134,049
Springfield, Mass	254	3,513	115,560
Syracuse, N. Y	460	4,976	178,538
Tacoma, Wash	150	2,661	55,940
Tampa, Fla	223	2,406	82,679
Toledo, Ohio	417	7,502	187,893
Trenton, N. J	132	1,377	36,593
Tulsa, Okla	282	2,486	103,666
Utica, N. Y	184	1,972	59,359
Washington, D. C	496	7,575	261,083
Wichita, Kans	256	3,125	161,155
Wilmington, Del	127	1,742	102,114
Worcester, Mass	246	2,781	68,455
Yonkers, N. Y	74	809	27,695
Youngstown, Ohio	194	2,970	100,942

Source: Bureau of the Census, Department of Commerce.

No. 764.—RETAIL TRADE: By Type of Operation, 1929

[All money figures in thousands of dollars]

	Number of stores	Employees		Salaries and wages			Total net sales	Stocks on hand, end of year (at cost)
		Full time	Part time	Total	Full time	Part time		
United States, total	**1, 543, 158**	**3, 833, 581**	**676, 559**	**5, 189, 670**	**5, 028, 282**	**161, 388**	**49, 114, 653**	**7, 262, 583**
Single-store independents	1, 230, 300	2, 421, 438	439, 192	3, 247, 936	3, 138, 981	108, 955	31, 486, 128	4, 981, 910
2-store independents	49, 071	256, 497	29, 835	367, 242	360, 002	7, 240	3, 020, 443	474, 886
3-store independents	15, 512	108, 709	14, 764	165, 264	161, 861	3, 403	1, 255, 142	207, 501
Local branch systems	231	6, 447	404	8, 771	8, 554	217	64, 441	10, 703
Local chains	52, 495	263, 568	36, 646	395, 577	386, 612	8, 965	3, 293, 890	393, 832
Sectional chains	41, 083	180, 496	33, 779	259, 390	251, 216	8, 174	2, 191, 250	228, 347
National chains	51, 058	341, 772	79, 906	412, 447	396, 688	15, 759	3, 960, 087	376, 017
Other types of operation:								
Mail-order houses (catalogue only)	271	41, 756	1, 565	45, 408	45, 039	369	515, 237	86, 862
Direct selling (house-to-house)	1, 661	30, 380	435	33, 018	32, 923	95	93, 961	4, 335
Roadside markets or stands	840	214	274	151	115	36	2, 459	213
Curbside markets or stands	3, 662	365	114	396	372	24	16, 155	483
Itinerant vendors	1, 384	208	111	260	232	28	7, 131	200
Rolling stores	244	411	52	719	712	7	3, 971	371
Industrial stores (including commissaries)	1, 347	6, 104	542	8, 837	8, 721	116	115, 583	14, 732
Leased departments—independent operators	596	2, 460	439	3, 176	3, 088	88	24, 321	4, 550
Leased department chains	3, 675	16, 702	1, 851	22, 310	21, 947	363	129, 702	14, 534
Utility-operated retail stores	4, 053	16, 462	4, 347	26, 370	25, 177	1, 193	163, 371	31, 906
Manufacturer-controlled chains	3, 431	43, 455	1, 416	81, 605	81, 306	299	389, 618	54, 151
Cooperative stores	1, 143	3, 420	753	4, 583	4, 436	147	76, 035	9, 759
Cooperative buying associations	566	1, 294	399	1, 788	1, 707	81	40, 960	3, 696
Retailers—country buyers	73, 274	63, 356	24, 888	65, 510	60, 831	4, 679	1, 779, 278	298, 287
Retailers—wholesalers	7, 121	28, 407	4, 775	37, 964	36, 827	1, 137	476, 071	63, 961
All other types of operation	170	590	73	948	936	12	9, 418	1, 347

Source: Bureau of the Census, Department of Commerce.

No. 765.—RETAIL TRADE, INDEPENDENTS, CHAINS, AND OTHER TYPES: 17 Kinds of Business, 1929

[Net sales in thousands of dollars]

Kind of business	Independents (1, 2, and 3 store independents)		Chains (local, sectional, and national)		All other types of operation	
	Number of stores	Net sales	Number of stores	Net sales	Number of stores	Net sales
Department stores	2, 166	3, 140, 287	1, 964	725, 021	91	484, 790
Variety, 5-and-10, and to-a-dollar stores	6, 603	88, 340	5, 377	814, 762	130	1, 045
Men's and boys' clothing and furnishings stores	25, 114	929, 365	2, 815	252, 354	268	11, 003
Clothing stores—men's, women's, and children's	8, 860	394, 707	1, 585	150, 739	106	6, 907
Women's ready-to-wear specialty shops—apparel and accessories	15, 966	807, 811	1, 914	246, 960	373	32, 830
Shoe stores	17, 938	431, 818	5, 092	306, 216	1, 229	68, 795
Furniture stores	23, 902	1, 268, 112	1, 004	213, 661	248	28, 877
Radio and music stores	15, 081	443, 974	794	107, 279	162	10, 519
Grocery stores (without meats)	142, 245	1, 674, 805	35, 369	1, 576, 252	14, 262	198, 072
Combination stores (groceries and meats)	91, 837	2, 463, 173	17, 249	1, 257, 727	6, 463	182, 762
Restaurants, cafeterias	94, 546	1, 551, 912	2, 153	245, 788	251	5, 213
Cigar stores and cigar stands	30, 910	301, 328	2, 162	102, 980	176	5, 756
Filling stations	90, 365	1, 113, 012	28, 617	605, 204	2, 531	69, 207
Coal and wood yards—ice dealers	17, 258	811, 159	1, 401	185, 666	459	16, 544
Drug stores	54, 585	1, 371, 986	3, 526	312, 451	147	5, 962
Hardware stores	24, 659	667, 829	352	21, 141	319	17, 083
Jewelry stores	19, 534	498, 602	370	34, 246	94	3, 432

Source: Bureau of the Census, Department of Commerce.

No. 766.—RETAIL SALES: By States, 1929

[All money figures, except sales per capita, in thousands of dollars]

Division and state	Number of stores	Proprietors and firm members	Number of employees		Expenses		Net sales	Sales per capita (dollars)
			Full time	Part time	Salaries and wages	Other		
United States, total	1,543,158	1,510,607	3,833,581	676,559	5,189,670	5,182,733	49,114,653	400
New England	108,764	98,882	310,275	59,006	422,040	411,832	3,785,869	464
Connecticut	22,202	19,794	58,934	10,611	87,196	82,585	768,510	478
Maine	11,091	10,379	22,925	5,000	28,012	23,163	307,627	386
Massachusetts	54,183	48,294	177,214	32,625	241,100	238,990	2,054,976	484
New Hampshire	6,557	6,354	13,643	3,288	16,786	15,928	184,285	396
Rhode Island	9,542	8,749	27,281	5,311	36,183	33,974	318,295	463
Vermont	5,189	5,312	10,278	2,171	12,763	12,192	152,176	423
Middle Atlantic	385,302	364,487	957,284	149,525	1,397,727	1,461,078	12,717,399	484
New Jersey	60,010	55,959	126,751	22,227	193,503	199,358	1,843,545	456
New York	190,017	175,597	513,434	71,253	792,285	843,898	7,070,414	562
Pennsylvania	135,275	132,931	317,099	56,045	411,939	417,820	3,803,940	395
East North Central	317,667	304,951	877,112	161,384	1,247,467	1,217,941	11,262,958	445
Illinois	96,900	92,936	296,785	52,471	440,280	430,854	3,711,903	486
Indiana	41,618	41,058	100,677	20,531	125,966	117,569	1,222,384	377
Michigan	55,958	53,540	161,245	26,413	241,870	234,825	2,226,398	460
Ohio	83,717	78,846	229,870	41,163	318,273	311,146	2,864,831	431
Wisconsin	39,474	38,571	88,535	20,806	121,078	123,547	1,237,442	421
West North Central	170,644	173,247	401,112	85,336	497,830	504,149	5,269,554	396
Iowa	32,716	33,470	70,538	18,409	86,094	88,436	972,136	393
Kansas	25,605	26,412	54,605	13,529	66,612	64,541	744,586	396
Minnesota	30,725	30,903	81,729	14,527	103,817	105,837	1,051,930	410
Missouri	47,039	46,958	123,694	20,268	153,142	152,910	1,448,220	399
Nebraska	17,637	18,474	39,780	10,012	49,678	49,966	562,945	409
North Dakota	8,077	8,017	14,297	3,485	17,931	21,407	234,540	344
South Dakota	8,845	9,013	16,469	5,106	20,556	21,052	255,197	368
South Atlantic	169,068	166,871	355,178	66,297	419,553	405,932	4,201,755	266
Delaware	3,688	3,417	7,774	1,680	9,842	9,117	103,512	434
Dist. of Columbia	5,931	5,136	31,453	3,600	44,385	40,054	336,262	691
Florida	22,449	20,765	45,618	7,932	52,749	53,860	504,523	344
Georgia	28,687	29,022	57,554	11,068	60,599	60,142	635,440	218
Maryland	21,082	20,162	53,480	7,492	64,292	64,940	619,573	380
North Carolina	28,831	30,172	49,900	13,035	58,066	56,747	653,419	206
South Carolina	15,036	14,744	24,580	6,595	26,128	23,541	300,220	173
Virginia	26,120	26,076	52,287	9,411	61,386	57,443	600,929	248
West Virginia	17,244	17,377	32,532	5,484	42,106	40,088	447,877	259
East South Central	89,199	94,226	174,772	30,817	193,312	186,421	2,171,995	220
Alabama	21,442	22,001	43,632	7,886	48,123	45,087	527,101	199
Kentucky	27,117	28,553	46,749	8,289	53,266	50,292	587,340	225
Mississippi	17,256	18,381	29,244	5,618	30,747	29,993	413,737	206
Tennessee	23,384	25,291	55,147	9,324	61,176	61,049	643,817	246
West South Central	135,482	140,660	296,335	51,035	348,243	333,068	3,727,371	306
Arkansas	17,937	19,444	29,710	6,250	33,034	31,284	412,680	223
Louisiana	23,288	23,900	47,058	4,227	48,982	47,180	476,643	227
Oklahoma	27,339	27,846	59,259	11,327	74,266	71,750	795,028	332
Texas	66,918	69,470	160,308	29,231	191,961	182,853	2,043,020	351
Mountain	44,661	43,758	116,018	20,142	155,952	150,424	1,548,650	418
Arizona	5,068	5,206	14,445	2,091	19,900	19,388	198,620	456
Colorado	13,993	13,361	39,339	6,700	50,731	49,868	466,959	451
Idaho	4,916	4,779	11,313	2,256	15,386	15,245	169,087	380
Montana	6,951	6,713	16,125	3,120	23,317	22,108	243,828	454
Nevada	1,310	1,389	3,108	494	5,096	4,425	50,401	554
New Mexico	4,191	4,320	8,596	1,501	10,344	9,884	119,759	283
Utah	5,249	5,027	16,374	2,942	21,509	19,666	196,559	387
Wyoming	2,983	2,963	6,718	1,038	9,669	9,840	103,437	459
Pacific	122,371	123,525	345,495	53,017	507,546	511,390	4,428,602	540
California	85,691	87,364	251,148	36,107	375,948	377,122	3,210,863	566
Oregon	14,570	14,933	35,579	6,158	48,154	51,203	455,931	478
Washington	22,110	21,228	58,768	10,752	83,444	83,565	761,808	487

Source: Bureau of the Census, Department of Commerce.

No. 767.—RETAIL TRADE: By Kind of Business, 1929

[All money figures in thousands of dollars]

Kind of business	Number of stores	Proprietors and firm members	Employees (full time)	Salaries and wages, total [1]	Net sales
United States total	**1,543,158**	**1,510,607**	**3,833,581**	**5,189,670**	**49,114,653**
Food group	**481,891**	**468,301**	**569,632**	**767,207**	**10,837,422**
Candy and confectionery stores:					
Candy stores—nut stores	2,658	1,882	4,143	4,365	34,913
Confectionery stores (candy and fountain)	60,607	65,714	42,929	41,359	536,636
Dairy products stores:					
Dairy products stores (including ice cream)	4,488	3,879	9,332	13,583	165,965
Egg and poultry dealers	3,258	3,513	2,573	3,320	70,858
Milk dealers (incomplete)	3,990	4,063	52,975	101,027	560,996
Delicatessen stores	11,166	12,184	9,058	10,699	194,820
Fruit stores and vegetable markets	22,904	25,106	16,368	20,583	308,379
Grocery stores (without meats) [2]	191,876	171,991	143,413	183,439	3,449,129
Combination stores (groceries and meats):					
Grocery stores with meats	91,888	87,420	148,819	192,504	3,025,305
Meat markets with groceries	23,661	25,866	44,907	61,759	878,357
Meat markets (including sea foods):					
Fish markets—sea foods	6,077	6,571	6,202	7,500	83,698
Meat markets	43,788	45,248	55,318	84,898	1,253,260
Bakeries—caterers:					
Bakeries—bakery goods stores (except manufacturing bakeries)	11,903	11,698	24,571	29,328	193,563
Caterers	110	84	1,180	1,733	7,530
Other food stores:					
Coffee, tea, spice dealers	1,236	834	4,914	7,438	44,938
Farm products stores	974	1,023	455	456	8,942
General food stores (miscellaneous)	686	666	633	618	8,598
Bottled waters and beverage dealers	621	559	1,842	2,598	11,533
General stores	**104,089**	**121,366**	**107,023**	**115,511**	**2,570,744**
General stores—groceries with apparel	5,426	6,200	4,532	4,919	111,075
General stores—groceries with dry goods	40,159	46,264	29,350	29,095	713,226
General stores—groceries with other merchandise	58,504	68,902	73,141	81,496	1,746,443
General merchandise group	**54,636**	**47,821**	**702,822**	**818,930**	**6,444,101**
Department stores:					
With food departments	460	184	107,354	139,293	939,411
Without food departments	3,730	1,249	342,138	443,091	2,963,663
Mail-order houses—general merchandise	31	8	35,483	38,607	447,024
Dry goods stores:					
Dry goods stores	24,676	25,885	49,538	55,962	641,386
Piece goods stores	774	757	1,032	1,503	21,822
General merchandise stores:					
With food departments	2,182	2,150	8,472	10,805	139,405
Without food departments	9,849	9,527	28,803	31,905	363,887
Army and Navy goods stores	724	646	1,072	1,576	19,783
Women's exchanges	100	72	610	827	3,573
Variety, 5-and-10, and to-a-dollar stores	12,110	7,343	128,320	95,362	904,147
Automotive group	**257,685**	**242,800**	**628,333**	**934,402**	**9,615,810**
Motor vehicle dealers (new and used):					
Automobile sales rooms	40,797	38,790	330,617	528,988	6,153,217
Used car dealers	3,097	3,036	7,274	11,805	140,932
Automobile dealers with farm implements and machinery	1,407	1,635	5,679	8,217	113,363
Accessories, tires, and batteries:					
Accessory stores with tires and batteries	7,762	6,801	20,336	30,990	257,742
Battery and ignition shops—brake repair shops	6,409	6,819	10,550	15,442	94,238
Tire shops (including tire repairs)	8,142	7,341	20,000	29,671	247,314
Filling stations:					
Filling stations—gasoline and oil	52,728	32,281	66,655	87,517	869,081
Filling stations with tires and accessories	26,775	27,269	35,339	43,173	516,917
Filling stations with other merchandise	42,011	41,196	24,727	28,521	401,425
Motor cycles, bicycles, and supplies:					
Motor-cycle dealers	298	292	668	988	8,035
Bicycles, motor cycles, and supplies stores	255	278	433	585	4,640
Bicycle shops	879	925	630	747	7,570

[1] Including full-time and part-time.
[2] See also Feed stores with groceries in "Other retail stores" group.

No. 767.—Retail Trade: By Kind of Business, 1929—Continued

[All money figures in thousands of dollars]

Kind of business	Number of stores	Proprietors and firm members	Employees (full time)	Salaries and wages, total	Net sales
Automotive group—Continued.					
Garages and repair shops:					
Body, fender, and paint shops	3,379	3,754	9,596	15,289	46,106
Garages (repairs, storage, gasoline, oil, accessories)	60,627	69,746	88,357	121,257	693,063
Parking stations, parking garages, and lots	2,059	1,585	5,015	7,442	39,262
Radiator shops (including repairs)	728	818	1,041	1,554	6,569
Other automotive establishments:					
Aircraft and accessories	114	26	882	1,344	5,594
Boats (motor boats, yachts, canoes)	219	208	534	871	10,741
Apparel group	**114,296**	**99,613**	**329,254**	**505,352**	**4,240,893**
Men's and boys' clothing and furnishings stores:					
Men's and boys' clothing stores	3,386	2,407	9,335	18,317	176,419
Men's and boys' hat stores	1,566	907	2,586	4,852	43,744
Men's furnishings stores	9,196	8,798	10,051	17,267	212,032
Men's clothing and furnishings stores	14,049	14,242	45,389	82,928	760,528
Family clothing stores—men's, women's, children's	10,551	9,345	43,555	65,086	522,353
Women's ready-to-wear specialty shops—apparel and accessories	18,253	15,751	100,791	134,582	1,087,601
Women's accessories stores:					
Blouse shops	11	12	30	31	313
Corset and lingerie shops	2,390	2,170	3,624	4,591	49,556
Furriers—fur shops	2,280	2,103	7,506	14,344	106,861
Hosiery shops	1,943	1,211	8,940	9,860	54,830
Knit goods shops	464	364	863	1,056	11,348
Millinery stores (including leased millinery departments)	12,433	10,106	19,106	23,788	161,807
Costume accessories stores (including jewelry, bags, and gloves)	323	254	582	715	6,781
Umbrella shops (including parasols, canes)	127	81	95	115	1,146
Other apparel stores:					
Children's specialty shops	1,019	1,027	1,458	1,861	23,982
Custom tailors	11,284	11,624	23,277	39,138	165,048
Dressmakers	463	486	2,804	4,029	11,611
Infants' wear shops	290	315	335	437	5,983
Mail-order apparel houses	9	2	111	136	2,121
Shoe stores:					
Shoe stores—men's	1,402	418	2,810	5,194	61,507
Shoe stores—women's	1,666	535	8,146	15,673	130,681
Shoe stores—men's, women's, children's	21,191	17,455	37,860	61,351	614,641
Furniture and household group	**58,941**	**51,962**	**249,945**	**404,095**	**2,754,721**
Furniture stores:					
Furniture stores	17,891	16,550	105,185	176,362	1,272,393
Furniture and undertaker	3,590	4,491	5,886	8,790	103,163
Furniture and hardware stores	3,672	4,386	8,260	11,425	134,259
Floor coverings, drapery, curtain, and upholstery stores:					
Drapery, curtain, and upholstery stores	973	975	2,021	2,992	18,735
Floor coverings stores	1,503	1,475	6,348	10,280	73,428
Household appliance stores:					
Household appliance stores (electrical)	6,637	1,939	36,729	55,574	228,810
Household appliance stores	1,757	268	10,202	16,742	99,898
Refrigerator dealers (electric only)	492	325	3,874	6,922	49,012
Refrigerator dealers (electric and gas)	45	37	176	269	1,984
Other home furnishing and appliance stores:					
Aluminumware	58	3	1,333	1,358	4,471
Antique and used furniture dealers	715	768	951	1,649	10,025
Brushes and brooms	269	97	3,388	4,642	9,765
China, glassware, crockery, tinware, enamelware	1,008	922	2,748	4,077	30,657
Picture and framing stores	690	694	1,046	1,507	8,748
Stove and range dealers	398	307	1,031	1,639	9,357
Antique shops	1,384	1,409	2,342	5,062	50,348
Awning, flag, banner, window shade, and tent shops	841	882	1,872	2,661	15,563
Interior decorators	701	616	5,864	11,663	68,818
Lamp and shade shops	280	287	368	485	3,516
Radio and music stores:					
Radio and electrical shops [3]	11,783	11,910	29,999	45,411	337,294
Radio and musical instruments stores [4]	4,254	3,621	20,322	34,585	224,478
Restaurants, cafeteria, and eating places	**134,293**	**148,948**	**419,994**	**396,076**	**2,124,890**
Restaurants, cafeterias:					
Cafeterias	3,124	1,992	56,330	57,888	272,739
Lunch rooms	57,612	64,855	93,121	82,232	541,702
Restaurants with table service	36,214	42,990	222,321	208,580	988,473

[3] See also Electrical shops (without radio) in "Lumber and building group."
[4] See also Music stores (without radio) in "Other retail stores" group.

No. 767.—Retail Trade: By Kind of Business, 1929—Continued

[All money figures in thousands of dollars]

Kind of business	Number of stores	Proprietors and firm members	Employees (full time)	Salaries and wages, total	Net sales
Restaurants, cafeterias, etc—Continued.					
Lunch counters, refreshment stands, etc:					
Box lunches	161	179	1,123	1,278	6,335
Refreshment stands	7,764	8,003	5,409	5,014	46,005
Fountains—lunches	1,906	1,658	11,982	12,207	64,565
Lunch counters	17,119	18,446	25,966	25,018	162,181
Soft-drink stands	10,393	10,825	3,742	3,858	42,892
Lumber and building group	52,814	43,480	215,830	359,985	2,621,064
Lumber and building material dealers:					
Lumber and building material dealers	16,911	10,167	96,926	163,437	1,471,745
Lumber and hardware	6,139	3,242	28,868	46,730	457,660
Roofing	2,868	3,165	7,728	11,453	46,160
Dealers in any other single building material	459	482	961	1,235	5,718
Electrical shops (without radio)	4,858	4,895	14,278	23,539	110,131
Heating and plumbing shops:					
Heating appliances and oil burners	1,915	993	10,366	20,320	70,737
Plumbing shops—heating and ventilating	10,794	11,966	35,723	60,003	263,540
Paint and glass stores:					
Glass and mirror shops	588	609	1,093	1,853	9,552
Paint and glass stores	8,282	7,961	19,887	31,415	185,820
Other retail stores	269,448	270,217	595,920	867,949	7,756,941
Hardware stores	25,330	27,692	48,709	73,272	706,053
Hardware and farm implement stores:					
Farm implements, machinery and equipment dealers	4,980	5,777	7,316	10,591	174,975
Farm implement dealers with hay, grain, and feed	673	721	1,587	2,119	46,818
Hardware and farm implement stores	6,589	7,909	16,130	22,396	296,714
Farmers' supplies:					
Feed stores (flour, feed, grain, fertilizer)	9,953	9,835	15,823	20,035	480,305
Fertilizer stores	1,213	1,234	612	692	21,669
Harness shops	2,567	2,741	1,051	1,370	16,266
Irrigation and drainage equipment and supplies (retail)	46	50	208	346	1,508
Farmers' supply stores	306	300	898	1,216	15,377
Seeds, bulbs, and nursery stock	1,489	1,380	7,884	11,305	70,640
Cooperage—barrels, boxes, crates, casks	119	113	310	365	2,962
Coal and feed stores	4,093	4,193	11,803	16,429	287,707
Grain elevators (sales at retail)	221	189	508	647	17,495
Feed stores with groceries	7,127	8,306	8,163	8,634	205,236
Bookstores:					
Bookstores	2,720	2,358	12,397	18,209	116,371
Circulating libraries	89	93	68	74	650
Cigar stores and cigar stands:					
Cigar stores with fountains	2,234	2,179	3,555	4,253	44,732
Cigar stands	12,239	13,416	10,863	12,219	97,947
Cigar stores without fountains	18,775	18,387	13,115	17,763	267,384
Coal and wood yards—ice dealers: [5]					
Coal and wood yards	15,444	14,787	65,810	101,158	929,829
Ice dealers	3,674	2,942	14,408	20,189	83,540
Drug stores:					
Drug stores without fountains	23,414	24,381	42,467	58,828	541,139
Drug stores with fountains	34,844	33,034	106,113	136,915	1,149,260
Florists	9,328	10,015	22,964	30,760	176,201
Gifts, novelties, and toys—cameras:					
Toy shops	620	613	886	1,061	11,544
Art and gift shops	2,959	3,097	3,591	4,304	38,594
Novelty and souvenir shops	2,227	2,348	2,294	2,349	22,908
Camera dealers—photographic supplies	710	653	3,037	4,251	28,810
Jewelry stores:					
Jewelry stores (installment credit)	837	420	7,450	14,464	93,413
Jewelry stores	19,161	19,562	30,823	55,098	442,868
Luggage and leather goods	1,367	1,255	2,829	4,556	40,312
Music stores (without radio)	2,232	1,943	5,410	8,915	54,742
News dealers	10,285	8,608	16,101	14,890	149,866
Office, school, and store supplies and equipment dealers:					
Office and school supplies	1,176	922	6,832	10,741	61,825
Office and store mechanical appliance dealers (retail)	1,284	347	14,108	30,786	112,756
Office and store furniture and equipment dealers	988	593	6,783	13,315	89,623
Store fixture dealers	348	314	1,163	2,355	16,670
Typewriter dealers	878	476	6,443	11,630	43,150
Opticians and optometrists	3,001	2,687	5,014	10,132	50,000

[5] See also Coal and feed stores above.

No. 767.—Retail Trade: By Kind of Business, 1929—Continued

[All money figures in thousands of dollars]

Kind of business	Number of stores	Proprietors and firm members	Employees (full time)	Salaries and wages, total	Net sales
Other retail stores—Continued.					
Sporting-goods stores, including athletic and playground equipment:					
Sporting goods specialty stores	1,238	1,227	3,190	5,045	44,888
Sporting goods stores with toys and stationery	675	678	1,356	1,941	19,894
Athletic and playground equipment	17	12	52	80	683
Scientific and medical instruments and supplies, at retail	574	399	2,827	4,947	31,166
Stationers and printers:					
Blank books, accounting and legal forms	80	46	510	1,053	4,384
Paper and paper products stores	135	125	413	631	4,700
Printers and lithographers	1,084	1,121	1,726	2,662	11,638
Stationers and engravers	1,572	1,457	7,678	11,730	72,566
Monuments and tombstones	2,564	2,897	4,990	8,770	48,653
Miscellaneous classifications (combined)	25,969	26,385	47,652	72,461	510,511
Secondhand stores	15,065	16,099	14,828	20,182	148,068
Tires, accessories, and parts (secondhand)	2,820	3,145	3,755	4,685	25,843
Furniture stores (secondhand)	5,643	6,042	3,326	3,959	37,749
Pawn shops (sales)	1,509	1,599	2,396	4,331	35,537
Clothing and shoe stores (secondhand)	2,606	2,697	1,027	1,109	12,042
Building materials and hardware stores (secondhand)	429	421	1,536	2,088	9,286
Book stores (secondhand)	175	172	193	320	2,372
Office appliances (secondhand)	112	114	299	422	2,132
Radios, phonographs, musical instruments (secondhand)	81	86	38	47	497
Other secondhand stores	1,690	1,823	2,258	3,201	22,610

Source: Bureau of the Census, Department of Commerce.

No. 768.—RETAIL SALES FOR INDIVIDUAL CITIES OF 50,000 OR MORE INHABITANTS, 1929

[Net sales in thousands of dollars. For population of cities see Table 20, p. 20]

City	Number of stores	Employees (full-time)	Net sales	City	Number of stores	Employees (full-time)	Net sales
Akron, Ohio	3,057	11,606	140,469	Cicero, Ill	819	1,251	21,502
Albany, N. Y	1,909	8,669	102,257	Cincinnati, Ohio	6,950	25,933	291,083
Allentown, Pa	1,401	5,402	59,666	Cleveland, Ohio	12,470	46,497	534,061
Altoona, Pa	1,171	3,978	39,092	Cleveland Heights, Ohio	294	968	12,403
Asheville, N. C	664	2,936	29,519	Columbia, S. C	803	3,179	28,689
Atlanta, Ga	3,754	19,602	180,565	Columbus, Ohio	3,722	16,799	170,930
Atlantic City, N. J	1,649	6,331	70,495	Covington, Ky	857	1,962	25,722
Augusta, Ga	898	2,683	24,307	Dallas, Tex	3,445	17,222	178,927
Austin, Tex	756	2,855	31,047	Davenport, Iowa	918	4,130	43,684
Baltimore, Md	12,285	38,907	406,352	Dayton, Ohio	2,010	10,481	118,507
Bayonne, N. J	1,403	1,613	29,381	Dearborn, Mich	265	883	14,580
Beaumont, Tex	759	3,514	36,231	Decatur, Ill	844	3,109	32,709
Berkeley, Calif	1,114	2,606	32,538	Denver, Colo	4,426	19,404	194,163
Bethlehem, Pa	913	1,944	23,387	Des Moines, Iowa	2,031	8,848	89,665
Binghamton, N. Y	1,226	4,178	52,329	Detroit, Mich	17,169	69,013	890,189
Birmingham, Ala	2,799	13,669	129,365	Duluth, Minn	1,286	5,564	55,851
Boston, Mass	9,972	66,244	672,760	Durham, N. C	667	1,891	21,269
Bridgeport, Conn	2,181	6,501	79,410	East Chicago, Ind	752	1,204	17,406
Brockton, Mass	888	2,960	35,004	East Orange, N. J	821	2,056	29,621
Buffalo, N. Y	9,786	28,003	342,855	East St. Louis, Ill	1,057	2,657	33,109
Cambridge, Mass	1,494	4,472	54,904	Elizabeth, N. J	2,171	3,823	60,156
Camden, N. J	1,839	4,418	54,320	El Paso, Tex	1,308	5,289	54,993
Canton, Ohio	1,433	5,308	63,991	Erie, Pa	1,881	4,999	59,033
Cedar Rapids, Iowa	821	3,062	34,932	Evanston, Ill	834	3,904	49,210
Charleston, S. C	830	2,682	25,105	Evansville, Ind	1,588	4,803	47,634
Charleston, W. Va	886	3,693	42,839	Fall River, Mass	1,551	4,012	45,997
Charlotte, N. C	954	4,891	48,135	Flint, Mich	1,754	7,031	93,444
Chattanooga, Tenn	1,345	5,721	58,048	Fort Wayne, Ind	1,459	6,353	69,626
Chester, Pa	1,107	2,041	29,689	Fort Worth, Tex	1,981	9,103	99,859
Chicago, Ill	43,576	177,969	2,127,520	Fresno, Calif	1,451	4,036	52,654

No. 768.—Retail Sales for Individual Cites of 50,000 or more Inhabitants, 1929—Continued

[Net Sales in thousands of dollars]

City	Number of stores	Employees (full-time)	Net sales	City	Number of stores	Employees (full-time)	Net sales
Galveston, Tex	824	2,628	26,966	Passaic, N. J	1,046	1,971	32,688
Gary, Ind	1,283	3,821	48,246	Paterson, N. J	2,166	5,683	85,026
Glendale, Calif	999	2,844	36,805	Pawtucket, R. I	1,056	3,154	40,763
Grand Rapids, Mich	2,560	9,862	114,532	Peoria, Ill	1,432	7,087	70,345
Greensboro, N. C	630	2,677	26,830	Philadelphia, Pa	33,905	102,032	1,083,914
Hamilton, Ohio	661	2,111	28,150	Pittsburgh, Pa	8,547	41,518	441,143
Hammond, Ind	666	2,325	29,882	Pontiac, Mich	833	3,196	44,477
Hamtramck, Mich	648	1,253	19,787	Port Arthur, Tex	491	1,726	21,731
Harrisburg, Pa	1,859	5,619	57,542	Portland, Me	1,225	5,383	56,281
Hartford, Conn	2,318	12,173	128,802	Portland, Oreg	5,150	19,746	208,601
Highland Park, Mich	488	1,929	30,859	Providence, R. I	4,036	16,498	173,489
Hoboken, N. J	1,095	1,593	24,358	Pueblo, Colo	706	2,441	26,944
Holyoke, Mass	1,028	2,511	29,141	Quincy, Mass	869	2,539	32,745
Houston, Tex	3,825	17,229	184,680	Racine, Wis	1,139	2,883	40,738
Huntington, W. Va	916	3,000	33,361	Reading, Pa	1,791	6,100	72,700
Indianapolis, Ind	4,911	22,984	220,628	Richmond, Va	2,558	10,614	104,043
Irvington, N. J	583	951	20,436	Roanoke, Va	985	4,635	42,782
Jackson, Mich	753	3,453	41,548	Rochester, N. Y	5,144	18,370	206,492
Jacksonville, Fla	2,027	7,536	65,910	Rockford, Ill	1,158	4,610	56,510
Jersey City, N. J	4,369	7,676	121,085	Sacramento, Calif	1,567	5,700	73,169
Johnstown, Pa	946	3,934	42,851	Saginaw, Mich	1,040	3,664	47,444
Kalamazoo, Mich	812	3,187	41,973	St. Joseph, Mo	1,217	4,440	44,627
Kansas City, Kans	1,589	3,143	40,517	St. Louis, Mo	12,571	45,574	471,950
Kansas City, Mo	6,188	34,297	349,918	St. Paul, Minn	3,129	15,287	170,733
Kenosha, Wis	690	1,646	25,030	Salt Lake City, Utah	1,546	8,482	89,427
Knoxville, Tenn	1,382	5,618	55,027	San Antonio, Tex	3,315	12,904	120,259
Lakewood, Ohio	609	1,495	22,524	San Diego, Calif	2,349	7,814	94,772
Lancaster, Pa	941	3,674	39,678	San Francisco, Calif	10,849	44,307	474,683
Lansing, Mich	981	4,406	55,801	San Jose, Calif	1,032	3,976	46,942
Lawrence, Mass	1,220	2,725	36,916	Savannah, Ga	1,225	3,996	33,611
Lincoln, Nebr	986	4,797	50,034	Schenectady, N. Y	1,418	4,356	60,419
Little Rock, Ark	1,040	4,680	46,733	Scranton, Pa	2,336	7,616	77,772
Long Beach, Calif	2,107	5,958	78,252	Seattle, Wash	5,625	23,628	252,169
Los Angeles, Calif	17,887	76,584	875,775	Shreveport, La	940	4,436	40,192
Louisville, Ky	3,952	16,092	152,850	Sioux City, Iowa	1,059	4,857	52,145
Lowell, Mass	1,535	4,071	44,650	Somerville, Mass	905	2,368	30,200
Lynn, Mass	1,445	4,466	51,714	South Bend, Ind	1,522	5,725	67,949
Macon, Ga	590	3,005	25,572	Spokane, Wash	1,696	6,766	74,889
Madison, Wis	973	3,907	46,813	Springfield, Ill	1,040	4,520	45,668
Malden, Mass	761	2,053	25,837	Springfield, Mass	2,233	9,579	107,587
Manchester, N. H	1,124	3,112	37,706	Springfield, Mo	865	2,876	30,363
McKeesport, Pa	812	2,354	27,540	Springfield, Ohio	968	3,084	36,119
Medford, Mass	387	922	12,300	Syracuse, N. Y	3,128	11,953	136,592
Memphis, Tenn	3,147	15,381	151,235	Tacoma, Wash	1,604	5,300	61,745
Miami, Fla	2,386	6,618	72,804	Tampa, Fla	1,875	4,963	48,706
Milwaukee, Wis	8,669	29,361	353,894	Terre Haute, Ind	1,260	3,690	37,689
Minneapolis, Minn	5,939	29,103	298,576	Toledo, Ohio	3,724	15,227	180,023
Mobile, Ala	943	3,829	33,062	Topeka, Kans	935	4,116	41,578
Montgomery, Ala	850	3,573	31,875	Trenton, N. J	1,998	6,270	75,061
Mount Vernon, N. Y	896	2,656	33,268	Troy, N. Y	1,148	3,670	45,830
Nashville, Tenn	1,843	8,959	90,024	Tulsa, Okla	1,586	8,868	91,654
Newark, N. J	7,153	26,208	322,778	Union City, N. J	1,356	2,573	39,176
New Bedford, Mass	1,892	4,583	51,758	Utica, N. Y	1,700	4,809	56,978
New Britain, Conn	601	1,482	22,795	Waco, Tex	936	3,394	33,340
New Haven, Conn	3,225	9,428	113,880	Washington, D. C	5,931	31,453	336,262
New Orleans, La	7,912	19,999	162,948	Waterbury, Conn	1,577	4,130	51,568
New Rochelle, N. Y	766	2,749	37,863	Wheeling, W. Va	990	3,995	42,487
Newton, Mass	512	1,632	20,744	Wichita, Kans	1,599	7,150	79,741
New York, N. Y	103,036	316,570	4,272,633	Wilkes-Barre, Pa	1,916	5,933	57,668
Niagara Falls, N. Y	1,118	3,168	38,402	Wilmington, Dela	1,990	5,688	69,245
Norfolk, Va	2,133	7,368	67,087	Winston-Salem, N. C	894	3,027	31,856
Oakland, Calif	5,061	16,489	201,637	Worcester, Mass	2,338	9,528	109,101
Oak Park, Ill	510	2,661	32,741	Yonkers, N. Y	1,851	3,689	60,834
Oklahoma City, Okla	2,432	10,952	118,614	York, Pa	1,111	3,436	35,689
Omaha, Nebr	2,663	11,577	118,184	Youngstown, Ohio	2,040	8,977	96,875
Pasadena, Calif	1,419	5,215	60,035				

Source: Bureau of the Census, Department of Commerce.

No. 769.—INDEXES OF VALUES OF SALES BY DEPARTMENT STORES: BY FEDERAL RESERVE DISTRICTS AND BY MONTHS

NOTE.—Compiled from reports of about 360 to 560 firms. Indexes have been adjusted for variations in number of firms reporting and monthly indexes for the varying number of business days in the different months and the effect of changes in the date of Easter. Sales are much affected by changes in price levels

[1923–1925 average=100]

Year	United States	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City [1]	Dallas	San Francisco
1919	78	78	76	79	77	84	94	------	------	93	------	98	68
1920	94	91	91	93	98	93	113	------	------	105	------	117	83
1921	87	89	87	89	86	89	96	81	90	97	------	97	79
1922	88	92	89	91	87	86	90	84	89	93	------	90	83
1923	98	98	96	101	100	97	100	99	99	99	------	96	96
1924	99	100	99	99	99	99	98	98	98	99	95	100	99
1925	103	102	105	100	101	104	102	103	103	102	100	104	105
1926	106	105	109	102	102	107	106	109	105	99	95	109	110
1927	107	106	111	98	102	105	107	110	103	97	96	106	113
1928	108	104	112	96	101	106	107	117	104	90	97	108	117
1929	111	106	117	96	103	110	104	119	105	86	96	110	120
1930	102	100	113	89	92	106	95	105	94	85	95	100	113
1931	91	91	104	78	80	100	84	89	82	76	82	84	100
1932	69	71	81	62	59	81	64	67	63	60	64	63	76

Month	United States—Unadjusted					United States—With seasonal adjustment				
	1928	1929	1930	1931	1932	1928	1929	1930	1931	1932
January	91	90	88	79	64	108	110	107	97	78
February	88	91	89	80	64	106	111	108	98	78
March	97	107	93	92	69	107	112	107	97	72
April	105	103	110	101	74	106	110	107	106	79
May	107	109	105	97	72	107	109	105	97	72
June	102	108	98	90	66	107	113	103	95	69
July	80	79	71	65	46	110	109	100	91	65
August	81	84	77	67	49	107	111	102	88	65
September	113	117	103	87	71	112	114	99	84	68
October	118	122	112	93	75	108	112	102	86	69
November	125	125	113	95	73	108	108	98	83	63
December	192	191	165	142	106	111	108	94	81	60

[1] Monthly average sales in 1925=100.

No. 770.—INDEXES OF VALUE OF SALES OF MAIL-ORDER HOUSES AND 5-AND-10-CENT CHAIN STORES

NOTE.—Indexes for mail-order houses cover two companies throughout. The number of chain-store companies reporting varied from year to year, but in computing the indexes adjustment has been made for these variations. No adjustment has been made, however, to eliminate the influence of increase in the number of stores operated by the individual companies, which accounts for a considerable part of the increase in the indexes. In the monthly indexes for both mail-order houses and chain stores, allowance has been made for the varying number of business days in the different months; the chain-store indexes have also been adjusted for seasonal variations. Sales are much affected by changes in price levels

[1923–1925 average=100]

Year	Mail-order houses [1]	5-and-10-cent (variety) chains [2]	Month	Mail-order houses [1]			5-and-10-cent (variety) chains [2]		
				1930	1931	1932	1930	1931	1932
1921	65	66	January	142	125	100	152	162	155
1922	70	74	February	152	129	106	163	163	156
1923	89	88	March	143	130	98	165	159	146
1924	98	99	April	170	157	120	161	168	141
1925	113	113	May	186	157	121	175	168	138
1926	121	125	June	170	149	120	161	162	138
1927	126	138	July	147	131	100	153	149	135
1928	148	150	August	153	130	98	164	160	127
1929	188	164	September	170	144	123	156	156	135
1930	169	160	October	200	152	137	152	152	133
1931	144	157	November	182	150	129	159	147	129
1932	117	135	December	218	177	155	154	144	117

[1] Includes mail-order and store sales.
[2] Some of the companies included do not limit the sales prices of individual articles to 10 cents, some selling as high as $1, but all come within the broad classification popularly known as "10-cent stores."

Source tables 769 and 770: Federal Reserve Board and Bureau of Foreign and Domestic Commerce, Department of Commerce.

No. 771.—HOTELS OPERATING THE ENTIRE YEAR 1929 AND FROM 2 TO 8 MONTHS OF 1929: SUMMARY OF STATISTICS

NOTE.—The hotel census is confined to hotels in the United States having 25 or more guest rooms. It does not include apartment houses, boarding houses, clubs, etc. Hotels that make separate charges for rooms and meals, and hotels that confine their operations to room rentals are classified as European-plan hotels. American-plan hotels are hotels that have a fixed combined rate for rooms and meals. A hotel is classed as "transient" or "permanent" if more than 75 per cent of its patrons are "transient" or "permanent," respectively

[Receipts and salaries and wages in thousands of dollars]

	Total	Plan of operation			Type of occupancy		
		European	American	Mixed American and European	Mainly transient	Mainly permanent	Mixed transient and permanent
HOTELS OPERATING ENTIRE YEAR							
Number of hotels	13,328	10,907	1,097	1,324	4,941	1,702	6,685
Owned by corporations	3,047	2,549	243	255	1,262	424	1,361
Owned by individuals and partnerships	10,281	8,358	854	1,069	3,679	1,278	5,324
Number of guest rooms	1,134,957	969,172	78,020	87,765	438,959	151,900	544,098
Seating capacity of dining rooms	610,762	382,581	109,497	118,684	319,216	52,069	239,477
Receipts, total	962,801	790,740	90,663	81,398	482,542	99,102	381,157
Rooms	485,076	485,076			223,208	61,871	199,997
Meals	223,502	223,502			140,945	11,943	70,614
Rooms and meals	157,056		80,917	76,139	60,613	19,674	76,769
Other sources	97,167	82,162	9,746	5,259	57,776	5,614	33,777
All employees:							
Number, average for the year [1]	291,259	237,531	28,457	25,271	151,367	26,527	113,365
Male	158,997	130,919	15,137	12,941	83,216	13,682	62,099
Female	132,262	106,612	13,320	12,330	68,151	12,845	51,266
Salaries and wages	257,034	213,406	23,713	19,915	130,854	25,005	101,175
Dining and lunch room and kitchen employees—							
Average for the year [1]	100,140	75,022	13,120	11,998	56,677	7,152	36,311
Male	60,480	47,138	6,943	6,399	33,537	4,581	22,362
Female	39,660	27,884	6,177	5,599	23,140	2,571	13,949
Salaries and wages	84,428	65,556	10,066	8,806	47,362	6,175	30,891
All other employees:							
Average for the year [1]	191,119	162,509	15,337	13,273	94,690	19,375	77,054
Male	98,517	83,781	8,194	6,542	49,679	9,101	39,737
Female	92,602	78,728	7,143	6,731	45,011	10,274	37,317
Salaries and wages	172,606	147,850	13,647	11,109	83,492	18,830	70,284
Proprietors and firm members	14,968	11,874	1,366	1,728	5,645	1,694	7,629
Male	10,160	8,268	854	1,038	3,978	1,093	5,089
Female	4,808	3,606	512	690	1,667	601	2,540
HOTELS OPERATING 2 TO 8 MONTHS							
Number of hotels	2,249	370	1,537	342	646	324	1,279
Owned by corporations	541	104	360	77	210	78	253
Owned by individuals and partnerships	1,708	266	1,177	265	436	246	1,026
Number of guest rooms	158,939	26,250	108,872	23,817	50,502	23,559	84,878
Seating capacity of dining rooms	274,571	16,478	210,098	47,995	80,422	43,699	150,450
Receipts, total	76,562	8,849	58,386	9,327	25,465	13,877	37,220
Rooms	5,582	5,582			2,764	394	2,424
Meals	2,631	2,631			1,533	139	959
Rooms and meals	63,224		54,348	8,876	18,761	12,421	32,042
Other sources	5,125	636	4,038	451	2,407	923	1,795
Employees, number:							
April	9,883	1,262	7,565	1,056	4,180	1,626	4,077
July	55,818	3,785	43,978	8,055	16,894	9,229	29,695
October	10,064	1,925	6,649	1,490	2,821	1,629	5,614
December	14,999	3,357	10,253	1,389	6,543	2,629	5,827
Salaries and wages, all employees	15,814	1,868	11,936	2,010	5,405	2,776	7,633
Proprietors and firm members	2,777	381	1,938	458	712	406	1,659
Male	1,661	247	1,137	277	451	242	968
Female	1,116	134	801	181	261	164	691

[1] Based on the reported number of employees as of the 15th of April, July, October, and December.

Source: Bureau of the Census, Department of Commerce.

34.—CONSTRUCTION

No. 772.—CONSTRUCTION CONTRACTS AWARDED

NOTE.—Data compiled from reports covering contracts awarded in small towns and rural districts as well as large cities. Public works and public utilities cover some projects not susceptible to measurement in terms of floor space, such as highways, pipe lines, subways, etc. Statistics for the 37 States were not compiled for years prior to 1925, but available figures covering a varied number of States for earlier years have been published in the 1932 and previous issues of this publication

[Values in millions and tenths of millions of dollars; floor space in thousands of square feet]

Year	Total	Residential	Commercial [1]	Factories [2]	Public works	Public utilities [1 2]	Educational	Hospitals and institutions	Public buildings	Religious and memorial	Social and recreational
37 STATES [3]											
Number of projects:											
1925	173,720	127,678	19,083	5,139	9,381	1,802	4,024	929	856	2,426	2,402
1926	170,723	120,473	20,249	5,456	11,461	2,122	3,993	985	995	2,406	2,583
1927	184,604	128,436	21,616	5,361	14,100	2,456	4,497	1,194	1,303	2,751	2,890
1928	200,255	139,133	23,583	5,809	16,876	2,394	4,759	1,141	1,383	2,520	2,657
1929	172,171	110,498	24,136	6,383	16,708	2,661	4,531	1,190	1,303	2,277	2,484
1930	135,269	74,713	22,431	4,675	18,257	3,130	4,771	1,221	1,477	2,044	2,551
1931	110,203	63,834	15,299	2,824	16,393	2,405	3,250	929	1,454	1,560	2,255
1932	76,129	38,057	14,234	2,370	13,821	1,628	1,800	552	974	1,193	1,500
Value of construction:											
1925	6,006.4	2,747.7	872.4	326.6	650.6	415.4	420.4	111.1	54.5	153.1	248.7
1926	6,380.9	2,671.1	920.9	471.2	775.6	564.7	381.1	133.1	67.2	148.8	247.1
1927	6,303.1	2,573.3	932.9	375.9	962.2	419.8	379.8	162.5	79.5	156.5	260.7
1928	6,628.3	2,788.3	884.6	508.8	980.1	484.4	399.0	164.7	76.2	127.9	214.1
1929	5,750.8	1,915.7	929.2	545.9	934.4	524.5	381.9	152.2	120.8	106.1	140.0
1930	4,523.1	1,101.3	616.3	256.6	963.0	700.7	376.1	163.1	139.8	92.8	118.3
1931	3,092.8	811.4	311.1	116.2	875.4	295.7	228.8	121.2	181.3	53.1	98.7
1932	1,351.2	280.1	122.7	43.5	514.7	75.6	82.3	48.4	118.0	27.3	38.7
Floor space of buildings:											
1925	920,537	559,501	160,067	66,900	-------	-------	61,308	14,036	8,293	18,869	31,565
1926	872,574	521,061	152,355	75,705	-------	-------	54,565	14,790	7,856	16,371	29,872
1927	838,298	494,563	141,815	68,130	-------	-------	55,475	18,803	9,941	17,191	32,381
1928	956,841	568,383	159,192	92,903	-------	-------	62,983	20,004	11,237	15,398	26,691
1929	779,747	387,671	161,262	105,523	-------	-------	60,644	19,494	12,626	12,817	19,709
1930	494,809	230,039	96,587	48,020	-------	-------	58,550	19,120	17,024	10,862	14,606
1931	357,789	190,274	50,035	20,108	-------	-------	37,372	16,881	24,256	5,578	13,287
1932	152,829	73,607	23,885	9,048	-------	-------	14,234	7,317	16,198	3,517	5,023

[1] Owing to a change in the classification, data for airports have been excluded from the "Commercial" class and included with "Public utilities" beginning 1930. Separate figures for airports are not available prior to 1930.

[2] Owing to a change in the classification figures for the "Factories" class exclude data for power plants for all years and for pipe lines beginning 1929 (separate figures not available for years prior to 1929), which data are included with "Public utilities."

[3] Figures for the 37 States include all except the 11 States in the Mountain and Pacific divisions.

Source: The F. W. Dodge Corporation.

No. 773.—CONSTRUCTION CONTRACTS AWARDED IN 37 STATES: By Months[1]

Note.—See headnote, Table 772

Month	Value of construction (thousands of dollars)					Floor space of buildings[2] (thousands of square feet)				
	1928	1929	1930	1931	1932	1928	1929	1930	1931	1932
Total	6,628,286	5,750,791	4,523,115	3,092,850	1,351,159	956,841	779,747	494,809	357,789	152,829
January	427,169	406,468	323,975	227,956	84,798	63,333	57,356	31,037	24,002	12,301
February	465,331	361,274	317,053	235,405	89,046	68,281	53,465	36,157	28,017	12,123
March	592,567	484,588	456,119	369,981	112,235	87,290	76,531	52,920	37,362	16,728
April	642,237	642,061	482,877	336,925	121,705	93,864	84,375	54,502	38,486	13,675
May	667,097	587,766	457,416	306,079	146,221	93,281	80,445	52,512	38,484	15,561
June	650,466	529,891	600,573	316,148	113,075	93,807	70,751	46,263	32,370	12,189
July	583,432	652,436	366,878	285,997	128,769	81,598	74,873	43,466	32,262	14,134
August	516,970	488,882	346,644	233,106	133,988	78,104	65,483	38,364	29,793	13,659
September	581,674	444,402	331,864	251,110	127,527	75,346	58,466	39,592	29,566	13,271
October	597,104	445,642	336,706	242,094	107,274	85,213	64,389	39,108	30,365	10,896
November	471,482	391,013	253,574	151,196	105,302	72,696	50,471	32,598	20,179	11,525
December	432,756	316,368	249,436	136,852	81,219	64,030	43,141	28,290	16,903	6,768

[1] Figures for the 37 States include all except the 11 States in the Mountain and Pacific divisions.
[2] Figures do not include data for floor space for public works and public utilities. Figures for 1930 and 1931 have been revised to exclude data for airports which are now included with "Public Utilities". Separate figures for airports are not available prior to 1930.

Source: The F. W. Dodge Corporation.

No. 774.—CONSTRUCTION CONTRACTS AWARDED IN 37 STATES: By Territories

Note.—See headnote, Table 772. New England includes Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. Metropolitan New York and vicinity includes northern New Jersey, New York City, Long Island, Westchester, Orange, Putnam, and Rockland Counties, N. Y. Up-State New York includes all counties north of Orange, Putnam, and Rockland. Middle Atlantic includes eastern Pennsylvania, southern New Jersey, Maryland, Delaware, District of Columbia, and Virginia. Pittsburgh includes western Pennsylvania, West Virginia, Ohio, and Kentucky. Southern Michigan consists of the southern peninsula. Chicago includes northern Illinois, Indiana, Iowa, and eastern and southern Wisconsin. Central Northwest includes Minnesota, the Dakotas, northern peninsula of Michigan, and northwest Wisconsin. St. Louis includes southern Illinois, eastern Missouri, northeast Arkansas, western Tennessee, and northwest Mississippi. Kansas City includes western Missouri, Kansas, Oklahoma, and Nebraska. Texas includes the State only. New Orleans includes Louisiana, western and southern Arkansas, and eastern and southern Mississippi. Southeastern includes the Carolinas, Georgia, Florida, Alabama, and eastern Tennessee

[Value in thousands of dollars; floor space in thousands of square feet]

Territory	Value				Floor space of buildings[1]			
	1929	1930	1931	1932	1929	1930	1931	1932
Total	5,750,791	4,523,115	3,092,850	1,351,159	779,747	494,809	357,789	152,829
New England	398,382	354,466	295,019	114,053	61,599	45,310	36,345	15,425
Metropolitan New York and vicinity	1,241,842	938,693	725,061	190,678	159,735	120,411	106,872	26,819
Up-State New York	225,430	188,164	169,718	75,955	23,954	18,266	15,701	7,868
Middle Atlantic	671,500	538,636	356,807	227,615	98,071	58,411	41,677	30,300
Pittsburgh	685,536	567,796	309,540	151,612	77,961	56,090	32,268	13,633
Southern Michigan	356,411	173,537	90,611	41,715	57,599	22,959	11,206	5,044
Chicago	873,554	560,291	345,583	152,842	123,073	53,598	33,155	13,578
Central Northwest	104,554	98,712	93,815	61,516	11,468	10,373	8,686	4,305
St. Louis	237,223	245,878	120,750	83,077	30,157	18,198	11,680	5,810
Kansas City	255,208	300,284	153,496	76,631	36,109	25,094	14,481	6,241
Texas	217,800	186,026	157,033	56,233	34,754	22,831	16,384	6,943
New Orleans	179,877	102,037	126,484	35,921	14,929	9,708	7,446	4,806
Southeastern	303,473	268,596	148,932	83,260	50,339	33,561	21,888	12,058

[1] Figures do not include data for floor space for public works and public utilities. Figures for 1930 and 1931 have been revised to exclude data for airports which are now included with "Public Utilities." Data for airports were not reported separately for 1929.

Source: The F. W. Dodge Corporation.

No. 775.—BUILDING PERMITS ISSUED IN PRINCIPAL CITIES

NOTE.—Figures cover new buildings and repairs to old buildings, but exclude data for installation permits (those for installing boilers, signs, etc.) which are not strictly building operations. These permits are rather numerous, but in value they are of small amount. The number figures represent the number of buildings covered by permits issued (new construction and repairs, etc.), rather than the number of permits. The cities shown had a population of 50,000 or over in 1930. The estimated cost of new buildings only, authorized in 257 identical cities since 1921 is as follows: 1921, $1,573,000,000; 1922, $2,489,000,000; 1923, $3,072,000,000; 1924, $3,208,000,000; 1925, $3,805,000,000; 1926, $3,557,000,000; 1927, $3,138,000,000; 1928, $2,995,000,000; 1929, $2,580,000,000; 1930, $1,451,000,000; 1931, $1,049,000,000; 1932, $379,000,000. Buildings authorized by permit are not always actually constructed, and the actual cost of those constructed may differ considerably from that originally estimated

City and State	Total number of buildings					Proposed cost of buildings (thousands of dollars)				
	1928	1929	1930	1931	1932	1928	1929	1930	1931	1932
Akron, Ohio	5,356	5,560	2,421	1,506	908	19,485	21,640	8,777	1,939	804
Albany, N. Y	2,226	1,784	1,612	1,229	1,172	14,894	9,035	9,004	6,061	3,896
Allentown, Pa	1,556	1,388	671	428	329	5,935	4,510	2,270	968	1,093
Altoona, Pa	1,313	1,932	1,481	1,016	634	3,361	1,984	1,369	745	170
Asheville, N. C	901	598	383	267	201	3,095	2,236	422	234	96
Atlanta, Ga	3,952	2,946	3,043	3,239	2,393	27,395	12,564	8,446	3,471	3,520
Atlantic City, N. J	839	701	593	663	1,233	7,411	7,483	1,401	843	825
Augusta, Ga	2,233	1,884	989	964	624	1,551	1,137	715	732	420
Austin, Tex	-------	1,139	1,234	1,435	1,104	-------	4,477	3,335	2,471	5,565
Baltimore, Md	17,099	19,332	16,943	15,680	12,364	33,945	33,175	27,821	24,691	13,663
Bayonne, N. J	504	329	226	240	293	1,995	1,107	792	448	195
Beaumont, Tex	1,901	1,852	1,561	1,046	772	4,327	2,582	2,606	1,021	711
Berkeley, Calif	2,487	1,806	1,541	1,143	940	6,077	6,369	2,986	1,900	1,097
Bethlehem, Pa	743	604	381	177	113	3,843	2,905	1,065	443	239
Binghamton, N. Y	2,273	2,747	2,814	2,590	2,654	3,456	3,988	2,255	969	1,484
Birmingham, Ala	5,687	3,071	2,542	1,716	1,240	14,225	8,234	2,420	1,937	699
Boston, Mass	9,255	8,169	7,496	7,694	5,964	55,699	53,834	26,906	33,968	11,695
Bridgeport, Conn	1,135	1,172	1,140	938	581	3,527	4,242	2,618	2,753	1,249
Brockton, Mass	887	927	772	614	482	1,726	1,467	1,113	830	495
Buffalo, N. Y	5,545	4,326	3,763	3,568	2,240	24,402	24,128	14,825	9,338	4,067
Cambridge, Mass	1,052	941	773	650	490	8,084	12,166	11,063	4,991	1,977
Camden, N. J	1,293	1,131	832	609	301	7,428	6,164	2,582	1,130	445
Canton, Ohio	1,579	1,507	930	627	319	3,662	3,456	1,585	640	378
Cedar Rapids, Iowa	1,256	1,216	1,227	1,177	1,004	2,438	2,906	2,032	1,606	436
Charleston, S. C	454	673	438	400	466	561	671	1,103	414	244
Charleston, W. Va	601	719	456	325	381	2,873	2,241	6,881	1,050	491
Charlotte, N. C	1,397	1,086	824	641	397	7,458	3,729	2,588	1,318	602
Chattanooga, Tenn	2,939	3,218	2,978	2,349	1,622	4,703	2,261	2,934	1,230	2,185
Chester, Pa	489	343	252	146	61	1,747	1,099	1,139	681	126
Chicago, Ill	19,982	15,849	10,380	6,619	3,872	323,509	210,798	85,749	66,594	12,881
Cicero, Ill	547	562	241	142	93	3,860	3,609	1,117	1,071	66
Cincinnati, Ohio	9,431	8,971	6,667	5,395	3,861	35,459	31,037	33,161	21,467	7,820
Cleveland, Ohio	10,593	9,863	7,637	6,045	3,612	56,159	37,783	32,554	11,991	12,048
Columbia, S. C	883	620	535	559	505	1,610	1,255	1,903	2,073	631
Columbus, Ohio	5,350	3,557	2,594	1,738	1,074	16,237	10,613	5,616	3,369	1,868
Covington, Ky	580	409	343	347	212	1,592	1,479	629	761	197
Dallas, Tex	3,428	3,251	3,325	3,071	2,409	8,089	9,660	11,028	4,348	2,222
Davenport, Iowa	1,235	1,489	1,557	1,493	1,157	1,350	2,342	2,462	1,252	712
Dayton, Ohio	2,617	2,017	1,697	1,396	744	10,358	6,343	5,958	2,895	939
Decatur, Ill	1,134	839	447	252	158	4,169	3,890	1,991	781	179
Denver, Colo	6,154	6,111	5,043	4,183	3,523	16,771	16,576	7,648	6,828	3,001
Des Moines, Iowa	1,299	1,171	1,113	1,171	953	4,510	4,082	4,011	3,033	1,895
Detroit, Mich	28,541	26,554	15,313	10,082	5,159	129,260	100,567	48,369	23,435	8,740
Duluth, Minn	2,175	1,700	1,390	1,472	919	3,289	3,686	2,168	948	1,352
Durham, N. C	632	284	233	191	152	9,906	1,863	1,047	693	667
East Chicago, Ind	421	525	367	215	58	3,482	5,307	1,801	605	76
East Orange, N. J	928	769	678	644	353	7,632	5,946	2,627	1,411	665
East St. Louis, Ill	1,003	895	566	468	321	2,707	2,392	1,365	1,052	272
Elizabeth, N. J	910	731	433	292	216	5,504	4,095	2,384	2,348	385
El Paso, Tex	1,014	1,181	1,123	697	419	2,144	4,325	2,937	949	376
Erie, Pa	1,779	1,694	1,480	1,220	685	4,764	6,431	3,302	2,711	673
Evanston, Ill	1,040	736	513	354	224	13,178	8,196	3,103	3,251	789
Evansville, Ind	1,805	1,354	1,639	1,055	814	5,111	4,421	1,761	1,188	485
Fall River, Mass	592	607	561	537	428	2,836	792	1,189	697	447
Flint, Mich	6,700	6,717	3,104	2,103	992	14,423	14,684	3,994	1,966	262
Fort Wayne, Ind	1,646	1,927	1,351	1,311	595	5,011	7,039	3,099	3,188	1,623
Fort Worth, Tex	4,560	3,237	2,616	1,923	1,325	11,544	11,262	10,463	6,345	1,432
Fresno, Calif	1,272	1,784	1,496	1,437	1,088	1,662	1,699	1,333	1,007	893
Galveston, Tex	2,243	1,895	1,376	1,371	1,454	2,677	3,613	1,717	2,543	877
Gary, Ind	1,966	1,162	743	340	89	6,041	3,146	1,177	983	130
Grand Rapids, Mich.	5,401	4,415	2,640	1,664	1,002	8,187	6,087	2,922	1,147	1,513
Greensboro, N. C	1,179	710	471	511	393	5,048	3,134	766	1,135	209

No. 775.—Building Permits Issued in Principal Cities—Continued

City and State	Total number of buildings					Proposed cost of buildings (thousands of dollars)				
	1928	1929	1930	1931	1932	1928	1929	1930	1931	1932
Hamilton, Ohio	841	756	502	325	361	2,063	2,411	1,552	467	703
Hammond, Ind	1,055	777	704	345	190	6,527	4,154	1,876	3,314	152
Hamtramck, Mich	518	643	322	228	118	1,345	1,066	1,299	121	54
Harrisburg, Pa	844	778	676	482	350	5,595	7,958	2,519	2,001	695
Hartford, Conn	1,931	2,192	1,339	1,331	1,116	11,278	16,144	6,365	4,847	2,068
Highland Park, Mich	382	383	235	142	132	2,603	2,327	624	117	81
Hoboken, N. J	239	265	272	289	227	565	748	828	567	486
Holyoke, Mass	350	298	250	243	149	1,261	1,256	1,703	766	237
Houston, Tex	6,072	3,972	2,741	2,261	963	35,310	29,133	17,265	11,863	2,573
Huntington, W. Va	270	306	201	236	237	982	1,455	770	1,096	202
Indianapolis, Ind	10,217	6,785	4,919	3,229	2,160	21,967	14,844	7,451	9,339	2,546
Irvington, N. J	903	567	445	380	242	6,639	2,134	1,700	1,749	366
Jackson, Mich	1,230	1,227	736	506	280	2,097	3,492	698	410	374
Jacksonville, Fla	3,431	2,557	2,103	2,288	2,331	7,660	4,580	2,410	1,847	2,344
Jersey City, N. J	1,375	1,219	835	725	571	13,876	14,585	12,167	1,991	1,171
Johnstown, Pa	556	522	412	327	214	1,095	682	696	605	139
Kalamazoo, Mich	1,513	1,349	973	742	493	2,035	2,410	1,172	1,085	202
Kansas City, Kans	1,043	867	673	596	358	1,651	1,844	1,350	667	288
Kansas City, Mo	2,345	1,946	1,503	1,396	708	15,541	14,845	15,663	8,291	1,961
Kenosha, Wis	894	945	522	387	210	3,726	4,577	1,484	646	248
Knoxville, Tenn	2,138	1,220	667	526	316	7,115	5,499	3,627	1,035	1,415
Lakewood, Ohio	625	550	456	391	311	4,622	1,830	1,482	797	404
Lancaster, Pa	647	671	520	410	202	2,389	1,982	1,381	558	362
Lansing, Mich	1,340	1,308	722	470	329	5,204	8,738	2,065	1,209	523
Lawrence, Mass	222	241	236	350	180	603	854	618	892	235
Lincoln, Nebr	1,070	980	609	627	394	3,643	2,560	1,598	1,745	340
Little Rock, Ark	1,528	1,376	1,496	848	742	4,260	3,268	2,251	2,771	398
Long Beach, Calif	4,988	4,949	4,502	3,304	2,449	16,308	18,044	13,058	4,472	3,101
Los Angeles, Calif	33,195	31,722	30,614	25,311	17,122	101,679	93,020	75,357	41,422	17,786
Louisville, Ky	3,215	2,466	1,756	1,174	898	18,120	13,205	6,937	5,585	2,415
Lowell, Mass	633	676	663	537	434	942	704	1,147	627	167
Lynn, Mass	1,279	1,133	1,041	802	626	3,787	3,942	2,972	1,521	740
Macon, Ga	1,817	1,416	674	501	420	2,350	988	777	564	585
Madison, Wis	1,475	1,155	845	685	398	7,630	4,974	2,348	1,345	608
Malden, Mass	630	534	475	495	328	2,893	1,894	1,133	985	252
Manchester, N. H	970	1,044	1,095	1,045	996	1,059	1,241	765	826	717
McKeesport, Pa	1,325	1,320	1,231	815	404	2,185	1,674	1,052	632	349
Medford, Mass	1,131	904	625	608	303	4,515	3,483	1,656	2,243	461
Memphis, Tenn	4,005	3,178	3,693	2,717	2,059	14,283	8,062	9,501	3,334	1,809
Miami, Fla	1,568	2,511	3,032	2,970	2,354	1,946	3,615	1,917	3,097	1,197
Milwaukee, Wis	7,258	7,501	4,939	3,892	2,165	35,406	37,947	25,285	12,634	4,147
Minneapolis, Minn	6,580	6,054	5,932	5,861	3,889	23,258	20,960	13,449	12,390	6,991
Mobile, Ala	1,647	1,055	680	443	343	3,346	1,667	1,100	881	639
Montgomery, Ala	2,916	2,320	1,558	1,194	829	3,289	2,769	1,274	820	1,187
Mt. Vernon, N. Y	946	577	596	516	293	14,262	6,179	4,197	3,819	677
Nashville, Tenn	2,227	2,327	2,062	1,580	1,273	5,565	5,695	5,517	4,403	1,124
Newark, N. J	2,972	2,763	1,882	1,593	1,025	34,285	28,838	12,379	6,456	5,410
New Bedford, Mass	681	581	520	542	423	1,095	789	982	471	194
New Britain, Conn	1,227	1,051	592	535	403	3,532	1,248	896	1,000	317
New Haven, Conn	1,330	1,323	1,193	1,003	749	8,798	12,762	15,924	9,491	2,449
New Orleans, La	2,882	1,933	1,227	1,323	1,047	12,628	11,971	6,487	5,526	3,406
New Rochelle, N. Y	845	740	609	485	288	11,233	7,585	5,669	4,340	715
Newton, Mass	1,676	1,387	1,048	915	511	10,802	6,857	5,870	4,882	1,341
New York, N. Y.:										
Borough of Bronx	10,959	7,811	7,507	7,183	5,956	189,825	95,666	56,116	65,399	8,881
Borough of Brooklyn	18,358	13,271	11,503	11,396	8,350	198,285	146,016	70,632	75,534	20,396
Borough of Manhattan	3,787	3,692	3,396	3,202	2,487	361,723	595,522	198,445	137,371	30,496
Borough of Queens	22,101	16,152	17,583	18,899	12,049	151,566	94,510	77,344	76,754	15,982
Borough of Richmond	3,766	2,868	2,539	2,217	1,592	15,273	10,584	7,629	7,805	3,097
Niagara Falls, N. Y	1,577	1,805	1,640	1,305	1,013	4,869	5,071	3,736	1,249	904
Norfolk, Va	1,383	1,185	1,092	1,142	966	3,840	2,730	2,603	1,640	3,091
Oakland, Calif	5,092	4,264	3,154	2,734	2,023	19,537	14,396	9,085	7,223	2,266
Oak Park, Ill	836	529	315	240	119	9,290	5,721	1,861	1,249	600
Oklahoma City, Okla	3,965	4,280	3,270	1,796	859	13,522	22,501	26,412	19,019	7,176
Omaha, Nebr	1,169	1,046	854	1,017	740	9,050	5,581	5,121	3,915	2,228
Pasadena, Calif	2,452	3,834	4,040	3,285	2,978	5,950	6,987	5,886	4,460	1,220
Passaic, N. J	975	976	709	629	569	3,062	4,870	2,099	604	451
Paterson, N. J	2,258	2,123	1,785	1,477	1,066	7,357	4,872	2,088	1,548	1,177
Pawtucket, R. I	991	904	597	525	256	2,823	1,995	1,847	962	288

No. 775.—Building Permits Issued in Principal Cities—Continued

City and State	Total number of buildings					Proposed cost of buildings (thousands of dollars)				
	1928	1929	1930	1931	1932	1928	1929	1930	1931	1932
Peoria, Ill	1,418	1,207	1,150	807	497	3,951	3,604	3,436	2,515	584
Philadelphia, Pa	16,423	10,388	6,430	5,491	4,144	112,226	104,406	53,142	35,265	17,863
Pittsburgh, Pa	7,070	6,128	5,115	4,059	2,401	39,374	35,639	20,730	19,386	9,135
Pontiac, Mich	2,851	2,299	572	444	193	13,115	6,219	1,280	341	77
Port Arthur, Tex	1,207	972	1,070	626	398	1,881	1,979	2,430	905	87
Portland, Me	1,351	1,214	1,173	1,117	922	2,739	2,133	1,567	1,254	1,067
Portland, Oreg	9,567	7,646	6,041	4,823	3,435	21,276	15,504	12,063	7,156	2,982
Providence, R. I	4,979	5,046	4,835	4,729	4,004	16,004	14,943	10,742	7,913	2,189
Pueblo, Colo	1,458	1,281	1,028	736	424	1,467	1,572	533	454	129
Quincy, Mass	2,335	1,920	1,438	1,312	904	6,870	4,217	2,724	1,783	687
Racine, Wis	1,078	1,264	723	333	134	4,417	4,783	3,924	1,757	205
Reading, Pa	2,179	2,483	2,417	1,543	843	3,808	6,111	2,474	2,772	478
Richmond, Va	2,317	2,151	1,668	1,543	147	8,845	9,146	5,951	3,054	88
Roanoke, Va	880	700	499	422	293	3,279	2,220	2,606	1,113	257
Rochester, N. Y	4,542	3,429	2,490	2,291	1,785	17,621	13,303	8,011	6,303	3,557
Rockford, Ill	1,875	1,652	1,039	583	249	5,737	5,083	2,908	647	732
Sacramento, Calif	1,859	1,101	1,636	1,377	1,373	5,524	4,381	3,029	3,787	2,339
Saginaw, Mich	1,658	1,801	1,054	825	542	4,350	3,121	2,690	485	288
St. Joseph, Mo	284	558	470	453	274	2,005	1,404	1,620	431	220
St. Louis, Mo	12,627	9,533	8,120	6,754	4,387	42,828	27,074	17,322	16,620	4,414
St. Paul, Minn	4,999	5,055	3,780	3,959	2,813	8,700	9,365	10,682	12,652	2,796
Salt Lake City, Utah	1,024	1,089	948	968	518	5,277	5,691	4,274	3,462	540
San Antonio, Tex	4,284	4,550	3,234	2,586	2,023	18,300	18,070	8,488	3,272	1,638
San Diego, Calif	5,150	3,811	3,219	2,831	2,067	12,150	11,415	5,426	5,811	2,592
San Francisco, Calif	6,648	5,505	4,951	5,251	3,931	37,504	33,426	22,414	21,442	16,465
San Jose, Calif	948	937	755	811	583	2,541	2,428	3,403	1,803	1,230
Savannah, Ga	525	317	187	276	181	2,137	1,122	1,069	450	155
Schenectady, N. Y	1,175	1,341	1,390	1,050	754	3,428	3,431	5,339	1,300	599
Scranton, Pa	1,189	880	826	744	652	4,632	2,947	3,190	1,378	2,126
Seattle, Wash	9,512	7,924	6,577	5,714	3,677	34,807	29,101	30,356	12,483	3,257
Shreveport, La	2,921	2,838	1,924	1,687	1,332	4,846	3,535	1,542	1,600	455
Sioux City, Iowa	799	748	705	668	328	2,170	3,130	3,412	1,571	1,141
Somerville, Mass	407	639	555	559	395	1,424	3,076	1,380	980	556
South Bend, Ind	2,524	2,445	1,760	1,074	665	6,363	7,015	3,709	1,329	493
Spokane, Wash	2,187	2,241	2,169	1,757	1,334	5,737	4,148	3,641	2,176	566
Springfield, Ill	1,195	1,101	964	850	602	3,739	3,112	3,179	2,329	714
Springfield, Mass	1,539	1,367	1,062	827	569	5,977	5,095	5,703	2,948	1,021
Springfield, Mo	628	522	426	347	329	1,616	1,525	1,115	2,283	361
Springfield, Ohio	1,017	1,006	651	428	231	1,557	1,750	777	1,194	445
Syracuse, N. Y	3,103	2,512	1,532	1,268	657	13,220	11,267	5,399	7,000	1,598
Tacoma, Wash	2,341	2,538	1,621	1,278	800	4,660	4,053	4,070	2,002	432
Tampa, Fla	3,637	2,405	2,337	2,642	2,065	3,617	1,858	1,302	741	414
Terre Haute, Ind	1,696	1,189	879	675	507	973	799	687	228	615
Toledo, Ohio	5,334	4,802	2,637	1,822	898	17,346	13,507	10,405	2,295	493
Topeka, Kans	1,117	897	684	591	435	1,992	1,751	2,425	2,305	909
Trenton, N. J	1,062	824	580	565	399	4,106	3,675	2,449	2,421	707
Troy, N. Y	774	781	713	556	451	1,324	2,037	3,024	2,201	723
Tulsa, Okla	3,829	3,161	2,360	1,501	714	13,411	11,757	8,356	4,389	513
Union City, N. J	674	462	497	534	389	1,121	855	887	1,075	624
Utica, N. Y	680	486	552	326	207	3,917	2,497	1,350	1,134	533
Waco, Tex	410	486	360	312	319	2,291	2,700	1,154	1,779	327
Washington, D. C	6,916	5,641	4,605	5,819	4,492	53,975	56,128	48,824	52,588	59,927
Waterbury, Conn	907	746	541	438	290	3,488	2,999	2,037	1,187	309
Wheeling, W. Va	843	669	528	421	271	1,967	1,768	1,121	645	318
Wichita, Kans	2,390	2,712	1,762	1,132	652	7,974	8,652	6,308	2,340	1,195
Wilkes-Barre, Pa	1,337	865	774	696	601	3,896	3,177	1,669	1,170	780
Wilmington, Del	1,969	1,537	1,407	1,055	559	5,577	6,143	4,917	3,297	1,382
Winston-Salem, N. C	2,550	1,568	1,217	1,027	584	8,531	5,000	1,602	852	403
Worcester, Mass	1,999	1,925	1,663	1,304	950	7,260	7,251	6,341	5,592	1,583
Yonkers, N. Y	1,934	1,413	1,134	1,265	810	35,619	21,366	9,887	10,014	2,595
York, Pa	954	974	830	891	674	2,065	1,458	1,679	792	235
Youngstown, Ohio	2,191	1,787	1,029	768	473	8,638	5,894	2,801	1,464	595

Source: Bureau of Labor Statistics, Department of Labor.

No. 776.—BUILDING PERMITS ISSUED, BY CLASSES

NOTE.—See headnote, Table 775. Figures for 1930 represent 311 cities; 1931 and 1932, 360 identical cities. For 1931 figures for 311 cities comparable with data for 1930, see Statistical Abstract 1932, Table 799

Class of building	Number of buildings			Proposed cost (1,000 dollars)		
	1930	1931	1932	1930	1931	1932
Grand total, all buildings	467, 430	414, 586	290, 913	1, 766, 145	1, 326, 005	520, 502
Total new buildings	210, 141	174, 462	91, 901	1, 505, 779	1, 123, 158	410, 188
New residential buildings	73, 201	63, 556	24, 721	625, 901	458, 577	112, 935
1-family dwellings	61, 656	55, 010	22, 328	306, 186	260, 880	85, 742
2-family dwellings	7, 187	5, 608	1, 653	53, 986	38, 888	10, 098
1-family and 2-family dwellings with stores	874	541	239	6, 986	3, 953	1, 466
Multifamily dwellings	3, 019	2, 177	432	193, 174	132, 933	13, 042
Multifamily dwellings with stores	205	99	33	12, 250	9, 453	572
Hotels	79	20	6	24, 778	2, 305	205
Lodging houses	11	10	12	219	336	132
Other	170	91	18	28, 323	9, 830	1, 678
New nonresidential buildings	136, 940	110, 906	67, 180	879, 878	664, 581	297, 253
Amusement buildings	1, 450	551	375	43, 375	24, 080	12, 715
Churches	698	498	266	29, 575	19, 100	9, 064
Factories and workshops	2, 679	1, 552	818	109, 491	49, 275	17, 577
Public garages	1, 948	1, 092	357	26, 828	11, 127	2, 648
Private garages	97, 458	81, 442	44, 441	33, 723	24, 097	10, 660
Service stations	5, 778	3, 905	3, 252	21, 869	10, 551	6, 738
Institutions	272	247	117	58, 258	58, 426	16, 806
Office buildings	703	286	135	160, 741	107, 293	10, 316
Public buildings	434	409	227	85, 821	129, 384	106, 788
Public works and utilities	603	493	314	45, 237	44, 232	25, 651
Schools and libraries	754	575	206	126, 908	113, 697	43, 893
Sheds	10, 725	9, 704	10, 240	3, 865	2, 906	2, 533
Stables and barns	267	268	282	438	488	325
Stores and warehouses	8, 916	7, 170	4, 748	127, 832	67, 108	26, 034
All other	4, 255	2, 714	1, 402	5, 914	2, 817	5, 505
Additions, alterations, and repairs	257, 289	240, 124	199, 012	260, 365	202, 848	110, 314

Source: Bureau of Labor Statistics, Department of Labor.

No. 777.—INDEX NUMBERS OF BUILDING MATERIAL PRICES AND CONSTRUCTION COSTS

[Monthly average 1923-1925=100]

Year	Wholesale price indexes [1]							Construction costs [6]	Factory building costs	Frame house materials, retail prices	Brick house materials, retail prices
	All building materials	Lumber	Brick and tile [2]	Portland cement, plant [3]	Structural steel [4]	Paint and paint materials [5]	Other building materials				
1913	54.4	52.0	38.0	56.5	68.0	49.1	61.1	47.1	-------	49.7	49.2
1914	50.6	48.0	37.9	52.2	52.9	49.0	57.8	41.8	50.5	-------	-------
1915	51.3	46.9	38.2	48.4	57.6	53.0	63.0	43.7	-------	-------	-------
1916	64.9	53.0	41.4	62.0	113.7	74.6	85.0	69.5	-------	-------	-------
1917	84.6	69.5	49.0	76.2	168.3	92.2	110.4	85.4	-------	-------	-------
1918	94.6	80.4	65.1	89.8	135.1	117.9	117.1	89.2	-------	-------	-------
1919	110.9	108.8	89.7	97.1	113.5	135.7	113.1	93.5	-------	-------	-------
1920	144.0	159.0	115.6	111.2	127.3	143.2	130.7	118.5	-------	-------	-------
1921	93.5	85.6	103.2	105.1	92.1	81.1	107.6	95.1	90.1	-------	-------
1922	93.4	95.4	97.1	98.2	78.0	90.7	92.3	82.3	85.9	90.5	91.6
1923	104.3	107.6	101.2	102.4	109.1	98.0	102.1	100.9	101.9	102.7	103.0
1924	98.2	95.6	101.0	100.3	100.7	96.4	100.7	101.6	100.1	100.0	100.1
1925	97.6	96.8	97.8	97.3	90.1	105.7	97.2	97.5	98.1	97.2	96.8
1926	96.0	96.2	97.7	94.9	88.2	96.7	96.8	98.1	99.5	96.7	95.9
1927	90.9	89.6	93.5	91.7	83.5	93.1	92.4	97.3	97.2	92.9	92.6
1928	90.3	87.1	93.4	91.0	84.0	90.0	93.6	97.5	96.4	88.4	90.1
1929	91.6	90.3	92.1	87.1	86.5	91.8	94.6	97.6	[7] 95.9	88.0	89.6
1930	86.3	82.6	87.7	87.1	77.0	87.5	90.3	95.7	[7] 94.3	85.9	87.3
1931	76.0	66.9	81.6	75.3	73.3	76.8	82.1	85.5	[7] 88.8	78.7	81.5
1932	68.5	56.3	75.5	73.2	71.3	68.8	77.0	74.0	[7] 84.8	75.0	77.2

[1] Beginning 1926 the indexes, except for Portland cement and structural steel, have been revised to include additional items not previously included; the "All building materials" index also includes plumbing and heating equipment (not shown separately in this table) for which data are not available prior to 1926.
[2] Excludes tile prior to 1926. [3] Composite price. [4] Pittsburgh district. [5] Excludes paint prior to 1926.
[6] Based upon the cost of lumber, steel, cement, and the rates paid common labor.
[7] Average of March, June, September, and December.

Sources: Wholesale prices, Department of Labor; Construction costs, Engineering News-Record; Standard factory building costs, Aberthaw Construction Co.; Retail prices of frame and brick house building materials in 60 cities, Department of Commerce.

No. 778.—CONSTRUCTION ESTABLISHMENTS WHICH DID A BUSINESS OF OVER $25,000 DURING 1929: VALUE OF BUSINESS AND PRINCIPAL EXPENDITURES BY STATES

NOTE.—The construction business of 113,799 active reporting establishments which did a business of less than $25,000 during 1929 amounted to $1,035,454,000 (figure partially estimated)

Division and State	Number of establishments	Value of construction business (1,000 dollars)			Principal expenditures (1,000 dollars)			Projected average number of workmen employed throughout the year [1]
		Total	Under general contract or directly for owner	Under subcontract	Subcontract work let	Wages paid	Cost of materials	
Continental U. S.	**30,597**	**6,250,267**	**4,911,766**	**1,338,501**	**1,455,494**	**1,467,542**	**2,055,595**	**828,772**
New England	**2,780**	**474,849**	**392,224**	**82,625**	**104,657**	**130,650**	**144,376**	**73,479**
Maine	142	13,100	11,408	1,692	1,507	4,513	4,135	2,843
New Hampshire	113	9,992	7,972	2,020	857	3,106	4,091	2,080
Vermont	61	5,878	4,955	923	266	1,898	2,611	1,243
Massachusetts	1,434	306,094	255,229	50,865	76,316	81,454	88,448	45,086
Rhode Island	226	30,675	25,317	5,358	5,385	8,566	9,958	4,997
Connecticut	804	109,110	87,343	21,767	20,326	31,111	35,083	17,230
Middle Atlantic	**8,546**	**2,219,827**	**1,709,448**	**510,379**	**610,855**	**519,448**	**658,851**	**250,447**
New York	4,372	1,323,724	993,098	330,626	385,625	318,537	363,751	139,508
New Jersey	1,483	292,175	238,500	53,675	57,114	66,005	110,025	33,018
Pennsylvania	2,691	603,928	477,851	126,078	168,116	134,906	185,075	77,921
East North Central	**7,934**	**1,568,591**	**1,202,108**	**366,483**	**343,927**	**374,717**	**542,728**	**202,122**
Ohio	2,043	400,298	317,307	82,991	89,779	90,596	144,722	53,679
Indiana	746	104,623	87,834	16,789	17,863	25,462	40,614	16,004
Illinois	2,497	589,011	440,190	148,821	134,487	151,494	186,280	72,344
Michigan	1,501	329,380	242,419	86,961	76,387	73,578	115,431	39,052
Wisconsin	1,147	145,279	114,357	30,921	25,411	33,588	55,681	21,043
West North Central	**2,490**	**438,590**	**369,185**	**69,406**	**71,046**	**104,914**	**160,143**	**72,716**
Minnesota	561	105,798	88,829	16,969	17,687	25,739	35,259	17,081
Iowa	486	76,782	70,717	6,065	8,122	18,795	30,042	12,705
Missouri	759	152,664	120,419	32,245	32,368	36,996	52,422	24,700
North Dakota	81	8,388	7,348	1,040	960	1,817	3,557	1,077
South Dakota	70	8,364	7,583	781	773	1,894	2,958	1,682
Nebraska	243	45,345	39,543	5,802	5,031	10,451	18,631	8,321
Kansas	290	41,249	34,745	6,504	6,105	9,223	17,274	7,144
South Atlantic	**2,184**	**439,732**	**347,907**	**91,825**	**101,494**	**95,665**	**152,128**	**72,824**
Delaware	91	18,696	14,063	4,633	3,907	4,050	6,702	2,412
Maryland	407	108,075	81,048	27,027	26,045	23,494	33,390	15,348
District of Columbia	253	66,201	49,781	16,420	26,355	13,486	15,501	8,826
Virginia	337	54,313	42,710	11,603	12,631	12,443	19,604	9,605
West Virginia	169	23,375	20,438	2,936	3,322	6,086	7,946	4,351
North Carolina	293	54,786	46,043	8,743	6,986	12,032	24,767	9,523
South Carolina	116	16,622	13,617	3,005	1,789	3,797	8,161	3,647
Georgia	230	57,077	45,840	11,237	10,587	11,293	23,624	11,578
Florida	288	40,587	34,366	6,220	9,872	8,983	12,435	7,534
East South Central	**936**	**164,952**	**130,341**	**34,611**	**27,852**	**35,474**	**62,133**	**29,356**
Kentucky	330	43,319	32,965	10,355	8,998	9,394	13,872	7,252
Tennessee	314	62,826	45,794	17,032	9,761	13,349	23,706	10,807
Alabama	197	45,859	40,630	5,229	7,018	9,813	19,380	8,934
Mississippi	95	12,948	10,953	1,995	2,075	2,918	5,177	2,362
West South Central	**1,609**	**307,705**	**259,633**	**48,071**	**50,855**	**69,823**	**118,365**	**47,596**
Arkansas	118	17,022	15,135	1,886	2,465	3,915	7,156	2,320
Louisiana	178	34,943	29,486	5,457	6,344	7,507	11,733	6,332
Oklahoma	312	56,298	48,723	7,575	7,086	13,028	22,225	8,976
Texas	1,001	199,442	166,289	33,153	34,960	45,373	77,250	29,968
Mountain	**709**	**90,105**	**73,189**	**16,916**	**15,902**	**21,247**	**29,218**	**13,169**
Montana	119	11,423	9,520	1,903	1,215	2,958	4,551	1,608
Idaho	44	7,120	6,570	551	852	2,207	1,168	1,782
Wyoming	40	3,061	2,707	354	296	848	984	439
Colorado	211	28,016	22,098	5,918	4,976	6,440	10,009	4,127
New Mexico	41	6,563	6,010	552	819	1,412	2,030	862
Arizona	105	12,932	9,468	3,464	2,610	2,595	4,969	1,616
Utah	129	17,350	13,570	3,780	4,451	4,041	4,717	2,470
Nevada	20	3,639	3,245	394	683	747	790	265
Pacific	**3,409**	**545,915**	**427,730**	**118,185**	**128,906**	**115,604**	**187,653**	**67,064**
Washington	404	66,728	56,950	9,778	11,465	16,622	25,616	9,274
Oregon	249	30,870	25,526	5,343	4,555	7,935	10,915	4,724
California	2,756	448,317	345,253	103,064	112,886	91,048	151,122	53,066

[1] The average number of workmen reported as employed on the fifteenth of each month (or nearest representative day), including estimates for a considerable number of establishments which failed to report the number of workmen employed. Salaried employees are not included.

Source: Bureau of the Census, Department of Commerce.

No. 779.—VALUE OF BUSINESS AND PRINCIPAL EXPENDITURES OF CONSTRUCTION ESTABLISHMENTS WHICH DID A BUSINESS OF OVER $25,000 DURING 1929: By Class of Establishments, Continental United States

[All money figures in thousands of dollars]

Classification of establishment	Number of establishments	Value of construction business			Principal expenditures			Projected average number of workmen employed throughout the year [1]
		Total	Under general contract or directly for owner	Under subcontract	Subcontract work let	Wages paid	Cost of materials	
All classes	30,597	6,250,267	4,911,766	1,338,501	1,455,494	1,467,542	2,055,595	828,772
Operative builders	750	153,524	153,519	5	103,142	13,146	22,602	7,418
General contractors	14,766	4,217,367	4,171,886	45,480	1,290,878	914,112	1,188,687	565,179
Building	10,131	2,622,047	2,611,366	10,681	1,124,702	502,676	652,167	286,962
Building not specialized	7,062	2,149,941	2,139,919	10,022	919,417	424,776	527,438	245,043
Commercial only	539	132,627	132,473	154	67,126	23,702	25,284	11,777
Manufacturing only	75	93,828	93,815	13	32,185	12,463	34,580	7,865
Residential only	2,455	245,651	245,159	492	105,974	41,736	64,865	22,277
Highway	1,514	443,064	436,443	6,621	43,789	102,294	165,341	78,733
Bridge and culvert	475	137,206	129,086	8,120	11,893	35,596	55,658	23,761
Grading	396	47,733	45,897	1,836	4,400	16,399	3,532	11,213
Street paving	984	282,760	276,319	6,441	25,230	61,282	109,106	42,773
Sewer, gas, water, conduit	494	115,153	113,352	1,801	5,959	36,056	41,011	22,683
Dam and reservoir	87	28,483	28,003	480	2,351	8,280	8,229	4,923
Waterworks	105	44,210	43,510	700	2,684	11,601	17,857	7,086
Dredging, river, harbor, etc.	193	104,463	100,856	3,607	7,719	28,423	20,732	19,808
Levee	34	5,631	5,519	112	631	1,490	392	1,185
Railroad	137	105,302	103,026	2,276	12,815	34,840	24,177	24,432
Foundation	56	8,282	8,057	225	988	2,475	2,695	1,367
Central station, light and power plant	86	158,160	157,667	493	35,463	37,491	55,678	21,954
Air transport work	7	2,416	2,317	99	250	860	696	555
Refuse disposal plant	7	1,721	1,721	----------	193	527	445	240
Oil and natural gas pipe line	22	29,507	29,493	14	2,837	9,370	8,178	5,312
Subway (other than buildings)	24	71,818	69,888	1,930	5,782	22,451	21,013	10,923
Vehicular subway and tunnel	3	3,772	3,772	----------	3,025	130	138	75
Telephone line and system	9	5,158	5,114	44	102	1,805	1,436	1,152
Miscellaneous, n. e. s.	2	481	481	----------	65	67	206	42
Subcontractors	15,081	1,879,376	586,361	1,293,015	61,474	540,284	844,306	256,175
Carpentering and wood flooring	382	36,611	10,359	26,252	2,600	11,160	14,829	4,898
Concreting	477	66,312	13,716	52,596	2,468	23,740	23,117	13,766
Electrical	1,928	198,487	78,531	119,956	1,509	61,683	87,768	26,330
Elevator construction	129	77,376	12,469	64,907	1,727	13,048	50,697	5,395
Heating and plumbing	5,583	611,886	237,782	374,104	18,298	148,602	319,128	72,246
Heating and piping	1,423	221,996	93,087	128,909	11,291	48,616	116,004	23,761
Plumbing	2,808	256,834	80,209	176,625	4,332	66,393	135,603	31,444
Plumbing and heating combined	1,218	93,738	44,937	48,801	1,947	22,922	48,754	11,827
Miscellaneous	134	39,319	19,549	19,770	728	10,672	18,767	5,214
Masonry	673	85,023	24,508	60,515	2,634	32,749	34,191	16,045
Painting and decorating	1,102	83,899	26,858	57,041	926	43,504	17,623	19,509
Glass and glazing	154	16,653	2,660	13,993	286	3,063	8,888	1,334
Plastering and lathing	623	83,313	6,984	76,329	4,633	42,712	21,749	16,675
Roofing and sheet metal work	1,697	145,095	39,388	105,707	2,379	37,302	64,118	21,026
Steel erection	300	135,716	56,914	78,802	10,498	25,285	71,285	11,661
Stone work	173	27,085	2,913	24,172	1,196	9,265	9,685	4,169
Marble and tiling	851	112,950	14,417	98,533	1,372	34,213	50,626	15,233
Wrecking	44	3,816	152	3,664	50	2,045	26	920
Excavating	293	39,813	7,049	32,764	2,668	14,269	2,025	8,221
Ornamental iron	227	36,077	2,396	33,681	1,256	6,696	17,811	2,669
Highway	26	4,174	379	3,795	65	974	1,543	605
Bridge and culvert	14	1,496	210	1,286	88	534	513	464
Grading	59	5,636	1,094	4,542	285	2,014	238	1,533
Street paving	18	3,324	479	2,845	31	987	1,212	555
Sewer, gas, water, conduit	14	5,480	4,147	1,333	25	2,085	1,724	1,260
Dam, reservoir, and waterworks	4	334	88	246	2	92	182	58
Dredging, river, harbor, etc.	13	2,346	787	1,559	10	664	781	381
Soundproofing	26	5,556	962	4,594	75	1,181	2,825	539
Railroad	3	934	222	712	230	294	242	290
Foundation	25	22,950	4,877	18,073	3,841	6,922	6,091	3,365
Power plant	4	1,064	858	206	17	238	659	149
Metal work, n. e. s.	136	52,189	30,985	21,204	1,957	11,222	29,209	4,840
Flooring, n. e. s.	81	10,760	2,887	7,873	116	2,651	5,281	1,293
Miscellaneous n. e. s.	22	3,020	1,289	1,731	232	1,089	238	746

[1] See footnote 1, Table 778.

Source: Bureau of the Census, Department of Commerce.