

# POULTRY KILLING, DRESSING, AND PACKING, WHOLESALE

Description of the industry.—This industry embraces establishments engaged primarily in killing, dressing, and packing poultry or in processing and packing dressed poultry purchased, whose products for the year were valued at \$20,000 or more. Some of these establishments also kill and dress rabbits. The preparation and packing of poultry products such as potted chicken, etc., come within the classification. Although a number of large establishments operate throughout the year, the industry is mainly a seasonal one, and most of the plants are active only a few

months each year. No data are included for those doing business only a few weeks.

Statistics published for earlier years.—Establishments engaged primarily in killing and dressing poultry were canvassed for 1925 and earlier years, but as the statistics based on the returns thus collected did not cover the canning of poultry and poultry products, they are not comparable with those for the industry as at present constituted and therefore are not included in the present report.

TABLE 1.—GENERAL STATISTICS, BY STATES: 1929<sup>1</sup>

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups]

STATE	Number of establishments	Salaried officers and employees <sup>2</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>3</sup>	Value added by manufacture <sup>4</sup>
				Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States.....	485	1,385	7,760	13,500	2,464	11,036	\$2,584,570	\$7,284,558	\$100,865,500	\$100,175,011	\$600,405	\$130,101,230	\$23,205,724
Individual States:													
California.....	24	80	200	325		325	223,831	345,172	6,013,420	5,090,472	13,048	7,225,264	1,211,844
Florida.....	3	4	19				4,100	13,800	231,949	231,151	793	233,593	51,044
Illinois.....	40	100	742	1,120	98	1,031	208,336	650,914	9,920,945	9,894,016	50,929	12,074,180	2,153,244
Indiana.....	22	74	384	718	5	713	133,396	362,370	5,088,609	5,052,544	36,065	6,031,452	602,883
Iowa.....	85	244	1,438	3,072	168	2,906	370,385	1,365,955	18,858,958	18,099,643	159,315	22,830,601	3,950,048
Kansas.....	34	133	789	1,453	312	1,141	253,021	742,701	9,853,081	9,700,565	92,516	11,632,336	1,070,265
Maryland.....	4	5	32	8		8	12,700	30,743	697,090	695,208	1,822	737,333	90,243
Michigan.....	13	24	140	216	75	141	73,547	144,732	2,739,540	2,727,653	11,887	3,278,307	533,827
Minnesota.....	35	121	550	1,077	177	900	186,133	548,618	7,899,906	7,791,416	68,490	9,500,162	1,040,256
Missouri.....	31	116	607	990	220	770	185,486	500,221	3,184,389	3,124,256	60,133	9,375,003	1,001,514
Nebraska.....	20	57	351	585	189	396	87,598	300,440	4,223,050	4,197,703	25,347	5,261,406	1,038,356
New Jersey.....	6		18				23,877	476,800	476,800	30	30	553,268	77,468
New York.....	20	54	206	215	100	115	140,404	255,093	3,316,492	3,307,144	9,348	4,205,880	850,397
North Dakota.....	5	8	33	33		33	11,535	31,105	598,987	587,167	1,820	693,604	104,017
Ohio.....	15	30	114	188	40	148	60,093	125,800	1,056,515	1,047,098	9,417	2,120,824	470,309
Oklahoma.....	13	35	202	602	140	462	55,768	230,120	3,155,370	3,134,031	21,338	3,743,404	538,095
Oregon.....	11	23	78	108	10	98	42,031	76,164	1,411,587	1,406,086	4,601	1,607,894	286,307
South Dakota.....	8	29	125	205	10	195	41,297	111,452	1,848,180	1,834,123	14,057	2,220,118	380,038
Tennessee.....	9	23	112	568	225	343	45,420	90,303	1,822,595	1,810,326	12,269	2,230,413	407,818
Texas.....	44	103	653	1,370	569	810	214,018	407,209	9,019,203	9,875,045	43,218	11,687,343	1,769,080
Washington.....	13	10	113	35		35	13,023	131,515	1,471,561	1,469,675	1,886	1,820,700	358,238
Wisconsin.....	6	12	72	170		170	20,748	68,123	1,005,221	995,195	10,026	1,214,317	209,096
Groups of States:													
Colo., 1 est.; Idaho, 4; Utah, 2.....	7	6	38	77	20	57	7,586	34,204	636,267	630,688	5,570	769,440	133,182
Del., 1; Mass., 2; Pa., 2; R. I., 1.....	6	52	522	226	108	118	100,924	442,298	4,001,493	4,878,282	23,211	6,978,317	2,071,824
Ga., 1; Ky., 2; Miss., 1; Va., 1.....	5	24	72	106		106	22,270	47,663	980,220	970,134	7,005	1,102,285	176,056

<sup>1</sup> No comparable data are available for earlier years.

<sup>2</sup> Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: Total, 9,301; proprietors and firm members, 207.

<sup>3</sup> The figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products.

<sup>4</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>5</sup> This table includes some duplication due to the use of the products (dressed poultry) of certain establishments as materials by establishments engaged in the preparation and packing of potted chicken, etc.

## CENSUS OF MANUFACTURES: 1929

TABLE 2.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1929<sup>1</sup>

[The figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products]

PRODUCT	Value	PRODUCT	Value
1. Poultry killing, dressing, and packing industry, all products.....	\$ 180,161,280	Poultry and rabbits killed, dressed, and packed, and other poultry products—Continued.	
2. Poultry and rabbits killed, dressed, and packed, and other poultry products.....	128,947,015	Poultry killed and dressed—Continued.	
3. Other products (not normally belonging to the industry).....	3,213,315	Turkeys.....	\$0,908,021
4. Poultry products, etc., made as secondary products in other industries.....	1,087,552	Other poultry.....	654,984
		Not reported as to quantity or kind.....	10,101,820
Poultry and rabbits killed, dressed, and packed, and other poultry products, aggregate (sum of 2 and 4).....	128,005,467	Poultry canned, total.....	4,124,789
Poultry killed and dressed, total.....	122,460,372	Whole.....	332,000
Chickens.....	94,824,785	Parts.....	3,792,189
Ducks.....	1,385,853	Other poultry products.....	1,207,019
		Rabbits killed and dressed.....	207,287

<sup>1</sup> No comparable data for earlier years.

This table includes some duplication due to the use of the products (dressed poultry) of certain establishments as materials by establishments engaged in the preparation and packing of potted chicken, etc.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1929

[The figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments. Certain of the "Other States," however, reported larger production than some of the States shown separately]

KIND AND STATE	Pounds	Value	KIND AND STATE	Pounds	Value	KIND AND STATE	Pounds	Value
CHICKENS			DUCKS—continued			TURKEYS—continued		
United States.....	329,689,483	\$94,324,785	Kansas.....	62,873	\$12,170	South Dakota.....	503,000	\$155,735
California.....	19,637,261	6,042,737	Maryland.....	159,298	49,404	Tennessee.....	383,521	115,763
Illinois.....	32,858,141	9,975,113	Michigan.....	49,614	14,524	Texas.....	18,805,647	5,607,899
Indiana.....	14,613,785	4,427,794	Minnesota.....	859,531	169,154	Other States (Colo., Fla., Ga., Idaho, Ky., Miss., N. J., Okla., Oreg., Pa., R. I., Utah, Va., Wash., Wis.).....	3,180,003	1,111,315
Iowa.....	64,175,147	18,662,679	Missouri.....	844,026	181,808	OTHER POULTRY		
Kansas.....	33,673,831	9,833,955	Nebraska.....	46,587	9,184	United States.....	2,781,000	654,984
Michigan.....	4,200,509	1,358,360	New Jersey.....	256,000	64,140	California.....	202,078	78,720
Minnesota.....	30,994,036	8,178,093	New York.....	409,848	113,519	Indiana.....	140,022	45,804
Missouri.....	28,593,942	8,130,712	Ohio.....	302,864	99,514	Iowa.....	400,462	96,028
Nebraska.....	20,139,859	5,172,372	South Dakota.....	310,910	65,776	Kansas.....	26,398	7,410
New York.....	8,407,068	2,187,579	Tennessee.....	37,098	8,040	Minnesota.....	605,108	134,015
North Dakota.....	1,525,935	396,800	Texas.....	204,889	70,819	Missouri.....	492,692	93,082
Ohio.....	4,590,091	1,310,449	Other States (Fla., Idaho, Miss., N. Dak., Okla., Oreg., Pa., R. I., Utah, Wash., Wis.).....	158,245	41,806	Ohio.....	80,952	23,225
Oklahoma.....	10,724,310	3,278,798	TURKEYS			South Dakota.....	83,000	17,130
Oregon.....	4,725,816	1,355,454	United States.....	31,427,113	9,908,921	Other States (Fla., Idaho, Ill., Md., Mich., Nebr., N. J., N. Dak., Okla., Oreg., Tenn., Tex., Utah, Wash., Wis.).....	764,487	158,531
South Dakota.....	7,008,543	1,979,287				POULTRY NOT REPORTED AS TO KIND OR QUANTITY		
Tennessee.....	6,748,978	2,022,001				Total value.....		10,101,820
Texas.....	17,330,370	4,593,441						
Washington.....	6,562,268	1,665,393						
Wisconsin.....	4,270,377	1,194,807						
Other States (Colo., Fla., Ga., Idaho, Ky., Md., Miss., N. J., N. C., Pa., R. I., Utah, Va.).....	8,779,164	2,503,089						
DUCKS								
United States.....	5,659,706	1,385,853						
California.....	505,670	150,893						
Illinois.....	280,661	78,205						
Indiana.....	626,007	136,262						
Iowa.....	478,558	120,513						

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929<sup>1</sup>

TYPE	1920		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY, 1920	TYPE	1920		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY, 1920
	Number	Capacity			Number	Capacity	
Prime movers and electric motors driven by purchased energy, aggregate.....	1,888	Horse-power 13,500	100.0	Electric motors, total.....	1,890	Horse-power 11,161	100.0
Prime movers, total.....	71	2,404	18.3	Driven by purchased energy.....	1,817	11,036	98.9
Steam engines.....	42	1,741	12.9	Driven by energy generated in establishments reporting.....	82	125 Kilowatts	1.1
Internal-combustion engines.....	20	723	5.4	Electric generators.....	0	227 Kilowatts	
Electric motors driven by purchased energy.....	1,817	11,036	81.7	Electric energy purchased <sup>2</sup> .....		15,760,240 hours	

<sup>1</sup> No comparable data for earlier years.

<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

TABLE 5.—WAGE EARNERS, BY MONTHS, BY STATES: 1929<sup>1</sup>

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
United States.....	7,700	5,077	<i>5,150</i>	5,257	5,875	6,521	7,357	7,912	8,514	9,085	9,868	11,273	10,750	46.7
California.....	209	<i>226</i>	243	240	280	339	369	307	318	284	276	309	329	61.2
Florida.....	19	21	21	21	21	18	17	<i>16</i>	<i>16</i>	18	20	22	20	72.7
Illinois.....	742	504	<i>477</i>	408	566	604	662	710	833	932	990	1,103	1,017	43.3
Indiana.....	384	261	215	<i>214</i>	273	307	385	446	467	608	520	541	478	39.6
Iowa.....	1,438	1,033	995	901	863	931	1,197	1,353	1,534	1,815	2,248	2,441	2,449	28.2
Kansas.....	789	520	<i>508</i>	564	792	808	837	819	963	970	989	900	800	51.4
Maryland.....	82	<i>52</i>	52	52	52	52	52	52	52	52	52	52	34	94.1
Michigan.....	140	<i>115</i>	122	117	116	123	129	128	133	148	175	189	185	60.8
Minnesota.....	550	362	253	<i>223</i>	311	360	454	509	558	711	913	967	977	22.8
Missouri.....	607	355	344	410	495	520	597	723	772	836	816	759	667	40.1
Nebraska.....	351	307	286	<i>278</i>	292	299	334	335	300	418	454	423	304	01.2
New Jersey.....	18	18	18	18	18	18	18	18	18	18	18	18	18	
New York.....	200	105	200	207	<i>180</i>	204	203	218	218	219	207	209	209	82.0
North Dakota.....	83	21	15	<i>14</i>	17	25	24	29	35	35	68	50	57	20.0
Ohio.....	114	91	83	82	<i>76</i>	76	100	128	119	139	152	171	159	44.4
Oklahoma.....	262	<i>222</i>	255	273	301	260	280	223	270	262	230	326	299	68.1
Oregon.....	78	65	67	69	74	87	69	94	93	93	74	65	54	54.5
South Dakota.....	125	89	71	77	100	98	138	120	122	150	177	183	176	88.8
Tennessee.....	112	93	87	<i>84</i>	94	107	119	120	123	135	139	142	112	59.2
Texas.....	653	509	598	<i>465</i>	469	502	509	527	536	472	517	1,498	1,323	31.0
Washington.....	113	44	<i>42</i>	68	81	144	212	236	170	117	89	78	79	17.8
Wisconsin.....	72	37	<i>27</i>	29	39	53	75	84	63	100	108	122	102	22.1

<sup>1</sup> No comparable figures for earlier years.

# RICE CLEANING AND POLISHING

Description of the industry.—The establishments classified in this industry are those engaged in cleaning and polishing rice after it comes from the thresher. The rough rice is cleaned, the outer shell or hull and the inner cuticle or bran are removed, and the grain

is scoured, polished, and graded, and in most cases given a coat of glucose and talc. The lustrous appearance of the finished product is imparted by the coating, not by the polishing, which is really only the last step in the scouring process.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	60	1,589	\$1,448,594	\$38,443,529	\$48,793,777	\$10,350,248	22,901
1927	60	1,524	1,540,315	40,480,679	54,120,046	7,048,907	23,012
1925	63	1,206	1,098,124	45,847,273	58,497,857	7,050,584	21,000
1923	69	1,704	1,378,899	40,212,070	47,008,240	6,855,570	22,220
1921	76	1,940	1,706,986	34,178,009	41,213,472	7,034,803	( <sup>3</sup> )
1919	86	2,113	1,932,190	76,633,810	00,038,412	13,404,590	25,340
1914	59	1,253	645,563	20,015,800	23,039,294	2,423,434	15,571
1909	71	1,230	563,538	19,501,080	22,371,467	2,870,377	19,519
1904	74	1,492	640,032	13,315,065	10,296,916	2,081,851	15,806
1899	80	651	265,585	7,575,522	8,723,726	1,148,204	7,540
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	( <sup>4</sup> )	4.3	-6.3	-17.3	-9.0	35.3	-0.5
1925-1927	( <sup>4</sup> )	17.0	40.8	1.4	1.2	( <sup>5</sup> )	5.0
1923-1925	( <sup>4</sup> )	-26.5	-20.4	14.0	13.7	11.6	-1.4
1921-1923	( <sup>4</sup> )	-0.1	-10.2	17.7	14.2	-2.5	-----
1919-1921	( <sup>4</sup> )	-8.2	-11.7	-55.4	-54.2	-47.5	-----
1919-1929	( <sup>4</sup> )	-24.8	-25.0	-40.8	-45.8	-22.8	-0.6
1909-1919	( <sup>4</sup> )	70.5	242.9	203.0	302.5	307.0	20.8
1899-1909	( <sup>4</sup> )	90.3	112.2	157.4	156.4	150.0	158.7

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> Per cent not computed where base is less than 100.

<sup>5</sup> Less than one-tenth of 1 per cent decrease.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	60	527	1,589	22,901	14,870	8,031	\$1,209,394	\$1,448,594	\$38,443,529	\$38,221,284	\$22,245	\$48,793,777	\$10,350,248
	1927	60	622	1,524	23,012	16,182	6,830	1,205,437	1,540,315	40,480,679	46,295,507	215,112	54,120,046	7,048,907
	1919	86	1,096	2,113	25,340	19,578	5,762	1,508,040	1,932,190	76,633,810	76,335,172	298,044	90,038,412	13,404,590
California	1929	11	39	209	4,753	800	4,453	109,048	300,170	6,321,206	6,253,756	67,540	8,024,130	1,702,834
	1927	11	62	262	4,361	500	3,861	148,576	367,050	9,518,252	9,443,643	74,606	11,218,339	1,700,037
	1919	14	97	337	4,698	850	3,848	240,621	499,743	17,169,245	17,004,978	74,267	20,264,203	3,095,018
Louisiana	1929	28	250	775	7,821	7,223	598	582,641	572,248	17,070,007	17,010,801	59,206	21,680,613	4,519,546
	1927	26	278	528	8,076	7,300	707	555,045	567,060	18,073,184	17,992,676	80,508	20,753,271	2,680,087
	1919	46	745	1,121	12,562	10,115	2,447	737,980	805,408	36,017,410	35,806,591	120,819	41,220,471	5,203,081
Texas	1929	12	107	353	5,000	3,524	1,566	288,302	331,178	8,351,117	8,284,060	66,157	10,302,070	1,951,859
	1927	14	127	329	5,889	4,405	1,894	260,071	328,658	8,787,366	8,757,004	29,372	10,117,240	1,329,883
	1919	14	180	423	7,908	6,523	1,475	366,174	414,116	13,800,430	13,721,006	87,824	17,900,547	4,001,117
Other States	<sup>4</sup> 1929	0	131	252	5,237	3,823	1,414	229,405	244,908	6,701,040	6,671,767	29,282	8,877,058	2,170,000
	<sup>6</sup> 1927	0	155	405	4,680	3,878	808	273,880	294,562	10,071,877	10,071,251	30,626	12,040,787	1,038,910
	<sup>7</sup> 1919	12	74	232	2,124	2,090	34	104,165	214,929	9,037,731	9,021,997	15,784	10,653,131	1,015,400

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 25; 1927, 19; 1919, 40. The total numbers of persons engaged—proprietors and firm members, salaried officers, and employees, and wage earners—as reported for the industry, are as follows: For 1929, 2,141; 1927, 2,105; 1919, 3,249.

<sup>2</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

<sup>5</sup> Arkansas, 8 establishments; Tennessee, 1.

<sup>6</sup> Arkansas, 7 establishments; Georgia, 1; Tennessee, 1.

<sup>7</sup> Arkansas, 5 establishments; South Carolina, 1; Tennessee, 1; Washington, 5.



# RICE CLEANING AND POLISHING

195

**TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1923 TO 1929**

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products]

	1929	1927	1925	1923		1929	1927	1925	1923
Products, total value.	\$48,793,777	\$54,129,046	\$53,497,857	\$47,008,246	Clean rice—Continued.				
Clean rice:					Screenings—				
Total pounds.....	1,243,071,233	1,246,642,941	947,787,200	1,171,633,833	Pounds.....	118,000,700	140,512,403	121,888,074	155,777,486
Total value.....	\$46,087,526	\$51,827,572	\$51,112,850	\$44,798,510	Value.....	\$3,001,331	\$3,578,522	\$3,097,957	\$3,367,650
Whole-grain grades—					Browns—				
Total pounds.....	1,006,259,760	1,005,153,283	732,632,610	913,153,380	Pounds.....	45,730,207	43,044,900	43,404,093	52,716,125
Total value.....	\$39,560,579	\$45,823,534	\$44,172,121	\$39,159,024	Value.....	\$1,322,627	\$817,905	\$933,948	\$819,742
Polished—					Polish:				
Pounds.....	985,516,604	920,332,075	(1)	(1)	Pounds.....	34,375,440	34,025,046	32,735,250	30,930,217
Value.....	\$38,803,911	\$42,048,600	(1)	(1)	Value.....	\$513,427	\$461,956	\$601,728	\$585,048
Brown—					Bran:				
Pounds.....	20,743,156	75,821,208	(1)	(1)	Pounds.....	143,381,236	140,037,375	114,026,144	140,803,053
Value.....	\$766,068	\$3,174,925	(1)	(1)	Value.....	\$1,663,025	\$1,151,827	\$1,321,057	\$1,278,900
Second-head—					Other products, value.....	\$539,700	\$698,291	\$562,222	\$455,692
Pounds.....	73,020,377	57,032,205	40,771,613	40,086,842					
Value.....	\$2,202,680	\$1,607,011	\$2,008,824	\$1,451,101					

<sup>1</sup> Data incomplete.

**TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1923 TO 1929**

[The figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments]

PRODUCT AND CENSUS YEAR	United States	California	Louisiana	Texas	Other States <sup>1</sup>
<b>Number of establishments:</b>					
1929.....	00	11	28	12	9
1927.....	00	11	26	14	9
1925.....	03	13	29	12	8
1923.....	09	15	32	14	8
<b>Products, total value:</b>					
1929.....	\$48,793,777	\$8,024,130	\$21,580,613	\$10,302,070	\$8,877,068
1927.....	54,129,046	11,218,339	20,763,271	10,117,240	12,040,787
1925.....	53,497,857	8,592,328	23,564,990	10,901,367	10,440,265
1923.....	47,008,246	8,408,687	16,244,013	10,025,497	8,730,149
<b>Clean rice:</b>					
Pounds—					
1929.....	1,243,071,233	204,115,076	544,708,583	256,770,886	237,470,680
1927.....	1,246,642,941	244,917,090	477,269,332	220,308,422	304,118,101
1925.....	947,787,200	142,776,154	421,120,614	193,016,600	189,062,802
1923.....	1,171,633,833	206,182,381	480,635,220	255,932,642	225,883,500
Value—					
1929.....	\$46,087,526	\$7,401,000	\$20,541,340	\$9,070,209	\$8,388,972
1927.....	51,827,572	10,649,306	19,922,824	9,679,498	11,576,046
1925.....	51,112,850	8,108,951	22,405,900	10,389,895	10,118,038
1923.....	44,798,510	8,064,026	18,307,214	10,084,245	8,353,031
Polish:					
Pounds—					
1929.....	34,375,440	6,700,003	14,328,338	7,535,070	5,721,435
1927.....	34,025,046	6,077,237	13,478,925	7,063,693	8,005,791
1925.....	32,735,250	4,268,025	15,370,223	6,469,070	6,031,932
1923.....	30,930,217	3,932,377	16,452,978	10,944,600	8,009,202
Value—					
1929.....	\$513,427	\$93,370	\$212,252	\$120,800	\$87,496
1927.....	451,050	85,402	182,503	89,578	94,473
1925.....	501,728	63,626	244,170	97,722	90,210
1923.....	535,048	55,209	214,040	160,018	104,581
Bran:					
Pounds—					
1929.....	143,381,236	21,085,049	62,438,824	33,159,006	26,098,357
1927.....	140,037,375	20,369,915	55,905,360	27,070,740	30,502,364
1925.....	114,026,144	14,898,072	55,031,383	25,394,463	19,002,220
1923.....	140,303,053	16,395,847	65,407,658	38,696,153	26,713,056
Value—					
1929.....	\$1,663,025	\$254,200	\$710,717	\$399,814	\$318,225
1927.....	1,151,827	166,135	475,504	220,082	260,100
1925.....	1,321,057	149,393	652,172	301,672	217,020
1923.....	1,278,900	120,417	587,558	324,851	237,164
Other products, value:					
1929.....	\$539,700	\$184,486	\$125,205	\$142,653	\$87,865
1927.....	698,291	317,502	172,440	128,181	80,168
1925.....	562,222	270,358	102,598	112,168	17,098
1923.....	455,692	220,035	134,601	55,783	35,373

<sup>1</sup> For 1929: Arkansas, 8 establishments; Tennessee, 1. For 1927: Arkansas, 7 establishments; Georgia, 1; Tennessee, 1. For 1925: Arkansas, 7 establishments; Georgia, 1; Tennessee, 1. For 1923: Arkansas, 6 establishments; Georgia, 1; Tennessee, 1.

CENSUS OF MANUFACTURES: 1929

TABLE 5.—PRODUCTS OF MERCHANT AND OF CUSTOM MILLING, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 AND 1927

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for 1927 represent production. See GENERAL EXPLANATIONS—Value of Products]

KIND	TOTAL		MERCHANT MILLING		CUSTOM MILLING	
	1929	1927	1929	1927	1929	1927
Products, total value.....	\$48,793,777	\$54,120,640	\$47,484,570	\$49,720,850	\$1,309,207	\$4,402,790
Clean rice:						
Pounds.....	1,243,071,233	1,240,642,941	1,208,294,430	1,145,879,628	34,776,797	101,263,413
Value.....	\$46,087,626	\$51,827,572	\$44,826,004	\$47,506,867	\$1,209,532	\$4,320,705
Polish:						
Pounds.....	34,375,446	34,025,046	33,480,870	33,145,011	894,576	1,480,635
Value.....	\$513,427	\$451,056	\$500,118	\$430,280	\$13,309	\$21,070
Bran:						
Pounds.....	143,881,236	140,037,375	140,570,726	133,857,591	2,810,510	6,170,784
Value.....	\$1,053,025	\$1,151,827	\$1,018,965	\$1,094,468	\$34,060	\$67,359
Other products, value.....	\$539,790	\$698,291	\$538,493	\$695,235	\$1,308	\$3,056

TABLE 6.—RICE MILLED, BY TYPE AND QUANTITY: 1929 AND 1927

[Bushel, 45 pounds]

TYPE	1929		1927		TYPE	1929		1927	
	Quantity	Value	Quantity	Value		Quantity	Value	Quantity	Value
Total.....	33,888,044		42,550,392						
Rough rice, domestic:									
Long-grain rice (Honduras, Edith, etc.).....	6,003,040		7,027,398		Early prolific.....	6,480,047		7,110,508	
Short-grain rice, total.....	24,060,877		27,381,729		Other short-grain rice.....	775,703		806,098	
Blue rose.....	10,705,227		19,465,123		Round-grain rice (Japan type).....	8,000,092		8,004,056	
					Rough rice, foreign.....	134,029		142,609	

TABLE 7.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
		Horsepower		Horsepower		Horsepower		Horsepower		Horsepower		
Prime movers and electric motors driven by purchased energy, aggregate.....	403	22,401	334	23,012	344	21,000	303	25,340	120	15,571	100.0	100.0
Prime movers, total.....	90	14,870	63	16,182	73	15,273	115	19,578	71	14,000	64.9	77.3
Steam, total.....	50	14,500	61	15,972	70	15,252	94	18,881	68	13,927	63.3	74.5
Engines.....	54	14,140	58	15,742	66	14,932	90	18,821	(1)	(1)	61.7	74.3
Turbines.....	2	360	3	230	4	320	4	60	(1)	(1)	1.0	2.2
Internal-combustion engines.....	4	370	2	210	3	121	21	697	3	82	1.0	2.8
Electric motors driven by purchased energy.....	348	8,031	271	6,830	271	6,533	188	5,762	49	1,562	35.1	22.7
Electric motors, total.....	383	8,400	311	7,312	310	7,188	255	6,637	74	1,070	100.0	100.0
Driven by purchased energy.....	348	8,031	271	6,830	271	6,533	188	5,762	49	1,562	94.8	89.8
Driven by energy generated in establishments reporting.....	40	438	40	482	39	655	67	875	25	408	5.2	13.2
Electric generators.....	20	Kilowatts 1,076	26	Kilowatts 901	28	Kilowatts 1,039	(2)	(2)	(2)	(2)		
Electric energy purchased <sup>1</sup> .....		Kilowatt-hours 6,525,615		(4)		(4)		(2)		(2)		

<sup>1</sup> Not called for separately on schedule.  
<sup>2</sup> Not called for on schedule.  
<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>4</sup> Data incomplete.

# RICE CLEANING AND POLISHING

**TABLE 8.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929**

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>United States:</b>														
1929.....	1,580	1,723	1,738	1,527	1,314	1,271	1,121	1,163	1,250	1,714	2,301	2,033	1,854	48.7
1925.....	1,206	1,723	1,302	808	663	550	601	420	808	1,576	2,197	2,479	2,337	10.0
1919.....	2,113	3,041	2,423	1,704	1,470	1,462	1,243	851	1,140	2,220	2,840	3,354	3,410	28.0
1914.....	1,253	1,753	1,600	1,342	1,175	819	344	332	603	1,567	1,701	1,852	1,843	17.0
1909.....	1,239	1,513	1,433	1,240	900	642	437	456	722	1,750	2,017	1,932	1,753	21.0
<b>California.....</b>	200	180	210	247	216	200	223	222	235	200	206	180	185	72.9
<b>Louisiana.....</b>	775	850	852	600	583	636	403	506	577	847	1,263	1,030	916	39.0
<b>Texas.....</b>	353	409	374	326	301	269	255	233	200	451	486	449	434	43.4

# SAUSAGE, MEAT PUDDINGS, HEADCHEESE, ETC., AND SAUSAGE CASINGS

Description of the industry.—The establishments classified in this industry are those engaged primarily in the manufacture of sausage, meat puddings, headcheese, etc., and sausage casings. Establishments which are engaged primarily in slaughtering and which also manufacture sausage, etc., are classified in the

meat-packing industry, but statistics for the sausage, headcheese, sausage casings, etc., made by such establishments are included in Table 3, which shows the total production of sausage and similar products, regardless of the industry classification of the establishments in which they are manufactured.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1914 TO 1929<sup>1</sup>

[Data for establishments with products under \$5,000 in value included for 1919 and 1914 but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>	Horsepower
1929	681	5,897	\$8,850,172	\$81,371,087	\$108,240,194	\$20,874,507	25,755
1927	505	4,967	7,463,077	60,215,599	81,648,209	21,332,700	19,080
1925	480	4,914	7,632,132	61,497,294	82,496,005	20,638,711	18,184
1923	490	4,592	6,839,596	51,033,897	69,510,406	18,477,009	17,017
1921	513	3,872	6,479,184	37,441,080	53,087,089	15,645,493	(4) 12,071
1919	633	3,471	4,070,118	43,940,356	56,610,092	12,069,736	7,981
1914	533	2,616	1,821,010	17,925,555	23,082,121	5,166,500	
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	34.9	18.7	18.0	35.1	32.7	20.0	28.9
1925-1927	3.3	1.1	-2.5	-2.1	-1.1	1.9	0.0
1923-1925	-2.0	7.0	11.9	20.5	18.0	13.3	0.0
1921-1923	-2.7	18.6	24.8	36.3	30.9	18.1	
1919-1921	-19.0	11.6	17.1	-14.8	-6.2	23.5	
1919-1929	7.6	69.0	89.1	85.2	91.2	112.1	103.3

<sup>1</sup> No comparable data for years prior to 1914.

<sup>2</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	681	1,210	5,897	25,755	1,499	24,256	\$8,837,162	\$8,850,172	\$81,371,087	\$80,231,370	\$1,140,311	\$108,240,194	\$20,874,507
	1927	505	1,108	4,967	19,080	1,366	18,614	2,059,017	7,463,077	60,215,599	59,281,495	934,104	81,648,209	21,332,700
	1919	633	319	3,471	12,071	2,618	10,053	1,463,437	4,070,118	43,940,356	43,410,690	520,666	56,610,092	12,069,736
Individual States:														
Alabama	1929	4	10	20	96		96	10,600	25,642	205,075	293,594	2,381	376,492	70,467
California	1929	68	45	275	1,066	21	1,045	130,580	410,874	2,058,105	2,016,622	41,483	4,282,271	1,324,100
	1927	44	60	315	901	142	759	113,462	503,018	2,157,469	2,120,475	36,604	3,510,342	1,358,873
	1919	39	32	174	485	100	385	89,001	229,654	1,847,056	1,825,061	21,995	1,800,270	540,220
Connecticut	1929	24	35	124	669	10	659	78,684	189,877	2,007,032	2,005,247	31,785	2,004,871	597,839
	1927	15	23	118	541		541	91,913	175,127	1,402,241	1,377,366	24,875	1,872,141	400,000
	1919	20	23	79	410	32	378	37,990	87,802	1,068,406	1,051,520	16,876	1,370,156	301,751
Delaware	1929	4	2	9	46	10	36	2,760	9,066	116,329	115,304	1,026	106,880	80,551
Florida	1929	3	3	13	67		67	4,500	13,100	147,316	143,206	4,110	202,933	66,687

<sup>1</sup> Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 7,794; proprietors and firm members, 678. For 1927, total, 6,568; proprietors and firm members, 493. For 1919, total, 4,094; proprietors and firm members, 794.

<sup>2</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

SAUSAGE, MEAT PUDDINGS, ETC.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>2</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
Individual States—Contd.														
Georgia.....	1929	5	10	42	162	20	142	\$33,900	\$40,000	\$480,551	\$478,253	\$8,298	\$640,760	\$163,215
	1927	7	13	55	351	-----	251	21,130	48,852	400,140	453,518	6,328	602,268	142,122
	1919	7	4	25	59	-----	59	3,300	29,143	192,113	180,511	2,602	250,274	58,161
Illinois.....	1929	68	203	1,136	3,518	280	3,238	744,839	1,000,417	14,251,203	14,093,857	157,346	10,352,401	5,101,288
	1927	60	236	1,053	2,931	60	2,871	770,093	1,552,474	12,708,125	12,614,625	159,500	17,735,913	4,067,788
	1919	54	120	706	1,470	116	1,354	271,005	1,177,295	7,612,852	7,433,079	78,873	10,053,809	2,551,047
Indiana.....	1929	10	17	66	540	-----	540	56,217	87,600	1,060,383	1,050,809	15,574	1,877,871	311,488
Iowa.....	1929	7	6	89	259	10	240	20,265	107,900	404,536	457,066	6,570	750,401	291,865
	1927	0	7	95	232	6	232	21,697	117,065	407,842	460,567	7,275	775,355	307,513
	1919	9	18	63	92	-----	92	24,732	73,257	368,018	364,175	3,843	502,826	134,808
Kansas.....	1929	4	4	63	102	-----	102	15,220	72,719	340,732	330,874	0,858	524,478	177,740
	1927	5	4	59	202	-----	202	11,702	67,664	390,344	388,350	7,994	528,253	131,919
Louisiana.....	1929	8	23	53	347	54	293	64,309	56,336	762,192	748,614	13,578	1,004,809	242,617
	1927	5	5	26	198	-----	198	9,433	29,783	415,171	406,080	9,082	552,225	137,064
	1919	8	4	26	340	-----	340	5,000	27,811	231,802	226,138	5,664	324,638	92,836
Maine.....	1929	10	11	55	357	-----	357	30,246	64,824	633,150	621,277	11,873	924,763	201,613
	1927	8	10	44	260	-----	260	28,040	58,912	428,904	417,639	11,265	610,837	181,933
	1919	9	11	20	280	75	205	13,439	23,950	213,547	206,160	7,387	300,807	87,350
Maryland.....	1929	18	12	74	460	-----	460	27,949	115,601	1,370,347	1,358,194	21,153	1,890,200	519,850
	1927	18	33	210	828	90	738	81,096	267,920	2,362,063	2,320,420	33,243	3,020,050	657,396
	1919	25	39	101	577	121	456	42,273	105,937	1,427,813	1,416,405	17,408	1,788,648	366,835
Massachusetts.....	1929	60	101	485	2,114	50	2,064	243,763	732,066	5,542,180	5,444,851	97,329	7,248,411	1,706,231
	1927	57	83	444	1,661	50	1,611	186,865	602,712	4,818,241	4,734,634	83,607	6,538,055	1,710,514
	1919	50	81	306	1,151	77	1,074	123,971	397,346	4,222,572	4,166,988	55,584	5,296,350	1,073,784
Michigan.....	1929	49	120	645	3,161	45	3,116	340,383	1,042,021	9,635,375	9,507,870	127,505	12,566,075	2,920,300
	1927	26	88	375	1,600	20	1,646	231,494	671,400	4,909,750	4,926,091	79,659	6,556,225	1,566,475
	1919	29	87	159	770	148	628	64,794	226,047	2,813,434	2,283,468	29,960	2,930,730	617,302
Minnesota.....	1929	16	34	132	800	-----	800	90,178	189,769	1,895,590	1,856,640	38,950	2,493,553	597,957
	1927	13	20	109	514	-----	514	70,508	185,050	1,445,474	1,412,000	33,474	1,930,093	490,520
	1919	11	15	33	155	-----	155	13,525	44,224	309,724	388,900	10,824	558,360	168,045
Missouri.....	1929	11	18	100	334	23	311	56,215	134,207	1,103,375	1,173,354	21,021	1,071,797	478,422
	1927	9	21	81	293	-----	293	55,300	125,155	761,603	733,754	27,849	1,211,799	460,166
	1919	13	10	71	247	81	166	27,763	75,132	647,067	633,420	13,677	800,714	219,617
New Jersey.....	1929	29	75	252	1,266	-----	1,266	260,445	442,740	4,413,866	4,347,909	65,807	5,777,560	1,363,754
	1927	26	68	228	1,525	305	1,220	196,664	423,714	4,534,717	4,408,220	66,491	5,740,337	1,200,120
	1919	38	27	201	685	177	508	61,582	202,274	3,232,300	3,108,192	34,198	4,058,878	826,088
New York.....	1929	114	116	616	3,065	85	2,980	301,548	1,019,460	10,423,838	10,256,309	167,529	13,566,415	3,082,577
	1927	75	93	432	1,931	39	1,892	202,067	672,970	6,408,249	6,379,079	97,670	8,462,360	1,934,120
	1919	157	129	513	2,173	415	1,758	260,784	732,659	7,511,955	7,415,317	96,638	9,087,913	2,176,968
North Carolina.....	1929	9	5	32	90	-----	90	8,700	25,000	438,458	434,818	3,640	680,543	142,085
Ohio.....	1929	33	112	436	2,163	75	2,088	382,220	724,084	6,539,313	6,404,040	74,607	8,730,536	2,197,223
	1927	25	117	450	1,893	185	1,708	368,700	755,221	5,617,693	5,541,291	76,372	7,007,910	1,990,253
	1919	30	99	269	1,279	333	946	187,092	420,305	4,107,144	4,160,569	36,575	5,354,530	1,157,386
Oklahoma.....	1929	5	-----	86	-----	-----	86	-----	-----	149,210	142,427	0,783	210,256	61,046
Oregon.....	1929	6	5	19	104	-----	104	8,900	34,535	253,868	248,770	5,087	347,405	93,542
Pennsylvania.....	1929	23	64	359	1,409	285	1,124	167,924	567,021	6,259,738	6,195,828	63,910	7,878,302	1,618,504
	1927	16	36	158	851	125	720	64,153	204,868	3,009,334	2,973,352	35,982	3,000,100	596,766
	1919	23	42	178	735	304	431	85,632	190,423	3,096,659	3,072,831	23,828	3,688,188	591,529
Rhode Island.....	1929	12	20	57	273	20	253	42,656	70,594	1,171,530	1,159,761	11,778	1,510,093	338,554
	1927	12	18	59	291	30	261	36,226	70,907	864,873	852,874	11,999	1,154,892	290,019
	1919	15	14	68	273	134	139	21,311	85,408	1,625,594	1,615,431	10,163	1,870,797	245,233
Texas.....	1929	7	17	77	493	200	293	34,411	76,490	1,047,516	1,037,527	0,989	1,371,826	324,310
	1927	5	5	24	132	-----	132	10,000	26,462	238,375	233,793	4,612	322,626	84,251
	1919	6	6	12	41	-----	41	4,088	11,152	130,455	129,252	1,203	171,715	41,260
Washington.....	1929	10	11	31	170	-----	170	30,900	61,097	530,900	524,000	6,951	690,752	159,792
	1927	9	10	31	186	-----	186	20,891	57,115	350,321	339,161	11,160	403,919	113,598
	1919	5	2	0	37	-----	37	300	11,900	87,380	80,850	630	134,188	46,808
Wisconsin.....	1929	35	97	415	1,939	311	1,628	333,408	640,833	4,995,404	4,913,044	82,360	6,793,117	1,707,713
	1927	32	118	368	1,766	293	1,473	285,271	582,393	4,282,007	4,200,641	75,366	5,959,641	1,677,934
	1919	28	65	244	887	466	421	133,411	288,078	3,040,541	3,000,341	40,200	4,024,463	983,922
Groups of States:														
Ark., 1 est.; Miss., 2; Tenn., 6.....	1929	9	10	22	248	-----	248	22,831	22,540	366,218	355,582	10,636	470,692	113,474
D. C., 2 est.; N. H., 5; Mont., 1 est.; Nebr., 4; S. Dak., 1; Utah, 2.....	1929	8	6	143	205	-----	205	16,494	178,762	941,856	928,194	13,662	1,374,471	432,615
States not shown separately.....	1927	32	34	233	951	21	930	74,543	293,354	1,066,087	1,020,680	39,407	2,841,144	875,057
	1919	46	26	124	552	39	518	39,853	142,931	1,073,835	1,051,573	22,262	1,470,031	306,196

<sup>1</sup> Alabama, 2 establishments; Colorado, 1; Delaware, 1; District of Columbia, 3; Florida, 1; Indiana, 3; Montana, 1; Nebraska, 3; New Hampshire, 4; North Carolina, 3; Oklahoma, 1; Oregon, 2; South Dakota, 1; Tennessee, 5; Virginia, 1.  
<sup>2</sup> Alabama, 1 establishment; Arkansas, 1; Colorado, 1; Delaware, 1; District of Columbia, 1; Indiana, 2; Kansas, 1; Kentucky, 2; Nebraska, 3; Nevada, 1; New Hampshire, 1; North Carolina, 2; Oregon, 1; South Carolina, 6; South Dakota, 1; Tennessee, 6; Vermont, 2; Virginia, 2; Wyoming, 1.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929<sup>1</sup>

[The figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

PRODUCTS	Pounds	Value	PRODUCTS	Pounds	Value
1. "Sausage, meat puddings, headcheese, etc., and sausage casings" industry, all products, total value.....		\$108,240,194	Sausage, meat puddings, headcheese, etc., and sausage casings—Continued.		
2. Sausage, meat puddings, headcheese, etc., and sausage casings.....		98,080,884	Sausage casings, total.....	176,198,403	\$32,616,034
3. Other products (not normally belonging to this industry).....		10,165,310	Beef casings, total.....	54,191,880	10,468,686
4. Sausage, meat puddings, headcheese, etc., and sausage casings made as secondary products in meat-packing and other industries, value.....		225,014,616	Made in sausage, meat-puddings, headcheese, etc., and sausage-casings industry.....	11,313,730	2,401,605
Sausage, meat puddings, headcheese, etc., and sausage casings, all industries:			Made in meat-packing industry.....	42,878,150	8,067,081
Aggregate value (sum of 2 and 4).....		323,095,500	Sheep casings, total.....	49,593,240	9,307,485
Sausage, meat puddings, headcheese, etc., total <sup>2</sup> .....	1,313,039,530	200,470,466	Made in sausage, meat-puddings, headcheese, etc., and sausage-casings industry.....	24,621,826	4,182,850
Fresh sausage, meat puddings, headcheese, etc., total.....	1,184,210,220	252,117,241	Made in meat-packing industry.....	25,271,420	5,124,635
Made in sausage, meat-puddings, headcheese, etc., and sausage-casings industry.....	345,580,704	78,251,181	Hog casings, total.....	72,113,271	12,830,863
Made in meat-packing industry.....	831,218,171	172,717,041	Made in sausage, meat-puddings, headcheese, etc., and sausage-casings industry.....	21,925,407	3,788,080
Made as secondary products in other industries.....	7,411,351	1,149,019	Made in meat-packing industry.....	48,212,414	8,655,809
Dry sausage, total.....	128,829,304	38,362,225	Made as secondary products in other industries.....	1,075,360	305,068
Made in sausage, meat-puddings, headcheese, etc., and sausage-casings industry.....	31,474,041	9,466,262			
Made in meat-packing industry.....	97,355,263	28,905,963			

<sup>1</sup> No comparable data for earlier years.  
<sup>2</sup> See Table 4 of the report on meat packing.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1929

[The figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments. Certain of the "Other States," however, reported larger production than some of the States shown separately]

KIND AND STATE	Pounds	Value	KIND AND STATE	Pounds	Value	KIND AND STATE	Pounds	Value
FRESH SAUSAGE, MEAT PUDDINGS, HEAD-CHEESE, SCRAPPLE, ETC.			FRESH SAUSAGE, MEAT PUDDINGS, HEAD-CHEESE, SCRAPPLE, ETC.—continued			SAUSAGE CASINGS		
United States.....	1,184,210,220	\$252,117,241	United States.....	128,829,304	38,362,225	United States.....	176,198,403	\$32,616,034
Individual States:			Individual States—Con.			Individual States:		
Alabama.....	4,084,153	716,122	Washington.....	13,191,114	\$2,620,231	California.....	10,147,030	1,086,686
Arkansas.....	044,807	170,515	Wisconsin.....	40,091,740	8,876,387	Colorado.....	740,140	138,017
California.....	30,883,108	7,704,183	Other States (Ariz., Miss., Nev., N. Dak., S. C., S. Dak., W. Va., Wyo.).....	18,500,443	3,820,102	Illinois.....	72,821,306	14,078,025
Colorado.....	13,142,488	2,500,084	DRY SAUSAGE			Indiana.....	3,211,896	509,728
Connecticut.....	13,810,210	2,981,649	United States.....	128,829,304	38,362,225	Iowa.....	9,754,203	1,629,449
Delaware.....	4,988,737	1,046,219	Individual States:			Kansas.....	11,506,108	1,871,840
District of Columbia.....	8,541,157	2,119,276	California.....	2,435,450	826,974	Kentucky.....	60,023	12,767
Florida.....	2,279,351	457,780	Illinois.....	35,435,580	12,102,003	Louisiana.....	230,879	41,292
Georgia.....	10,204,605	1,882,203	Iowa.....	2,038,832	548,060	Maine.....	100,158	27,636
Idaho.....	1,010,640	177,081	Kansas.....	4,560,604	1,470,734	Maryland.....	1,704,625	294,162
Illinois.....	173,150,160	30,088,370	Kentucky.....	821,461	186,560	Massachusetts.....	2,584,833	492,927
Indiana.....	31,899,483	6,076,827	Louisiana.....	527,916	95,491	Michigan.....	2,544,676	489,341
Iowa.....	41,564,967	8,304,268	Maryland.....	1,362,505	337,052	Minnesota.....	7,639,208	1,370,087
Kansas.....	45,434,064	8,032,910	Massachusetts.....	1,431,642	490,868	Missouri.....	5,084,150	989,792
Kentucky.....	9,761,927	1,870,540	Michigan.....	3,762,010	1,197,982	Montana.....	99,848	19,767
Louisiana.....	5,782,577	1,087,371	Minnesota.....	9,784,414	2,536,074	Nebraska.....	10,767,010	1,921,380
Maine.....	5,484,715	1,175,637	Missouri.....	1,248,119	292,806	New Jersey.....	2,156,632	288,677
Maryland.....	27,309,429	6,062,436	Nebraska.....	11,704,470	3,921,052	New York.....	17,768,615	3,288,705
Massachusetts.....	64,425,325	14,295,212	New Jersey.....	2,727,983	839,745	North Carolina.....	274,400	31,450
Michigan.....	69,454,545	14,885,478	New York.....	5,593,560	2,690,317	North Dakota.....	470,828	77,454
Minnesota.....	42,495,128	8,182,144	North Carolina.....	1,353,200	261,730	Ohio.....	2,958,651	604,781
Missouri.....	44,380,690	8,477,113	Ohio.....	9,291,849	2,126,487	Oklahoma.....	1,106,651	185,608
Montana.....	2,278,438	445,353	Pennsylvania.....	19,406,715	5,003,717	Oregon.....	271,742	59,716
Nebraska.....	23,333,437	4,236,400	Texas.....	4,140,513	839,497	Pennsylvania.....	1,907,403	374,278
New Hampshire.....	1,785,281	353,567	Washington.....	562,842	166,187	South Dakota.....	2,380,627	457,720
New Jersey.....	46,096,187	10,996,436	Wisconsin.....	4,461,710	1,482,068	Tennessee.....	181,923	30,875
New York.....	108,576,908	26,840,777	Other States (Ala., Ark., Colo., Conn., D. C., Ga., Ind., Miss., Mont., N. H., Okla., Oreg., S. C., S. Dak., Va., W. Va.).....	6,178,029	1,546,303	Texas.....	2,556,166	430,690
North Carolina.....	2,718,032	540,791				Utah.....	32,280	6,269
Ohio.....	99,380,679	21,940,718				Washington.....	393,252	76,340
Oklahoma.....	10,201,343	1,883,898				Wisconsin.....	2,658,701	523,454
Oregon.....	5,441,801	1,119,748						
Pennsylvania.....	104,599,286	24,218,003						
Rhode Island.....	5,490,250	1,177,142						
Tennessee.....	8,851,117	1,610,314						
Texas.....	26,804,662	5,093,996						
Utah.....	3,290,511	779,734						
Virginia.....	7,073,244	1,153,716						

TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY.—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919,<sup>1</sup> AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	3,043	Horse-power 25,755	2,292	Horse-power 19,080	1,853	Horse-power 18,184	1,300	Horse-power 12,671	100.0	100.0
Prime movers, total.....	43	1,490	38	1,360	50	1,568	107	2,618	5.8	20.7
Steam, total.....	39	1,435	33	1,280	36	1,322	72	2,058	5.0	16.2
Engines.....	35	1,341	33	1,280	35	1,252	70	2,038	5.2	16.0
Turbines.....	4	94	1	80	1	70	2	20	0.4	0.2
Internal-combustion engines.....	4	64	5	77	13	220	35	560	0.2	4.4
Water wheels and water turbines.....					1	7				
Electric motors driven by purchased energy.....	3,000	24,266	2,254	18,614	1,803	16,626	1,193	10,053	94.2	79.3
Electric motors, total.....	3,020	24,546	2,262	18,814	1,812	16,746	1,217	10,221	100.0	100.0
Driven by purchased energy.....	3,000	24,266	2,254	18,614	1,803	16,626	1,193	10,053	98.8	98.4
Driven by energy generated in establishments reporting.....	20	280	8	200	9	120	24	168	1.2	1.6
Electric generators.....	4	Kilowatts 200 Kilowatt-hours 22,237,377	2	Kilowatts 150	4	Kilowatts 185	(?)	(?)		
Electric energy purchased <sup>4</sup> .....				(?)		(?)		(?)		

<sup>1</sup> No comparable data for earlier years.  
<sup>2</sup> Not called for on schedule.  
<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>4</sup> Data incomplete.

TABLE 6.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, AND 1919,<sup>1</sup> AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929.....	5,897	5,930	5,905	5,771	<b>5,710</b>	5,802	5,850	5,006	5,002	5,081	5,900	6,005	6,033	6,038	94.8
1925.....	4,014	<i>4,769</i>	4,778	4,780	4,771	4,863	4,892	4,946	4,900	4,994	5,681	5,009	5,141	5,141	92.8
1919.....	3,471	3,355	3,305	3,208	<i>3,200</i>	3,207	3,458	3,586	3,513	3,684	3,646	3,684	3,785	3,785	80.1
Alabama.....	20	<i>24</i>	<b>24</b>	22	22	20	<i>10</i>	<b>10</b>	<i>10</i>	<b>10</b>	<i>10</i>	<b>10</b>	<i>10</i>	<b>10</b>	70.2
California.....	275	<i>266</i>	<b>268</b>	271	269	270	272	270	277	279	282	282	282	282	94.3
Connecticut.....	124	124	124	124	123	125	125	126	126	125	123	119	119	119	94.4
Delaware.....	0	11	<i>0</i>	0	8	7	7	7	7	8	11	11	11	11	93.0
Florida.....	13	13	13	13	13	13	<i>12</i>	<b>12</b>	<i>12</i>	13	13	13	14	14	85.7
Georgia.....	42	43	42	42	40	41	41	43	43	43	42	41	41	41	93.0
Illinois.....	1,136	1,178	1,166	1,114	1,108	1,137	1,136	<i>1,087</i>	1,114	1,166	1,139	1,142	1,148	1,148	92.8
Indiana.....	60	68	<i>60</i>	68	68	60	64	63	60	67	67	67	68	68	88.2
Iowa.....	80	111	107	73	68	80	85	84	84	83	81	104	114	114	59.6
Kansas.....	63	64	63	61	62	63	64	66	61	60	61	64	62	62	90.9
Louisiana.....	53	58	58	52	54	54	52	<i>51</i>	<b>51</b>	53	53	55	55	55	92.7
Maine.....	55	52	52	<i>51</i>	53	52	53	60	60	57	58	58	56	56	85.0
Maryland.....	74	97	97	83	68	68	68	68	68	68	69	70	70	70	70.1
Massachusetts.....	485	481	<i>470</i>	477	478	478	476	492	494	496	490	489	494	494	96.0
Michigan.....	645	<i>613</i>	627	621	637	648	659	677	671	673	648	633	635	635	90.5
Minnesota.....	132	<i>122</i>	<b>122</b>	<i>122</i>	127	133	136	136	136	131	131	142	140	140	85.0
Missouri.....	100	<i>97</i>	<b>97</b>	98	100	101	102	103	102	101	101	101	99	99	94.2
New Jersey.....	262	270	267	263	233	231	232	232	232	242	272	276	276	276	83.7
New York.....	616	613	609	606	601	602	612	610	614	626	628	653	628	628	94.0
North Carolina.....	32	<i>32</i>	<b>32</b>	<i>32</i>	32	32	32	32	32	33	33	33	33	33	97.0
Ohio.....	436	417	<i>417</i>	418	420	427	436	458	452	440	457	438	442	442	91.0
Oklahoma.....	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
Oregon.....	10	21	20	21	20	18	18	17	17	19	20	20	20	20	81.0
Pennsylvania.....	359	345	351	<i>343</i>	350	359	359	368	367	368	360	365	373	373	92.0
Rhode Island.....	57	57	57	57	56	56	56	56	56	56	57	57	57	57	98.2
Texas.....	77	73	75	74	74	75	76	78	83	83	78	77	74	74	88.0
Washington.....	31	31	30	31	31	31	31	31	31	31	31	31	31	31	93.8
Wisconsin.....	415	417	408	<i>402</i>	403	407	413	420	415	418	424	428	427	427	93.0

<sup>1</sup> No comparable data for earlier years.

# SHORTENINGS AND VEGETABLE COOKING OILS

(NOT INCLUDING LARD)

Description of the industry.—The establishments classified in this industry are engaged primarily in the manufacture of shortenings and vegetable cooking oils. Materials used in their manufacture include both animal and vegetable substances. The secondary products include refined cottonseed oil, oleomargarine, salad oils, solidified oil, cottonseed oil foots, distilled cottonseed fatty acids, tallow, grease, soap stock, etc.

Lack of comparable statistics for prior years.—Be-

cause of the transfer to this industry classification of the establishments engaged primarily in the manufacture of vegetable cooking oils, most of which were formerly assigned to the "Oils, not elsewhere classified" industry, the statistics published for the shortenings and cooking-oils industry for 1925 and prior years are not comparable with those for 1927-1929. For this reason no comparative statistics for prior years are included in the current report.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1929 AND 1927<sup>1</sup>

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>	Horsepower
1929	40	2,712	\$3,003,046	\$139,030,964	\$154,553,197	\$15,522,233	36,047
1927	33	2,655	2,624,371	137,078,000	148,408,076	11,389,476	33,462
PER CENT OF INCREASE							
1927-1929	(4)	2.1	14.5	1.4	4.1	36.3	9.5

<sup>1</sup> No comparable data for years prior to 1927.

<sup>2</sup> The figures for both years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929 AND 1927

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. See GENERAL EXPLANATION—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	40	775	2,712	36,047	10,747	25,000	\$1,710,096	\$3,003,046	\$139,030,964	\$137,610,194	\$1,420,770	\$154,553,197	\$15,522,233
	1927	33	631	2,655	33,462	10,187	23,275	1,288,472	2,624,371	137,078,000	135,694,358	1,384,242	148,408,076	11,389,476
Individual States:														
Georgia	1929	4	92	346	2,293	186	2,107	171,776	233,208	17,320,181	17,173,801	152,380	18,030,923	1,013,742
	1927	4	70	500	2,510	307	2,203	330,190	330,190	20,044,124	20,423,412	220,712	22,011,424	1,367,300
Tennessee	1929	6	88	387	4,310	1,503	2,807	180,628	344,659	23,814,265	23,677,461	136,704	20,568,480	2,754,234
	1927	5	77	419	3,092	1,242	2,450	167,004	417,873	23,207,959	23,078,975	134,014	25,093,637	2,485,048
Texas	1929	8	108	308	3,099	2,850	1,149	233,542	359,757	14,982,001	14,836,608	145,393	17,700,031	2,727,030
	1927	7	98	336	3,522	2,700	322	227,062	378,030	10,677,454	10,513,992	163,462	18,000,875	1,992,421
Groups of States:														
Calif., 2 est.; Mo., 1	1929	3	66	180	3,014	950	2,064	140,010	232,751	4,317,227	4,221,003	96,134	5,562,954	1,235,727
La., 2 est.; Mass., 2;														
Va., 8	1929	7	136	489	7,310	1,805	5,445	364,002	394,271	24,200,788	24,000,617	200,171	25,022,403	1,721,705
Fla., 2 est.; Ill., 2;														
Ky., 1; N. Y., 2;	1929	7	153	601	9,220	2,299	6,927	368,485	853,950	20,382,787	20,937,005	445,782	32,015,105	3,232,378
N. J., 2 est.; N. C., 1;														
Ohio, 2	1929	5	132	395	5,505	1,094	4,501	250,193	635,450	25,007,725	24,763,609	244,116	27,245,142	2,237,417
States not shown separately	1927	17	286	1,400	23,738	5,938	17,800	771,116	1,480,578	76,540,033	75,682,079	860,054	82,003,140	5,544,107

<sup>1</sup> The total numbers of persons engaged are as follows: 1929, 3,487; 1927, 3,190 (including 4 proprietors and firm members, not shown in the table).

<sup>2</sup> The figures for both years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value of Products.

<sup>4</sup> Illinois, 2 establishments; Kentucky, 1; Louisiana, 2; Massachusetts, 1; New Jersey, 2; New York, 1; North Carolina, 1; Ohio, 2; Rhode Island, 1; Virginia, 4.



# SHORTENINGS AND COOKING OILS

203

**TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 AND 1927<sup>1</sup>**

[The figures for both years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

KIND	1929		1927	
	Pounds	Value	Pounds	Value
1. Shortenings (not including lard) and vegetable-cooking-oils industry, all products, total value.....		\$154,563,197		\$148,468,070
2. Shortenings (not including lard) and vegetable cooking oils.....		140,004,368		134,881,074
3. Other products (not normally belonging to this industry).....		13,558,830		13,587,002
4. Shortenings (not including lard) and vegetable cooking oils made as secondary products in other industries.....		57,573,650		57,148,728
Shortenings and vegetable cooking oils, all industries, aggregate (sum of 2 and 4).....	1,754,712,020	108,538,017	1,748,475,056	102,020,802
Shortenings (not including lard), total.....	<sup>2</sup> 1,250,836,501	147,051,407	1,239,087,167	142,570,674
Made in shortenings (not including lard) and vegetable-cooking-oils industry, total.....	832,354,420	98,340,592	775,000,564	80,319,760
From vegetable oils and fats solely, total.....	658,471,337	78,166,834	637,337,870	61,856,553
Package goods, 8 pounds and under.....	212,620,144	27,600,945	205,144,129	20,018,063
Other, over 8 pounds.....	445,842,193	50,466,880	332,193,741	35,837,600
From animal and vegetable oils and fats, total.....	173,883,092	20,173,758	237,668,604	27,463,210
Package goods, 8 pounds and under.....	70,839,700	8,761,612	80,580,401	10,168,860
Other, over 8 pounds.....	103,043,380	11,412,146	157,088,203	17,304,347
Made as secondary products in the meat-packing industry <sup>3</sup> .....	408,140,785	40,038,020	438,030,060	50,331,878
Made as secondary products in other industries <sup>4</sup> .....	10,332,287	2,372,766	20,043,634	2,025,627
Vegetable cooking oils, total.....	407,975,518	50,886,610	500,387,880	40,463,128
Made in shortenings (not including lard) and vegetable-cooking-oils industry.....	421,800,020	42,623,706	468,224,705	45,661,305
Made as secondary products in other industries.....	76,084,502	8,262,904	41,163,181	3,801,823

<sup>1</sup> No comparable data for years prior to 1927.

<sup>2</sup> Some of the establishments in the shortenings and vegetable-cooking-oils industry reported for their fiscal years conforming most nearly to the calendar year 1929, which is permissible under the census law, and for this reason the total production of shortenings given in this table is not identical with the aggregate of the totals for the four quarters of the year 1929 (1,230,101,530 pounds) as shown by the reports of the quarterly census of "Animal and vegetable fats and oils."

<sup>3</sup> Not reported as to materials used or as to size of container.

**TABLE 4.—SHORTENINGS (NOT INCLUDING LARD)—PRODUCTION IN ALL INDUSTRIES, BY QUANTITY AND VALUE, BY STATES: 1929 AND 1927**

[The figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments. Certain of the "Other States," however, reported larger production than some of the States shown separately]

STATE	1929		1927		STATE	1929		1927	
	Pounds	Value	Pounds	Value		Pounds	Value	Pounds	Value
United States.....	<sup>1</sup> 1,250,836,501	\$147,051,407	1,239,087,167	\$142,570,674	Nobraska.....	7,063,485	\$868,003	(?)	(?)
California.....	42,248,804	4,848,492	34,001,120	3,951,077	New Jersey.....	63,621,567	7,185,861	70,274,360	\$7,091,660
Colorado.....	6,147,428	700,804	7,330,082	938,177	Pennsylvania.....	260,535	30,965	(?)	(?)
Illinois.....	134,205,966	15,065,201	123,787,003	13,372,630	Tennessee.....	187,011,628	18,441,726	153,770,424	17,795,925
Indiana.....	680,941	80,020	1,273,467	100,524	Texas.....	212,627,626	25,201,042	232,943,320	28,211,802
Iowa.....	3,822,925	452,842	(?)	(?)	Washington.....	4,798,351	570,800	(?)	(?)
Kansas.....	34,408,260	3,852,530	40,220,082	4,400,046	Other States <sup>2</sup> .....	580,001,150	70,283,002	574,876,433	65,954,833

<sup>1</sup> See footnote 2, Table 3.

<sup>2</sup> Included in figure for "Other States" to avoid disclosing data for individual establishments.

<sup>3</sup> For 1929: Arizona, Florida, Georgia, Idaho, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New York, North Carolina, Ohio, Oklahoma, Oregon, Utah, Virginia, Wisconsin. For 1927: Alabama, Arizona, District of Columbia, Florida, Georgia, Idaho, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Virginia, Washington, Wisconsin.

**TABLE 5.—PRINCIPAL MATERIALS CONSUMED, BY KIND, QUANTITY, AND COST, FOR THE UNITED STATES: 1929**

[The difference between the sum of the costs of the several kinds of materials shown by this table, \$114,000,800, and the cost of materials as given in Tables 1 and 2 in this report is accounted for by the fact that the other tables cover all materials consumed, whereas this table covers only the principal materials, as specified]

KIND	Pounds	Cost	KIND	Pounds	Cost
Aggregate cost.....		\$114,000,800	Oils—Continued.....		
Oils, total.....	1,215,730,891	112,470,083	Peanut.....	2,330,137	\$140,937
Cottonseed.....	1,085,176,080	100,882,583	Other vegetable oils.....	22,362,284	2,067,018
Coconut.....	104,823,817	9,204,434	Animal oils.....	1,038,573	95,111
			Other materials.....		1,590,720

## CENSUS OF MANUFACTURES: 1929

TABLE 6.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS, ELECTRIC MOTORS, AND GENERATORS, 1929 AND 1927;<sup>1</sup> QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY	TYPE	1929		1927		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY
	Number	Capacity	Number	Capacity			Number	Capacity	Number	Capacity	
Prime movers and electric motors driven by purchased energy, aggregate.....	1,726	Horse-power 36,047	1,943	Horse-power 33,402	100.0	Electric motors, total.....	2,126	Horse-power 29,459	2,002	Horse-power 25,604	100.0
Prime movers, total.....	64	10,747	64	10,187	29.3	Driven by purchased energy.....	1,062	25,000	1,870	23,276	87.9
Steam, total.....	60	9,697	61	9,262	26.5	Driven by energy generated in establishments reporting.....	464	3,559	213	2,310	12.1
Engines.....	53	7,542	56	7,009	20.6	Electric generators.....	10	Kilowatts 3,003	13	Kilowatts 2,777	.....
Turbines.....	7	2,155	5	2,253	5.9	Electric energy purchased <sup>2</sup> .....	48,334,845		(*)	(*)	.....
Internal-combustion engines.....	4	1,050	3	925	2.8						
Electric motors driven by purchased energy.....	1,062	25,000	1,870	23,276	70.7						

<sup>1</sup> No comparable data for years prior to 1927.<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.<sup>3</sup> Data incomplete.TABLE 7.—WAGE EARNERS, BY MONTHS, BY STATES: 1929<sup>1</sup>

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
United States.....	2,712	2,687	<b>2,816</b>	2,706	2,647	2,639	2,716	<i>2,585</i>	2,670	2,827	2,799	2,817	2,633	91.4
Georgia.....	346	349	<b>353</b>	352	<i>329</i>	332	333	<i>310</i>	345	378	363	362	342	82.0
Tennessee.....	337	332	410	336	357	330	412	352	337	435	391	404	<i>347</i>	79.8
Texas.....	308	303	312	303	294	299	304	<i>238</i>	292	315	310	331	333	86.5

<sup>1</sup> No comparable data for earlier years.

## THE SUGAR INDUSTRIES

Combined statistics for the three sugar industries— | are treated for census purposes as separate and distinct  
beet sugar, cane sugar, and cane-sugar refining—which | from one another, are presented in the table below.

### COMBINED SUMMARY FOR THE SUGAR INDUSTRIES, FOR THE UNITED STATES:<sup>1</sup> 1899 TO 1929

(Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—  
Establishments Covered—Size)

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>2</sup>	Horsepower
1929	173	23,727	\$20,513,090	\$521,582,017	\$334,267,035	\$112,085,018	311,809
1927	163	22,309	28,056,380	630,441,459	710,381,330	73,030,877	274,707
1925	204	25,440	32,454,135	648,520,710	752,409,794	103,886,078	368,870
1923	226	25,645	31,875,674	773,009,204	871,736,338	98,073,044	288,667
1921	240	31,783	44,418,009	905,411,203	929,978,228	93,262,025	( <sup>3</sup> )
1919	307	39,084	42,027,051	793,816,541	937,883,018	144,567,377	281,704
1914	259	22,882	15,969,667	321,442,937	379,639,298	52,196,861	230,617
1909	201	20,730	12,202,168	274,847,074	327,371,780	52,523,800	217,805
1904	395	17,512	10,032,352	250,230,078	301,070,243	42,439,565	170,110
1899	687	16,000	8,010,030	226,188,666	247,034,303	26,846,303	( <sup>4</sup> )
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	13.1	0.1	5.2	-18.0	-10.7	52.4	13.5
1925-1927	-25.0	-12.1	-13.0	-1.9	-5.0	-28.8	-11.1
1923-1925	-0.7	-0.8	1.8	-10.2	-13.7	6.9	7.0
1921-1923	-8.1	-10.3	-28.2	36.8	38.7	55.0	-----
1919-1921	-19.0	-11.0	4.2	-28.7	-33.0	-56.2	-----
1919-1929	-43.0	-34.2	-30.8	-34.3	-32.4	-22.1	10.7
1909-1919	5.5	74.1	240.8	188.0	180.5	175.2	20.4
1899-1909	-57.6	28.8	53.5	21.5	32.5	152.0	-----

<sup>1</sup> Not including outlying possessions.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> No comparable figure.

## BEET SUGAR

**Description of the industry.**—The establishments assigned to the beet-sugar industry for census purposes are those engaged wholly or mainly in the manufacture of sugar from sugar beets. In 1929 the bulk of the production of beet sugar was reported from four States—California, Colorado, Nebraska, and Utah—which together produced nearly 68 per cent of the total for that year. Colorado produced far more beet sugar than any other State, but separate figures for Colorado can not be given in this report without disclosing an approximation of data reported by individual establishments.

**Period covered by report.**—The schedule used for this industry called for data in regard to operations during the season 1928–29; in other words, the manufacture of sugar from beets grown in the calendar year 1928. A few of the establishments, however, appear to have reported for the crop year 1929–30. The bulk of the work in any season is done during the last four months of the calendar year in which the beets are grown, and particularly during October and November.

**TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929**

[Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	82	7,406	\$10,020,743	\$70,900,908	\$108,552,581	\$37,591,073	146,303
1927	70	7,402	9,709,969	70,016,770	104,026,584	25,909,314	132,023
1925	89	8,872	12,038,067	87,038,255	132,339,012	45,300,767	146,085
1923	84	7,671	10,103,182	70,820,150	118,313,978	47,403,828	127,771
1921	92	18,602	22,658,392	121,868,863	139,109,655	17,240,792	( <sup>3</sup> )
1919	86	11,781	15,908,118	87,029,144	149,155,892	62,120,748	127,304
1914	60	7,997	6,606,204	41,399,361	62,606,210	21,205,849	76,705
1909	58	7,204	4,808,446	27,265,170	48,122,383	20,867,213	57,202
1904	51	3,993	2,436,702	14,486,876	24,393,794	9,966,018	36,490
1899	30	1,979	1,692,207	4,803,796	7,323,857	2,520,061	14,460
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	( <sup>4</sup> )	1.3	3.2	-10.2	3.5	45.1	3.1
1925-1927	( <sup>4</sup> )	-16.6	-19.7	-9.2	-20.7	-42.8	-3.4
1923-1925	( <sup>4</sup> )	17.2	19.6	22.9	11.9	-4.6	15.0
1921-1923	( <sup>4</sup> )	-44.3	-55.4	-41.9	-14.9	175.5	-----
1919-1921	( <sup>4</sup> )	15.5	42.4	40.0	-0.7	-72.2	-----
1914-1920	( <sup>4</sup> )	-36.4	-37.0	-18.5	-27.2	-30.5	14.9
1909-1910	( <sup>4</sup> )	63.5	230.8	219.2	210.0	197.9	122.7
1899-1909	( <sup>4</sup> )	265.7	340.3	467.6	557.7	727.0	295.6

<sup>1</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> Per cent not computed where base is less than 100.

# BEET SUGAR

**TABLE 2.—GENERAL STATISTICS, BY STATES: 1920, 1927, AND 1919**

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Cen- sus year	Num- ber of estab- lish- ments	Salaried officers and em- ployees	Wage earners (aver- age for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PUR- CHASED ELECTRIC ENERGY			Value of products <sup>1</sup>	Value added by manufac- ture <sup>2</sup>
					Total	Primo movers	Motors run by pur- chased energy			Total	Materials and con- tainers	Fuel and purchased energy		
United States.....	1920	82	1,447	7,400	146,393	136,913	9,480	\$2,708,026	\$10,020,743	\$70,060,008	\$66,387,083	\$4,673,925	\$108,652,581	\$37,501,073
	1927	79	1,470	7,402	142,023	133,693	8,390	3,014,775	0,709,060	70,010,770	74,584,877	3,431,803	104,026,584	28,000,814
	1919	85	2,408	11,781	127,394	117,763	9,631	4,427,056	15,008,118	87,020,144	81,650,540	5,378,604	140,165,802	62,120,748
Individual States:														
California.....	1920	5	96	707	17,804	16,701	1,073	234,851	1,000,087	6,951,856	6,302,811	559,045	11,211,474	4,250,018
	1927	5	120	575	20,300	19,163	1,297	285,380	748,803	5,555,030	5,210,623	338,407	7,545,748	1,000,738
	1919	10	384	1,512	27,155	22,198	4,957	730,180	2,246,411	14,154,361	13,174,193	980,168	20,854,064	12,100,733
Michigan.....	1920	12	98	610	15,802	14,630	1,253	209,330	825,111	5,213,800	4,701,435	452,365	7,335,204	2,121,404
	1927	16	179	1,032	18,093	16,387	1,706	298,137	1,510,991	11,330,089	10,342,543	987,546	14,441,818	3,105,229
	1919	10	385	1,836	20,550	19,811	739	604,584	2,704,910	16,081,850	15,520,700	1,161,150	20,378,870	9,697,620
Montana.....	1920	4	59	356	6,619	6,427	192	116,067	425,039	3,231,234	3,074,792	156,442	4,004,304	1,763,130
	1927	3	54	301	5,621	5,405	126	185,758	433,006	3,707,331	3,627,735	109,596	5,105,425	1,398,004
Ohio.....	1920	5	41	311	7,089	6,763	926	90,923	309,183	2,327,121	2,160,217	166,907	3,300,051	1,068,927
	1927	5	80	336	7,708	6,823	885	80,327	635,337	2,889,491	2,636,692	252,899	3,603,242	773,751
	1919	5	63	630	7,180	7,085	95	138,060	1,126,048	5,108,116	4,819,409	288,707	7,240,150	2,141,040
Utah.....	1920	10	120	691	13,971	12,107	1,804	235,107	920,363	5,600,735	5,360,047	240,688	9,114,201	3,501,400
	1927	9	89	459	11,166	9,232	1,934	202,110	617,357	4,315,723	4,121,310	194,413	5,855,872	1,530,140
	1919	16	310	2,214	14,948	11,810	3,138	617,482	1,999,012	12,630,335	11,868,671	761,664	20,500,135	7,038,800
Groups of States:														
Colo., 17 est.; Idaho, 7; Wash., 1; Wyo., 1.....	1920	29	645	3,207	49,585	47,000	2,576	1,150,144	4,313,231	31,805,621	30,000,630	1,795,991	48,520,581	16,723,050
Ind., 1 est.; Iowa, 2; Kans., 1; Nebr., 7; Minn., 2 est.; S. Dak., 1; Wis., 3.....	1920	11	281	1,272	26,570	25,650	914	439,576	1,614,270	12,200,372	11,277,520	922,850	18,576,080	6,375,708
States not shown sepa- rately.....	1927	41	942	4,609	79,075	76,543	2,532	2,061,054	5,804,205	51,123,106	48,640,064	2,483,042	68,254,050	17,181,857
	1919	38	1,260	5,589	57,561	56,859	792	2,268,644	7,771,131	38,454,482	36,267,567	2,186,915	68,604,637	30,150,155

<sup>1</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Colorado, 18 establishments; Idaho, 3; Indiana, 1; Iowa, 1; Kansas, 1; Minnesota, 2; Nebraska, 6; Nevada, 1; Washington, 1; Wisconsin, 3; Wyoming, 4.  
<sup>4</sup> Colorado, 14 establishments; Idaho, 8; Illinois, 1; Indiana, 1; Iowa, 1; Kansas, 1; Minnesota, 1; Montana, 1; Nebraska, 4; Washington, 1; Wisconsin, 4; Wyoming, 1.

**TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1923 TO 1920**

[The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

KIND	1920	1927	1925	1923	KIND	1920	1927	1925	1923
Aggregate value.....	\$108,652,581	\$104,026,584	\$132,330,012	\$118,313,078	Molasses—Continued.				
Sugar:					Other sold for purposes other than desugariza- tion—				
Total tons (2,000 pounds).....	1,086,055	800,300	1,082,842	764,450	Tons.....	24,300	20,257	48,664	( <sup>3</sup> )
Total value.....	\$100,707,031	\$98,584,598	\$124,418,497	\$112,793,044	Value.....	\$379,642	\$230,001	\$707,074	( <sup>3</sup> )
Granulated—					Beet pulp:				
Tons.....	1,068,285	803,215	1,075,570	749,447	Total tons.....	1,480,507	1,307,842	1,550,208	( <sup>3</sup> )
Value.....	\$100,249,231	\$98,141,359	\$124,025,027	\$112,384,350	Total value.....	\$5,230,705	\$4,413,417	\$5,520,651	\$3,707,803
Unfinished—					Dried pulp, exclusive of molasses pulp—				
Tons.....	17,770	6,181	7,272	5,012	Tons.....	87,530	79,239	134,057	( <sup>3</sup> )
Value.....	\$517,800	\$443,239	\$387,570	\$400,258	Value.....	\$2,127,354	\$1,974,275	\$3,207,429	\$3,170,808
Molasses: <sup>1</sup>					Moist pulp—				
Total tons (2,000 pounds).....	77,781	70,301	143,077	105,068	Tons.....	1,207,308	1,154,763	1,301,783	( <sup>3</sup> )
Total value.....	\$1,169,257	\$962,271	\$2,250,690	\$1,287,453	Value.....	\$1,124,038	\$905,668	\$822,095	( <sup>3</sup> )
Discarded from desugar- ization process (exclusive of that used for molasses beet pulp)—					Molasses pulp—				
Tons.....	53,472	50,134	94,513	( <sup>3</sup> )	Tons.....	75,693	73,840	54,458	( <sup>3</sup> )
Value.....	\$789,615	\$472,210	\$1,453,610	( <sup>3</sup> )	Value.....	\$1,070,403	\$1,443,674	\$1,430,227	\$530,905
					Other products, value.....	\$1,385,408	\$1,230,298	\$145,174	\$525,078

<sup>1</sup> Because of a change in the method of reporting molasses the figures for 1925 and prior years are not strictly comparable with those for 1927 and 1929.  
<sup>2</sup> Not called for on schedule.  
<sup>3</sup> No data.  
<sup>4</sup> Includes data for a small quantity of pressed beet pulp, the tonnage and value of which can not be shown without disclosing the production of individual establish-  
ments.  
<sup>5</sup> Reported as value of "moist beet pulp"; data on molasses beet pulp not called for on schedule used prior to 1925.  
<sup>6</sup> Includes the value of molasses sold or transferred to other factories for desugarization, as follows: For 1920, \$1,309,076, the value of 115,000 tons; for 1927, \$1,203,771, the value of 131,289 tons.

## CENSUS OF MANUFACTURES: 1929

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1929

[The figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments, and for the remaining States in groups.]

KIND	Tons (2,000 pounds)	Value	KIND	Tons (2,000 pounds)	Value
Granulated sugar, total.....	1,068,285	\$100,240,231	Molasses sold for purposes other than desugarization, total.....	24,309	\$379,042
California.....	103,990	9,803,440	Groups of States:		
Michigan.....	65,241	6,346,085	California and Idaho.....	1,306	20,404
Ohio.....	28,943	2,921,620	Colorado and Utah.....	6,550	94,950
Groups of States:			Michigan and Wisconsin.....	13,825	224,310
Colorado, Idaho, Montana, and Wyoming.....	540,399	50,552,028	Minnesota and South Dakota.....	2,568	39,873
Indiana and Wisconsin.....	16,676	1,775,517	Dried beet pulp, total.....	87,536	2,127,354
Iowa, Kansas, Minnesota, and Nebraska.....	197,034	18,477,766	Michigan.....	23,137	708,093
Other States:			Ohio.....	10,895	351,347
South Dakota, Utah, and Washington.....	106,052	10,282,857	Groups of States:		
Unfinished sugar, total.....	17,770	517,800	Colorado, Nebraska, and Utah.....	32,297	410,726
California.....	859	67,050	Indiana and Wisconsin.....	6,481	215,786
Michigan.....	721	49,071	Iowa, Kansas, and Minnesota.....	14,726	441,402
Groups of States:			Moist beet pulp, total.....	1,297,368	11,124,038
Colorado, Idaho, Montana, and Wyoming.....	4,119	198,890	Groups of States:		
Indiana, Ohio, and Wisconsin.....	7,039	36,730	Colorado and Montana.....	788,474	723,696
Iowa, Kansas, Minnesota, and Nebraska.....	4,511	120,779	Nebraska, South Dakota, and Wyoming.....	267,559	251,003
Other States:			Other States:		
South Dakota, Utah, and Washington.....	471	30,171	California, Idaho, and Utah.....	251,335	140,240
Molasses discarded from desugarization process (exclusive of that used for molasses beet pulp), total.....	53,472	789,616	Molasses beet pulp, total.....	75,693	1,970,403
Groups of States:			California.....	30,745	1,152,272
Colorado, Idaho, Montana, and Wyoming.....	20,702	428,055	Group of States:		
Indiana, Michigan, and Ohio.....	4,460	78,450	Iowa, Minnesota, and Nebraska.....	19,802	440,908
Iowa, Kansas, and Nebraska.....	9,020	128,030	Other States:		
Other States:			Colorado, Utah, Washington, and Wyoming.....	10,140	377,163
California and Utah.....	10,290	154,402			

<sup>1</sup> Includes data for a small quantity of pressed beet pulp, the tonnage and value of which can not be shown without disclosing the output of individual establishments.

TABLE 5.—SUGAR BEETS—ACREAGE AND QUANTITY TREATED, FOR THE UNITED STATES: 1929, 1927, 1925, AND 1923

	1929	1927	1925	1923		1929	1927	1925	1923
Acres planted, total.....	695,047	720,057	818,197	468,819	Quantity of beets received (tons of 2,000 pounds), total.....	7,186,443	7,190,876	( <sup>1</sup> )	( <sup>1</sup> )
By factories.....	19,824	12,924	19,984	11,810	Grown directly by factories.....	178,281	111,604	( <sup>1</sup> )	( <sup>1</sup> )
By tenants of factories.....	9,130	15,339	35,230	9,944	Grown by tenants of factories.....	74,551	111,769	( <sup>1</sup> )	( <sup>1</sup> )
By independent growers.....	667,193	700,794	762,983	447,056	Grown on contract by independent growers.....	6,933,611	6,967,503	( <sup>1</sup> )	( <sup>1</sup> )
Acres harvested, total.....	649,583	668,304	( <sup>1</sup> )	( <sup>1</sup> )	Quantity of beets treated (tons of 2,000 pounds).....	6,050,520	6,711,438	7,422,806	5,780,082
By factories.....	18,002	12,305	( <sup>1</sup> )	( <sup>1</sup> )	Average yield of sugar per ton of beets, pounds.....	818	208	292	201
By tenants of factories.....	8,546	14,279	( <sup>1</sup> )	( <sup>1</sup> )	Quality of beets treated:				
By independent growers.....	623,035	641,810	( <sup>1</sup> )	( <sup>1</sup> )	Average percentage of sucrose.....	<sup>2</sup> 16.54	14.80	17.2	15.3
					Average coefficient of purity.....	85.28	83.19	85.0	83.7

<sup>1</sup> Not called for on schedule.

<sup>2</sup> Maximum, 18.95; minimum, 13.28.

TABLE 6.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	1,167	Horse-power 146,303	1,169	Horse-power 142,023	1,371	Horse-power 146,085	1,136	Horse-power 127,304	686	Horse-power 76,705	100.0	100.0
Prime movers, total.....	545	136,013	613	133,033	687	135,014	670	117,763	500	71,630	63.5	62.4
Steam, total.....	528	135,070	570	132,031	669	135,674	659	117,469	449	70,507	62.7	62.2
Engines.....	474	104,975	534	109,173	626	116,284	624	103,697	(1)	(1)	71.7	81.4
Turbines.....	54	30,701	45	23,458	43	19,390	35	13,772	(1)	(1)	21.0	10.8
Internal-combustion engines.....	17	1,237	34	1,002	18	240	10	259	30	628	0.8	0.2
Water wheels and water turbines.....							1	35	18	105		(?)
Electric motors driven by purchased energy.....	622	9,480	549	8,300	684	11,071	457	9,631	180	5,075	6.5	7.0
Electric motors, total.....	5,035	85,340	4,415	71,198	4,054	70,173	2,466	44,871	814	17,871	100.0	100.0
Driven by purchased energy.....	622	9,480	549	8,300	684	11,071	457	9,631	180	5,075	11.1	21.5
Driven by energy generated in establishments reporting.....	4,413	75,860	3,866	62,898	3,370	59,102	1,949	35,240	634	12,796	88.9	78.5
Electric generators.....	177	Kilowatts 54,030	271	Kilowatts 47,720	183	Kilowatts 40,058	(?)	(?)	(?)	(?)		
Electric energy purchased <sup>4</sup> .....		Kilowatt-hours 5,246,818		(?)		(?)		(?)		(?)		

<sup>1</sup> Not called for separately on schedule.

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

<sup>3</sup> Not called for on schedule.

<sup>4</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>5</sup> Data incomplete.

TABLE 7.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929.....	7,406	3,501	<b>2,020</b>	2,073	2,758	2,870	3,114	3,548	5,100	6,129	21,379	<b>22,164</b>	14,003	11.8	
1925.....	8,872	5,303	<b>3,225</b>	3,309	3,701	4,022	4,272	4,076	6,034	8,785	22,522	<b>22,422</b>	18,103	14.3	
1919.....	11,781	11,627	<b>5,926</b>	4,691	5,573	6,386	7,248	7,994	9,064	10,607	23,281	<b>27,064</b>	21,941	17.2	
1914.....	7,997	6,593	<b>2,527</b>	2,537	3,164	3,989	4,045	4,470	7,180	9,006	20,353	<b>18,086</b>	13,854	12.4	
1909.....	7,204	6,405	<b>2,206</b>	2,750	3,057	3,432	3,943	4,505	6,045	7,215	15,815	<b>16,807</b>	14,233	13.1	
California.....	707	<b>223</b>	244	200	205	340	380	481	1,370	1,759	1,838	916	345	12.4	
Michigan.....	610	145	<b>137</b>	161	168	193	226	300	359	308	2,109	2,972	258	4.0	
Montana.....	356	109	<b>99</b>	124	130	141	102	180	192	227	1,218	1,069	617	8.1	
Ohio.....	311	97	<b>99</b>	99	104	100	112	132	161	201	1,221	1,294	102	7.5	
Utah.....	601	405	<b>234</b>	250	266	278	299	306	371	419	1,807	1,090	1,002	11.8	

## CANE SUGAR

**Description of the industry.**—The cane-sugar industry consists in the manufacture of various grades of sugar, including refined sugar, and of sirup and molasses, from sugarcane. It does not, therefore, cover the refining of purchased cane sugar, which is treated as a separate industry.

The schedule used in canvassing the cane-sugar industry called for data in regard to the manufacture of sugar during the season 1928-29 from cane grown in

1928. Most of the establishments, however, reported their operations for the calendar year 1929 or the season 1929-30.

**Concentration in Louisiana.**—All the establishments classified in this industry in the censuses for 1925 and subsequent years were located in Louisiana. In preceding censuses a few establishments were reported from other States. No data for outlying possessions are included for any year.

**TABLE 1.—SUMMARY FOR THE UNITED STATES: 1909 TO 1929**

[Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size. No comparable data available for years prior to 1909]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	70	2,319	\$1,642,463	\$12,222,558	\$18,325,792	\$6,103,234	66,779
1927	53	971	639,154	5,830,411	8,009,120	2,178,709	45,705
1925	94	2,060	1,410,964	11,585,359	13,434,099	1,848,040	72,700
1923	123	2,820	1,727,893	20,903,005	27,180,783	0,217,778	88,214
1921	134	2,724	2,268,207	10,941,432	22,961,221	0,019,780	( <sup>3</sup> )
1919	202	6,101	4,009,369	44,143,416	57,741,320	13,597,904	101,850
1914	181	3,632	1,561,376	15,968,218	21,635,373	5,677,155	113,246
1909	214	4,127	1,862,751	21,294,844	30,620,738	9,325,894	122,189
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	( <sup>4</sup> )	138.8	157.0	100.6	128.8	180.1	46.1
1925-1927	( <sup>5</sup> )	-53.0	-54.7	-49.7	-40.4	17.9	-37.2
1923-1925	-23.0	-20.7	-18.3	-44.7	-50.0	-70.3	-17.5
1921-1923	-9.0	3.5	-24.8	23.7	18.4	3.3	-----
1919-1921	-33.7	-55.4	-42.7	-61.6	-60.2	-65.7	-----
1919-1929	-65.3	-62.0	-59.0	-72.3	-68.3	-55.1	-34.4
1909-1919	-5.6	47.8	115.2	107.3	88.0	45.8	-10.6

<sup>1</sup> Figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> Per cent not computed where base is less than 100.

**TABLE 2.—GENERAL STATISTICS: 1929, 1927, AND 1919**

[Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	70	404	2,319	66,770	66,513	266	\$459,516	\$1,642,463	\$12,222,558	\$11,437,579	\$784,079	\$18,325,792	\$6,103,234
	1927	53	233	971	45,705	45,681	24	292,710	639,154	5,830,411	5,272,858	557,553	8,009,120	2,178,709
	1919	202	770	6,101	101,850	101,850	-----	1,665,448	4,009,369	44,143,416	42,161,236	1,082,180	57,741,320	13,597,904

<sup>1</sup> Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 2,745; proprietors and firm members, 22. For 1927, total, 1,225; proprietors and firm members, 21. For 1919, total, 7,045; proprietors and firm members, 165.

<sup>2</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Louisiana only.

<sup>5</sup> Florida, 3 establishments; Georgia, 2; Louisiana, 189; Mississippi, 1; South Carolina, 6; Texas, 1.



# CANE SUGAR

211

**TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE: 1923 TO 1929**

[The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products. See "Concentration in Louisiana," page 210]

KIND	1929	1927 <sup>1</sup>	1925	1923	KIND	1929	1927 <sup>1</sup>	1925	1923
Total value.....	\$18,325,792	\$8,000,120	\$13,434,900	\$27,180,783	Molasses, other than blackstrap: <sup>2</sup>				
Sugar:					Gallons.....	7,050,800	3,284,332	5,510,568	6,111,560
Total tons (2,000 pounds).....	179,839	56,492	110,041	169,573	Value.....	\$1,300,073	\$327,155	\$1,130,540	\$1,834,845
Total value.....	\$13,740,995	\$6,115,169	\$9,670,019	\$22,892,807	Blackstrap molasses: <sup>3</sup>				
Granulated <sup>4</sup> —					Gallons.....	10,874,130	2,300,702	0,051,341	0,016,965
Tons.....	27,742	7,435	15,057	21,521	Value.....	\$1,088,150	\$162,504	\$620,887	\$825,113
Value.....	\$2,039,143	\$600,771	\$1,583,872	\$3,491,039	Baggasse, for sale as such:				
Clarified <sup>5</sup> —					Tons.....	134,055	60,374	( <sup>6</sup> )	( <sup>6</sup> )
Tons.....	10,504	3,222	11,500	27,943	Value.....	\$684,055	\$410,155	\$220,011	( <sup>6</sup> )
Value.....	\$832,221	\$207,811	\$988,321	\$3,804,354	Other products, value.....	\$62,456	\$17,032	\$16,937	\$82,062
Raw—									
Tons.....	141,593	45,835	88,524	120,100					
Value.....	\$10,278,031	\$4,126,687	\$7,007,820	\$15,507,504					
Sirup: <sup>1</sup>									
Gallons.....	4,025,236	3,885,400	5,699,364	3,364,856					
Value.....	\$1,341,103	\$1,341,045	\$1,707,596	\$1,545,806					

<sup>1</sup> Production in 1927 was abnormally small because of flood conditions.   <sup>2</sup> For production of refiners' sirup and blackstrap, see "Cane-sugar refining," Table 3.  
<sup>3</sup> See footnote 2, Table 3, report on "Cane-sugar refining."   <sup>4</sup> No data.

**TABLE 4.—CANE GROWN AND CRUSHED: 1929**

	Tons	Cost		Tons	Cost
Total.....	2,726,310	\$10,468,456	Cane purchased and crushed.....	1,847,819	\$7,307,007
Cane grown and crushed by establishments reporting.....	818,080	2,877,814	Cane crushed for others on custom or share basis.....	60,402	193,036

**TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929**

TYPE	1929 *		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
		Horse-power		Horse-power		Horse-power		Horse-power		Horse-power		
Prime movers and electric motors driven by purchased energy, aggregate.....	677	66,779	481	46,705	670	72,796	1,270	101,850	1,437	113,240	100.0	100.0
Prime movers, total.....	604	66,513	477	46,081	670	72,796	1,270	101,850	1,432	113,214	99.6	100.0
Steam, total.....	625	64,037	435	44,120	652	71,088	1,108	98,823	1,342	112,770	97.2	97.0
Engines.....	591	59,860	411	42,039	624	67,155	1,090	97,943	( <sup>1</sup> )	( <sup>1</sup> )	89.0	90.2
Turbines.....	34	6,077	24	2,091	28	4,833	13	880	( <sup>1</sup> )	( <sup>1</sup> )	7.0	0.8
Internal-combustion engines.....	37	1,528	38	1,476	27	808	172	3,028	50	438	2.3	3.0
Water wheels and water turbines.....	2	50	4	55			1	8			0.1	( <sup>1</sup> )
Electric motors driven by purchased energy.....	13	266	4	24					5	32	0.4	
Electric motors, total.....	173	2,243	87	1,876	20	463	108	2,288	85	2,760	100.0	100.0
Driven by purchased energy.....	13	266	4	24					5	32	11.0	
Driven by energy generated in establishments reporting.....	160	1,977	83	1,852	20	463	108	2,288	80	2,728	88.1	100.0
Electric generators.....	20	Kilowatts 2,101	31	Kilowatts 1,874	46	Kilowatts 1,458	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )		
Electric energy purchased <sup>2</sup> .....		Kilowatt-hours 272,449		( <sup>1</sup> )		( <sup>1</sup> )		( <sup>1</sup> )		( <sup>1</sup> )		

\* Not called for separately on schedule.   <sup>1</sup> Not called for on schedule.  
<sup>2</sup> Less than one-tenth of 1 per cent.   <sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>4</sup> Revised.   <sup>5</sup> Data incomplete.

**TABLE 6.—WAGE EARNERS, BY MONTHS: 1929, 1925, 1919, 1914, AND 1909**

[The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See "Concentration in Louisiana," p. 210]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929.....	2,310	1,653	693	<b>608</b>	652	695	867	989	1,018	1,226	4,686	7,204	7,233	7,233	8.4
1925.....	2,066	1,773	<i>808</i>	273	295	351	402	499	601	738	2,318	8,570	8,725	8,725	3.0
1919.....	6,161	8,655	4,051	2,160	<i>1,514</i>	1,646	1,727	1,845	1,708	1,854	8,104	19,395	18,570	18,570	7.7
1914.....	3,632	1,453	893	673	701	723	857	1,062	1,017	1,338	7,263	14,635	12,970	12,970	4.6
1909.....	4,127	1,598	<i>569</i>	715	793	874	1,040	1,122	920	1,322	6,698	15,761	15,115	15,115	3.5

# CANE-SUGAR REFINING

Description of the industry.—The cane-sugar refining industry embraces establishments engaged in the refining of raw cane sugar, the greater part of which is imported. The cane-sugar refineries are located in Continental United States, chiefly in or near the seaports through which the raw materials are imported.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1909 TO 1929

[Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size. No comparable data available for years prior to 1909]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>	Horsepower
1929	21	13,912	\$17,850,493	\$438,399,151	\$507,380,262	\$68,990,111	98,637
1927	21	13,006	17,707,257	551,594,278	597,445,632	45,851,354	86,079
1925	21	14,502	18,955,114	549,896,102	606,632,783	50,736,681	89,098
1923	20	15,254	20,044,499	681,880,130	726,241,577	44,361,438	72,682
1921	20	15,457	19,463,410	426,000,908	466,602,352	40,001,444	( <sup>4</sup> )
1919	20	18,202	22,710,404	662,143,981	730,980,706	68,842,725	52,541
1914	18	11,253	7,823,377	204,085,358	239,398,715	25,313,357	40,006
1909	19	9,300	5,620,971	226,287,900	248,628,650	22,340,000	38,414
PER CENT OF INCREASE OR DECREASE (-)							
1927-1929		-0.6	0.8	-20.5	-15.1	50.5	13.4
1925-1927		-3.5	-6.0	0.3	-1.5	-19.2	-2.4
1923-1925	( <sup>5</sup> )	-4.9	-5.4	-19.4	-16.5	27.9	22.0
1921-1923		-1.3	3.0	59.8	55.6	10.0	
1919-1921		-15.1	-14.3	-35.0	-36.2	-41.0	
1910-1929	( <sup>5</sup> )	-23.6	-21.4	-33.8	-36.6	0.2	87.7
1909-1919	( <sup>5</sup> )	93.7	304.0	192.0	194.0	208.1	30.8

<sup>1</sup> Not including outlying possessions.

<sup>2</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Not called for on schedule.

<sup>5</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. California, not shown separately, reported a larger value of products than Louisiana. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	21	1,743	13,912	98,637	84,565	14,072	\$4,669,528	\$17,850,493	\$438,399,151	\$431,620,225	\$6,778,026	\$507,380,262	\$68,990,111
	1927	21	1,746	13,006	86,979	84,396	2,583	4,645,827	17,707,257	551,594,278	543,380,070	8,207,008	597,445,632	45,851,354
	1919	20	2,718	18,202	52,541	52,181	360	5,442,187	22,710,404	662,143,981	652,374,860	0,769,121	730,980,706	68,842,725
Louisiana	1929	4	202	2,223	7,250	7,250		330,655	1,900,287	64,625,238	63,637,217	988,021	74,706,373	10,081,136
	1927	4	181	2,069	10,325	10,325		404,670	1,867,371	78,109,480	76,810,356	1,290,124	82,574,110	4,464,636
New York	1929	5	405	4,352	21,644	18,760	2,884	1,253,025	6,274,281	114,334,200	112,321,401	2,012,889	137,432,214	23,097,924
	1927	5	303	4,225	17,397	15,424	1,973	1,234,489	5,673,103	143,848,778	141,825,388	2,023,390	155,217,848	11,369,070
	1919	5	1,210	6,289	15,934	15,934		2,058,005	8,330,303	245,299,262	242,054,505	3,244,757	268,818,172	23,018,910
Pennsylvania	1929	3	271	1,715	17,208	17,208		709,029	2,726,953	65,823,218	64,737,889	1,085,329	73,980,294	8,160,076
	1927	3	340	1,957	17,630	17,630		905,353	3,203,706	88,486,915	87,253,158	1,233,757	95,684,436	7,197,521
	1919	4	392	3,221	9,762	9,762		784,817	4,340,680	119,796,068	117,893,162	1,902,906	133,706,110	14,000,051
Other States (Calif., 2 est.; Ga., 1; Md., 1; Mass., 2; N. J., 1; Tex., 2)	1929	9	805	5,622	52,535	41,847	11,188	2,107,819	6,948,972	193,616,405	190,923,718	2,692,687	221,261,381	27,044,970
States not shown separately	1927	9	862	5,715	41,627	41,017	610	2,100,315	6,872,987	241,140,105	237,488,768	3,660,337	263,960,232	22,820,127
	1919	11	1,111	8,092	26,845	26,485	360	2,599,865	10,030,421	297,048,661	292,427,193	4,621,468	328,872,415	31,823,764

<sup>1</sup> Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total 15,059; proprietors and firm members, 4. For 1927, total, 15,742; proprietors and firm members, none. For 1919, total, 20,921; proprietors and firm members, 6.

<sup>2</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> California, 2 establishments; Georgia, 1; Maryland, 1; Massachusetts, 2; New Jersey, 1; Texas, 2.

<sup>5</sup> California, 2 establishments; Georgia, 1; Louisiana, 3; Massachusetts, 2; New Jersey, 2; Texas, 1.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES:<sup>1</sup> 1923 TO 1929

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products]

KIND	1929	1927	1925	1923
Total value.....	\$507,389,262	\$597,445,632	\$606,632,783	\$726,241,577
Refinery products.....	507,193,319	597,038,850	606,119,702	725,615,923
Other products.....	190,943	406,773	513,081	625,654
Refined sugar, hard: <sup>2</sup>				
Tons (2,000 pounds).....	4,794,767	4,027,001	5,243,548	
Value.....	\$473,340,370	\$572,033,038	\$583,208,004	4,420,128
Refined sugar, soft or brown: <sup>2</sup>				
Tons (2,000 pounds).....	320,551	200,001	168,169	\$722,278,707
Value.....	\$29,057,634	\$20,086,867	\$10,001,030	
Refiners' sirup, edible: <sup>3</sup>				
Gallons.....	4,320,168	5,536,808	8,536,094	
Value.....	\$610,802	\$1,247,054	\$2,151,518	\$41,006,563
Refiners' blackstrap and nonedible sirup: <sup>4</sup>				
Gallons.....	32,169,406	31,014,017	37,373,450	\$9,337,126
Value.....	\$3,044,428	\$2,171,000	\$3,859,160	
Other sugar products.....	\$830,085			

<sup>1</sup> Not including outlying possessions.  
<sup>2</sup> For production in the cane-sugar industry, see Table 3 of report for that industry. The combined production, in the cane-sugar-refining and cane-sugar industries, of sugar intended for consumption without further refining, was as follows: 1929, 5,153,554 tons, valued at \$605,875,308; 1927, 5,188,739 tons, \$594,008,487; 1925, 5,439,234 tons, \$602,031,227; 1923, 4,478,592 tons, \$720,574,100.  
<sup>3</sup> For production of sirup and blackstrap molasses in the cane-sugar industry, see Table 3 of report for that industry.  
<sup>4</sup> Reported as "sirup," "refiners' sirup," and "molasses."

TABLE 4.—RAW SUGAR TREATED, FOR THE UNITED STATES:<sup>1</sup> 1923 TO 1929

[Tons of 2,000 pounds]

SOURCE	1929	1927	1925	1923
Aggregate.....	5,295,815	5,404,703	5,735,112	4,733,217
Domestic, total.....	1,423,052	1,374,075	1,533,672	1,043,009
Continental United States and Hawaii <sup>2</sup> .....	988,221	824,090	1,026,599	748,007
Porto Rico.....	434,831	544,120	490,655	293,450
Virgin Islands.....		6,750	10,421	700
Foreign, total.....	3,872,763	4,029,728	4,201,440	3,690,148
Cuba and Honduras.....	3,227,933	3,513,013	3,829,143	(9)
Philippines.....	644,830	510,715	372,638	(9)
Other.....			2,760	(9)

<sup>1</sup> Not including outlying possessions.  
<sup>2</sup> Combined to avoid disclosing amounts treated by individual establishments.  
<sup>3</sup> Cuba only; no imports of raw sugar from Honduras reported for 1929 or 1925.  
<sup>4</sup> No comparable data.

TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1920, 1927, 1925, 1910, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1920		1927		1925		1910		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	1,171	Horsepower 94,437	355	Horsepower 86,070	375	Horsepower 80,098	200	Horsepower 52,541	533	Horsepower 49,660	100.0	100.0
Prime movers, total.....	184	84,565	160	84,300	152	85,284	200	52,181	261	45,470	85.7	99.3
Steam, total.....	183	84,405	158	84,201	151	85,274	200	52,181	262	45,407	85.6	99.3
Engines.....	109	32,872	107	38,220	118	48,074	205	32,278	(1)	(1)	33.3	61.4
Turbines.....	74	51,533	51	46,065	33	37,200	31	19,903	(1)	(1)	52.3	37.0
Internal-combustion engines.....	1	100	3	105	1	10			2	00	0.1	
Electric motors driven by purchased energy.....	987	14,072	195	2,583	223	3,814	3	300	200	4,190	14.3	0.7
Electric motors, total.....	7,934	107,247	6,048	95,318	6,026	94,904	3,023	54,608	2,110	24,016	100.0	100.0
Driven by purchased energy.....	987	14,072	195	2,583	223	3,814	3	300	200	4,190	13.1	0.7
Driven by energy generated in establishments reporting.....	6,947	93,175	6,453	92,735	6,403	91,150	3,020	54,308	1,911	19,826	86.9	99.3
Electric generators.....	82	Kilowatts 50,713 Kilowatt-hours	82	51,880	82	51,058	(2)	(2)	(2)	(2)		
Electric energy purchased <sup>3</sup> .....		11,517,050		(1)		(1)		(2)		(2)		

<sup>1</sup> Not called for separately on schedule.  
<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>3</sup> Not called for on schedule.  
<sup>4</sup> Data incomplete.

TABLE 6.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
United States:														
1929.....	13,912	13,458	13,887	14,523	14,530	13,563	14,448	14,075	14,981	13,603	14,030	13,039	<b>12,197</b>	81.4
1925.....	14,502	<i>12,672</i>	14,874	15,772	15,185	15,276	15,352	15,200	14,849	14,911	13,885	12,873	13,280	79.7
1919.....	18,202	<i>14,553</i>	18,692	19,311	18,904	19,539	19,600	20,501	19,058	19,366	17,624	16,204	15,002	71.2
1914.....	11,253	<i>9,112</i>	9,930	11,722	11,983	12,220	12,792	12,471	12,397	11,593	10,300	10,117	10,300	71.2
1909.....	9,399	<i>7,955</i>	8,653	9,880	9,652	9,492	9,920	9,952	9,613	9,650	9,341	9,583	9,048	79.7
Louisiana.....	2,223	2,114	2,306	2,338	2,817	2,177	2,323	2,449	2,668	2,172	2,004	1,880	<b>1,820</b>	68.4
New York.....	4,352	4,000	4,052	4,530	4,543	4,240	4,592	4,655	4,664	4,481	4,559	4,137	3,771	80.8
Pennsylvania.....	1,715	1,661	1,701	1,703	1,828	1,757	1,770	1,704	1,832	1,600	1,704	1,487	1,025	81.2

## VINEGAR AND CIDER

Description of the industry.—This industry consists in the manufacture of vinegar and cider in factories, not including small custom mills nor those located on farms. A large part of the total output of vinegar and

cider is, however, made as a secondary product by canning establishments, classified under the industry designation "Canning and preserving: Fruits and vegetables, etc." (See Table 3, p. 216.)

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929.....	172	970	\$1,021,581	\$6,016,020	\$10,450,332	\$4,434,303	8,074
1927.....	158	1,123	1,235,000	5,858,241	10,755,246	4,897,005	7,502
1925.....	161	1,243	1,231,947	6,838,080	12,233,099	5,395,010	6,020
1923.....	160	1,317	1,270,000	7,462,321	12,535,128	5,072,805	8,414
1921.....	227	1,481	1,878,142	0,893,000	13,248,828	8,355,138	( <sup>3</sup> )
1919.....	720	1,081	2,047,450	15,558,525	24,722,610	9,164,085	17,043
1914.....	618	1,220	712,667	4,440,462	7,810,892	3,370,440	13,117
1909.....	963	1,542	723,488	4,604,015	8,447,577	3,453,532	16,657
1904.....	588	1,323	725,148	3,852,233	7,265,460	3,413,236	10,441
1899.....	613	1,557	652,077	3,134,313	5,931,002	2,797,370	10,000
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929.....	8.9	-12.8	-17.3	2.7	-2.8	-0.4	14.7
1925-1927.....	-1.9	-9.7	0.3	-14.3	-12.1	-0.2	0.1
1923-1925.....	-15.3	-5.6	-3.7	-8.4	-2.4	0.4	-17.0
1921-1923.....	-16.3	-11.1	-19.0	-24.1	-31.3	-30.3	.....
1919-1921.....	-33.5	-25.2	-22.9	-36.4	-26.2	-8.8	.....
1919-1929.....	-76.1	-50.6	-50.1	-61.3	-57.7	-51.0	-51.7
1909-1919.....	-25.2	28.5	183.0	213.4	192.7	163.1	7.7
1899-1909.....	57.1	-1.0	11.0	58.4	42.4	24.5	( <sup>4</sup> )

<sup>1</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> Less than one-tenth of 1 per cent.

# VINEGAR AND CIDER

215

TABLE 2.—GENERAL STATISTICS, BY STATES: 1920, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employes <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States.....	1920	172	283	979	8,074	2,340	6,328	\$929,942	\$1,021,581	\$0,016,029	\$5,810,749	\$205,280	\$10,450,332	\$4,434,303
	1927	158	315	1,123	7,562	2,006	5,400	885,625	1,235,906	5,858,241	5,600,274	191,907	10,765,246	4,897,005
	1919	720	628	1,081	17,043	13,000	4,937	1,108,017	2,047,460	15,558,525	15,200,351	352,174	24,722,610	9,164,085
Individual States:														
California.....	1920	12	14	71	480	---	480	10,855	79,729	317,417	301,023	16,394	542,548	225,131
	1927	12	13	45	394	---	394	18,400	63,132	214,413	209,206	8,147	420,351	214,938
	1919	12	18	97	270	11	298	31,092	94,541	291,006	279,975	12,021	602,115	370,119
Colorado.....	1920	4	5	10	50	37	19	15,020	11,307	37,250	36,320	924	88,780	51,530
	1927	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
	1919	4	4	12	92	---	92	7,200	15,180	59,722	55,413	1,309	117,610	60,888
Connecticut.....	1920	4	2	11	91	15	76	3,540	12,367	49,373	48,093	1,280	92,702	43,329
	1927	5	4	7	89	25	64	2,200	9,293	52,415	51,995	420	85,235	32,820
	1919	93	1	34	1,152	1,045	107	1,000	20,948	100,500	155,555	4,945	416,605	256,165
Illinois.....	1920	8	15	28	506	288	278	34,355	28,075	325,593	318,634	6,920	476,430	159,873
	1927	9	25	60	704	488	216	60,424	99,877	418,024	401,453	10,571	800,445	382,421
	1919	26	55	163	1,160	898	262	121,085	194,492	1,021,778	1,508,421	63,357	2,446,107	823,419
Massachusetts.....	1920	12	16	66	483	105	288	35,557	82,887	382,177	373,880	8,297	604,243	282,006
	1927	11	13	60	478	109	279	61,215	72,875	230,585	230,080	5,899	440,849	204,264
	1919	75	29	89	1,140	895	275	30,443	99,405	721,130	700,931	14,205	1,208,902	542,706
Michigan.....	1920	11	10	33	393	167	226	20,357	30,501	157,139	150,753	6,386	275,921	118,782
	1927	9	11	29	310	180	136	23,932	35,461	101,337	96,824	4,513	292,162	100,825
	1919	42	19	100	1,200	935	265	44,033	108,009	800,501	844,540	21,052	1,238,792	372,231
Missouri.....	1920	9	29	80	1,009	50	959	87,630	85,077	515,776	491,189	6,587	1,034,926	510,150
	1927	5	16	65	592	55	507	44,598	113,803	370,274	338,877	31,397	740,461	379,187
	1919	13	28	64	1,001	644	57	98,328	71,274	552,113	536,080	16,027	1,022,673	470,500
New Jersey.....	1920	9	11	40	443	285	158	31,392	32,793	291,078	282,409	8,678	514,009	252,931
	1927	5	7	29	258	210	48	8,670	20,969	90,841	92,598	4,243	161,078	64,237
	1919	17	5	31	428	408	20	13,270	36,518	374,708	370,184	4,524	578,210	198,511
New York.....	1920	45	55	247	2,067	711	1,386	112,001	269,177	1,670,000	1,600,038	61,962	2,608,007	907,917
	1927	44	54	274	2,541	620	1,915	181,304	339,453	1,611,174	1,547,630	63,545	2,885,038	1,273,894
	1919	169	130	488	4,420	3,271	1,158	204,056	531,252	4,068,723	4,870,084	82,630	7,227,741	2,209,618
Oregon.....	1920	6	8	34	179	---	179	10,511	35,008	116,799	112,943	3,556	297,393	90,594
	1927	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
	1919	10	14	60	210	40	179	24,872	56,000	379,606	379,506	9,100	529,403	140,767
Pennsylvania.....	1920	6	11	38	306	225	171	19,759	49,400	204,408	195,258	9,150	429,914	216,506
	1927	7	29	40	293	66	137	41,880	61,827	314,044	304,754	9,290	503,370	249,326
	1919	42	75	126	625	524	101	114,216	132,983	1,141,599	1,120,622	14,977	1,866,432	664,833
Texas.....	1920	4	17	26	75	---	75	42,730	29,465	239,914	235,979	3,935	517,434	277,520
	1927	6	21	43	64	---	64	54,729	30,602	321,103	316,098	4,405	683,441	362,338
	1919	7	48	64	37	---	37	107,593	59,498	383,831	381,404	2,397	782,272	398,441
Washington.....	1920	9	12	39	579	25	554	22,140	37,764	216,064	203,453	12,611	408,325	192,291
	1927	7	11	30	269	30	239	15,253	35,907	130,930	135,472	4,468	307,793	167,833
	1919	19	27	98	1,147	223	924	54,747	135,270	425,392	401,750	23,633	902,492	477,100
Groups of States:														
Ark., 3 est.; La., 2.....	1920	5	22	64	214	75	130	43,587	52,018	481,020	473,758	7,268	685,919	204,893
Fla., 1 est.; W. Va., 2.....	1920	3	7	36	329	20	309	7,320	20,700	121,741	118,120	3,615	221,000	99,259
Idaho, 3 est.; Minn., 1.....	1920	4	6	9	116	40	76	10,500	11,337	88,159	85,806	2,353	161,328	78,109
Ind., 1 est.; Ohio, 3.....	1920	5	16	32	374	70	304	58,865	41,918	265,730	258,231	7,505	452,386	186,049
Iowa, 1 est.; Kans., 4.....	1920	5	7	16	357	123	234	7,000	16,358	108,864	105,084	1,780	188,886	82,022
Me., 2 est.; N. H., 1; Vt., 1.....	1920	4	2	8	81	5	76	1,710	4,557	20,465	19,449	816	45,034	24,509
Md., 2 est.; Va., 2.....	1920	4	6	50	333	15	318	10,420	53,381	175,892	172,245	3,647	300,091	124,199
Okla., 1 est.; Tenn., 2.....	1920	3	12	20	23	---	23	20,693	20,162	262,498	258,881	3,617	483,442	220,044
States not shown separately.	1927	38	81	453	1,684	217	1,467	174,011	382,047	1,082,101	1,043,012	30,089	3,447,063	1,404,052
	1919	191	175	555	5,034	3,842	1,192	277,262	485,364	3,628,830	3,532,202	91,628	5,734,157	2,110,327

<sup>1</sup> Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry are as follows: For 1920, total 1,397; proprietors and firm members, 105; for 1927, total 1,650; proprietors and firm members, 112; for 1919, total 3,333; proprietors and firm members, 724.

<sup>2</sup> The figures for 1920 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Withheld from publication in order to avoid disclosing data for individual establishments.

<sup>5</sup> Alabama, 2 establishments; Arkansas, 3; Idaho, 4; Indiana, 2; Kansas, 3; Kentucky, 1; Louisiana, 2; Maine, 2; Maryland, 1; Minnesota, 1; Ohio, 4; Oklahoma, 1; Oregon, 3; Tennessee, 1; Vermont, 1; Virginia, 4; West Virginia, 2; Wisconsin, 1.

<sup>6</sup> Alabama, 2 establishments; Arkansas, 3; Delaware, 1; District of Columbia, 2; Florida, 1; Georgia, 2; Idaho, 4; Indiana, 3; Iowa, 2; Kansas, 7; Kentucky, 5; Louisiana, 1; Maine, 47; Maryland, 5; Minnesota, 1; Mississippi, 1; Montana, 1; Nebraska, 4; New Hampshire, 14; Ohio, 18; Oklahoma, 1; Rhode Island, 9; Tennessee, 2; Utah, 2; Vermont, 33; Virginia, 11; West Virginia, 7; Wisconsin, 2.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1923 TO 1929

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products]

CLASS	1929	1927	1925	1923	CLASS	1929	1927	1925	1923
1. Vinegar and cider industry, all products, total value.....	\$10,450,332	\$10,755,246	\$12,233,099	\$12,535,126	5. Vinegar and cider made as secondary products of other industries (principally canning and preserving).....	\$3,251,386	\$4,456,507	\$7,163,313	\$5,588,750
2. Vinegar.....	8,100,090	7,650,885	9,002,478	9,837,218	Vinegar and cider, all industries, total (sum of 2, 3, and 5).....	17,796,479	13,420,635	18,266,022	16,955,226
3. Cider.....	1,444,403	1,407,243	1,500,231	1,520,252	Vinegar.....	15,872,207	11,566,353	16,317,718	14,065,827
4. Other products (not normally belonging to the industry).....	905,239	1,791,118	1,130,390	1,168,656	Cider.....	1,924,272	1,854,282	1,948,304	1,989,300

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	1,005	Horsepower 8,674	957	Horsepower 7,562	834	Horsepower 6,929	1,313	Horsepower 17,943	850	Horsepower 13,117	100.0	100.0
Prime movers, total.....	80	2,340	79	2,096	130	2,579	657	13,006	600	11,280	27.0	72.5
Steam, total.....	63	2,040	47	1,404	74	2,057	270	7,893	312	7,188	23.6	43.0
Engines.....	63	2,040	47	1,404	74	2,057	271	7,783	(1)	(1)	23.6	43.4
Turbines.....							5	30	(1)	(1)		0.5
Internal-combustion engines.....	13	180	20	511	52	431	205	2,806	224	2,201	2.1	15.6
Water wheels and water turbines.....	4	111	3	91	4	01	86	2,337	73	1,840	1.3	13.0
Electric motors driven by purchased energy.....	925	6,333	878	5,466	704	4,350	656	4,937	247	1,823	73.0	27.5
Electric motors, total.....	935	6,395	903	5,608	716	4,403	763	6,464	252	1,845	100.0	100.0
Driven by purchased energy.....	925	6,333	878	5,466	704	4,350	656	4,937	247	1,823	99.0	70.4
Driven by energy generated in establishments reporting.....	10	67	25	142	11	53	107	1,527	5	17	1.0	23.6
Electric generators.....	3	Kilowatts 201 Kilowatt-hours 2,462,741	2	Kilowatts 156	67	Kilowatts 623	(2)	(2)	(2)	(2)		
Electric energy purchased.....				(1)		(1)		(2)		(2)		

1 Not called for separately on schedule.  
 2 Not called for on schedule.  
 3 This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
 4 Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by italic figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929.....	979	708	<i>644</i>	684	676	710	724	779	868	1,205	1,844	1,771	1,072	1,072	34.0
1925.....	1,243	717	<i>695</i>	761	828	825	875	931	1,005	1,518	2,559	2,523	1,675	1,675	27.1
1919.....	1,981	1,431	<i>1,375</i>	1,400	1,387	<i>1,361</i>	1,455	1,601	1,955	2,618	3,468	3,465	2,225	2,225	30.2
1914.....	1,229	776	<i>768</i>	777	778	778	815	882	1,008	1,051	2,529	2,477	1,513	1,513	30.4
1909.....	1,542	921	<i>891</i>	886	880	885	922	1,057	1,169	2,130	3,464	3,453	1,852	1,852	25.6
California.....	71	36	<i>34</i>	45	37	40	40	54	65	118	148	122	107	107	23.0
Colorado.....	16	7	<i>8</i>	10	8	7	7	7	7	16	51	47	15	15	13.7
Connecticut.....	11	4	<i>4</i>	5	5	5	5	5	5	17	27	28	26	26	10.7
Illinois.....	28	18	<i>16</i>	21	20	23	24	22	27	54	51	35	24	24	29.6
Massachusetts.....	66	40	<i>44</i>	41	40	40	47	55	65	92	126	112	80	80	31.7
Michigan.....	33	16	<i>15</i>	15	15	16	16	16	20	28	64	80	78	35	18.8
Missouri.....	80	69	<i>70</i>	70	73	71	72	74	77	101	117	98	72	72	59.0
New Jersey.....	40	23	<i>22</i>	24	25	25	27	33	35	45	70	104	51	51	21.2
New York.....	247	199	<i>187</i>	140	137	139	150	144	170	260	557	608	330	330	21.4
Oregon.....	34	16	<i>16</i>	18	19	23	31	30	32	43	77	67	31	31	20.8
Pennsylvania.....	38	35	<i>35</i>	35	35	42	55	35	38	42	40	40	39	39	33.3
Texas.....	26	37	<i>37</i>	34	33	30	36	23	23	15	15	15	15	15	40.5
Washington.....	39	24	<i>25</i>	25	18	20	23	23	33	72	82	75	46	46	22.0

## Group 2.—TEXTILES AND THEIR PRODUCTS

### THE GROUP AS A WHOLE

This group of industries may be divided into three subgroups, namely: (1) The textile-mill industries, that is, those in which are performed one or more of the processes included in the manufacture of the fabric, such as spinning cotton, silk, wool, or other fiber, weaving the fabric from yarn, dyeing and finishing yarn or fabric, and other preparatory and finishing processes; (2) industries in which the establishments cut or manufacture wearing apparel from purchased fabrics; (3) industries in which other articles, such as awnings, tents, bags, horse blankets, flags, regalia, badges, floor coverings, etc., are made from purchased fabrics. In making use of the figures for cost of materials and value of products for the group as a whole, it must be borne in mind that they include a considerable amount of duplication due to the fact that industries making wearing apparel or other articles from purchased fabrics (subgroups 2 and 3) use the products of the textile mills (subgroup 1) as their principal ma-

terials. Even within a single industry considerable duplication of this kind sometimes occurs.

The textile group occupies second place among the 16 groups of industries as ranked according to value of products, being outranked only by the "Food and kindred products" group. (See Table, p. 41.) When the comparison is made on the basis of the average number of wage earners, however, the textile group leads all others.

The following table presents summary statistics for the group as a whole, for each of its subgroups, and for each industry separately. On pages 224 to 435 are given detailed reports for the individual industries, all of which have been previously published in pamphlet form.

The tables on pages 222 and 223 show total consumption of all fibers and of purchased yarns in textile mills, by industries, for 1929, with comparative figures for earlier years.

SUMMARY FOR GROUP 2.—TEXTILES AND THEIR PRODUCTS: 1914 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and 1914 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>1</sup>	Horsepower
Aggregate for the groups.....	1929	27,404	1,707,708	\$1,733,031,423	\$5,103,845,724	\$9,243,302,523	\$4,130,450,700	4,145,008
	1927	20,843	1,094,410	1,759,958,139	4,023,716,808	8,050,472,873	4,027,757,005	4,173,438
	1925	24,450	1,028,283	1,654,814,270	5,349,024,770	9,126,154,002	3,770,230,132	3,080,522
	1923	26,793	1,715,203	1,743,797,717	5,304,441,315	9,402,281,003	4,007,840,651	3,783,401
	1921	25,055	1,809,738	1,472,352,008	3,801,000,387	6,956,404,003	3,155,374,570	(?)
	1919	28,451	1,010,003	1,481,142,946	5,370,387,036	9,210,932,057	3,831,545,321	3,248,304
	1914	23,350	1,505,012	675,781,743	2,013,737,838	3,444,810,423	1,431,072,555	2,717,078
Textile-mill products, total.....	1929	6,074	1,090,163	1,052,970,525	2,820,002,555	5,043,171,018	2,222,178,453	3,843,398
	1927	7,244	1,110,733	1,090,734,717	2,762,074,252	4,933,281,020	2,170,007,377	3,000,023
	1925	7,470	1,110,200	1,006,202,320	3,234,034,647	5,342,617,183	2,108,582,530	3,748,885
	1923	7,810	1,164,038	1,122,751,533	3,213,272,073	5,527,557,587	2,314,285,514	3,550,440
	1921	7,241	908,557	808,373,303	2,136,803,103	3,806,448,001	1,750,045,408	(?)
	1919	7,143	1,032,327	910,047,020	3,258,527,400	5,481,883,549	2,223,350,140	3,024,486
	1914	5,042	950,880	404,000,024	1,185,002,064	1,935,341,548	750,248,584	2,522,862
Carpets and rugs, wool, other than rag.....	1929	67	32,023	40,014,207	86,650,802	170,015,304	90,264,472	65,205
	1927	65	32,820	42,040,802	85,601,835	166,888,408	81,286,573	65,828
	1925	69	33,886	43,382,517	104,195,624	187,778,772	83,683,148	63,008
	1923	79	35,217	48,628,430	97,472,044	109,480,023	102,007,070	53,852
	1921	72	22,022	28,705,036	50,118,184	103,880,500	53,702,366	(?)
	1919	75	22,033	24,216,121	67,118,030	123,253,828	50,135,789	37,593
	1914	97	31,300	14,715,015	42,280,223	60,128,185	26,847,002	42,704
Cloth sponging and refinishing.....	1929	46	902	1,457,104	88,340	3,361,221	3,272,881	800
	1927	52	736	1,602,111	160,770	3,457,038	3,207,150	933
	1925	61	931	1,880,118	203,420	3,888,852	3,085,423	975
	1923	65	1,225	2,200,506	208,263	4,651,736	4,353,473	911
	1921	65	1,123	1,769,597	264,300	4,101,084	3,830,784	(?)
	1919	67	1,206	1,564,601	178,101	3,090,858	3,512,097	927
	1914	51	901	658,377	132,653	1,531,317	1,398,664	677
Cordage and twine.....	1929	123	14,489	12,833,501	54,573,259	91,455,117	36,881,858	73,021
	1927	110	15,084	13,674,081	50,105,063	89,172,495	33,067,432	74,924
	1925	118	15,400	14,018,511	66,847,504	100,447,504	33,000,060	77,563
	1923	121	16,382	15,148,157	53,642,371	88,283,038	34,040,907	72,371
	1921	118	14,593	12,923,694	46,480,950	75,355,705	28,874,755	(?)
	1919	120	17,622	14,700,001	89,705,282	133,306,470	43,661,104	60,556
	1914	105	15,769	6,095,590	43,605,473	59,701,486	16,150,013	55,272

See footnotes at end of summary.

## CENSUS OF MANUFACTURES: 1929

## SUMMARY FOR GROUP 2.—TEXTILES AND THEIR PRODUCTS: 1914 TO 1929—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>1</sup>	Horsepower
<b>Textile-mill products—Continued.</b>								
Cotton goods.....	1920	1,231	424,016	\$324,280,004	\$908,028,977	\$1,524,177,087	\$626,148,110	2,269,346
	1927	1,347	407,696	380,909,643	871,591,901	1,567,400,612	696,808,711	2,328,836
	1925	1,366	445,184	353,882,870	1,077,152,614	1,714,367,787	637,215,173	2,236,368
	1923	1,375	471,503	306,002,644	1,147,372,215	1,901,125,703	753,763,488	2,163,299
	1921	1,323	412,058	328,226,744	707,442,067	1,278,220,831	570,778,734	(2)
	1919	1,288	430,066	355,474,937	1,277,785,667	2,125,272,193	847,486,500	1,836,208
	1914	1,179	379,866	146,129,623	431,602,540	676,569,115	244,966,575	1,569,823
Cotton small wares.....	1920	202	15,281	15,449,436	33,636,208	65,169,753	31,533,545	27,308
	1927	220	14,058	15,333,332	32,222,020	64,819,965	32,597,945	20,205
	1925	230	16,162	15,547,100	41,816,332	74,675,099	32,858,764	33,769
	1923	228	16,387	15,956,874	38,614,695	73,223,566	34,608,871	31,926
Dyeing and finishing textiles.....	1920	732	79,327	94,244,685	235,712,156	465,820,620	230,108,473	304,067
	1927	743	73,851	91,607,219	210,680,990	408,047,372	195,300,472	287,212
	1925	697	70,749	83,983,377	220,678,181	348,515,484	187,837,303	252,701
	1923	713	63,414	72,524,711	199,156,387	366,623,213	167,466,826	204,128
	1921	599	51,510	58,138,729	141,198,956	276,750,670	135,551,714	(2)
	1919	628	55,985	57,189,978	174,742,815	323,967,683	140,224,868	159,867
	1914	507	48,407	24,872,318	56,705,135	109,291,636	62,586,401	129,327
Felt goods, wool, hair, or jute.....	1920	54	5,540	7,531,298	26,223,067	45,465,823	19,241,856	25,656
	1927	50	5,452	6,653,147	23,289,338	41,894,844	18,005,500	23,479
	1925	50	5,146	6,403,687	20,354,123	43,776,618	17,421,495	23,478
	1923	53	5,735	6,634,964	23,894,694	42,036,964	18,142,330	20,622
	1921	49	4,180	4,625,883	11,232,110	24,120,390	12,807,271	(2)
	1919	40	5,236	4,873,490	22,780,775	30,220,540	16,448,765	16,411
	1914	53	4,035	2,080,243	8,303,270	13,692,766	5,384,495	14,016
Flax and hemp, dressed.....	1920	6	47	35,400	93,477	197,035	103,558	429
	1927	7	62	51,390	116,166	282,895	166,729	654
	1925	9	82	88,534	244,417	459,671	214,654	1,457
	1923	6	62	48,743	173,623	280,795	107,142	877
	1921	6	112	71,747	201,064	297,636	99,572	(2)
	1919	20	420	447,373	1,708,670	2,309,114	660,444	1,920
	1914	16	116	45,271	185,247	282,648	97,401	832
Haircloth.....	1920	13	450	526,669	2,550,568	3,855,388	1,304,825	1,113
	1927	16	385	480,045	2,688,784	3,616,119	927,335	1,312
	1925	15	355	387,450	1,897,470	2,746,225	848,740	1,058
	1923	18	490	464,401	2,511,080	3,733,069	1,221,083	1,333
	1921	17	301	329,110	1,546,061	2,618,319	1,072,258	(2)
	1919	18	425	426,149	2,259,142	3,315,113	1,056,971	972
	1914	19	595	260,280	1,654,006	2,305,480	741,480	1,636
Hats, fur-felt.....	1920	159	16,539	22,562,542	55,298,045	102,004,166	46,709,120	19,894
	1927	139	15,806	22,854,064	51,053,267	99,184,842	48,131,586	20,517
	1925	146	16,156	20,466,420	40,124,134	80,066,390	39,642,206	17,948
	1923	163	16,722	21,531,362	34,447,708	75,253,664	40,806,206	18,488
	1921	154	13,880	15,881,848	28,252,448	52,614,167	26,301,710	(2)
	1919	176	18,510	19,642,531	40,188,010	82,745,398	42,587,289	20,377
	1914	224	21,318	12,070,812	16,947,658	37,349,744	20,492,696	20,774
Hats, wool-felt.....	1920	14	2,028	2,314,680	4,678,189	9,656,500	4,377,401	2,811
	1927	12	2,113	2,190,031	4,480,717	8,809,610	4,316,809	2,405
	1925	23	1,854	1,985,798	5,122,765	8,948,644	3,825,889	2,580
	1923	21	1,960	2,094,774	4,457,010	8,643,217	4,180,207	2,762
	1921	26	1,428	1,347,985	2,463,607	4,964,324	2,510,717	(2)
	1919	40	1,443	1,387,777	3,699,822	6,739,652	3,639,830	2,694
	1914	30	1,249	599,678	978,339	1,944,484	966,145	3,091
Jute goods.....	1920	20	4,031	4,276,143	11,967,578	21,869,757	9,962,179	35,679
	1927	23	5,358	4,687,228	11,802,328	23,185,997	11,393,609	36,210
	1925	23	6,312	5,636,754	14,569,709	27,617,437	12,050,768	28,763
	1923	19	6,042	5,778,058	12,348,303	25,421,683	13,073,390	24,174
	1921	24	5,664	4,636,347	8,943,459	17,505,140	8,592,681	(2)
	1919	26	7,138	6,436,286	17,708,834	34,442,698	16,733,804	32,135
	1914	34	7,987	3,060,010	12,579,840	16,513,874	3,034,034	28,693
Knit goods.....	1920	1,888	208,488	210,714,335	456,700,958	899,716,672	443,016,714	181,879
	1927	1,899	190,283	188,163,458	424,099,384	816,620,404	392,621,110	177,216
	1925	1,987	186,668	168,682,840	453,925,780	809,060,213	350,034,433	170,630
	1923	2,323	194,244	168,271,584	484,020,075	848,170,734	364,166,659	183,675
	1921	2,078	161,880	132,190,340	399,457,833	634,073,896	273,610,092	(2)
	1919	2,050	172,572	125,199,820	427,095,500	713,139,089	286,644,129	149,438
	1914	1,622	150,620	59,758,151	146,687,458	258,912,003	112,225,445	122,919
Lace goods.....	1920	42	6,854	7,670,122	10,112,363	29,237,434	19,125,081	10,466
	1927	43	6,482	7,584,848	11,392,379	29,237,434	15,905,780	11,399
	1925	42	7,006	7,620,166	13,361,423	30,843,607	17,482,084	9,607
	1923	39	7,307	8,084,068	14,631,019	35,791,878	21,109,859	9,545
	1921	37	6,396	6,208,992	11,321,446	25,981,093	14,659,647	(2)
	1919	44	6,490	6,080,557	13,075,994	29,398,853	16,320,850	9,078
	1914	41	7,440	3,468,081	5,676,948	13,200,785	7,529,837	8,817
Linen goods.....	1920	16	2,195	2,185,339	5,214,423	9,780,898	4,522,470	11,096
	1927	18	2,530	2,545,210	5,409,441	10,377,346	4,967,005	11,473
	1925	18	2,607	2,462,179	6,394,303	11,156,585	4,762,282	12,110
	1923	18	2,880	2,897,005	6,073,163	11,390,254	5,317,091	6,803
	1921	16	2,519	2,123,021	4,403,866	8,209,596	3,745,730	(2)
	1919	10	1,890	1,636,642	4,190,187	6,008,048	2,807,859	6,069
	1914	21	3,667	1,386,117	4,289,104	6,959,708	2,670,604	9,032
Mats and matting, grass and coir.....	1920	7	467	430,862	684,951	1,692,200	1,007,249	1,293
	1927	7	422	398,426	668,850	1,630,607	867,711	1,425
	1925	10	902	766,871	1,526,453	3,491,638	1,955,085	2,147
	1923	11	986	1,509,407	1,509,407	3,690,359	2,380,892	1,980
	1921	13	628	670,134	1,020,348	2,321,710	1,391,392	(2)
	1919	12	1,073	810,007	2,102,580	4,860,855	2,758,275	1,070
	1914	12	869	455,247	1,170,214	2,236,867	1,065,653	1,643

See footnotes at end of summary.



TEXTILES AND THEIR PRODUCTS

SUMMARY FOR GROUP 2.—TEXTILES AND THEIR PRODUCTS: 1914 TO 1929—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>1</sup>	Horsepower
<b>Textile-mill products—Continued.</b>								
<b>Silk and rayon manufactures.....</b>								
	1920	1,491	130,467	\$137,547,146	\$412,181,260	\$731,200,231	\$310,018,971	220,225
	1927	1,048	127,643	140,053,688	445,390,076	750,123,705	304,733,020	212,240
	1925	1,050	132,509	142,733,630	484,122,527	808,970,399	324,856,872	212,609
	1923	1,598	125,234	120,849,454	470,038,203	701,322,110	282,283,856	200,020
	1921	1,565	121,378	113,395,026	337,558,799	583,418,756	245,859,957	( <sup>2</sup> )
	1910	1,309	126,782	108,226,330	388,460,022	688,409,523	300,060,501	173,748
	1914	902	108,170	47,108,469	144,442,321	254,011,257	100,568,436	111,417
<b>Wool pulling.....</b>								
	1920	18	500	907,278	10,016,094	13,048,004	2,731,070	1,847
	1927	18	524	708,090	12,460,050	14,040,401	2,174,345	2,403
	1925	23	573	840,850	13,037,313	15,209,221	1,571,908	2,706
	1923	27	600	806,468	11,308,221	15,170,021	3,887,800	2,887
	1921	22	552	693,475	5,197,095	0,707,101	1,870,000	( <sup>3</sup> )
	1910	24	705	900,788	12,800,592	17,361,231	4,551,639	2,162
	1914	34	708	452,190	0,632,101	8,272,721	1,040,620	2,248
<b>Wool scouring.....</b>								
	1920	21	1,302	1,770,974	3,021,731	0,241,204	3,210,533	8,241
	1927	25	1,380	1,981,774	3,000,050	0,001,004	3,052,038	7,035
	1925	25	1,112	1,000,657	2,527,160	5,831,490	3,304,314	7,823
	1923	26	1,473	2,025,307	4,528,982	8,190,001	3,001,199	0,970
	1921	21	1,530	2,067,467	3,303,717	0,810,005	3,516,888	( <sup>4</sup> )
	1910	33	2,177	2,800,453	7,228,350	13,070,584	6,451,234	0,710
	1914	24	1,059	010,593	3,170,438	4,565,412	1,388,074	7,570
<b>Wool shoddy.....</b>								
	1920	50	1,762	2,100,374	10,120,717	15,344,078	5,218,201	15,040
	1927	55	1,679	1,910,195	7,980,875	12,500,720	4,615,851	15,353
	1925	68	2,218	2,000,201	14,012,450	21,021,882	0,109,420	15,435
	1923	60	2,128	2,442,522	10,627,386	10,037,515	0,070,120	12,496
	1921	53	1,170	1,250,249	4,470,950	0,803,118	2,323,162	( <sup>5</sup> )
	1910	78	2,508	2,653,169	10,070,315	23,254,398	7,178,083	10,567
	1914	61	2,145	1,050,114	5,200,903	7,700,843	2,400,040	12,244
<b>Woolen goods.....</b>								
	1920	400	58,474	60,013,599	105,882,063	200,938,040	125,056,886	105,247
	1927	471	61,700	72,150,158	172,700,233	301,308,743	128,608,510	191,703 <sup>6</sup>
	1925	503	67,050	82,430,037	210,018,330	361,524,034	141,005,704	193,080
	1923	513	72,408	87,313,708	201,547,430	304,287,817	102,740,387	180,657
	1921	493	56,434	62,893,150	120,275,820	230,044,847	110,600,027	( <sup>7</sup> )
	1910	500	62,057	60,595,826	217,005,338	304,800,590	146,031,257	172,101
	1914	501	49,165	24,204,479	63,606,042	103,815,905	40,110,803	133,052
<b>Worsted goods.....</b>								
	1920	204	88,485	98,137,732	330,040,469	536,007,399	190,417,040	372,536
	1927	288	92,571	101,605,747	320,407,609	516,000,550	187,201,947	364,422
	1925	329	98,108	108,834,754	400,783,618	606,206,304	195,482,604	377,215
	1923	338	122,144	136,070,814	421,184,417	608,270,621	277,086,204	357,808
	1921	321	105,930	112,001,618	279,709,742	524,038,921	244,860,179	( <sup>8</sup> )
	1910	202	103,830	101,512,855	447,620,360	700,537,482	252,008,182	204,028
	1914	298	109,527	51,748,905	182,800,024	275,608,474	92,867,850	242,521
<b>Wearing apparel made from purchased fabrics, total.....</b>								
	1920	10,105	536,561	500,058,848	1,867,041,707	3,530,040,536	1,068,098,709	137,880
	1927	15,480	501,656	578,152,148	1,771,890,310	3,391,890,761	1,010,090,441	120,723
	1925	14,883	406,846	534,823,022	1,741,617,883	3,243,848,044	1,502,231,001	119,744
	1923	16,004	499,413	598,138,539	1,852,228,720	3,443,939,800	1,591,711,080	132,317
	1921	16,784	473,574	534,312,484	1,424,284,434	2,710,656,748	1,286,372,314	( <sup>9</sup> )
	1910	18,778	507,700	520,056,210	1,745,930,004	3,198,146,442	1,452,215,748	131,965
	1914	14,953	510,595	250,112,677	673,011,707	1,207,273,043	624,201,870	117,011
<b>Clothing (except work clothing), men's, youths', and boys', not elsewhere classified.....</b>								
	1920	3,691	140,808	170,708,808	440,504,070	901,104,205	460,500,220	40,325
	1927	3,502	146,099	184,613,090	447,244,035	932,181,718	484,937,683	34,351
	1925	3,491	141,611	179,044,721	471,501,209	946,274,140	474,772,031	33,207
	1923	4,024	158,173	207,252,217	483,920,728	1,016,721,705	532,794,977	40,250
<b>Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....</b>								
	1920	511	38,201	20,047,078	83,551,715	138,450,078	54,808,803	11,492
	1927	550	40,012	29,945,915	85,134,183	147,250,925	62,153,842	11,218
	1925	509	32,821	24,802,629	85,960,311	140,903,062	54,094,201	11,542
	1923	583	36,047	28,234,741	100,877,104	161,993,020	61,115,892	12,392
<b>Clothing, men's, buttonholes.....</b>								
	1920	32	202	314,192	80,792	573,909	513,117	104
	1927	40	412	428,817	98,020	617,932	819,003	132
	1925	30	327	346,855	71,047	658,084	687,017	87
	1923	37	334	409,251	103,080	804,427	701,347	105
	1921	37	320	347,978	77,406	646,047	508,641	( <sup>10</sup> )
	1910	107	484	514,600	123,266	1,090,049	908,783	176
	1914	139	672	326,322	90,012	637,728	547,710	295
<b>Collars, men's.....</b>								
	1920	15	2,952	2,263,335	3,080,168	8,740,390	5,110,228	1,281
	1927	24	3,270	2,900,938	5,800,077	13,264,207	7,397,530	3,131
	1925	28	7,187	5,502,020	11,792,440	27,587,075	15,795,229	4,497
	1923	37	10,440	7,959,700	18,380,580	42,000,218	24,206,638	5,060
	1921	34	9,285	7,061,018	12,374,064	29,571,374	17,107,320	( <sup>11</sup> )
	1910	39	11,103	7,430,729	19,434,095	47,564,940	28,130,854	5,276
	1914	35	10,100	4,404,140	6,505,578	18,590,840	11,066,262	3,559
<b>Furnishing goods, men's, not elsewhere classified.....</b>								
	1920	598	20,588	23,009,391	83,681,818	150,063,003	67,331,755	7,030
	1927	594	25,183	22,070,390	82,839,406	145,474,143	62,034,737	7,100
	1925	419	21,094	17,438,160	69,861,348	120,807,590	51,000,248	4,977
	1923	454	18,958	14,810,103	37,230,879	102,951,087	45,714,698	5,470
	1921	421	15,921	12,409,810	47,193,111	77,520,542	30,333,431	( <sup>12</sup> )
	1910	437	18,944	13,502,806	64,743,912	107,834,095	43,090,783	5,659
	1914	551	22,450	8,415,480	31,593,442	52,453,398	20,850,890	5,840
<b>Gloves and mittens, cloth or cloth and leather combined, made from purchased fabrics.....</b>								
	1920	125	0,279	5,914,275	10,280,234	20,882,058	10,503,724	3,702
	1927	131	10,296	6,080,708	17,302,160	30,202,152	12,800,086	4,112
	1925	139	9,001	5,709,401	17,977,323	29,531,710	11,554,393	4,102
	1923	129	8,894	5,295,095	18,202,054	28,125,528	9,833,474	3,148
	1921	128	5,758	3,204,079	10,161,476	15,212,890	5,021,423	( <sup>13</sup> )
	1910	182	8,980	4,855,246	16,062,402	28,220,118	12,127,651	3,364

See footnotes at end of summary.

## CENSUS OF MANUFACTURES: 1929

## SUMMARY FOR GROUP 2.—TEXTILES AND THEIR PRODUCTS: 1914 TO 1929—Continued

(See note at head of this table)

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>1</sup>	Horsepower
<b>Wearing apparel made from purchased fabrics, total—Continued.</b>								
Hats and caps, except felt and straw, men's	1929	576	5,826	\$7,094,078	\$16,007,061	\$35,900,064	\$18,998,003	1,796
	1927	568	6,300	9,126,438	20,702,206	41,213,005	20,511,669	1,090
	1925	570	6,552	9,242,037	22,698,720	43,822,720	21,124,000	1,876
	1923	651	7,813	9,593,883	22,250,182	42,811,444	20,561,262	1,782
	1921	584	6,505	8,701,150	18,536,982	36,987,008	18,460,020	(2)
	1919	700	7,539	9,438,864	24,176,514	44,539,801	20,303,347	1,087
	1914	580	7,322	4,507,521	9,267,577	18,593,221	9,326,044	1,313
Shirts	1929	663	59,830	43,428,224	116,678,466	228,321,616	111,643,120	17,040
	1927	907	57,216	42,997,827	120,743,737	241,640,930	111,006,202	14,616
	1925	840	49,864	35,078,731	120,763,752	225,062,022	96,200,170	13,884
	1923	934	51,072	37,043,405	139,354,361	241,331,226	101,976,865	14,050
	1921	860	45,427	33,182,332	123,259,180	203,944,376	60,685,106	(3)
	1919	896	39,603	25,833,855	127,087,745	205,327,133	78,239,388	14,890
	1914	792	51,972	10,169,697	50,604,074	95,815,013	45,150,039	17,117
Suspenders, garters, and other elastic woven goods, made from purchased webbing	1929	91	4,341	3,971,030	17,905,748	30,473,169	12,567,421	1,180
	1927	91	4,041	3,520,147	16,259,683	26,985,376	10,725,063	983
	1925	93	3,885	3,072,392	16,499,915	27,504,028	11,004,113	876
	1923	100	3,458	2,891,526	13,934,072	24,207,342	10,363,270	800
Clothing, women's, not elsewhere classified	1929	8,082	187,500	243,851,143	934,413,683	1,709,580,505	775,106,822	35,291
	1927	7,588	154,450	211,340,759	809,520,125	1,494,401,044	684,886,019	30,287
	1925	6,127	126,406	175,044,511	724,298,974	1,293,705,201	590,406,317	24,316
	1923	7,040	133,195	170,445,518	809,560,802	1,406,683,835	597,123,033	27,704
	1921	7,091	144,865	185,082,108	567,810,452	1,022,742,790	454,932,344	(3)
	1919	7,711	165,649	195,295,834	680,406,844	1,208,543,128	528,136,284	32,421
	1914	5,564	108,007	92,578,642	252,345,040	473,888,354	221,543,314	27,874
Corsets and allied garments	1929	213	13,604	12,440,334	30,935,079	76,802,199	40,707,120	6,048
	1927	222	18,778	12,402,288	35,394,422	77,218,202	41,823,780	7,819
	1925	185	14,525	12,394,094	37,808,237	77,114,840	39,306,093	8,304
	1923	216	16,104	13,258,200	38,416,008	78,047,059	39,631,951	5,901
	1921	173	17,084	13,102,159	38,857,277	75,600,156	36,742,870	(3)
	1919	188	18,415	13,082,242	38,815,803	75,541,059	36,720,159	6,956
	1914	167	20,496	7,976,721	19,686,533	40,550,702	20,094,169	6,962
Handkerchiefs	1929	105	6,014	4,635,901	10,342,735	29,553,777	13,211,042	2,499
	1927	115	6,659	5,264,147	11,588,220	31,382,983	13,382,983	2,605
Millinery	1929	1,293	32,206	42,715,059	98,080,650	165,693,457	97,603,798	10,170
	1927	1,148	33,311	46,787,735	103,489,714	209,494,823	100,005,114	7,920
<b>Other articles made from purchased fabrics, total</b>								
	1929	4,235	75,074	33,402,050	416,811,392	664,090,969	248,270,577	164,720
	1927	4,113	73,027	32,071,274	388,161,306	625,310,493	237,159,187	140,692
	1925	2,907	51,228	53,728,025	539,088,775	374,272,240	165,410,535	117,593
	1923	2,043	51,242	52,907,645	328,940,522	490,784,573	101,844,051	94,644
	1921	1,930	42,007	41,667,251	240,002,760	349,356,584	109,356,794	(3)
	1919	2,530	49,970	44,140,107	374,029,542	530,902,966	155,073,422	91,013
	1914	2,455	44,437	21,063,042	155,633,107	212,105,232	50,502,125	76,305
Artificial leather	1929	17	2,590	3,955,702	22,267,938	32,961,252	10,093,314	14,650
	1927	19	2,730	4,006,613	21,827,945	34,228,101	12,400,466	14,467
	1925	18	2,659	3,800,990	31,238,270	40,951,682	9,605,403	10,493
	1923	17	2,462	3,234,671	22,624,398	33,567,634	10,933,236	8,359
	1921	19	1,444	1,801,384	11,247,109	15,516,739	4,268,630	(2)
	1919	17	2,011	2,163,171	18,132,204	26,281,969	8,149,702	4,652
	1914	10	795	484,578	4,108,256	6,007,293	1,980,037	1,674
Asphalted-felt-base floor covering	1929	14	2,345	3,501,238	14,278,805	31,888,962	17,610,157	11,092
	1927	12	2,442	3,694,808	10,186,469	34,100,585	17,014,120	8,004
	1925	11	2,494	3,337,770	14,930,491	32,532,488	17,601,992	9,575
	1923	9	1,932	2,203,611	9,139,914	25,286,100	16,140,246	2,700
	1921	10	810	981,602	3,716,611	10,147,305	6,430,694	(3)
Awnings, tents, sails, and canvas covers	1929	1,002	7,162	8,550,321	25,328,140	49,237,576	23,900,436	4,995
	1927	903	6,543	8,229,362	24,409,718	47,929,352	23,519,634	4,850
	1925	905	6,249	7,600,561	27,463,159	48,508,084	21,115,828	4,564
	1923	814	5,958	6,022,938	25,229,222	45,275,756	20,046,534	4,728
	1921	709	5,070	5,930,577	21,327,125	37,011,718	15,684,593	(2)
	1919	895	6,028	5,868,523	29,961,140	45,090,390	18,720,250	4,571
	1914	888	5,073	2,963,884	10,185,101	18,388,326	7,983,225	2,892
Bags, other than paper, not made in textile mills	1929	202	11,828	6,644,876	144,275,477	170,175,893	25,900,410	19,150
	1927	181	11,164	6,548,317	136,748,406	162,940,837	26,201,431	15,754
	1925	162	11,464	6,331,815	189,102,277	175,041,911	24,979,634	15,295
	1923	169	11,548	6,300,999	128,221,603	151,675,727	23,464,124	13,862
	1921	169	10,324	8,031,523	99,437,815	115,452,413	16,014,508	(3)
	1919	216	10,756	7,755,582	176,017,590	214,059,474	38,041,914	9,076
	1914	188	9,358	3,788,837	67,021,376	79,049,151	12,027,775	10,381
Belting, other than leather and rubber, not made in textile mills	1929	9	255	298,010	1,328,090	2,788,027	1,460,537	1,048
	1927	11	343	410,698	1,489,841	3,211,875	1,722,034	1,457
	1925	11	254	264,240	1,595,602	3,111,500	1,515,898	914
	1923	13	335	350,736	1,074,041	3,311,627	1,637,486	630
Carpets and rugs, rag	1929	94	1,529	1,562,372	1,658,937	5,510,768	3,851,831	2,416
	1927	110	1,633	1,677,672	1,839,371	5,890,265	4,259,804	2,905
	1925	139	1,901	1,876,760	1,942,334	5,709,812	3,707,478	2,349
	1923	151	2,041	1,866,701	2,095,107	6,007,441	4,002,274	2,587
	1921	149	1,570	1,440,407	1,639,171	4,860,405	3,221,234	(2)
	1919	339	2,016	1,550,501	2,037,874	5,697,057	3,550,183	2,659
	1914	463	2,130	994,608	721,728	2,786,439	2,064,711	2,656
Embroideries	1929	813	6,622	7,867,908	6,608,840	25,286,796	18,677,956	2,270
	1927	1,069	8,964	10,962,090	7,959,709	32,418,888	24,450,110	2,930

See footnotes at end of summary.

TEXTILES AND THEIR PRODUCTS

221

SUMMARY FOR GROUP 2.—TEXTILES AND THEIR PRODUCTS: 1914 TO 1929—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture <sup>1</sup>	Horsepower
<b>Other articles made from purchased fabrics—Continued.</b>								
Flags and banners.....	1929	54	938	\$794,328	\$1,771,320	\$3,835,824	\$2,064,504	577
	1927	46	1,040	807,000	2,282,450	4,586,348	2,253,802	709
	1925	49	1,031	800,420	2,332,222	4,588,111	2,255,889	629
	1923	52	878	758,485	2,024,130	3,807,308	1,783,178	748
	1921	57	991	776,931	1,850,833	3,630,900	1,780,067	( <sup>2</sup> )
	1919	70	1,005	795,242	3,280,106	5,346,080	2,059,924	778
	1914	87	1,495	889,075	1,760,004	3,001,310	1,851,210	637
Hat and cap materials, men's.....	1929	112	2,504	2,876,718	17,305,115	25,030,048	7,725,828	5,104
	1927	96	2,702	2,658,871	15,071,702	23,339,341	7,067,649	5,158
	1925	80	2,127	2,413,187	15,218,003	22,049,047	6,830,964	5,141
	1923	104	2,304	2,410,808	13,803,235	20,507,602	6,044,357	4,749
	1921	103	1,722	1,737,221	6,713,371	11,545,326	4,831,955	( <sup>2</sup> )
	1919	133	3,009	3,132,571	10,643,910	20,521,212	6,877,203	4,927
	1914	98	1,775	804,240	5,051,857	6,929,342	1,877,485	2,946
Horse blankets, fly nets, and related products.....	1929	14	582	497,871	1,470,070	2,805,158	1,424,488	1,375
	1927	16	600	574,177	1,877,800	3,379,105	1,501,209	1,421
	1925	20	604	564,061	2,535,217	3,800,018	1,301,701	1,773
	1923	22	841	609,555	2,773,844	5,130,544	2,302,700	2,900
	1921	27	705	682,175	2,077,487	3,834,586	1,157,000	( <sup>2</sup> )
	1919	28	760	551,278	3,455,080	6,020,012	2,564,920	1,577
	1914	37	1,009	608,305	3,508,700	5,150,482	1,581,713	1,903
House-furnishing goods, not elsewhere classified.....	1929	664	15,794	16,150,490	70,024,089	127,002,002	50,977,013	10,800
	1927	548	11,091	10,047,259	52,704,730	87,070,000	34,971,870	12,007
	1925	433	9,307	9,142,570	51,073,800	78,054,569	27,575,703	10,702
	1923	452	8,708	8,451,350	44,090,898	69,333,182	21,000,284	9,909
	1921	419	7,501	6,955,472	35,100,227	54,550,787	10,444,500	( <sup>2</sup> )
	1919	467	7,853	6,443,015	39,793,062	60,211,804	20,417,812	11,857
	1914	370	6,035	3,308,515	17,390,886	20,452,037	6,002,051	11,270
Linoleum.....	1929	7	5,544	8,500,183	27,480,253	57,250,449	20,761,100	51,047
	1927	7	5,304	8,170,044	24,215,018	47,442,441	23,220,823	41,432
	1925	6	4,872	6,392,009	19,090,020	44,000,453	25,032,827	31,840
	1923	7	6,201	8,375,839	27,277,311	52,527,100	25,240,705	23,205
	1921	9	4,877	6,220,341	21,018,444	38,474,848	16,550,404	( <sup>2</sup> )
Nets and seines.....	1929	19	603	708,871	3,780,366	6,104,403	2,375,047	1,155
	1927	21	800	770,326	3,347,710	5,401,173	2,053,454	1,102
	1925	21	885	702,489	3,478,003	5,157,461	1,078,498	1,190
	1923	17	882	740,482	3,157,327	4,627,692	1,470,305	1,082
	1921	15	705	405,015	1,045,740	3,015,865	1,070,110	( <sup>2</sup> )
	1919	19	859	501,282	3,648,208	5,114,414	1,400,208	959
	1914	15	1,058	378,741	2,267,093	3,088,042	830,040	1,934
Olecloth.....	1929	9	1,412	2,144,007	14,024,051	23,107,272	8,182,621	5,017
	1927	8	1,072	1,745,575	11,818,624	17,942,432	5,823,818	3,505
	1925	9	1,100	1,675,209	13,540,171	17,843,375	4,204,294	3,484
	1923	9	1,203	1,781,040	12,165,628	17,719,053	5,554,020	2,836
	1921	10	647	637,126	6,283,093	10,001,443	4,407,455	( <sup>2</sup> )
	1919	11	1,130	1,200,877	11,140,723	15,439,876	4,290,152	4,251
	1914	13	1,223	608,947	6,523,987	7,000,026	1,472,088	3,400
Regalia, badges, and emblems.....	1929	77	1,757	1,824,590	3,227,230	7,027,214	4,699,078	1,105
	1927	70	1,075	1,700,438	3,018,048	7,061,255	4,072,305	1,015
	1925	85	1,092	2,032,832	3,062,261	6,023,018	5,000,757	1,008
	1923	84	2,146	2,090,012	4,242,715	10,585,846	6,343,131	1,100
	1921	81	2,204	2,048,359	4,422,824	10,350,949	5,930,525	( <sup>2</sup> )
	1919	115	2,223	1,800,383	4,287,055	9,395,470	5,108,415	1,321
	1914	138	2,010	970,903	2,205,068	5,025,451	2,820,383	655
Trimmings (not made in textile mills) and stamped art goods for embroidering.....	1929	639	7,934	9,701,881	20,783,220	45,170,933	21,390,707	3,068
Upholstering materials, not elsewhere classified.....	1929	53	1,410	1,317,371	7,046,334	11,234,192	4,187,868	3,915
	1927	39	1,080	1,162,456	6,550,109	9,072,800	3,110,007	4,482
	1925	34	1,196	1,174,403	6,122,777	7,907,832	2,875,055	3,380
	1923	35	1,248	1,279,830	4,537,787	7,641,279	3,103,492	2,442
	1921	35	740	685,529	2,087,712	4,081,273	1,303,501	( <sup>2</sup> )
	1919	51	1,557	1,379,033	4,794,722	8,094,295	3,809,573	4,338
	1914	70	2,454	1,100,525	5,285,118	7,878,807	2,593,089	6,108
Waste <sup>6</sup> .....	1929	136	3,905	3,310,344	25,693,015	36,013,705	10,380,000	18,592
	1927	118	3,494	2,852,971	23,040,303	33,377,270	10,327,883	14,529
	1925	105	3,093	2,509,827	20,705,041	38,942,505	9,170,054	13,604
	1923	88	2,745	2,408,012	25,247,002	33,700,725	8,452,823	12,347
	1921	87	1,803	1,428,747	12,032,418	16,701,004	4,168,580	( <sup>2</sup> )
	1919	98	2,810	2,224,872	22,719,612	30,089,825	7,964,213	11,837
	1914	79	3,082	1,339,918	15,472,774	17,068,027	2,485,853	8,500

<sup>1</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>2</sup> Not called for on schedule.  
<sup>3</sup> Revised; revision not carried into total for subgroup or aggregate for group.  
<sup>4</sup> No comparable figures available for earlier years.  
<sup>5</sup> Figures published in report for 1927 not comparable with those for 1929 because of a change in classification.  
<sup>6</sup> Data for establishments engaged in the production of oakum are included for all years except 1921. For that year, the figures for 2 establishments reporting oakum as their principal product were included in those for "All other industries."

CENSUS OF MANUFACTURES: 1929

RAW FIBERS CONSUMED IN TEXTILE MILLS, BY INDUSTRIES, FOR THE UNITED STATES: 1904 TO 1919 AND 1925 TO 1929

KIND	Cen- sus year	Total	In cotton- goods and cotton- small-ware industries	IN WOOL-MANUFACTURES GROUP					In knit- goods industry	In silk and rayon manu- factures industry	In cordage and twine, jute-goods, and linen-goods industries	In wool- shoddy industry	In lace- goods indus- try <sup>1</sup>
				In woolen- goods in- dustry	In worsted- goods in- dustry	In carpet and rug industry	In felt- goods in- dustry	In wool- felt hat industry					
		<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Cotton (including lin- ters).	1929	8,635,322,073	3,465,861,199	16,427,860	3,739,331	8,545,263	2,559,109	71,654,827	64,229,887	2,304,501			
	1927	3,765,408,686	3,601,145,535	18,556,159	4,290,046	7,704,876	2,270,823	66,771,576	64,008,375	1,296			
	1925	3,232,790,042	3,126,523,981	20,352,012	6,206,076	11,131,462	2,498,715	66,068,110	(2)	9,681			
	1919	2,905,779,683	2,758,355,019	14,629,920	2,745,483	3,864,826	1,442,400	93,050,318	31,685,111	6,000			
	1914	2,679,994,778	2,523,500,837	23,915,466	4,471,526	3,802,789	3,117,272	88,390,208	32,330,685	399,965			
	1909	2,465,225,572	2,335,344,906	15,801,394	4,222,967	6,147,130	1,375,670	75,416,023	27,024,490	203,292			
1904	1,981,804,446	1,876,437,150	28,279,832	4,333,576	1,997,369	1,982,624	50,686,760	18,142,735	44,400				
Wool (in condition in which purchased).	1929	533,376,549	925,398	139,964,412	371,475,254	95,769,001	18,022,099	1,492,513	6,598,580	54,690			
	1927	544,900,507	800,053	139,227,574	204,841,199	88,159,996	16,532,762	228,956	4,009,050	75,567			
	1925	562,446,600	7,289	150,760,876	302,096,956	85,025,307	16,518,843	200,869	6,222,931	160,775			
	1919	496,434,334		105,792,290	337,609,614	86,261,904	11,804,373	200,294	4,518,068	181,052			
	1914	510,008,799		78,873,310	355,854,759	52,552,449	14,969,352	606,667	6,947,598	203,868			
	1909	459,850,995	41,400	87,037,951	387,717,415	64,135,020	12,409,326	1,203,498	7,068,788	237,097			
1904	501,424,203		157,335,727	261,368,084	51,320,521	11,868,238	1,633,625	17,300,616	597,492				
Animal hair	1929	84,087,635		5,572,166	21,003,958	3,080,309	52,631,203						
	1927	62,909,554	485,303	5,562,406	20,440,307	2,587,650	34,318,091						
	1925	69,953,644		6,528,062	20,631,472	2,834,382	30,524,425						
	1919	55,366,055		12,013,937	15,697,157	6,272,522	10,663,511	606	705,839	442,483			
	1914	44,821,941		16,199,052	12,921,907	3,469,283	11,540,635	350	690,714				
	1909	41,549,822		17,719,863	7,441,659	5,400,944	8,144,011	\$ 142,001	191,344	2,610,000			
1904	44,079,928		23,754,714	5,740,249	6,805,802	6,974,634	\$ 210,927	80,502	605,000				
Silk	1929	64,214,714	48,974	143,756				0,483,063	54,473,331			64,900	
	1927	47,754,765	1,255,798	197,537	300			8,023,105	38,277,925				
	1925	43,057,620	2,403,187	313,705	222,202		9,818	4,921,127	35,187,500				
	1919	27,857,055	593,982		106,777			1,265,568	26,890,728				
	1914	25,021,945	1,057,083					1,500,162	22,374,700				
	1909	17,729,306	267,102						17,472,204				
1904	11,572,783							11,572,783					
Flax	1929	14,483,769	1,687,666							12,796,103			
	1927	16,213,695	1,051,182							15,162,413			
	1925	1,492,613	1,492,613							(2)			
	1919	12,787,560	(4)							12,787,560			
	1914	26,455,737	1,738,139							24,717,598			
	1909	28,063,703	1,108,918							26,954,785			
Hemp, jute, etc.	1929	528,090,413	6,548,361							521,551,052			
	1927	533,333,410	4,370,082							528,963,334			
	1925	8,401,979	8,401,979							(2)			
	1919	570,494,610	(4)							570,494,610			
	1914	751,008,027	50,000							750,958,027			
	1909	632,786,278	22,087							632,764,191			

<sup>1</sup> No data for years prior to 1929.

<sup>2</sup> Not called for on schedule.

<sup>3</sup> Includes data for hatters' fur.

<sup>4</sup> No data available.

# TEXTILES AND THEIR PRODUCTS

PURCHASED YARNS CONSUMED IN TEXTILE MILLS, BY INDUSTRIES, FOR THE UNITED STATES: 1904 TO 1919 AND 1925 TO 1920

KIND	Census year	Total	In cotton-goods and cotton-small-wares industries	IN WOOL-MANUFACTURES GROUP				In knit-goods industry	In silk and rayon manufactures industry	In cordage and twine, jute-goods, and linen-goods industries	In wool-shoddy industry	In lace-goods industry <sup>1</sup>
				In woolen-goods industry	In worsted-goods industry	In carpet and rug industry	In felt-goods industry					
		<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Cotton	1920	480,954,372	100,468,569	13,588,072	29,306,953	28,401,754	227,760	100,356,402	13,260,600	8,821,424		0,452,854
	1927	481,300,387	187,346,046	12,025,459	19,540,897	25,688,094		210,670,022	10,868,707	9,250,272		
	1925	484,719,561	194,385,593	10,941,884	16,852,254	25,205,007		222,043,040	15,390,174	( <sup>2</sup> )		
	1910	519,420,163	230,061,217	12,854,825	16,828,820	17,309,949	45,767	217,411,343	17,068,012	7,960,240		
	1914	428,316,700	139,482,027	15,316,561	16,788,861	24,019,137	263,780	205,624,143	18,333,810	7,968,054	20,343	
	1900	430,483,305	126,707,003	16,888,501	22,280,887	26,166,241	263,225	216,087,611	14,111,878	7,077,950		
	1904	330,360,633	105,411,516	18,878,949	13,719,123	27,421,831	409,463	161,600,466	9,018,205	( <sup>3</sup> )		
Woolen and worsted (Includes all combinations of wool and cotton).	1920	141,992,664	1,306,522	8,969,378	42,709,335	42,667,844		45,434,800	914,086			
	1927	138,224,104	5,864,382	11,166,390	41,702,241	36,285,504		43,614,636	1,191,051			
	1925	141,636,804	2,797,729	8,745,618	45,180,209	38,520,149		44,980,732	1,394,310	( <sup>4</sup> )		
	1910	100,602,630	484,390	9,870,510	46,048,020	21,658,625	8,032	24,084,813	638,334			
	1914	115,832,891	656,789	3,898,922	52,427,100	30,961,720	110,338	25,784,005	1,987,018			
	1900	122,714,085	1,013,118	8,035,598	54,016,104	37,595,684	116,116	20,624,878	610,688		202,000	
	1904	102,272,635	1,428,077	9,582,443	20,078,246	44,823,631	124,380	16,197,803	443,165			
Thrown silk and spun silk	1920	26,030,258	1,515,408	87,438	1,073,380			13,206,700	9,790,358	87,560		278,260
	1927	39,531,369	1,837,660	405,327	1,401,847	21,057		11,537,450	24,182,862	55,167		
	1925	35,689,367	2,306,048	206,703	448,012	( <sup>5</sup> )		8,780,621	23,930,078	( <sup>6</sup> )		
	1910	18,047,429	1,489,387	84,218	331,672	136,736	1,238	5,711,110	10,893,169			
	1914	11,078,929	1,305,550	111,680	404,370	273,032	5,711	1,013,478	7,065,208			
	1900	0,015,070	2,062,000	70,059	211,677	196,840		982,753	5,490,944			
	1904	6,409,531	412,589	107,377	394,930	76,000	10	320,671	5,187,945			
Rayon yarn	1920	128,288,885	34,511,095	959,171	2,523,187	12,955		56,368,443	32,551,605			1,301,520
	1927	80,644,618	28,361,010	735,164	788,748	20,733		36,680,605	23,168,462			
	1925	67,118,993	15,180,169	1,748,718	787,216	( <sup>7</sup> )		23,070,699	15,728,292	( <sup>8</sup> )		
	1910	7,693,622	772,005	7,266	21,568			4,153,540	3,030,267			
	1914	3,160,217	( <sup>9</sup> )					1,267,243	1,002,074			
	1900	914,494	( <sup>9</sup> )					( <sup>9</sup> )	914,494			
	1904	466,161	( <sup>9</sup> )					( <sup>9</sup> )	466,161			
Linen	1920	3,107,110	340,031	106		350,078	2,040		108,767	2,300,002		
	1927	2,007,401	408,170	442		17,260				1,330,660		
	1925	1,263,283	319,784			250,851		( <sup>10</sup> )		( <sup>11</sup> )		
	1910	2,790,469	200,950			933,499						
	1914	0,834,110	780,860			15,000	445	6,288,000				
	1900	10,652,240	669,532	8,168		372		7,002,200	338	7,002,200		
	1904	9,048,018	740,097	12,686		8,792,876	1,768	6,241,764	( <sup>12</sup> )	933,634		
				2,097	1,500	8,228,209		55,892				
Hemp, jute, etc.	1920	83,991,050	175,795		14,300	80,484,921				3,316,028		
	1927	70,043,850	417,851	4,220		67,621,080				2,900,093		
	1925	82,560,198	1,009,723			80,678,476				( <sup>13</sup> )		
	1910	53,137,042	227,574			46,119,812	680,320	( <sup>14</sup> )		5,520,126		
	1914	66,789,424	292,047	1,966,905	2,748	59,148,296	535,099	( <sup>15</sup> )		4,603,762		
	1900	58,817,550	400,705	1,031,880	2,170	56,692,343	114,339	( <sup>16</sup> )		1,600,522	70,000	
	1904	49,713,205		365,101	13,171	49,119,568	178,160	7,225		( <sup>17</sup> )		
Mohair <sup>1</sup>	1920	9,880,990	2,235,148	5,950	7,577,380				32,521			
Other yarns	1920	20,782,127	711,927	2,295,098	4,252,441	7,852,550		3,714,652	1,161,040	744,009		
	1927	21,650,043	1,000,806	23,723	5,520,578	8,851,970		2,425,288	2,788,754	144,874		
	1925	11,209,593	1,439,075	99,964	3,231,433	4,692,320		790,024	1,048,268	( <sup>18</sup> )		
	1910	4,420,938	1,241,270	94,908	237,677	780,460			1,042,790	1,023,843		
	1914	3,294,162	367,435						2,926,727			
	1900	2,000,200	854,161						1,063,888	142,211		
	1904	1,210,519	960,200						269,310			

<sup>1</sup> No data for years prior to 1920.  
<sup>2</sup> Not called for on schedule.  
<sup>3</sup> Not reported separately.  
<sup>4</sup> Woolen and worsted yarns only. Combinations of wool and cotton included in "Other yarns."  
<sup>5</sup> Included in item for "Other yarns."  
<sup>6</sup> Includes data for "Hemp, jute, etc."  
<sup>7</sup> Included in item for "Linen."  
<sup>8</sup> Data for mohair yarn are included with those for "Other yarns" for years prior to 1929.  
<sup>9</sup> See note 8.

# ARTIFICIAL LEATHER

Description of the industry.—The establishments classified in this industry are engaged primarily in the manufacture of artificial or imitation leather, made on a textile base, regardless of the uses of the finished product.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1909 TO 1929

[Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929.....	17	2,590	\$3,955,702	\$22,267,938	\$32,901,252	\$10,693,314	14,650
1927.....	19	2,730	4,006,613	21,827,645	34,228,101	12,400,456	14,407
1925.....	18	2,669	3,800,990	31,238,279	40,931,682	9,693,403	10,503
1923.....	17	2,462	3,234,671	22,624,498	33,567,634	10,933,236	8,359
1921.....	19	1,444	1,861,384	11,247,109	15,515,739	4,268,630	(c)
1919.....	17	2,011	2,163,171	18,132,204	26,281,969	8,149,702	4,952
1914.....	10	705	484,578	4,108,256	6,097,293	1,089,037	1,674
1909 <sup>4</sup> .....	12	443	216,528	2,033,201	3,128,298	1,095,097	(c)
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929.....	(c)	-5.1	-1.3	2.0	-3.7	-13.8	1.3
1925-1927.....	(c)	2.7	5.4	-30.1	-16.4	27.9	36.6
1923-1925.....	(c)	8.0	17.5	38.1	22.0	-11.3	26.7
1921-1923.....	(c)	70.5	79.0	101.2	116.3	156.1	-----
1919-1921.....	(c)	-28.2	-19.7	-38.0	-41.0	-47.6	-----
1919-1929.....	-----	28.8	82.0	22.8	25.4	31.2	105.8
1909-1919.....	(c)	354.0	890.0	791.8	740.1	644.2	-----

- <sup>1</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not called for on schedule.  
<sup>4</sup> No comparable figures for earlier years.  
<sup>5</sup> Not tabulated separately.  
<sup>6</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929 AND 1927

[This table presents statistics separately for only two States for which figures can be given without disclosing data for individual establishments. See GENERAL EXPLANATIONS—Establishments Covered—Size. One of the "Other States," namely, New York, reported a larger value of products than Massachusetts]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States.....	1929	17	570	2,590	14,660	2,172	12,478	\$1,643,071	\$3,955,702	\$22,267,938	\$21,764,446	\$503,492	\$32,901,252	\$10,693,314
	1927	19	552	2,730	14,467	2,070	11,488	1,625,700	4,006,613	21,827,645	21,162,794	664,851	34,228,101	12,400,456
	1919	17	339	2,011	4,062	1,022	3,080	832,335	2,163,171	18,132,204	17,800,292	271,012	26,281,969	8,149,702
Massachusetts.....	1929	4	64	318	1,895	472	923	131,626	408,053	2,439,568	2,369,132	70,436	3,701,053	1,262,386
	1927	4	52	257	2,147	932	1,215	97,809	324,390	1,937,091	1,898,502	39,189	3,102,604	1,164,313
New Jersey.....	1929	7	139	583	5,633	1,210	4,423	503,989	1,004,522	8,173,178	8,024,100	140,018	10,875,556	2,762,378
	1927	8	229	1,054	5,834	1,547	4,287	664,004	1,539,336	9,062,482	9,089,155	273,327	14,280,303	4,526,821
Other States.....	<sup>3</sup> 1929	0	367	1,689	7,022	490	7,132	1,007,456	2,543,127	11,655,192	11,371,154	284,038	18,383,743	6,728,551
	<sup>4</sup> 1927	7	271	1,419	6,480	600	5,986	763,827	2,142,887	9,927,472	9,575,137	352,335	16,830,794	6,909,322

- <sup>1</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Connecticut, 1 establishment; Michigan, 1; New York, 1; Ohio, 1; Pennsylvania, 1; Rhode Island, 1.  
<sup>4</sup> Connecticut, 1 establishment; Michigan, 1; New York, 1; Ohio, 2; Pennsylvania, 1; and Rhode Island, 1.

# ARTIFICIAL LEATHER

225

**TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1923 TO 1929**

[The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

KIND	1929	1927	1925	1923
1. Artificial-leather industry, all products, total value.....	\$32,901,252	\$34,228,101	\$40,931,692	\$33,557,034
2. Artificial leather.....	\$30,441,024	\$28,543,502	\$35,790,014	\$29,707,820
3. Other products (not normally belonging to the industry) <sup>1</sup> .....	\$2,500,274	\$5,684,599	\$5,141,678	\$3,759,805
4. Receipts for contract work.....	\$13,954	\$21,724	\$12,000	(3)
5. Artificial leather made as a secondary product in other industries, value.....	\$904,030	\$621,024	\$885,312	\$207,167
Artificial leather, all industries: Aggregate value (sum of 2 and 5).....	\$31,345,000	\$29,165,420	\$36,675,326	\$30,004,906
Pyroxylin-coated— Total square yards.....	65,029,485	49,660,535	67,525,778	41,058,611
Total value.....	\$30,440,663	\$24,454,974	\$30,673,444	\$21,884,640
Light goods— Square yards.....	28,535,004	17,572,493	25,500,134	8,434,816
Value.....	\$8,364,213	\$5,160,531	\$9,750,717	\$2,877,168
Heavy goods— Square yards.....	36,494,481	32,078,042	31,920,644	32,623,795
Value.....	\$22,080,440	\$19,304,443	\$20,913,727	\$19,007,472
Other than pyroxylin-coated— Square yards.....	892,164	10,025,277	11,054,225	15,640,566
Value.....	\$891,020	\$4,088,528	\$6,116,570	\$7,913,189
Kind not specified, value.....	\$13,087	\$621,024	\$885,312	\$207,167

<sup>1</sup> Lacquers, enamel, coated paper, rubber cloth, oilcloth, window-shade cloth, etc.

<sup>3</sup> No data.

**TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929**

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
		Horse-power		Horse-power		Horse-power		Horse-power		Horse-power		
Prime movers and electric motors driven by purchased energy, aggregate.....	970	14,650	816	14,467	627	10,593	213	4,952	57	1,074	100.0	100.0
Prime movers, total.....	21	2,172	20	2,070	23	2,654	18	1,022	10	1,213	14.8	20.0
Steam, total.....	20	2,000	19	2,813	22	2,488	17	855	19	1,213	13.7	17.3
Engines.....	14	1,020	16	2,047	20	1,713	(1)	(1)	(2)	(1)	7.0	-----
Turbines.....	6	988	3	760	2	775	(1)	(1)	(2)	(2)	6.7	-----
Water wheels and water turbines.....	1	100	1	100	1	100	1	107	-----	-----	1.1	3.3
Electric motors driven by purchased energy.....	949	12,478	796	11,488	604	7,930	195	3,930	38	461	85.2	79.4
Electric motors, total.....	983	12,832	1,011	12,002	800	8,747	209	4,117	46	520	100.0	100.0
Driven by purchased energy.....	949	12,478	796	11,488	604	7,930	195	3,930	38	461	97.2	95.5
Driven by energy generated in establishments reporting.....	34	354	215	1,204	196	1,808	14	187	8	65	2.8	4.5
Electric generators.....	6	700 Kilowatts	11	1,120 Kilowatts	8	720 Kilowatts	(9)	(9)	(9)	(9)	-----	-----
Electric energy purchased <sup>4</sup> .....	-----	11,260,024 Kilowatt-hours	-----	(9)	-----	(9)	-----	(9)	-----	(9)	-----	-----

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

<sup>2</sup> Not called for separately on schedule.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>5</sup> Data incomplete.

**TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929**

[This table presents statistics for the only two States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:														-----	
1929.....	2,500	2,828	2,800	2,951	2,830	2,782	2,604	2,588	2,462	2,450	2,350	2,183	2,118	71.8	
1925.....	2,050	2,510	2,602	2,684	2,677	2,667	2,656	2,635	2,607	2,680	2,642	2,780	2,766	89.3	
1919.....	2,011	1,708	1,739	1,767	1,859	1,845	1,905	2,000	2,158	2,214	2,205	2,284	2,328	74.7	
1914.....	795	707	705	840	881	875	770	763	751	714	807	782	760	81.0	
Massachusetts.....	318	334	317	380	340	327	300	283	281	304	343	335	304	81.2	
New Jersey.....	583	780	788	771	687	583	549	538	470	482	466	435	429	64.4	

<sup>1</sup> No comparable figures for earlier years.

# AWNINGS, TENTS, SAILS, AND CANVAS COVERS

Description of the industry.—The establishments classified in this industry are engaged primarily in the manufacture of window, store, and veranda awnings; tents, sails, and tarpaulins; and canvas covers for trucks, furniture, etc. Small establishments which make these goods to individual order are not covered by the census.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	1,002	7,162	\$8,559,321	\$25,328,140	\$49,237,576	\$23,909,430	4,995
1927	963	6,543	8,229,362	24,409,718	47,929,352	23,519,634	4,850
1925	905	6,249	7,500,561	27,453,156	48,508,984	21,116,828	4,564
1923	814	5,958	6,922,938	25,229,222	45,275,756	20,046,534	4,728
1921	709	5,070	5,930,577	21,327,125	37,011,718	15,684,593	( <sup>3</sup> )
1919	895	6,028	5,858,523	20,961,140	45,090,390	18,729,350	4,571
1914	888	5,073	2,953,884	10,155,101	18,138,326	7,983,225	2,602
1900	621	4,242	2,187,651	8,376,781	14,499,020	6,122,230	2,004
1904	390	3,432	1,757,466	6,669,721	11,209,170	4,599,440	1,078
1899	340	3,336	1,598,593	5,227,593	9,143,604	3,916,101	828
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	4.0	9.5	4.0	3.8	2.7	1.7	3.0
1925-1927	0.4	4.7	9.7	-11.1	-1.3	11.4	6.3
1923-1925	11.2	4.9	8.3	8.8	7.3	5.3	-3.5
1921-1923	14.8	17.5	10.7	18.3	22.3	27.8	
1919-1921	-20.8	-15.9	1.2	-20.9	-10.0	-16.3	
1919-1929	12.0	18.8	46.1	-6.1	7.8	27.7	9.3
1909-1919	44.1	42.1	167.8	221.9	215.1	205.9	124.1
1899-1909	82.6	27.2	39.5	60.2	59.6	50.3	142.0

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of awnings, tents, sails, and canvas covers, as follows: 1929, \$4,647,333; 1927, \$2,878,514; 1925, \$2,742,563; corresponding amounts for earlier years not available. Does not include values of awnings, tents, sails, and canvas covers made as secondary products by establishments classified in other industries, as follows: 1929, \$2,170,831; 1927, \$1,043,483; 1925, \$1,743,831; 1923, \$1,409,439; 1921, \$1,028,266; 1919, \$2,302,007; corresponding amounts for earlier years not available.  
<sup>3</sup> Value of products less cost of materials, fuel and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>4</sup> Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	1,002	2,014	7,162	4,995	465	4,540	\$4,719,834	\$8,559,321	\$25,328,140	\$25,032,728	\$295,412	\$49,237,576	\$23,909,436
	1927	963	1,863	6,543	4,850	481	4,369	4,103,867	8,229,362	24,409,718	24,135,127	274,691	47,929,352	23,519,634
	1919	895	1,614	6,028	4,571	438	4,133	3,002,147	5,858,523	20,961,140	20,702,652	198,488	45,090,390	18,729,250
Individual States:														
Alabama	1929	6	6	24	15		15	9,700	21,859	80,541	80,148	393	161,920	81,388
	1927	5	7	16	14		14	10,217	20,188	93,354	92,919	435	158,724	65,370
	1919	5	8	10	8		8	4,020	4,746	23,143	22,874	269	42,014	18,871
California	1929	85	107	447	425		425	237,097	596,762	1,554,374	1,543,329	11,045	3,056,149	1,501,775
	1927	76	104	401	275		275	206,606	585,468	1,930,332	1,917,875	12,456	3,592,563	1,602,222
	1919	47	53	327	216		216	89,950	379,270	1,749,829	1,743,238	6,691	2,806,399	1,116,570
Colorado	1929	9	39	113	122		122	104,219	126,708	413,274	405,849	7,425	802,327	389,053
	1927	10	45	156	117		117	112,535	157,495	600,719	601,524	5,195	1,094,042	487,323
	1919	10	57	182	162		162	132,503	108,953	688,603	660,432	8,171	1,021,664	353,051
Connecticut	1929	26	27	97	47		47	66,666	107,870	267,300	202,087	5,213	535,093	328,093
	1927	26	20	91	106	25	81	42,503	106,516	188,442	180,255	8,187	479,170	295,737
	1919	29	12	68	37		37	9,060	60,714	160,035	148,123	1,912	280,593	139,468
District of Columbia	1929	11	25	70	28		28	50,246	71,822	163,145	160,143	3,002	361,895	208,750
	1927	8	25	73	16		16	42,882	112,925	104,104	102,778	1,326	355,282	251,178
	1919	5	14	76	18		18	29,396	70,526	145,517	144,102	1,415	274,384	128,867
Florida	1929	19	38	104	88		88	68,376	105,643	262,865	250,629	2,236	548,994	296,129
	1927	21	40	104	154		154	80,667	137,792	238,024	234,804	8,220	609,394	422,730
	1919	9	16	49	12		12	29,113	53,335	473,926	478,214	712	673,700	194,834

See footnotes at end of table.



# AWNINGS, TENTS, SAILS, AND CANVAS COVERS

227

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

(See note at head of this table)

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
Individual States—Con.														
Georgia	1929	0	20	84	303	250	113	\$60,956	\$60,533	\$320,678	\$324,544	\$4,034	\$583,058	\$208,480
	1927	8	27	107	422	300	122	47,137	85,042	327,220	322,312	4,008	581,082	254,462
Idaho	1929	4	7	23	14	0	14	15,022	27,785	74,737	78,815	022	123,016	48,279
	1927	3	8	14	0	0	0	15,001	30,133	42,456	40,000	1,550	131,000	88,544
Illinois	1929	63	142	583	276	—	270	378,712	784,674	2,302,450	2,277,230	25,220	4,228,007	1,025,567
	1927	61	140	408	287	10	277	256,402	725,042	1,988,804	1,007,013	20,461	3,853,811	1,805,447
	1919	63	125	348	270	85	185	206,644	400,005	1,523,053	1,507,080	15,977	2,804,213	1,970,550
Indiana	1929	21	64	205	125	—	125	100,432	237,951	714,351	706,120	8,231	1,388,808	674,467
	1927	23	64	109	115	—	115	121,408	210,510	635,895	628,406	7,300	1,279,072	643,267
	1919	19	28	142	61	—	61	63,136	93,675	407,085	403,652	3,433	808,110	330,031
Iowa	1929	13	34	62	70	—	70	49,846	62,654	159,804	155,062	4,362	438,801	279,487
	1927	12	21	56	72	0	60	25,770	73,870	101,837	158,826	3,011	338,507	170,670
	1919	18	31	77	91	17	74	52,628	62,370	213,530	200,018	3,021	410,080	203,141
Kansas	1929	15	33	97	59	—	59	80,220	90,432	260,141	257,364	2,837	593,771	393,630
	1927	11	40	80	45	—	45	90,708	90,262	319,387	310,462	2,025	700,398	387,011
	1919	9	15	46	41	11	30	26,460	30,632	113,019	112,098	1,251	270,278	105,320
Kentucky	1929	0	17	58	45	—	45	28,784	55,400	140,383	137,780	2,597	310,692	179,309
	1927	7	13	57	106	—	100	22,182	54,000	143,833	140,853	2,080	292,146	148,313
	1919	6	25	72	28	—	28	40,278	48,342	178,020	170,561	1,450	231,209	153,270
Louisiana	1929	7	35	70	55	—	55	110,666	81,780	458,956	455,737	3,210	755,300	266,353
	1927	7	47	74	35	12	33	77,077	83,500	450,597	448,840	1,751	784,740	334,149
	1919	7	18	54	33	—	23	27,117	49,706	248,178	247,390	788	402,933	154,755
Maine	1929	6	5	23	13	—	13	13,680	20,727	60,974	68,487	1,487	160,893	59,019
	1927	7	5	21	12	—	12	0,080	24,305	60,800	59,638	1,408	136,014	75,208
	1919	17	4	40	22	—	22	3,430	42,770	120,150	118,400	1,750	215,410	95,251
Maryland	1929	19	23	81	41	—	41	40,694	83,415	221,539	210,451	2,088	400,102	238,023
	1927	10	21	60	38	—	38	37,081	87,845	205,689	203,270	2,419	400,041	254,372
	1919	16	20	65	40	—	40	75,005	78,062	367,793	365,313	2,480	611,491	243,698
Massachusetts	1929	58	78	308	135	—	135	175,737	421,870	710,173	698,023	11,250	1,770,996	1,000,823
	1927	64	80	324	185	—	185	203,669	453,418	895,435	882,432	13,003	2,070,291	1,174,850
	1919	47	73	275	118	—	118	103,654	208,074	887,288	870,056	7,332	1,542,767	655,470
Michigan	1929	32	100	357	145	—	145	215,923	482,870	1,231,000	1,221,769	9,850	2,510,732	1,279,123
	1927	34	92	264	150	6	154	188,050	370,077	906,354	980,703	9,651	2,063,702	1,067,348
	1919	22	79	190	117	—	117	155,072	213,004	919,000	913,430	6,479	1,045,000	725,161
Minnesota	1929	15	50	125	72	—	72	110,177	133,911	340,060	340,710	5,980	734,093	388,000
	1927	15	38	108	75	—	75	75,014	132,798	350,368	345,188	5,180	609,072	348,704
	1919	16	20	89	62	—	62	42,657	82,135	340,825	337,434	3,401	580,467	239,032
Missouri	1929	32	120	414	233	—	233	275,048	420,020	1,800,836	1,850,022	13,814	2,011,078	1,041,242
	1927	37	43	505	190	—	190	288,600	519,131	1,934,877	1,917,205	17,612	3,408,756	1,473,879
	1919	23	200	771	273	—	273	362,697	500,581	3,785,711	3,700,737	18,074	5,824,070	2,038,360
Montana	1929	3	1	6	5	—	5	300	5,227	22,072	21,827	245	40,516	24,444
	1927	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	—	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
	1919	5	0	0	9	( <sup>4</sup> )	9	0	5,808	23,668	23,336	232	42,861	10,283
Nebraska	1929	8	39	105	135	—	135	70,880	108,543	310,030	309,557	6,482	638,432	322,303
	1927	9	24	70	40	—	40	32,424	71,344	229,955	228,152	1,803	474,702	244,747
	1919	9	38	127	57	—	57	105,232	85,487	476,966	473,020	3,040	706,215	310,240
New Jersey	1929	71	56	301	203	—	203	132,533	324,500	785,431	770,060	15,765	1,634,959	848,528
	1927	60	50	247	146	—	146	123,758	293,837	615,745	604,070	21,075	1,432,642	816,897
	1919	50	36	100	112	20	62	40,870	100,209	434,100	427,798	6,401	892,482	458,283
New York	1929	198	297	1,141	609	102	597	840,478	1,740,986	4,078,103	4,028,027	49,470	8,938,008	4,860,505
	1927	178	291	954	620	14	612	698,246	1,483,103	3,730,105	3,685,030	45,075	7,971,248	4,241,143
	1919	192	238	984	510	11	490	612,140	1,161,363	4,992,250	4,962,839	29,411	8,402,969	3,410,669
North Carolina	1929	0	2	27	15	—	15	7,120	23,173	64,695	63,955	740	141,020	70,331
	1927	5	6	11	25	—	25	12,228	12,489	78,500	77,514	986	144,105	65,065
	1919	4	—	3	3	—	3	—	3,415	10,277	10,181	00	17,008	0,731
Ohio	1929	46	214	756	637	7	630	516,076	827,137	2,809,759	2,771,740	38,019	5,120,184	2,310,375
	1927	48	220	708	646	12	634	504,638	904,354	2,971,830	2,937,917	33,913	5,515,049	2,543,219
	1919	41	160	851	1,732	272	1,400	259,273	753,602	3,735,820	3,680,161	46,659	6,037,360	3,201,393
Oklahoma	1929	12	27	68	32	—	32	55,424	63,473	234,667	232,100	1,877	430,238	205,171
	1927	10	21	47	73	45	28	30,371	61,203	140,321	147,598	1,723	200,907	147,568
	1919	9	12	30	23	—	22	22,955	23,748	148,312	147,064	658	244,660	90,348
Pennsylvania	1929	88	116	454	307	96	211	211,129	503,775	1,724,198	1,704,016	19,582	3,108,163	1,383,965
	1927	93	79	397	274	3	271	158,964	402,916	1,370,650	1,363,535	17,124	2,677,471	1,300,812
	1919	82	51	261	183	—	183	105,404	200,018	1,122,825	1,114,267	8,558	1,883,888	701,063
Tennessee	1929	11	23	59	34	—	34	55,856	74,213	254,192	251,994	2,198	503,936	240,744
	1927	9	17	48	23	—	23	30,888	49,789	203,037	201,415	1,322	400,898	197,851
	1919	11	14	42	28	—	28	32,282	80,875	255,014	254,242	1,672	504,251	134,597
Texas	1929	22	87	365	238	—	238	183,409	312,688	1,392,203	1,378,202	14,001	2,328,683	930,420
	1927	23	76	360	217	20	191	171,483	287,579	1,445,903	1,434,840	11,114	2,261,945	845,952
	1919	13	37	128	84	26	64	76,070	97,965	938,051	936,021	2,330	1,308,002	369,111
Utah	1929	5	5	15	11	—	11	7,480	10,442	78,063	78,472	491	120,224	50,291
	1927	4	3	10	10	—	10	1,880	12,472	60,691	60,022	600	94,859	25,108
	1919	6	2	18	11	—	11	1,200	15,110	110,713	110,103	610	161,155	50,442

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
Individual States—Con.														
Virginia	1929	11	15	64	40		40	\$24,405	\$70,824	\$155,161	\$153,347	\$1,814	\$358,833	\$203,672
	1927	14	19	68	50	22	28	20,047	78,850	182,553	178,312	4,241	388,363	205,810
	1919	12	17	81	46		46	32,885	95,691	299,329	297,932	1,397	547,410	248,087
Washington	1929	13	31	82	72		72	61,540	108,089	422,967	419,800	3,161	812,770	380,812
	1927	13	38	83	67		67	80,954	109,930	505,523	502,659	2,864	841,850	330,833
	1919	15	23	107	59	2	57	63,667	165,263	752,850	751,152	1,204	1,174,060	421,710
West Virginia	1929	5	13	24	22		22	25,230	20,933	62,273	61,261	1,012	162,877	100,604
	1927	4	12	15	15		15	25,993	20,055	46,113	45,061	1,052	111,459	65,346
	1919	5	4	10	9		9	3,000	15,202	32,642	32,314	328	77,171	44,529
Wisconsin	1929	22	49	125	47		47	97,698	144,847	394,638	388,201	6,347	866,249	471,611
	1927	22	61	133	91		91	120,047	152,102	402,051	396,925	5,129	888,600	486,939
	1919	21	30	98	44		44	41,021	80,231	317,751	313,746	4,005	530,118	218,367
Groups of States:														
Ariz., 1 est.; Oreg., 4; Wyo., 1	1929	6	24	41	25		25	62,602	41,781	183,531	182,200	1,331	386,148	202,617
N. H., 2 est.; Vt., 2	1929	4	3	15	14		14	4,900	17,967	41,306	40,618	688	97,065	56,659
N. Dak., 1 est.; S. Dak., 2	1929	3	1	8	9		9	1,165	10,175	19,940	18,754	1,195	30,877	10,928
Other States (Ark., 3 est.; Del., 2; Miss., 1; R. I., 4; S. C., 2)	1929	12	32	161	79		79	90,214	113,262	736,247	731,464	4,783	1,070,623	343,376
States not shown separately.	<sup>4</sup> 1927	27	49	147	100	1	90	116,797	153,225	739,670	733,209	6,461	1,253,426	513,756
	<sup>7</sup> 1919	43	53	200	81		81	98,602	208,247	927,035	921,513	5,572	1,561,281	634,106

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 813; 1927, 920; 1919, 871. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 9,989; 1927, 9,326; 1919, 8,413.

<sup>2</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

<sup>5</sup> Withheld from publication in order to avoid disclosing data for individual establishments.

<sup>6</sup> Arizona, 1 establishment; Arkansas, 3; Montana, 1; New Hampshire, 2; North Dakota, 1; Oregon, 6; Rhode Island, 6; South Carolina, 1; South Dakota, 2; Vermont, 2; Wyoming, 2.

<sup>7</sup> Arizona, 3 establishments; Arkansas, 6; Delaware, 1; Georgia, 4; Idaho, 2; Mississippi, 3; New Hampshire, 3; New Mexico, 1; North Dakota, 1; Oregon, 3; Rhode Island, 5; South Carolina, 4; South Dakota, 3; Vermont, 2; and Wyoming, 2.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929 AND 1927; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	5,330	Horse-power 4,995	4,511	Horse-power 4,850	3,910	Horse-power 4,664	2,637	Horse-power 4,671	1,675	Horse-power 2,002	100.0	100.0
Prime movers, total	10	455	25	481	10	358	10	438	32	270	9.1	9.6
Steam, total	5	352	7	337	2	310	7	349	0	104	7.0	7.6
Engines	4	340	7	337	2	310	7	349	( <sup>1</sup> )	( <sup>1</sup> )	8.8	7.6
Turbines	1	12							( <sup>1</sup> )	( <sup>1</sup> )	0.2	
Internal-combustion engines	5	103	9	132	5	46	9	80	19	159	2.1	1.9
Water wheels and water turbines			9	12	9	2			7	7		
Electric motors driven by purchased energy	5,326	4,540	4,486	4,369	3,894	4,206	2,621	4,133	1,643	2,332	90.9	90.4
Electric motors, total	5,327	4,544	4,489	4,372	3,894	4,206	2,635	4,166	1,653	2,383	100.0	100.0
Driven by purchased energy	5,326	4,540	4,486	4,369	3,894	4,206	2,621	4,133	1,643	2,332	90.9	98.5
Driven by energy generated in establishments reporting	1	4	3	3			14	63	10	51	0.1	1.5
Electric generators	3	Kilo-watts 81	1	Kilo-watts 6			( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )		
Electric energy purchased <sup>3</sup>		Kilowatt-hours 4,707,205		( <sup>4</sup> )		( <sup>4</sup> )		( <sup>4</sup> )		( <sup>4</sup> )		

<sup>1</sup> Not called for separately on schedule.

<sup>2</sup> Not called for on schedule.

<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>4</sup> Data incomplete.

AWNINGS, TENTS, SAILS, AND CANVAS COVERS

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929	7,162	<i>5,585</i>	5,880	6,001	8,340	9,271	9,556	8,833	7,375	6,577	6,338	5,805	5,710	58.4	
1925	6,249	<i>4,713</i>	5,013	5,740	7,105	8,200	8,004	7,739	6,604	5,073	5,637	5,227	4,978	55.4	
1919	6,028	<i>4,881</i>	4,800	5,287	6,390	7,051	7,456	7,161	6,417	5,854	5,725	5,686	5,530	55.5	
1914	5,073	<i>3,653</i>	4,103	4,718	5,802	6,811	7,072	6,263	5,178	4,601	4,350	4,021	3,695	55.9	
1909	4,242	<i>3,180</i>	3,412	3,000	4,054	5,249	5,463	5,177	4,525	4,110	3,880	3,619	3,697	57.8	
Alabama	24	<i>21</i>	21	22	25	30	32	31	29	24	21	<i>17</i>	17	53.1	
California	447	<i>404</i>	418	437	458	495	495	500	460	430	430	423	408	80.8	
Colorado	113	<i>79</i>	80	97	142	154	176	171	106	90	89	82	81	44.9	
Connecticut	97	<i>71</i>	80	90	111	133	140	134	94	79	78	77	71	48.0	
District of Columbia	70	<i>49</i>	53	61	87	111	108	83	60	55	55	51	51	44.1	
Florida	104	<i>123</i>	114	102	98	84	83	75	75	79	110	151	152	40.3	
Georgia	84	<i>112</i>	80	72	92	90	79	73	75	75	91	87	70	62.5	
Idaho	23	<i>23</i>	23	23	24	24	23	24	23	23	23	24	24	95.8	
Illinois	683	<i>466</i>	478	537	676	743	772	727	643	587	467	400	447	57.9	
Indiana	205	<i>130</i>	138	184	301	325	321	258	202	164	162	140	150	40.0	
Iowa	62	<i>30</i>	48	57	70	89	80	83	70	58	50	42	30	43.8	
Kansas	97	<i>86</i>	87	95	104	108	111	104	102	92	94	88	87	77.5	
Kentucky	58	<i>49</i>	49	50	60	71	72	64	65	60	63	51	50	68.1	
Louisiana	70	<i>61</i>	61	70	82	82	80	73	68	68	66	64	64	74.4	
Maine	23	<i>17</i>	17	21	26	20	32	30	27	21	10	10	20	53.1	
Maryland	81	<i>78</i>	50	81	88	90	90	84	81	70	74	75	75	82.2	
Massachusetts	308	<i>297</i>	251	273	362	305	434	372	309	282	276	202	253	54.0	
Michigan	357	<i>310</i>	312	325	428	467	505	465	422	312	275	239	231	45.7	
Minnesota	125	<i>94</i>	100	109	142	137	161	160	132	123	110	112	100	58.4	
Missouri	414	<i>305</i>	381	410	531	581	500	489	408	349	347	306	297	51.1	
Montana	6	<i>3</i>	4	4	6	7	9	9	9	9	6	3	3	33.3	
Nebraska	105	<i>70</i>	82	98	120	146	153	147	103	80	80	82	78	51.0	
New Jersey	301	<i>250</i>	230	280	334	404	416	349	298	293	278	250	250	60.1	
New York	1,141	<i>857</i>	963	1,031	1,278	1,484	1,608	1,447	1,153	1,050	1,011	937	925	53.5	
North Carolina	27	<i>24</i>	27	20	30	30	30	28	27	26	26	24	23	70.7	
Ohio	756	<i>544</i>	613	717	927	1,010	1,033	942	760	650	689	610	581	52.7	
Oklahoma	68	<i>46</i>	47	51	81	85	85	65	84	75	65	54	44	46.3	
Pennsylvania	454	<i>338</i>	344	404	561	631	661	554	444	393	404	342	380	51.9	
Tennessee	50	<i>45</i>	45	65	81	80	87	71	58	49	49	47	47	40.4	
Texas	305	<i>214</i>	271	325	410	453	464	500	430	370	342	287	260	42.0	
Utah	15	<i>14</i>	14	14	15	18	17	17	15	15	14	14	14	77.8	
Virginia	64	<i>49</i>	49	52	70	94	85	80	64	53	60	54	49	52.1	
Washington	82	<i>67</i>	69	70	92	101	106	108	87	82	70	66	65	60.0	
West Virginia	24	<i>14</i>	14	30	34	30	42	30	21	15	15	15	14	33.3	
Wisconsin	125	<i>91</i>	101	110	143	150	168	159	132	131	97	94	94	64.2	

## BAGS, OTHER THAN PAPER, NOT MADE IN TEXTILE MILLS

Description of the industry.—The principal products of the establishments classified in this industry are jute and canvas bags for mail, coal, cement, grain, flour, meal, money, etc.; bags for use by carpenters, newsboys, and fruit pickers; individual tea-service bags, etc. The industry does not include the manu-

facture of bags made and used by the same establishments as containers for flour, tobacco, cement, or other commodities of their own manufacture. The production of bags in cotton mills is shown in Table 4 of the report for the cotton-goods industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	202	11,828	\$0,044,876	\$144,275,477	\$170,175,893	\$25,000,416	19,159
1927	181	11,164	9,548,317	136,748,406	162,949,837	20,201,431	15,754
1925	162	11,404	9,831,815	150,102,277	175,081,911	24,070,634	15,295
1923	160	11,548	9,300,999	128,221,603	161,675,727	23,454,124	13,852
1921	169	10,324	8,031,523	99,437,815	115,452,413	10,014,568	(*)
1919	216	10,756	7,756,582	176,017,560	214,059,474	38,041,914	9,076
1914	138	9,358	3,788,837	67,021,370	79,049,151	12,027,775	10,381
1909	100	7,968	2,942,309	46,364,468	54,881,622	8,617,154	6,824
1904	79	5,722	1,828,526	30,758,040	37,300,037	6,041,047	4,442
1899	73	3,922	1,102,308	16,438,576	19,652,080	3,213,510	1,631
PER CENT OF INCREASE OR DECREASE (-)							
1927-1929	11.6	5.9	1.0	5.5	4.4	-1.1	21.6
1925-1927	11.7	-2.1	2.3	-3.9	-6.9	4.9	3.0
1923-1925	-4.1	-1.2	-0.3	17.1	15.4	0.5	10.4
1921-1923	11.9	11.9	16.6	28.0	31.4	46.5	
1919-1921	-21.8	-4.0	3.5	-43.5	-46.1	-57.9	
1919-1929	-6.5	10.0	24.3	-18.0	-20.5	-31.9	111.1
1909-1919	98.2	35.0	183.6	270.6	200.0	346.7	33.0
1899-1909	(*)	103.2	156.9	182.0	179.3	105.0	318.4

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Includes values of miscellaneous products normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of bags (other than paper), as follows: 1929, \$3,633,512; 1927, \$1,933,037; 1925, \$2,769,916; corresponding amounts for earlier years not available. Does not include values of bags (other than paper) made as secondary products by establishments classified in other industries, as follows: 1929, \$4,099,219; 1927, \$5,003,593; 1925, \$5,337,193; 1923, \$6,767,195; 1921, \$3,880,973. These amounts include the following values of bags reported by cotton mills as made from fabrics of their own weaving: 1929, \$2,031,568; 1927, \$3,271,207; 1925, \$3,333,670; 1923, \$5,863,923; 1921, \$2,683,870. No comparable data for earlier years are available.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Not called for on schedule.

<sup>5</sup> Per cent not computed where base is less than 100.

# BAGS, OTHER THAN PAPER

231

TABLE 2.—GENERAL STATISTICS, BY STATES: 1920, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Certain of the States, however, for which statistics are given in combination with those for others reported larger values of products than some of the States shown separately. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1920	202	1,047	11,828	10,150	0,047	12,512	\$4,734,471	\$0,044,876	\$144,275,477	\$143,850,270	\$410,207	\$170,175,893	\$25,000,416
	1927	181	1,545	11,164	15,754	5,023	9,831	4,180,781	0,548,317	130,748,406	130,841,070	405,430	162,049,837	26,201,431
	1919	216	1,720	10,756	9,076	4,366	4,710	4,093,062	7,756,582	170,017,560	175,663,004	323,506	214,059,474	38,041,914
Individual States:														
California	1920	10	122	737	780	-----	789	320,450	679,650	0,314,371	9,295,193	10,178	11,210,537	1,899,160
	1927	8	90	680	806	-----	806	260,379	659,723	8,485,842	8,471,014	13,928	10,358,082	1,872,840
	1919	6	98	487	502	-----	502	206,141	388,081	11,100,563	11,092,168	8,305	13,414,851	2,314,268
Illinois	1920	17	55	484	584	-----	584	180,238	425,400	4,742,777	4,710,758	23,010	5,759,903	1,017,120
	1927	16	50	382	598	125	473	162,033	353,701	5,306,750	5,349,090	17,693	6,397,779	1,031,020
	1919	9	53	381	340	125	224	251,333	280,474	5,400,319	5,380,482	10,837	7,933,704	2,533,386
Kansas	1920	3	28	153	315	-----	315	50,902	110,578	1,062,078	1,046,123	0,855	2,208,605	255,627
Louisiana	1920	6	114	1,195	970	200	770	342,053	603,550	10,136,148	10,105,193	30,955	12,180,430	2,044,201
	1927	6	123	1,101	981	150	831	384,719	798,254	13,058,577	13,022,000	30,451	15,217,021	2,159,544
	1919	5	109	634	525	125	400	323,304	497,904	14,359,130	14,342,410	16,711	18,310,111	3,050,981
Maryland	1920	9	19	137	113	-----	113	41,922	95,413	1,531,337	1,527,219	4,110	1,931,493	400,156
	1927	6	18	111	129	60	69	35,892	85,910	1,434,045	1,430,487	3,558	1,619,518	185,478
	1919	12	34	183	177	65	112	92,206	133,529	2,725,880	2,721,757	4,132	3,132,886	400,907
Massachusetts	1920	5	11	74	50	-----	50	23,583	65,378	680,320	680,833	2,487	870,851	187,531
	1927	5	7	44	48	-----	48	18,043	47,955	541,012	539,074	1,038	700,500	159,488
	1919	6	22	140	177	-----	177	40,604	100,079	1,551,851	1,548,587	3,204	1,816,051	263,800
Missouri	1920	15	261	1,408	2,036	1,040	996	838,325	1,377,086	18,281,426	18,240,218	41,208	21,586,361	3,304,935
	1927	12	200	1,280	1,570	640	930	580,191	1,173,401	10,538,045	10,480,701	40,154	10,448,517	3,000,572
	1919	10	343	1,752	1,120	935	491	717,049	1,292,580	32,710,447	32,061,417	58,030	38,020,623	5,801,176
New Jersey	1920	9	41	331	365	-----	365	125,454	345,704	4,340,237	4,325,275	23,002	5,340,558	901,321
	1927	7	21	183	214	-----	214	63,547	192,804	2,061,777	2,055,050	6,721	2,450,487	388,710
	1919	14	39	824	351	278	73	115,842	330,604	12,743,534	12,724,755	19,079	14,000,734	1,952,000
New York	1920	38	244	1,715	3,484	2,040	1,444	876,425	1,737,805	24,892,899	24,822,595	70,394	20,849,322	4,050,423
	1927	38	275	2,062	3,465	1,675	1,700	904,705	2,144,243	23,567,467	23,475,050	92,407	28,063,016	6,085,550
	1919	50	264	1,568	1,780	788	1,001	755,203	1,082,756	21,258,636	21,185,074	67,992	20,821,937	5,508,301
Ohio	1920	9	34	285	243	-----	243	80,484	285,702	3,408,570	3,455,702	12,817	3,984,533	515,054
	1927	11	35	328	307	-----	307	104,184	322,350	3,523,720	3,510,850	12,870	4,510,174	992,454
Pennsylvania	1920	11	50	353	192	-----	192	151,652	298,632	3,500,040	3,581,027	0,922	4,704,980	1,114,031
	1927	12	54	328	220	-----	220	198,066	287,993	3,753,093	3,744,020	0,673	4,580,737	836,044
	1919	14	45	340	202	-----	202	104,980	267,589	5,226,221	5,210,440	6,781	6,079,582	1,753,801
Tennessee	1920	5	70	606	1,873	-----	1,873	170,040	479,765	8,302,516	8,364,710	27,800	9,407,649	1,075,133
	1927	6	84	824	903	-----	903	222,262	578,014	9,544,878	9,500,890	37,988	10,874,085	1,329,207
	1919	7	90	662	351	-----	351	225,008	428,921	10,817,270	10,804,058	12,021	12,318,292	1,501,013
Texas	1920	13	114	872	947	-----	947	244,811	540,152	9,890,793	9,870,447	20,316	11,343,293	1,452,530
	1927	9	67	538	462	-----	462	150,871	300,765	6,980,052	6,978,384	7,668	7,934,290	948,244
	1919	6	80	372	313	-----	313	156,012	251,650	7,020,901	7,018,975	7,980	7,909,765	882,804
Virginia	1920	9	38	390	525	-----	525	95,875	262,737	4,005,037	4,590,303	8,734	5,207,118	602,081
	1927	9	51	316	296	-----	296	87,013	191,546	3,195,338	3,188,374	6,904	3,795,512	570,174
	1919	13	43	441	260	110	150	65,327	221,318	4,225,023	4,210,055	8,008	4,840,831	615,208
Groups of States:														
Ala., 3 est.; Fla., 3; Ky., 1	1920	7	26	350	296	25	271	51,884	188,274	2,787,266	2,770,036	7,020	3,356,887	560,081
Conn., 3 est.; R. I., 2	1920	5	12	26	14	-----	14	21,335	24,353	94,785	92,941	1,844	177,090	82,014
Ga., 7 est.; N. C. 2; S. C., 2	1920	11	143	626	2,385	1,700	685	396,817	438,012	10,743,546	10,715,771	27,775	12,280,288	1,542,742
Ind., 3 est.; Mich., 2; Minn., 5; Wis., 4	1920	14	182	1,240	3,098	1,152	1,860	451,057	1,210,756	16,034,828	16,572,128	62,700	19,280,168	2,645,340
Other States (Nebr., 1 est.; Oreg., 2; Utah, 1; Wash., 2)	1920	6	74	450	955	400	465	230,355	450,774	8,176,725	8,102,220	14,506	9,423,209	1,246,484
States not shown separately	* 1927	30	401	2,800	5,095	3,273	2,422	1,005,701	2,386,448	38,090,911	38,580,888	110,023	46,323,613	7,632,702
	* 1919	58	482	2,903	2,801	2,240	621	1,030,194	2,296,107	46,866,807	46,767,977	98,830	57,864,597	10,697,700

<sup>1</sup> Not including proprietors and firm members, as follows: For 1920, 103; 1927, 94; 1919, 106. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1920, 13,578; 1927, 12,803; 1919, 12,942.

<sup>2</sup> The figures for 1920 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

\* Alabama, 2 establishments; Connecticut, 2; Florida, 3; Georgia, 3; Indiana, 2; Kansas, 1; Kentucky, 1; Michigan, 1; Minnesota, 5; Nebraska, 1; North Carolina, 1; Oklahoma, 1; Oregon, 3; Rhode Island, 1; South Carolina, 2; Utah, 1; Washington, 2; Wisconsin, 4.  
 \* Alabama, 2 establishments; Connecticut, 3; Florida, 3; Georgia, 6; Indiana, 2; Kentucky, 2; Michigan, 5; Minnesota, 5; Nebraska, 1; North Carolina, 2; Ohio, 12; Oklahoma, 1; Oregon, 2; Rhode Island, 2; South Carolina, 4; Washington, 1; and Wisconsin, 5.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
		Horse-power		Horse-power		Horse-power		Horse-power		Horse-power		
Prime movers and electric motors driven by purchased energy, aggregate.....	3,014	19,159	2,176	15,754	1,869	15,295	1,051	9,076	529	16,381	100.0	100.0
Prime movers, total.....	29	6,647	30	5,023	33	5,761	30	4,366	45	6,793	34.7	48.1
Steam, total.....	27	6,497	26	5,042	28	5,470	33	4,216	36	6,511	33.9	46.5
Engines.....	25	4,897	24	4,302	24	4,005	32	4,116	(1)	(1)	25.6	45.4
Turbines.....	2	1,600	1	1,340	4	1,375	1	100	(1)	(1)	8.3	1.1
Internal-combustion engines.....	2	150	5	281	5	281	0	150	7	192	0.8	1.6
Water wheels and water turbines.....									2	90		
Electric motors driven by purchased energy.....	2,085	12,512	2,146	9,831	1,866	9,544	1,012	4,710	484	3,588	65.3	51.0
Electric motors, total.....	3,592	15,413	2,769	13,107	2,558	12,711	1,600	8,104	1,047	7,289	100.0	100.0
Driven by purchased energy.....	2,085	12,512	2,146	9,831	1,866	9,544	1,012	4,710	484	3,588	81.2	57.7
Driven by energy generated in establishments reporting.....	607	2,901	623	3,276	692	3,167	648	3,454	563	3,701	18.8	42.3
Electric generators.....	21	Kilowatts 3,525	32	Kilowatts 3,782	20	Kilowatts 3,034	(2)	(2)	(2)	(2)		
Electric energy purchased <sup>1</sup> .....		Kilowatt-hours 7,004,787		(1)		(1)		(2)		(2)		

<sup>1</sup> Not called for separately on schedule.  
<sup>2</sup> Not called for on schedule.  
<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>4</sup> Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by italic figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimums of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929.....	11,828	<i>11,100</i>	11,228	11,705	11,783	11,513	11,540	11,954	12,244	12,479	12,578	12,204	11,604	11,604	88.2
1925.....	11,404	<i>10,726</i>	11,090	11,375	11,108	10,760	10,883	11,214	11,730	12,114	12,302	11,857	11,682	11,682	87.2
1919.....	10,756	10,463	9,848	<i>9,461</i>	9,541	10,155	10,405	11,013	11,531	11,409	11,803	11,670	11,503	11,503	80.2
1914.....	9,358	8,968	9,023	9,394	9,399	9,308	9,578	9,951	9,820	9,818	9,420	8,747	8,864	8,864	87.9
1909.....	7,968	<i>7,373</i>	7,515	7,626	7,040	7,543	7,503	7,974	8,310	8,528	8,553	8,640	8,305	8,305	85.3
California.....	737	<i>617</i>	636	755	754	773	760	777	707	811	807	722	661	661	76.1
Illinois.....	484	<i>477</i>	482	489	483	483	481	477	482	481	480	492	487	487	96.8
Kansas.....	153	<i>153</i>	151	161	163	<i>139</i>	143	147	168	152	164	159	149	149	82.7
Louisiana.....	1,195	1,040	1,058	1,031	<i>1,023</i>	1,050	1,060	1,161	1,423	1,478	1,410	1,383	1,214	1,214	90.6
Maryland.....	137	<i>130</i>	138	144	146	130	133	139	130	140	135	133	132	132	80.7
Massachusetts.....	74	<i>79</i>	79	79	74	70	70	<i>69</i>	<i>69</i>	73	77	76	76	76	87.3
Missouri.....	1,498	1,387	1,442	1,463	1,399	1,389	1,369	1,444	1,443	1,411	1,430	1,389	<i>1,323</i>	1,323	90.4
New Jersey.....	331	326	328	339	337	335	355	350	340	349	354	283	<i>266</i>	266	74.9
New York.....	1,715	<i>1,630</i>	1,645	1,716	1,706	1,682	1,721	1,730	1,700	1,788	1,780	1,727	1,693	1,693	91.2
Ohio.....	285	<i>286</i>	284	283	294	280	285	<i>285</i>	<i>276</i>	289	294	276	277	277	93.2
Pennsylvania.....	353	<i>330</i>	341	371	353	355	358	361	360	347	358	357	339	339	88.0
Tennessee.....	696	684	698	702	695	685	690	728	689	712	694	694	<i>677</i>	677	93.3
Texas.....	872	821	<i>796</i>	830	880	879	844	835	925	906	894	891	807	807	85.1
Virginia.....	390	<i>293</i>	320	300	473	374	343	382	383	404	453	458	404	404	61.9

## BELTING OTHER THAN LEATHER AND RUBBER, NOT MADE IN TEXTILE MILLS

Description of the industry.—This industry em- | facture, from purchased fabrics, of cotton and canvas  
braces establishments engaged primarily in the manu- | belting, both sewed and endless, and balata belting.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1923 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929.....	9	265	\$298,910	\$1,328,000	\$2,788,627	\$1,460,537	1,048
1927.....	11	343	410,008	1,480,841	3,211,875	1,722,034	1,457
1925.....	11	254	204,246	1,595,002	3,111,500	1,515,808	914
1923.....	13	335	350,736	1,674,041	3,311,527	1,637,480	930
PER CENT OF INCREASE OR DECREASE (-)							
1927-1929.....	(9)	-25.7	-27.2	-10.9	-13.2	-15.2	13.1
1925-1927.....	(11)	35.0	55.4	-0.6	3.2	13.0	50.4
1923-1925.....	(13)	-24.2	-24.7	-4.7	-6.0	-7.4	-1.7

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> No comparable figures available for years prior to 1923.

<sup>4</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS FOR THE UNITED STATES AND FOR PENNSYLVANIA: 1929 AND 1927

[Pennsylvania is the only State for which figures can be given without disclosing data for individual establishments. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States.....	1929	9	122	265	1,048	824	824	\$405,346	\$298,910	\$1,328,000	\$1,287,303	\$40,697	\$2,788,627	\$1,460,537
	1927	11	155	343	1,457	668	709	\$31,308	410,008	1,480,841	1,440,204	40,577	3,211,875	1,722,034
Pennsylvania.....	1929	4	88	100	1,102	375	787	108,119	187,836	695,024	637,523	27,501	1,303,513	728,480
	1927	4	63	215	867	125	732	200,532	250,848	867,680	823,550	34,130	1,620,579	771,890
Other States.....	1929	5	64	80	486	449	37	297,227	111,074	683,066	649,870	13,196	1,306,114	732,048
	1927	7	92	128	600	533	67	330,866	150,850	632,161	616,714	15,447	1,582,296	650,135

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 6; 1927, 6. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 383; 1927, 504.

<sup>2</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Illinois, 1 establishment; Indiana, 1; Maryland, 1; New Jersey, 1; Ohio, 1.

<sup>5</sup> Illinois, 1 establishment; Maryland, 3; Minnesota, 1; New Jersey, 1; Ohio, 1.

## CENSUS OF MANUFACTURES: 1929

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS, ELECTRIC MOTORS, AND GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		Per cent distribution of rated horse-power capacity, 1929
	Number	Capacity	Number	Capacity	Number	Capacity	
Prime movers and electric motors driven by purchased energy, aggregate	81	Horse-power 1,648	75	Horse-power 1,457	74	Horse-power 914	100.0
Prime movers, total	7	824	8	658	7	624	50.0
Steam engines	6	818	6	643	5	608	40.6
Internal-combustion engines	1	0	2	15	2	16	0.4
Electric motors driven by purchased energy	74	824	67	799	67	290	50.0
Electric motors, total	75	844	69	824	69	345	100.0
Driven by purchased energy	74	824	67	799	67	290	97.6
Driven by energy generated in establishments reporting	1	20	2	25	2	55	2.4
Electric generators	2	Kilowatts 70 Kilowatt-hours 647,387	2	Kilowatts 70	2	Kilowatts 70	
Electric energy purchased <sup>1</sup>				(?)		(?)	

<sup>1</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.<sup>2</sup> Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929 AND 1925, AND FOR PENNSYLVANIA, 1929

[Pennsylvania is the only State for which figures can be given without disclosing data for individual establishments. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929	255	259	265	261	250	242	<b>231</b>	255	266	263	264	258	248	86.8	
1925	254	245	252	225	<i>210</i>	210	236	250	264	275	274	303	295	69.3	
Pennsylvania	108	165	170	164	161	157	<b>153</b>	167	178	172	172	172	163	86.0	



## CARPETS AND RUGS, RAG

**Description of the industry.**—This industry embraces those establishments whose principal products are rag and fluff carpets and rugs made from materials obtained from old carpets and rugs, and to some extent from cotton yarns, cut rags, and mill ends. The "Value of Products" as given in Tables 1 and 2 con-

sists in part of the actual value of carpets and rugs manufactured from materials owned by the same establishments and in part of the amounts received for work done on a contract basis on materials owned by others.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—[Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929.....	94	1,520	\$1,502,872	\$1,058,037	\$5,510,708	\$3,851,831	2,416
1927.....	110	1,033	1,077,572	1,636,871	5,890,205	4,253,804	2,005
1925.....	139	1,901	1,875,750	1,042,334	5,709,812	3,707,478	2,340
1923.....	151	2,041	1,850,701	2,095,107	0,097,441	4,002,274	2,587
1921.....	140	1,570	1,449,407	1,630,171	4,890,405	3,221,234	(*)
1910.....	339	2,016	1,550,501	2,037,874	5,897,057	3,559,188	2,059
1914.....	463	2,130	994,008	721,728	2,780,430	2,094,711	2,056
1909.....	428	1,982	800,460	688,621	2,597,500	1,878,048	2,559
1904.....	303	1,730	674,020	480,285	1,018,286	1,420,001	1,581
1899.....	805	1,318	448,380	622,185	1,755,256	1,133,071	579
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929.....	-14.5	-6.4	-6.9	1.4	-6.4	-0.5	20.5
1925-1927.....	-20.0	-14.1	-10.6	-15.8	3.2	12.9	-14.6
1923-1925.....	-7.9	-6.9	1.0	-7.3	-0.4	-5.9	-0.2
1921-1923.....	1.3	20.5	28.9	27.8	25.5	24.2	-----
1910-1921.....	-50.0	-21.8	-7.1	-19.6	-13.2	-0.5	-----
1919-1929.....	-72.3	-24.2	0.8	-18.6	-1.5	8.2	-0.1
1909-1919.....	-20.8	1.7	80.2	195.9	118.0	80.4	3.9
1899-1909.....	-46.8	50.4	94.1	10.7	49.3	65.8	342.0

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not called for on schedule.

## CENSUS OF MANUFACTURES: 1929

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. Certain of the "Other States," however, reported larger values of products than some of the States shown separately. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States.....	1929	94	254	1,520	2,410	182	2,234	\$480,079	\$1,562,372	\$1,058,937	\$1,557,610	\$101,321	\$5,510,768	\$3,851,831
	1927	110	281	1,633	2,005	233	1,772	511,189	1,677,572	1,630,371	1,542,434	93,937	5,890,285	4,253,894
	1919	330	309	2,016	2,059	668	2,001	383,870	1,550,501	2,037,874	1,947,915	89,959	5,697,057	3,559,183
California.....	1929	12	9	94	152	-----	152	25,312	124,880	63,138	58,840	4,292	374,178	311,040
	1927	9	5	63	105	-----	105	6,522	80,784	40,109	37,018	3,061	261,527	221,418
	1919	23	19	108	119	5	114	23,219	105,407	42,603	40,308	2,205	314,805	272,142
Massachusetts.....	1929	14	11	70	90	40	50	15,990	61,052	74,373	71,718	2,655	238,547	104,174
	1927	12	7	74	150	60	90	10,105	57,585	46,068	43,194	2,904	201,527	129,703
	1919	19	10	81	84	20	64	11,917	67,321	48,599	45,812	2,727	190,598	142,059
New Jersey.....	1929	7	3	58	44	-----	44	3,045	39,704	46,408	43,797	2,611	170,900	124,682
	1927	7	8	97	73	-----	73	19,374	87,757	100,390	101,107	5,253	271,454	105,094
	1919	15	4	85	79	65	14	1,987	64,990	87,853	84,985	2,865	197,935	110,082
New York.....	1929	6	9	26	46	-----	46	9,440	27,642	29,102	27,700	1,402	120,030	90,937
	1927	12	23	133	199	50	149	39,629	152,346	157,734	161,230	6,504	573,236	415,601
	1919	33	41	174	277	14	263	71,072	140,215	114,213	105,185	9,028	473,811	359,818
Pennsylvania.....	1929	12	28	379	521	100	421	47,646	270,147	424,325	404,175	20,150	955,988	531,663
	1927	11	36	402	402	100	302	61,996	295,033	490,774	440,600	20,105	1,242,279	781,505
	1919	56	66	608	598	207	391	76,463	407,598	1,091,500	1,072,192	19,368	2,098,912	1,002,352
Other States.....	1929	43	199	806	1,563	42	1,521	378,667	1,638,947	1,021,591	951,380	70,211	3,651,026	2,629,435
	1927	59	202	864	1,070	23	1,047	343,593	1,004,067	825,296	769,216	59,080	3,368,904	2,543,608
	1919	193	169	900	1,517	347	1,170	169,212	764,970	653,046	599,373	53,973	2,326,276	1,073,230

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 83; 1927, 92; 1919, 391. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 1,866; 1927, 2,006; 1919, 2,710.

<sup>2</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

<sup>5</sup> Alabama, 2 establishments; Connecticut, 1; Illinois, 6; Indiana, 2; Iowa, 1; Kansas, 5; Kentucky, 1; Maine, 5; Michigan, 2; Minnesota, 5; Missouri, 1; Nebraska, 1; North Carolina, 1; Ohio, 5; Oregon, 1; Washington, 1; Wisconsin, 3.

<sup>6</sup> Colorado, 2 establishments; Connecticut, 2; Illinois, 5; Indiana, 3; Iowa, 3; Kansas, 3; Kentucky, 2; Maine, 5; Maryland, 1; Michigan, 4; Minnesota, 4; Mississippi, 1; Missouri, 2; Nebraska, 1; New Hampshire, 1; Ohio, 6; Oregon, 4; Rhode Island, 1; South Dakota, 1; Washington, 6; Wisconsin, 3.

<sup>7</sup> Colorado, 6 establishments; Connecticut, 7; Illinois, 30; Indiana, 11; Iowa, 22; Kansas, 14; Kentucky, 2; Maine, 3; Maryland, 1; Michigan, 10; Minnesota, 9; Missouri, 8; Montana, 1; Nebraska, 6; New Hampshire, 2; Ohio, 25; Oklahoma, 2; Oregon, 3; Rhode Island, 2; South Dakota, 1; Vermont, 3; Washington, 8; West Virginia, 1; Wisconsin, 16;

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	650	Horse-power 2,416	461	Horse-power 2,005	564	Horse-power 2,340	520	Horse-power 2,650	408	Horse-power 2,056	100.0	100.0
Prime movers, total.....	4	182	13	233	15	374	40	658	94	1,237	7.5	24.7
Steam engines.....	2	130	8	160	4	201	15	350	17	420	5.4	14.6
Internal-combustion engines.....	1	12	4	43	10	133	34	260	75	748	0.5	10.1
Water wheels and water turbines.....	1	40	1	40	1	40	-----	-----	2	60	1.6	-----
Electric motors driven by purchased energy.....	652	2,234	448	1,772	549	1,975	471	2,001	314	1,419	92.5	75.3
Electric motors, total.....	658	2,273	454	1,811	558	2,001	483	2,068	323	1,515	100.0	100.0
Driven by purchased energy.....	652	2,234	448	1,772	549	1,975	471	2,001	314	1,419	98.3	97.0
Driven by energy generated in establishments reporting.....	6	39	6	39	9	86	12	62	9	96	1.7	3.0
Electric generators.....	1	Kilowatts 60	2	Kilowatts 63	1	Kilowatts 60	(1)	(1)	(1)	(1)	-----	-----
Electric energy purchased <sup>2</sup> .....	-----	Kilowatt-hours 1,910,106	-----	(1)	-----	(1)	-----	(1)	-----	(1)	-----	-----

<sup>1</sup> Not called for on schedule.

<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>3</sup> Data incomplete.

# CARPETS AND RUGS, RAG

**TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929**

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
<b>United States:</b>															
1929	1,520	<i>1,475</i>	1,494	1,520	1,550	1,505	1,606	1,553	1,500	1,512	1,537	1,512	1,520	91.8	
1925	1,901	1,904	1,938	2,012	2,057	2,070	1,935	1,838	1,807	1,798	1,837	1,840	1,777	85.8	
1919	2,016	<i>1,608</i>	1,640	1,723	1,933	2,037	2,113	2,001	2,198	2,104	2,204	2,276	2,325	69.2	
1914	2,130	<i>1,943</i>	1,994	2,072	2,271	2,359	2,330	2,190	2,127	2,118	2,108	2,071	1,992	82.4	
1909	1,982	<i>1,643</i>	1,603	1,863	2,045	2,168	2,183	2,120	2,053	2,058	2,043	2,000	1,949	75.3	
California	94	83	81	86	102	98	95	98	88	85	90	108	90	78.6	
Massachusetts	76	75	73	74	70	80	78	77	78	70	74	74	82	80.0	
New Jersey	58	<i>55</i>	50	58	57	59	58	60	55	59	59	59	57	91.7	
New York	26	<i>25</i>	28	26	26	26	26	28	26	26	26	26	26	90.2	
Pennsylvania	379	<i>369</i>	376	370	369	375	389	381	372	370	382	396	402	91.8	

# CLOTH SPONGING AND REFINISHING

Description of the industry.—The establishments classified in this industry are engaged primarily in sponging and refinishing woolen cloth on contract. The value of products shown represents merely the amount received for work done. Many of the estab-

lishments engaged in the manufacture of clothing do their own sponging and refinishing, but no data for such establishments are included in the statistics for this industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	46	902	\$1,457,104	\$88,340	\$3,301,221	\$3,272,881	800
1927	52	736	1,502,111	100,779	3,457,938	3,297,150	938
1925	61	931	1,889,118	203,429	3,888,852	3,685,423	976
1923	65	1,225	2,209,566	293,263	4,051,730	4,353,473	911
1921	85	1,123	1,769,597	294,300	4,101,084	3,836,784	(3)
1919	67	1,206	1,564,061	178,161	3,690,858	3,512,697	927
1914	51	901	658,377	132,653	1,531,317	1,398,064	977
1900	57	975	651,293	85,203	1,543,872	1,458,060	537
1904	55	795	503,035	38,852	1,052,939	1,014,087	244
1899	46	534	263,191	17,490	566,000	548,510	48
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	(4)	22.6	-3.0	-45.1	-2.8	-0.7	-14.3
1925-1927	(4)	-20.9	-20.5	-21.0	-11.1	-10.5	-4.3
1923-1925	(4)	-24.0	-14.5	-31.8	-10.4	-15.3	7.0
1921-1923	(4)	9.1	24.9	12.9	13.4	13.5	-----
1919-1921	(4)	-6.9	13.1	48.3	11.1	9.2	-----
1919-1929	(4)	-25.2	-6.9	-50.4	-8.9	-6.8	-13.7
1909-1919	(4)	23.7	140.3	109.1	139.1	140.8	72.0
1899-1909	(4)	82.6	142.8	387.2	172.8	105.9	(4)

<sup>1</sup> Amount received for work done. (See "Description of the industry," above.)  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not called for on schedule.  
<sup>4</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	46	161	902	800	-----	800	\$559,463	\$1,457,104	\$88,340	\$23,505	\$64,835	\$3,301,221	\$3,272,881
	1927	52	176	736	933	-----	742	604,017	1,502,111	100,779	36,720	74,050	3,457,938	3,297,150
	1919	67	193	1,206	927	-----	495	612,363	1,564,061	178,161	119,829	58,332	3,690,858	3,512,697
Maryland	1929	3	11	48	32	-----	32	39,521	74,556	6,280	178	6,102	178,318	172,638
	1927	3	8	42	143	-----	42	26,064	83,249	13,223	6,545	6,078	176,871	163,048
	1919	4	0	42	115	-----	5	9,180	43,753	9,766	3,175	6,591	119,039	110,173
Massachusetts	1929	4	5	41	57	-----	57	15,320	57,588	4,320	1,040	2,680	110,701	115,381
	1927	4	8	43	104	-----	84	21,320	64,133	7,958	2,371	5,587	150,915	142,957
	1919	6	7	51	21	-----	21	12,303	57,300	5,972	4,530	1,436	107,614	101,642
New York	1929	25	107	645	510	-----	510	387,338	1,069,006	57,533	11,373	46,100	2,405,332	2,347,799
	1927	29	124	458	521	-----	451	454,796	1,065,417	111,108	68,530	42,578	2,439,071	2,328,563
	1919	39	153	819	462	-----	302	532,769	1,182,959	85,684	52,045	33,639	2,870,140	2,784,955
Ohio	1929	6	13	57	54	-----	54	41,205	84,365	12,730	8,027	4,703	243,308	230,578
	1927	5	12	67	66	-----	66	28,787	90,012	14,808	5,227	9,041	273,034	268,100
	1919	6	7	64	37	-----	25	10,810	68,283	6,103	4,860	1,243	140,813	143,716
Pennsylvania	1929	5	9	57	111	-----	111	21,188	86,464	5,078	2,146	2,932	215,526	210,448
	1927	6	10	71	75	-----	75	13,874	92,136	7,902	3,706	4,100	188,961	180,999
	1919	6	14	138	281	-----	131	35,732	111,503	42,023	26,717	12,906	238,261	215,638
Other States	<sup>5</sup> 1929	4	16	54	36	-----	36	54,891	85,125	2,399	141	2,258	199,036	196,637
	<sup>6</sup> 1927	5	14	55	24	-----	24	58,576	101,164	5,720	341	5,379	228,540	222,820
	<sup>7</sup> 1919	6	6	92	36	-----	36	11,530	100,871	28,013	25,496	2,517	205,082	177,000

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 20; 1927, 29; 1919, 55. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 1,083; 1927, 941; 1919, 1,454.  
<sup>2</sup> Amount received for work done. (See "Description of the industry," above.)  
<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.  
<sup>5</sup> California, 1 establishment; Illinois, 2; Missouri, 1.  
<sup>6</sup> Illinois, 2 establishments; Kentucky, 1; Michigan, 1; Missouri, 1.  
<sup>7</sup> Illinois, 4 establishments; Michigan, 1; Missouri, 1

CLOTH SPONGING AND REFINISHING

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	342	Horse-power 800	338	Horse-power 833	273	Horse-power 975	258	Horse-power 927	127	Horse-power 677	100.0	100.0
Prime movers, total			11	191	6	344	10	432	11	370		46.6
Steam engines			6	134	3	327	8	412	11	370		44.4
Internal-combustion engines			5	57	3	17	2	20				2.2
Electric motors driven by purchased energy	342	800	327	742	268	631	248	495	116	301	100.0	53.4
Electric motors, total	342	800	327	742	285	666	260	520	116	301	100.0	100.0
Driven by purchased energy	342	800	327	742	268	631	248	495	116	301	100.0	95.2
Driven by energy generated in establishments reporting					17	35	12	25				4.8
Electric generators		Kilo-watts		Kilo-watts	1	Kilo-watts 125	(1)	(1)	(1)	(1)		
Electric energy purchased <sup>2</sup>		Kilo-watt-hours 823,017		(9)		(9)		(1)		(1)		

<sup>1</sup> Not called for on schedule.

<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>3</sup> Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
United States:														
1929	902	895	913	904	900	912	914	930	921	914	890	874	857	92.2
1925	931	1,000	1,000	977	804	887	800	928	922	900	917	925	915	87.9
1919	1,206	991	1,028	1,063	1,048	1,087	1,183	1,353	1,378	1,336	1,310	1,332	1,367	71.9
1914	901	930	918	914	908	894	863	900	899	926	890	869	868	92.7
1909	975	955	933	943	901	974	992	977	977	997	1,006	1,001	1,001	91.3
Maryland	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Massachusetts	41	40	42	38	40	39	42	42	42	42	38	38	43	85.4
New York	645	630	653	646	642	654	653	665	658	657	648	624	608	90.7
Ohio	57	58	59	59	59	61	59	60	58	54	54	54	55	88.5
Pennsylvania	57	59	59	58	58	57	59	60	60	58	48	57	55	80.0

## CORDAGE AND TWINE; JUTE GOODS; LINEN GOODS

**Description of the industries.**—The industry designation "Cordage and twine" covers all establishments engaged primarily in the manufacture of rope, cordage, and twine (including binder twine), from any class of textile materials, including cotton, jute, flax, and paper.

The "Jute goods" industry consists in the manufacture of bagging, other woven fabrics, and yarns, in which jute is the principal material.

The classification "Linen goods" is applied to establishments whose products of chief value are threads, yarns, or fabrics made wholly or principally from flax.

Because of the close relationship of these industries, statistics are presented for the group as a whole in all

the tables in this report; and separate figures are given for the individual industries also in Tables 1, 2, 6, and 7.

**Manufacture of binder twine in penal institutions.**—Considerable quantities of binder twine are manufactured in penal institutions, which are not treated as manufacturing establishments for census purposes. Special canvasses of penal institutions have been made, however, in order to ascertain their production of binder twine. The amounts reported for 1929 and 1927 were 47,322,550 pounds and 57,808,454 pounds, respectively. The addition of these amounts to those shown in Table 3 gives the following aggregates: For 1929, 219,247,656 pounds; for 1927, 227,603,692 pounds.

CORDAGE AND TWINE; JUTE GOODS; LINEN GOODS

TABLE 1.—SUMMARY FOR THE INDUSTRIES, IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES: 1899 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
<b>THE GROUP AS A WHOLE</b>							
1929	159	21,615	\$10,295,043	\$71,756,265	\$123,061,772	\$51,300,507	110,100
1927	157	22,072	21,206,510	73,316,832	122,736,838	49,410,000	122,007
1925	150	24,310	22,130,444	87,808,516	130,121,610	51,313,100	118,485
1923	158	25,304	23,823,220	72,063,837	125,094,075	53,031,338	100,348
1921	157	22,776	19,680,062	60,888,275	101,071,441	41,183,106	( <sup>3</sup> )
1919	156	20,050	22,771,080	111,604,303	174,807,220	63,292,017	104,760
1914	160	27,323	11,441,723	60,474,417	83,235,668	22,760,051	93,737
1909	151	24,866	8,843,242	30,536,892	59,121,939	19,685,007	78,430
1904	133	24,508	8,680,785	44,890,546	62,039,320	18,048,783	65,703
1899	141	20,003	6,331,741	32,197,885	47,601,607	15,403,722	47,447
Per cent of increase or decrease (—):							
1927-1929	1.3	-5.0	-0.0	-2.1	0.3	3.8	-2.9
1925-1927	-1.3	-5.5	-4.1	-16.5	-11.8	-3.7	3.5
1923-1925	0.6	-3.9	-7.1	21.8	11.2	-3.2	11.4
1921-1923	0.6	11.1	21.0	20.3	23.5	28.9	
1919-1921	0.6	-14.5	-13.6	-46.3	-42.2	-34.8	
1910-1929	1.0	-18.0	-15.3	-35.7	-20.6	-18.8	13.7
1909-1919	3.3	7.2	157.5	182.3	195.7	222.7	33.6
1899-1909	7.1	19.0	39.7	22.8	24.2	27.1	65.3
<b>CORDAGE AND TWINE</b>							
1929	123	14,489	12,833,501	54,573,259	91,455,117	30,881,858	79,021
1927	116	15,084	13,074,031	50,105,003	89,172,495	33,007,432	74,024
1925	118	15,400	14,018,511	60,847,504	100,447,604	33,000,000	77,663
1923	121	10,352	15,148,157	53,042,371	85,233,038	34,840,047	72,371
1921	118	14,593	12,023,094	40,480,050	75,555,705	28,874,756	( <sup>3</sup> )
1919	120	17,652	14,700,001	60,705,282	133,366,476	43,001,134	60,550
1914	105	15,769	0,995,506	43,005,473	59,701,489	10,155,013	55,272
1909	112	14,020	5,304,300	20,315,402	41,841,541	12,020,130	( <sup>3</sup> )
1904	102	14,014	5,358,178	30,005,747	43,017,130	11,021,892	40,850
1899	105	13,114	4,113,112	26,632,000	37,840,051	11,217,045	33,411
Per cent of increase or decrease (—):							
1927-1929	6.0	-3.0	-6.1	-2.7	2.6	11.5	-2.8
1925-1927	-1.7	-2.1	-2.5	-10.1	-11.2	-1.4	-3.4
1923-1925	-2.5	-6.0	-7.5	24.0	13.8	-3.0	7.2
1921-1923	2.5	12.3	17.2	15.4	17.2	20.0	
1919-1921	-1.7	-17.2	-12.1	-48.2	-43.5	-33.0	
1910-1929	2.5	-17.8	-12.7	-30.2	-31.4	-15.5	0.7
1909-1919	7.1	20.5	177.1	203.0	218.0	245.8	
1899-1909	6.7	11.6	29.0	10.1	10.8	12.0	
<b>JUTE GOODS</b>							
1929	20	4,931	\$4,276,143	\$11,967,678	\$21,800,757	\$9,902,170	85,079
1927	23	5,358	4,987,228	11,802,328	23,185,907	11,383,069	30,210
1925	23	6,312	5,039,754	14,560,709	27,617,467	12,050,758	28,753
1923	19	6,042	5,778,053	12,348,303	25,421,083	13,073,380	24,174
1921	24	5,664	4,039,347	8,043,459	17,600,140	5,662,681	( <sup>3</sup> )
1919	28	7,138	6,436,230	17,708,834	34,442,908	10,753,664	32,185
1914	34	7,987	3,060,010	12,579,840	10,613,574	3,034,034	28,533
1909	24	6,064	2,325,041	0,264,918	10,705,230	4,540,312	( <sup>3</sup> )
1904	10	0,083	1,017,080	5,054,130	0,005,802	4,011,072	18,810
1899	18	4,506	1,181,700	3,015,302	5,383,707	2,308,435	8,181
Per cent of increase or decrease (—):							
1927-1929	( <sup>4</sup> )	-8.0	-14.3	1.4	-5.7	-13.0	-3.1
1925-1927	( <sup>4</sup> )	-15.1	-11.0	-10.0	-15.7	-12.1	25.0
1923-1925	( <sup>4</sup> )	4.5	-2.4	18.0	8.2	-0.9	18.9
1921-1923	( <sup>4</sup> )	6.7	24.5	38.1	45.2	52.7	
1919-1921	( <sup>4</sup> )	-20.7	-27.0	-49.5	-49.2	-48.8	
1910-1929	( <sup>4</sup> )	-30.0	-33.6	-32.4	-30.5	-40.8	0.2
1909-1919	( <sup>4</sup> )	7.1	170.8	185.1	219.1	203.6	
1899-1909	( <sup>4</sup> )	47.0	00.8	107.4	100.5	01.7	
<b>LINEN GOODS</b>							
1929	10	2,105	\$2,185,330	\$5,214,428	\$0,736,808	\$4,522,470	11,006
1927	18	2,530	2,545,210	5,400,441	10,377,346	4,007,905	11,473
1925	18	2,607	2,462,179	6,304,803	11,150,585	4,702,282	12,119
1923	18	2,880	2,897,005	0,073,163	11,390,254	5,317,091	0,803
1921	15	2,510	2,123,021	4,463,806	8,209,590	3,745,730	( <sup>3</sup> )
1919	10	1,800	1,635,642	4,190,187	6,008,046	2,807,859	0,069
1914	21	3,567	1,386,117	4,230,104	0,060,708	2,670,604	0,032
1909	15	3,573	1,213,211	3,906,572	0,385,218	2,418,640	( <sup>3</sup> )
1904	15	3,811	1,324,021	3,740,669	5,856,388	2,115,719	0,133
1899	18	3,283	1,036,830	2,550,517	4,308,150	1,817,642	5,855
Per cent of increase or decrease (—):							
1927-1929	( <sup>4</sup> )	-13.2	-14.1	-3.0	-6.2	-9.0	-4.1
1925-1927	( <sup>4</sup> )	-3.0	3.4	-15.4	-7.0	4.3	-5.3
1923-1925	( <sup>4</sup> )	-0.5	-15.0	5.3	-2.1	-10.4	23.0
1921-1923	( <sup>4</sup> )	14.8	36.5	36.1	38.7	42.0	
1919-1921	( <sup>4</sup> )	33.3	20.8	6.5	17.3	33.4	
1910-1929	( <sup>4</sup> )	10.1	33.0	24.4	30.1	01.1	81.3
1909-1919	( <sup>4</sup> )	-47.1	34.8	5.6	0.6	16.1	
1899-1909	( <sup>4</sup> )	8.8	17.0	55.5	40.2	33.1	

<sup>1</sup> The figures for all years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not called for on schedule.  
<sup>4</sup> No data.  
<sup>5</sup> Per cent not computed where base is less than 100.

CENSUS OF MANUFACTURES: 1929

TABLE 2.—GENERAL STATISTICS FOR THE INDUSTRIES, IN COMBINATION AND SEPARATELY, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. Certain of the States, however, for which statistics are given in combination with those for others reported larger values of products than some of the States shown separately. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
<b>THE GROUP AS A WHOLE</b>														
United States	1929	159	2,018	21,615	110,106	59,764	59,342	\$5,564,945	\$19,295,043	\$71,755,265	\$69,788,246	\$1,967,019	\$123,061,772	\$51,306,507
	1927	157	2,022	22,972	122,607	67,217	55,390	5,559,321	21,206,519	73,316,832	71,156,087	2,160,745	122,735,838	49,419,006
	1919	156	2,197	26,650	104,760	77,954	426,806	5,458,841	22,771,989	111,604,303	109,605,974	1,998,329	174,807,220	63,202,917
<b>CORDAGE AND TWINE</b>														
United States	1929	123	1,409	14,489	73,021	28,069	44,952	3,995,968	12,833,561	54,573,259	53,105,382	1,467,877	91,455,117	36,881,858
	1927	116	1,405	15,084	74,924	33,518	41,406	3,855,990	13,674,081	56,105,063	54,611,376	1,493,687	89,172,495	33,067,432
	1919	120	1,581	17,622	66,556	45,709	420,847	4,015,501	14,700,061	89,705,282	88,324,147	1,381,135	133,366,476	43,601,194
Alabama	1929	5	49	779	4,906		4,906	108,706	556,078	2,022,014	1,938,998	83,916	3,606,286	1,583,372
	1927	5	31	702	3,767		3,767	77,173	499,001	1,551,043	1,476,634	75,009	2,411,563	859,920
	1919	4	19	475	2,580	1,375	1,205	41,742	301,308	1,581,276	1,529,429	51,847	2,230,905	649,629
California	1929	5	54	350	1,236	400	836	179,484	347,899	1,626,708	1,604,396	22,312	2,776,190	1,149,482
	1927	5	40	268	966	400	566	106,436	278,464	1,371,565	1,356,149	15,416	1,776,230	870,230
Connecticut	1929	14	67	368	1,779	1,306	473	159,700	316,138	1,003,950	978,160	25,790	1,992,665	988,715
	1927	13	46	332	1,848	1,213	635	119,030	272,771	1,173,914	1,153,962	19,952	1,863,103	689,189
	1919	9	43	348	1,100	1,077	83	73,435	225,941	1,438,028	1,426,107	11,886	1,932,997	494,969
Georgia	1929	7	46	819	2,904	90	2,814	152,841	409,765	2,430,791	2,387,123	93,668	3,505,145	1,024,354
	1927	3	8	110	488	90	398	22,950	67,638	276,328	260,168	10,160	415,394	139,066
Kentucky	1929	6	32	652	2,630	825	1,805	91,921	438,650	1,327,886	1,276,699	51,187	2,426,812	1,098,926
	1927	6	37	706	2,729	850	1,879	97,413	508,261	1,330,732	1,272,363	58,369	2,407,171	1,076,439
	1919	4	22	409	1,185	600	585	39,599	209,435	942,018	915,388	26,630	1,843,510	901,792
Massachusetts	1929	11	282	1,882	8,900	5,840	3,060	805,757	1,964,016	8,928,608	8,782,149	146,459	16,773,761	7,845,153
	1927	12	325	2,283	11,025	7,975	3,050	875,592	2,354,238	11,459,820	11,298,353	161,493	18,159,091	6,699,265
	1919	13	248	2,743	10,957	9,501	1,396	493,034	2,360,026	19,430,950	19,227,341	203,609	28,086,044	8,655,094
Michigan	1929	3	15	62	167		167	68,101	76,271	184,480	177,204	7,276	449,718	265,238
New Jersey	1929	7	114	955	7,960	5,450	2,510	401,687	1,091,271	4,159,297	4,050,136	109,161	7,688,966	3,520,669
	1927	6	131	1,060	8,012	5,275	2,737	554,914	1,024,695	4,443,684	4,336,005	107,679	6,833,656	2,389,972
	1919	6	179	2,334	6,376	5,342	1,034	656,778	1,784,974	9,789,320	9,610,371	178,949	14,540,263	4,750,943
New York	1929	17	342	2,528	12,106	2,925	9,181	843,024	2,578,207	8,714,218	8,449,118	265,100	16,208,651	7,949,433
	1927	14	330	2,792	14,426	3,090	11,336	781,876	2,977,288	9,141,728	8,850,318	291,410	16,308,473	7,161,745
	1919	20	611	3,918	16,267	6,099	10,168	1,175,430	3,683,418	17,606,498	17,305,474	301,024	27,643,710	10,937,212
North Carolina	1929	11	63	1,725	8,472	2,625	5,847	130,651	1,058,365	5,316,164	5,093,823	222,341	7,925,174	2,600,010
	1927	9	50	1,456	5,453	2,810	2,643	131,754	915,094	4,113,524	3,930,602	182,922	6,520,057	2,406,538
	1919	5	34	444	2,175	2,150	25	52,903	258,477	1,805,061	1,770,403	28,658	2,386,373	581,312
Ohio	1929	5	35	675	3,516	700	2,816	77,016	611,591	2,464,318	2,383,916	80,402	4,165,771	1,701,453
	1927	5	71	650	2,927	700	2,227	127,260	601,018	2,611,690	2,536,019	75,671	4,199,742	1,588,052
Pennsylvania	1929	9	93	1,435	5,076	2,425	2,651	384,438	1,321,981	3,535,526	3,427,696	107,830	6,094,207	2,558,681
	1927	13	100	1,777	7,962	4,330	3,632	373,662	1,696,689	4,482,779	4,344,990	137,789	7,387,789	2,905,010
	1919	19	106	1,970	5,283	4,980	303	463,509	1,723,360	5,968,291	5,858,552	109,739	9,843,454	3,875,163
Rhode Island	1929	5	15	128	521	280	241	39,428	124,744	287,916	277,676	10,240	562,168	274,252
	1927	4	14	123	363	130	233	36,505	112,831	264,575	251,944	12,631	523,865	259,290
	1919	5	12	125	589	435	154	12,461	91,714	449,399	443,410	5,989	644,636	195,237
Other States	1929	18	202	2,131	12,848	5,203	7,645	493,124	1,938,585	12,520,433	12,278,288	242,195	17,279,603	4,769,120
	1927	21	222	2,765	14,958	6,655	8,303	551,425	2,366,093	13,883,075	13,537,889	345,186	19,905,796	6,022,721
	1919	35	407	4,796	20,071	14,090	5,981	1,006,610	3,991,401	30,694,441	30,231,637	462,804	44,214,284	13,519,843
<b>JUTE GOODS</b>														
United States	1929	20	394	4,931	35,079	25,747	9,332	1,033,423	4,276,143	11,967,578	11,685,696	281,882	21,869,757	9,902,179
	1927	23	406	5,358	36,210	27,271	8,939	1,085,845	4,987,223	11,802,328	11,392,171	410,157	23,185,997	11,383,669
	1919	26	436	7,138	32,135	27,578	4,557	1,114,015	6,496,286	17,708,334	17,255,328	453,006	34,442,698	16,733,864
Pennsylvania	1929	5	62	804	4,219	1,790	2,429	189,295	793,195	2,597,677	2,525,883	71,794	4,389,651	1,791,974
	1927	4	36	563	2,134	1,900	234	159,491	593,748	1,614,677	1,587,147	27,529	2,875,072	1,260,395
	1919	8	48	793	2,275	2,140	135	147,510	740,204	2,292,355	2,254,967	37,388	4,618,328	2,225,973
Groups of States: Conn., 1 est.; Mass., 1; N. H., 1; N. J., 1; N. Y., 2; Ohio, 1	1929	7	283	2,982	27,611	23,957	3,654	662,069	2,944,474	7,730,659	7,591,935	138,724	14,306,682	6,576,023
Ga., 2 est.; N. C., 2; S. C., 2; Va., 2	1929	8	49	1,145	3,249		3,249	182,059	538,474	1,639,242	1,567,878	71,364	3,173,424	1,534,182
States not shown separately	1929	19	370	4,795	34,076	25,371	8,705	926,354	4,888,450	10,187,651	9,805,023	382,628	20,310,925	10,123,274
	1927	18	388	6,345	29,860	25,438	4,422	966,505	6,696,082	15,416,479	15,000,361	416,118	29,924,370	14,507,891
<b>LINEN GOODS</b>														
United States	1929	16	215	2,195	11,006	5,948	5,053	535,554	2,185,339	5,214,428	4,997,168	217,260	9,786,898	4,522,470
	1927	18	211	2,530	11,473	6,428	5,045	617,486	2,545,210	5,409,441	5,152,540	256,901	10,377,346	4,967,905
	1919	10	180	1,890	6,069	4,667	1,402	329,325	1,635,642	4,190,187	4,026,499	163,688	6,998,046	2,807,850
Massachusetts	1929	4	64	880	5,245	3,168	2,077	137,842	853,955	2,220,087	2,187,421	82,666	4,450,149	2,230,062
	1927	5	70	1,151	5,417	3,103	2,309	217,818	1,099,609	2,564,705	2,454,644	110,151	4,921,677	2,356,882
	1919	4	69	1,219	3,780	3,430	350	161,604	1,105,526	3,328,489	3,231,247	97,242	5,177,679	1,849,190

See footnotes at end of table.



CORDAGE AND TWINE; JUTE GOODS; LINEN GOODS

TABLE 2.—GENERAL STATISTICS FOR THE INDUSTRIES, IN COMBINATION AND SEPARATELY, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Cen- sus year	Number of estab- lish- ments	Salaried officers and em- ploy- ees	Wage earn- ers (aver- age for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>1</sup>	Value added by manu- facture <sup>2</sup>
					Total	Prime mov- ers	Motors run by pur- chased energy			Total	Materials	Fuel and pur- chased energy		
New Jersey	1929	3	75	683	2,071	1,630	441	\$221,727	\$761,253	\$1,952,544	\$1,889,025	\$63,519	\$3,062,031	\$1,109,487
	1927	3	75	810	2,492	2,220	272	243,673	907,803	1,926,988	1,859,988	67,000	3,660,025	1,733,037
New York	1929	3	21	154	689	550	139	62,320	145,813	294,278	282,361	11,917	591,160	296,862
	1927	3	14	135	630	500	130	30,512	130,129	206,737	195,930	10,807	436,896	230,159
Other States	<sup>1</sup> 1929	6	55	478	3,001	600	2,401	113,665	424,318	747,519	688,361	59,158	1,633,558	886,039
	<sup>1</sup> 1927	7	52	434	2,934	600	2,334	125,483	407,769	710,921	641,978	68,943	1,358,748	647,827
	<sup>1</sup> 1919	6	111	671	2,289	1,237	1,052	167,821	530,116	861,698	795,252	66,446	1,820,367	958,669

<sup>1</sup> The figures for all years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not including proprietors and firm members as follows: For 1929, 22; 1927, 27; 1919, 42. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 23,655; 1927, 25,021; 1919, 28,889.  
<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919, but not in the United States totals.  
<sup>5</sup> Not including proprietors and firm members, as follows: For 1929, 17; 1927, 19; 1919, 29. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 15,915; 1927, 16,508; 1919, 19,232.  
<sup>6</sup> Arkansas, 1 establishment; Delaware, 1; Illinois, 2; Indiana, 1; Louisiana, 1; Minnesota, 1; Missouri, 2; Oregon, 1; South Carolina, 2; Tennessee, 2; Texas, 1; Washington, 2; Wisconsin, 1.  
<sup>7</sup> Delaware, 1 establishment; Illinois, 2; Indiana, 2; Louisiana, 1; Maryland, 1; Michigan, 2; Minnesota, 1; Missouri, 2; Oregon, 1; South Carolina, 2; Tennessee, 2; Texas, 1; Virginia, 1; Washington, 1; Wisconsin, 1.  
<sup>8</sup> California, 1 establishment; Georgia, 1; Illinois, 3; Indiana, 1; Iowa, 1; Maine, 1; Maryland, 1; Michigan, 2; Minnesota, 1; Mississippi, 1; Missouri, 2; New Hampshire, 1; Ohio, 7; Oklahoma, 1; Oregon, 1; South Carolina, 2; Tennessee, 2; Texas, 1; Virginia, 1; Washington, 1; Wisconsin, 3.  
<sup>9</sup> Not including proprietors and firm members as follows: For 1929, 5; 1927, 3; 1919, 13. The total numbers of persons engaged—proprietors and firm members, salaried officers, and employees, and wage earners—as reported for the industry, are as follows: For 1929, 5,330; 1927, 5,772; 1919, 7,587.  
<sup>10</sup> Georgia, 3 establishments; Illinois, 2; Massachusetts, 1; Missouri, 1; New Hampshire, 1; New Jersey, 3; New York, 2; North Carolina, 2; South Carolina, 2; Virginia, 2.  
<sup>11</sup> California, 1 establishment; Delaware, 1; Georgia, 1; Illinois, 1; Maryland, 1; Massachusetts, 2; Missouri, 1; New Hampshire, 1; New Jersey, 3; New York, 1; North Carolina, 2; South Carolina, 2; Virginia, 1.  
<sup>12</sup> No proprietors or firm members were reported for this industry. The total numbers of persons engaged—salaried officers and employees and wage earners—are as follows: For 1929, 2,410; 1927, 2,741; 1919, 2,070.  
<sup>13</sup> Connecticut, 1 establishment; Minnesota, 1; New Hampshire, 1; Oregon, 2; Pennsylvania, 1.  
<sup>14</sup> Connecticut, 1 establishment; Minnesota, 1; New Hampshire, 2; Oregon, 2; Pennsylvania, 1.  
<sup>15</sup> Michigan, 1 establishment; Minnesota, 2; New Hampshire, 2; New York, 1.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, IN DETAIL, FOR THE INDUSTRIES AS A GROUP, FOR THE UNITED STATES: 1929 AND 1927

[The figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

KIND	1929		1927		KIND	1929		1927	
	Quantity	Value	Quantity	Value		Quantity	Value	Quantity	Value
1. Cordage and twine, jute goods, and linen goods industries, all products, total value	<i>Pounds</i>		<i>Pounds</i>		Cordage and twine, etc.—Con. Twine, total	<i>Pounds</i>		<i>Pounds</i>	
		\$123,061,772		\$122,735,838			\$62,589,702		\$52,429,463
2. Cordage and twine, jute goods, and linen goods		118,370,701		117,355,609	Binder twine, total <sup>2</sup>		18,394,946		169,795,238
						Manila, all or chiefly	6,570,550	609,070	1,430,277
3. Other products (not normally belonging to the industries)		4,691,071		15,380,229	Sisal	26,762,969	3,292,611	122,610,710	13,702,524
					Henequen	145,271,619	14,493,265	45,764,251	5,640,489
4. Cordage and twine, jute goods, and linen goods made as secondary products in other industries, value		17,618,730		12,648,493	Twine other than binder, total		44,194,756		133,273,574
						Flax	934,907	764,807	670,308
Cordage and twine, jute goods, and linen goods, all industries:					Hemp	4,919,177	1,662,979	6,115,346	1,560,883
	Aggregate value (sum of 2 and 4)	135,989,431		130,004,102	Jute	45,235,028	6,320,231	38,745,239	5,607,517
Rope, cable, and cordage, total	227,686,988	42,671,292	232,651,263	44,642,019	Cotton	<sup>3</sup> 85,988,140	<sup>3</sup> 28,991,411	<sup>3</sup> 64,208,265	<sup>3</sup> 20,159,793
	Manila hemp, total	114,475,807	22,170,547	105,614,007	22,607,490	Hard fiber	13,206,786	1,841,867	28,534,416
Transmission rope	1,041,213	3,840,048	942,549		Other	26,795,319	4,604,461		
Drilling cables	12,536,580	2,851,866	10,987,945	2,531,937	Fish line, total value		2,892,531		2,332,781
Marine cordage	45,999,515	8,778,554	46,221,499	9,744,814	Silk		1,285,177		1,098,607
Other commercial and bolt ropes	26,819,075	5,064,256	21,228,320	4,509,295	Linen		479,662		368,797
Hardware rope, all or chiefly manila	6,211,615	872,810	5,282,709	908,642	Cotton		1,035,639		813,177
Unclassified as to kind	17,973,756	3,561,848	18,053,486	3,970,453	Other		92,033		52,200
Henequen	16,120,283	2,446,616	12,992,345	1,839,942	Yarns for sale, total	97,934,846	15,467,208	88,539,400	15,742,388
Sisal	27,381,207	3,972,426	30,712,494	4,438,957	Jute	96,538,846	14,903,810	84,477,265	14,632,332
Jute	35,826,871	4,859,652	12,265,999	1,883,584	Other	1,396,000	563,398	4,062,135	1,110,056
Cotton	28,095,763	8,298,542	27,408,626	7,601,677	Linen thread	3,103,056	4,510,278	2,707,584	4,210,819
Other	5,787,057	923,509	43,672,792	6,270,369	Woven goods:				
					Linen and part linen		3,364,968		13,552,297
					Jute—				
					Bagging for baling cotton	<i>Square yards</i>	27,862,993	<i>Square yards</i>	48,271,951
					Webbing (not over 12 inches in width)	<i>Linear yards</i>	43,736,731	<i>Linear yards</i>	45,863,260
					Other		242,428		540,490

<sup>1</sup> Revised.  
<sup>2</sup> Not including data for binder twine made in penal institutions, as follows: For 1929, 47,322,550 pounds; 1927, 57,808,454 pounds.  
<sup>3</sup> Includes data for cotton twine made as a secondary product in cotton mills, as follows: For 1929, 40,642,518 pounds, valued at \$14,650,396; 1927, 28,280,334 pounds, \$9,500,376.

## CENSUS OF MANUFACTURES: 1929

TABLE 4.—PRINCIPAL MATERIALS CONSUMED IN THE CORDAGE AND TWINE, JUTE GOODS, AND LINEN-GOODS INDUSTRIES, BY KIND, QUANTITY, AND COST, 1929, AND BY KIND AND QUANTITY, 1927

[The difference between the sum of the costs of the several kinds of materials shown in this table and the total cost of materials as given in Tables 1 and 2 is due to the fact that this table covers only certain specified materials, whereas the others cover all materials]

MATERIAL	1929		1927	MATERIAL	1929		1927
	Cost	Pounds	Pounds		Cost	Pounds	Pounds
Raw fibers:				Raw fibers—Continued.			
Hard fibers, total.....	\$27,827,010	330,186,838	340,692,208	Soft fibers—Continued.			
Abaca (Manila hemp).....	11,479,036	104,456,511	103,710,450	Hemp and hemp tow.....	\$918,520	10,680,714	0,201,986
New Zealand hemp.....	583,217	7,580,615	10,200,023	Flax.....	2,750,587	8,577,687	15,162,413
Henequen (sisal) from Mexico and Cuba.....	11,225,857	150,231,194	150,854,830	Flax tow.....	698,040	4,218,416	
Sisal from Africa, the Bahamas, Sumatra, Hawaii, and Java.....	3,898,930	43,307,402	30,342,108	Other soft fibers.....	493,772	4,980,793	
Other hard fibers.....	639,970	18,611,116	39,584,788	Cotton, raw.....	10,303,128	64,220,887	64,668,375
Soft fibers, other than cotton, total.....	17,894,316	204,100,817	203,424,539	Yarns purchased, total.....	5,579,540	15,276,112	13,681,075
Jute.....	11,354,560	140,890,946	139,825,270	Cotton.....	2,760,137	8,821,424	9,250,272
Jute butts and rejections.....	1,172,231	28,805,762	36,247,866	Linen.....	1,622,930	2,806,092	1,330,609
				Jute.....	612,258	3,316,028	2,900,093
				Other.....	584,216	831,568	200,041

TABLE 5.—MACHINERY USED IN THE CORDAGE AND TWINE, JUTE GOODS, AND LINEN GOODS INDUSTRIES: 1929 AND 1927

KIND	1929			1927			KIND	1929			1927		
	Total	Active at some time within the year	Idle entire year	Total	Active at some time within the year	Idle entire year		Total	Active at some time within the year	Idle entire year	Total	Active at some time within the year	Idle entire year
Spinning spindles.....	366,493	324,027	41,860	349,918	301,040	48,260	Rope machines.....	1,409	1,451	48	1,164	1,084	80
Doubling and twisting spindles.....	90,756	82,331	8,425	97,301	88,711	8,680	Looms.....	2,497	2,028	469	3,156	2,261	895
							Braiding machines.....	14,534	13,302	1,232	14,078	13,203	875

TABLE 6.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929; FOR THE INDUSTRIES IN COMBINATION AND SEPARATELY

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
THE GROUP AS A WHOLE												
Prime movers and electric motors driven by purchased energy, aggregate	4,764	Horse-power 119,108	3,956	Horse-power 122,607	3,492	Horse-power 118,435	1,659	Horse-power 104,760	759	Horse-power 93,737	100.0	100.0
Prime movers, total	146	59,764	159	67,217	184	70,016	242	77,951	270	83,088	50.2	74.4
Steam, total	87	39,344	107	47,057	118	50,909	162	68,331	192	65,867	33.1	55.7
Engines	75	25,574	91	33,212	100	37,340	147	47,480	(1)	(1)	21.5	45.3
Turbines	12	13,770	13	13,845	12	13,560	15	16,842	(1)	(1)	11.6	10.4
Internal-combustion engines	3	295	2	125	5	375	10	778	19	2,844	0.2	0.7
Water wheels and water turbines	56	20,125	50	20,035	61	18,762	61	18,845	68	14,377	16.9	18.0
Electric motors driven by purchased energy	4,618	59,342	3,797	55,390	3,308	48,380	1,417	26,866	480	16,649	49.8	25.6
Electric motors, total	5,830	83,088	4,023	79,811	4,408	74,862	2,132	51,183	1,646	34,068	100.0	100.0
Driven by purchased energy	4,618	59,342	3,797	55,390	3,308	48,380	1,417	26,866	480	16,649	71.4	52.4
Driven by energy generated in establishments reporting	1,212	23,746	1,126	24,421	1,100	26,473	715	24,377	566	23,440	28.6	47.6
Electric generators	70	Kilowatts 28,251 Kilowatt-hours 75,589,021	77	Kilowatts 28,147	60	Kilowatts 24,619	(2)	(2)	(2)	(2)		
Electric energy purchased			(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)		
CORDAGE AND TWINE												
Prime movers and electric motors driven by purchased energy, aggregate	3,748	Horse-power 73,021	3,110	Horse-power 74,924	2,770	Horse-power 77,663	1,229	Horse-power 60,550	477	Horse-power 55,272	100.0	100.0
Prime movers, total	95	28,060	110	33,618	131	38,642	167	45,769	184	46,080	38.4	68.7
Steam, total	61	23,673	82	29,322	89	32,680	121	40,845	129	41,638	32.4	61.4
Engines	55	18,003	72	22,077	80	25,029	109	36,853	(1)	(1)	24.7	54.9
Turbines	6	5,070	10	7,245	9	6,000	12	4,262	(1)	(1)	7.7	6.5
Internal-combustion engines	3	295	2	125	5	375	10	645	19	2,844	0.4	1.0
Water wheels and water turbines	31	4,101	20	4,071	37	5,678	36	4,210	36	3,107	5.0	6.3
Electric motors driven by purchased energy	3,653	44,952	3,000	41,406	2,639	38,021	1,062	20,847	293	8,283	61.6	31.3
Electric motors, total	4,026	50,672	3,521	49,035	3,271	49,214	1,435	31,053	525	18,413	100.0	100.0
Driven by purchased energy	3,653	44,952	3,000	41,406	2,639	38,021	1,062	20,847	293	8,283	88.7	67.1
Driven by energy generated in establishments reporting	373	5,720	521	7,629	632	10,203	373	10,206	232	10,130	11.3	32.9
Electric generators	37	Kilowatts 8,679 Kilowatt-hours 62,060,887	40	Kilowatts 8,294	44	Kilowatts 10,679	(2)	(2)	(2)	(2)		
Electric energy purchased			(1)	(1)	(1)	(1)	(2)	(2)	(2)	(2)		
JUTE GOODS												
Prime movers and electric motors driven by purchased energy, aggregate	480	Horse-power 35,079	300	Horse-power 36,210	308	Horse-power 28,753	191	Horse-power 32,135	113	Horse-power 28,533	100.0	100.0
Prime movers, total	26	25,747	23	27,271	21	23,106	40	27,678	56	27,000	73.4	85.8
Steam, total	14	11,191	12	12,775	13	12,050	30	14,520	39	16,950	31.9	45.2
Engines	9	3,591	10	6,075	11	5,950	28	8,420	(1)	(1)	10.2	20.2
Turbines	5	7,606	2	6,199	2	6,150	2	6,150	(2)	(2)	21.7	19.0
Internal-combustion engines							1	12				(2)
Water wheels and water turbines	12	14,556	11	14,496	8	11,146	9	13,046	17	10,050	41.5	40.6
Electric motors driven by purchased energy	454	9,332	337	8,939	287	5,557	151	4,557	57	1,533	26.6	14.2
Electric motors, total	1,100	24,985	700	22,070	634	19,805	400	17,633	296	12,447	100.0	100.0
Driven by purchased energy	454	9,332	337	8,939	287	5,557	151	4,557	57	1,533	87.4	26.8
Driven by energy generated in establishments reporting	646	15,653	453	14,040	347	14,248	300	13,076	239	10,914	62.6	74.2
Electric generators	29	Kilowatts 16,926 Kilowatt-hours 9,691,701	22	Kilowatts 15,095	16	Kilowatts 12,615	(2)	(2)	(2)	(2)		
Electric energy purchased			(1)	(1)	(1)	(1)	(2)	(2)	(2)	(2)		
LINEN GOODS												
Prime movers and electric motors driven by purchased energy, aggregate	530	Horse-power 11,006	480	Horse-power 11,473	414	Horse-power 12,119	239	Horse-power 6,989	160	Horse-power 9,932	100.0	100.0
Prime movers, total	25	5,948	26	6,428	32	8,208	35	4,667	39	9,099	54.0	76.9
Steam, total	12	4,480	13	4,960	16	6,270	11	2,966	24	7,879	40.7	48.9
Engines	11	3,980	12	4,460	15	5,770	10	2,510	(1)	(1)	36.2	41.5
Turbines	1	500	1	500	1	500	1	450	(1)	(1)	4.5	7.4
Internal-combustion engines							8	121				2.0
Water wheels and water turbines	13	1,468	13	1,468	16	1,938	16	1,580	15	1,220	13.8	26.0
Electric motors driven by purchased energy	511	5,058	460	5,045	382	3,911	204	1,402	130	833	46.0	23.1

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 6.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929; FOR THE INDUSTRIES IN COMBINATION AND SEPARATELY—Continued

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
LINEN GOODS—continued												
Electric motors, total.....	704	Horse-power 7,431	612	Horse-power 7,797	503	Horse-power 5,843	237	Horse-power 2,497	225	Horse-power 3,238	100.0	100.0
Driven by purchased energy.....	511	5,058	400	5,045	382	3,911	204	1,402	130	833	68.1	56.1
Driven by energy generated in establishments reporting.....	193	2,373 Kilo-watts	152	2,752 Kilo-watts	121	1,932 Kilo-watts	33	1,095	95	2,405	31.9	43.9
Electric generators.....	13	2,046 Kilo-watt-hours	15	1,848	9	1,325	(?)	(?)	(?)	(?)		
Electric energy purchased <sup>1</sup> .....		3,836,433		( <sup>2</sup> )		( <sup>2</sup> )		( <sup>2</sup> )		( <sup>2</sup> )		

<sup>1</sup> Not called for separately on schedule.  
<sup>2</sup> Not called for on schedule.  
<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>4</sup> Data incomplete.  
<sup>5</sup> Less than one-tenth of 1 per cent.

TABLE 7.—WAGE EARNERS, BY MONTHS, FOR THE INDUSTRIES IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909; AND FOR EACH INDUSTRY, BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum		
		January	February	March	April	May	June	July	August	September	October	November	December			
<b>THE GROUP AS A WHOLE</b>																
United States:																
1929.....	21,615	21,775	21,858	22,231	22,047	21,808	21,244	21,107	<i>20,456</i>	21,356	21,699	21,028	21,700	21,700	91.0	
1925.....	24,319	25,341	25,601	25,816	25,218	24,073	23,203	22,842	<i>22,707</i>	22,721	24,018	24,704	25,351	25,351	88.0	
1919.....	26,650	26,600	26,267	25,936	<i>25,622</i>	25,696	26,137	25,735	<i>27,072</i>	27,127	27,285	27,452	27,977	27,977	91.9	
1914.....	27,323	28,191	28,342	28,505	28,716	28,490	28,293	27,957	<i>24,627</i>	25,417	26,783	26,655	26,165	26,165	86.8	
1909.....	24,866	25,381	25,638	25,742	25,498	25,128	24,732	24,756	<i>24,264</i>	24,747	24,583	23,577	24,500	24,500	90.7	
<b>CORDAGE AND TWINE</b>																
United States:																
1929.....	14,489	14,773	14,707	15,056	14,937	14,850	14,210	14,110	<i>13,264</i>	14,269	14,569	14,651	14,516	14,516	88.2	
1925.....	15,400	16,279	16,414	16,584	16,081	15,201	14,415	14,179	<i>14,008</i>	14,199	15,245	15,810	16,386	16,386	84.5	
1919.....	17,022	17,896	17,639	17,372	<i>17,084</i>	17,079	17,240	17,494	<i>17,690</i>	17,777	17,889	18,015	18,393	18,393	93.1	
1914.....	15,769	16,287	16,427	16,478	16,629	16,512	16,516	16,346	<i>13,445</i>	14,028	15,708	15,288	15,555	15,555	80.0	
Alabama.....	779	729	770	<i>715</i>	735	742	724	784	833	881	807	798	825	825	81.2	
California.....	350	336	<i>321</i>	351	359	365	368	341	346	352	351	358	360	360	87.0	
Connecticut.....	308	351	<i>343</i>	350	364	367	368	370	373	373	358	358	360	360	87.0	
Georgia.....	819	882	851	845	818	766	755	<i>706</i>	760	851	867	899	848	848	70.3	
Kentucky.....	652	672	678	688	692	690	690	<i>601</i>	602	645	635	645	645	645	80.8	
Massachusetts.....	1,882	1,894	1,909	1,914	1,880	1,873	<i>1,846</i>	1,854	1,854	1,864	1,904	1,910	1,875	1,875	90.2	
Michigan.....	62	60	61	66	69	65	68	58	50	61	61	61	61	61	82.0	
New Jersey.....	955	974	960	983	990	917	898	910	926	903	957	1,031	1,001	1,001	87.1	
New York.....	2,528	2,648	2,671	2,837	2,607	2,748	2,405	<i>2,262</i>	2,301	2,302	2,511	2,516	2,472	2,472	79.7	
North Carolina.....	1,725	1,611	1,624	1,715	1,773	1,768	1,766	1,760	<i>1,588</i>	1,780	1,792	1,740	1,788	1,788	88.0	
Ohio.....	675	746	709	732	740	752	731	738	576	563	634	634	600	600	74.9	
Pennsylvania.....	1,435	1,469	1,463	1,464	1,430	1,410	1,416	1,425	1,429	1,424	1,445	1,443	1,368	1,368	90.2	
Rhode Island.....	128	122	122	126	131	118	118	132	123	131	143	130	137	137	82.5	
<b>JUTE GOODS</b>																
United States:																
1929.....	4,931	4,843	4,943	4,970	4,883	4,530	<i>4,831</i>	4,850	4,938	4,938	4,907	5,054	5,075	5,075	95.2	
1925.....	6,312	6,482	6,540	6,490	6,404	6,288	6,217	6,200	<i>6,055</i>	6,055	6,138	6,277	6,227	6,227	92.6	
1919.....	7,138	6,895	6,747	6,708	<i>6,702</i>	6,763	7,090	7,337	<i>7,513</i>	7,495	7,485	7,427	7,495	7,495	89.2	
1914.....	7,987	8,221	8,234	8,308	8,393	8,366	8,326	8,266	<i>8,060</i>	7,891	7,491	7,237	7,061	7,061	84.2	
Pennsylvania.....	804	<i>779</i>	801	789	789	800	818	812	808	787	801	834	833	833	93.4	
<b>LINEN GOODS</b>																
United States:																
1929.....	2,105	2,159	2,148	2,205	2,227	2,209	2,203	2,228	2,227	2,209	2,193	2,213	<i>2,115</i>	2,115	94.0	
1925.....	2,607	2,580	2,647	2,733	2,673	2,584	2,571	2,563	<i>2,456</i>	2,467	2,635	2,677	2,738	2,738	89.0	
1919.....	1,890	1,809	1,871	1,856	1,886	1,864	1,798	1,908	<i>1,863</i>	1,855	1,911	1,980	2,079	2,079	86.5	
1914.....	3,567	3,683	3,681	3,719	3,704	3,663	3,451	3,376	<i>3,422</i>	3,498	3,530	3,530	3,549	3,549	90.8	
Massachusetts.....	880	905	873	904	916	908	900	901	898	892	877	894	748	748	81.7	
New Jersey.....	683	671	696	707	714	699	681	675	680	657	671	670	677	677	92.0	
New York.....	154	<i>116</i>	131	140	154	161	157	150	158	162	161	168	173	173	67.1	

# COTTON GOODS

Description of the industry.—The cotton-goods industry embraces mills engaged primarily in any of the processes preparatory to spinning, in spinning cotton yarn, or in weaving cotton or cotton-mixed piece goods. (Manufacturers of cotton knit goods are classified in the "Knit goods" industry.)

Duplication in cost of materials and value of products.—The total cost of materials and the total value of products include some duplication, due to the inclusion in both items of data for cotton yarn and cotton waste. The values of these commodities enter directly into the value of products of the establishments in which they are manufactured, and indirectly into the value of products of the establishments using purchased yarn and purchased waste as materials; and the cost of materials from which they are made enters directly

into the cost of materials reported by the establishments manufacturing them, and indirectly into the cost of materials of the establishments purchasing them and using them as materials for further manufacture. Cotton yarn to the amount of 647,725,439 pounds and cotton waste amounting to 443,916,268 pounds were produced for sale in the cotton-goods industry in 1929, and 145,824,461 pounds of cotton yarn and 144,855,966 pounds of cotton waste were purchased and used as materials by manufacturers in this industry. The cost of the last two items, \$77,777,586, may be assumed to represent the duplication in the cost of materials; and this amount less transportation charges and middlemen's profits represents the duplication in value of products.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Paid for contract work	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	1,281	424,916	\$324,280,004	\$8,418,268	\$808,028,977	\$1,524,177,087	\$626,148,110	2,269,346
1927	1,317	407,600	380,909,643	8,710,062	871,691,001	1,607,400,012	695,808,711	2,328,830
1925	1,300	445,184	369,882,870	7,089,636	1,077,152,014	1,714,867,787	637,215,173	2,230,303
1923	1,376	471,603	300,002,944	11,021,644	1,147,372,215	1,901,125,703	763,768,488	2,153,290
1921	1,328	412,058	328,220,744	4,347,870	707,442,007	1,278,220,831	570,778,784	( <sup>3</sup> )
1919	1,288	430,966	355,474,087	3,903,742	1,277,785,607	2,125,272,193	847,486,506	1,830,208
1914	1,170	379,566	140,126,028	1,489,770	431,032,540	670,609,116	244,096,675	1,608,823
1909	1,208	371,182	120,789,717	( <sup>4</sup> )	394,013,504	616,217,702	251,204,108	( <sup>5</sup> )
1904	1,077	310,468	94,877,006	450,817	282,047,048	442,451,218	100,403,670	669,889
1899	973	207,929	85,120,810	1,692,954	167,097,082	382,806,166	175,738,174	780,173
PER CENT OF INCREASE OR DECREASE (—)								
1927-1929	-4.0	-0.1	-14.9	-3.3	3.0	-2.8	-10.0	-2.0
1925-1927	-1.4	5.0	7.6	13.3	-19.1	-8.0	0.2	4.1
1923-1925	-7	-6.0	-10.8	-33.8	-0.1	-0.8	-15.5	3.9
1921-1923	3.5	14.4	20.8	167.3	92.2	48.7	32.1	-----
1919-1921	3.1	-4.4	-7.7	17.7	-44.6	-39.9	-32.7	-----
1910-1929	-5	-1.4	-8.8	127.9	-20.7	-28.3	-20.1	23.6
1909-1919	6.6	10.1	173.9	-----	251.0	245.5	237.4	-----
1899-1909	24.2	24.6	52.5	-----	181.8	84.9	42.0	-----

<sup>1</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Revised.  
<sup>4</sup> Not called for on schedule.  
<sup>5</sup> No comparable figures available.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	Paid for contract work	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>	
					Total	Prime movers	Motors run by purchased energy				Total	Materials	Fuel and purchased energy			
								Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars		
United States	1929	1,281	14,094	424,916	2,269,346	1,030,366	1,229,081	41,020,722	\$324,280,004	\$8,418,268	\$808,028,977	\$850,658,328	\$47,870,649	\$1,524,177,087	\$626,148,110	
	1927	1,317	13,054	407,600	2,328,830	1,200,916	1,118,914	38,154,444	\$380,909,643	\$8,710,062	\$871,691,001	\$820,687,805	\$50,904,096	\$1,607,400,012	\$695,808,711	
	1919	1,288	14,218	430,966	1,830,208	1,320,989	518,309	37,304,478	\$355,474,087	\$3,903,742	\$1,277,785,607	\$1,240,463,758	\$37,321,830	\$2,125,272,193	\$847,486,506	
Individual States:																
	Alabama	1929	83	722	27,724	133,228	22,920	110,302	1,910,552	10,875,951	140,913	64,045,940	61,784,428	2,861,518	102,330,864	87,684,918
	1927	98	567	24,826	103,825	25,362	78,463	1,461,489	15,927,634	200,710	49,860,441	47,466,552	2,384,889	80,833,617	30,983,176	
1919	68	510	18,102	73,669	50,162	23,407	1,125,084	11,857,948	8,076	51,339,153	49,901,930	1,487,223	70,043,343	23,304,190		
Arkansas	1929	5	23	617	2,795	-----	2,795	50,780	355,599	-----	1,571,646	1,486,767	84,779	2,241,581	670,035	
1927	3	13	810	1,160	-----	-----	1,160	23,072	206,724	-----	670,443	611,614	64,029	940,057	373,214	
California	1929	8	60	1,163	6,335	-----	6,335	169,157	1,238,715	-----	3,985,664	8,790,137	195,427	6,406,413	2,420,849	

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 2.—GENERAL STATISTICS BY STATES: 1929, 1927, AND 1919—Continued

(See note at head of this table)

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	Paid for contract work	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy				Total	Materials	Fuel and purchased energy		
Individual States—Continued															
Connecticut															
	1929	33	512	10,789	70,341	57,382	12,959	1,410,285	10,723,851	308,200	23,020,722	22,636,597	990,125	40,405,128	16,868,406
	1927	35	484	12,039	65,020	55,870	9,760	1,808,557	13,140,400	616,633	20,021,429	24,910,791	1,110,635	49,177,763	23,156,337
	1919	47	1,039	15,647	71,850	60,888	5,468	2,473,425	14,783,982	393,947	64,411,158	63,268,805	1,182,353	101,551,071	37,130,013
Georgia															
	1929	137	1,608	55,868	268,072	91,212	170,869	4,230,055	35,846,064	375,815	135,703,153	129,708,117	5,905,036	212,851,829	77,148,676
	1927	130	1,144	56,007	223,025	95,021	128,004	3,205,712	36,908,790	51,863	106,882,283	101,240,225	5,642,058	180,509,344	73,627,061
	1919	132	1,120	38,288	150,363	97,336	53,027	3,155,904	20,277,763	205,040	123,433,608	120,400,162	3,032,340	192,185,806	68,747,888
Illinois															
	1929	12	90	1,237	4,570	2,758	1,821	397,336	1,197,316	-----	3,282,770	3,176,945	105,834	5,506,178	2,313,300
	1927	11	73	1,102	4,017	3,105	912	204,930	1,208,020	6,783	3,332,342	3,215,547	116,795	5,867,687	2,535,345
	1919	7	78	1,277	4,540	4,070	470	283,947	1,086,712	-----	4,430,197	4,430,197	78,592	6,484,403	1,975,074
Indiana															
	1929	3	24	698	3,213	3,213	-----	82,901	502,852	-----	1,553,891	1,506,726	47,155	2,351,528	797,647
	1927	3	18	697	2,515	2,515	-----	70,244	536,797	-----	1,183,905	1,125,093	58,302	2,200,728	1,026,823
	1919	4	46	997	4,550	4,550	-----	113,880	700,509	-----	2,480,005	2,385,791	104,114	4,352,535	1,862,630
Kentucky															
	1929	6	32	1,214	6,042	3,689	2,463	131,681	780,542	-----	2,850,537	2,754,347	96,190	4,082,728	1,232,191
	1927	4	28	1,100	5,230	3,404	1,882	74,997	827,051	1,444	2,363,227	2,273,600	89,567	3,834,451	1,471,224
	1919	6	37	967	5,524	3,140	2,384	100,405	630,832	-----	2,021,020	2,834,454	90,476	4,469,330	1,534,110
Maryland															
	1929	9	150	1,901	13,204	4,125	9,169	340,080	1,570,859	-----	5,078,072	4,825,285	252,787	8,447,031	3,308,059
	1927	8	150	2,217	11,725	4,310	7,415	376,244	2,020,520	-----	4,391,842	4,131,181	260,061	8,063,570	3,071,728
	1919	14	207	3,410	17,323	9,341	7,082	540,335	2,900,753	3,934	11,427,657	11,130,221	288,336	18,454,067	7,027,400
Massachusetts															
	1929	135	2,450	70,788	438,184	237,225	180,950	7,519,444	65,556,850	1,765,431	125,441,030	118,088,790	7,352,846	233,018,000	108,170,373
	1927	103	2,458	90,878	530,201	342,058	194,208	7,895,017	53,089,007	2,874,068	145,030,038	136,237,073	9,343,865	284,706,007	130,075,060
	1919	191	3,318	122,499	623,045	425,274	98,371	9,351,610	109,902,603	549,728	359,075,230	348,077,063	11,568,176	596,087,441	237,012,202
Michigan															
	1929	9	21	262	1,000	-----	1,060	89,912	299,591	-----	1,628,172	1,580,508	47,604	2,772,720	1,144,548
	1927	9	32	315	1,459	-----	1,459	109,774	325,880	-----	869,600	810,893	46,713	1,448,020	581,414
Mississippi															
	1929	10	69	2,342	8,001	5,010	2,991	169,733	1,320,310	-----	3,776,405	3,567,733	188,672	6,593,947	2,817,542
	1927	14	61	2,761	10,235	6,695	3,540	161,070	1,324,003	-----	3,682,231	3,430,642	251,589	6,603,051	2,880,820
	1919	15	93	2,406	6,939	6,036	963	200,761	1,537,147	400	4,974,107	4,786,440	187,667	8,090,769	3,062,662
New Hampshire															
	1929	18	477	13,769	90,696	31,334	14,761	1,435,936	12,418,241	82,717	23,821,463	26,800,430	1,455,024	48,850,308	20,528,635
	1927	17	406	14,722	90,642	34,225	2,417	1,385,209	15,142,435	1,294,127	20,772,287	25,341,864	1,430,423	57,721,546	30,940,267
	1919	16	503	21,183	90,895	73,516	17,379	1,200,553	13,136,098	41,743	40,098,138	45,152,817	1,845,321	86,986,158	38,988,020
New Jersey															
	1929	28	241	4,758	24,729	19,162	5,567	827,311	5,220,985	76,356	9,141,925	8,727,373	414,552	17,270,661	8,128,730
	1927	25	315	6,718	35,700	25,699	10,110	1,170,432	6,285,049	289,200	9,050,449	8,650,520	399,929	19,092,931	10,642,482
	1919	33	433	9,261	22,373	17,800	4,313	1,185,481	8,115,852	18,000	40,612,313	39,856,021	756,292	58,705,653	18,093,342
New York															
	1929	32	311	6,811	43,754	15,373	27,831	3,777,671	6,135,012	719,096	12,186,877	11,423,249	763,628	24,147,000	11,960,180
	1927	35	333	7,572	50,289	21,587	28,702	3,898,689	7,872,894	939,018	14,477,202	13,504,073	913,129	29,102,221	14,025,010
	1919	37	420	9,222	47,891	38,536	9,325	1,052,655	8,800,275	542,740	23,103,221	27,215,006	888,215	49,076,203	20,973,072
North Carolina															
	1929	351	2,806	91,844	420,210	97,328	322,882	7,442,420	60,794,170	1,751,855	193,222,115	181,325,894	11,896,221	317,005,212	123,783,097
	1927	374	2,477	95,786	452,934	129,738	332,196	6,494,211	60,149,690	1,049,700	184,509,300	171,939,723	12,500,637	310,290,158	123,780,798
	1919	311	2,160	67,297	258,463	120,616	137,047	5,644,833	49,134,606	558,655	180,770,715	181,021,415	6,768,300	318,368,181	131,588,466
Pennsylvania															
	1929	94	650	7,773	21,013	9,544	11,469	2,460,620	10,613,092	500,122	23,431,402	22,765,455	665,947	40,064,587	22,633,185
	1927	107	1,027	12,160	29,292	10,437	15,855	2,965,658	17,060,128	926,876	39,551,482	38,473,772	1,077,710	75,061,302	35,449,880
	1919	118	741	9,767	21,504	16,656	4,848	2,412,910	10,200,030	552,787	38,819,743	38,076,870	742,873	66,404,059	27,584,316
Rhode Island															
	1929	55	997	21,833	134,194	66,904	67,290	3,275,800	21,778,173	349,651	44,406,063	41,992,204	2,413,859	86,203,705	41,797,732
	1927	66	1,034	20,203	129,400	75,632	53,877	3,072,317	27,580,550	447,815	45,060,265	42,728,307	2,940,898	90,053,020	44,384,415
	1919	74	1,150	31,405	111,986	37,266	24,720	2,579,532	28,974,008	63,182	88,283,650	85,699,501	2,584,149	155,488,347	67,204,697
South Carolina															
	1929	159	1,636	71,731	358,640	149,511	209,130	4,958,650	40,758,650	631,824	140,734,375	138,013,308	8,721,067	241,435,650	94,701,284
	1927	163	1,400	75,069	338,320	159,305	170,024	4,135,763	49,389,478	59,911	135,085,027	129,385,837	6,099,190	231,272,506	96,187,572
	1919	145	1,353	48,079	287,090	160,680	100,410	3,351,097	36,401,912	115,833	137,033,555	132,590,854	4,492,731	228,440,242	91,856,667
Tennessee															
	1929	20	264	7,544	34,333	8,732	25,551	5,158,625	3,280,506	8,500	16,819,586	16,010,237	809,349	26,173,993	9,354,407
	1927	21	201	7,211	33,393	8,254	25,139	430,173	4,777,860	-----	13,580,259	12,840,280	742,979	21,056,017	8,367,358
	1919	16	171	4,895	16,093	10,996	5,097	446,110	3,171,482	169,325	14,295,355	13,928,837	366,468	22,400,737	8,165,382
Texas															
	1929	27	222	4,649	19,774	4,268	15,506	531,149	3,280,506	-----	11,470,824	10,853,544	623,280	13,862,217	7,385,393
	1927	26	123	5,564	19,020	6,025	13,904	383,843	4,007,506	78,877	11,075,491	10,097,432	678,059	21,125,992	9,450,501
	1919	16	97	2,633	14,210	5,585	8,025	238,717	1,840,264	2,794	9,314,893	8,987,812	327,081	13,919,603	4,604,710
Virginia															
	1929	9	142	7,632	38,787	55,982	2,805	499,755	5,741,225	39,723	13,465,604	12,915,830	549,774	25,038,049	11,572,445
	1927	11	126	8,426	57,638	54,818	2,820	629,842	7,057,919	31,611	14,177,760	13,622,619	655,141	27,295,233	13,117,473
	1919	10	117	6,518	38,963	38,540	423	545,827	6,077,197	-----	17,543,973	17,132,814	411,159	32,534,934	14,000,961
Groups of States:															
Mo., 15 est.;															
Vt., 3-----															
	1929	18	317	9,862	85,120	78,712	6,408	898,300							

# COTTON GOODS

249

**TABLE 8.—COTTON GOODS—PRINCIPAL PRODUCTS, BY CLASS, QUANTITY, AND VALUE, FOR THE UNITED STATES, THE COTTON-GROWING STATES, AND THE NEW ENGLAND STATES: 1920, 1927, AND 1925**

[The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

CLASS AND SECTION	1920	1927	1925	CLASS AND SECTION	1920	1927	1925
<b>Aggregate value:</b>				<b>Woven goods—Continued.</b>			
United States.....	\$1,514,207,820	\$1,540,785,191	\$1,694,953,403	Tire fabrics—Continued.			
Cotton-growing States.....	970,340,134	897,813,590	929,107,255	New England States—			
New England States.....	460,660,970	610,990,193	607,925,188	Pounds.....	82,553,202	70,034,740	73,704,042
<b>Woven goods (over 12 inches in width):</b>				Square yards.....	102,426,247	87,672,222	90,930,550
United States—				Value.....	\$37,876,380	\$30,960,916	\$43,425,210
Total pounds.....	2,363,404,820	2,433,700,519	2,070,985,009	<b>Cord fabrics for tires—</b>			
Total square yards.....	8,541,545,733	8,980,414,774	7,741,568,028	United States—			
Total value.....	\$1,138,846,086	\$1,183,760,651	\$1,215,130,031	Pounds.....	220,360,699	160,612,114	140,462,454
Cotton-growing States—				Square yards.....	201,026,851	170,740,778	176,964,460
Total pounds.....	1,702,308,489	1,705,309,091	1,346,022,487	Value.....	\$90,377,400	\$60,074,070	\$80,478,025
Total square yards.....	6,150,259,049	6,037,010,040	4,842,095,472	<b>Cotton-growing States—</b>			
Total value.....	\$720,954,501	\$666,331,228	\$663,000,522	Pounds.....	137,485,104	88,758,024	56,750,641
New England States—				Square yards.....	158,000,070	92,067,547	73,030,020
Total pounds.....	504,073,490	608,228,088	589,031,919	Value.....	\$61,447,571	\$36,483,346	\$30,502,960
Total square yards.....	2,150,604,401	2,062,764,632	2,007,308,008	<b>Tire duck—</b>			
Total value.....	\$334,504,672	\$413,218,570	\$450,807,228	United States—			
Sheetings—				Pounds.....	17,374,824	30,104,043	32,081,733
United States—				Square yards.....	22,270,844	35,474,346	40,701,508
Total pounds.....	396,021,203	435,706,842	369,375,945	Value.....	\$6,845,008	\$11,343,197	\$16,628,610
Total square yards.....	1,093,167,162	1,867,476,174	1,638,168,738	<b>Tire fabrics other than cord</b>			
Total value.....	\$146,181,212	\$167,888,002	\$180,367,056	and duck—			
Cotton-growing States—				United States—			
Total pounds.....	336,680,578	348,641,410	284,700,475	Pounds.....	12,768,053	6,576,001	16,771,008
Total square yards.....	1,465,802,480	1,557,195,980	1,318,071,398	Square yards.....	19,560,804	10,716,518	24,400,486
Total value.....	\$118,225,214	\$121,800,654	\$128,580,070	Value.....	\$5,497,705	\$2,656,032	\$8,518,650
New England States—				<b>Dentins—</b>			
Pounds.....	48,467,016	69,540,295	70,262,227	United States—			
Square yards.....	170,482,256	230,970,990	270,166,289	Total pounds.....	141,853,387	144,605,484	163,658,090
Value.....	\$23,010,642	\$36,260,780	\$42,607,037	Total square yards.....	249,891,122	254,117,955	180,461,666
<b>Widths 40 inches and narrower—</b>				Total value.....	\$40,266,461	\$40,791,845	\$46,002,096
United States—				Cotton-growing States—			
Pounds.....	271,347,297	278,381,417	(0)	Pounds.....	120,561,967	123,467,960	\$ 80,183,809
Square yards.....	1,175,307,528	1,209,422,165	(0)	Square yards.....	227,914,292	222,017,676	\$ 156,367,273
Value.....	\$92,204,300	\$93,048,540	(0)	Value.....	\$44,560,566	\$43,462,326	\$ 30,315,004
Cotton-growing States—				New England States—			
Pounds.....	251,079,165	201,084,651	(0)	Pounds.....	12,291,420	18,134,294	14,080,676
Square yards.....	1,090,698,084	1,142,598,051	(0)	Square yards.....	21,076,830	31,460,617	22,950,331
Value.....	\$83,606,687	\$85,042,566	(0)	Value.....	\$4,665,895	\$6,327,028	\$6,200,906
<b>Widths over 40 inches—</b>				<b>Standard dentin—white-back</b>			
United States—				and double-and-twist—			
Pounds.....	124,673,996	157,325,425	(0)	United States—			
Square yards.....	517,859,634	648,051,000	(0)	Pounds.....	122,519,165	132,044,840	(0)
Value.....	\$53,910,903	\$73,930,460	(0)	Square yards.....	209,695,700	226,295,040	(0)
Cotton-growing States—				Value.....	\$41,727,408	\$43,942,500	(0)
Pounds.....	85,601,413	86,650,708	(0)	<b>Pin checks, express stripes,</b>			
Square yards.....	375,133,496	414,607,020	(0)	and other—			
Value.....	\$34,528,527	\$36,948,080	(0)	United States—			
<b>Print cloth—</b>				Pounds.....	10,334,222	12,560,638	(0)
United States—				Square yards.....	40,285,422	27,822,015	(0)
Total pounds.....	301,470,145	270,577,116	195,504,472	Value.....	\$7,520,053	\$6,849,285	(0)
Total square yards.....	1,703,026,248	1,583,831,282	1,196,374,053	<b>Napped fabrics—</b>			
Total value.....	\$121,423,305	\$109,826,442	\$98,452,793	United States—			
Cotton-growing States—				Pounds.....	108,870,302	125,944,806	101,058,550
Total pounds.....	208,369,081	224,312,537	156,732,801	Square yards.....	323,140,452	400,097,211	340,415,810
Total square yards.....	1,520,452,500	1,300,293,077	906,454,938	Value.....	\$48,320,480	\$55,386,386	\$53,006,741
Total value.....	\$106,897,095	\$89,166,271	\$76,728,562	Cotton-growing States—			
New England States—				Pounds.....	80,004,848	83,540,474	66,540,111
Pounds.....	\$ 32,040,000	45,802,878	39,327,470	Square yards.....	242,528,331	268,232,790	184,413,628
Square yards.....	\$ 181,083,097	281,097,050	287,006,045	Value.....	\$33,612,844	\$32,005,441	\$27,606,448
Value.....	\$ 14,456,464	\$20,454,076	\$21,448,062	New England States—			
<b>Widths 36 inches and wider—</b>				Pounds.....	\$ 28,083,251	42,020,514	45,032,436
United States—				Square yards.....	\$ 80,047,655	131,100,360	156,002,191
Pounds.....	251,368,798	229,826,810	(0)	Value.....	\$ 14,580,040	\$22,371,027	\$25,940,293
Square yards.....	1,390,953,040	1,322,875,122	(0)	<b>Shirtings—</b>			
Value.....	\$102,145,705	\$92,570,977	(0)	United States—			
Cotton-growing States—				Pounds.....	78,480,836	90,081,801	103,643,271
Pounds.....	222,448,371	190,558,353	(0)	Square yards.....	317,045,592	378,530,160	455,303,760
Square yards.....	1,244,732,200	1,089,547,703	(0)	Value.....	\$45,771,241	\$55,437,170	\$75,756,880
Value.....	\$89,663,200	\$76,743,902	(0)	Cotton-growing States—			
<b>Widths narrower than 36 inches—</b>				Pounds.....	62,406,362	71,531,796	70,601,000
United States—				Square yards.....	244,675,177	282,095,502	296,392,733
Pounds.....	50,110,347	40,750,300	(0)	Value.....	\$31,718,710	\$35,019,983	\$40,288,493
Square yards.....	306,071,308	209,986,100	(0)	New England States—			
Value.....	\$10,277,000	\$17,255,465	(0)	Pounds.....	\$ 45,671,668	18,740,176	32,373,021
Cotton-growing States—				Square yards.....	\$ 70,410,083	63,464,317	166,851,723
Pounds.....	45,920,710	33,754,184	(0)	Value.....	\$13,421,875	\$10,406,525	\$34,332,062
Square yards.....	275,720,369	219,745,374	(0)	<b>Plushes, velvets, and velveteens—</b>			
Value.....	\$17,234,486	\$13,422,360	(0)	United States—			
<b>Tire fabrics—</b>				Pounds.....	41,777,351	35,641,022	30,600,434
United States—				Square yards.....	50,303,597	42,680,220	33,478,404
Total pounds.....	250,503,570	197,353,058	180,345,195	Value.....	\$41,700,622	\$45,710,213	\$40,678,052
Total square yards.....	302,864,499	225,981,042	242,126,450	Cotton-growing States—			
Total value.....	\$111,720,812	\$86,974,190	\$105,625,894	Pounds.....	11,661,834	3,080,310	(0)
Cotton-growing States—				Square yards.....	21,011,987	4,618,427	(0)
Pounds.....	164,367,468	119,203,157	86,233,101	Value.....	\$9,003,604	\$2,033,078	(0)
Square yards.....	196,261,831	121,146,926	112,675,565	New England States—			
Value.....	\$72,248,291	\$44,513,833	\$44,722,472	Pounds.....	10,161,027	11,852,000	4,719,163

See footnotes at end of table.



TABLE 3.—COTTON GOODS—PRINCIPAL PRODUCTS, BY CLASS, QUANTITY, AND VALUE, FOR THE UNITED STATES, THE COTTON-GROWING STATES, AND THE NEW ENGLAND STATES: 1929, 1927, AND 1925—Con.

[See note at head of this table]

CLASS AND SECTION	1929	1927	1925	CLASS AND SECTION	1929	1927	1925
<b>Woven goods—Continued.</b>				<b>Woven goods—Continued.</b>			
<b>Reps, poplins, and broadcloths—</b>				<b>Lawns, nainsooks, cambrics, and</b>			
<b>United States—</b>				<b>similar muslins—</b>			
Total pounds.....	70, 078, 442	60, 821, 581	(9)	United States—	31, 144, 807	37, 000, 333	47, 566, 144
Total square yards.....	308, 620, 221	264, 724, 549	(9)	Pounds.....	226, 553, 738	272, 453, 011	320, 087, 427
Total value.....	\$40, 564, 026	\$37, 655, 031	(9)	Square yards.....	\$26, 418, 696	\$32, 100, 888	\$43, 323, 433
<b>Cotton-growing States—</b>				<b>Value.....</b>			
Total pounds.....	34, 031, 877	24, 972, 134	(9)	Cotton-growing States—	6, 702, 847	5, 462, 553	18, 270, 720
Total square yards.....	143, 200, 102	107, 410, 713	(9)	Pounds.....	39, 341, 757	35, 325, 951	105, 408, 813
Total value.....	\$16, 620, 035	\$12, 903, 063	(9)	Square yards.....	\$4, 080, 001	\$3, 430, 322	\$10, 724, 273
<b>New England States—</b>				<b>Value.....</b>			
Total pounds.....	35, 810, 426	34, 785, 202	(9)	New England States—	22, 061, 295	31, 237, 700	28, 500, 126
Total square yards.....	156, 304, 771	153, 071, 810	(9)	Pounds.....	178, 776, 565	235, 188, 052	215, 966, 059
Total value.....	\$23, 584, 497	\$24, 250, 803	(9)	Square yards.....	\$20, 243, 883	\$23, 454, 914	\$31, 006, 552
<b>Average single yarn-count,</b>				<b>Fabrics (except draperies) entirely</b>			
<b>40s and under—</b>				<b>or in chief value of rayon 12—</b>			
<b>United States—</b>				<b>United States—</b>			
Pounds.....	40, 342, 412	35, 040, 505	(9)	Pounds.....	14, 843, 670	(9)	(9)
Square yards.....	173, 333, 325	143, 112, 060	(9)	Square yards.....	85, 004, 430	(9)	(9)
Value.....	\$19, 003, 528	\$16, 845, 722	(9)	Value.....	\$24, 160, 789	(9)	(9)
<b>Cotton-growing States—</b>				<b>Cotton-growing States—</b>			
Pounds.....	26, 932, 423	22, 505, 209	(9)	Pounds.....	3, 397, 303	(9)	(9)
Square yards.....	116, 322, 921	99, 335, 272	(9)	Square yards.....	18, 165, 403	(9)	(9)
Value.....	\$11, 340, 572	\$10, 308, 540	(9)	Value.....	\$9, 202, 294	(9)	(9)
<b>New England States—</b>				<b>New England States—</b>			
Pounds.....	12, 406, 415	11, 420, 161	(9)	Pounds.....	10, 667, 230	(9)	(9)
Square yards.....	62, 952, 938	47, 537, 892	(9)	Square yards.....	63, 004, 523	(9)	(9)
Value.....	\$7, 835, 149	\$9, 035, 217	(9)	Value.....	\$10, 278, 071	(9)	(9)
<b>Average single yarn-count,</b>				<b>Ginghams 11—</b>			
<b>41s and over—</b>				<b>United States—</b>			
<b>United States—</b>				<b>United States—</b>			
Pounds.....	30, 336, 030	25, 772, 026	(9)	Pounds.....	30, 317, 150	60, 207, 681	71, 770, 408
Square yards.....	135, 236, 898	110, 611, 859	(9)	Square yards.....	147, 120, 296	200, 618, 628	350, 475, 009
Value.....	\$20, 951, 098	\$20, 810, 209	(9)	Value.....	\$17, 717, 408	\$37, 128, 556	\$67, 501, 270
<b>Cotton-growing States—</b>				<b>Cotton-growing States—</b>			
Pounds.....	7, 009, 454	2, 406, 925	(9)	Pounds.....	26, 302, 382	41, 673, 088	30, 027, 204
Square yards.....	31, 836, 181	11, 078, 441	(9)	Square yards.....	120, 020, 241	206, 850, 507	184, 370, 775
Value.....	\$5, 182, 463	\$2, 505, 123	(9)	Value.....	\$15, 032, 466	\$23, 330, 306	\$23, 803, 505
<b>New England States—</b>				<b>Osnaburgs 11—</b>			
Pounds.....	22, 855, 932	23, 305, 101	(9)	United States—	50, 144, 030	72, 247, 512	53, 891, 002
Square yards.....	101, 170, 958	105, 533, 418	(9)	Pounds.....	139, 520, 817	104, 075, 704	118, 008, 903
Value.....	\$15, 507, 180	\$18, 215, 086	(9)	Value.....	\$17, 301, 069	\$17, 800, 540	\$18, 448, 738
<b>Drills 11—</b>				<b>Cotton-growing States—</b>			
<b>United States—</b>				<b>United States—</b>			
Pounds.....	118, 843, 173	128, 687, 635	103, 457, 753	Pounds.....	58, 876, 582	71, 070, 755	53, 210, 058
Square yards.....	324, 041, 245	347, 775, 006	286, 114, 586	Square yards.....	139, 023, 197	103, 107, 374	110, 075, 044
Value.....	\$39, 700, 916	\$40, 698, 249	\$42, 688, 703	Value.....	\$17, 181, 459	\$17, 007, 844	\$18, 177, 214
<b>Cotton-growing States—</b>				<b>Bedspreads and quilts—</b>			
Pounds.....	114, 737, 006	122, 201, 734	96, 878, 003	United States—	17, 758, 093	24, 020, 704	21, 307, 170
Square yards.....	312, 610, 486	329, 261, 727	265, 523, 507	Total pounds.....	62, 901, 717	71, 282, 515	62, 030, 525
Value.....	\$38, 101, 123	\$38, 270, 422	\$39, 555, 704	Total square yards.....	\$16, 396, 884	\$18, 040, 785	\$10, 703, 225
<b>Twills and satens—</b>				<b>Cotton-growing States—</b>			
<b>United States—</b>				<b>United States—</b>			
Pounds.....	82, 492, 337	111, 972, 833	151, 500, 881	Total pounds.....	10, 021, 838	15, 214, 145	9, 367, 880
Square yards.....	294, 117, 406	413, 906, 565	532, 830, 805	Total square yards.....	31, 013, 036	40, 627, 350	20, 130, 171
Value.....	\$37, 441, 206	\$50, 336, 045	\$64, 133, 051	Total value.....	\$9, 215, 099	\$10, 308, 940	\$8, 588, 766
<b>Cotton-growing States—</b>				<b>New England States—</b>			
Pounds.....	44, 284, 959	50, 481, 340	70, 441, 726	Total pounds.....	6, 885, 470	8, 044, 098	11, 163, 851
Square yards.....	125, 078, 276	170, 574, 004	227, 710, 959	Total square yards.....	19, 739, 704	22, 238, 180	24, 932, 739
Value.....	\$17, 113, 531	\$20, 556, 885	\$35, 035, 823	Total value.....	\$6, 480, 000	\$7, 610, 190	\$8, 509, 704
<b>New England States—</b>				<b>Double-woven fabric (Mar-</b>			
Pounds.....	27, 283, 705	44, 832, 613	64, 489, 089	<b>selles, satin, etc.)—</b>			
Square yards.....	120, 411, 831	203, 083, 028	274, 708, 851	<b>United States—</b>			
Value.....	\$15, 608, 694	\$25, 573, 700	\$44, 307, 620	Pounds.....	4, 150, 625	5, 940, 220	(9)
<b>Towels, towelings, and wash</b>				<b>Square yards.....</b>			
<b>cloths—</b>				<b>Value.....</b>			
<b>United States—</b>				<b>Cotton-growing States—</b>			
Pounds.....	70, 973, 774	83, 848, 302	61, 003, 456	Pounds.....	3, 107, 711	2, 180, 406	(9)
Square yards.....	169, 094, 153	169, 907, 031	126, 565, 750	Square yards.....	9, 100, 952	6, 442, 578	(9)
Value.....	\$33, 037, 277	\$42, 611, 371	\$38, 149, 506	Value.....	\$2, 670, 610	\$1, 462, 809	(9)
<b>Cotton-growing States—</b>				<b>New England States—</b>			
Pounds.....	60, 894, 758	68, 988, 380	46, 900, 097	Pounds.....	640, 139	3, 614, 084	(9)
Square yards.....	144, 936, 627	141, 454, 564	90, 323, 500	Square yards.....	1, 219, 511	7, 820, 436	(9)
Value.....	\$29, 396, 812	\$32, 703, 647	\$20, 787, 953	Value.....	\$542, 733	\$2, 901, 538	(9)
<b>New England States—</b>				<b>Single-woven fabric (crochet,</b>			
Pounds.....	3, 642, 307	3, 000, 000	3, 027, 010	<b>dimity, ripplette, etc.)—</b>			
Square yards.....	10, 080, 891	8, 351, 900	8, 442, 932	<b>United States—</b>			
Value.....	\$1, 478, 928	\$1, 580, 916	\$2, 165, 349	Pounds.....	13, 607, 468	18, 080, 538	(9)
<b>Fabrics (other than shirtings and</b>				<b>Square yards.....</b>			
<b>draperies) in chief value of cot-</b>				<b>Value.....</b>			
<b>ton, containing rayon 12—</b>				<b>Cotton-growing States—</b>			
<b>United States—</b>				<b>United States—</b>			
Pounds.....	21, 063, 487	(9)	(9)	Pounds.....	6, 824, 127	13, 024, 679	(9)
Square yards.....	111, 970, 184	(9)	(9)	Square yards.....	21, 908, 743	40, 184, 781	(9)
Value.....	\$28, 084, 042	(9)	(9)	Value.....	\$9, 538, 420	\$8, 846, 181	(9)
<b>Cotton-growing States—</b>				<b>New England States—</b>			
Pounds.....	6, 842, 715	(9)	(9)	Pounds.....	6, 245, 331	4, 430, 610	(9)
Square yards.....	26, 891, 241	(9)	(9)	Square yards.....	18, 570, 253	14, 401, 760	(9)
Value.....	\$6, 245, 296	(9)	(9)	Value.....	\$5, 943, 207	\$4, 627, 652	(9)
<b>New England States—</b>				<b>Tieckings—</b>			
Pounds.....	13, 837, 504	(9)	(9)	<b>United States—</b>			
Square yards.....	80, 645, 059	(9)	(9)	Pounds.....	19, 931, 428	24, 567, 950	20, 842, 173
Value.....	\$20, 020, 196	(9)	(9)	Square yards.....	42, 410, 547	59, 283, 360	48, 802, 153
				<b>Value.....</b>			
				\$9, 280, 484			
				\$10, 368, 553			
				\$10, 304, 978			

See footnotes at end of table.



# COTTON GOODS

251

**TABLE 3.—COTTON GOODS—PRINCIPAL PRODUCTS, BY CLASS, QUANTITY, AND VALUE, FOR THE UNITED STATES, THE COTTON-GROWING STATES, AND THE NEW ENGLAND STATES: 1929, 1927, AND 1925—Con.**

[See note at head of this table]

CLASS AND SECTION	1929	1927	1925	CLASS AND SECTION	1929	1927	1925
<b>Woven goods—Continued.</b>				<b>Cotton yarns produced for sale—Con.</b>			
<b>Tickings—Continued.</b>				<b>Carded—Continued.</b>			
<b>Cotton-growing States—</b>				<b>Other carded yarns produced for sale, including those for weaving and machine knitting—</b>			
Pounds.....	14,470,733	17,220,575	13,875,947	United States—			
Square yards.....	34,430,204	44,703,437	33,000,090	Pounds.....	401,003,220	400,408,342	( <sup>5</sup> )
Value.....	\$0,400,017	\$0,811,818	\$0,530,738	Value.....	\$162,050,172	\$100,272,282	( <sup>5</sup> )
<b>New England States—</b>				<b>Cotton-growing States—</b>			
Pounds.....	3,727,840	5,071,150	4,825,410	Pounds.....	416,407,103	423,877,066	( <sup>5</sup> )
Square yards.....	4,853,300	10,407,714	10,825,708	Value.....	\$132,163,783	\$133,113,403	( <sup>5</sup> )
Value.....	\$1,874,005	\$2,330,064	\$2,451,811	<b>New England States—</b>			
<b>Cotton table damask<sup>11</sup>—</b>				Pounds.....	62,463,689	50,070,304	( <sup>5</sup> )
United States—				Value.....	\$25,332,370	\$21,044,833	( <sup>5</sup> )
Pounds.....	12,378,545	11,005,682	14,004,134	<b>Combed—</b>			
Square yards.....	35,808,245	33,523,412	53,403,207	<b>Yarns for sewing thread and for crochet, darning, hand-knitting, and embroidery cottons—</b>			
Value.....	\$8,332,821	\$0,751,405	\$12,450,300	United States—			
Cotton-growing States—				Pounds.....	11,372,059	10,618,750	( <sup>5</sup> )
Pounds.....	11,000,370	10,130,743	9,903,233	Value.....	\$3,300,078	\$3,111,222	( <sup>5</sup> )
Square yards.....	13,351,848	30,828,457	23,003,000	Cotton-growing States—			
Value.....	\$7,070,025	\$0,000,025	\$7,037,700	Pounds.....	3,035,543	( <sup>5</sup> )	( <sup>5</sup> )
<b>Cottonades and cotton worsteds<sup>11</sup>—</b>				Value.....	\$2,302,164	( <sup>5</sup> )	( <sup>5</sup> )
United States—				New England States—			
Pounds.....	18,011,008	10,542,803	12,825,801	Pounds.....	7,737,110	( <sup>5</sup> )	( <sup>5</sup> )
Square yards.....	34,837,045	32,000,010	20,131,005	Value.....	\$0,003,914	( <sup>5</sup> )	( <sup>5</sup> )
Value.....	\$3,357,448	\$8,140,836	\$7,003,377	<b>Other combed yarns produced for sale, including those for weaving and machine knitting—</b>			
Cotton-growing States—				United States—			
Pounds.....	13,385,421	11,040,405	8,718,348	Pounds.....	138,030,810	150,107,014	( <sup>5</sup> )
Square yards.....	25,873,411	23,773,085	20,037,800	Value.....	\$80,167,030	\$83,725,800	( <sup>5</sup> )
Value.....	\$5,212,018	\$4,068,271	\$4,424,525	Cotton-growing States—			
<b>Other woven goods (over 12 inches in width)—</b>				Pounds.....	110,000,435	122,440,341	( <sup>5</sup> )
United States—				Value.....	\$04,500,823	\$04,810,707	( <sup>5</sup> )
Pounds.....	475,024,207	501,010,404	418,511,477	New England States—			
Square yards.....	1,020,082,417	2,110,383,380	1,755,374,570	Pounds.....	20,074,404	27,220,112	( <sup>5</sup> )
Value.....	\$207,070,408	\$310,135,906	\$313,171,833	Value.....	\$15,017,305	\$18,042,000	( <sup>5</sup> )
Cotton-growing States—				<b>Cotton waste produced for sale:</b>			
Pounds.....	303,102,054	288,050,575	230,790,554	United States—			
Square yards.....	1,024,852,734	080,162,304	702,505,413	Pounds.....	443,010,208	484,416,320	417,004,448
Value.....	\$127,401,550	\$120,407,209	\$110,277,613	Value.....	\$32,570,034	\$20,808,051	\$40,022,870
New England States <sup>13</sup>				Cotton-growing States—			
Pounds.....	140,100,378	202,117,300	190,900,484	Pounds.....	209,273,756	307,040,580	228,117,850
Square yards.....	808,183,721	1,153,781,785	1,110,843,266	Value.....	\$20,008,868	\$15,500,444	\$10,021,440
Value.....	\$131,350,048	\$170,087,034	\$180,087,201	New England States—			
<b>Cotton yarns produced for sale:</b>				Pounds.....	134,714,084	161,907,070	172,547,874
United States—				Value.....	\$11,838,210	\$10,574,381	\$10,137,200
Total pounds.....	647,725,430	604,334,502	620,350,804	<b>Other cotton products:<sup>14</sup></b>			
Total value.....	\$253,340,111	\$253,003,750	\$313,000,245	United States, value.....	\$30,531,000	\$82,552,130	\$90,131,838
<b>Carded—</b>				Cotton-growing States, value.....	\$28,552,013	\$14,400,245	\$22,028,901
Yarns for sewing thread and for crochet, darning, hand-knitting, and embroidery cottons <sup>12</sup> —				New England States, value.....	\$30,238,050	\$40,893,400	\$60,712,235
United States—							
Pounds.....	0,709,744	4,040,550	( <sup>5</sup> )				
Value.....	\$2,745,225	\$1,554,347	( <sup>5</sup> )				

<sup>1</sup> United States totals cover cotton-growing States, the New England States, and Delaware, Illinois, Indiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, and Wisconsin. Cotton-growing States comprise Alabama, Arkansas, California, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

<sup>2</sup> Revised.

<sup>3</sup> Not strictly comparable with figures for 1929 and 1927 because of the inclusion of data for small amounts of products not belonging to the industry.

<sup>4</sup> Statistics for New England withheld from publication to avoid disclosing output of individual establishments.

<sup>5</sup> No comparable data.

<sup>6</sup> Excludes data for 1 establishment to avoid disclosing its output; included in corresponding figure for "Other woven goods."

<sup>7</sup> Because of the failure of some manufacturers to report cord fabric in square yards, it was necessary to estimate (on the basis of the averages shown by the complete returns) nearly 40 per cent of this item.

<sup>8</sup> Statistics for cotton-growing States and for New England States withheld from publication to avoid disclosing output of individual establishments.

<sup>9</sup> Excludes data for 2 establishments to avoid disclosing their output; included in corresponding figure for "Other woven goods."

<sup>10</sup> Withheld from publication to avoid disclosing output of individual establishments; included in corresponding figure for "Other woven goods."

<sup>11</sup> Statistics for New England withheld from publication to avoid disclosing output of individual establishments; included in corresponding figure for "Other woven goods."

<sup>12</sup> The figures for 1927 and 1925, which include data for draperies, are not comparable with those for 1929, which do not include such data. (The value of draperies produced in 1929 is included in the item "Other woven goods.")

<sup>13</sup> Figures for New England States include data for drills, gingham, osenbargs, cotton table damask, cottonades, and cotton worsteds. (See footnote 11.)

<sup>14</sup> Thread, twine, batting, wadding, mattress felts, card lays, sliver, roving, old bagging and ties, etc. (See Table 4.)

CENSUS OF MANUFACTURES: 1929

TABLE 4.—COTTON GOODS—PRODUCTION, BY CLASS, QUANTITY, AND VALUE, BY STATES: 1929

[The figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products. Statistics are given for each State which can be shown separately without disclosing data for individual establishments, and for the remaining States in groups. Certain of the "Other States," however, reported larger quantities and values of the specified classes of products than some of the States shown separately.]

CLASS AND STATE	Number of establishments <sup>1</sup>	QUANTITY		Value <i>Dollars</i>	CLASS AND STATE	Number of establishments <sup>1</sup>	QUANTITY		Value <i>Dollars</i>
		Pounds	Square yards				Pounds	Square yards	
1. Cotton-goods industry, all products, total value.....				1,524,177,087	Cotton goods, all industries—Contd. Woven-goods—Continued. Numbered duck—except tire-plied warp and plied filling, total.....		43,667,312	42,085,750	10,386,810
2. Cotton goods.....				1,507,825,222	Alabama.....		13,181,727	12,587,801	4,601,701
3. Other products (not normally belonging to the industry) <sup>2</sup> .....				14,400,600	Maryland.....		10,967,261	8,725,002	4,008,388
4. Amount received for contract work.....				2,251,265	Georgia and South Carolina.....		15,056,290	16,533,536	5,550,685
5. Cotton goods made as secondary products in other industries, value.....				6,772,604	Other States.....		4,462,028	4,138,811	2,106,042
Cotton goods, all industries: Aggregate value (sum of 2 and 5).....				1,514,297,826	Sail duck (Ala., Calif., Ga., Md., Mass., S. C.).....	12	3,621,515	2,566,604	1,309,013
Woven-goods (over 12 inches in width), total.....	2,363,404,826	8,541,545,733	1,138,846,685		Wide duck, total.....	17	24,456,697	22,212,706	8,917,604
Tire fabrics, total.....	250,503,576	802,804,469	111,720,812		Alabama.....	4	8,314,152	8,438,387	2,901,884
Cord fabric for tires, total.....	38	220,360,699	261,026,861	99,377,400	Georgia.....	5	7,402,097	6,210,072	2,694,867
Georgia.....	12	73,527,407	86,467,284	33,275,383	Maryland.....	4	5,700,562	4,480,802	2,114,672
Massachusetts.....	7	60,368,212	73,754,728	20,666,894	Other States (Calif., S. C., Tex.).....	4	3,039,886	3,073,455	1,116,181
North Carolina.....	6	26,842,062	30,010,493	12,301,432	Naught duck, including hydraulic and "biscuit" (Ala., Ga., Md., S. C.).....	9	2,374,620	1,127,512	900,459
Alabama and South Carolina.....	4	29,026,477	32,990,741	12,780,124	Other numbered duck, except tire, total.....	16	13,214,471	10,178,838	5,259,740
Other States (Calif., Conn., Me., N. H., N. Y., Ohio, R. I., Tex.).....	9	29,006,541	36,903,905	14,353,000	Alabama, Georgia, South Carolina, Connecticut, Maryland, Massachusetts.....	8	7,124,120	10,738,691	2,401,796
Tire duck, total.....	19	17,374,824	22,270,844	6,845,008	8	6,090,351	5,430,847	2,857,944	
Alabama.....	4	3,432,035	4,535,322	1,245,484	Osnaburgs, total.....	68	59,144,030	130,526,817	17,301,669
Georgia.....	6	3,909,002	4,994,700	1,552,224	Alabama.....	11	17,042,339	40,530,421	4,902,092
North Carolina.....	5	9,266,133	11,800,938	3,753,051	Georgia.....	16	21,653,796	49,425,125	6,500,462
Other States (Md., Mass., S. C.).....	4	677,654	945,818	294,849	North Carolina.....	6	3,103,073	11,270,352	872,591
Tire fabrics other than cord or duck, total.....	14	12,768,053	19,560,804	5,497,795	South Carolina.....	15	7,013,207	19,155,687	2,080,837
Georgia.....	4	5,218,040	8,286,101	2,250,510	Texas.....	11	5,563,010	11,110,408	1,693,212
Other States (Ala., Calif., Mass., N. C., S. C.).....	10	7,550,007	11,274,703	3,247,276	Other States (Ark., Calif., Ind., La., N. J., Okla., Tenn.).....	9	4,177,945	8,016,824	1,262,475
Ounce duck, except tire, total.....		137,053,484	198,058,220	48,705,834	Sheetings, total.....		396,021,293	1,693,167,102	146,181,212
Alabama.....		41,274,449	57,752,701	14,013,007	Alabama.....		41,312,284	152,446,296	13,332,007
Georgia.....		47,534,028	61,318,707	16,037,132	Georgia.....		70,716,402	360,298,693	28,726,862
Massachusetts.....		3,704,690	5,364,122	2,368,532	Maine.....		14,957,191	49,633,772	5,911,250
South Carolina.....		9,818,857	9,455,954	3,554,140	Massachusetts.....		17,300,773	69,980,969	10,219,575
Texas.....		23,595,609	35,388,666	7,995,584	North Carolina.....		38,105,483	176,542,222	14,638,260
Other States.....		11,665,842	18,778,010	4,136,399	South Carolina.....		127,215,232	543,072,093	44,083,586
Army duck, including awning, shoe, etc.; plied warp and plied filling, total.....	23	28,313,462	37,692,210	9,896,347	Tennessee and Virginia.....		36,079,051	162,363,925	12,212,482
Georgia.....	5	4,665,152	7,894,037	1,844,741	Other States.....		41,334,869	177,926,102	17,077,134
Alabama, North Carolina, South Carolina.....	9	14,973,340	24,456,175	5,605,262	Sheetings, 40 inches and narrower, total.....	141	271,347,297	1,175,307,528	92,264,309
Other States (Ark., Me., Md., Mass., N. H., Pa., Tenn.).....	9	3,674,970	5,341,998	2,446,844	Alabama.....	20	32,030,249	114,620,707	9,937,605
Hose and belting duck—plied warp and plied filling, total.....	14	36,905,616	24,089,631	12,764,571	Georgia.....	27	55,942,271	252,354,778	10,164,330
Georgia.....	7	21,317,902	13,951,723	7,296,194	Maine.....	4	1,723,797	6,143,308	743,916
Other States (Ala., Calif., Md., S. C.).....	7	15,587,714	10,137,908	5,468,377	Massachusetts.....	6	1,204,125	5,369,003	834,704
Filter cloth (Calif., Conn., Ga., Md., Mass., N. H., N. Y., Ohio, S. C., Tex.).....	10	3,890,773	3,344,844	1,507,014	North Carolina.....	15	14,926,379	62,312,527	5,180,004
Flat-laid duck—single warp, single and plied filling, total.....	35	65,732,881	108,010,483	21,878,131	Rhode Island.....	4	4,545,910	18,582,098	1,837,146
Alabama.....	7	23,114,881	36,051,153	7,889,970	South Carolina.....	39	110,830,227	480,984,091	37,284,055
Georgia.....	8	16,935,170	32,449,304	5,321,433	Tennessee.....	5	18,692,524	80,210,958	6,021,214
Texas.....	11	13,690,324	26,991,981	6,632,311	Mississippi and Virginia.....	5	14,367,682	74,137,580	4,653,278
Other States (Ark., Conn., Ind., Mass., N. C., Okla., Tenn.).....	9	6,980,506	13,124,045	2,034,411	Other States (Ark., Conn., Ill., Ind., Ky., N. H., N. J., N. Y., Pa., Tex.).....	16	17,094,233	74,501,605	6,607,078
Other ounce duck, except tire, total.....	12	8,310,752	14,315,052	2,590,771	Sheetings, wider than 40 inches, total.....	82	124,073,996	517,850,634	53,916,903
Georgia and Texas.....	6	7,570,056	13,653,731	2,233,453	Alabama.....	8	9,282,035	37,825,589	3,394,562
Other States (Ala., Ind., Md., Mass., S. C., Tenn.).....	6	740,696	661,321	366,318	Georgia.....	18	23,774,131	107,943,915	9,562,622
					Maine.....	4	13,233,394	43,400,464	5,197,341
					Massachusetts.....	7	16,006,648	64,611,900	9,384,781
					New Hampshire.....	6	3,975,137	12,908,945	1,878,767
					North Carolina.....	15	23,170,100	114,229,665	9,457,266
					South Carolina.....	9	16,385,005	56,987,909	6,740,531
					Mississippi, Oklahoma, Virginia.....	4	8,001,743	41,668,806	3,840,450
					Other States (Ark., Ill., Ky., N. Y., Pa., R. I., Tenn., Tex.).....	11	9,936,794	38,232,256	4,451,674
					Drills, total.....		118,843,173	324,041,245	39,700,910
					Georgia.....		37,131,287	98,764,137	12,873,490
					South Carolina.....		28,402,262	75,663,900	8,927,036
					Texas.....		664,926	1,587,980	250,996
					Alabama and North Carolina.....		43,395,283	120,737,924	14,218,317
					Other States.....		9,210,415	27,288,138	3,425,068

See footnotes at end of table.

# COTTON GOODS

TABLE 4.—COTTON GOODS—PRODUCTION, BY CLASS, QUANTITY, AND VALUE, BY STATES: 1929—Continued

[See note at head of this table]

CLASS AND STATE	Number of establishments	QUANTITY		Value	CLASS AND STATE	Number of establishments	QUANTITY		Value
		Pounds	Square yards				Pounds	Square yards	
<b>Cotton goods, all industries—Contd.</b>					<b>Cotton goods, all industries—Contd.</b>				
<b>Woven goods—Continued.</b>					<b>Woven goods—Continued.</b>				
<b>Drills—Continued.</b>					<b>Napped fabrics—Continued.</b>				
Drills, 40 inches and narrower, total.....	70	80,350,672	237,405,139	<i>Dollars</i> 29,209,625	Moleskin (Ga., Mo., Mass., N. H., N. C., R. I., Tenn.).....	12	6,445,877	10,560,102	<i>Dollars</i> 2,874,909
Alabama.....	16	26,904,059	70,738,634	8,723,945	Other (Ala., Ga., Mo., Mass., N. H., N. J., N. C., Pa., Tenn., Tex.).....	14	8,350,103	16,255,604	3,440,951
Georgia.....	15	20,958,608	54,730,823	6,963,190	<b>Cottonades and cotton worsteds, total.....</b>	10	18,911,098	34,837,645	8,357,448
North Carolina.....	0	8,319,408	24,726,688	2,723,593	Pennsylvania.....	6	3,150,394	5,020,186	1,029,136
South Carolina.....	10	24,511,597	63,876,455	7,677,433	Other States (Ala., Ga., La., Mass., N. H., N. C., Tex.).....	13	15,751,704	29,811,459	6,428,312
Texas.....	4	694,020	1,587,986	259,090	<b>Towels, towelings, and wash cloths, total.....</b>	70	973,774	169,604,153	33,037,277
Arkansas, Mississippi, Tennessee, Virginia.....	4	4,065,156	10,788,472	1,440,900	Georgia.....	12	12,557,638	25,608,369	6,030,521
Other States (Ind., Mo., Mass., N. H.).....	6	3,845,728	11,037,081	1,419,500	New Jersey.....	2	2,274,135	5,801,650	1,132,270
<b>Drills, wider than 40 inches, total.....</b>	24	20,483,001	86,546,106	10,405,301	Pennsylvania.....	2	2,021,204	5,140,934	2,540,545
Georgia.....	10	10,172,580	44,024,314	5,910,339	North Carolina, South Carolina, Virginia.....	43	207,482	109,532,170	18,404,692
South Carolina.....	3	3,890,665	11,787,505	1,240,598	Other States.....	0	0,023,255	23,401,024	4,863,340
Other States (Ala., Mo., Mass., N. H., N. C., Tenn.).....	11	9,420,347	30,734,287	3,335,454	<b>Towels and towelings, total.....</b>	66	233,280	157,621,025	30,168,738
<b>Denims, total.....</b>	141	853,387	240,801,122	49,250,461	Plain-woven (Ala., Ga., Mo., Mass., N. H., N. J., N. Y., Pa., S. C., Va., Wis.).....	12	6,774,955	18,508,501	3,114,022
Georgia.....	23	404,492	41,328,473	8,577,760	Turkish and terry-woven, total.....	33	38,158,202	82,414,610	17,867,786
Now Hampshire.....	8	346,282	14,341,769	3,050,940	New Jersey.....	4	24,338	30,034	30,032
North Carolina.....	5	56,728,800	95,607,179	18,190,361	North Carolina.....	5	23,441,671	54,441,993	9,060,240
Alabama, Georgia, Louisiana, Other States (Conn., Mo., Mass., Miss., S. C., Tex.).....	9	38,076,958	90,159,641	13,462,393	Pennsylvania.....	11	1,711,420	2,581,001	1,521,839
Pin checks, express stripes, and all other, total.....	11	20,369,035	33,537,111	7,008,724	Other States (Ala., Calif., Ga., Md., Mass., N. Y., S. C., Va.).....	13	12,080,773	25,352,588	6,349,075
North Carolina.....	4	1,175,365	2,473,141	414,375	<b>Huck-woven, total.....</b>	14	13,487,978	37,417,114	5,303,233
Georgia and South Carolina.....	6	9,848,084	10,949,705	3,763,760	Alabama, Georgia, North Carolina.....	7	8,553,625	23,722,114	3,270,447
Other States (Ala., La., Mo., Mass., Miss., Tex.).....	10	8,310,773	17,802,480	3,350,900	Other States (Calif., N. H., N. J., N. Y., S. C., Va.).....	7	4,034,363	13,005,000	2,092,786
<b>Tickings, total.....</b>	24	19,931,428	42,410,547	9,280,494	Damask or Jacquard and other (Ga., Mo., N. H., N. J., N. Y., N. C., Pa., S. C., Va., Wis.).....	18	7,812,145	19,280,704	3,823,607
Georgia.....	6	5,211,910	11,740,882	2,236,967	<b>Wash cloths, total.....</b>	30	4,740,404	12,073,128	2,868,539
North Carolina.....	6	7,543,704	18,340,067	3,581,290	New Jersey.....	5	337,839	584,223	312,848
Pennsylvania.....	3	1,732,855	3,117,014	609,772	Pennsylvania.....	0	731,770	1,509,342	652,943
Other States (Ala., Conn., Mo., Mass., N. H., R. I., S. C., Tex.).....	11	5,442,860	0,193,094	2,552,485	Other States (Ala., Calif., Conn., Ga., Md., Mass., N. H., N. Y., N. C., Va., Wis.).....	16	3,670,879	9,910,503	1,902,748
<b>Blankets, total.....</b>	43	650,171	94,000,007	25,301,002	<b>Bath mats, total.....</b>	21	2,085,588	1,180,655	1,532,026
Blankets, all-cotton, except crib, total.....	24	427,595	59,168,402	13,185,104	Pennsylvania.....	11	1,211,864	697,408	1,130,830
Pair length, total.....	15	729,058	44,733,360	7,725,538	Other States (Ala., Calif., Ga., Ill., Md., N. C., Va.).....	10	873,724	483,157	305,106
60 inches or less in width.....	4	1,079,701	4,712,548	737,274	<b>Terry-woven fabrics, except towels, towelings, wash cloths, and bath mats.....</b>	0	678,580	1,505,928	461,644
Over 60 inches in width.....	6	14,049,357	40,020,812	6,988,264	<b>Bedspreads and quilts, total.....</b>	17	758,093	52,901,717	16,395,884
Single length.....	8	8,098,537	14,425,042	5,450,020	Massachusetts.....	2	725,042	6,531,628	2,597,108
Crib blankets, all-cotton (Mo., Mass., N. C., R. I., S. C., Tex.).....	8	4,161,792	6,907,812	3,214,005	North Carolina.....	2	7,272,614	23,106,994	6,824,872
Blankets (wool and cotton) (Ga., Mo., Mass., N. H., N. C., S. C.).....	9	15,060,784	27,094,693	8,991,833	South Carolina.....	2	2,584,743	7,598,240	2,270,561
<b>Napped fabrics, total.....</b>	108	879,302	323,140,452	48,320,469	Maine, New Hampshire, Rhode Island.....	4	1,000,428	13,258,136	3,888,802
Alabama.....	10	578,697	23,174,685	4,082,941	Other States.....	1	1,015,205	2,406,719	805,451
Georgia.....	19	687,339	36,162,781	7,138,599	<b>Double-woven fabric (Mar-solles, satin, etc.), total.....</b>	4	150,625	10,682,547	3,541,430
Massachusetts.....	6	963,554	11,680,572	4,322,519	All-cotton (Ga., Ky., Mo., N. H., N. C., Pa., S. C., Tex.).....	13	2,271,099	5,704,359	1,404,232
New Hampshire.....	17	425,720	60,220,930	8,409,798	All-rayon and part-rayon (Ky., Mo., Mass., N. H., N. C., Pa., S. C.).....	11	1,879,526	4,978,188	2,047,108
North Carolina.....	41	942,220	150,369,288	18,247,444	<b>Single-woven fabrics (crochet, dimity, rippletto, etc.), total.....</b>	13	13,007,468	42,219,170	12,854,454
South Carolina.....	7	801,222	30,360,784	3,023,930	All-cotton, total.....	21	7,538,423	21,477,465	4,010,007
Other States.....	5	380,544	11,105,453	2,444,301	North Carolina.....	7	2,791,283	8,995,689	2,260,602
Blanketings (sold as piece goods) (Mass., N. H., N. C., S. C., Tex.).....	7	5,233,075	7,880,957	3,854,354	Other States (Ill., Mo., Mass., N. H., Pa., S. C., Va.).....	14	4,747,140	12,511,776	2,650,215
<b>Canton flannel, total.....</b>	18	24,738,318	45,427,598	8,744,388					
Georgia.....	5	12,968,761	21,684,319	4,124,821					
Other States (Ala., Mo., Mass., N. H., N. C., S. C.).....	13	11,769,557	23,743,279	4,619,567					
<b>Cotton flannel (flannelettes, domets, outing, and similar fabrics), total.....</b>	32	64,102,929	243,010,201	29,408,810					
Georgia.....	3	4,777,830	11,159,008	2,018,602					
North Carolina.....	15	31,506,156	133,799,952	14,464,823					
Other States (Ala., Mo., Mass., N. H., Pa., S. C.).....	14	27,818,934	98,052,141	12,925,331					

See footnotes at end of table.

## CENSUS OF MANUFACTURES: 1929

TABLE 4.—COTTON GOODS—PRODUCTION, BY CLASS, QUANTITY, AND VALUE, BY STATES: 1929—Continued

[See note at head of this table]

CLASS AND STATE	Number of establishments <sup>1</sup>	QUANTITY		Value	CLASS AND STATE	Number of establishments <sup>1</sup>	QUANTITY		Value
		Pounds	Square yards				Pounds	Square yards	
Cotton goods, all industries—Contd. Woven goods—Continued. Bedspreads and quilts—Contd. All-rayon and part-rayon, total	25	6,000,045	20,741,705	Dollars 7,934,547	Cotton goods, all industries—Contd. Woven goods—Continued. Reps, poplins, and broadcloths— Continued. Average single yarn-count, 41s and over, total	40	30,330,030	135,230,896	Dollars 20,951,098
Massachusetts	6	1,355,032	4,314,011	1,862,918	Massachusetts	20	14,906,580	65,934,079	10,028,467
North Carolina	8	1,791,376	6,019,760	2,323,071	South Carolina	0	5,300,058	24,251,144	3,053,734
Other States (Ala., Me., Pa., R. I., S. C.)	11	2,922,138	10,407,944	3,748,558	Other States (Conn., Mo., N. H., N. Y., N. C., R. I.)	20	10,120,392	45,051,673	0,008,907
Cotton bags, made from fabric woven by same establishment (Ala., Conn., Ga., La., Me., Mo., N. Y., Pa.)	12	7,659,518	10,485,045	2,031,568	Pajama checks, dimities, and similar fabrics, total	-----	20,904,845	122,108,068	13,085,354
Pillow tubing (Conn., Ga., Ill., Me., Mass., N. H., N. Y., N. C., S. C.)	10	7,059,688	21,264,466	3,080,000	Massachusetts	-----	6,172,349	49,737,784	0,184,780
Tobacco, cheese, butter, bunting, and bandage cloths, total	31	41,772,410	617,410,845	18,090,860	South Carolina	-----	9,160,208	43,951,905	3,078,590
Massachusetts	11	11,029,314	177,884,474	4,876,876	Other States	-----	5,563,198	28,410,270	2,021,084
North Carolina	3	7,016,715	114,250,611	2,861,267	Average single yarn-count, 40s and under (Ala., Conn., Ga., Mass., N. H., N. C., S. C., Va.)	26	14,833,563	88,378,478	0,008,333
South Carolina	0	16,319,161	202,257,199	0,639,843	Average single yarn-count, 41s and over (Conn., Me., Mass., N. Y., R. I., S. C.)	23	6,071,282	33,730,400	3,477,021
Other States (Conn., Ga., N. H., N. J., N. Y.)	8	8,408,230	123,018,561	3,721,864	Voiles, total	-----	17,908,973	157,449,397	13,406,699
Print cloth, total	-----	301,479,145	1,703,025,248	121,423,305	Massachusetts	-----	13,271,319	118,513,052	10,043,027
North Carolina	-----	29,859,217	157,909,702	11,839,007	Other States	-----	4,037,654	38,935,445	3,363,672
South Carolina	-----	200,187,485	1,170,162,008	82,501,225	Average single yarn-count, 40s and under, total	20	4,538,344	36,607,293	2,702,319
Massachusetts and Rhode Island	-----	23,247,892	131,426,776	10,069,374	Massachusetts	10	3,095,454	25,783,626	1,078,903
Other States	-----	42,184,551	243,536,162	17,018,609	Other States (Conn., Ga., Me., N. H., N. Y., N. C., R. I.)	10	1,442,890	10,913,067	813,416
Widths narrower than 36 in- ches, total	35	50,110,347	306,071,308	19,277,600	Average single yarn-count, 41s and over, total	38	13,370,029	120,752,104	10,014,380
Massachusetts	8	1,378,096	12,183,104	659,594	Massachusetts	21	10,175,865	92,730,326	8,064,124
South Carolina	15	34,867,342	202,542,897	13,102,468	Other States (Conn., Ga., Me., N. C., R. I., S. C.)	17	3,194,704	28,021,778	2,550,256
Other States (Ala., Ga., Ky., Me., N. H., N. J., R. I., Tenn., Va.)	12	13,874,909	91,345,307	5,515,538	Crêpes, total	-----	5,011,480	30,600,148	0,045,009
Widths 36 inches and wider, total	103	251,368,798	1,306,963,940	102,145,705	Connecticut, Maine, Massa- chusetts, Rhode Island	-----	4,792,271	30,050,310	5,369,071
North Carolina	15	29,859,217	157,909,702	11,839,007	Other States	-----	819,218	0,609,838	670,238
South Carolina	61	171,330,143	967,009,711	69,398,757	Average single yarn-count, 40s and under (Ala., Mass., N. J., R. I., S. C.)	8	1,457,132	7,284,371	831,425
Massachusetts and New Hampshire	13	20,304,207	138,466,449	11,282,591	Average single yarn-count, 41s and over (Conn., Me., Mass., N. C.)	7	4,154,357	20,375,777	5,214,484
Other States (Ala., Ark., Conn., Ga., Me., N. J., N. Y., R. I., Tenn., Va.)	14	23,875,231	132,968,078	0,625,850	Mosquito netting and tarlatan (Conn., Ill., Mass., N. J., N. Y.)	10	3,513,655	33,298,163	2,359,362
Lawns, nainsooks, cambrics, and similar muslins, total	-----	31,144,397	226,553,738	25,418,595	Twills and sateens, total	-----	82,492,337	284,117,406	37,441,206
Connecticut	-----	4,223,904	35,404,381	4,480,592	Georgia	-----	16,753,245	30,168,331	0,130,207
Massachusetts	-----	11,026,600	97,174,210	10,012,166	Massachusetts	-----	15,368,484	73,149,815	8,778,050
Rhode Island	-----	5,476,800	25,228,826	4,079,652	North Carolina	-----	4,746,637	10,720,074	2,270,005
South Carolina	-----	2,752,681	16,151,682	1,875,522	Rhode Island	-----	4,389,836	19,988,802	2,530,691
Other States	-----	7,664,292	52,594,639	4,961,763	South Carolina	-----	12,905,038	51,007,835	5,447,679
Average single yarn-count, 40s and under (Conn., Me., Mass., N. H., N. C., R. I., Tenn.)	11	2,404,120	10,626,082	1,100,298	Other States	-----	28,323,493	80,481,599	12,277,278
Average single yarn-count, 41s and over, total	53	28,740,271	215,926,756	24,318,297	Average single yarn-count, 40s and under, total	71	69,467,005	225,085,907	28,384,057
South Carolina	5	2,752,681	16,151,682	1,875,522	Maine	6	1,596,210	3,418,426	683,910
Connecticut, Massachusetts, Rhode Island	38	10,908,472	154,108,686	18,115,748	Massachusetts	17	10,732,715	49,537,059	6,421,149
Other States (Ala., Me., N. Y., N. C., Vt.)	10	6,079,118	45,666,368	4,327,027	North Carolina	0	4,166,000	13,392,530	1,817,316
Reps, poplins, and broadcloths, total	-----	70,678,442	308,620,221	40,554,626	Rhode Island	6	2,954,548	12,564,067	1,404,012
Massachusetts	-----	21,659,374	95,170,439	15,862,151	Alabama and Georgia	14	26,116,308	54,468,501	0,167,907
North Carolina	-----	3,150,211	13,880,749	1,882,726	Other States (Conn., Miss., N. H., N. J., N. Y., S. C., Tenn., Vt., Va.)	22	23,931,177	92,284,374	9,880,094
South Carolina	-----	27,346,535	120,973,794	13,185,129	Average single yarn-count, 41s and over, total	37	13,025,332	58,431,499	0,057,140
Connecticut and Rhode Is- land	-----	12,412,179	53,565,567	6,707,798	Massachusetts	18	4,635,709	23,591,856	3,357,507
Other States	-----	6,113,143	26,029,792	2,850,822	North Carolina	4	580,031	3,323,394	453,679
Average single yarn-count, 40s and under, total	60	40,342,412	173,383,325	10,603,528	Rhode Island	5	1,435,246	7,424,735	1,132,679
Massachusetts	15	6,749,794	29,286,369	4,933,694	Connecticut, Maine, New Hampshire	5	2,933,236	14,427,143	2,194,007
New Hampshire	3	147,513	505,125	119,004	Other States (Ala., Ga., N. Y., S. C.)	5	3,440,450	0,659,371	1,010,517
South Carolina	16	22,037,477	96,722,560	9,231,395	Ginghams, total	-----	80,317,156	147,120,299	17,717,408
Other States (Conn., Ga., Ky., Me., N. J., N. Y., N. C., R. I., Tenn., Va.)	26	11,407,028	46,919,280	5,219,435	North Carolina, South Caro- lina, Virginia	-----	20,624,002	68,035,132	12,064,007
					Other States	-----	9,692,254	49,085,164	5,653,401

COTTON GOODS

TABLE 4.—COTTON GOODS—PRODUCTION, BY CLASS, QUANTITY, AND VALUE, BY STATES: 1929—Continued

[See note at head of this table]

CLASS AND STATE	Number of establishments	QUANTITY		Value Dollars	CLASS AND STATE	Number of establishments	QUANTITY		Value Dollars
		Pounds	Square yards				Pounds	Square yards	
Cotton goods, all industries—Contd. Woven goods—Continued. Ginghams—Continued. Average single yarn-count, 40s and under, total.....	30	29,993,503	145,006,845	17,247,207	Cotton goods, all industries—Contd. Woven goods—Continued. Draperies—Continued. Average single yarn-count, 41s and over, total.....	14	1,096,081	3,868,515	2,320,665
North Carolina.....	10	13,198,545	53,587,598	7,535,055	Pennsylvania.....	3	373,561	792,222	1,140,561
South Carolina.....	6	3,318,897	23,121,910	1,733,989	Other States (Conn., Me., Mass., N. Y., N. C., R. I.).....	11	722,520	3,076,293	1,171,114
Other States (Ala., Conn., Me., Mass., Miss., N. H., R. I., Tex., Va.).....	11	13,470,061	68,297,337	7,078,163	In chief value of rayon (Me., Mass., N. J., N. C., Pa., R. I., S. C.).....	18	5,799,158	24,292,002	5,088,400
Average single yarn-count, 41s and over (Me., Mass., N. C., Pa., S. C., Va.).....	0	323,053	2,113,451	470,201	Shirtings, made entirely of cotton, total.....		66,565,850	265,830,195	37,330,070
Cotton table damask (Ga., Me., N. H., N. J., N. Y., N. C., S. C., Va.).....	14	12,378,545	55,868,245	8,382,821	Connecticut.....		263,896	1,490,200	260,877
Cotton tapestries, total.....	41	6,030,928	9,810,361	12,995,414	Massachusetts.....		4,621,939	21,887,902	4,085,348
North Carolina.....	4	842,066	1,012,723	650,559	Rhode Island.....		3,620,930	17,009,012	3,412,328
Pennsylvania.....	26	4,210,632	6,501,827	10,430,623	South Carolina.....		8,702,138	38,874,052	4,967,901
Other States (Ga., Ky., Md., Miss., N. H., N. J.).....	11	1,581,230	2,295,811	1,014,233	North Carolina and Virginia.....		38,743,703	143,885,033	17,816,122
Plushes, velvets, and velveteens, total.....	41,777,351	50,303,507	41,760,522		Other States.....		10,613,253	42,683,996	6,807,400
Pennsylvania.....	15,200,146	16,824,130	16,191,262		Average single yarn-count, 40s and under, total.....	72	56,123,444	219,091,040	29,367,612
Massachusetts and Rhode Island.....	8,788,308	12,478,490	8,687,671		Massachusetts.....	12	1,677,720	7,490,583	1,415,361
North Carolina and South Carolina.....	6,674,366	8,987,958	7,782,845		North Carolina.....	28	24,620,486	92,945,012	11,013,306
Other States.....	11,114,591	21,103,010	9,068,764		Rhode Island.....	0	2,293,705	10,730,517	2,121,811
Plushes, total.....	34,054,250	40,473,750	35,981,435		South Carolina.....	7	5,268,720	24,609,475	2,901,930
All-cotton, total.....	40	27,927,018	33,100,317	27,762,701	Other States (Ala., Conn., Ia., Me., Miss., N. H., Tenn., Tex., Va.).....	19	22,361,714	83,303,162	11,065,210
Pennsylvania.....	18	11,394,956	12,702,583	11,175,947	Average single yarn-count, 41s and over, total.....	33	10,443,415	46,735,546	7,982,364
New Jersey and Rhode Island.....	10	9,304,450	10,764,987	8,808,488	Massachusetts.....	14	3,044,219	14,391,319	2,669,987
Other States (Conn., Del., Md., Mass., N. H., N. Y., N. C., S. C.).....	12	7,227,603	9,642,747	7,088,260	North Carolina, South Carolina, Virginia.....	8	4,076,462	17,324,693	2,608,601
Other, total.....	18	6,127,241	7,283,433	8,218,734	Other States (Conn., Me., R. I., Vt.).....	11	3,322,734	15,019,544	2,703,080
Pennsylvania.....	10	3,805,190	4,631,547	5,015,305	Shirtings, in chief value of cotton, containing rayon, total.....	11,707,718	49,837,594	8,110,818	
South Carolina.....	3	1,830,155	2,160,305	2,068,825	Massachusetts.....		1,676,455	7,872,703	1,785,674
Other States (N. H., N. J., N. C., R. I.).....	5	485,896	1,091,581	1,104,604	North Carolina.....		4,862,317	19,084,180	2,737,075
Velvets (Conn., Ga., N. H., N. J., Tex.).....	6	4,300,967	10,694,480	2,006,551	South Carolina.....		4,682,449	19,180,532	2,879,401
Velveteens (Ga., Mass., N. Y., R. I., Tenn.).....	7	3,422,185	8,225,358	3,772,536	Other States.....		686,497	3,100,170	714,068
Corduroys (Ala., Ga., Mass., N. Y., N. C., R. I., Tenn.).....	13	15,501,482	27,134,410	9,500,563	Average single yarn-count, 40s and under, total.....	82	10,146,437	42,258,500	6,269,242
Draperies (except velvets and plushes), total.....	41,184,860	220,671,163	39,043,368		North Carolina, South Carolina, Texas.....	18	8,648,005	34,815,016	4,608,950
Massachusetts.....	13,487,962	93,064,974	12,486,447		Other States (Conn., Mass., N. Y., R. I.).....	14	1,498,432	7,448,484	1,600,292
North Carolina.....	5,894,607	18,839,080	4,592,120		Average single yarn-count, 41s and over (Conn., Mass., Pa., S. C., Va., N. C.).....	11	1,561,281	7,570,094	1,847,570
Pennsylvania.....	1,077,101	2,257,624	3,784,817		Shirtings, in chief value of cotton, containing silk.....	7	213,259	1,377,803	314,447
Connecticut and Rhode Island.....	6,848,267	53,076,327	9,546,485		Fabrics (other than shirtings and draperies), in chief value of cotton, containing rayon, total.....	21,963,487	111,079,184	28,984,042	
Georgia and South Carolina.....	11,523,070	48,418,294	6,250,302		Massachusetts.....		7,076,546	44,934,955	12,027,133
Other States.....	2,353,863	9,214,865	2,374,191		Rhode Island.....		2,193,277	11,761,289	3,701,000
All-cotton, total.....	26,955,484	171,117,581	22,109,490		North Carolina and South Carolina.....		6,463,078	24,823,346	5,825,769
Average single yarn-count, 40s and under, total.....	54	20,984,037	119,904,791	16,107,889	Other States.....		5,690,586	30,469,594	7,430,080
Connecticut.....	7	2,135,868	18,620,987	2,277,064	Average single yarn-count, 40s and under, total.....	40	16,062,133	74,410,488	10,780,604
Massachusetts.....	20	7,130,413	50,927,721	5,802,968	Massachusetts.....	18	4,818,200	30,495,078	7,960,276
Other States (Calif., Ga., Ky., Me., N. H., N. J., N. C., Pa., R. I., S. C., Tenn.).....	27	11,711,766	50,437,083	8,027,867	North Carolina.....	4	3,285,043	9,555,373	2,363,114
Average single yarn-count, 41s and over, total.....	24	5,971,447	51,122,700	6,091,607	Rhode Island.....	5	893,115	2,984,829	1,038,314
Massachusetts.....	12	3,108,691	27,474,868	2,920,693	Other States (Calif., Conn., Ga., Ky., Me., N. H., N. J., N. Y., Pa., S. C.).....	19	7,095,116	31,380,008	7,827,900
Other States (Conn., Ga., Me., N. C., R. I., S. C.).....	12	2,862,456	23,647,987	3,170,914	Average single yarn-count, 41s and over, total.....	25	5,901,354	37,562,696	9,194,438
In chief value of cotton, containing rayon, total.....		8,430,218	31,261,580	10,355,382	Massachusetts.....	11	2,858,286	14,430,277	4,069,857
Average single yarn-count, 40s and under, total.....	34	7,334,137	27,363,065	8,634,717	Rhode Island.....	4	1,330,162	8,776,460	2,092,746
Massachusetts.....	8	2,402,527	10,261,909	2,290,944	Other States (Conn., Me., N. H., N. C., Pa.).....	10	1,712,906	14,346,950	3,004,835
Other States (Conn., Ga., Md., N. H., N. J., N. Y., N. C., Pa., R. I., S. C., Va.).....	26	4,931,610	17,131,156	6,343,773	Fabrics (other than shirtings and draperies) in chief value of cotton, containing silk, total.....	30	5,096,458	30,581,260	7,564,793
					Massachusetts.....	18	4,122,795	31,654,092	6,088,663

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 4.—COTTON GOODS—PRODUCTION, BY CLASS, QUANTITY, AND VALUE, BY STATES: 1929—Continued

[See note at head of this table]

CLASS AND STATE	Number of establishments <sup>1</sup>	QUANTITY		Value	CLASS AND STATE	Number of establishments <sup>1</sup>	QUANTITY		Value
		Pounds	Square yards				Pounds	Square yards	
Cotton goods, all industries—Contd.					Cotton goods, all industries—Contd.				
Woven goods—Continued.					Cotton yarn produced for sale—Continued.				
Fabrics, containing silk—Contd.					Carded—Continued.				
Other States (Conn., Me., R. I., S. C.)	12	973,663	7,020,307	Dollars 1,470,130	Other carded yarns produced for sale, etc.—Continued.				Dollars
Fabrics (except draperies), in chief value of rayon, total	39	14,843,678	85,064,430	24,100,789	Georgia	44	102,730,757		34,110,582
Connecticut	5	987,449	5,048,684	1,008,279	Maine	7	6,924,008		3,078,202
Rhode Island	5	2,914,071	18,370,311	5,494,750	Massachusetts	35	26,030,408		11,184,060
Massachusetts and New Hampshire	17	6,765,710	38,985,528	8,875,033	New York	6	7,490,560		2,602,792
Other States (N. C., Pa., S. C., Va.)	12	4,176,440	22,659,907	7,882,718	North Carolina	130	220,798,134		66,553,874
Rugs (except bath mats), cotton, total		2,063,715	2,850,800	2,465,066	South Carolina	20	28,585,630		9,698,557
Pennsylvania		1,043,266	1,216,741	1,099,709	Tennessee	9	12,065,690		4,784,820
Other States		1,920,440	1,634,125	1,365,267	New Hampshire and Rhode Island	15	20,846,600		7,607,707
Woven (Ga., Ill., Ky., Mass., Minn., N. Y., Pa., Wis.)	11	2,435,134	2,402,066	2,233,432	Other States (Ark., Calif., Ill., Ky., Md., Miss., N. J., Pa., Tex., Va.)	10	14,482,404		4,910,450
Braided (Ga., Mass., N. C., Pa.)	6	528,581	358,800	231,634	Combed, total		149,412,475		88,553,714
Other woven fabrics (over 12 inches in width), total		71,472,241	298,065,247	44,608,331	Yarns for sewing thread and for crochet, darning, hand-knitting, and embroidery cotton, total	22	11,372,050		8,306,078
Georgia		8,288,939	20,991,250	3,190,878	Massachusetts	8	6,243,004		4,710,274
Maine		4,443,095	13,163,314	1,785,187	Other States (Conn., Ga., Me., N. H., N. C., R. I., S. C.)	14	5,128,005		3,685,804
Massachusetts		13,313,838	75,197,500	12,356,710	Other combed yarns produced for sale, including those for weaving and machine knitting, total	163	138,030,816		80,157,636
North Carolina		15,254,362	51,724,722	7,490,135	Massachusetts	23	13,013,517		9,009,139
South Carolina		5,634,504	20,710,548	4,774,153	North Carolina	8	92,264,172		52,291,158
Other States		24,537,443	98,268,808	15,011,268	South Carolina	8	7,606,702		3,074,219
Average single yarn-count, 40s and under, total	87	58,257,812	216,518,117	32,307,332	Other States (Ala., Conn., Ga., Ky., Me., N. H., N. Y., R. I., Tenn.)	35	24,555,335		14,283,120
Maine	6	4,443,095	13,163,314	1,785,187	Thread, total <sup>2</sup>	30	25,250,378		37,000,794
Massachusetts	10	7,268,960	34,829,698	5,926,909	Massachusetts	12	8,090,587		0,400,783
North Carolina	15	14,660,572	47,692,372	7,039,920	Other States (Conn., Ga., Ky., Mich., N. H., N. J., N. Y., N. C., Ohio, Pa., R. I., Tex., Wis.)	24	10,550,701		27,000,011
South Carolina	10	3,070,989	14,840,973	1,707,076	Twine <sup>3</sup> (Ala., Calif., Ga., La., Mo., Md., Mass., Miss., Mo., N. J., N. C., Okla., R. I.)	20	40,042,518		14,050,306
Other States (Ala., Calif., Conn., Ga., N. H., N. C., R. I., S. C., Tex., Va.)	37	23,813,196	105,991,760	15,788,240	Batting, wadding, and mattress felts <sup>4</sup> (Ark., Calif., Conn., Ga., Ill., Ind., Mo., Md., Mass., Mich., Mo., N. H., N. Y., N. C., Ohio, Pa., R. I., S. C., Tex., Wis.)	67	149,481,003		10,409,876
Average single yarn-count, 41s and over, total	35	13,214,429	81,547,130	12,300,990	Cotton card laps, sliver, and roving, produced for sale (Ala., Ill., Md., Mass., N. J., N. Y., N. C., Pa., R. I.)	10	10,134,267		1,700,475
Massachusetts	14	6,043,878	40,367,901	6,429,801	Cotton waste produced for sale, total	628	443,016,268		32,670,034
North Carolina	4	593,700	4,032,350	460,215	Alabama	70	31,257,406		2,005,900
South Carolina	7	2,563,575	14,878,575	3,007,077	Arkansas	4	1,051,811		40,566
Other States (Ala., Conn., Ga., N. H., R. I., Va.)	10	4,013,186	22,268,304	2,413,906	Connecticut	21	12,367,165		1,211,551
Cotton yarn produced for sale, total		647,725,439		253,349,111	Georgia	126	68,794,658		3,526,825
Connecticut		11,977,843		6,102,331	Massachusetts	68	70,406,777		7,252,484
Georgia		110,415,281		37,361,812	Mississippi	10	2,337,774		117,008
Maine		7,366,952		3,399,143	New Hampshire	10	12,421,040		741,238
Massachusetts		47,130,562		25,899,549	New Jersey	6	2,208,320		236,565
New Hampshire		13,554,300		4,620,434	New York	9	4,050,176		263,110
North Carolina		316,170,435		120,462,122	North Carolina	207	107,881,811		8,131,540
Rhode Island		13,069,334		7,967,990	Pennsylvania	8	1,123,795		64,604
South Carolina		38,045,962		14,378,069	Rhode Island	34	20,067,025		1,075,342
Tennessee		18,234,975		7,709,062	South Carolina	140	73,372,055		4,783,897
Texas		1,776,420		548,178	Tennessee	10	9,583,075		749,023
Alabama and Kentucky		54,194,103		19,240,151	Texas	24	6,292,703		241,122
Other States		15,789,203		5,569,470	Virginia	8	4,683,033		228,160
Carded, total		498,312,064		164,795,397	Other States (Calif., Ill., Ind., Ky., La., Me., Md., Mo., Ohio, Okla., Va., Wis.)	32	17,923,735		1,010,415
Yarns for sewing thread and for crochet, darning, hand-knitting, and embroidery cottons (Conn., Ga., Mass., N. H., N. Y., N. C., R. I., S. C.)	12	6,709,744		2,745,225	Other cotton products, value				15,310,989
Other carded yarns produced for sale, including those for weaving and machine knitting, total	343	491,603,220		162,050,172	Old bagging and ties, value				1,303,467
Alabama	30	42,380,435		14,038,721					
Connecticut	10	8,656,474		3,511,441					

<sup>1</sup> Establishments which made the specified products to the value of \$1,000 or more during the year.  
<sup>2</sup> Cotton small wares, cordage and rope, mohair plush, bags made from purchased fabrics, woolen goods, worsted goods, knit goods, silk, and linen goods.  
<sup>3</sup> Because of the failure of some manufacturers to report cord fabric in square yards, it was necessary to estimate (on the basis of the averages shown by the complete returns) nearly 40 per cent of this item.  
<sup>4</sup> Production in cotton-goods industry only. The total production of blankets composed of cotton and wool by all establishments reporting the manufacture of such blankets in 1929 amounted to 55,953,769 square yards, valued at \$19,014,798.  
<sup>5</sup> Not including products of silk mills.  
<sup>6</sup> Production in cotton-goods industry only; does not include production of thread by establishments classified in "Dyeing and finishing textiles" industry.  
<sup>7</sup> Production in cotton-goods industry only; does not include production by establishments engaged primarily in the manufacture of cordage and twine. The total production of cotton twine by all establishments reporting the manufacture of such twine in 1929 was 85,968,140 pounds, valued at \$28,991,411.  
<sup>8</sup> Not including mattress felts made in mattress factories.

COTTON GOODS

257

TABLE 5.—COTTON GOODS—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY, BY KIND, QUANTITY, AND COST, FOR THE UNITED STATES, THE COTTON-GROWING STATES, AND THE NEW ENGLAND STATES: 1929, 1927, AND 1925

(The difference between the sum of the costs of the several kinds of materials shown in this table and the total cost of materials as given in Tables 1 and 2 is due to the fact that this table covers only certain specified materials, whereas the others cover all materials)

KIND	UNITED STATES				COTTON-GROWING STATES <sup>1</sup>				NEW ENGLAND STATES			
	1929		1927	1925	1929		1927	1925	1929		1927	1925
	Pounds	Cost	Pounds	Pounds	Pounds	Cost	Pounds	Pounds	Pounds	Cost	Pounds	Pounds
Raw cotton, total..	3,370,206,678	\$81,849,245	3,530,065,954	3,066,380,683	2,580,272,447	\$68,028,121	2,001,604,374	2,075,365,531	697,593,144	\$6,144,416	820,607,182	850,380,527
Domestic, total..	3,216,672,753	641,837,436	3,395,775,080	2,922,430,667	2,567,376,692	502,484,567	2,606,848,750	2,065,407,032	577,949,044	125,090,802	723,542,070	733,162,563
Long-staple.....	468,883,056	108,280,700	488,047,465	408,701,410	230,035,854	63,037,674	194,954,250	195,701,195	226,464,105	52,793,702	274,462,790	286,773,080
Short-staple.....	2,747,789,697	533,547,727	2,907,807,615	2,423,000,248	2,337,340,838	440,440,803	2,371,804,401	1,869,705,837	351,484,939	72,393,100	449,079,280	446,419,428
Foreign, total.....	153,623,925	40,011,809	143,200,874	143,959,016	21,805,755	5,543,557	34,815,024	9,948,502	110,644,100	31,047,614	97,155,103	117,197,024
Egyptian.....	117,737,884	33,578,282	110,876,200	100,303,032	10,962,372	4,662,348	29,001,101	7,501,318	80,093,733	25,085,737	71,344,171	77,534,002
Other.....	35,886,041	6,433,527	32,324,674	43,655,984	4,033,383	881,209	5,814,433	2,447,184	29,550,367	5,361,877	25,810,932	39,663,022
Linters.....	80,046,707	5,078,004	55,878,087	38,705,218	28,203,417	1,237,012	7,408,730	1,388,970	(?)	(?)	(?)	(?)
Cotton waste, purchased.....	144,855,960	13,003,413	132,377,020	149,770,062	61,806,056	7,234,414	34,578,158	50,302,283	28,002,192	3,141,700	60,622,170	49,342,467
Raw silk.....	48,974	169,007	1,255,083	2,980,476	(?)	(?)	53,808	280,158	48,974	169,007	1,161,800	1,479,085
Other fibers.....	15,187,801	2,116,857	6,861,925	10,063,046	6,036,927	1,022,462	983,481	2,560,623	3,802,000	980,608	1,731,138	1,765,490
Yarns, purchased, total.....	182,876,049	114,253,580	185,031,301	175,500,101	65,404,740	31,282,000	47,071,053	44,160,011	60,004,226	55,241,500	73,230,618	60,418,343
Cotton.....	145,824,401	63,874,173	149,822,074	153,367,008	56,065,256	22,628,322	30,975,056	40,514,502	47,014,101	23,100,203	53,371,200	57,001,055
Silk.....	1,437,319	4,337,681	1,785,618	2,046,280	394,803	1,081,401	141,018	60,706	1,003,232	3,030,785	1,547,534	1,820,674
Rayon.....	31,581,853	40,437,680	26,586,260	14,335,341	8,264,011	10,367,862	7,050,044	3,252,040	20,497,748	28,170,853	17,766,121	8,569,767
Other yarns.....	4,039,016	5,603,746	7,437,440	6,849,660	320,071	214,521	407,130	322,749	1,200,055	2,531,650	564,604	1,320,557

<sup>1</sup> Alabama, Arkansas, California, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.  
<sup>2</sup> Withheld from publication to avoid disclosing consumption by individual establishments.

TABLE 6.—COTTON GOODS—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY, BY KIND, QUANTITY, AND COST, BY STATES: 1929

(The difference between the sum of the costs of the several kinds of materials shown in this table and the total cost of materials as given in Tables 1 and 2 is due to the fact that this table covers only certain specified materials, whereas the others cover all materials)

STATE	RAW COTTON				COTTON WASTE PURCHASED	
	Domestic		Foreign		Pounds	Cost
	Pounds	Cost	Pounds	Cost		
United States.....	3,216,672,753	\$641,837,436	153,623,925	\$40,011,809	144,855,960	\$13,003,413
Alabama.....	302,676,304	57,172,040	(?)	(?)	19,052,020	2,431,254
Connecticut.....	38,007,433	6,443,054	11,803,702	3,680,532	3,034,115	360,070
Georgia.....	594,547,004	114,308,515	(?)	(?)	24,110,803	2,367,760
Indiana.....	7,006,844	1,497,440	(?)	(?)	(?)	(?)
Maine.....	54,316,946	11,324,535	(?)	(?)	3,033,923	470,688
Maryland.....	13,519,940	2,403,501	(?)	(?)	(?)	(?)
Massachusetts.....	315,820,143	68,180,807	66,481,882	18,394,057	10,304,528	1,955,883
Mississippi.....	17,017,003	3,283,548	(?)	(?)	(?)	(?)
New Hampshire.....	65,988,218	19,371,501	7,063,273	1,024,674	(?)	(?)
New York.....	31,700,557	6,548,004	4,569,960	1,084,551	23,157,797	1,300,505
North Carolina.....	772,350,434	153,508,155	10,258,571	2,488,170	8,105,461	952,919
Pennsylvania.....	6,226,433	1,177,400	(?)	(?)	(?)	(?)
Rhode Island.....	68,300,921	15,707,047	32,136,612	6,748,908	648,398	93,208
South Carolina.....	637,690,606	127,253,335	(?)	(?)	2,340,047	384,521
Tennessee.....	74,303,402	15,003,763	(?)	(?)	(?)	(?)
Texas.....	57,417,652	10,178,858	(?)	(?)	(?)	(?)
Virginia.....	57,327,400	11,405,006	(?)	(?)	(?)	(?)
Other States.....	70,507,533	13,737,832	21,400,809	5,081,917	44,668,074	3,806,590

See footnotes at end of table.



CENSUS OF MANUFACTURES: 1929

TABLE 6.—COTTON GOODS—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY, BY KIND, QUANTITY, AND COST, BY STATES: 1929—Continued

[See note at head of this table]

STATE	LINTERS		FIBERS OTHER THAN COTTON		YARNS PURCHASED			
	Pounds	Cost	Pounds	Cost	Cotton		Other	
					Pounds	Cost	Pounds	Cost
United States.....	89,046,707	\$5,678,004	15,230,835	\$2,275,554	145,824,461	\$63,874,173	37,052,183	\$50,370,410
Alabama.....	(1)	(1)	(1)	(1)	2,568,002	868,530	(1)	(1)
Connecticut.....	(1)	(1)	(1)	(1)	6,955,780	3,850,032	2,518,274	3,081,074
Georgia.....	(1)	(1)	(1)	(1)	18,888,830	6,378,453	252,410	278,883
Indiana.....								
Maine.....					397,305	181,094	2,005,905	2,464,509
Maryland.....					993,093	304,412	41,302	41,985
Massachusetts.....	(1)	(1)	1,140,881	518,094	23,168,006	11,678,614	10,570,128	14,348,680
Mississippi.....					(1)	(1)	(1)	(1)
New Hampshire.....			(1)	(1)	2,331,931	880,497	1,967,060	2,213,805
New York.....	9,168,555	655,223	203,824	70,337	1,608,596	707,851	330,733	238,767
North Carolina.....	(1)	(1)	1,459,208	284,173	24,500,846	11,235,980	4,872,958	6,000,024
Pennsylvania.....	(1)	(1)			20,865,861	11,924,619	4,199,516	5,441,323
Rhode Island.....			(1)	(1)	14,190,269	6,593,366	5,750,125	9,394,441
South Carolina.....	(1)	(1)	(1)	(1)	6,995,580	2,627,760	3,181,073	4,582,137
Tennessee.....					(1)	(1)	(1)	(1)
Texas.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Virginia.....					704,530	251,077	(1)	(1)
Other States.....	280,478,152	25,022,871	22,300,882	21,395,060	15,064,314	20,280,207	21,420,000	21,087,708

<sup>1</sup> Included in item for "Other States" to avoid disclosing consumption by individual establishments.

<sup>2</sup> See footnote 1.

TABLE 7.—COTTON YARNS (EXCEPT YARNS FOR SEWING THREAD AND FOR CROCHET, DARNING, HAND-KNITTING, AND EMBROIDERY COTTONS) USED AND COTTON YARNS PRODUCED FOR SALE, BY COUNTS, FOR THE COTTON-GROWING STATES, THE NEW ENGLAND STATES, AND OTHER STATES: 1929, 1927, AND 1919

[No data in regard to consumption of yarns by counts were collected for 1925, 1923, or 1921]

SECTION	Total	20s and under	21s to 40s	41s to 60s	61s to 80s	81s to 100s	101s to 120s	121s and over	Unclassified
United States:									
Yarns used—									
Produced for own consumption—									
1929.....	2,200,014,137	1,111,801,094	999,035,909	122,507,341	19,020,400	6,642,454	342,667	60,082	
1927.....	2,327,011,088	1,188,684,745	900,951,687	120,528,868	13,104,849	5,609,374	606,448	31,992	1,433,125
1919.....	1,728,820,022	827,900,047	799,071,278	70,328,307	12,168,672	8,416,513	1,543,571	331,034	
Purchased <sup>1</sup> —									
1929.....	136,651,086	74,509,742	59,405,518	8,083,162	1,888,240	1,054,037	12,176	8,210	
1927.....	141,038,519	72,540,043	56,674,610	9,500,307	1,306,933	871,295	107,671	37,660	
Yarns produced for sale—									
1929.....	627,594,927	306,664,734	293,748,152	40,270,203	20,600,135	4,307,461	1,230,368	56,690	41,628,835
1927.....	649,666,250	335,159,694	235,870,318	53,072,548	21,870,437	3,973,434	728,842	10,983	
1919.....	618,034,098	294,769,742	293,600,295	45,000,595	11,003,926	2,385,486	590,207	23,767	
Cotton growing States:									
Yarns used—									
Produced for own consumption—									
1929.....	1,725,862,727	939,167,302	743,191,756	39,150,442	3,142,792	1,068,878	102,557		
1927.....	1,683,760,614	967,297,667	681,204,169	29,686,488	5,060,079	490,162	7,640		
1919.....	902,393,711	584,426,098	303,329,145	13,531,471	1,107,997				
Purchased <sup>1</sup> —									
1929.....	56,631,903	31,261,508	20,675,183	3,088,917	183,692	620,000	2,603		
1927.....	39,975,655	19,929,918	17,396,032	2,587,254	54,459	62	8,930		
Yarns produced for sale—									
1929.....	532,603,947	275,214,369	163,480,533	41,520,673	10,327,995	2,966,966	828,785	11,011	29,244,615
1927.....	546,318,007	291,001,240	187,694,109	44,632,208	20,189,023	2,391,922	639,496		
1919.....	369,008,634	210,604,312	119,676,965	21,133,474	7,363,996		335,887		
New England States:									
Yarns used—									
Produced for own consumption—									
1929.....	466,914,398	134,415,564	229,054,373	81,144,165	16,455,977	5,543,527	240,110	60,082	
1927.....	565,861,163	179,817,599	275,361,570	95,398,487	8,048,770	6,170,212	599,399	31,992	1,433,125
1919.....	600,667,167	199,136,684	376,591,384	65,796,836	11,060,675	6,206,983	1,543,571	331,034	
Purchased <sup>1</sup> —									
1929.....	39,110,973	14,549,062	19,187,612	3,620,207	1,333,963	372,594	3,335	8,210	
1927.....	45,109,876	17,585,195	20,699,048	5,200,252	769,298	690,324	68,129	37,660	
Yarns produced for sale—									
1929.....	82,761,281	24,807,243	37,605,455	7,740,530	1,371,140	1,340,435	401,588	45,088	9,449,807
1927.....	84,202,503	28,685,520	44,322,180	8,101,737	1,211,178	1,651,612	289,346	10,983	
1919.....	298,964,523	52,523,953	127,578,605	23,280,622	3,216,162	2,087,014	254,410	23,767	
Other States:									
Yarns used—									
Produced for own consumption—									
1929.....	67,237,012	38,218,818	26,792,780	2,293,734	21,631	49			
1927.....	77,399,311	41,569,479	34,885,939	1,443,893					
1919.....	75,759,144	44,398,865	29,150,749				2,209,530		
Purchased <sup>1</sup> —									
1929.....	40,008,209	28,789,182	19,642,723	1,008,088	340,585	61,443	6,238		
1927.....	55,952,988	35,024,930	18,580,530	1,652,801	483,206	180,900	80,612		
Yarns produced for sale—									
1929.....	12,139,699	6,643,122	2,662,164						2,834,413
1927.....	19,145,745	15,452,925	3,354,029	338,553	236				
1919.....	60,065,941	31,641,477	19,505,725	1,186,499	433,768	298,472			

<sup>1</sup> Not called for on schedule for 1919.



# COTTON GOODS

259

**TABLE 8.—COTTON YARNS (EXCEPT YARNS FOR SEWING THREAD AND FOR CROCHET, DARNING, HAND-KNITTING, AND EMBROIDERY COTTONS) USED AND COTTON YARNS PRODUCED FOR SALE, BY COUNTS, BY STATES: 1929, 1927, AND 1919**

[No data in regard to consumption of yarns by counts were collected for 1925, 1923, or 1921. Statistics are given for each State which can be shown separately without disclosing data for individual establishments, and for the remaining States in groups. Certain of the States shown in combination with others, however, consumed larger amounts of yarn than some of those for which separate figures are given]

STATE	Total	20s and under	21s to 40s	41s to 60s	61s to 80s	81s to 100s	101s to 120s	121s and over	Unclas- sified
<b>United States:</b>									
Yarns used—									
Produced for own consumption—									
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
1929	2,260,014,137	1,111,801,654	909,038,909	122,507,341	19,630,400	6,642,451	312,667	60,682	1,134,125
1927	2,327,011,033	1,188,684,745	900,951,687	126,528,863	13,104,819	5,609,374	606,448	31,092	1,134,125
1919	1,728,820,022	827,960,647	709,071,278	70,328,307	12,168,672	8,416,513	1,543,671	301,634	
Purchased 1—									
1929	130,651,085	74,599,742	50,405,618	8,083,162	1,888,240	1,051,637	12,176	8,210	
1927	141,038,510	72,540,043	50,974,610	9,500,307	1,300,033	871,295	107,671	37,660	
Yarns produced for sale—									
1929	627,504,927	306,664,734	203,748,152	40,270,203	20,699,135	4,307,401	1,230,368	56,000	41,528,835
1927	649,060,250	335,139,694	235,370,318	53,072,548	21,370,437	3,073,434	728,842	10,983	
1919	618,034,008	291,769,742	263,600,295	45,000,595	11,003,020	2,385,480	500,207	23,757	
<b>Alabama and Kentucky:</b>									
Yarns used—									
Produced for own consumption—									
1929	236,527,781	181,402,654	50,989,490	1,130,348					
1927	199,207,026	170,185,851	27,608,237	1,413,858					
1919	110,140,623	90,750,091	19,386,022						
Purchased 1—									
1929	2,982,019	972,096	1,705,873	304,050					
1927	1,073,850	591,400	482,390						
Yarns produced for sale—									
1929	54,104,103	37,494,603	14,174,482	2,124,637	400,081				
1927	69,206,077	41,392,680	15,984,300	1,511,120	377,078				
1919	35,543,460	23,160,978	11,384,680	837,130	100,763				
<b>Connecticut:</b>									
Yarns used—									
Produced for own consumption—									
1929	25,607,723	2,373,005	12,920,042	7,201,367	1,841,450	1,175,202	67,023	19,744	
1927	30,380,820	8,527,419	12,263,344	6,870,371	1,300,884	1,142,262	189,662	16,878	
1919	36,683,677	8,574,300	18,008,167	6,444,707	1,853,821	1,201,332	282,240	128,860	
Purchased 1—									
1929	4,687,916	1,977,633	1,788,275	870,440	10,200	41,133	229		
1927	11,997,046	4,219,789	6,863,418	801,221	22,370	247			
Yarns produced for sale—									
1929	10,571,063	1,588,920	7,107,252	910,034	28,608	531,292	121,304	28,410	245,034
1927	7,009,838	1,818,490	4,209,744	511,621	13,008	411,624	103,411	8,040	
1919	13,483,820	3,734,670	6,851,658	2,305,792	137,733	345,701	97,400	10,878	
<b>Georgia:</b>									
Yarns used—									
Produced for own consumption—									
1929	435,036,931	312,622,954	120,493,670	1,919,301					
1927	400,820,730	288,846,485	111,053,465	900,400	21,300				
1919	226,759,107	172,556,689	63,869,093	333,275					
Purchased 1—									
1929	18,796,202	15,422,892	3,340,370	24,595	8,420				
1927	6,118,907	3,920,995	2,072,816	111,099	5,900				
Yarns produced for sale—									
1929	107,030,628	87,609,554	10,725,052						9,704,422
1927	108,277,114	87,027,168	20,040,050						
1919	76,053,900	65,121,241	11,632,088						
<b>Maine:</b>									
Yarns used—									
Produced for own consumption—									
1929	43,042,151	13,058,811	24,813,970	4,359,355	816,847	2,168			
1927	67,679,500	25,737,008	20,173,501	2,553,560	215,381				
1919	63,267,160	15,253,588	47,157,147	669,105	200,320				
Purchased 1—									
1929	414,816	269,802	154,240	708					
1927	727,895	606,044	55,087	62,024	1,023	1,017			
Yarns produced for sale—									
1929	7,219,702	2,788,253	4,368,041	53,574	9,161	73			
1927	5,828,146	2,705,180	2,616,016	464,448	11,598				
1919	8,734,110	4,226,885	3,971,828	530,403	5,000				
<b>Massachusetts:</b>									
Yarns used—									
Produced for own consumption—									
1929	250,573,274	50,044,743	133,973,702	51,831,735	6,037,250	3,987,700	157,228	40,010	
1927	300,646,800	67,093,182	164,827,291	66,972,833	4,974,500	2,916,225	414,706	14,818	1,434,125
1919	361,848,884	97,976,909	296,200,543	47,209,613	6,763,844	2,904,763	714,540	89,583	
Purchased 1—									
1929	18,477,907	6,260,700	8,828,914	2,121,742	1,111,887	151,218	3,100	340	
1927	16,262,064	5,910,160	7,425,874	2,447,200	106,050	213,701	68,129		
Yarns produced for sale—									
1929	30,422,130	9,028,210	15,560,118	4,628,413	1,001,715	412,368	153,570	1,600	7,736,131
1927	51,458,167	14,810,509	29,434,168	5,802,067	860,701	482,647	62,077		
1919	154,709,604	37,490,644	95,950,360	18,055,387	2,819,561	341,148	14,880	1,024	
<b>New Hampshire:</b>									
Yarns used—									
Produced for own consumption—									
1929	70,354,940	49,210,525	28,338,723	1,764,907	22,743	17,982			
1927	67,834,608	67,834,608	28,073,716	1,254,838	59,701				
1919	100,187,550	98,969,148	39,061,818	206,654	25,930				
Purchased 1—									
1929	2,143,360	284,332	1,825,873	20,710	12,430				
1927	2,444,412	627,512	1,630,965	138,728	147,207				
Yarns produced for sale—									
1929	13,338,954	7,980,514	4,368,401	979,679					300
1927	7,514,947	6,187,358	1,247,376	80,213					
1919	3,811,883	360,294	3,253,862	191,727					

See footnotes at end of table.

## CENSUS OF MANUFACTURES: 1929

TABLE 8.—COTTON YARNS (EXCEPT YARNS FOR SEWING THREAD AND FOR CROCHET, DARNING, HAND-KNITTING, AND EMBROIDERY COTTONS) USED AND COTTON YARNS PRODUCED FOR SALE, BY COUNTS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Total	20s and under	21s to 40s	41s to 60s	61s to 80s	81s to 100s	101s to 120s	121s and over	Unclassified
North Carolina:									
Yarns used—									
Produced for own consumption—									
1929	Pounds 354,790,502	Pounds 203,594,251	Pounds 144,553,993	Pounds 0,080,407	Pounds 422,761	Pounds	Pounds	Pounds	Pounds
1927	374,004,133	201,804,019	160,850,533	4,054,074	1,134,607				
1919	227,738,577	132,851,730	94,000,050						
Purchased 1—									
1929	25,202,332	11,593,156	11,598,487	1,222,364	168,325	620,000			
1927	23,772,050	12,220,051	10,714,060	824,306	8,141	62		8,030	
Yarns produced for sale—									
1929	312,167,715	110,690,689	113,586,837	32,045,950	17,323,888	2,760,601	778,785	11,011	26,131,054
1927	300,595,486	132,642,945	113,038,473	35,406,357	16,842,004	2,149,559	396,148		
1919	190,161,566	97,637,173	77,053,800	10,551,882	6,712,754		336,887		
Rhode Island:									
Yarns used—									
Produced for own consumption—									
1929	58,963,087	10,128,480	28,250,501	14,117,400	6,071,254	360,475	15,850	28	
1927	60,368,150	9,755,382	38,236,261	16,322,877	1,362,333	676,000	16,031		
1919	85,747,065	8,313,263	62,626,400	10,190,367	2,226,754	1,730,818	540,782	112,591	
Purchased 1—									
1929	13,386,974	5,766,685	6,500,304	612,538	220,434	180,243			7,870
1927	13,640,368	6,321,100	4,723,104	1,682,387	400,818	475,299			37,600
Yarns produced for sale—									
1929	12,210,832	2,511,340	6,201,043	1,158,930	331,656	396,712	126,700	15,060	1,400,382
1927	12,150,894	3,103,977	6,609,462	1,303,540	310,871	687,241	123,860	2,043	
1919	28,225,091	6,699,460	17,550,997	2,197,313	223,858	1,400,165	142,040	11,258	
South Carolina:									
Yarns used—									
Produced for own consumption—									
1929	514,618,933	127,280,973	354,583,931	28,888,757	2,715,470	1,097,236	102,557		
1927	500,347,438	107,348,421	312,823,238	21,769,396	3,900,172	499,162	7,040		
1919	368,802,198	102,061,226	188,585,940	12,097,020	1,107,997				
Purchased 1—									
1929	7,043,020	1,772,723	2,929,870	2,338,186	238		2,063		
1927	6,063,370	1,616,788	2,643,421	1,506,852	6,318				
Yarns produced for sale—									
1929	36,192,428	20,715,519	12,104,800	2,732,234	613,444	26,365			
1927	55,423,503	18,519,731	31,637,743	3,638,843	1,577,180				
1919	29,842,984	16,389,260	10,244,700	3,193,584	15,431				
Tennessee:									
Yarns used—									
Produced for own consumption—									
1929	31,806,433	9,650,176	22,035,013	175,050	4,552	1,042			
1927	37,075,788	24,617,603	12,349,185	200,000					
1919	21,797,139	15,058,918	6,788,221						
Purchased 1—									
1929	563,600	350,500	190,000	23,100					
1927	1,066,150	1,094,250	1,000						
Yarns produced for sale—									
1929	18,234,975	6,707,421	5,143,284	3,727,452	980,982	150,000	50,000		1,407,130
1927	18,330,707	7,070,620	5,032,624	3,985,888	1,361,865	242,363	43,348		
1919	10,398,800	3,221,965	6,160,927	6,550,869	465,048				
Texas:									
Yarns used—									
Produced for own consumption—									
1929	47,951,878	43,910,149	4,035,720						
1927	53,364,152	40,649,445	6,714,707						
1919	25,733,692	21,625,276	4,208,410						
Purchased 1—									
1929	306,723	288,864	17,860						
1927	150,972	44,830	106,133						
Yarns produced for sale—									
1929	1,776,420	1,607,190	169,218						3
1927	3,373,751	2,950,052	423,699						
1919	1,463,381	852,794	610,587						
New Jersey, New York, and Pennsylvania:									
Yarns used—									
Produced for own consumption—									
1929	85,227,820	11,671,766	21,500,420	2,033,954	21,631	49			
1927	46,630,265	14,848,234	20,388,128	1,443,893					
1919	40,649,095	10,965,162	27,474,403			2,200,530			
Purchased 1—									
1929	38,406,121	27,157,898	9,773,019	1,066,038	340,585	61,443	6,238		
1927	53,344,365	33,527,863	17,579,034	1,582,801	443,206	180,909	30,612		
Yarns produced for sale—									
1929	9,072,577	6,418,220	2,654,357						
1927	16,092,557	14,195,665	1,896,892						
1919	40,099,862	28,754,855	15,850,088	762,679	433,768	298,472			
Other States: 2									
Yarns used—									
Produced for own consumption—									
1929	140,453,684	84,297,797	52,393,810	2,095,650	766,427				
1927	148,712,528	95,107,208	50,990,032	2,163,982	45,881	405,725			
1919	115,559,359	83,065,617	30,843,402	1,370,300		280,080			
Purchased 1—									
1929	4,239,495	2,492,561	1,661,519	78,712	6,703				
1927	4,847,062	1,720,062	2,374,908	163,092	80,000				
Yarns produced for sale—									
1929	6,066,800	1,648,386	1,584,001						
1927	4,279,079	2,055,414	1,884,876	338,553	236				2,834,413
1919	9,875,614	7,107,514	2,344,280	423,820					

1 Not called for on schedule for 1919.

2 For 1929: Arkansas, California, Delaware, Illinois, Indiana, Louisiana, Maryland, Missouri, Mississippi, Ohio, Oklahoma, Vermont, Virginia, Wisconsin.

COTTON GOODS

TABLE 9.—PRODUCING SPINDLES, ACTIVE AND IDLE, BY TYPE AND NUMBER, BY STATES: 1929, 1927, AND 1919

[Statistics are given for each State which can be shown separately without disclosing data for individual establishments. Certain of the "Other States," however, reported larger numbers of spindles than some of those for which separate figures are given]

STATE	YEAR AND TYPE OF SPINDLE								
	1929			1927			1919		
	Total	Ring	Mule	Total	Ring	Mule	Total	Ring	Mule
ACTIVE SOME TIME WITHIN THE YEAR									
United States.....	31,583,588	30,181,312	1,402,276	33,007,939	31,063,821	1,944,118	33,718,053	30,578,703	3,140,250
Cotton-growing States <sup>1</sup> .....	18,318,042	18,100,606	168,036	17,750,610	17,701,159	55,460	14,668,272	14,437,712	130,560
New England States.....	12,174,353	11,065,375	1,108,978	14,504,680	13,124,425	1,440,104	17,642,026	14,003,306	2,570,620
Other States <sup>2</sup> .....	1,090,593	955,331	135,262	1,280,731	1,138,237	148,404	1,007,755	1,177,085	430,070
Alabama.....	1,780,628	1,733,268	27,360	1,447,441	1,447,441	—	1,108,933	1,106,033	2,000
Connecticut.....	1,037,804	775,724	262,080	1,072,872	768,028	304,844	1,256,770	870,510	386,266
Georgia.....	3,053,151	3,020,330	32,824	2,021,840	2,895,849	25,600	2,459,143	2,405,333	53,810
Indiana.....	70,704	70,704	—	70,704	70,704	—	81,256	81,256	—
Kentucky.....	71,480	71,480	—	68,792	68,792	—	85,830	74,910	10,920
Maryland.....	74,040	74,040	—	73,704	73,704	—	117,154	110,914	6,240
Massachusetts.....	0,975,664	6,361,844	613,810	8,818,081	7,991,083	826,998	11,200,855	9,068,340	1,548,515
Mississippi.....	123,000	123,000	—	160,300	160,300	—	168,802	168,802	—
New Hampshire.....	1,275,155	1,263,655	11,500	1,207,205	1,285,705	11,600	1,333,797	1,322,277	11,520
New Jersey.....	326,424	191,070	128,764	374,407	225,913	148,494	402,263	156,841	242,422
New York.....	509,636	506,636	—	603,644	603,644	—	741,618	604,880	76,732
North Carolina.....	0,020,134	5,002,142	67,002	0,073,027	0,067,419	16,608	4,622,714	4,594,508	28,206
Pennsylvania.....	68,807	52,889	6,008	80,320	80,320	—	105,830	100,328	80,511
Rhode Island.....	1,888,616	1,697,228	191,388	2,200,116	1,912,274	266,842	2,512,283	1,931,324	580,959
South Carolina.....	5,580,580	5,571,900	8,680	5,422,626	5,418,606	3,020	4,040,226	4,047,026	1,500
Tennessee.....	550,316	525,076	31,240	510,472	500,472	10,000	320,337	311,073	18,264
Texas.....	245,728	245,728	—	251,800	254,800	—	131,454	115,654	15,800
Virginia.....	678,560	678,560	—	678,280	678,848	432	600,280	500,280	—
Other States <sup>3</sup> .....	1,266,078	1,265,378	10,700	1,463,009	1,434,010	29,980	1,465,388	1,397,893	67,525
IDLE THROUGHOUT THE YEAR									
United States.....	1,425,735	1,230,777	194,958	1,092,950	1,430,106	292,760	612,404	464,136	148,268
Cotton-growing States <sup>1</sup> .....	172,371	160,009	2,672	110,050	115,059	1,000	(0)	(0)	(0)
New England States.....	1,105,433	984,821	180,612	1,517,392	1,280,070	230,722	(0)	(0)	(0)
Other States <sup>2</sup> .....	87,931	70,257	11,074	68,005	83,507	25,038	(0)	(0)	(0)
Alabama.....	28,006	28,024	672	32,310	32,310	—	7,250	2,060	4,000
Connecticut.....	5,004	1,428	4,176	40,400	10,120	30,280	87,078	64,564	23,424
Georgia.....	66,020	60,020	—	39,233	39,233	—	20,295	20,295	—
Massachusetts.....	743,232	642,172	101,060	1,100,511	997,093	171,008	231,246	105,179	30,070
New Hampshire.....	93,347	93,347	—	80,792	80,792	—	0,445	0,445	—
New Jersey.....	63,088	51,414	11,674	24,877	14,063	10,814	47,270	9,200	38,010
New York.....	12,308	12,308	—	25,608	11,384	14,224	—	—	—
North Carolina.....	44,977	42,977	2,000	13,070	13,070	—	30,438	35,838	3,000
Pennsylvania.....	12,535	12,535	—	0,536	0,536	—	12,057	3,200	0,757
Rhode Island.....	224,376	168,700	55,616	132,208	97,074	34,634	54,039	27,072	27,867
South Carolina.....	23,330	23,330	—	13,562	13,152	400	37,612	36,512	1,100
Tennessee.....	3,888	3,888	—	2,068	2,068	—	3,392	3,392	—
Other States <sup>3</sup> .....	100,434	80,674	19,760	101,085	101,985	—	51,066	47,826	3,840

<sup>1</sup> For 1929: Alabama, Arkansas, California, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia.

<sup>2</sup> For 1929: Illinois, Indiana, Maryland, New Jersey, New York, Pennsylvania.

<sup>3</sup> For 1929: Arkansas, California, Illinois, Louisiana, Maine, Missouri, Oklahoma, Vermont.

<sup>4</sup> Figures not available.

<sup>5</sup> For 1929: California, Maine.

TABLE 10.—DOUBLING AND TWISTING SPINDLES, ACTIVE AND IDLE, BY STATES: 1929 AND 1927

STATE	ACTIVE		IDLE		STATE	ACTIVE		IDLE	
	1929	1927	1929	1927		1929	1927	1929	1927
United States.....	2,036,307	2,817,932	363,353	392,895	New Hampshire.....	50,172	37,995	7,942	0,051
Cotton-growing States <sup>1</sup> .....	1,695,096	1,514,100	32,840	80,522	New Jersey.....	156,300	172,611	80,704	64,391
New England States.....	1,045,789	1,065,136	241,431	286,007	New York.....	19,065	28,276	6,440	5,902
Other States <sup>2</sup> .....	196,426	238,000	80,073	71,366	North Carolina.....	744,185	784,807	6,365	9,002
Alabama.....	127,596	115,666	1,020	10,500	Pennsylvania.....	4,382	8,507	1,920	20
Connecticut.....	117,040	116,289	3,104	5,037	Rhode Island.....	233,821	268,883	92,295	100,293
Georgia.....	564,515	361,732	15,002	12,210	South Carolina.....	168,542	150,057	3,744	2,840
Kentucky.....	2,010	8,384	700	—	Tennessee.....	56,742	57,868	100	—
Maryland.....	15,220	17,006	—	532	Texas.....	6,140	10,624	100	204
Massachusetts.....	600,597	601,035	134,016	171,548	Virginia.....	7,424	7,420	2,900	—
Missouri.....	1,404	1,404	—	—	Other States <sup>3</sup> .....	53,940	63,418	4,526	3,480

<sup>1</sup> For 1925: Alabama, Arkansas, California, Georgia, Kentucky, Louisiana, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia.

<sup>2</sup> For 1929: New Jersey, New York, Maryland, Ohio, Pennsylvania, Wisconsin.

<sup>3</sup> For 1929: Arkansas, California, Louisiana, Maine, Ohio, Oklahoma, Vermont, Wisconsin.

## CENSUS OF MANUFACTURES: 1929

TABLE 11.—SPINNING MILLS, WEAVING MILLS, AND MILLS WHICH DO BOTH SPINNING AND WEAVING, BY NUMBER AND CAPACITY, BY STATES: 1929, 1927, AND 1919

STATE	Census year	Number of establishments	SPINNING AND WEAVING MILLS			SPINNING MILLS		WEAVING MILLS		Number of establishments having no spindles or looms for spinning or weaving
			Number	Capacity		Number	Capacity (number of spindles)	Number	Capacity (number of looms)	
				Number of spindles	Number of looms					
United States.....	1920	1,281	652	20,612,209	631,310	341	6,397,114	207	22,357	81
	1927	1,347	665	28,553,892	690,257	387	6,747,003	220	24,789	75
	1919	1,288	632	27,050,718	673,017	409	7,280,639	181	10,152	66
Cotton-growing States.....	1920	821	473	14,202,591	344,066	293	4,288,422	42	0,153	13
	1927	834	466	13,662,719	337,400	328	4,210,859	31	4,578	9
	1919	714	386	11,260,013	283,714	313	3,440,900	10	1,931	5
New England States.....	1920	259	150	11,055,738	268,404	38	1,684,048	36	5,113	26
	1927	302	175	14,000,901	334,301	46	2,081,080	52	7,259	20
	1919	346	214	14,827,162	369,036	66	3,101,412	34	4,676	32
Other States <sup>1</sup> .....	1920	201	20	753,880	17,940	10	424,044	129	11,001	42
	1927	211	24	890,272	18,556	13	455,064	137	12,957	37
	1919	228	32	963,543	20,267	30	738,327	137	12,546	20
Alabama.....	1920	83	54	1,360,764	32,367	26	428,560	(?)	(?)	1
	1927	68	37	1,071,242	25,731	31	408,515			
	1919	58	30	845,087	19,738	27	271,102	(?)	(?)	
Arkansas.....	1920	5	3	27,978	601	(?)	(?)			1
California.....	1920	8	3	49,848	337			(?)	(?)	3
	1927	4	3	52,048	580					1
Connecticut.....	1920	33	13	785,804	18,902	8	277,604	8	1,434	4
	1927	35	17	887,730	20,754	7	225,536	8	1,282	3
	1919	47	27	1,000,424	24,710	11	284,330	5	820	4
Georgia.....	1920	137	94	2,543,456	58,704	36	579,618	5	328	2
	1927	139	90	2,407,712	55,622	30	552,870	(?)	(?)	2
	1919	132	82	1,011,290	40,268	47	577,058	(?)	(?)	1
Indiana.....	1920	3	3	70,704	1,812					
	1927	3	3	70,704	1,812					
	1919	4	4	86,704	2,110					
Maryland.....	1920	9	4	74,040	980			5	201	
	1927	8	4	74,088	1,009			4	143	
	1919	14	6	117,154	1,421			7	1,106	1
Massachusetts.....	1920	135	88	6,855,078	155,388	21	863,808	15	1,518	11
	1927	163	97	8,748,032	203,377	28	1,240,400	22	2,012	16
	1919	191	114	9,302,859	223,980	30	2,135,242	17	1,300	21
Mississippi.....	1920	10	8	117,416	3,392	(?)	(?)	(?)	(?)	
	1927	14	12	166,464	4,580	(?)	(?)	(?)	(?)	
	1919	15	11	137,764	3,883	3	33,776			1
New Hampshire.....	1920	18	15	1,368,502	28,075					3
	1927	17	13	1,370,353	33,813	(?)	(?)			3
	1919	16	13	1,326,598	39,747	(?)	(?)			2
New Jersey.....	1920	28	3	64,684	2,100	3	328,828	21	1,207	1
	1927	25	(?)	87,685	2,123	4	347,708	10	1,947	
	1919	33	5			4	361,848	21	2,142	3
New York.....	1920	32	6	459,688	10,363	4	59,256	8	650	14
	1927	35	8	558,716	11,288	5	70,536	11	930	11
	1919	37	6	509,812	11,020	11	281,806	10	1,010	10
North Carolina.....	1920	351	136	3,331,063	81,384	103	2,733,448	20	3,342	2
	1927	374	142	3,370,187	84,788	212	2,716,810	18	3,304	2
	1919	311	107	2,625,504	70,874	169	2,136,648	4	604	1
Pennsylvania.....	1920	94	3	69,532	2,018	(?)	(?)	85	8,079	5
	1927	107	4	84,876	1,981	(?)	(?)	95	9,071	6
	1919	118	8	97,200	2,900	11	111,506	95	8,153	4
Rhode Island.....	1920	55	29	1,605,112	39,658	7	507,880	11	2,101	8
	1927	66	32	1,777,040	45,102	8	593,694	10	3,880	7
	1919	74	43	1,908,834	48,473	14	658,388	12	2,448	6
South Carolina.....	1920	159	130	5,355,674	132,614	21	248,236	8	752	
	1927	163	129	5,157,322	128,063	27	278,756	7	551	
	1919	145	120	4,750,507	115,890	22	236,330	(?)	(?)	1
Tennessee.....	1920	20	8	315,692	8,385	11	244,512	(?)	(?)	
	1927	21	9	332,308	8,269	11	187,132	(?)	(?)	
	1919	19	7	206,771	5,471	9	125,958			
Texas.....	1920	27	23	230,430	5,710	(?)	(?)			2
	1927	26	22	225,296	5,633	4	31,208			
	1919	15	14	121,358	3,535	(?)	(?)			
Virginia.....	1920	9	8	678,560	18,630			(?)	(?)	
	1927	11	9	679,280	19,032			(?)	(?)	
	1919	10	9	554,680	13,325	(?)	(?)			1
States not shown separately.....	1920	65	21	1,257,534	31,880	11	125,364	21	2,085	24
	1927	68	28	1,519,888	38,728	11	123,728	17	1,007	23
	1919	52	26	1,500,487	37,550	12	116,567	10	1,401	13

<sup>1</sup> For 1920: Delaware, Illinois, Indiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Wisconsin.  
<sup>2</sup> Included in "States not shown separately" in order to avoid disclosing data reported by individual establishments.

COTTON GOODS

TABLE 12.—ACTIVE LOOMS, BY TYPE AND NUMBER, BY STATES: 1929 AND 1927

TYPE	Census Year	United States	Alabama	Connecticut	Georgia	Indiana	Kentucky	Maryland	Massachusetts	Mississippi	New Hampshire	New Jersey	New York	North Carolina	Pennsylvania	Rhode Island	South Carolina	Tennessee	Texas	Virginia	Other States <sup>1</sup>
Looms, aggregate.....	1929	616,277	32,925	19,058	55,011	1,812	1,470	1,136	136,444	3,437	25,605	4,118	9,894	81,648	8,420	40,127	130,772	8,653	5,995	18,716	28,895
	1927	670,068	25,610	21,880	83,708	1,812	1,444	1,105	181,462	4,326	26,591	3,486	12,052	86,783	10,105	47,146	128,947	3,638	3,638	31,976	30,829
Plain, total.....	1929	520,506	31,427	14,167	49,108	1,812	1,384	961	85,210	2,900	22,208	1,720	8,124	61,631	3,648	39,108	110,092	6,313	5,432	14,737	24,226
	1927	520,506	25,116	16,677	46,981	1,812	1,376	947	122,164	3,902	22,814	1,950	9,107	64,050	4,175	32,350	118,976	6,100	3,475	14,735	27,750
Nonautomatic, total.....	1929	126,884	1,373	4,884	11,445	1,037	1,037	641	41,563	216	2,528	549	169	12,445	1,654	12,611	26,244	2,298	2,097	490	4,075
	1927	126,884	2,910	5,691	5,647	1,029	1,029	777	68,477	882	3,458	513	313	9,982	2,068	3,263	11,366	2,097	1,889	1,889	2,010
2-harness.....	1929	61,869	1,373	1,409	6,672	1,037	1,037	606	17,013	108	18	193	167	3,639	189	8,793	15,167	2,298	1,907	490	1,690
	1927	69,130	2,910	1,103	3,111	1,029	1,029	725	41,247	2	602	182	182	2,948	232	3,139	7,845	1,907	1,689	490	1,959
2-harness, box.....	1929	11,423	608	96	98	1,038	1,038	490	3,103	48	2,419	198	10	2,025	102	13	3,473	1,689	1,689	490	1,628
	1927	11,973	97	97	1,872	1,038	1,038	490	2,419	45	2,419	198	10	2,025	102	13	3,473	1,689	1,689	490	1,628
More than 2-harness.....	1929	48,911	31,427	3,167	3,886	16	16	16	21,394	1,014	1,014	94	80	3,061	3,861	3,861	7,110	400	400	1,615	2,354
	1927	36,183	25,116	2,255	3,617	30	30	30	26,883	220	1,005	87	80	3,861	3,861	3,861	7,110	400	400	1,615	2,354
More than 2-harness, box.....	1929	4,781	1,373	4,884	11,445	1,037	1,037	641	41,563	216	2,528	549	169	12,445	1,654	12,611	26,244	2,298	2,097	490	4,075
	1927	7,941	2,226	2,226	761	22	22	22	385	385	1,005	87	80	3,861	3,861	3,861	7,110	400	400	1,615	2,354
Automatic, total.....	1929	356,669	30,054	9,303	37,663	1,812	347	310	43,617	2,774	19,680	1,176	7,981	49,263	1,984	16,587	99,848	4,015	3,835	14,247	19,751
	1927	395,273	22,206	10,896	41,284	1,812	347	170	32,687	3,070	19,376	1,453	8,794	53,108	2,112	20,087	102,580	6,130	3,473	12,846	25,740
2-harness.....	1929	221,884	14,800	3,245	34,120	938	347	254	28,686	1,600	4,316	6	3,794	28,690	1,899	11,611	77,875	2,111	1,981	10,645	7,474
	1927	242,005	10,328	1,672	19,879	1,288	347	116	34,056	2,222	8,655	108	3,446	30,980	1,940	17,660	83,902	4,061	2,275	10,036	10,630
2-harness, box.....	1929	13,340	97	8	1,462	250	8	8	2,841	391	2,841	119	4	3,342	21	2,791	729	313	313	2,275	2,180
	1927	17,543	608	8	1,872	624	8	8	13,012	470	12,537	1,037	4	4,978	405	4,978	12,718	1,175	876	1,416	1,208
More than 2-harness.....	1929	121,651	14,809	6,053	11,622	624	48	48	13,012	470	12,537	1,037	4	4,978	405	4,978	12,718	1,175	876	1,416	1,208
	1927	10,809	11,046	9,314	17,325	624	48	48	14,342	853	3,203	203	5,333	15,218	673	6,941	17,653	1,370	866	9,757	9,257
More than 2-harness, box.....	1929	14,074	324	2,226	761	22	22	22	1,830	688	3,089	12	13	3,690	78	144	94	1,353	185	482	13,902
	1927	126,688	1,496	4,881	5,902	86	86	74	45,598	467	4,394	2,393	1,770	19,927	4,558	10,929	13,678	2,340	102	3,979	4,064
	1927	141,884	1,494	5,293	5,460	88	88	31	53,513	424	3,774	2,302	2,975	22,680	5,461	14,713	14,572	2,368	163	4,241	3,033
Fancy, total.....	1929	66,636	597	3,642	1,801	86	20	74	32,793	85	2,381	407	1,004	5,146	3,774	5,400	6,041	440	15	1,023	1,819
	1927	78,944	124	4,631	1,129	86	20	31	40,283	74	1,797	1,033	846	8,172	5,167	9,400	4,982	85	15	3,004	851
Nonautomatic, total.....	1929	34,245	372	2,502	996	11	11	11	20,892	8	34	30	657	1,516	71	2,741	2,692	188	276	276	1,349
	1927	37,226	124	2,326	500	492	10	10	26,436	8	10	30	492	1,645	256	2,850	1,778	252	15	140	606
Dobby.....	1929	21,091	145	1,566	308	20	20	20	8,935	77	1,245	59	45	2,879	1,277	1,500	3,246	252	15	150	377
	1927	26,403	80	1,246	280	20	20	20	2,418	77	1,245	59	45	2,879	1,277	1,500	3,246	252	15	150	300
Jacquard.....	1929	5,246	80	265	81	142	63	63	3,255	74	568	400	146	512	1,877	768	28	60	60	65	53
	1927	6,654	100	100	142	142	63	63	1,860	74	542	541	13	504	1,899	2,436	28	60	60	65	60
Jacquard, box.....	1929	8,634	899	1,239	4,011	86	86	86	12,785	382	2,013	1,986	768	14,781	784	5,426	7,637	1,900	147	2,956	2,975
	1927	6,634	370	572	4,331	48	48	48	13,280	350	1,977	1,469	2,129	14,517	494	5,313	9,990	2,288	148	3,937	2,182
Automatic, total.....	1929	34,457	169	908	3,423	86	86	86	8,160	342	1,721	1,632	710	7,095	18	1,900	5,765	1,900	306	306	314
	1927	40,154	174	456	3,671	48	48	48	10,368	342	1,732	1,469	2,079	4,999	240	2,829	8,555	1,984	306	1,336	796
Dobby, box.....	1929	13,467	456	316	426	297	297	297	2,529	40	231	12	8	9,760	231	1,000	1,598	147	147	2,290	975
	1927	13,185	82	116	508	297	297	297	1,965	8	231	1	48	9,760	231	1,000	1,598	148	148	2,555	868
Jacquard.....	1929	3,506	58	20	94	12	12	12	781	14	14	39	39	1,713	20	750	274	296	250	250	650
	1927	3,546	80	20	40	12	12	12	284	14	14	322	39	1,446	453	1,494	194	296	250	347	650
Jacquard, box.....	1929	3,322	186	173	112	112	112	112	1,275	703	1,446	453	39	1,446	453	1,494	194	296	250	347	80
	1927	4,105	34	173	112	112	112	112	1,275	703	1,446	453	39	1,446	453	1,494	194	296	250	347	80
Not reported by type.....	1929	5,700	2	111	112	112	112	112	5,700	6	3	3	3	40	231	11	2	2	12	12	75
	1927	7,387	1	111	112	112	112	112	3,779	6	3	3	3	40	231	11	2	2	12	12	56
Webbing and ribbon looms.....	1929	341	2	111	112	112	112	112	341	6	3	3	3	40	231	11	2	2	12	12	75
	1927	265	1	111	112	112	112	112	341	6	3	3	3	40	231	11	2	2	12	12	56

<sup>1</sup> For 1929: Arkansas, California, Delaware, Illinois, Louisiana, Maine, Missouri, Ohio, Oklahoma, Vermont, Wisconsin.

## CENSUS OF MANUFACTURES: 1929

TABLE 13.—IDLE LOOMS, BY TYPE AND NUMBER, BY STATES: 1929 AND 1927

Type	Census year	United States	Alabama	Connecticut	Georgia	Maryland	Massachusetts	Mississippi	New Hampshire	New Jersey	New York	North Carolina	Pennsylvania	Rhode Island	South Carolina	Tennessee	Virginia	Other States <sup>1</sup>
Looms, aggregate.....	1929	37,300	538	1,183	2,021	45	20,402	20	1,470	251	177	3,078	2,277	1,032	604	2	-----	3,640
	1927	44,978	121	166	2,099	47	23,927	336	7,222	240	186	1,809	1,547	1,035	70	61	110	5,606
Plain, total.....	1929	27,381	603	874	2,003	5	14,993	-----	1,328	109	175	1,024	1,055	393	570	-----	-----	3,389
	1927	36,631	70	66	1,717	10	18,530	336	6,957	221	160	963	801	006	50	41	48	4,909
Nonautomatic, total.....	1929	17,795	168	703	796	5	11,218	-----	191	157	15	809	535	385	310	-----	-----	2,492
	1927	20,516	64	48	410	-----	11,810	336	5,877	107	90	850	484	264	-----	-----	-----	80
2-harness.....	1929	8,431	168	705	138	5	6,622	-----	3	106	3	256	36	203	-----	-----	-----	96
	1927	8,246	64	40	304	-----	6,668	336	-----	123	70	340	148	99	-----	-----	-----	54
2-harness, box.....	1929	2,965	-----	-----	-----	-----	72	-----	-----	44	-----	288	26	-----	310	-----	-----	2,210
	1927	6,800	-----	-----	36	-----	1,412	-----	4,945	44	-----	363	-----	-----	-----	-----	-----	-----
More than 2-harness.....	1929	4,862	-----	3	658	-----	3,821	-----	6	7	12	40	36	92	-----	-----	-----	177
	1927	3,834	-----	8	-----	-----	2,985	-----	456	30	20	145	96	72	-----	-----	-----	22
More than 2-harness, box.....	1929	1,547	-----	-----	70	-----	703	-----	182	-----	-----	225	437	-----	-----	-----	-----	-----
	1927	1,636	-----	-----	-----	-----	751	-----	476	-----	-----	2	240	93	-----	-----	-----	4
Automatic, total.....	1929	9,586	335	166	1,207	-----	3,775	-----	1,137	12	160	1,115	520	8	254	-----	-----	897
	1927	15,015	6	8	1,307	10	6,714	-----	1,080	24	60	1,113	317	342	50	41	48	4,880
2-harness.....	1929	5,242	277	5	1,207	-----	2,211	-----	550	12	160	125	401	8	154	-----	-----	72
	1927	5,706	-----	8	802	16	4,407	-----	-----	24	60	40	8	8	50	1	15	820
2-harness, box.....	1929	962	-----	-----	60	-----	504	-----	-----	-----	-----	118	-----	-----	-----	-----	-----	330
	1927	3,375	-----	-----	-----	-----	1,270	-----	-----	-----	-----	12	4	200	-----	-----	-----	1,829
More than 2-harness.....	1929	3,111	68	101	-----	-----	976	-----	542	-----	-----	720	69	100	-----	-----	-----	495
	1927	5,698	6	-----	825	-----	1,033	-----	1,080	-----	-----	313	74	74	40	33	-----	2,234
More than 2-harness, box.....	1929	281	-----	-----	120	-----	84	-----	45	-----	-----	152	-----	-----	-----	-----	-----	-----
	1927	236	-----	-----	-----	-----	4	-----	-----	-----	-----	52	60	-----	-----	-----	-----	-----
Fancy, total.....	1929	10,009	35	309	18	40	5,469	20	142	82	2	1,154	1,222	1,230	24	2	-----	251
	1927	9,442	61	100	382	31	5,397	-----	265	10	30	340	741	1,329	20	20	68	637
Nonautomatic, total.....	1929	8,075	-----	309	18	40	4,654	-----	85	82	2	802	1,083	739	14	-----	-----	247
	1927	7,468	-----	84	70	31	4,376	-----	210	19	30	192	741	1,096	20	20	-----	584
Dobby.....	1929	4,333	-----	308	-----	-----	3,822	-----	-----	34	-----	518	62	96	-----	-----	-----	4
	1927	3,513	-----	40	-----	-----	2,951	-----	-----	13	-----	2	12	401	-----	-----	-----	4
Dobby, box.....	1929	1,571	-----	-----	-----	-----	636	-----	-----	3	-----	161	397	324	-----	-----	-----	50
	1927	1,946	-----	31	45	-----	872	-----	-----	2	-----	82	92	208	-----	10	-----	514
Jacquard.....	1929	441	-----	1	-----	-----	124	-----	-----	16	-----	42	140	4	14	-----	-----	100
	1927	645	-----	1	25	20	201	-----	44	2	34	65	183	70	-----	-----	-----	-----
Jacquard, box.....	1929	1,730	-----	-----	18	40	572	-----	85	20	2	81	494	316	-----	-----	-----	93
	1927	1,364	-----	12	-----	11	362	-----	175	2	2	43	454	237	-----	10	-----	60
Automatic, total.....	1929	1,934	35	-----	-----	-----	815	20	57	-----	-----	352	189	500	10	2	-----	4
	1927	1,074	51	16	312	-----	1,021	-----	46	-----	-----	154	-----	233	20	-----	-----	53
Dobby.....	1929	917	34	-----	-----	-----	540	-----	43	-----	-----	-----	48	250	-----	2	-----	-----
	1927	952	-----	16	310	-----	507	-----	46	-----	-----	-----	-----	13	-----	-----	-----	-----
Dobby, box.....	1929	449	1	-----	-----	-----	140	20	-----	-----	-----	114	-----	170	-----	-----	-----	4
	1927	297	-----	-----	-----	-----	208	-----	-----	-----	-----	-----	-----	4	-----	-----	-----	-----
Jacquard.....	1929	201	-----	-----	-----	-----	84	-----	14	-----	-----	42	61	-----	10	-----	-----	-----
	1927	568	61	-----	2	-----	138	-----	-----	-----	-----	154	40	118	20	-----	32	53
Jacquard, box.....	1929	367	-----	-----	-----	-----	51	-----	-----	-----	-----	106	40	80	-----	-----	-----	-----
	1927	157	-----	-----	-----	-----	23	-----	-----	-----	-----	-----	-----	98	-----	-----	30	-----
Not reported by type.....	1927	6	-----	-----	-----	-----	-----	-----	-----	-----	-----	5	-----	-----	-----	-----	-----	-----

<sup>1</sup> For 1929: California, Illinois, Louisiana, Maine, Texas, Vermont, Wisconsin.

COTTON GOODS

TABLE 14.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	176,516	<i>Horsepower</i> 2,269,346	172,092	<i>Horsepower</i> 2,328,830	110,110	<i>Horsepower</i> 2,236,363	41,094	<i>Horsepower</i> 1,836,208	12,647	<i>Horsepower</i> 1,563,823	100.0	100.0
Prime movers, total	1,616	1,030,365	2,206	1,200,010	2,283	1,310,508	2,862	1,320,089	3,163	1,313,803	45.8	71.9
Steam, total	838	771,982	1,020	1,011,004	1,226	983,530	1,622	1,013,146	1,827	908,089	34.0	55.2
Engines	592	380,060	781	565,793	950	677,011	1,407	760,073	(*)	(*)	16.8	41.2
Turbines	246	391,313	248	446,231	267	406,925	215	257,073	(*)	(*)	17.2	14.0
Internal-combustion engines	18	1,602	32	4,823	43	5,821	30	2,030	41	3,501	0.1	0.1
Water wheels and water turbines	760	206,691	1,205	293,090	1,014	321,151	1,200	305,204	1,285	812,123	11.7	16.6
Electric motors driven by purchased energy	174,000	1,220,081	160,826	1,118,014	116,827	925,855	38,162	515,309	0,404	250,020	54.2	28.1
Electric motors, total	240,107	1,607,003	231,729	1,569,815	180,095	1,426,950	61,455	861,009	18,068	505,559	100.0	100.0
Driven by purchased energy	174,000	1,220,081	160,826	1,118,014	116,827	925,855	38,162	515,309	0,404	250,020	70.5	59.8
Driven by energy generated in establishments reporting	66,207	377,082	61,003	450,001	63,178	501,101	23,303	346,300	9,164	255,539	23.5	40.2
Electric generators	721	<i>Kilowatts</i> 460,930 <i>Kilowatt-hours</i>	843	<i>Kilowatts</i> 504,342	901	<i>Kilowatts</i> 495,262	(*)	(*)	(*)	(*)		
Electric energy purchased <sup>4</sup>		2,740,568,535		(*)		(*)		(*)		(*)		

<sup>1</sup> Revised.  
<sup>2</sup> Not called for separately on schedule.  
<sup>3</sup> Not called for on schedule.  
<sup>4</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>5</sup> Data incomplete.

TABLE 15.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italicized* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum		
		January	February	March	April	May	June	July	August	September	October	November	December			
United States:																
1929	424,916	432,027	434,780	436,956	436,697	431,291	429,157	421,050	420,552	410,449	420,121	410,507	406,500	406,500	93.0	
1925	445,184	453,261	455,200	457,068	454,330	448,100	439,520	420,422	<i>426,015</i>	420,707	444,511	453,059	457,860	457,860	93.9	
1919	436,966	432,978	417,786	415,000	<i>414,718</i>	423,256	420,213	434,345	436,312	437,375	438,711	442,252	449,007	449,007	92.4	
1914	379,366	380,980	388,685	387,447	386,989	384,510	380,001	375,484	<i>369,198</i>	360,284	371,584	374,004	375,380	375,380	94.7	
Alabama	27,724	27,820	28,230	27,975	27,674	27,458	27,710	27,510	27,698	27,238	28,184	28,010	<i>27,159</i>	27,159	96.2	
Arkansas	617	<i>458</i>	511	549	580	611	626	633	672	601	606	700	677	677	64.6	
California	1,153	1,229	1,203	1,190	1,189	1,150	1,130	1,110	<i>1,104</i>	1,121	1,143	1,147	1,109	1,109	89.8	
Connecticut	10,789	11,090	11,071	11,038	11,040	11,001	10,871	10,675	<i>10,410</i>	10,430	10,425	10,979	10,628	10,628	92.1	
Georgia	55,808	56,934	57,021	57,058	56,744	56,810	56,778	56,631	56,205	54,700	54,460	53,700	<i>53,309</i>	53,309	93.4	
Illinois	1,237	1,154	<i>1,145</i>	1,109	1,230	1,260	1,251	1,210	1,240	1,258	1,278	1,304	1,297	1,297	87.7	
Indiana	698	707	<i>689</i>	695	694	693	697	698	696	699	711	704	694	694	96.9	
Kentucky	1,214	1,280	1,212	1,227	1,262	1,257	1,140	<i>1,127</i>	1,194	1,218	1,263	1,230	1,153	1,153	88.0	
Maryland	1,901	<i>1,789</i>	1,850	1,915	1,968	1,972	1,939	1,937	1,911	1,869	1,889	1,911	1,867	1,867	90.6	
Massachusetts	70,788	73,024	73,972	74,623	73,975	73,600	71,975	70,536	69,147	68,936	68,654	67,452	<i>67,452</i>	67,452	86.5	
Michigan	262	218	262	304	305	315	274	232	268	283	248	227	<i>202</i>	202	64.1	
Mississippi	2,342	2,517	2,544	2,629	2,602	2,630	2,648	<i>2,629</i>	2,100	2,148	2,267	2,342	2,342	2,342	77.2	
New Hampshire	13,709	14,640	14,273	14,171	14,242	14,161	14,261	13,883	13,066	13,303	13,414	13,222	<i>13,066</i>	13,066	86.0	
New Jersey	4,768	4,613	4,770	4,897	4,820	4,843	4,762	4,725	4,588	<i>4,465</i>	4,725	4,959	4,928	4,928	90.6	
New York	5,811	6,200	6,336	6,223	6,094	<i>6,080</i>	5,940	5,785	5,804	5,808	5,634	5,520	5,393	5,393	78.6	
North Carolina	91,844	92,485	93,117	93,694	93,255	93,293	92,203	89,864	90,505	91,463	91,695	90,912	<i>89,640</i>	89,640	95.7	
Pennsylvania	7,773	8,080	8,111	8,081	7,943	7,563	7,475	7,543	7,696	7,919	7,960	7,746	<i>7,152</i>	7,152	88.2	
Rhode Island	21,833	23,254	23,467	23,426	23,700	23,412	22,753	21,350	21,999	20,889	20,810	19,222	<i>17,721</i>	17,721	74.8	
South Carolina	71,731	71,993	72,321	72,650	<i>68,663</i>	71,522	72,490	71,364	72,168	72,463	71,768	72,120	70,024	70,024	94.9	
Tennessee	7,544	7,605	7,517	7,480	7,406	7,526	7,622	7,527	7,556	7,603	7,680	7,605	<i>7,399</i>	7,399	93.3	
Texas	4,640	4,768	4,596	4,777	4,811	4,767	4,672	4,655	4,886	4,680	4,472	4,402	<i>4,365</i>	4,365	89.3	
Virginia	7,672	7,448	7,626	7,695	7,617	7,681	7,618	7,508	7,373	7,616	7,572	8,038	8,066	8,066	91.4	

# COTTON SMALL WARES

Description of the industry.—The cotton-small-wares industry embraces mills engaged in weaving tape, webbing, figured labels, banding, belts, belting, trimmings, edgings, etc., composed of cotton or of cotton mixed with other kinds of fibers; or in making cotton

or cotton-mixed flat or round braids, including shoe and corset laces. Some of these mills produce their own yarns, but the majority purchase yarns made by establishments in the cotton-goods industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1923 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Paid for contract work	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929.....	202	15,281	\$15,440,435	\$130,510	\$33,036,208	\$65,169,753	\$31,533,545	27,308
1927.....	220	14,958	15,333,332	373,828	32,222,020	64,819,065	32,507,045	29,205
1925.....	230	16,102	15,547,190	185,323	41,816,332	74,075,090	32,858,764	33,700
1923 <sup>3</sup> .....	228	16,387	15,950,874	251,267	38,014,005	78,223,596	34,008,871	31,920
PER CENT OF INCREASE OR DECREASE (—)								
1927-1929.....	-8.2	2.2	0.8	-65.1	4.4	0.5	-3.3	-6.5
1925-1927.....	-4.3	-7.4	-1.4	101.7	-22.9	-13.2	-0.8	-13.5
1923-1925.....	0.9	-1.4	-2.0	-26.2	8.3	2.0	-5.1	5.7

<sup>1</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> No comparable figures available for earlier years.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929 AND 1927

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	Paid for contract work	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy				Total	Materials and containers	Fuel and purchased energy		
United States	1929	202	1,330	15,281	27,308	11,003	16,305	\$4,015,407	\$15,440,435	\$130,510	\$33,036,208	\$32,603,673	\$1,032,535	\$65,169,753	\$31,533,545
	1927	220	1,558	14,958	29,205	10,859	18,340	4,514,817	15,333,332	373,828	32,222,020	31,071,837	1,150,183	64,819,065	32,507,045
Individual States:															
	California	1929	3	10	30	31	31	11,943	23,364	-----	23,544	22,050	588	81,485	57,041
Connecticut	1929	15	295	2,452	4,160	1,150	3,016	705,891	2,648,665	23,548	6,410,005	6,224,405	194,600	10,800,314	4,381,309
	1927	18	370	2,733	6,569	1,585	4,974	869,672	2,905,260	30,025	6,138,531	5,915,620	222,905	13,460,110	7,321,579
Massachusetts	1929	43	165	2,024	4,274	1,350	2,924	532,507	2,857,062	8,053	6,210,169	6,023,307	180,862	11,922,618	5,712,449
	1927	47	185	2,538	4,099	1,428	2,673	571,460	2,484,558	70,302	5,183,016	4,982,469	200,547	10,184,683	5,001,667
New Hampshire	1929	8	24	215	272	105	167	50,082	211,272	-----	423,673	411,289	12,384	835,529	411,850
	1927	5	30	252	277	110	167	61,188	240,781	-----	415,413	403,872	11,541	987,882	572,469
New Jersey	1929	14	51	381	774	357	417	141,192	468,333	-----	966,366	936,125	30,241	2,003,046	1,036,680
	1927	15	57	394	803	522	281	145,524	430,848	3,410	1,151,926	1,121,001	30,925	2,027,563	875,637
New York	1929	20	97	985	2,161	165	1,990	380,282	1,228,062	1,661	2,932,885	2,850,485	73,400	5,699,544	2,760,669
	1927	19	164	1,123	3,033	165	2,868	643,407	1,355,966	11,872	2,919,074	2,826,819	92,255	5,079,791	2,760,717
North Carolina	1929	8	20	250	346	-----	346	52,357	229,330	-----	525,536	509,260	19,320	995,433	469,847
	1927	9	20	161	296	-----	296	56,538	171,694	-----	420,960	406,079	14,881	850,515	435,555
Pennsylvania	1929	29	269	2,537	4,974	2,736	2,238	868,805	2,474,697	70,336	4,815,267	4,152,961	162,306	10,403,760	6,058,403
	1927	39	323	2,910	4,041	1,826	2,215	908,154	2,070,533	56,221	5,790,813	5,604,311	186,502	11,758,199	5,967,380
Rhode Island	1929	49	316	4,781	9,075	5,015	4,660	1,026,693	4,841,003	18,119	10,001,487	9,693,570	307,917	19,332,244	9,330,767
	1927	50	299	4,191	9,218	5,015	4,203	987,022	4,151,196	195,998	8,523,214	8,185,968	337,246	16,731,769	8,293,555
Groups of States:															
	Ga., 2 est., Ky., 2 Mo., 2 S. C., 1 Ind., 2 est., Mich., 1; Ohio, 3.....	1929	7	38	432	325	-----	325	123,026	279,308	8,802	1,049,904	1,020,147	29,757	1,753,466
States not shown separately.....															
	1927	18	104	656	879	210	669	221,852	562,496	-----	1,679,073	1,025,692	53,381	3,133,453	1,454,380

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 69; 1927, 105. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 16,080; 1927, 16,021.

<sup>2</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> California, 2 establishments; Georgia, 2; Illinois, 4; Indiana, 1; Kentucky, 2; Missouri, 2; Ohio, 4; South Carolina, 1.



# COTTON SMALL WARES

267

**TABLE 3.—PRODUCTS, BY KIND AND VALUE, BY STATES: 1929<sup>1</sup>**

[The figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments. Certain of the "Other States," however, reported larger values of some of the specified products than were reported by one or more of the States for which separate figures are given]

KIND AND STATE	Value	KIND AND STATE	Value
1. Cotton-small-wares industry, all products, total.....	\$65,169,753	Cotton small wares, all Industries—Continued. Shoe and corset laces, total.....	\$6,286,230
2. Cotton small wares.....	61,864,450	Massachusetts.....	281,050
3. Other products (not normally belonging to the industry)....	3,305,303	Rhode Island.....	4,438,475
4. Cotton small wares made as secondary products in other industries.....	3,029,853	Other States.....	1,565,706
Cotton small wares, all industries, aggregate (sum of 2 and 4)....	65,494,303	Woven labels, total.....	2,188,562
Elastic webbing, total.....	25,099,028	New Hampshire.....	111,721
Woven, total.....	19,747,093	New Jersey.....	344,887
Connecticut.....	5,400,595	Other States.....	1,731,954
Massachusetts.....	7,362,149	Belting for machinery, total.....	3,665,079
Rhode Island.....	5,611,684	Transmission, total.....	1,366,265
Other States.....	1,466,665	New Jersey.....	610,828
Braided, total.....	5,351,935	New York.....	291,477
Connecticut.....	730,228	Other States.....	463,900
Massachusetts.....	968,526	Conveyor.....	872,909
Rhode Island.....	2,450,464	Other.....	1,426,445
Other States.....	1,187,710	Other woven cotton small wares, total <sup>2</sup> .....	9,816,257
Nonelastic webbing, total.....	11,967,415	Massachusetts.....	700,908
Woven, total.....	8,051,173	Pennsylvania.....	3,489,578
Connecticut.....	1,788,350	Rhode Island.....	1,336,238
Massachusetts.....	1,119,000	Other States.....	4,280,473
New Hampshire.....	252,563	Other braided cotton small wares, total.....	0,481,132
New York.....	811,683	New York.....	476,616
Rhode Island.....	3,280,308	Pennsylvania.....	1,194,362
Other States.....	1,000,320	Rhode Island.....	942,362
Braided, total.....	3,006,242	Other States.....	3,867,792
Pennsylvania.....	1,468,319		
Rhode Island.....	1,116,713		
Other States.....	392,210		

<sup>1</sup> Comparable figures for prior years can not be given because of changes in the form of schedule used in making the canvass.  
<sup>2</sup> Principally tapes and bindings.

**TABLE 4.—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY, BY KIND, QUANTITY, AND COST, 1929, AND BY KIND AND QUANTITY, 1927 AND 1925**

[The difference between the sum of the costs of the several kinds of materials shown in this table and the total cost of materials as given in Tables 1 and 2 is due to the fact that this table covers only certain specified materials, whereas the others cover all materials]

KIND	1929		1927 <sup>1</sup>	1925 <sup>1</sup>	KIND	1929		1927 <sup>1</sup>	1925 <sup>1</sup>
	Cost	Pounds	Pounds	Pounds		Cost	Pounds	Pounds	Pounds
Raw cotton, total.....	\$1,171,207	5,017,814	6,200,894	21,339,080	Yarns purchased—Continued.				
Long-staple.....	188,730	934,340	130,084	1,060,353	Cotton—Continued.				
Short-staple.....	982,558	4,083,474	6,061,810	20,288,727	Mercerized.....	\$4,516,612	8,175,635	(?)	(?)
Yarns purchased, total.....	23,430,157	48,148,919	40,004,339	42,733,830	Not mercerized.....	14,737,574	36,468,463	(?)	(?)
Cotton, total.....	19,254,180	44,044,098	37,523,072	41,017,595	Silk.....	340,004	78,170	52,142	259,702
					Rayon.....	3,387,200	2,030,142	1,774,756	844,828
					Other yarns.....	459,858	400,500	653,469	611,645

<sup>1</sup> No data on cost of materials, by kind, were collected for 1927 or 1925.

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

**TABLE 5.—COTTON YARNS USED AND COTTON YARNS PRODUCED FOR SALE, BY COUNTS, FOR THE UNITED STATES: 1929**

	Total	20s and under	21s to 40s	41s to 60s	61s to 80s	81s to 100s	101s to 120s	121s and over	Unclassified
Yarns used:									
Produced for own consumption.....	Pounds 4,606,098	Pounds 2,321,202	Pounds 2,264,398	Pounds 21,393	Pounds 3,041,615	Pounds 304,544	Pounds 47,788	Pounds 13,279	Pounds 179,499
Purchased.....	46,288,190	27,579,875	13,507,897	3,041,615	304,544	47,788	13,279	179,499	653,703
Yarns produced for sale.....	250,251	218,000	41,251						

## CENSUS OF MANUFACTURES: 1929

TABLE 6.—MACHINERY, ACTIVE AND IDLE, BY CLASS AND NUMBER, BY STATES: 1929 AND 1927

STATE	Cen- sus Year	LOOMS															BRAIDING MACHINES		
		SPINDLES						Broad						Narrow (webbing and ribbon)					
		Ring			Doubling and twisting			Plain			Fancy			Total	Active	Idle	Total	Active	Idle
		Total	Active	Idle	Total	Active	Idle	Total	Ac- tive	Idle	Total	Ac- tive	Idle						
United States...	1929	39,100	38,836	324	12,400	12,400	2	604	542	62	66	60	11,186	9,846	1,340	176,484	172,184	4,300	
	1927	44,850	39,072	5,184	17,718	15,418	2,300	649	578	71	250	105	10,861	10,728	128	180,860	180,800	60	
California.....	1929				80	80							20	20		136	135		
Connecticut.....	1929	144	72	72				69	67	2			82	32	140	7,134	6,810	324	
	1927												2,195	2,195		6,443	6,443		
Massachusetts.....	1929							9	8	1	17	17	2,704	2,458	300	17,867	10,755	1,102	
	1927	5,184		5,184	6,300	4,000	2,300	4	4				2,545	2,545		16,374	16,374		
New Hampshire.....	1929							20	20				214	200	6				
	1927							5	5		88	75	113	113		38	38		
New Jersey.....	1929							46	27	19			361	284	77	1,441	900	475	
	1927							36	20	16	60	30	599	599		3,568	3,568		
New York.....	1929	9,576	9,324	252	1,160	1,160		334	305	29			500	543	23	1,508	1,115	483	
	1927	9,576	9,576		191	191		274	240	28			2,403	2,403		2,008	2,008		
North Carolina.....	1929							19	19				107	107		300	300		
	1927							18	18		44	4	96	96		231	231		
Pennsylvania.....	1929				750	750		60	58	2	1	1	1,072	1,719	253	12,387	11,044	1,343	
	1927				727	727		135	119	16	68	56	2,089	1,960	123	12,815	12,815		
Rhode Island.....	1929	28,816	28,816		10,300	10,300		31	31		10		3,167	2,633	534	30,318	20,791	627	
	1927	20,472	20,472		10,300	10,300		35	35				2,580	2,580		34,888	34,888		
Other States <sup>3</sup> .....	1929	624	624		200	200		85	74	11			122	120	2	5,308	5,202	40	
	1927	624	624		200	200		73	64	9			225	225		4,501	4,501		

<sup>1</sup> Includes data for 1,952 active and 741 idle braiding machines used in the cotton-goods industry.

<sup>2</sup> Revised.

<sup>3</sup> For 1929: Georgia, Indiana, Kentucky, Michigan, Missouri, Ohio, South Carolina.

TABLE 7.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS, ELECTRIC MOTORS, AND GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925 <sup>1</sup>		TYPE	1929		1927		1925 <sup>1</sup>	
	Num- ber	Capac- ity	Num- ber	Capac- ity	Num- ber	Capac- ity		Num- ber	Capac- ity	Num- ber	Capac- ity	Num- ber	Capac- ity
Prime movers and electric motors driven by purchased energy, aggregate.....	5,608	Horse-power 27,308	5,784	Horse-power 29,205	5,601	Horse-power 33,760	Electric motors, total.....	6,927	Horse-power 10,911	6,085	Horse-power 21,423	6,000	Horse-power 26,406
Prime movers, total.....	67	11,003	72	10,850	84	12,345	Driven by purchased energy.....	5,601	16,305	5,712	18,340	5,607	21,415
Steam, total.....	49	9,083	49	9,376	64	11,041	Driven by energy generated in establishments reporting.....	1,326	3,606	1,273	3,277	1,302	5,051
Engines.....	47	8,083	47	7,776	58	7,315	Electric generators.....	30	Kilowatts 4,387	32	Kilowatts 3,702	30	Kilowatts 4,905
Turbines.....	2	1,600	2	1,000	6	3,726	Electric energy purchased <sup>2</sup> .....		28,353,704		( <sup>3</sup> )		( <sup>3</sup> )
Internal-combustion engines.....	1	25	2	145	5	153							
Water wheels and water turbines.....	17	1,205	21	1,338	15	1,151							
Electric motors driven by purchased energy.....	5,601	16,305	5,712	18,346	5,607	21,415							

<sup>1</sup> No comparable data for earlier years.

<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>3</sup> Data incomplete.

COTTON SMALL WARES

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929 AND 1925,<sup>1</sup> AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1920.....	15,281	14,001	15,167	15,822	15,850	15,970	15,598	15,252	15,225	15,250	15,240	14,920	<i>14,599</i>	90.2	
1925.....	16,162	<i>15,689</i>	16,101	16,601	16,683	16,347	16,121	15,867	15,730	15,770	16,188	16,525	16,414	93.4	
California.....	30	<i>28</i>	<i>28</i>	20	30	31	31	33	32	31	30	30	20	84.8	
Connecticut.....	2,452	2,395	2,464	2,588	2,601	2,627	2,565	2,520	2,445	2,396	2,377	2,287	<i>2,146</i>	81.7	
Massachusetts.....	2,024	<i>2,790</i>	2,857	2,903	2,906	2,906	2,905	2,930	2,971	2,944	2,964	2,922	2,877	93.1	
New Hampshire.....	216	210	214	210	215	<i>210</i>	<i>210</i>	211	214	221	221	210	<i>210</i>	95.0	
New Jersey.....	381	348	370	370	380	396	404	406	405	392	390	372	<i>328</i>	80.8	
New York.....	985	946	998	1,004	1,001	993	957	977	976	1,055	1,035	952	<i>922</i>	87.4	
North Carolina.....	250	<i>241</i>	248	248	247	251	253	249	252	250	251	255	250	94.5	
Pennsylvania.....	2,587	2,558	2,584	2,667	2,674	2,749	2,701	2,610	2,573	2,540	2,546	2,476	<i>2,558</i>	85.8	
Rhode Island.....	4,781	<i>4,604</i>	4,744	5,050	5,010	5,056	4,880	4,644	4,600	4,718	4,720	4,716	4,623	80.1	

<sup>1</sup> No comparable figures available for earlier years.

## DYEING AND FINISHING TEXTILES

**Description of the industry.**—This classification is applied to establishments engaged primarily in such operations as bleaching, dyeing, mercerizing, printing, or otherwise converting yarn or cloth, without regard to the kind of fiber; beaming or winding yarns (except winding and warping silk); or spooling thread.

The majority of the establishments classified in this industry specialize in this kind of work, which is usually performed on a contract or commission basis, so that the value of products for the industry represents, in the main, the amount charged for performing the dyeing and finishing processes, and the cost of materials is made up chiefly of the cost of chemicals and dyestuffs.

In some cases, however, the goods dyed or finished are purchased by the establishments which perform these final operations; and in such cases the cost of the fabric is included in the cost of materials and the value of the finished cloth in the value of products.

A number of cotton, silk, woolen, and worsted mills carry on one or more of these subordinate processes in connection with the manufacture of textiles. These mills do not, however, make separate reports for their dyeing and finishing departments; therefore the statistics for the industry as classified do not cover in full the dyeing and finishing of textiles.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	732	79,327	\$94,244,685	\$235,712,156	\$465,820,029	\$230,108,473	304,067
1927	743	73,851	91,697,219	210,680,000	406,047,372	195,306,472	287,212
1925	697	70,749	83,083,377	220,678,181	408,515,484	187,837,303	252,701
1923	713	63,414	72,624,711	199,150,387	366,623,213	167,466,826	204,128
1921	599	51,510	58,138,729	141,108,956	276,760,670	135,551,714	( <sup>3</sup> )
1919	628	55,985	57,180,078	174,742,815	323,967,663	149,224,868	150,867
1914	507	48,407	24,872,318	56,705,135	109,201,530	52,686,401	120,827
1909	426	44,046	21,226,024	35,261,801	83,556,432	48,205,131	100,270
1904	360	35,565	15,469,205	19,621,253	50,840,545	31,228,262	82,483
1899	298	20,776	12,726,316	17,958,137	44,963,331	27,005,104	68,372
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	-1.5	7.4	2.8	11.0	14.7	17.8	5.0
1925-1927	6.6	4.4	9.2	-4.5	-0	4.0	13.7
1923-1925	-2.2	11.6	15.8	10.8	11.4	12.2	23.8
1921-1923	19.0	23.1	24.7	41.0	32.5	23.5	
1919-1921	-4.6	-8.0	1.7	-19.2	-14.6	-0.2	
1919-1929	16.6	41.7	64.8	34.9	43.8	54.2	90.2
1909-1919	47.4	27.1	169.4	395.6	287.7	269.0	50.4
1899-1909	43.0	47.9	60.8	96.4	85.8	78.8	55.4

<sup>1</sup> Principally receipts for work done. (See "Description of the industry," above.)

<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

# DYEING AND FINISHING TEXTILES

271

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Certain of the States, however, for which statistics are given in combination with those for others reported larger values of products than some of the States shown separately. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Cen- sus year	Num- ber of estab- lish- ments	Sala- ried officers and em- ploy- ees <sup>1</sup>	Wage earn- ers (aver- age for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PUR- CHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value add- ed by man- ufacture <sup>3</sup>
					Total	Prime movers	Motors run by pur- chased energy			Total	Materials	Fuel and purchased energy		
United States.....	1929	732	10,103	79,327	304,067	165,088	108,000	\$31,274,996	\$94,244,685	\$235,712,156	\$210,122,377	\$16,589,770	\$465,820,629	\$230,108,473
	1927	743	9,339	73,851	287,212	187,147	100,005	27,002,701	91,697,219	210,080,000	193,004,012	17,075,088	406,017,372	195,306,472
	1919	628	6,240	55,085	150,857	133,864	25,993	16,251,555	57,180,978	174,742,815	164,314,521	10,428,204	323,067,683	160,224,868
Individual States:														
California.....	1929	12	62	181	516	-----	516	162,032	250,111	902,608	974,702	17,000	1,700,111	776,443
	1927	12	55	185	434	-----	434	145,821	295,794	1,120,603	1,102,479	24,124	1,080,420	553,523
Connecticut.....	1929	21	367	2,300	14,229	11,022	3,207	1,144,002	2,801,222	4,901,570	4,421,002	560,668	12,440,511	7,448,941
	1927	20	301	2,551	12,779	9,322	3,457	807,307	3,265,780	4,122,350	4,220,067	592,283	11,779,105	6,906,756
	1919	16	141	1,918	9,427	7,767	1,670	498,710	2,233,708	3,450,119	3,043,074	+60,445	8,350,008	4,899,670
Georgia.....	1929	6	70	1,145	5,210	3,776	1,443	187,022	850,150	5,270,773	5,080,842	183,931	8,109,880	2,028,013
Illinois.....	1929	21	316	1,638	6,555	5,545	1,010	850,060	2,026,086	6,315,844	6,082,058	233,180	17,137,218	7,821,374
	1927	( <sup>6</sup> )	( <sup>4</sup> )	( <sup>5</sup> )	( <sup>6</sup> )	( <sup>4</sup> )	( <sup>5</sup> )	( <sup>6</sup> )	( <sup>5</sup> )	( <sup>6</sup> )	( <sup>5</sup> )	( <sup>6</sup> )	( <sup>5</sup> )	( <sup>6</sup> )
	1919	11	89	403	745	548	107	254,800	373,608	1,004,000	1,033,507	61,183	2,210,100	1,124,410
Maryland.....	1929	5	11	53	343	-----	343	38,105	50,184	99,077	70,002	20,015	212,400	112,732
	1927	6	16	99	494	30	404	59,328	101,730	183,892	104,020	19,863	456,937	273,045
Massachusetts.....	1929	67	1,600	14,460	65,427	50,965	14,462	4,585,639	10,853,064	53,034,427	50,111,250	2,923,168	93,148,770	40,114,243
	1927	68	1,415	13,826	68,800	49,065	18,835	3,927,703	10,229,352	51,434,428	47,010,835	3,523,593	81,460,065	33,025,238
	1919	62	1,055	12,321	39,133	30,177	8,056	2,653,277	12,240,747	44,209,538	41,815,099	2,363,839	75,281,815	31,052,277
Missouri.....	1929	6	60	385	801	500	301	100,650	327,344	841,632	792,144	40,488	2,009,623	1,227,997
	1927	5	51	426	657	418	239	122,087	390,304	590,053	568,004	41,019	1,717,490	1,118,431
New Jersey.....	1929	107	2,867	23,007	71,472	42,065	29,407	9,522,023	26,043,872	47,184,154	41,539,316	5,644,838	113,558,338	66,374,184
	1927	170	2,197	19,470	58,833	30,224	19,609	7,203,417	26,004,610	35,234,552	32,906,487	5,230,066	91,732,052	53,497,500
	1919	132	1,512	14,402	28,703	25,639	3,064	4,351,773	14,031,758	44,222,000	41,712,221	2,509,779	79,305,174	35,083,174
New York.....	1929	157	911	6,561	23,951	12,601	11,350	2,000,861	8,346,440	14,206,162	13,022,262	1,273,000	33,267,902	18,901,740
	1927	174	1,410	7,535	27,227	13,075	13,552	3,692,282	9,532,200	18,133,072	16,722,135	1,411,837	38,876,271	20,742,209
	1919	133	1,145	6,070	17,150	13,888	3,262	2,628,790	6,160,670	21,178,386	23,306,878	871,508	44,693,507	20,518,121
North Carolina....	1929	18	242	2,303	9,557	4,777	4,780	636,094	1,052,693	10,822,504	10,407,052	825,542	16,079,262	5,250,008
	1927	16	205	2,545	10,593	4,101	6,492	530,755	2,228,412	13,381,416	13,027,619	353,767	18,996,189	6,014,773
	1919	8	36	414	1,431	916	516	90,117	220,208	741,522	680,222	61,300	1,242,579	501,057
Ohio.....	1929	12	88	586	5,466	3,012	2,454	352,910	704,051	2,382,051	2,230,906	142,145	4,583,685	2,201,634
	1927	10	91	520	5,718	2,833	2,835	291,304	701,863	1,637,467	1,514,820	122,647	3,320,929	1,033,492
	1919	6	28	339	3,551	3,400	161	99,410	383,650	744,402	661,524	82,878	1,518,698	760,206
Pennsylvania.....	1929	133	1,218	8,853	31,728	20,072	11,050	3,752,505	11,504,787	44,617,951	42,504,720	2,023,225	73,958,497	20,340,510
	1927	145	1,251	8,902	29,907	19,108	10,589	3,598,264	11,497,742	30,395,507	28,403,540	1,931,967	54,491,209	24,095,762
	1919	103	767	7,381	18,140	14,847	3,293	2,677,001	8,120,917	19,714,571	18,174,670	1,539,901	42,475,000	22,760,429
Rhode Island.....	1929	62	1,591	9,242	41,092	26,478	14,614	5,032,865	11,306,286	22,816,892	20,666,826	2,150,066	51,394,741	28,577,840
	1927	62	1,481	9,500	38,234	27,389	10,845	4,037,562	11,521,344	19,595,612	17,000,499	2,595,122	44,079,389	25,413,777
	1919	67	1,163	9,319	28,920	25,743	3,177	2,643,326	6,356,057	20,926,740	18,901,077	2,025,663	42,257,545	21,330,305
South Carolina....	1929	11	165	1,939	8,018	1,035	6,383	472,343	1,090,178	2,648,133	2,342,240	305,893	8,555,180	5,907,050
	1927	7	101	1,302	6,085	1,300	4,785	263,578	1,134,073	3,385,877	3,157,380	228,491	7,162,721	3,770,844
Tennessee.....	1929	7	130	3,565	4,700	175	4,585	377,066	2,321,081	10,094,201	9,830,202	264,059	15,093,816	5,609,555
	1927	6	69	1,183	4,040	295	4,354	191,828	1,001,535	5,305,918	6,184,020	121,880	8,790,358	3,484,440
Wisconsin.....	1929	4	7	43	95	-----	95	27,947	54,627	93,405	70,048	16,457	204,930	111,525
Groups of States:														
Ala., 1 est.; Ind., 4; Ky., 3; Va., 2.....	1929	10	100	701	4,008	3,332	1,570	200,825	591,590	1,369,307	1,213,351	155,956	3,443,088	2,073,781
Del., 1 est.; Me., 1; Mich., 4; N. H., 1	1929	7	248	2,001	8,687	7,348	1,339	641,430	2,284,750	2,207,063	2,040,986	247,977	6,593,005	4,295,642
Other States (Minn., 1 est.; Neb., 3; Tex., 1; W. Va., 1)	1929	6	35	210	1,230	1,185	45	120,133	305,745	2,542,092	2,500,033	42,059	3,310,578	707,880
States not shown sep- arately.....	1927	42	692	5,711	23,012	19,437	3,575	2,122,405	6,895,485	22,484,253	21,583,002	900,291	37,004,570	15,120,317
	1919	30	304	3,322	13,230	10,950	2,280	643,388	3,153,049	15,400,847	14,955,040	505,798	26,649,248	11,188,401

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 217; 1927, 267; 1919, 363. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 89,647; 1927, 83,457; 1919, 62,588.  
<sup>2</sup> Principally receipts for work done. (See "Description of the Industry," p. 270.)  
<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.  
<sup>5</sup> Withheld from publication in order to avoid disclosing data for individual establishments.  
<sup>6</sup> Alabama, 1 establishment; Delaware, 1; Georgia, 4; Illinois, 16; Indiana, 4; Kentucky, 2; Maine, 1; Michigan, 2; Minnesota, 1; Nebraska, 2; New Hampshire, 1; Virginia, 1; West Virginia, 1; Wisconsin, 3.  
<sup>7</sup> Alabama, 1 establishment; California, 2; Delaware, 2; Florida, 1; Indiana, 2; Kentucky, 3; Maine, 1; Maryland, 3; Michigan, 1; Minnesota, 3; Missouri, 2; New Hampshire, 1; South Carolina, 3; Tennessee, 2; West Virginia, 1; Wisconsin, 2.

## CENSUS OF MANUFACTURES: 1929

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	21,527	Horse-power 304,087	17,731	Horse-power 287,212	13,723	Horse-power 252,701	5,656	Horse-power 159,857	2,694	Horse-power 129,327	100.0	100.0
Prime movers, total.....	1,019	195,088	1,139	187,147	1,321	168,512	2,150	133,864	1,904	122,165	64.2	83.7
Steam, total.....	930	180,231	1,061	174,948	1,241	157,313	2,042	118,197	1,868	111,506	59.3	73.9
Engines.....	703	77,000	897	88,862	1,101	83,008	1,063	85,899	(1)	(1)	25.3	53.7
Turbines.....	227	103,231	164	86,086	140	74,305	79	32,298	(1)	(1)	34.0	20.2
Internal-combustion engines.....	12	577	14	1,419	14	1,598	28	2,124	32	690	0.2	1.3
Water wheels and water turbines.....	77	14,280	64	10,780	66	9,601	80	13,543	64	9,000	4.7	8.5
Electric motors driven by purchased energy.....	20,508	108,969	16,592	100,065	12,402	84,180	3,506	25,993	730	7,162	35.8	16.3
Electric motors, total.....	38,577	295,526	30,030	221,475	25,259	190,587	6,004	85,889	4,249	51,021	100.0	100.0
Driven by purchased energy.....	20,508	108,969	16,592	100,065	12,402	84,180	3,506	25,993	730	7,162	30.9	30.3
Driven by energy generated in establishments reporting.....	18,069	186,557	13,438	121,410	12,857	112,308	5,558	59,896	3,519	43,859	63.1	60.7
Electric generators.....	351	Kilowatts 116,075 Kilowatt-hours	304	Kilowatts 95,261	308	Kilowatts 83,210	(2)	(2)	(2)	(2)		
Electric energy purchased <sup>1</sup> .....		130,655,550		(3)		(3)		(3)		(3)		

<sup>1</sup> Not called for separately on schedule.

<sup>2</sup> Not called for on schedule.

<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>4</sup> Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929.....	70,327	78,757	80,698	81,643	80,048	70,265	78,218	<i>70,929</i>	77,929	70,664	80,535	70,783	77,562	77,562	94.2
1925.....	70,749	69,949	71,541	72,615	72,377	70,891	69,110	68,230	<i>67,959</i>	69,665	71,539	72,343	72,773	72,773	93.4
1919.....	55,085	55,781	51,658	51,202	<i>51,052</i>	53,144	55,422	57,833	58,153	57,036	58,727	61,102	62,590	62,590	81.6
1914.....	48,407	49,059	50,369	51,070	50,815	49,681	49,291	47,916	46,981	48,007	47,662	<i>46,253</i>	45,501	45,501	88.6
1909.....	44,046	43,716	44,299	44,863	44,635	43,840	43,405	<i>43,212</i>	43,447	44,171	44,031	44,707	44,157	44,157	96.3
California.....	181	182	174	180	170	173	171	182	184	190	194	191	180	180	87.6
Connecticut.....	2,309	2,321	2,437	2,437	2,428	2,343	2,303	2,271	<i>2,173</i>	2,214	2,287	2,262	2,234	2,234	89.2
Georgia.....	1,145	1,190	1,240	1,258	1,167	1,099	1,107	1,032	1,103	1,139	1,108	1,113	1,137	1,137	86.4
Illinois.....	1,038	1,057	1,027	1,063	1,079	1,099	1,110	1,042	1,015	1,021	1,029	1,084	1,028	1,028	89.4
Maryland.....	53	66	66	66	66	47	47	47	47	47	47	47	47	47	71.2
Massachusetts.....	14,450	14,177	14,578	14,874	15,030	14,904	14,702	14,070	13,874	14,202	14,596	14,408	13,991	13,991	92.3
Missouri.....	385	429	431	426	434	405	373	390	351	340	358	356	340	340	78.3
New Jersey.....	23,097	22,794	23,210	23,619	23,295	22,596	22,534	<i>22,414</i>	23,156	23,793	23,695	23,279	22,898	22,898	94.2
New York.....	6,561	6,092	6,034	6,371	6,648	6,439	6,147	6,147	6,343	6,520	6,767	6,769	6,560	6,560	88.5
North Carolina.....	2,363	2,322	2,393	2,297	2,328	2,231	2,283	2,307	2,356	2,371	2,480	2,498	2,434	2,434	91.3
Ohio.....	586	584	605	595	602	579	580	547	537	574	585	633	609	609	84.8
Pennsylvania.....	8,858	9,084	9,178	9,281	9,094	8,830	8,689	8,578	8,755	8,921	8,932	8,735	8,591	8,591	90.0
Rhode Island.....	0,242	0,234	0,417	0,615	0,583	0,325	0,630	0,930	3,024	9,087	9,236	9,328	0,174	0,174	92.8
South Carolina.....	1,930	1,745	1,970	1,995	2,024	1,992	1,980	1,906	1,905	1,999	1,984	1,925	1,773	1,773	86.2
Tennessee.....	3,565	3,552	3,551	3,538	3,470	3,516	3,516	3,493	3,644	3,673	3,697	3,703	3,459	3,459	93.2
Wisconsin.....	43	42	47	42	43	46	44	46	44	47	47	45	45	45	40.8

## EMBROIDERIES

**Description of the industry.**—The establishments classified in this industry are those engaged primarily in the manufacture of embroideries and burnt-out laces. This industry was given a separate classification for the first time at the census for 1927. At prior censuses it had formed a part of the "Millinery and lace goods, not elsewhere classified" industry.

**Value of products.**—A large part of the "value of products" as reported for this industry represents receipts for work done on a contract basis on materials owned by others. (See Table 3.) This item does not, therefore, cover the total value of embroideries and burnt-out laces.

TABLE 1.—SUMMARY FOR THE INDUSTRY AND ITS BRANCHES, FOR THE UNITED STATES: 1929 AND 1927<sup>1</sup>

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Paid for contract work	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>	Horsepower
<b>THE INDUSTRY AS A WHOLE</b>								
1929.....	813	6,622	\$7,867,608	\$1,111,204	\$6,608,840	\$25,280,706	\$18,677,056	2,279
1927.....	1,009	8,904	10,902,000	2,503,184	7,959,760	32,418,888	24,469,110	2,930
Per cent of decrease (—):								
1927-1929.....	-23.9	-20.1	-28.2	-56.0	-17.0	-22.0	-23.6	-22.2
<b>SCHIEFFEL EMBROIDERIES</b>								
1929.....	326	2,757	3,119,220	324,196	3,779,320	11,847,513	8,008,187	1,313
1927.....	412	3,276	4,040,046	1,502,322	4,703,881	15,340,724	10,552,843	1,773
Per cent of decrease (—):								
1927-1929.....	-20.9	-15.8	-22.8	-78.4	-21.2	-22.8	-23.5	-25.0
<b>OTHER EMBROIDERIES</b>								
1929.....	487	3,865	4,748,688	787,008	2,820,514	13,430,283	10,669,769	966
1927.....	657	5,688	6,921,445	1,000,802	3,165,888	17,072,161	13,906,270	1,157
Per cent of decrease (—):								
1927-1929.....	-25.9	-32.0	-31.4	-25.8	-10.0	-21.3	-23.7	-10.5

<sup>1</sup> No statistics available for earlier years. (See "Description of the industry," above.)

<sup>2</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

## CENSUS OF MANUFACTURES: 1929

TABLE 2.—GENERAL STATISTICS FOR THE INDUSTRY AND ITS BRANCHES, BY STATES: 1929 AND 1927<sup>1</sup>

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	Paid for contract work	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Primamovers	Motors run by purchased energy				Total	Materials and containers	Fuel and purchased energy		
<b>THE INDUSTRY AS A WHOLE</b>															
United States	1929	813	4,720	6,622	2,270		2,270	\$1,839,075	\$7,867,908	\$1,111,294	\$6,608,840	\$6,374,921	\$233,910	\$25,286,790	\$18,677,950
	1927	1,069	4,997	8,964	2,930		2,863	2,050,101	10,962,090	2,563,184	7,950,760	7,620,911	320,858	32,418,888	24,450,119
California	1929	14	7	77	20		20	9,545	88,063	50,000	62,221	60,555	1,660	310,004	248,743
	1927	15	7	78	35		35	10,096	102,700	1,440	32,068	30,700	1,368	200,042	177,874
Illinois	1929	43	80	570	169		169	179,402	659,447	22,045	591,824	576,767	15,057	1,897,117	1,305,293
	1927	41	72	693	155		155	186,906	820,090	33,547	690,701	670,221	14,480	2,120,662	1,429,901
Maryland	1929	6	19	132	39		39	65,228	96,897		141,840	130,205	2,554	402,406	260,557
	1927	6	17	132	34		34	57,661	93,240		99,023	96,982	2,041	313,787	214,764
Massachusetts	1929	5	3	45	17		17	4,066	40,645		19,468	18,768	700	106,176	80,708
Missouri	1929	8	6	117	95		95	24,800	82,675		69,340	66,501	2,839	288,276	218,930
	1927	9	9	111	17		17	18,421	101,291		52,215	48,622	3,593	243,281	191,000
New Jersey	1929	297	171	1,988	1,045		1,045	419,311	2,356,848	220,490	2,788,720	2,664,807	123,913	8,904,500	6,205,780
	1927	370	220	2,531	1,239	67	1,172	522,682	3,169,673	1,287,062	3,514,934	3,343,504	170,530	11,960,806	8,440,772
New York	1929	403	399	3,189	748		748	1,014,763	4,062,289	789,783	2,572,768	2,501,025	71,733	11,014,698	9,341,860
	1927	576	598	4,869	1,298		1,298	1,140,108	6,107,325	1,208,124	3,276,982	3,155,182	121,800	16,154,456	12,877,474
Ohio	1929	7	6	55	28		28	26,450	69,776		130,105	128,647	1,458	298,340	168,235
	1927	11	10	161	43		43	30,536	200,335		92,095	80,389	2,700	484,207	392,112
Pennsylvania	1929	26	32	422	189		189	73,106	384,917	19,376	203,742	160,619	13,123	973,397	760,655
	1927	28	45	367	103		103	78,373	327,690	33,011	172,073	160,061	12,012	825,024	652,961
Other States	<sup>4</sup> 1929	4	7	27	9		9	22,424	26,351		28,813	27,937	876	101,012	72,199
	<sup>4</sup> 1927	4	3	22	6		6	5,408	39,831		30,578	20,250	1,328	100,723	70,145
<b>SCHIFFLI EMBROIDERIES</b>															
United States	1929	326	7,269	2,757	1,313		1,313	721,328	3,110,220	324,196	3,779,326	3,622,430	156,896	11,847,513	8,068,187
	1927	412	7,362	3,270	1,773	67	1,706	882,448	4,040,645	1,502,322	4,798,881	4,590,292	203,589	15,346,724	10,552,843
Illinois	1929	8	34	206	59		59	100,633	195,302		310,144	302,260	7,875	740,255	436,111
	1927	6	36	253	59		59	90,887	300,640	6,500	387,369	379,805	7,554	888,561	601,202
New Jersey	1929	259	154	1,798	954		954	390,571	2,146,936	229,400	2,635,957	2,516,803	119,004	8,401,430	5,765,482
	1927	340	198	2,206	1,166	67	1,099	490,487	2,885,002	1,180,048	3,395,941	3,234,710	160,331	11,235,787	7,840,740
New York	1929	36	44	283	133		133	116,108	389,241	87,168	500,201	544,718	15,483	1,599,178	1,038,977
	1927	40	84	446	433		433	194,652	605,304	295,806	812,575	787,215	25,360	2,507,387	1,604,812
Pennsylvania	1929	13	18	325	100		109	50,378	280,026	7,538	131,153	120,287	10,866	670,873	539,720
	1927	10	10	167	76		76	39,855	155,950	10,908	106,845	99,671	7,178	492,002	296,053
Other States	<sup>5</sup> 1929	10	19	145	58		58	63,048	107,715		141,871	138,263	3,608	429,768	287,897
	<sup>5</sup> 1927	7	15	114	39		39	60,637	93,740		92,057	88,891	3,166	312,087	220,030
<b>OTHER EMBROIDERIES</b>															
United States	1929	487	10,451	3,865	966		966	1,117,747	4,748,688	787,098	2,829,514	2,752,401	77,023	13,430,283	10,009,769
	1927	657	10,645	5,088	1,157		1,157	1,167,743	6,021,445	1,060,862	3,165,888	3,036,619	126,260	17,072,164	13,906,276
Illinois	1929	35	36	364	110		110	78,860	404,145	22,645	281,680	274,498	7,182	1,150,802	869,182
	1927	35	46	440	96		96	90,019	519,447	27,047	303,342	290,416	6,926	1,232,101	928,759
New Jersey	1929	38	17	190	91		91	28,740	209,912		152,763	147,914	4,849	593,061	440,298
	1927	39	22	235	73		73	20,195	284,571	98,014	118,993	108,794	10,199	725,010	606,020
New York	1929	367	355	2,906	615		615	898,555	3,673,048	702,615	2,012,557	1,956,307	56,250	10,315,430	8,302,873
	1927	527	514	4,423	865		865	945,426	5,502,021	912,258	2,404,407	2,367,907	66,440	13,647,069	11,182,062
Pennsylvania	1929	13	14	97	30		30	22,728	104,891	11,838	72,580	70,332	2,267	302,524	229,635
	1927	18	26	200	27		27	38,518	171,740	22,103	65,224	60,390	4,834	422,122	356,898
Other States	<sup>11</sup> 1929	34	29	308	120		120	88,855	296,692	50,000	399,925	393,440	6,485	1,077,406	767,481
	<sup>12</sup> 1927	38	37	390	96		96	61,685	443,666	1,440	213,922	206,052	7,870	1,045,853	831,931

<sup>1</sup> No statistics available for earlier years. (See "Description of the industry," p. 273.)<sup>2</sup> For 1929, sales (shipments or deliveries) by manufacturers; for 1927, production. See GENERAL EXPLANATIONS—Value of Products.<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.<sup>4</sup> Not including proprietors and firm members, as follows: For 1929, 819; 1927, 1,273. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 8,161; 1927, 11,234.<sup>5</sup> Kentucky, 1 establishment; Michigan, 2; Minnesota, 1.<sup>6</sup> Massachusetts, 3 establishments; Michigan, 1.<sup>7</sup> Not including proprietors and firm members, as follows: For 1929, 239; 1927, 490. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 3,315; 1927, 4,118.<sup>8</sup> California, 2 establishments; Maryland, 4; Massachusetts, 2; Missouri, 1; Ohio, 1.<sup>9</sup> California, 2 establishments; Maryland, 3; Missouri, 1; Ohio, 1.<sup>10</sup> Not including proprietors and firm members, as follows: For 1929, 457; 1927, 783. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 4,773; 1927, 7,116.<sup>11</sup> California, 12 establishments; Kentucky, 1; Maryland, 2; Massachusetts, 3; Michigan, 2; Minnesota, 1; Missouri, 7; Ohio, 6.<sup>12</sup> California, 13 establishments; Maryland, 3; Massachusetts, 3; Michigan, 1; Missouri, 8; Ohio, 10.



# EMBROIDERIES

275

**TABLE 3.—PRODUCTS, BY CLASS, KIND, AND VALUE, BY STATES: 1929**

[The figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products. Statistics are given for each State which can be shown separately without disclosing data for individual establishments. In some cases, however, certain of the "Other States" reported larger quantities and values than some of the States shown separately.]

KIND AND STATE	Total	Value of products made from materials owned by establishments reporting	Receipts for work on materials owned by others	KIND AND STATE	Total	Value of products made from materials owned by establishments reporting	Receipts for work on materials owned by others
Embroideries industry, all products, total.....	\$25,286,796	\$10,156,761	\$15,130,036	Embroideries and burnt-out laces, all industries—Continued. Schiffli-machine products—Continued. Embroideries on a net foundation—Continued.			
Embroideries made as secondary products in other industries.....	232,483	212,483	20,000		Cotton net embroidered with cord, total.....	\$600,043	\$440,056
Embroideries and burnt-out laces, all industries: Aggregate.....	25,519,279	10,369,244	15,150,036	New Jersey.....	564,106	(1)	(1)
Schiffli-machine products, total.....	11,898,788	6,306,064	5,592,724	Other States (Ill., N. Y., Pa.).....	55,847	(1)	(1)
Embroidered handkerchiefs.....	726,328	160,871	565,457	Cotton net embroidered with cotton and cord, total.....	550,884	400,509	150,375
Other embroideries on a cloth foundation, total.....	6,110,007	2,649,250	3,460,757	New Jersey.....	406,968	(1)	(1)
Cotton cloth embroidered with cotton, total.....	1,402,761	705,028	697,733	Other States (Calif., Ill., N. Y., Pa.).....	143,916	(1)	(1)
New Jersey.....	710,684	187,073	523,611	Silk net embroidered with silk (N. J., N. Y.), total.....	247,510	88,015	159,495
New York.....	276,007	607,065	70,022	Other embroideries on net (N. J., N. Y., Pa.), total.....	1,077,200	804,894	182,306
Other States (Calif., Ill., Md., Pa.).....	407,980	103,201	254,850	All other Schiffli embroideries, total.....	319,945	164,321	155,624
Art linen embroidered with silk, total.....	448,147	103,201	254,850	New Jersey.....	46,436	(1)	(1)
New Jersey.....	383,826	103,201	254,850	Other States (N. Y., Pa.).....	273,509	(1)	(1)
Other States (Calif., N. Y., Pa.).....	64,321			Burnt-out laces, total.....	1,232,415	890,038	342,377
Dress novelties and dress trimmings embroidered with silk, total.....	1,540,526	632,505	908,021	Cotton (Ill., N. J., N. Y., Pa.).....	965,709	669,499	296,210
New Jersey.....	1,113,719	383,695	730,024	Other (Ill., N. J., N. Y.).....	320,706	220,539	97,077
New York.....	229,847	130,120	99,718	Embroideries other than Schiffli, total.....	13,020,491	4,003,180	9,017,311
Other States (Calif., Ill., Mass., Mo., Ohio, Pa.).....	196,960	118,781	78,179	Bonnaz embroideries, total.....	6,572,020	1,865,618	4,706,402
Other embroideries on cloth, total.....	2,719,473	1,028,426	1,691,047	Illinois.....	661,737	405,563	556,174
New Jersey.....	1,366,865	294,013	1,072,852	New York.....	4,658,084	1,065,724	3,592,360
New York.....	403,534	209,078	194,466	Other States (Calif., Ky., Mass., Mich., Mo., N. J., Ohio, Pa.).....	952,199	394,331	557,868
Other States (Calif., Ill., Md., Mass., Pa.).....	949,074	524,435	424,030	Embroideries other than Schiffli and Bonnaz, total.....	7,048,471	2,107,562	4,949,900
Embroideries on a net foundation, total.....	3,509,103	2,432,584	1,076,009	Handkerchiefs (N. J., N. Y.).....	370,514		370,514
Cotton net embroidered with cotton only, total.....	1,073,556	607,610	465,946	Other, total.....	6,677,957	2,107,562	4,579,385
New Jersey.....	819,056	360,038	458,918	New York.....	5,510,125	1,720,503	3,789,622
Other States (Calif., Ill., N. Y., Pa.).....	253,600	247,572	12,028	Other States (Calif., Ill., Ky., Mass., Mich., Minn., Mo., N. J., N. Y., Pa., Wash.).....	1,107,832	408,059	689,763

<sup>1</sup> Not shown separately in order to avoid disclosing data for individual establishments.

CENSUS OF MANUFACTURES: 1929

TABLE 4.—MACHINERY USED IN THE INDUSTRY, ACTIVE AND IDLE, BY KIND AND NUMBER, FOR THE UNITED STATES AND FOR SELECTED STATES: 1929 AND 1927

KIND	Census Year	ACTIVE SOMETIME WITHIN THE YEAR				IDLE THROUGHOUT THE YEAR			
		United States	New Jersey	New York	Other States	United States	New Jersey	New York	Other States
Schiffli (shuttle) embroidery machines, total.....	1929 1927	895 1,134	670 875	100 150	125 100	84 119	55 79	19 23	10 17
Automatic, total.....	1929 1927	627 728	409 592	68 84	60 50	43 41	27 27	15 11	1 3
10-yard.....	1929 1927	511 594	403 480	62 75	46 39	38 33	23 20	15 11	..... 2
15-yard.....	1929 1927	116 132	96 112	0 9	14 11	5 8	4 7	..... .....	1 1
Pantograph, total.....	1929 1927	208 408	171 283	32 75	65 50	41 78	28 52	4 12	9 14
10-yard.....	1929 1927	245 387	150 270	27 71	62 46	40 71	28 51	4 12	8 8
15-yard.....	1929 1927	23 21	15 13	5 4	3 4	1 7	..... 1	..... .....	1 0
Bonnaz or Cornely machines.....	1929 1927	2,231 2,749	44 8	1,531 2,150	656 596	1,195 1,071	5 .....	882 1,417	308 264
Other hand embroidery machines.....	1929 1927	555 569	80 114	374 288	101 167	254 100	15 14	200 53	33 33
Punching machines.....	1929 1927	264 363	97 112	124 202	43 49	112 86	2 3	83 65	27 18
Other machines <sup>1</sup> .....	1929 1927	1,141 1,263	520 410	404 691	208 262	264 223	140 38	90 120	25 65

<sup>1</sup> Principally sewing and mending machines.

TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929 AND 1927; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929; FOR THE INDUSTRY AND ITS BRANCHES

TYPE	1929		1927 <sup>1</sup>		Per cent distribution of rated horse-power capacity 1929	TYPE	1929		1927 <sup>1</sup>		Per cent distribution of rated horse-power capacity 1929
	Number	Capacity	Number	Capacity			Number	Capacity	Number	Capacity	
THE INDUSTRY AS A WHOLE						SCHIFFLI EMBROIDERIES—continued					
Prime movers and electric motors driven by purchased energy, aggregate.....	2,645	Horse-power 2,279	2,849	Horse-power 2,930	100.0	Prime movers and electric motors driven by purchased energy—Continued. Electric motors driven by purchased energy.....	1,454	Horse-power 1,313	1,027	Horse-power 1,706	100.0
Prime movers, total.....	.....	.....	4	67	.....	Electric energy purchased <sup>2</sup> .....	1,512,686	.....	(*)	.....	.....
Steam engines.....	.....	.....	3	52	.....	OTHER EMBROIDERIES					
Internal-combustion engines.....	.....	.....	1	15	.....	Electric motors driven by purchased energy.....	1,191	Horse-power 968	1,218	Horse-power 1,157	100.0
Electric motors driven by purchased energy.....	2,645	2,279	2,845	2,863	100.0	Electric energy purchased <sup>3</sup> .....	1,209,153	.....	(*)	.....	.....
Electric energy purchased <sup>2</sup> .....	.....	Kilowatt-hours 2,721,739	.....	(*)	.....						
SCHIFFLI EMBROIDERIES											
Prime movers and electric motors driven by purchased energy, aggregate.....	1,454	Horse-power 1,313	1,031	Horse-power 1,773	100.0						
Prime movers, total.....	.....	.....	4	67	.....						
Steam engines.....	.....	.....	3	52	.....						
Internal-combustion engines.....	.....	.....	1	15	.....						

<sup>1</sup> No statistics available for earlier years. See "Description of the industry," p. 273.  
<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>3</sup> Data incomplete.

# EMBROIDERIES

277

**TABLE 6.—WAGE EARNERS, BY MONTHS, FOR THE INDUSTRY AND ITS BRANCHES, BY STATES: 1929<sup>1</sup>**

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>THE INDUSTRY AS A WHOLE</b>														
United States.....	6, 622	6, 693	6, 819	<b>7, 009</b>	6, 864	6, 616	6, 102	<i>5, 688</i>	6, 163	6, 762	7, 121	7, 017	6, 770	70.0
California.....	77	76	77	<b>90</b>	92	88	74	<i>69</i>	74	73	72	72	70	75.0
Illinois.....	570	540	540	<b>580</b>	630	594	573	<i>526</i>	580	600	622	546	<i>507</i>	80.5
Maryland.....	132	<i>114</i>	119	126	126	133	130	140	142	142	143	136	133	79.7
Massachusetts.....	46	40	47	<b>54</b>	47	44	39	<i>34</i>	34	45	48	52	46	93.0
Missouri.....	117	113	125	<b>127</b>	119	121	121	111	111	117	110	<i>109</i>	111	85.8
New Jersey.....	1, 988	2, 022	2, 112	<b>2, 121</b>	2, 086	1, 990	1, 833	<i>1, 711</i>	1, 836	2, 004	2, 114	2, 062	1, 963	80.7
New York.....	3, 189	3, 307	3, 320	<b>3, 425</b>	3, 267	3, 058	2, 842	<i>2, 651</i>	2, 926	3, 169	3, 452	3, 450	3, 395	76.8
Ohio.....	55	55	55	<b>59</b>	63	54	61	53	64	66	50	52	51	78.5
Pennsylvania.....	422	399	397	<b>412</b>	418	406	400	<i>365</i>	391	458	462	505	462	72.3
<b>SCHIFFLI EMBROIDERIES</b>														
United States.....	2, 757	2, 771	2, 865	<b>2, 901</b>	2, 861	2, 756	2, 553	<i>2, 418</i>	2, 570	2, 862	2, 938	2, 862	2, 777	82.3
Illinois.....	206	<i>190</i>	192	201	210	208	196	199	214	218	225	222	201	84.4
New Jersey.....	1, 798	1, 865	1, 944	<b>1, 948</b>	1, 910	1, 808	1, 647	<i>1, 522</i>	1, 637	1, 794	1, 890	1, 842	1, 760	78.1
New York.....	283	291	306	<b>303</b>	295	288	252	<i>251</i>	268	270	288	270	265	81.5
Pennsylvania.....	325	297	<i>289</i>	303	304	303	307	295	309	366	376	373	377	76.7
<b>OTHER EMBROIDERIES</b>														
United States.....	3, 865	3, 922	3, 954	<b>4, 108</b>	4, 003	3, 760	3, 549	<i>3, 270</i>	3, 584	3, 900	4, 183	4, 155	3, 993	78.2
Illinois.....	364	350	348	<b>379</b>	420	386	377	327	366	382	397	324	<i>306</i>	72.0
New Jersey.....	190	<i>157</i>	168	173	176	182	186	186	190	210	218	220	203	71.4
New York.....	2, 906	3, 016	3, 014	<b>3, 117</b>	2, 972	2, 770	2, 590	<i>2, 390</i>	2, 638	2, 890	3, 164	3, 171	3, 100	75.7
Pennsylvania.....	67	62	68	<b>69</b>	114	103	93	<i>70</i>	73	92	86	132	85	53.0

<sup>1</sup> No statistics available for earlier years. (See "Description of the Industry," p. 273.)

# FLAGS AND BANNERS

Description of the industry.—The principal products made from bunting, cotton felt, leather, silk, and of this industry are flags, banners, pennants, etc., other materials.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929.....	54	938	\$794,328	\$1,771,820	\$3,835,824	\$2,064,504	577
1927.....	46	1,046	807,006	2,282,456	4,536,348	2,253,892	700
1925.....	49	1,031	800,420	2,332,222	4,588,111	2,255,880	620
1923.....	52	878	758,485	2,024,130	3,807,309	1,783,178	748
1921.....	57	991	770,931	1,850,333	3,636,990	1,780,657	(*)
1919.....	79	1,065	795,242	3,286,165	5,346,089	2,059,024	778
1914.....	87	1,495	680,975	1,750,094	3,601,310	1,851,216	637
1909.....	55	934	317,930	1,087,226	1,084,349	897,123	380
1904.....	31	374	115,487	486,872	854,693	367,820	216
1899.....	36	609	148,933	547,165	1,038,052	490,887	210
PER CENT OF INCREASE OR DECREASE (-)							
1927-1929.....	(*)	-10.3	-11.5	-22.4	-15.4	-8.4	-17.0
1925-1927.....	(*)	1.5	0.8	-2.1	-1.1	-0.1	11.3
1923-1925.....	(*)	17.4	17.4	15.2	20.5	26.5	-15.9
1921-1923.....	(*)	-11.4	-2.4	9.4	4.7	-0.2	-----
1919-1921.....	(*)	-6.9	-2.3	-43.7	-32.0	-13.3	-----
1910-1929.....	(*)	-11.9	-0.1	-46.1	-28.2	0.2	-25.8
1909-1919.....	(*)	14.0	150.1	202.3	169.4	120.6	100.0
1899-1909.....	(*)	83.6	113.5	98.7	91.2	82.8	85.2

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not called for on schedule.  
<sup>4</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Cen- sus year	Num- ber of estab- lish- ments	Sal- aried offi- cers and emp- loy- ees <sup>1</sup>	Wage earn- ers (aver- age for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manu- facture <sup>3</sup>
					Total	Prime movers	Motors run by pur- chased energy			Total	Materials	Fuel and pur- chased energy		
United States.....	1929	54	190	938	577	150	427	\$439,488	\$794,328	\$1,771,320	\$1,741,664	\$20,656	\$3,835,824	\$2,064,504
	1927	46	177	1,046	700	235	465	362,603	807,006	2,282,456	2,251,231	31,225	4,536,348	2,253,892
	1919	79	220	1,065	778	317	461	480,900	795,242	3,286,165	3,259,463	26,702	5,346,089	2,059,024
California.....	1929	7	12	35	23	-----	23	34,384	42,420	101,512	100,163	1,349	270,551	175,039
	1927	6	11	39	32	-----	32	21,138	42,014	100,760	99,565	1,185	251,342	150,592
	1919	6	9	39	17	-----	17	17,067	27,923	90,360	89,232	1,128	142,386	52,026
Illinois.....	1929	6	20	97	32	-----	32	64,317	77,180	195,333	193,609	2,324	440,143	244,810
	1927	4	16	86	29	-----	29	42,586	83,084	155,626	154,253	1,373	367,954	212,328
	1919	9	24	112	120	-----	120	48,175	73,643	173,622	170,495	3,127	340,336	175,714
New York.....	1929	19	83	290	128	-----	128	148,406	252,221	503,360	496,552	6,808	1,163,079	659,710
	1927	14	77	290	100	-----	100	139,802	269,972	607,374	600,012	7,362	1,259,158	591,784
	1919	22	107	367	130	-----	130	239,225	310,203	1,480,504	1,472,305	8,199	2,173,553	693,049
Ohio.....	1929	5	15	99	241	120	121	39,937	102,609	128,463	123,477	4,686	333,400	204,967
	1927	5	15	99	318	205	113	40,017	83,982	139,795	134,570	5,216	353,250	213,404
	1919	11	20	123	248	150	98	43,071	80,713	221,598	218,506	3,092	432,522	210,924
Pennsylvania.....	1929	7	44	206	93	-----	93	110,234	155,510	621,230	614,535	6,695	1,079,059	467,829
	1927	0	42	308	114	-----	114	73,263	218,398	712,880	705,767	7,122	1,355,834	642,045
	1919	9	27	215	182	180	32	72,646	150,372	1,079,706	1,074,318	5,388	1,525,128	445,422
Other States.....	<sup>4</sup> 1929	10	18	211	60	30	30	42,211	104,328	221,422	213,928	7,494	543,532	322,110
	<sup>5</sup> 1927	11	16	224	107	30	77	35,837	195,456	506,022	497,055	8,967	648,801	442,779
	<sup>6</sup> 1919	22	33	209	81	17	64	60,776	143,388	240,375	234,607	5,768	723,164	482,789

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 31; 1927, 35; 1919, 60. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 1,159; 1927, 1,258; 1919, 1,945.  
<sup>2</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>4</sup> Iowa, 1 establishment; Massachusetts, 1; Michigan, 2; New Jersey, 1; Vermont, 1; Virginia, 4.  
<sup>5</sup> Iowa, 2 establishments; Massachusetts, 2; Michigan, 1; Missouri, 1; New Jersey, 1; Vermont, 1; Virginia, 2; Washington, 1.  
<sup>6</sup> Colorado, 2 establishments; Iowa, 2; Massachusetts, 3; Michigan, 4; Minnesota, 2; New Jersey, 1; Oregon, 1; Rhode Island, 1; Virginia, 2; Washington, 2; Wisconsin, 2.

# FLAGS AND BANNERS

**TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929**

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	315	Horse-power 677	240	Horse-power 700	221	Horse-power 629	186	Horse-power 778	148	Horse-power 637	100.0	100.0
Prime movers, total	2	150	3	235	3	235	0	317	10	402	20.0	40.7
Steam engines	1	120	2	205	2	205	3	225	4	320	20.8	28.9
Internal-combustion engines	1	30	1	30	1	30	2	42	5	47	5.2	5.4
Water wheels and water turbines							1	50	1	35		6.4
Electric motors driven by purchased energy	313	427	237	465	218	304	180	401	138	235	74.0	59.3
Electric motors, total	317	437	307	535	300	480	180	476	156	324	100.0	100.0
Driven by purchased energy	313	427	237	465	218	304	180	401	138	235	97.7	90.8
Driven by energy generated in establishments reporting	4	10	70	70	82	95	0	15	18	80	2.3	3.2
Electric generators	2	Kilowatts 105	3	Kilowatts 175	3	Kilowatts 175	(1)	(1)	(1)	(1)		
Electric energy purchased <sup>1</sup>		Kilowatt-hours 410, 140		(3)		(3)		(1)		(1)		

<sup>1</sup> Not called for on schedule.

<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>3</sup> Data incomplete.

**TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929**

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

State	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent minimums of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>United States:</b>														
1929	938	884	<i>875</i>	909	937	1,015	968	921	905	917	980	969	976	86.2
1925	1,031	<b>978</b>	989	1,015	1,038	1,091	1,151	1,021	992	999	1,031	1,031	1,037	85.0
1919	1,065	<b>1,337</b>	1,175	1,113	1,172	1,140	1,155	1,027	930	878	922	922	1,000	95.7
1914	1,495	<b>1,351</b>	1,407	1,478	1,552	1,599	1,624	1,503	1,477	1,518	1,498	1,485	1,448	83.2
<b>California</b>	35	33	34	39	38	42	32	31	31	28	35	36	35	66.7
Illinois	97	99	83	100	107	110	100	83	78	77	104	104	120	64.2
New York	290	284	287	285	278	290	298	303	298	292	290	288	291	91.7
Ohio	99	97	95	97	100	97	99	98	97	101	105	104	111	83.8
Pennsylvania	209	183	178	186	212	273	252	203	197	197	207	199	184	65.2

## FLAX AND HEMP, DRESSED

Description of the industry.—The dressing of flax and hemp consists in the separation of the woody portion of the straw from the fiber, a combined process of decay and mechanical treatment technically known as retting, breaking, scutching, and hackling. The principal product, namely, the fiber, sometimes termed "line," is used mainly in the manufacture of linen

goods and of cordage and twine. Tow or waste, a natural by-product of the dressing process, is also reported as a product.

Omission of State statistics.—In order to avoid disclosing data reported by individual establishments, no State statistics are given for this industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	6	47	\$35,406	\$93,477	\$197,035	\$103,558	420
1927	7	62	51,390	116,166	282,895	160,720	664
1925	9	82	88,534	244,417	459,071	214,654	1,487
1923	8	62	48,743	173,023	280,765	107,142	877
1921	8	112	71,747	201,064	267,036	86,672	(3)
1919	20	420	447,373	1,708,670	2,369,114	660,444	1,920
1914	16	110	45,271	155,247	282,048	97,401	832
1909	16	104	64,007	336,300	467,346	131,046	1,147
1904	17	214	59,977	233,132	340,963	113,831	600
1899	4	211	46,000	91,032	158,650	67,618	187
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	(9)	(9)	-31.1	-19.5	-30.4	-37.0	-34.4
1925-1927	(9)	(9)	-42.0	-52.5	-38.4	-22.3	-55.1
1923-1925	(9)	(9)	81.6	40.8	63.5	100.3	60.1
1921-1923	(9)	-44.6	-32.1	-13.6	4.9	60.9	-----
1919-1921	(9)	-73.3	-84.0	-88.2	-88.7	-89.0	-----
1919-1929	(9)	-88.8	-92.1	-94.5	-91.7	-84.3	-77.7
1909-1919	(9)	156.1	598.9	408.1	406.9	404.0	67.4
1899-1909	(9)	-22.3	39.1	269.4	194.0	93.8	513.4

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not called for on schedule.  
<sup>4</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS FOR THE UNITED STATES: 1929, 1927, AND 1919

[Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	<sup>4</sup> 1929	6	13	47	420	295	134	\$18,428	\$35,406	\$93,477	\$90,580	\$2,897	\$197,035	\$103,558
	<sup>5</sup> 1927	7	10	62	664	523	131	12,912	51,390	116,166	111,127	5,030	282,895	160,720
	<sup>6</sup> 1919	20	45	420	1,920	1,535	385	87,591	447,373	1,708,670	1,652,874	55,796	2,369,114	660,444

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 2; 1927, 5; 1919, 26. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 62; 1927, 77; 1919, 491.  
<sup>2</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>4</sup> Michigan, 2 establishments; Minnesota, 1; Wisconsin, 3.  
<sup>5</sup> Michigan, 1 establishment; Minnesota, 1; North Dakota, 1; Wisconsin, 4.  
<sup>6</sup> California, 1 establishment; Illinois, 1; Indiana, 1; Kentucky, 3; Michigan, 4; Minnesota, 1; North Dakota, 1; Oregon, 1; Wisconsin, 7.

TABLE 3.—PRIME MOVERS, MOTORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	13	Horse-power 429	16	Horse-power 654	25	Horse-power 1,457	38	Horse-power 1,920	16	Horse-power 832	100.0	100.0
Prime movers, total.....	8	295	11	523	11	846	15	1,535	12	680	68.8	79.9
Steam, total.....	0	235	10	520	11	845	14	1,455	8	515	54.8	76.7
Engines.....	0	235	10	520	11	845	12	1,345	(1)	(1)	54.8	70.0
Turbines.....							2	110	(1)	(1)		5.7
Internal-combustion engines.....			1	8			1	80	4	165		4.2
Water wheels and water turbines.....	2	60									14.0	
Electric motors driven by purchased energy.....	5	134	5	131	14	612	23	385	4	152	31.2	20.1
Electric motors, total.....	5	134	5	131	14	612	24	395	4	152	100.0	100.0
Driven by purchased energy.....	5	134	5	131	14	612	23	385	4	152	100.0	97.5
Driven by energy generated in establishments reporting.....							1	10				2.5
Electric energy purchased <sup>1</sup> .....		Kilowatt-hours 38,410		( <sup>2</sup> )		( <sup>2</sup> )		( <sup>2</sup> )		( <sup>2</sup> )		

<sup>1</sup> Not called for separately on schedule.  
<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>3</sup> Data incomplete.  
<sup>4</sup> Not called for on schedule.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES: 1929, 1925, 1919, 1914 AND 1909

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

UNITED STATES	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
1929.....	47	80	60	35	30	62	53	86	64	17	<i>5</i>	23	63	5.8
1925.....	82	123	91	70	38	37	40	42	40	54	100	152	188	19.1
1919.....	420	570	304	387	301	307	442	387	427	453	441	487	614	68.1
1914.....	116	162	180	160	108	111	85	87	35	102	108	98	90	46.1
1909.....	164	178	229	210	213	160	130	87	77	118	164	206	183	33.6

## HAIRCLOTH

**Description of the industry.**—This industry embraces establishments engaged primarily in the weaving of haircloth, mainly from cotton warp with horsehair filling. Haircloth is used principally for upholstery purposes and as a stiffening in the manufacture of clothing.

**Omission of State statistics.**—In order to avoid disclosing data reported by individual establishments, no State statistics are given for this industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1909 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929.....	13	450	\$520,000	\$2,550,563	\$3,855,388	\$1,304,825	1,113
1927.....	16	385	480,045	2,088,784	3,616,110	927,335	1,312
1925.....	15	355	387,450	1,897,479	2,746,225	848,740	1,058
1923.....	18	499	404,401	2,511,986	3,733,969	1,221,083	1,333
1921.....	17	301	329,110	1,546,061	2,618,319	1,072,258	( <sup>3</sup> )
1919.....	18	425	425,149	2,250,142	3,315,113	1,055,071	972
1914.....	19	595	200,280	1,654,006	2,395,480	741,480	1,580
1909 <sup>4</sup> .....	14	538	252,279	1,613,581	2,230,033	616,452	848
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929.....	( <sup>5</sup> )	16.9	9.7	-5.1	6.6	40.7	-15.2
1925-1927.....	( <sup>5</sup> )	8.5	23.9	41.7	31.7	9.3	24.0
1923-1925.....	( <sup>5</sup> )	-28.9	-16.6	-24.5	-20.5	-30.5	-20.6
1921-1923.....	( <sup>5</sup> )	65.8	41.1	62.5	42.6	14.0	.....
1919-1921.....	( <sup>5</sup> )	-29.2	-22.6	-31.6	-21.0	1.5	.....
1919-1929.....	( <sup>5</sup> )	5.0	23.9	12.0	16.3	23.6	14.5
1909-1919.....	( <sup>5</sup> )	-21.0	68.5	40.0	48.7	71.3	14.6

- <sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not called for on schedule.  
<sup>4</sup> No comparable figures available for years prior to 1909.  
<sup>5</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS FOR THE UNITED STATES: 1929, 1927, AND 1919

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States.....	<sup>4</sup> 1929	13	42	450	1,113	455	658	\$126,838	\$520,069	\$2,550,563	\$2,503,154	\$47,409	\$3,855,388	\$1,304,825
	<sup>5</sup> 1927	16	39	385	1,312	810	502	83,807	480,045	2,088,784	2,647,153	41,631	3,616,110	927,335
	<sup>6</sup> 1919	18	67	425	972	826	149	143,910	425,149	2,250,142	2,217,552	41,590	3,315,113	1,055,071

- <sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 12; 1927, 18; 1919, 19. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 604; 1927, 442; 1919, 511.  
<sup>2</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>4</sup> Illinois, 1 establishment; New York, 1; Pennsylvania, 11.  
<sup>5</sup> Illinois, 2 establishments; New York, 1; Pennsylvania, 13.  
<sup>6</sup> Illinois, 1 establishment; Louisiana, 1; New York, 1; Pennsylvania, 14; Rhode Island, 1.



TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	175	Horse-power 1,113	52	Horse-power 1,312	36	Horse-power 1,058	18	Horse-power 972	17	Horse-power 1,580	100.0	100.0
Prime movers, total.....	5	455	0	810	7	780	8	826	11	1,452	40.0	85.0
Steam engines.....	5	455	8	700	7	780	6	620	0	1,202	40.0	63.0
Internal-combustion engines.....			1	20								
Water wheels and water turbines.....							2	200	2	160		21.1
Electric motors driven by purchased energy.....	170	658	43	502	29	278	10	146	6	137	59.1	15.0
Electric motors, total.....	173	723	47	500	32	343	10	146	12	242	100.0	100.0
Driven by purchased energy.....	170	658	43	502	29	278	10	146	6	137	91.0	100.0
Driven by energy generated in establishments reporting.....	3	65 Kilo-watts	4	67 Kilo-watts	3	65 Kilo-watts			6	105	9.0	
Electric generators.....	1	65 Kilowatt-hours	2	80	1	65	(1)	(1)	(1)	(1)		
Electric energy purchased <sup>2</sup> .....		748, 741		(3)		(3)		(1)		(1)		

<sup>1</sup> Not called for on schedule.

<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>3</sup> Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909

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

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
1929.....	450	443	446	<b>430</b>	445	444	447	460	450	<b>402</b>	451	452	448	95.0
1925.....	355	358	383	360	351	340	337	<b>326</b>	320	350	300	362	<b>388</b>	84.0
1919.....	425	385	391	386	<b>373</b>	387	414	436	458	451	<b>478</b>	468	473	78.0
1914.....	505	625	623	616	613	576	589	582	503	504	504	558	577	89.3
1909.....	638	<i>506</i>	544	547	530	537	540	530	554	545	537	532	536	91.1

# HAT AND CAP MATERIALS, MEN'S

Description of the industry.—The establishments classified in this industry are those engaged primarily in the preparation of hatters' fur, in the manufacture of linings, sweatbands, visors, and trimmings, and in

printing on sweatbands, linings, and bands. The industry does not include the manufacture of certain classes of hat and cap materials, such as leather and dressed fur, which are covered by separate reports.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	112	2,564	\$2,875,718	\$17,305,115	\$25,030,943	\$7,725,828	5,161
1927	96	2,762	2,658,871	15,671,792	23,339,341	7,667,549	5,168
1925	89	2,127	2,413,187	15,218,093	22,040,047	6,830,951	5,141
1923	104	2,304	2,410,803	13,863,235	20,507,592	6,641,357	4,740
1921	103	1,722	1,737,221	6,713,371	11,545,326	4,831,955	( <sup>3</sup> )
1919	133	3,009	3,132,571	10,643,910	20,521,212	9,877,235	4,927
1914	98	1,775	804,246	5,051,857	6,920,342	1,877,485	2,946
1909	74	2,367	940,520	5,370,970	8,230,310	2,856,340	2,860
1904	65	2,414	848,751	4,216,908	6,440,108	2,223,202	2,036
1899	70	1,371	434,148	2,797,756	3,849,110	1,051,360	1,680
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	( <sup>4</sup> )	-7.2	8.2	10.4	7.2	0.8	0.1
1925-1927	( <sup>4</sup> )	29.9	10.2	3.0	5.9	12.2	0.3
1923-1925	-14.4	-7.7	0.1	9.8	7.5	2.8	8.3
1921-1923	1.0	33.8	38.8	106.5	77.6	37.5	-----
1919-1921	-22.6	-42.8	-44.5	-59.7	-56.5	-51.1	-----
1910-1929	-15.8	-14.8	-8.2	4.0	-5.6	-21.8	4.8
1909-1919	( <sup>4</sup> )	27.1	231.0	209.4	222.0	245.8	72.3
1899-1909	( <sup>4</sup> )	72.6	118.0	92.3	114.0	171.7	71.7

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not called for on schedule.  
<sup>4</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	112	296	2,564	5,164	3,228	1,936	\$958,415	\$2,875,718	\$17,305,115	\$17,088,802	\$216,313	\$25,030,943	\$7,725,828
	1927	96	267	2,762	5,158	2,631	2,527	934,499	2,658,871	15,671,792	15,479,445	192,347	23,339,341	7,667,549
	1919	133	341	3,009	4,927	3,877	1,050	950,127	3,132,571	10,643,910	10,490,084	153,835	20,521,212	9,877,235
Connecticut	1929	10	74	886	2,634	1,527	1,107	224,356	1,071,859	6,102,629	5,974,222	128,407	9,009,909	2,997,340
	1927	13	41	1,025	2,438	1,440	992	161,231	806,086	3,894,180	3,775,733	88,307	5,893,465	1,939,335
	1919	15	53	682	1,789	1,000	720	95,529	610,700	3,057,007	2,980,402	67,605	4,931,487	1,874,480
Illinois	1929	5	9	55	8	-----	8	16,009	62,853	105,061	105,188	773	101,970	86,015
	1927	5	5	33	16	-----	16	10,405	43,104	32,488	32,198	200	104,791	72,303
	1919	7	5	40	18	-----	18	12,843	12,843	258,100	257,107	1,083	380,571	122,381
New Jersey	1929	8	27	422	753	486	207	73,407	295,443	2,251,644	2,231,130	20,514	3,020,730	778,086
	1927	7	24	419	660	401	265	72,760	419,434	2,318,648	2,791,220	27,428	4,192,722	1,374,071
	1919	9	29	471	938	865	73	99,700	456,813	2,100,436	2,072,004	28,432	3,684,271	1,683,835
New York	1929	74	172	1,132	1,681	1,215	406	600,663	1,386,972	8,687,158	8,026,633	66,525	12,391,071	3,793,913
	1927	62	175	1,211	1,948	784	1,164	644,210	1,309,180	8,712,732	8,040,048	72,684	12,792,310	4,079,678
	1919	86	235	1,731	2,162	1,949	213	700,177	1,944,837	10,688,825	10,030,439	65,386	16,730,514	6,041,689
Other States	1929	6	14	69	88	-----	88	43,890	53,591	157,723	151,620	6,064	318,197	160,474
	1927	9	22	74	90	-----	90	45,875	81,007	243,794	240,246	3,548	446,053	202,259
	1919	16	10	85	20	3	17	41,875	84,002	539,461	535,132	4,329	794,369	254,908

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 77; 1927, 87; 1919, 134. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 2,937; 1927, 3,116; 1919, 3,484.  
<sup>2</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Massachusetts, 3 establishments; Pennsylvania, 3.

<sup>5</sup> Massachusetts, 4 establishments; Ohio, 1; Pennsylvania, 4.

<sup>6</sup> Maryland, 1 establishment; Massachusetts, 5; Michigan, 1; Missouri, 3; Pennsylvania, 6.

# HAT AND CAP MATERIALS, MEN'S

285

**TABLE 3.—PRODUCTS, BY CLASS AND VALUE, BY STATES: 1929 AND 1927**

(The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for 1927 represent production. See GENERAL EXPLANATIONS—Value of Products. Connecticut is the only State which can be shown separately without disclosing data for individual establishments)

STATE	Census year	Total	Hatters' fur	Sweatbands	Hat linings	Cap fronts	Stamping and embossing (receipts for work done)	Other products, value, and receipts for contract work, except stamping and embossing
United States	1929	\$25,030,043	\$18,087,830	\$1,780,262	\$2,004,372	\$886,230	\$636,772	\$1,545,478
	1927	23,330,341	17,078,344	1,700,660	1,351,033	612,303	658,308	1,817,691
Connecticut	1929	9,000,060	8,954,563					145,496
	1927	5,803,465	5,580,410					223,055
New Jersey, New York	1929	15,420,801	9,133,276	1,753,212	2,020,960	864,254	559,574	1,080,525
	1927	16,985,632	11,497,934	1,686,200	1,351,033	578,060	572,090	1,297,855
Other States	1929	510,173		27,040	64,412	21,070	77,108	310,547
	1927	550,844		104,379		33,433	86,218	320,781

<sup>1</sup> Not including values of hat and cap materials made as secondary products by establishments classified in other industries, as follows: 1929, \$60,916; 1927, \$126,671.  
<sup>2</sup> Illinois, Massachusetts, and Pennsylvania.  
<sup>3</sup> Illinois, Massachusetts, Ohio, and Pennsylvania.

**TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929**

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	510	Horse-power 5,164	440	Horse-power 5,158	358	Horse-power 5,141	387	Horse-power 4,927	180	Horse-power 2,040	100.0	100.0
Prime movers, total	20	3,228	28	2,031	21	3,515	35	3,877	20	2,515	62.5	78.7
Steam, total	14	2,800	10	2,210	16	3,166	24	3,007	10	2,200	54.2	70.2
Engines	12	2,145	14	1,500	14	2,450	24	3,007	(3)	(1)	41.5	73.2
Turbines	2	955	2	550	2	707			(3)	(1)	12.7	
Internal-combustion engines	1	1	7	15	1	10	6	65	5	54	(5)	1.3
Water wheels and water turbines	5	427	5	307	4	330	5	205	5	201	8.3	4.2
Electric motors driven by purchased energy	400	1,930	412	2,527	337	1,626	352	1,050	157	434	37.5	21.3
Electric motors, total	637	2,933	506	3,243	366	1,647	484	1,070	202	687	100.0	100.0
Driven by purchased energy	400	1,930	412	2,527	337	1,626	352	1,050	157	434	60.0	53.1
Driven by energy generated in establishments reporting	147	907	94	716	29	321	132	920	45	550	34.0	46.9
Electric generators	7	Kilowatts 1,280 Kilowatt-hours	0	Kilowatts 1,475	2	Kilowatts 300	(4)	(3)	(4)	(3)		
Electric energy purchased <sup>4</sup>		1,876,053		(4)		(4)		(3)		(3)		

<sup>1</sup> Not called for separately on schedule.  
<sup>2</sup> Less than one-tenth of 1 per cent.  
<sup>3</sup> Not called for on schedule.  
<sup>4</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>5</sup> Data incomplete.

**TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929**

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
United States:														
1929	2,564	2,638	2,750	2,893	2,677	2,641	2,541	2,510	2,505	2,502	2,488	2,340	2,250	77.8
1925	2,127	2,098	2,138	2,140	2,138	2,130	2,098	2,080	2,177	2,141	2,084	2,145	2,157	95.5
1919	3,000	2,472	2,625	2,694	2,400	2,168	3,007	3,410	3,473	3,502	3,510	3,505	3,013	58.1
1914	1,775	1,844	1,803	1,910	1,804	1,803	1,813	1,733	1,690	1,687	1,680	1,781	1,824	84.4
1909	2,367	2,435	2,400	2,378	2,260	2,220	2,252	2,284	2,312	2,410	2,416	2,452	2,651	87.4
Connecticut	880	1,021	963	1,029	962	922	855	800	838	818	854	781	714	69.8
Illinois	55	54	81	50	57	58	54	52	55	50	52	47	35	77.0
New Jersey	422	383	458	488	402	423	427	408	426	440	423	300	375	70.6
New York	1,132	1,104	1,104	1,231	1,181	1,160	1,140	1,110	1,125	1,127	1,008	1,063	1,074	84.8

# HATS AND CAPS, EXCEPT FELT AND STRAW, MEN'S

Description of the industry.—This industry classification embraces establishments engaged primarily in the manufacture of cloth hats and caps, silk hats, and opera or crush hats.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1904 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Paid for contract work	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	576	5,826	\$7,604,078	(3)	\$16,907,661	\$35,000,664	\$18,993,003	1,706
1927	568	6,300	9,126,438	(3)	20,702,206	41,213,965	20,511,669	1,699
1925	570	6,552	9,242,937	\$947,150	22,608,729	43,822,729	21,124,000	1,876
1923	651	7,313	9,593,833	925,670	22,250,182	42,811,444	20,501,262	1,782
1921	584	6,505	8,701,150	320,047	18,536,982	36,087,008	18,450,020	(1)
1919	700	7,530	9,438,864	135,021	24,176,514	44,530,861	20,363,347	1,687
1914	580	7,322	4,507,521	109,008	9,267,677	18,593,221	9,325,644	1,313
1909	404	6,201	3,421,055	65,647	6,000,452	13,680,338	6,998,886	960
1904	415	6,604	3,353,889	0,710	6,307,663	12,955,400	6,047,827	788
PER CENT OF INCREASE OR DECREASE (—)								
1927-1929	1.4	-7.5	-15.7	-----	-18.3	-12.0	-7.4	-10.3
1925-1927	-1.9	-3.8	-1.3	-----	-8.8	-6.0	-2.9	6.0
1923-1925	-11.1	-10.4	-3.7	-8.5	2.0	2.4	2.7	5.3
1921-1923	11.5	12.4	10.3	183.9	20.0	15.7	11.4	-----
1919-1921	-17.6	-13.7	-7.8	139.0	-23.3	-17.0	-0.4	-----
1919-1929	-18.8	-22.7	-18.5	-----	-30.1	-10.4	-0.7	6.5
1909-1919	43.5	21.6	175.9	107.0	261.4	225.4	191.0	75.7

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> No comparable figures are available for years prior to 1904.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining State in groups. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	576	889	5,826	1,706	3	1,703	\$2,314,648	\$7,604,078	\$16,907,661	\$16,784,508	\$173,163	\$35,000,664	\$18,993,003
	1927	568	1,014	6,300	1,699	-----	1,900	2,480,033	9,126,438	20,702,206	20,507,153	195,143	41,213,965	20,511,669
	1919	700	1,282	7,530	1,687	165	1,522	2,765,099	9,438,864	24,176,514	24,018,776	157,738	44,530,861	20,363,347
Individual States:														
California	1929	32	31	234	60	-----	69	71,084	306,062	637,213	632,250	4,957	1,235,525	598,312
	1927	34	30	311	70	-----	70	59,080	433,645	971,498	971,506	7,902	1,825,187	845,089
	1919	80	32	222	40	-----	40	53,121	287,908	617,940	611,605	6,254	1,174,092	556,113
Connecticut	1929	9	7	77	19	-----	19	9,405	85,743	210,247	208,301	1,866	309,901	189,744
	1927	9	17	83	23	-----	23	31,473	117,341	308,310	304,685	3,025	633,768	205,448
	1919	10	24	137	18	-----	18	65,370	178,462	511,150	508,588	2,562	898,545	387,535
Illinois	1929	48	90	570	131	-----	131	362,483	735,106	1,544,367	1,527,219	17,148	3,545,418	2,001,051
	1927	59	87	588	181	-----	181	258,270	875,978	1,856,535	1,840,143	16,392	3,724,025	1,808,390
	1919	47	114	670	136	-----	136	304,137	896,882	2,348,250	2,334,070	14,180	4,190,613	1,842,363
Indiana	1929	5	10	65	16	-----	16	38,344	75,759	102,744	101,052	1,692	368,250	205,512
	1927	6	12	64	12	-----	12	60,005	81,731	190,780	194,797	1,983	407,990	211,180
	1919	4	9	22	11	-----	11	11,441	30,212	85,152	84,647	505	165,092	70,710
Iowa	1929	7	15	63	60	-----	60	36,513	68,013	156,860	154,940	1,920	323,551	166,682
	1927	6	10	101	10	-----	10	21,479	78,214	180,407	184,404	1,943	351,037	105,200
	1919	4	13	68	7	-----	7	17,165	52,097	165,780	164,836	960	280,603	114,877
Kentucky	1929	7	26	142	28	-----	28	89,089	133,884	368,217	365,048	3,169	730,440	371,223
	1927	5	42	145	23	-----	23	117,613	150,108	420,585	423,702	2,833	881,147	454,592

See footnotes at end of table.

# HATS AND CAPS, EXCEPT FELT AND STRAW, MEN'S

287

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
<b>Individual States—Contd.</b>														
Maryland	1929	15	24	99	25	-----	25	\$46,768	\$108,021	\$205,130	\$202,548	\$2,591	\$642,256	\$347,117
	1927	18	39	134	27	-----	27	59,444	172,366	395,262	392,040	3,222	904,329	509,067
	1919	24	17	98	42	-----	42	12,491	100,763	318,484	315,705	2,779	500,693	272,209
Massachusetts	1929	38	43	220	63	-----	63	93,858	291,061	671,090	662,272	8,818	1,256,501	685,411
	1927	36	43	269	130	-----	130	100,358	347,233	765,930	740,935	8,995	1,620,365	804,435
	1919	42	74	370	72	-----	72	163,224	508,775	1,380,599	1,370,724	9,875	2,403,884	1,017,285
Michigan	1929	6	6	73	30	-----	30	10,733	81,711	187,298	185,654	1,644	373,672	186,374
	1927	6	14	61	11	-----	11	20,989	72,034	168,953	167,271	1,682	353,691	184,708
Minnesota	1929	8	16	86	16	-----	16	25,758	114,800	293,845	290,008	2,437	524,838	230,093
	1927	8	9	80	26	-----	26	10,767	111,623	257,775	255,029	1,740	624,508	264,733
	1919	11	13	83	18	-----	18	10,264	88,838	280,222	288,197	1,025	492,703	173,481
Missouri	1929	31	84	628	114	-----	114	201,221	628,046	1,967,747	1,950,667	17,060	3,589,986	1,622,189
	1927	26	81	648	201	-----	201	221,588	721,845	2,138,810	2,122,844	15,972	3,743,795	1,604,079
	1919	22	152	348	55	-----	55	171,895	209,225	1,110,518	1,102,634	7,884	1,893,461	782,043
New Jersey	1929	21	30	303	83	-----	83	94,107	451,964	852,244	842,101	10,143	1,793,409	941,165
	1927	20	63	307	84	-----	84	147,681	607,858	1,213,870	1,200,231	13,648	2,477,261	1,263,355
	1919	21	23	288	45	10	29	67,060	303,195	627,782	621,597	6,185	1,126,617	498,835
New York	1929	231	272	1,065	722	3	719	673,149	3,212,647	6,675,000	6,615,837	59,163	14,552,003	7,877,005
	1927	214	298	1,000	678	-----	678	733,829	3,031,628	7,643,529	7,574,370	69,169	15,490,110	7,840,583
	1919	349	498	3,314	781	80	701	1,102,795	4,883,542	11,998,554	11,906,514	92,010	22,028,499	10,059,857
Ohio	1929	31	70	398	93	-----	93	174,835	408,330	1,107,145	1,090,109	8,036	2,234,700	1,127,555
	1927	26	98	482	132	-----	132	200,144	505,109	1,308,686	1,298,742	9,944	2,851,864	1,543,178
	1919	31	100	492	92	-----	92	211,875	471,137	1,606,977	1,600,693	6,284	2,016,457	1,210,480
Pennsylvania	1929	50	59	461	217	-----	217	119,493	605,382	941,536	921,673	19,863	2,313,673	1,372,137
	1927	51	66	453	205	-----	205	155,507	670,789	1,470,442	1,447,869	22,573	2,788,661	1,318,219
	1919	73	137	770	227	3	224	308,724	913,294	2,026,812	1,998,380	28,432	4,209,912	2,183,100
Rhode Island	1929	3	3	14	4	-----	4	5,780	10,140	35,598	34,984	584	70,436	34,868
	1927	(4)	(4)	(9)	(4)	-----	(4)	(9)	(9)	(9)	(9)	(9)	(9)	(9)
	1919	4	11	11	4	-----	4	15,000	15,000	53,540	53,221	328	90,312	30,763
Texas	1929	4	16	50	16	-----	16	47,295	20,802	107,215	105,707	1,448	266,298	189,053
	1927	5	13	60	16	-----	16	20,298	45,231	205,209	203,956	1,253	362,200	166,991
	1919	3	6	24	12	6	6	0,270	22,478	43,120	41,814	1,306	102,010	58,890
Wisconsin	1929	10	28	81	34	-----	34	90,786	114,041	290,120	196,302	3,818	474,545	274,425
	1927	10	29	93	27	-----	27	45,268	125,970	231,884	226,495	2,389	510,366	284,481
	1919	8	13	62	14	-----	14	25,001	70,809	70,658	78,022	1,636	317,182	237,474
<b>Groups of States:</b>														
Ala., 1 est.; D. C., 1; Ga., 1; La., 1; Tenn., 1	1929	5	5	38	22	-----	22	6,502	34,411	106,296	104,478	1,818	202,863	90,567
Colo., 4 est.; Nebr., 2; Okla., 1	1929	7	14	92	13	-----	13	20,984	92,392	250,536	248,424	2,112	475,357	221,821
Oreg., 3 est.; Utah, 1; Wash., 4	1929	8	21	107	21	-----	21	79,021	195,304	237,195	234,868	2,337	487,996	259,801
<b>States not shown separately</b>														
	1927	23	57	345	78	-----	78	165,460	310,748	897,810	887,084	9,832	1,750,187	868,371
	1919	26	48	350	104	60	44	142,800	365,827	876,952	871,409	5,543	1,698,417	821,565

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 564; 1927, 701; 1919, 931. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 7,270; 1927, 8,015; 1919, 9,752.

<sup>2</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Withheld from publication in order to avoid disclosing data for individual establishments.

<sup>5</sup> Alabama, 1 establishment; Colorado, 3; District of Columbia, 2; Georgia, 2; Louisiana, 1; Nebraska, 2; Oregon, 4; Rhode Island, 2; Tennessee, 2; Washington, 4.

<sup>6</sup> Arkansas, 1 establishment; Colorado, 3; Delaware, 1; District of Columbia, 3; Florida, 1; Kentucky, 3; Louisiana, 1; Michigan, 5; Nebraska, 2; Oregon, 3; Virginia, 2; Washington, 1.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—PRODUCTS, BY KIND, NUMBER, AND VALUE, BY STATES: 1929 AND 1927

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for 1927 represent production. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments. Certain of the "Other States," however, reported larger numbers and values of cloth hats and caps than some of the States shown separately]

KIND	1929		1927		KIND	1929		1927	
	Dozens	Value	Dozens	Value		Dozens	Value	Dozens	Value
1. "Hats and caps, except felt and straw" industry, all products, total value.....		\$35,900,604		\$41,213,965	Hats and caps, etc.—Continued. Cloth hats and caps—Contd.				
2. Hats and caps, except felt and straw.....		33,332,981		39,650,459	Illinois.....	329,031	\$3,276,408	348,359	\$3,651,975
3. Other products (not normally belonging to the industry).....		1,413,696		796,773	Indiana.....	26,583	368,256	29,653	407,960
4. Receipts for contract work.....		1,153,987		772,733	Iowa.....	36,131	307,408	28,199	317,744
5. Hats and caps (except felt and straw) made as secondary products in other industries, value.....		1,498,897		1,791,643	Kentucky.....	62,059	730,440	74,000	881,147
Hats and caps, except felt and straw, all industries: Aggregate value (sum of 2 and 5).....		34,831,878		41,442,102	Maryland.....	67,601	624,063	67,800	894,963
Cloth hats and caps, total.....	4,530,793	34,158,155	4,622,144	41,348,653	Massachusetts.....	121,815	1,215,241	132,411	1,704,868
California.....	94,749	1,140,004	126,082	1,670,893	Michigan.....	29,511	373,672	26,350	353,661
Connecticut.....	38,888	410,670	36,739	490,005	Minnesota.....	65,824	877,123	86,630	894,222
					Missouri.....	441,704	3,420,451	459,925	4,070,242
					New Jersey.....	400,256	1,681,392	487,098	2,450,528
					New York.....	2,100,316	13,629,617	1,924,327	15,426,060
					Ohio.....	223,837	2,290,411	185,800	2,836,804
					Pennsylvania.....	236,400	2,027,447	383,901	2,768,163
					Texas.....	15,530	188,298	23,015	309,050
					Wisconsin.....	52,196	455,945	60,095	507,500
					Other States.....	104,319	1,225,979	140,260	1,732,791
					Other hats and caps.....	45,157	673,723	(1)	93,449

<sup>1</sup> No data.

TABLE 4.—PRIME MOVERS, MOTORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	1,611	Horse-power 1,796	1,319	Horse-power 1,999	1,400	Horse-power 1,876	1,713	Horse-power 1,687	1,430	Horse-power 1,313	100.0	100.0
Prime movers, total.....	1	3			2	89	8	105	10	178	0.2	9.8
Steam engines.....	1	3			1	85	0	168	4	150	0.2	9.4
Internal-combustion engines.....					1	4	2	7	5	25		0.4
Water wheels and water turbines.....									1	3		
Electric motors driven by purchased energy.....	1,610	1,793	1,319	1,999	1,468	1,787	1,705	1,522	1,426	1,135	99.8	90.2
Electric motors, total.....	1,610	1,793	1,319	1,999	1,468	1,787	1,721	1,537	1,443	1,200	100.0	100.0
Driven by purchased energy.....	1,610	1,793	1,319	1,999	1,468	1,787	1,705	1,522	1,426	1,135	100.0	99.0
Driven by energy generated in establishments reporting.....							16	15	17	65		1.0
Electric energy purchased <sup>1</sup> .....		Kilowatt-hours 3,170,227		( <sup>2</sup> )		( <sup>2</sup> )		( <sup>2</sup> )		( <sup>2</sup> )		

<sup>1</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>2</sup> Data incomplete.

<sup>3</sup> Not called for on schedule.

# HATS AND CAPS, EXCEPT FELT AND STRAW, MEN'S

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
United States:														
1929	5,820	5,704	5,818	6,018	5,060	5,850	5,080	5,035	5,775	5,013	6,039	5,802	<i>5,612</i>	92.0
1925	6,552	6,250	6,415	6,443	6,570	6,643	6,580	6,370	6,685	6,871	6,875	6,701	<i>6,214</i>	90.4
1919	7,539	6,976	7,002	6,820	6,866	7,215	7,249	6,789	7,691	8,118	8,523	8,601	<i>8,618</i>	78.8
1914	7,322	7,200	7,438	7,400	7,297	7,388	7,310	7,350	7,830	7,503	7,391	<i>7,152</i>	7,212	95.3
1909	6,201	5,965	<i>5,934</i>	6,033	5,083	6,092	6,055	6,100	6,325	6,383	6,482	6,533	6,477	90.8
California	234	210	236	234	235	222	221	<i>218</i>	210	210	216	211	237	88.6
Connecticut	77	79	79	79	78	78	76	70	77	77	77	70	76	96.2
Illinois	570	490	550	602	602	604	620	535	555	601	604	590	550	82.1
Indiana	65	70	68	67	66	66	65	68	64	61	60	57	59	81.4
Iowa	63	60	59	71	72	59	63	<i>54</i>	54	65	63	60	63	75.0
Kentucky	142	161	169	167	154	134	135	132	132	134	146	132	<i>121</i>	74.2
Maryland	90	95	100	101	102	102	97	95	96	106	103	101	90	84.9
Massachusetts	220	219	220	216	224	225	221	<i>218</i>	218	221	223	221	216	94.2
Michigan	73	69	84	78	82	77	71	74	72	66	65	69	67	77.4
Minnesota	86	87	88	87	87	86	82	82	85	87	87	87	83	93.2
Missouri	628	617	635	646	595	600	599	571	615	650	734	602	591	76.7
New Jersey	393	380	388	396	403	411	418	408	383	377	384	381	370	90.2
New York	1,965	1,904	1,927	2,066	2,047	1,900	1,972	1,895	1,931	1,969	2,066	1,973	1,903	91.8
Ohio	368	378	392	387	381	365	354	373	380	377	369	340	<i>323</i>	82.4
Pennsylvania	461	461	462	469	471	466	457	461	460	461	440	457	458	95.3
Rhode Island	14	14	14	14	14	14	14	14	14	15	15	15	15	92.0
Texas	50	42	47	47	47	46	46	67	67	56	51	53	53	73.7
Wisconsin	81	93	80	80	70	70	78	78	78	70	70	70	70	81.7

## HATS, FUR-FELT

**Description of the industry.**—The establishments assigned to this industry are engaged primarily in the manufacture of stiff or soft hats (chiefly for men's wear) or hat bodies from hatters' fur. The principal material used is the fur of the hare. Some establishments perform all the various processes, beginning with the first treatment of the raw fur, while others purchase the cut fur, and still others buy the hat bodies in the rough and finish and trim them.

Establishments engaged primarily in cutting hatters' fur are not included in this industry but are classified under "Hat and cap materials."

**Duplication in cost of materials and value of products.**—Because of the use of the products of establishments manufacturing hat bodies as materials by those making finished hats, the total cost of materials and the total value of products for the industry include some duplication; that is to say, if every establishment performed all the manufacturing processes the cost of materials and the value of products would not include the amounts paid by certain establishments for hat bodies manufactured by other establishments.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	159	16,530	\$22,502,542	\$55,298,045	\$102,004,165	\$46,706,120	10,894
1927 <sup>3</sup>	139	15,898	22,854,094	51,053,257	99,184,842	48,131,585	20,617
1925	146	15,156	20,466,420	40,124,184	80,006,890	39,942,206	17,048
1923	103	16,722	21,531,362	34,447,703	75,263,064	40,805,296	18,488
1921	154	13,880	15,881,848	26,252,448	52,614,167	26,861,710	( <sup>4</sup> )
1919	176	18,510	19,642,531	40,153,019	82,745,308	42,537,289	20,377
1914	224	21,318	12,070,812	16,947,058	37,349,744	20,402,036	20,774
1909	273	26,064	14,223,192	22,109,231	47,864,030	25,765,300	19,017
1904	216	22,047	11,282,237	15,975,206	30,620,353	20,654,147	16,630
1899	171	18,860	9,119,264	13,513,068	27,811,187	14,297,519	11,843
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	14.4	4.0	-1.5	8.3	2.8	-3.0	-3.0
1925-1927	-4.3	4.9	11.7	27.2	23.0	20.5	14.3
1923-1925	-10.4	-9.4	-4.9	16.5	6.4	-2.1	-2.9
1921-1923	5.8	20.5	35.0	31.2	43.0	54.8	
1919-1921	-12.5	-25.0	-19.1	-34.6	-36.4	-38.1	
1919-1929	-9.7	-10.6	14.6	37.7	23.3	9.7	-2.4
1909-1919	-35.5	-26.1	38.1	81.6	72.9	65.4	7.2
1899-1909	59.6	32.8	56.0	63.6	72.1	80.1	60.0

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Revised.

<sup>4</sup> Not called for on schedule.



# HATS, FUR-FELT

291

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. Certain of the "Other States," however, reported larger values of products than some of the States shown separately. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>4</sup>	Value added by manufacture <sup>5</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	159	1,601	10,530	10,804	12,307	7,587	\$5,077,530	\$22,502,542	\$55,208,015	\$54,303,393	\$904,652	\$102,004,165	\$40,700,120
	1927	139	1,532	15,896	20,517	12,809	7,703	4,508,107	22,851,604	51,053,257	60,054,344	908,013	99,184,842	48,131,285
	1919	176	1,660	18,510	20,377	15,381	4,990	4,031,072	10,642,531	40,153,019	30,128,797	1,020,222	82,745,308	42,687,289
California	1929	6	18	72	62	—	52	37,951	100,458	379,908	375,563	4,345	650,335	270,427
	1927	7	27	70	38	—	38	75,329	118,028	405,001	402,393	3,608	705,231	290,170
	1919	6	10	60	21	—	21	25,238	82,500	308,453	309,511	1,912	557,013	150,960
Connecticut	1929	30	458	0,078	8,546	5,270	3,270	1,484,352	8,467,420	23,250,107	22,765,161	455,930	39,944,172	10,603,675
	1927	34	409	5,548	9,265	5,572	3,603	1,240,274	7,998,771	20,088,900	10,658,342	443,667	37,758,405	17,650,060
	1919	41	403	4,580	5,311	3,475	1,836	1,355,006	5,099,015	12,204,766	11,900,204	304,472	23,152,468	10,947,702
Massachusetts	1929	4	29	241	267	—	267	65,352	227,548	719,070	702,095	10,084	1,245,792	520,713
	1927	4	14	215	503	—	503	75,079	232,414	803,550	790,498	13,058	1,362,513	558,957
Missouri	1929	4	23	283	97	—	97	90,577	270,300	1,526,303	1,512,705	13,598	2,254,449	728,146
	1927	(6)	(6)	(6)	(6)	—	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
	1919	5	60	323	68	—	68	65,545	211,220	1,020,647	1,010,271	4,376	1,478,951	458,304
New Jersey	1929	20	125	1,660	2,665	1,305	1,360	495,398	2,371,075	6,313,315	6,170,068	142,247	10,245,352	3,032,037
	1927	19	120	1,078	2,502	1,145	1,357	423,709	2,453,011	5,081,368	4,914,818	160,550	9,154,147	4,072,779
	1919	31	268	3,303	4,447	3,058	1,380	600,017	4,243,918	8,235,100	7,907,108	327,992	10,625,357	8,300,101
New York	1929	44	412	2,573	1,622	305	1,317	1,400,351	4,016,339	11,787,100	11,643,093	143,473	21,840,520	10,053,360
	1927	36	300	2,837	1,555	580	969	980,563	4,250,019	12,000,202	11,981,098	100,104	22,270,482	10,180,190
	1919	42	560	4,088	3,200	2,425	775	1,154,931	4,081,004	10,790,390	10,595,646	194,750	19,887,862	9,007,466
Ohio	1929	5	23	66	37	—	37	80,150	105,163	350,868	357,808	2,060	535,838	175,970
Other States	1929	40	573	5,500	6,608	5,427	1,181	1,052,300	6,944,164	10,002,209	10,744,800	247,409	25,287,701	14,325,492
	1927	39	602	6,542	6,654	5,500	1,148	1,765,572	7,826,421	12,672,981	12,410,195	262,786	27,928,034	15,355,023
	1919	51	350	6,147	7,342	6,423	910	1,124,936	5,304,787	7,508,591	7,222,877	285,714	21,042,737	13,534,166

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 72; 1927, 103; 1919, 148. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 18,273; 1927, 17,631; 1919, 20,318.

<sup>2</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Revised.

<sup>5</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

<sup>6</sup> Withheld from publication in order to avoid disclosing data for individual establishments.

<sup>7</sup> Illinois, 4 establishments; Indiana, 1; Iowa, 1; Kentucky, 1; Louisiana, 1; Maine, 1; Maryland, 2; Minnesota, 2; Nebraska, 1; Oregon, 1; Pennsylvania, 17; Rhode Island, 1; Tennessee, 1; Texas, 3; Virginia, 1; Washington, 1; West Virginia, 1.

<sup>8</sup> Florida, 1 establishment; Illinois, 4; Indiana, 1; Kansas, 2; Kentucky, 1; Maine, 1; Maryland, 1; Minnesota, 1; Missouri, 3; Nebraska, 2; Ohio, 3; Pennsylvania, 14; Texas, 3; Virginia, 1; Washington, 1.

<sup>9</sup> Arkansas, 1 establishment; Florida, 1; Illinois, 5; Kentucky, 1; Maine, 1; Maryland, 3; Massachusetts, 3; Michigan, 1; Nebraska, 2; New Hampshire, 1; Ohio, 3; Oregon, 3; Pennsylvania, 20; Rhode Island, 2; South Dakota, 1; Washington, 1; West Virginia, 1; Wisconsin, 1.

TABLE 3.—PRODUCTS, BY CLASS, NUMBER, AND VALUE, BY STATES: 1929 AND 1927

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for 1927 represent production. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments. Certain of the "Other States," however, reported larger quantities and values of finished hats for 1929 than some of the States shown separately]

CLASS	1929		1927 <sup>1</sup>		CLASS	1929		1927 <sup>1</sup>	
	Dozens	Value	Dozens	Value		Dozens	Value	Dozens	Value
1. Fur-felt hat industry, all products, total value		\$102,004,165		\$90,184,842	Fur-felt hats, all industries—Con. Finished hats—Continued.				
2. Fur-felt hats made in the industry		94,658,564		92,162,567	Missouri	66,148	\$1,003,154	(2)	(2)
3. Other products (not normally belonging to the industry)		7,303,911		6,038,552	New Jersey	223,930	5,891,634	264,463	\$7,054,065
4. Receipts for contract work		41,690		83,733	New York	545,175	18,068,221	632,070	19,287,850
5. Fur-felt hats made as secondary products in other industries, value		610,521		802,402	Ohio	12,744	442,327	(3)	(2)
Fur-felt hats, all industries: Aggregate value (sum of 2 and 5)		95,278,085		93,025,019	Pennsylvania	350,592	10,050,048	592,637	21,363,437
Finished hats, total		1,770,058		2,013,244	Other States (For 1929: Ill., Ind., Iowa, La., Mo., Md., Mass., Mich., Neb., Oreg., R. I., Tenn., Tex., Va., Wash., W. Va.)	148,604	4,520,915	222,380	7,459,119
Men's		88,917,165		70,650,332	Fur-felt hat bodies and hats in the rough, total	1,533,937	24,460,154	1,232,763	10,940,984
Women's		1,801,700		30,455	Men's	900,328	14,512,000	812,854	13,071,709
California	17,611	650,335	(2)	(2)	Women's	633,609	9,967,148	419,909	6,869,275
Connecticut	406,264	18,778,297	401,095	17,920,528	Connecticut	1,200,068	19,113,343	1,010,253	16,794,971
					New Jersey	235,998	3,677,709	140,597	2,106,052
					Other States (For 1929: Iowa, Ky., Mo., Mass., N. Y., Pa.)	97,001	1,678,102	72,913	1,075,661

<sup>1</sup> Revised.

<sup>2</sup> Withheld from publication in order to avoid disclosing data for individual establishments.

## CENSUS OF MANUFACTURES: 1929

TABLE 4.—PRINCIPAL MATERIALS AND EQUIPMENT USED IN THE INDUSTRY: 1929 AND 1927

KIND	1929		1927		KIND	1929		1927	
	MATERIALS		EQUIPMENT			Number		Number	
Hatters' fur.....	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	Hat formers.....	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
	5,514,276	6,687,872	6,687,872	6,687,872	Pickers.....	328	367	150	151
Hat bodies and hats in the rough, purchased, total.....	<i>Dozens</i>	<i>Dozens</i>	<i>Dozens</i>	<i>Dozens</i>					
	946,263	1,742,825	1,742,825	1,742,825					

<sup>1</sup> Revised.

TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Num-ber	Capac-ity	Num-ber	Capac-ity	Num-ber	Capac-ity	Num-ber	Capac-ity	Num-ber	Capac-ity	1929	1919
											Horse-power	Horse-power
Prime movers and electric motors driven by purchased energy, aggregate.....	2,140	19,894	1,693	20,517	1,327	17,948	807	20,377	638	20,774	100.0	100.0
Prime movers, total.....	44	12,307	54	12,800	54	12,102	102	15,381	155	18,110	61.0	75.5
Steam, total.....	41	12,002	51	12,504	40	11,882	90	15,251	147	17,936	60.3	74.8
Engines.....	33	8,382	47	10,038	45	9,612	98	14,251	(?)	(?)	42.1	69.9
Turbines.....	8	3,620	4	2,400	4	2,270	1	1,000	(?)	(?)	18.2	4.0
Internal-combustion engines.....	1	65	1	65	4	100	2	10	0	48	0.3	(?)
Water wheels and water turbines.....	2	240	2	240	1	120	1	120	2	135	1.2	0.6
Electric motors driven by purchased energy.....	2,096	7,587	1,630	17,708	1,273	5,846	705	4,000	483	2,655	38.1	24.5
Electric motors, total.....	4,255	15,308	3,500	17,088	3,002	13,057	1,780	9,681	1,258	8,141	100.0	100.0
Driven by purchased energy.....	2,096	7,587	1,630	17,708	1,273	5,846	705	4,000	483	2,655	49.0	51.9
Driven by energy generated in establishments reporting.....	2,159	7,710	1,870	9,380	1,729	7,211	1,084	4,681	775	5,486	50.4	48.1
Electric generators.....	20	<i>Kilowatts</i> 7,089 <i>Kilowatt-hours</i>	28	<i>Kilowatts</i> 6,576	20	<i>Kilowatts</i> 6,607	(?)	(?)	(?)	(?)		
Electric energy purchased <sup>5</sup> .....		8,078,007		(?)		(?)		(?)		(?)		

<sup>1</sup> Revised.

<sup>2</sup> Not called for separately on schedule.

<sup>3</sup> Less than one-tenth of 1 per cent.

<sup>4</sup> Not called for on schedule.

<sup>5</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>6</sup> Data incomplete.

TABLE 6.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929.....	16,530	16,555	16,786	16,516	16,229	<i>16,102</i>	16,411	16,739	16,811	16,740	16,654	16,524	16,393	16,393	95.8
1925.....	15,156	<i>14,792</i>	14,913	15,036	14,853	14,919	14,902	15,250	15,473	15,666	15,428	15,306	15,273	15,273	94.2
1919.....	18,510	18,531	18,712	18,879	<i>18,855</i>	18,928	17,950	19,269	19,896	19,561	20,420	20,034	20,947	20,947	78.1
1914.....	21,318	21,510	21,783	21,581	20,518	<i>19,791</i>	20,134	22,030	22,269	22,356	22,438	20,844	20,553	20,553	88.2
1909.....	25,004	<i>25,987</i>	19,394	20,391	20,590	21,075	24,538	29,076	27,638	28,216	28,276	28,972	28,972	28,972	66.7
California.....	72	<i>56</i>	<i>87</i>	<i>69</i>	71	<i>60</i>	<i>68</i>	78	<i>83</i>	<i>80</i>	<i>87</i>	<i>85</i>	<i>88</i>	88	42.0
Connecticut.....	6,078	6,116	6,199	6,019	<i>5,855</i>	5,888	5,972	6,048	6,165	6,268	6,188	6,165	6,121	6,121	93.0
Massachusetts.....	241	230	246	250	<i>244</i>	231	232	256	251	265	241	244	233	233	84.5
Missouri.....	283	275	280	281	281	277	273	254	296	305	304	298	260	260	83.3
New Jersey.....	1,660	1,675	1,788	1,716	1,696	1,710	1,686	1,744	1,680	1,517	1,684	1,628	1,605	1,605	87.0
New York.....	2,573	2,599	2,625	2,665	2,491	<i>2,371</i>	2,480	2,623	2,652	2,649	2,570	2,590	2,554	2,554	80.3
Ohio.....	66	68	68	71	68	57	62	63	72	73	70	71	48	48	65.8

# HORSE BLANKETS, FLY NETS, AND RELATED PRODUCTS

Description of the industry.—The principal products of this industry are horse blankets, saddlecloths, and breast aprons, made from purchased fabrics; cotton and leather fly nets, sweat pads, etc. The industry does not include the manufacture of horse

blankets, saddlecloths, and breast aprons from fabrics woven by the same establishments, such establishments being treated as textile mills and classified in the appropriate textile industries.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	14	582	\$497,871	\$1,470,070	\$2,895,158	\$1,424,488	1,375
1927	16	660	574,177	1,877,896	3,379,105	1,501,209	1,421
1925	20	694	564,061	2,535,217	3,890,918	1,301,701	1,773
1923	22	841	609,555	2,778,844	5,136,544	2,302,700	2,000
1921	27	705	682,175	2,077,487	3,834,580	1,167,090	( <sup>3</sup> )
1919	28	766	551,273	3,455,086	6,020,012	2,564,020	1,577
1914	37	1,059	668,305	3,568,709	5,150,482	1,581,713	1,903
1909	33	1,048	491,598	2,773,388	4,134,864	1,361,476	1,430
1904	29	1,063	341,655	1,320,435	2,139,496	810,091	621
1899	26	575	170,687	817,840	1,305,164	467,318	261
PER CENT OF INCREASE OR DECREASE (-)							
1927-1929	( <sup>4</sup> )	-11.8	-13.3	-21.7	-14.3	-5.1	-3.2
1925-1927	( <sup>4</sup> )	-4.9	1.8	-25.0	-13.3	10.2	-19.9
1923-1925	( <sup>4</sup> )	-17.5	-7.5	-8.6	-24.1	-42.4	-38.0
1921-1923	( <sup>4</sup> )	10.3	-10.6	3.6	34.0	104.2	-----
1919-1921	( <sup>4</sup> )	-8.0	23.7	-22.5	-36.3	-54.9	-----
1919-1929	( <sup>4</sup> )	-24.0	-9.7	-57.4	-51.0	-44.5	-12.8
1909-1919	( <sup>4</sup> )	-53.5	12.1	24.6	45.0	88.4	9.8
1899-1909	( <sup>4</sup> )	180.6	178.2	227.1	216.8	197.7	450.2

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of horse blankets, fly nets, and related products, as follows: For 1929, \$462,698; 1927, \$241,650; 1925, \$647,238; corresponding amounts for earlier years not available. Does not include values of horse blankets, fly nets, and related products made as secondary products by establishments classified in other industries, as follows: For 1929, \$604,940; 1927, \$1,208,600; 1925, \$986,220; 1923, \$1,000,057; 1921, \$1,360,783; 1919, \$2,022,084. These amounts include the following values of horse blankets made by woolen and worsted mills: For 1929, \$212,200; 1927, \$631,014; 1925, \$786,500; 1923, \$1,338,551; 1921, \$1,173,058; 1919, \$1,606,417. No corresponding data are available for earlier years.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Not called for on schedule.

<sup>5</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, FOR THE UNITED STATES AND FOR WISCONSIN: 1929, 1927, AND 1919

[Wisconsin is the only State for which figures can be given without disclosing data for individual establishments. Ohio, however, reported a larger value of products than Wisconsin. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	14	71	582	1,375	1,237	138	\$187,453	\$497,871	\$1,470,070	\$1,437,375	\$33,205	\$2,895,158	\$1,424,488
	1927	16	71	660	1,421	1,202	159	170,105	574,177	1,877,896	1,837,821	40,075	3,379,105	1,501,209
	1919	28	108	766	1,577	1,217	300	318,431	551,273	3,455,086	3,413,273	42,413	6,020,012	2,564,020
Wisconsin	1929	5	27	182	205	125	80	58,822	157,152	536,247	520,955	15,202	853,040	317,390
	1927	5	22	210	234	150	84	55,435	182,360	546,685	530,883	15,702	1,036,269	480,684
	1919	5	61	183	393	150	233	139,467	159,462	1,222,818	1,205,567	17,251	1,007,816	684,008
Other States	1929	9	44	400	1,170	1,112	58	128,631	340,710	934,423	916,420	18,003	2,041,512	1,107,080
	1927	11	49	450	1,187	1,112	75	114,070	411,817	1,331,311	1,306,938	24,373	2,342,836	1,011,525
	1919	23	107	583	1,194	1,067	127	178,964	391,816	2,232,868	2,207,706	25,162	4,112,706	1,879,928

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 5; 1927, 6; 1919, 25. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 658; 1927, 737; 1919, 959.

<sup>2</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Kentucky, 1 establishment; New York, 2; Ohio, 2; Pennsylvania, 3; Rhode Island, 1.

<sup>5</sup> New York, 5 establishments; Ohio, 2; Pennsylvania, 3; Rhode Island, 1.

<sup>6</sup> Illinois, 3 establishments; Maine, 1; New York, 6; Ohio, 3; Pennsylvania, 8; Rhode Island, 1; and South Carolina, 1.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	60	Horse-power 1,375	96	Horse-power 1,421	76	Horse-power 1,773	100	Horse-power 1,577	104	Horse-power 1,903	100.0	100.0
Prime movers, total	8	1,237	9	1,262	10	1,610	10	1,217	20	1,570	90.0	77.2
Steam, total	7	1,212	8	1,237	9	1,585	9	1,102	14	1,354	88.2	75.6
Engines	5	1,075	7	1,225	9	1,585	9	1,102	(1)	(1)	78.2	75.6
Turbines	2	137	1	12					(1)	(1)	10.0	
Internal-combustion engines	1	25	1	25	1	25	1	25	0	146	1.8	1.6
Water wheels and water turbines									3	70		
Electric motors driven by purchased energy	52	138	87	159	66	163	90	360	78	333	10.0	22.8
Electric motors, total	167	1,105	191	984	169	975	204	1,235	246	1,381	100.0	100.0
Driven by purchased energy	52	138	87	159	66	163	90	360	78	333	11.5	29.1
Driven by energy generated in establishments reporting	105	1,057	104	825	103	812	114	875	168	1,048	88.5	70.0
Electric generators	6	Kilowatts 805	5	Kilowatts 1,025	5	Kilowatts 698	(2)	(2)	(2)	(4)		
Electric energy purchased <sup>1</sup>		Kilowatt-hours 115,754		(4)		(4)		(2)		(2)		

<sup>1</sup> Not called for separately on schedule.  
<sup>2</sup> Not called for on schedule.  
<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>4</sup> Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND FOR WISCONSIN, 1929

[Wisconsin is the only State for which figures can be given without disclosing data for individual establishments. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
United States:														
1929	582	<i>558</i>	534	540	576	636	643	500	597	571	586	500	577	82.9
1925	694	730	733	714	713	705	650	667	<i>640</i>	608	691	698	709	88.5
1919	766	781	745	683	677	678	720	757	784	792	813	803	899	75.3
1914	1,009	1,888	1,850	1,814	1,797	1,742	1,714	1,603	<i>1,460</i>	1,512	1,541	1,531	1,576	77.3
1909	1,048	1,664	1,661	1,686	1,665	1,646	1,604	1,549	<i>1,522</i>	1,545	1,673	1,751	1,799	84.0
Wisconsin	182	183	180	184	187	186	183	185	<i>168</i>	170	178	199	183	84.8

# HOUSE-FURNISHING GOODS, NOT ELSEWHERE CLASSIFIED

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of comfortables and quilts, bedspreads and bed sets, sheets and pillow cases, tablecloths, lunch cloths,

napkins, table and dresser covers and scarfs, curtains and draperies, feather pillows and feather beds, cushions and hassocks, and mops and dusters.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1920

[Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1920	964	15,794	\$16,150,499	\$76,024,989	\$127,602,002	\$50,977,013	16,860
1927	648	11,691	10,947,269	62,704,730	87,070,000	34,071,870	12,997
1925	483	8,307	9,142,870	61,078,800	78,064,503	27,676,793	10,702
1923	452	8,708	8,464,350	44,000,898	60,393,182	24,060,284	9,069
1921	419	7,604	6,955,472	35,100,227	64,650,787	19,444,500	(3)
1919	407	7,853	6,443,915	30,793,962	60,211,804	20,417,842	11,857
1914	370	6,935	3,306,515	17,300,880	20,452,637	9,062,051	11,276
1909	290	4,907	2,034,003	12,370,808	18,508,680	6,138,078	9,078
1904	237	4,778	1,879,860	9,020,519	16,010,028	5,384,109	8,363
1899	200	5,212	1,837,552	9,197,078	14,278,176	6,060,407	8,288
PER CENT OF INCREASE OR DECREASE (-)							
1927-1920	75.0	35.1	47.5	45.4	45.5	45.8	20.8
1925-1927	26.0	25.0	19.7	3.2	11.5	26.8	21.4
1923-1925	-4.2	6.9	8.1	14.4	13.4	11.8	7.4
1921-1923	7.0	10.0	21.5	27.2	27.1	26.9	-----
1919-1921	-10.3	-4.4	7.0	-11.8	-9.4	-4.8	-----
1910-1920	106.4	101.1	150.0	92.0	111.0	140.7	42.2
1909-1919	70.6	60.0	216.7	221.7	225.3	232.0	30.6
1899-1909	24.4	-5.9	10.7	34.5	20.0	20.8	0.6

<sup>1</sup> For 1920, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1920, 1927, AND 1919

(This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Certain of the States, however, for which statistics are shown in combination with those for others reported larger values of products than some of the States shown separately. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size)

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1920	964	2,730	15,794	16,806	4,201	12,665	\$7,680,280	\$16,150,499	\$76,024,989	\$70,000,235	\$624,754	\$127,602,002	\$50,977,013
	1927	648	1,826	11,691	12,007	5,556	7,441	4,787,552	10,947,269	62,704,730	62,218,435	480,301	87,070,000	34,071,870
	1919	407	1,740	7,853	11,857	6,153	4,705	3,770,328	6,443,915	30,793,962	30,439,747	354,215	60,211,804	20,417,842
Individual States:														
California	1920	89	162	791	777	---	777	328,412	864,111	2,600,022	2,578,183	27,480	4,750,509	2,158,947
	1927	35	76	301	624	---	624	170,598	348,651	1,203,581	1,188,222	15,350	2,270,480	1,072,809
	1919	18	10	55	184	5	179	34,559	48,106	276,241	260,252	6,980	440,632	173,201
Connecticut	1920	12	73	720	1,010	1,421	498	158,973	671,277	5,615,181	5,577,404	37,777	9,985,924	4,370,743
	1927	8	60	806	2,149	1,664	485	105,179	690,450	3,018,301	2,973,583	44,718	4,940,384	1,922,083
	1919	8	141	874	3,115	2,077	1,038	190,954	808,210	3,016,021	2,932,344	67,277	4,673,198	1,650,577
Georgia	1920	7	10	40	87	25	62	15,610	20,881	733,592	729,623	3,900	978,480	230,888
Illinois	1920	100	339	1,744	2,172	190	1,982	1,129,424	1,905,481	6,339,747	6,260,599	70,148	11,757,920	5,418,182
	1927	66	221	1,050	1,738	200	1,538	687,147	982,818	5,815,130	5,763,032	61,168	9,725,301	3,910,201
	1919	51	230	843	1,247	395	852	583,843	701,463	3,973,637	3,932,726	40,911	6,339,794	2,863,167
Indiana	1920	9	26	88	66	---	66	22,062	51,849	161,355	158,386	2,909	351,031	180,676
	1927	4	11	45	8	---	8	12,500	27,591	63,070	63,150	520	149,631	85,901
	1919	0	6	34	28	---	28	3,050	22,355	119,030	118,173	1,463	189,768	67,132
Kentucky	1920	4	32	146	391	---	391	101,700	168,244	610,588	603,384	13,204	1,200,112	670,524

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employes <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>	
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy			
<b>Individual States—Con.</b>															
Louisiana.....	1929	5	15	71	69	-----	69	\$27,650	\$33,586	\$194,601	\$192,625	\$1,976	\$367,841	\$173,240	
	1927	4	15	70	81	-----	81	26,494	30,411	213,479	211,669	1,310	390,113	185,634	
Maryland.....	1929	9	34	140	99	-----	99	60,164	111,208	657,703	654,274	3,429	1,008,116	350,413	
	1927	5	16	103	97	-----	97	36,844	73,704	406,016	406,361	555	644,850	237,034	
Massachusetts.....	1929	94	297	1,703	968	-----	968	733,328	1,431,073	10,006,698	10,048,006	48,662	14,780,032	4,684,264	
	1927	62	231	1,422	488	-----	488	669,330	1,193,039	6,443,320	6,403,696	39,633	10,743,327	4,299,098	
	1919	54	245	1,081	740	383	-----	363	634,139	793,381	5,120,815	5,091,557	38,258	7,708,426	2,578,611
Michigan.....	1929	19	96	422	1,098	825	273	356,252	526,778	1,450,226	1,431,280	27,946	3,438,178	1,978,952	
	1927	10	95	365	887	650	237	185,330	427,467	1,121,462	1,095,042	26,420	2,744,821	1,623,350	
	1919	10	70	401	1,008	1,085	523	200,396	347,894	801,934	780,797	21,137	1,054,741	1,152,807	
Minnesota.....	1929	10	37	100	63	-----	63	67,965	108,016	490,303	487,195	3,108	891,132	400,829	
	1927	7	18	59	56	-----	56	53,591	59,522	150,428	148,515	1,913	356,800	200,432	
Missouri.....	1929	25	69	364	419	-----	419	174,713	276,405	1,659,456	1,646,038	13,418	2,688,810	1,020,354	
	1927	22	42	232	382	-----	382	103,427	184,939	1,059,070	1,048,847	10,223	1,713,853	654,783	
	1919	14	30	102	413	-----	413	92,271	84,703	958,424	946,909	11,515	1,352,684	394,200	
New Jersey.....	1929	17	90	630	1,125	150	975	289,908	530,372	2,348,387	2,305,187	43,200	4,293,006	1,855,219	
	1927	16	92	701	838	150	688	216,042	648,200	2,030,090	1,987,739	42,351	3,835,951	1,805,861	
	1919	16	79	284	457	405	52	164,546	286,562	1,994,514	1,976,454	18,060	2,916,240	921,726	
New York.....	1929	408	1,054	6,435	4,527	915	3,612	3,059,569	7,247,480	34,216,565	34,000,542	216,023	55,069,514	20,852,949	
	1927	290	653	3,248	3,022	1,602	1,420	1,817,180	4,595,747	24,693,015	24,536,704	167,311	38,788,049	14,095,634	
	1919	185	582	2,771	2,097	637	1,370	1,288,655	2,304,274	18,015,026	17,934,016	81,010	25,406,855	7,451,820	
Ohio.....	1929	36	136	584	1,155	375	786	319,829	552,963	2,227,599	2,202,173	25,426	4,200,067	1,972,458	
	1927	23	88	310	879	740	139	183,735	318,726	1,588,999	1,569,926	18,173	2,783,348	1,165,249	
	1919	20	101	340	793	620	173	182,769	245,491	1,426,997	1,405,683	21,314	2,106,306	738,369	
Pennsylvania.....	1929	54	139	856	1,001	100	991	399,847	936,329	4,705,591	4,710,133	55,458	7,213,221	2,447,630	
	1927	44	129	742	963	350	648	274,501	757,078	3,029,940	2,986,768	43,172	5,122,153	2,092,213	
	1919	30	136	711	677	531	146	331,650	538,284	2,114,760	2,089,486	26,274	4,156,196	2,041,436	
Rhode Island.....	1929	6	16	63	31	-----	31	31,040	45,140	171,850	170,084	1,766	276,885	105,035	
	1927	5	10	57	14	-----	14	11,718	43,036	137,491	135,636	1,866	221,571	84,170	
Texas.....	1929	6	5	32	7	-----	7	9,680	18,980	191,058	190,196	856	255,016	63,058	
Washington.....	1929	10	16	55	59	-----	59	24,846	64,438	180,569	179,141	1,428	347,307	169,708	
	1927	5	6	25	45	-----	45	17,316	28,143	44,282	43,453	789	116,736	72,454	
Wisconsin.....	1929	11	28	168	251	150	101	158,745	197,348	532,622	523,691	9,921	991,693	450,040	
	1927	8	32	178	192	160	12	76,179	107,364	426,428	418,508	7,920	893,336	370,908	
	1919	6	7	25	32	12	20	9,143	20,847	33,704	32,672	1,032	85,460	51,750	
<b>Groups of States:</b>															
Fla., 1 est.; Tenn., 5; Va., 3.....		1929	9	23	360	378	-----	378	43,813	307,418	695,658	593,263	12,295	1,569,745	664,187
Me., 1 est.; N. H., 2; Vt., 2.....		1929	5	16	161	40	-----	40	25,187	105,044	613,080	610,064	3,326	852,023	238,034
Other States (Ark., 2 est.; Colo., 1; Iowa, 2; Kans., 1; Okla., 1; Oreg., 3).....		1929	10	17	118	74	50	48,563	64,838	140,169	144,251	1,908	323,846	177,687	
States not shown separately.....		1927	24	70	576	529	50	140,866	375,124	1,260,115	1,247,744	12,371	2,310,152	1,050,637	
		1919	33	76	332	942	2	130,347	247,345	1,932,653	1,913,678	18,975	2,769,544	829,891	

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 639; 1927, 442; 1919, 417. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 19,163; 1927, 13,958; 1919, 10,010.

<sup>2</sup> For 1929, figures refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

<sup>5</sup> Alabama, 1 establishment; Colorado, 1; Georgia, 3; Iowa, 2; Kansas, 1; Kentucky, 2; Nebraska, 1; New Hampshire, 2; North Carolina, 1; Oklahoma, 2; Oregon, 1; Tennessee, 3; Texas, 2; and Virginia, 2.

<sup>6</sup> Alabama, 1 establishment; Colorado, 2; District of Columbia, 1; Georgia, 3; Kansas, 2; Kentucky, 3; Louisiana, 2; Maine, 2; Maryland, 3; Minnesota, 3; Nebraska, 1; North Carolina, 4; Oklahoma, 1; Rhode Island, 1; Tennessee, 2; Texas, 1; and Washington, 1.

# HOUSE-FURNISHING GOODS

297

TABLE 3.—PRODUCTS, BY CLASS AND VALUE, BY STATES: 1929

[The figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments. In some cases, however, certain of the "Other States" reported larger values of products than some of the States for which separate figures are given]

CLASS	Value	CLASS	Value
1. House-furnishing-goods industry, all products, total value.....	\$127,602,002	House-furnishing goods, not elsewhere classified, all industries— Continued.	
2. House-furnishing goods, not elsewhere classified.....	116,280,338	Curtains and draperies—Continued.	
3. Other products (not normally belonging to the industry).....	7,620,373	Pennsylvania.....	\$1,479,306
4. Amount received for contract work.....	3,005,291	Rhode Island.....	175,830
5. House-furnishing goods, not elsewhere classified, made as secondary products in other industries, value.....	0,906,030	Wisconsin.....	218,585
House-furnishing goods, not elsewhere classified, all industries: Aggregate value (sum of 2 and 5).....	120,186,377	Other States (Colo., Conn., D. C., Fla., Ind., Iowa, Ky., Mo., Minn., Nebr., N. H., Oreg., Tenn., Tex., Wash.).....	7,718,501
Comfortables, total.....	6,904,701	Feather pillows and feather beds.....	0,963,500
Illinois.....	425,734	California.....	782,700
New York.....	1,736,450	Illinois.....	1,446,174
Pennsylvania.....	1,328,882	Maryland.....	92,203
Other States (Calif., Conn., Ind., Md., Minn., N. J., Ohio, Wash.).....	3,413,620	Massachusetts.....	212,307
Quilts, total.....	3,514,408	Missouri.....	384,302
Illinois.....	304,305	New Jersey.....	441,116
New York.....	2,255,578	New York.....	1,830,620
Pennsylvania.....	363,736	Ohio.....	245,080
Other States (Calif., Conn., Ind., Ky., Mich., Wash., Wis.).....	540,780	Pennsylvania.....	445,034
Bedspreads and bed sets, total.....	0,042,204	Other States (Ala., Ark., Colo., Conn., D. C., Ga., Ind., Kans., La., Mich., Minn., Nebr., N. H., Okla., Oreg., R. I., Tenn., Tex., Wash., Wis.).....	1,004,250
California.....	100,320	Cushions and hassocks, total.....	4,223,156
Georgia.....	724,570	California.....	610,500
Illinois.....	1,412,613	Illinois.....	236,205
New York.....	6,364,014	New York.....	2,073,520
Pennsylvania.....	98,084	Ohio.....	272,280
Other States (Ind., Kans., Md., Mass., Mich., Minn., Mo., Ohio, Tenn., and Wis.).....	243,588	Pennsylvania.....	145,552
Tablecloths, lunch cloths, and napkins, total.....	2,358,835	Other States (Conn., Ind., Md., Mass., Mich., N. J., Wis.).....	870,038
New York.....	2,287,031	Mops and dusters, total.....	5,600,003
Other States (Calif., Ill., Mass., Tex., Wash., Wis.).....	70,904	California.....	78,046
Table and dresser covers and scarfs, total.....	4,741,425	Illinois.....	1,600,008
Illinois.....	122,063	Louisiana.....	340,621
New York.....	4,400,921	Massachusetts.....	805,076
Other States (Calif., Md., Mass., Mich., N. J., Ohio, Wis.).....	118,541	Missouri.....	312,300
Curtains and draperies, total.....	47,660,990	New York.....	397,386
California.....	2,200,402	Ohio.....	841,474
Illinois.....	2,000,265	Pennsylvania.....	220,703
Maryland.....	106,634	Other States (Ala., Colo., Conn., Fla., Ga., Ind., Iowa, Ky., Minn., Miss., Tenn., Tex., Wis.).....	1,236,290
Massachusetts.....	12,478,170	Slip covers, total.....	3,020,944
Michigan.....	404,151	Illinois.....	124,026
Missouri.....	1,200,203	Michigan.....	127,123
New Jersey.....	1,785,232	New York.....	800,107
New York.....	10,200,004	Pennsylvania.....	747,845
Ohio.....	308,725	Other States (Ark., Calif., D. C., Ga., Iowa, Md., Mass., Minn., Mo., Nebr., N. J., Ohio, R. I., Tenn., W. Va., Wis.).....	2,115,237
		Other house-furnishing goods.....	31,201,061

CENSUS OF MANUFACTURES: 1929

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	6,217	Horse-power 16,866	3,091	Horse-power 12,997	2,246	Horse-power 10,702	1,389	Horse-power 11,857	834	Horse-power 11,276	100.0	100.0
Prime movers, total	22	4,201	30	5,556	34	4,395	54	6,152	79	7,024	21.0	51.0
Steam, total	19	3,780	33	5,002	25	3,852	36	5,427	51	5,655	22.4	45.8
Engines	16	2,605	30	4,242	24	3,502	35	5,077	(1)	(1)	15.4	42.8
Turbines	3	1,175	3	850	1	350	1	350	(1)	(1)	7.0	3.0
Internal-combustion engines	1	12	1	12	0	107	13	163	16	161	0.1	1.4
Water wheels and water turbines	2	409	2	452	3	436	5	562	12	1,208	2.4	4.7
Electric motors driven by purchased energy	6,195	12,665	3,055	7,441	2,212	6,307	1,335	5,705	755	4,252	75.1	48.1
Electric motors, total	6,739	14,096	4,026	9,972	3,173	7,720	1,533	6,631	918	5,197	100.0	100.0
Driven by purchased energy	6,195	12,665	3,055	7,441	2,212	6,307	1,335	5,705	755	4,252	80.8	80.0
Driven by energy generated in establishments reporting	544	1,431	971	2,531	961	1,422	198	926	163	945	10.2	14.0
Electric generators	14	Kilowatts 1,900 Kilowatt-hours	17	Kilowatts 1,491	15	Kilowatts 1,145	(?)	(?)	(?)	(?)		
Electric energy purchased <sup>1</sup>		11,574,663		(?)		(?)		(?)		(?)		

<sup>1</sup> Not called for separately on schedule.  
<sup>2</sup> Not called for on schedule.  
<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>4</sup> Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909 AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
United States:														
1929	15,794	14,540	15,220	15,794	15,818	15,592	14,896	<i>14,374</i>	14,003	16,531	17,750	17,653	16,523	80.0
1925	9,307	9,169	9,274	9,426	9,328	9,132	8,779	<i>8,514</i>	8,633	9,331	9,995	<b>10,257</b>	10,041	81.1
1919	7,853	<i>6,576</i>	6,846	7,034	7,024	7,283	7,784	8,385	8,365	8,469	8,689	8,872	8,019	73.7
1914	6,935	6,797	6,872	7,052	7,026	7,034	6,937	6,789	6,769	6,957	7,176	7,051	<i>6,760</i>	94.2
1909	4,907	<i>4,534</i>	4,606	4,673	4,707	4,650	4,750	4,874	5,002	5,202	5,247	5,343	5,232	84.8
California	791	<i>680</i>	709	715	740	747	747	712	762	851	918	902	918	70.7
Connecticut	720	<i>438</i>	444	433	486	487	498	643	763	971	1,161	1,145	1,120	37.7
Georgia	40	47	43	45	36	38	30	28	26	41	37	55	51	47.3
Illinois	1,744	<i>1,579</i>	1,639	1,705	1,749	1,788	1,757	1,675	1,693	1,767	1,933	1,875	1,762	81.7
Indiana	88	<i>68</i>	68	73	90	101	94	86	98	97	98	90	86	67.3
Kentucky	146	145	145	157	145	145	136	<i>134</i>	134	144	157	161	154	83.2
Louisiana	71	52	76	84	103	93	54	51	86	83	78	58	59	37.9
Maryland	140	<i>115</i>	140	144	141	142	140	138	130	141	143	160	141	76.7
Massachusetts	1,703	1,606	1,738	1,811	1,800	1,795	1,759	<i>1,659</i>	1,571	1,672	1,734	1,745	1,643	86.1
Michigan	422	434	440	441	427	411	394	<i>385</i>	417	438	444	437	300	80.7
Minnesota	100	95	93	101	102	101	106	106	107	99	93	94	<i>92</i>	86.0
Missouri	364	326	336	400	403	429	410	396	343	343	352	333	<i>301</i>	70.2
New Jersey	630	659	684	677	701	648	651	586	<i>523</i>	580	583	641	627	74.6
New York	6,435	6,032	6,245	6,458	6,410	6,202	5,760	<i>5,520</i>	5,958	6,915	7,478	7,441	6,788	73.8
Ohio	584	<i>489</i>	604	618	678	650	649	613	553	572	545	526	503	72.3
Pennsylvania	859	836	849	889	874	870	861	850	835	873	878	850	830	93.4
Rhode Island	63	69	69	72	73	70	65	67	65	65	65	61	56	72.6
Texas	32	32	32	32	32	32	32	32	32	32	32	32	32	
Washington	55	53	<i>49</i>	52	56	54	52	53	54	56	62	62	55	76.0
Wisconsin	168	194	193	186	185	182	178	179	160	140	143	136	<i>133</i>	67.9



# KNIT GOODS

Description of the industry.—The classification "Knit Goods" embraces all establishments whose principal products are made by machine knitting, without regard to whether the yarns used are of cotton, of wool, of silk, or of other material. The knitting machinery employed is, in the main, power driven, although a few hand machines are in use.

Branches of the industry.—This industry embraces four classes of establishments, whose chief products are respectively, (1) hosiery, (2) underwear, (3) outerwear, and (4) knit cloth, and each establishment as a whole has been assigned to one branch or another, according to the character of its principal products.

Some overlapping occurs among these branches. For example, of the total of \$500,381,773 representing the combined value of hosiery made in the industry as a whole, \$2,956,978 was reported by establishments classified in the underwear, outerwear, and knit-cloth branches. (See Table 5.) Moreover, most of the establishments manufacture some minor products not normally belonging to the industry. (See item 6, first section of Table 3.) For these reasons the total values of the several classes of products, as given in Table 3, are not identical with the total values of all products reported by the establishments assigned to the corresponding branches of the industry, as given, for example, in Table 5.

TABLE 1.—SUMMARY FOR THE INDUSTRY, 1899 TO 1929, AND FOR ITS BRANCHES, 1923 TO 1929, FOR THE UNITED STATES

[Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Contract work	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horse-power
<b>THE KNIT-GOODS INDUSTRY</b>								
1929	1,888	208,488	\$210,714,335	\$13,084,013	\$450,700,058	\$800,710,072	\$443,015,714	181,824
1927	1,809	100,283	188,163,458	11,191,250	424,000,884	816,020,404	392,521,110	177,216
1925	1,987	186,068	168,682,840	15,721,028	453,023,780	800,060,213	360,034,433	176,639
1923	2,323	104,214	168,271,584	20,683,400	484,020,075	848,176,734	364,166,050	183,653
1921	2,078	101,880	132,190,310	9,075,090	360,457,833	634,073,805	273,016,092	0
1919	2,050	172,572	125,100,820	8,405,082	427,095,500	713,180,680	280,044,129	149,438
1914	1,023	150,520	50,768,151	3,239,095	140,687,458	258,012,903	112,225,445	122,919
1909	1,374	120,275	44,740,223	2,158,078	110,241,053	200,143,527	80,062,474	101,319
1904	1,144	104,002	31,014,607	724,245	76,789,348	137,076,454	60,287,100	76,308
1899	1,006	83,691	24,484,497	1,141,828	51,105,330	95,833,692	44,038,362	56,001
Per cent of increase or decrease (—):								
1927-1929	1.0	0.0	12.0	25.3	7.7	10.2	12.9	2.6
1925-1927	-5.0	1.9	11.5	-20.0	-6.6	.8	10.2	.3
1923-1925	-14.5	-3.0	.2	-24.0	-6.2	-4.5	-2.2	-3.8
1921-1923	11.8	20.0	27.3	127.9	34.3	33.8	33.1	
1919-1921	1.4	-6.2	5.0	0.8	-15.6	-11.1	-4.3	
1910-1929	-7.0	20.8	68.3	64.6	6.9	26.2	54.9	21.7
1909-1919	49.2	33.5	179.8	203.7	287.4	256.3	218.2	47.5
1899-1909	36.0	54.5	83.1	89.0	115.3	108.8	101.4	80.8
<b>HOBIERY</b>								
1929	730	120,542	\$140,078,880	\$10,209,215	\$248,650,770	\$528,700,187	\$280,033,417	82,423
1927	672	112,842	114,077,845	5,721,009	229,936,530	450,913,137	225,073,601	76,431
1925	683	103,930	63,382,070	0,618,411	228,141,800	421,180,221	193,038,415	67,047
1923	721	96,057	78,702,357	11,542,132	222,410,701	390,273,178	107,862,387	67,567
Per cent of increase or decrease (—):								
1927-1929	8.0	14.8	22.1	78.3	8.1	15.7	23.4	7.8
1925-1927	-1.0	8.0	22.8	-40.5	.8	8.5	17.0	12.5
1923-1925	-5.3	7.2	18.0	-16.7	2.6	7.0	15.0	.6
<b>UNDERWEAR</b>								
1929	251	41,487	\$32,028,444	\$584,840	\$80,476,275	\$150,812,016	\$70,360,741	58,014
1927	285	40,227	39,182,748	1,521,973	90,727,774	173,423,491	82,695,717	67,455
1925	208	48,328	40,144,500	1,853,813	110,778,490	188,570,118	77,706,622	70,755
1923	326	48,562	39,031,603	690,096	106,760,066	182,355,328	75,505,272	73,525
Per cent of increase or decrease (—):								
1927-1929	-11.9	-10.3	-10.0	-61.6	-11.3	-13.0	-14.9	-14.0
1925-1927	-4.4	-4.3	-2.4	-17.9	-18.1	-8.0	6.3	-4.7
1923-1925	-8.6	-5	.5	168.0	3.8	3.4	2.9	-3.8
<b>OUTERWEAR</b>								
1929	757	28,068	\$28,034,190	\$2,500,788	\$75,876,462	\$147,240,277	\$71,372,815	22,411
1927	775	21,002	20,100,062	2,050,270	64,125,021	125,040,029	61,818,008	21,068
1925	874	27,080	27,738,485	3,193,911	77,647,876	143,602,293	65,054,417	23,586
1923	1,128	41,503	40,824,274	7,131,102	110,188,282	209,787,722	98,560,440	28,708
Per cent of increase or decrease (—):								
1927-1929	-2.3	17.5	10.4	-5.6	18.3	18.0	15.5	3.4
1925-1927	-11.3	-11.0	-5.5	-17.0	-17.3	-12.2	-6.3	-8.1
1923-1925	-22.5	-32.0	-32.1	-65.2	-20.0	-31.3	-35.1	-18.0
<b>KNIT CLOTH</b>								
1929	150	8,401	\$8,772,800	\$689,070	\$51,002,451	\$72,025,102	\$21,232,711	19,029
1927	137	6,582	8,102,903	1,204,395	30,309,153	60,342,037	21,033,784	11,662
1925	132	6,424	7,416,777	1,055,763	37,462,692	58,707,581	19,214,979	14,342
1923	148	7,232	8,753,350	1,320,070	44,660,946	60,780,506	22,120,560	13,815
Per cent of increase or decrease (—):								
1927-1929	0.5	26.0	8.3	-45.5	31.5	20.9	.0	63.2
1925-1927	3.8	2.0	9.3	19.8	4.9	6.4	0.3	-18.7
1923-1925	-10.8	-11.2	-15.3	-20.0	-16.1	-15.1	-13.0	3.8

<sup>1</sup> The figures for all years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> No comparable data for years prior to 1923.

CENSUS OF MANUFACTURES: 1929

TABLE 2.—GENERAL STATISTICS FOR THE INDUSTRY, 1929, 1927, AND 1919, AND FOR ITS BRANCHES, 1929 AND 1927, BY STATES

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Certain of the States for which statistics are given in combination with those for others reported larger values of products than some of the States shown separately. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	Paid for contract work	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
					Total	Prime movers	Motors run by purchased energy				Total	Materials and containers	Fuel and purchased energy		
<b>THE KNIT-GOODS INDUSTRY</b>															
United States..	1929	1,888	14,029	308,488	181,870	70,201	111,588	\$42,840,788	\$210,714,336	\$13,983,913	\$456,700,068	\$448,740,206	\$7,954,752	\$890,716,674	\$448,015,714
	1927	1,809	12,909	190,283	177,219	75,040	101,276	34,569,194	188,163,458	11,161,256	424,000,354	416,187,834	7,911,550	816,620,491	392,521,110
	1919	2,050	12,613	172,572	149,438	89,758	59,680	32,326,582	125,199,820	8,495,982	427,095,550	421,030,358	5,405,202	713,139,689	286,044,129
<b>Individual States:</b>															
Alabama.....	1929	20	111	2,607	2,856	670	2,186	205,182	1,360,598	430,614	3,068,793	3,873,935	84,858	6,666,184	2,707,391
	1927	13	60	2,026	1,844	16	1,828	159,553	1,036,350	-----	4,358,017	4,291,117	67,800	5,958,343	1,590,426
	1919	10	40	1,555	1,555	460	1,156	116,075	722,810	-----	3,274,965	3,218,340	56,619	4,757,008	1,482,043
California.....	1929	48	205	1,834	1,147	217	630	781,260	2,048,770	4,750	4,566,200	4,510,342	46,858	10,392,739	5,736,539
	1927	43	201	1,447	1,070	-----	1,076	476,379	1,654,103	1,309	3,582,972	3,547,861	35,111	8,174,050	4,591,684
	1919	21	208	695	207	-----	267	324,404	496,284	15,977	1,517,139	1,506,303	10,836	3,361,087	1,361,087
Connecticut.....	1929	16	120	1,343	2,223	2,100	123	305,230	1,220,375	390	2,371,708	2,304,595	67,113	4,981,129	2,000,421
	1927	16	115	1,367	2,298	1,696	602	303,787	1,421,319	2,622	2,318,778	2,227,870	90,008	5,181,152	2,892,374
	1919	21	104	2,040	4,594	3,393	1,201	405,764	2,220,920	10,063	5,349,220	5,226,385	122,835	9,332,776	3,083,550
Georgia.....	1929	44	325	6,018	5,810	760	5,056	739,695	3,632,232	119,229	10,841,044	10,578,512	262,532	19,377,923	8,536,879
	1927	37	300	6,025	5,022	700	4,322	775,782	3,376,352	161,604	9,493,708	9,290,204	203,504	10,760,900	7,267,132
	1919	28	290	3,808	4,325	1,577	2,748	419,897	2,321,090	952,539	6,815,010	6,292,995	142,021	12,560,787	5,751,771
Illinois.....	1929	47	399	4,137	4,183	1,932	2,201	1,057,042	3,836,514	52,977	8,082,420	8,481,863	200,557	16,948,041	8,265,621
	1927	55	413	4,440	4,626	1,903	2,633	933,100	3,908,423	37,431	9,478,600	9,217,182	261,508	17,553,482	8,974,792
	1919	58	412	5,005	3,644	1,477	2,107	1,082,228	3,808,741	489,017	11,701,032	11,526,862	174,170	20,409,360	8,760,328
Indiana.....	1929	11	563	5,053	3,682	-----	3,982	1,143,870	7,486,864	34,326	13,705,352	13,567,505	107,848	32,153,951	18,388,508
	1927	9	319	5,319	2,676	-----	525	1,073,045	6,254,271	277,750	12,127,049	11,939,130	187,909	20,067,291	16,940,242
	1919	8	292	2,675	1,786	-----	216	548,771	2,220,459	-----	5,615,352	5,226,180	69,216	8,101,928	4,186,570
Kentucky.....	1929	10	79	1,195	699	100	599	140,523	714,080	147,370	1,491,906	1,458,935	33,031	2,937,215	1,445,247
	1927	7	51	1,173	633	-----	633	95,735	661,980	13,973	1,220,821	1,107,202	23,619	2,503,548	1,372,727
Maryland.....	1929	8	43	843	495	95	400	86,102	457,105	214,820	1,127,680	1,103,218	24,462	2,225,599	1,098,210
	1927	8	48	968	680	95	585	112,052	565,678	63,406	2,210,993	2,178,156	32,837	3,333,007	1,122,104
	1919	7	57	749	606	200	406	116,616	366,857	40,321	1,772,537	1,744,350	28,181	2,687,496	914,950
Massachusetts.....	1929	86	838	8,817	10,693	6,174	4,519	2,704,408	8,945,286	218,734	20,401,873	20,003,210	398,577	41,050,135	20,648,282
	1927	93	1,043	9,660	14,812	8,733	6,079	2,770,919	9,359,035	481,460	22,315,903	21,868,161	452,752	43,939,724	21,020,821
	1919	77	804	12,751	16,574	11,241	5,333	2,004,457	11,364,030	147,789	31,172,563	30,730,778	441,786	52,424,235	21,251,672
Michigan.....	1929	20	236	2,789	4,417	3,632	785	671,122	2,070,117	-----	4,503,971	4,307,400	136,562	9,705,972	5,202,001
	1927	20	177	2,600	4,188	1,860	2,328	482,874	2,464,450	-----	4,278,582	4,068,534	180,048	10,880,016	5,602,033
	1919	31	259	3,170	3,073	1,475	1,598	649,047	2,114,308	220,850	6,790,386	6,065,380	136,056	12,039,377	5,248,991
Minnesota.....	1929	14	376	2,162	2,576	2,009	567	945,277	2,031,320	400	4,565,815	4,483,563	82,222	10,995,850	6,340,044
	1927	( <sup>1</sup> )	( <sup>2</sup> )	( <sup>3</sup> )	( <sup>4</sup> )	( <sup>5</sup> )	( <sup>6</sup> )	( <sup>7</sup> )	( <sup>8</sup> )	( <sup>9</sup> )	( <sup>10</sup> )	( <sup>11</sup> )	( <sup>12</sup> )	( <sup>13</sup> )	( <sup>14</sup> )
	1919	16	461	3,564	1,480	1,200	280	922,836	2,297,950	60	7,480,610	7,403,285	78,325	13,984,044	6,498,334
New Hampshire.....	1929	16	166	2,077	3,514	2,975	539	410,695	1,684,544	16,468	3,513,637	3,429,004	84,633	6,820,226	3,306,591
	1927	16	72	2,032	2,890	2,717	173	286,337	1,784,989	120,317	4,082,964	3,974,083	108,881	7,092,881	3,069,897
	1919	16	110	2,970	2,731	2,284	447	384,724	1,982,887	133,367	5,118,063	5,047,034	71,029	9,015,583	3,897,520
New Jersey.....	1929	83	405	6,827	8,501	1,020	2,481	1,594,216	9,854,539	1,120,946	17,079,790	17,438,086	241,704	35,480,337	17,800,547
	1927	85	378	5,975	5,514	3,225	2,289	1,333,457	8,815,318	871,491	16,526,892	16,304,299	222,593	36,881,312	10,324,560
	1919	90	276	4,853	3,016	1,481	1,635	921,742	4,476,305	261,371	15,849,898	15,219,580	180,318	23,853,075	8,503,177
New York.....	1929	563	2,783	31,558	44,302	20,851	23,511	8,468,507	31,978,004	4,985,566	84,013,775	82,204,142	1,719,633	158,110,012	74,006,237
	1927	577	2,669	31,825	48,920	23,250	25,676	7,066,622	33,953,021	4,498,203	84,841,105	82,778,321	2,062,784	159,818,016	74,076,911
	1919	682	3,175	41,372	48,206	28,910	19,200	8,362,494	34,000,707	3,074,770	114,965,838	113,266,713	1,705,125	195,376,641	80,410,803
North Carolina.....	1929	153	1,022	22,930	18,762	7,460	11,302	2,767,580	18,160,045	513,383	48,439,895	47,016,360	823,535	86,112,765	37,072,870
	1927	128	648	17,427	13,717	6,458	7,250	1,640,142	11,961,326	802,089	37,370,770	36,824,109	560,670	61,365,806	23,995,027
	1919	121	509	10,210	11,649	7,969	3,086	1,065,622	5,991,194	101,330	17,582,402	17,202,673	379,729	20,833,568	12,251,166
Ohio.....	1929	33	326	4,157	2,937	1,085	1,852	1,247,797	3,819,893	38,111	10,811,580	10,180,940	136,640	18,562,132	8,250,546
	1927	35	230	3,967	3,137	800	2,247	614,081	3,796,081	31,520	8,003,192	8,756,853	146,330	17,088,516	8,185,324
	1919	34	404	4,407	2,688	1,250	1,438	1,470,223	3,032,899	14,398	11,079,240	10,990,123	89,117	18,778,844	7,690,004
Pennsylvania.....	1929	482	3,473	62,141	39,029	10,548	28,481	11,772,331	78,900,922	5,659,321	145,113,947	143,095,976	2,017,973	294,322,580	149,208,933
	1927	487	3,069	51,967	34,222	12,108	22,114	8,815,623	68,393,890	3,239,593	117,757,369	115,900,696	1,799,673	234,166,337	116,408,008
	1919	606	2,962	44,166	26,359	14,715	11,644	7,720,462	30,691,815	1,206,936	110,696,773	115,655,130	1,041,634	188,260,800	71,564,027
Rhode Island.....	1929	19	97	1,851	1,169	225	944	357,671	1,228,848	28,845	4,006,277	4,537,543	68,734	7,039,021	2,432,744
	1927	21	105	1,636	1,724	490	1,234	370,308	1,782,583	277,815	6,428,635	6,330,120	99,509	10,724,483	4,265,848
	1919	26	139	1,983	1,261	630	631	469,602	1,569,590	70,089	7,389,116	7,331,113	58,003	11,936,313	4,547,197
South Carolina.....	1929	12	42	983	1,670	105	1,565	115,581	627,575	-----	1,646,923	1,590,905	50,318	2,828,522	1,181,509
	1927	11	45	1,084	1,388	70	1,318	90,762	589,520	-----	1,658,882	1,617,165	41,717	3,016,986	1,368,104
	1919	14	50	781	787	525	262	106,413	424,780	22,853	1,246,180	1,212,093			

# KNIT GOODS

**TABLE 2.—GENERAL STATISTICS FOR THE INDUSTRY, 1929, AND 1919, AND FOR ITS BRANCHES, 1929 AND 1927, BY STATES—Continued**

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	Paid for contract work	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
					Total	Primotives	Motors run by purchased energy				Total	Materials and containers	Fuel and purchased energy		
<b>THE KNIT-GOODS INDUSTRY—con.</b>															
<b>Individual States—Continued.</b>															
Vermont.....	1929	7	36	1,084	1,155	550	605	\$120,076	\$1,012,462	\$1,558	\$2,137,888	\$2,083,410	\$54,478	\$4,004,082	\$2,468,194
	1927	7	75	1,184	1,085	550	535	140,394	1,102,761	105	2,424,930	2,355,847	69,092	5,160,371	2,735,432
	1919	7	58	1,105	978	603	285	130,050	916,438	35,218	3,094,042	3,047,498	47,144	5,063,201	1,968,559
Virginia.....	1929	24	110	3,125	2,600	509	2,007	388,985	1,863,425	42,806	5,243,313	5,143,447	99,866	9,381,123	4,137,810
	1927	21	133	3,122	1,914	679	1,235	367,344	1,870,849	1,235	5,733,519	5,646,731	86,788	9,054,805	3,321,280
	1919	10	69	1,578	1,459	1,044	415	190,730	1,002,361	42,451	2,902,140	2,843,134	59,006	4,684,501	1,782,364
Washington....	1929	8	22	180	81	81	81	37,194	150,067	-----	301,702	295,877	5,825	583,145	281,443
	1927	9	33	286	102	102	102	60,003	197,551	1,800	545,481	538,070	6,805	1,170,403	624,022
	1919	8	28	105	33	33	33	52,900	71,375	100	159,020	157,340	2,280	400,902	241,282
Wisconsin.....	1929	52	1,123	11,118	8,435	4,335	4,100	3,786,290	12,200,293	60,902	21,201,800	20,882,902	408,898	51,549,404	30,257,574
	1927	57	1,396	11,008	7,720	4,660	3,160	2,900,855	12,409,766	445,848	25,144,478	24,737,779	406,699	55,838,360	30,003,888
	1919	72	1,173	8,730	5,413	3,020	1,493	2,958,501	5,770,628	77,640	24,210,868	23,988,227	228,641	40,777,704	16,500,836
<b>Groups of States:</b>															
Ark., 1 est.; La., 3; Mo., 4; Tex., 4.....	1929	12	63	1,000	537	40	407	230,641	653,748	-----	2,166,330	2,112,620	43,710	3,304,107	1,147,867
Iowa, 3 est.; Oreg., 5; Wyo., 1.....	1929	0	224	1,404	628	-----	628	507,030	1,338,050	62,124	3,263,830	3,224,181	30,655	7,881,500	4,617,700
<b>Other States (Del., 1 est.; Me., 3; Miss., 4; W. Va., 3).....</b>															
	1929	11	111	2,400	1,820	370	1,456	238,674	1,000,778	231,708	3,303,450	3,200,737	93,722	6,287,855	2,804,306
<b>States not shown separately.....</b>															
	1927	40	730	6,708	6,345	1,983	3,362	1,703,597	5,150,021	150,272	14,200,145	13,680,301	276,844	27,300,731	13,004,680
	1919	14	161	2,984	1,976	508	1,407	397,171	1,075,397	30,550	4,007,007	4,570,683	91,114	8,040,643	3,372,040
<b>HOSIERY</b>															
<b>United States.....</b>															
	1929	730	4,700	120,542	82,425	24,371	58,054	22,114,048	140,078,886	10,200,215	248,650,770	244,468,040	4,198,124	528,700,187	280,043,417
	1927	672	4,172	112,842	76,431	27,595	48,830	17,623,181	114,077,845	5,724,609	229,930,530	220,017,607	8,021,920	456,013,137	220,073,601
<b>Individual States:</b>															
Alabama.....	1929	11	67	1,544	1,246	120	1,120	110,852	845,052	430,614	2,060,096	2,016,596	43,500	3,814,100	1,754,013
	1927	9	32	1,376	983	10	607	75,025	690,690	-----	2,980,714	2,940,171	40,543	4,013,412	1,023,098
Georgia.....	1929	31	233	4,530	3,407	735	2,072	538,303	2,726,490	110,220	7,908,534	7,880,401	108,043	14,020,184	6,021,650
	1927	26	244	5,120	4,484	600	3,524	642,107	2,870,763	161,604	7,803,324	7,631,707	171,617	13,912,714	6,109,380
Illinois.....	1929	18	216	2,813	2,028	1,332	1,590	563,145	2,413,171	43,600	5,610,309	5,467,404	152,815	10,245,824	4,635,515
	1927	17	225	2,911	3,370	1,333	2,043	510,613	2,340,347	1,107	6,080,364	5,804,786	215,508	10,701,000	4,620,712
Indiana.....	1929	0	507	5,034	3,350	-----	3,350	1,050,883	6,657,132	34,320	11,621,119	11,455,114	166,005	28,238,628	16,617,509
Massachusetts..	1929	18	201	2,528	1,406	154	1,342	791,981	3,170,056	184,213	4,054,617	3,957,924	96,693	10,270,620	6,225,093
	1927	18	259	3,052	4,006	1,406	3,200	905,804	3,735,915	350,740	6,348,133	6,204,175	143,958	14,242,273	7,894,140
Michigan.....	1929	6	86	1,117	920	650	270	220,678	730,644	-----	1,515,404	1,470,420	35,984	3,730,485	2,215,081
	1927	8	84	1,092	1,013	685	328	249,075	901,440	-----	2,504,130	2,430,503	64,573	4,361,306	1,857,260
New Hampshire..	1929	10	122	1,533	2,654	2,270	384	201,811	1,229,410	10,468	2,335,431	2,278,080	66,445	4,758,570	2,423,148
New Jersey.....	1929	31	229	4,034	2,486	1,010	1,470	930,469	7,850,386	896,295	10,638,056	10,485,394	152,662	23,000,689	13,358,533
	1927	23	214	4,120	3,783	2,445	1,338	894,093	6,908,236	811,037	11,783,591	11,657,009	126,492	27,274,340	15,490,768
New York.....	1929	19	319	4,652	3,240	1,800	1,380	861,776	5,509,302	1,901,961	10,451,507	10,315,642	135,865	24,510,444	14,007,937
	1927	18	123	1,758	1,199	1,150	1,040	523,476	2,140,131	47,805	3,554,925	3,477,890	77,035	8,658,210	5,103,285
North Carolina..	1929	142	862	10,670	12,391	3,610	8,781	2,246,475	10,118,628	513,363	41,003,304	41,207,124	696,180	75,500,332	33,003,028
	1927	117	640	14,941	9,380	3,358	6,022	1,240,170	10,380,378	302,089	32,800,578	32,413,671	476,907	52,963,881	20,103,303
Pennsylvania....	1929	284	2,471	48,816	28,846	7,218	21,633	8,955,013	66,890,781	5,360,030	98,058,049	97,100,305	1,497,741	221,702,551	123,044,502
	1927	277	2,142	40,494	25,372	8,734	16,638	6,438,008	52,934,734	87,371,003	87,371,003	85,904,201	1,377,462	181,681,103	94,312,500
Rhode Island....	1929	6	16	327	97	-----	97	30,362	200,282	26,654	369,426	362,482	6,944	787,423	417,997
	1927	8	34	513	391	350	241	98,736	571,334	35,933	960,848	940,970	19,872	2,099,541	1,138,693
Tennessee.....	1929	56	524	13,402	6,483	1,847	5,130	1,459,794	8,532,285	2,569	10,858,267	10,528,545	320,722	36,548,038	16,000,671
	1927	51	494	12,838	6,442	1,905	4,537	1,561,602	7,997,016	118,304	20,581,793	20,222,580	359,407	35,670,982	15,098,130
Virginia.....	1929	13	69	1,808	817	230	587	211,576	1,085,272	42,806	2,616,253	2,563,010	53,243	4,007,470	2,201,223
	1927	12	70	1,930	640	150	499	109,604	1,050,144	-----	2,550,014	2,527,957	62,057	4,275,584	1,695,570
Wisconsin.....	1929	18	660	8,178	5,529	2,870	2,659	2,346,078	9,007,708	3,358	10,171,331	15,882,779	288,552	39,018,715	23,747,384
	1927	16	889	8,120	5,339	3,120	2,219	1,813,241	9,840,331	380,569	18,803,388	18,521,050	281,738	42,921,846	24,118,457
<b>Groups of States:</b>															
Conn., 4 est.; Md., 5; Va., 3; W. Va., 3.....	1929	15	140	2,930	1,909	100	1,896	307,730	1,008,682	232,039	4,350,621	4,245,053	114,568	8,167,605	3,808,044
Miss., 4 est.; S. C., 10; Tex., 3.....	1929	17	64	1,442	2,020	375	1,645	178,849	586,948	-----	1,927,148	1,857,701	60,432	3,496,316	1,509,168

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1922

TABLE 2.—GENERAL STATISTICS FOR THE INDUSTRY, 1929, 1927, AND 1919, AND FOR ITS BRANCHES, 1929 AND 1927, BY STATES—Continued

[See note at head of this table]

STATE	Cen- sus year	Num- ber of estab- lish- ments	Sal- aried officers and em- ploy- ees	Wage earners (aver- age for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	Paid for contract work	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PUR- CHASED ELECTRIC ENERGY			Value of products <sup>1</sup>	Value added by manufac- ture <sup>2</sup>
					Total	Prime movers	Motors run by pur- chased energy				Total	Materials and con- tainers	Fuel and pur- chased energy		
HOSIERY—con.															
Groups of States—Continued.															
Other States (Ark., 1 est.; Calif., 4; Iowa, 3; Ky., 8; La., 3; Minn., 3; Mo., 1; Ohio, 0)-----															
	1929	29	320	4,194	2,507	495	2,012	\$1,004,178	\$3,611,567	\$401,780	\$6,508,208	\$6,374,568	\$133,730	\$14,061,309	\$7,553,011
States not shown separately-----	1927	72	822	13,957	9,424	3,283	6,141	2,364,964	12,304,486	634,021	25,687,075	25,172,375	514,700	54,094,771	28,407,696
UNDERWEAR															
United States.															
	1929	251	2,849	41,487	58,014	28,006	29,019	7,947,903	32,928,444	584,840	80,475,275	78,658,640	1,816,629	150,842,016	70,366,741
	1927	285	3,142	46,227	67,465	37,004	30,461	7,736,393	39,182,748	1,621,973	90,727,774	88,692,355	2,135,419	173,423,491	82,695,717
Individual States:															
Connecticut-----	1929	7	108	1,192	2,092	2,063	27	202,409	1,086,070	300	1,974,719	1,918,360	56,359	4,250,711	2,275,992
	1927	6	46	1,006	1,600	1,631	35	151,907	1,038,261	1,874	1,504,500	1,512,776	51,724	3,652,263	2,087,763
Georgia-----	1929	9	57	1,113	1,751	26	1,720	116,254	671,265	-----	2,204,376	2,193,174	71,202	4,218,743	1,954,367
	1927	8	42	744	442	40	402	75,429	361,965	-----	1,335,949	1,311,050	24,899	2,200,670	873,021
Massachusetts-----	1929	15	258	2,691	2,166	1,240	926	747,036	2,560,610	-----	5,063,394	4,944,007	118,697	12,038,806	6,975,412
	1927	24	543	4,114	8,580	7,132	1,428	1,060,899	3,612,400	-----	7,369,897	7,188,569	181,338	15,768,311	8,398,414
Michigan-----	1929	4	113	1,452	2,304	1,926	379	345,330	1,096,882	-----	2,420,971	2,341,384	79,587	4,060,881	2,548,910
	1927	5	64	1,444	2,797	950	1,847	170,453	1,340,421	-----	2,280,268	2,178,030	102,232	5,741,848	3,461,680
New York-----	1929	69	801	12,615	24,670	12,553	12,115	2,280,345	10,208,008	395,873	22,491,049	21,783,221	707,828	41,970,643	19,488,594
	1927	82	899	16,631	29,987	16,220	13,767	2,336,507	15,728,285	1,294,596	31,436,402	30,510,366	926,036	61,302,820	29,810,418
North Carolina-----	1929	7	120	2,458	5,243	3,850	1,393	430,049	1,497,840	-----	4,590,071	4,541,234	58,437	7,588,721	2,989,050
	1927	7	105	2,380	4,148	3,100	1,048	392,996	1,553,797	-----	4,358,801	4,290,184	62,707	8,160,194	3,501,303
Ohio-----	1929	5	106	1,140	931	470	511	323,276	942,120	-----	2,337,067	2,302,315	34,752	4,262,253	1,925,186
	1927	6	84	1,187	805	250	645	227,034	925,360	-----	2,376,274	2,342,407	32,867	4,568,402	2,132,128
Pennsylvania-----	1929	85	474	6,800	5,190	1,495	3,035	1,177,332	5,656,173	170,300	16,813,867	16,589,170	224,688	28,367,577	11,553,710
	1927	80	462	6,186	5,080	1,740	3,340	1,165,792	4,969,126	181,224	14,637,200	14,439,393	197,307	25,013,424	10,370,224
Utah-----	1929	5	26	106	53	-----	53	46,282	75,351	-----	149,566	144,559	4,997	343,946	194,390
	1927	6	21	131	62	-----	52	27,796	91,272	4,212	190,327	192,974	3,353	398,150	201,823
Vermont-----	1929	3	22	900	1,069	550	519	90,609	866,212	-----	1,794,070	1,748,011	46,068	4,013,093	2,219,014
Virginia-----	1929	7	31	650	1,232	229	1,008	109,135	396,584	-----	1,132,895	1,105,877	27,018	1,962,515	829,020
Wisconsin-----	1929	5	46	424	538	175	363	134,780	364,714	-----	1,322,655	1,298,824	23,831	1,991,811	669,156
Groups of States:															
N. H., 2 est.; N. J., 2; R. I., 2-----															
	1929	6	79	1,511	1,143	710	433	299,592	1,240,521	-----	3,282,602	3,213,567	69,045	5,462,534	2,179,951
Ala., 6 est.; Md., 1; S. C., 1; Tenn., 7-----	1929	15	178	5,086	6,006	1,047	4,959	449,078	3,163,007	9,217	7,783,478	7,597,393	186,085	13,446,958	5,663,480
Other States (Calif., 1 est.; Ill., 3; Ind., 3; Minn., 2)-----															
	1929	9	430	3,306	3,636	2,659	977	1,086,400	3,102,391	-----	7,044,806	6,936,861	108,935	15,944,805	8,899,909
States not shown separately-----	1927	52	876	12,465	13,828	5,941	7,887	2,127,460	9,501,855	40,008	25,122,066	24,013,050	509,016	46,068,509	21,546,443
OUTERWEAR															
United States.															
	1929	757	3,261	28,998	22,411	7,598	14,995	9,981,823	28,934,196	2,509,788	75,876,462	74,699,743	1,176,719	147,249,277	71,372,815
	1927	775	2,985	24,602	21,698	7,466	14,202	7,281,948	26,199,962	2,650,279	64,122,921	62,036,106	1,180,815	126,940,929	61,818,008
Individual States:															
California-----	1929	43	151	1,280	697	92	605	445,474	1,248,139	4,760	3,020,587	2,988,189	32,398	6,778,232	3,757,633
	1927	37	136	1,039	741	-----	741	285,540	1,032,007	1,306	2,223,735	2,202,765	20,970	4,760,030	2,520,297
Illinois-----	1929	25	80	511	400	-----	400	289,616	617,245	9,477	1,731,460	1,709,827	24,633	3,254,401	1,622,941
	1927	33	78	718	474	-----	474	222,546	821,422	14,416	1,994,261	1,968,480	25,781	3,896,246	1,901,985
Massachusetts-----	1929	37	228	1,901	1,234	-----	1,234	719,037	1,560,536	34,521	5,347,743	5,200,465	57,338	9,122,098	3,774,055
	1927	36	139	1,163	669	-----	669	441,739	1,088,298	61,442	2,974,228	2,926,919	47,309	6,028,598	2,652,370
Michigan-----	1929	7	25	167	74	-----	74	70,682	164,273	-----	448,075	436,444	12,231	826,245	377,870
Minnesota-----	1929	9	20	125	90	-----	90	40,751	94,677	-----	361,477	354,832	6,645	951,325	289,848
New Jersey-----	1929	36	113	938	430	10	420	441,304	1,186,472	27,804	2,087,768	2,049,347	38,411	4,837,446	2,749,688
	1927	52	104	965	823	235	588	284,161	1,186,002	36,593	2,095,672	2,049,829	45,843	4,010,692	2,515,020
New York-----	1929	400	1,316	11,836	11,593	5,241	6,202	4,158,463	13,427,981	2,208,528	35,466,800	34,873,088	588,712	68,148,518	32,081,718
	1927	403	1,334	10,107	11,935	5,340	6,596	3,277,787	11,908,534	2,322,391	30,069,039	29,434,814	634,225	59,320,810	29,251,777
Ohio-----	1929	21	187	2,560	1,310	85	1,225	773,892	2,446,480	33,111	6,696,227	6,618,502	77,635	12,159,054	5,469,827
	1927	20	122	2,285	1,542	126	1,417	310,972	2,408,584	19,105	5,220,474	5,127,075	93,399	10,342,349	5,121,875

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS FOR THE INDUSTRY, 1929, 1927, AND 1919, AND FOR ITS BRANCHES, 1929 AND 1927, BY STATES—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	Paid for contract work	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
					Total	Prime movers	Motors run by purchased energy				Total	Materials and containers	Fuel and purchased energy		
<b>OUTERWEAR—CON.</b>															
<b>Individual States—Continued.</b>															
Pennsylvania	1929	96	389	4,571	2,182	425	1,757	\$1,002,249	\$4,149,803	\$89,826	\$11,829,700	\$11,075,458	\$154,838	\$21,135,416	\$0,305,020
	1927	100	300	4,566	2,225	614	1,611	901,433	4,408,186	123,870	11,071,193	11,605,800	105,287	20,941,290	0,270,107
Utah	1929	5	48	295	288	-----	238	83,409	225,340	-----	471,633	400,406	11,227	841,934	370,301
	1927	4	46	118	65	-----	65	71,975	79,642	-----	218,830	214,278	4,558	514,470	205,040
Washington	1929	8	22	180	81	-----	81	37,194	150,007	-----	301,702	295,877	5,825	583,145	281,443
	1927	9	33	280	192	-----	192	69,003	197,551	1,800	545,481	538,070	6,805	1,170,403	624,022
Wisconsin	1929	20	417	2,516	2,368	1,290	1,078	1,255,438	2,227,751	93,544	3,797,904	3,701,380	90,515	9,638,038	5,841,034
	1927	34	367	2,135	1,637	950	687	796,653	1,800,903	65,270	4,030,444	3,905,766	73,688	8,190,541	4,151,007
<b>Groups of States:</b>															
Conn., 2 est.; Me., 3; N. H., 4; R. I., 4; Vt., 1	1929	14	35	283	411	220	101	81,025	208,880	1,558	603,148	594,184	8,964	1,140,050	637,508
1927	14	35	283	411	220	101	81,025	208,880	1,558	603,148	594,184	8,964	1,140,050	637,508	
Ga., 2 est.; Ind., 1; Ky., 2; Mo., 1; Tenn., 1	1929	7	43	400	699	-----	699	121,400	333,451	-----	630,177	603,507	26,580	1,349,900	710,732
1927	7	43	400	699	-----	699	121,400	333,451	-----	630,177	603,507	26,580	1,349,900	710,732	
<b>Other States (Del., 1 est.; Md., 1; N. C., 7; Oreg., 5; Va., 2; Wyo., 1)</b>															
1929	17	187	1,246	629	140	480	400,800	883,000	12,660	3,081,375	3,046,408	34,007	6,781,372	3,600,007	
1927	17	187	1,246	629	140	480	400,800	883,000	12,660	3,081,375	3,046,408	34,007	6,781,372	3,600,007	
<b>States not shown separately</b>															
1927	44	297	1,301	1,365	202	1,103	613,247	1,121,474	3,984	3,070,568	3,001,618	68,950	6,577,486	3,500,918	
<b>KNIT CLOTH</b>															
<b>United States</b>															
1929	150	1,813	8,491	10,029	9,422	9,007	2,852,954	8,772,800	680,070	51,662,451	50,920,171	763,280	72,025,192	21,232,741	
1927	137	1,070	6,552	11,652	3,875	7,787	2,028,577	8,102,903	1,264,395	39,309,153	38,641,706	667,887	60,942,937	21,033,784	
<b>Individual States:</b>															
Massachusetts	1929	16	151	1,637	5,797	4,780	1,017	447,251	1,615,078	-----	5,036,110	5,810,100	125,929	9,609,011	3,672,802
	1927	12	102	741	887	195	692	302,460	902,422	60,272	5,023,616	5,543,498	80,147	8,290,542	2,676,897
Michigan	1929	3	12	53	1,110	1,057	53	34,431	78,018	-----	118,921	110,161	8,760	179,361	60,440
New York	1929	75	350	2,455	4,949	1,105	3,754	1,107,923	2,892,623	479,144	15,601,419	15,317,191	287,228	23,402,407	7,857,988
	1927	74	310	3,269	5,895	1,540	4,205	927,702	4,170,071	833,472	19,730,739	19,340,251	391,488	30,539,370	10,805,431
Pennsylvania	1929	17	130	1,060	2,871	1,415	1,456	637,737	2,204,075	20,105	17,812,235	17,671,031	141,204	23,117,336	5,305,101
	1927	21	105	781	1,545	1,020	525	310,300	1,021,815	123,008	4,077,323	4,020,700	56,623	6,521,450	2,450,137
Rhode Island	1929	7	41	360	523	-----	523	147,044	433,011	2,191	2,688,080	2,602,500	25,520	3,408,830	810,750
	1927	7	38	480	659	15	638	130,781	608,731	223,722	3,678,074	3,651,710	27,255	5,707,880	2,028,415
<b>Groups of States:</b>															
Ala., 3 est.; Ga., 2; Md., 1; S. C., 1; Tex., 1	1929	8	18	128	737	570	107	37,150	79,278	-----	853,007	831,988	21,100	1,177,528	324,431
1927	8	18	128	737	570	107	37,150	79,278	-----	853,007	831,988	21,100	1,177,528	324,431	
N. C., 2 est.; Tenn., 1; Va., 2	1929	5	41	1,324	2,155	70	2,085	145,089	800,398	-----	3,308,680	3,203,020	105,657	5,047,734	1,739,048
1927	5	41	1,324	2,155	70	2,085	145,089	800,398	-----	3,308,680	3,203,020	105,657	5,047,734	1,739,048	
<b>Other States (Conn., 3 est.; Ill., 1; Ind., 1; Mo., 2; N. J., 1; Ohio, 1)</b>															
1929	10	55	574	887	335	552	235,726	608,528	187,030	5,370,804	5,323,021	47,873	6,832,085	1,402,001	
1927	10	55	574	887	335	552	235,726	608,528	187,030	5,370,804	5,323,021	47,873	6,832,085	1,402,001	
<b>States not shown separately</b>															
1927	23	115	1,272	2,772	1,105	1,607	291,184	1,398,864	23,861	6,198,472	6,076,592	121,880	6,272,376	3,073,904	

<sup>1</sup> The figures for all years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> Not including proprietors and firm members, as follows: For 1929, 823; 1927, 980; 1919, 1,488. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 223,340; 1927, 204,232; 1919, 186,673.  
<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.  
<sup>5</sup> Withheld from publication in order to avoid disclosing data for individual establishments.  
<sup>6</sup> Arkansas, 1 establishment; Delaware, 3; Iowa, 4; Louisiana, 4; Maine, 3; Minnesota, 14; Mississippi, 2; Missouri, 2; Oregon, 5; Texas, 4; West Virginia, 3; Wyoming, 1.  
<sup>7</sup> Delaware, 2 establishments; Iowa, 2; Kentucky, 2; Louisiana, 2; Louisiana, 3; Maine, 2; Mississippi, 1; Oregon, 1; West Virginia, 1.  
<sup>8</sup> Not including proprietors and firm members, as follows: For 1929, 138; 1927, 175. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the hosiery branch of the industry, are as follows: For 1929, 136,786; 1927, 119,180.  
<sup>9</sup> Not tabulated separately for 1919.  
<sup>10</sup> California, 4 establishments; Connecticut, 3; Delaware, 2; Indiana, 3; Iowa, 3; Kentucky, 6; Louisiana, 4; Maryland, 6; Minnesota, 1; Mississippi, 2; New Hampshire, 12; Ohio, 6; South Carolina, 8; Texas, 4; Vermont, 3; West Virginia, 3.  
<sup>11</sup> Not including proprietors and firm members, as follows: For 1929, 81; 1927, 143. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the underwear branch of the industry, are as follows: For 1929, 44,417; 1927, 40,512.  
<sup>12</sup> Alabama, 4 establishments; Arkansas, 1; California, 2; Illinois, 4; Indiana, 3; Maryland, 1; Minnesota, 2; New Hampshire, 2; New Jersey, 4; Rhode Island, 2; South Carolina, 2; Tennessee, 7; Vermont, 4; Virginia, 8; Wisconsin, 6.  
<sup>13</sup> Not including proprietors and firm members, as follows: For 1929, 541; 1927, 507. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the outerwear branch of the industry, are as follows: For 1929, 32,770; 1927, 28,244.  
<sup>14</sup> Connecticut, 4 establishments; Delaware, 1; Georgia, 1; Iowa, 1; Kentucky, 1; Maine, 3; Michigan, 4; Minnesota, 11; Missouri, 1; New Hampshire, 2; North Carolina, 4; Oregon, 5; Rhode Island, 4; Tennessee, 1; Wyoming, 1.  
<sup>15</sup> Not including proprietors and firm members, as follows: For 1929, 63; 1927, 65. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the knit-cloth branch of the industry, are as follows: For 1929, 9,397; 1927, 7,287.  
<sup>16</sup> Connecticut, 2 establishments; Georgia, 2; Illinois, 1; Indiana, 2; Maryland, 1; Michigan, 3; Missouri, 1; New Jersey, 6; Ohio, 3; Virginia, 1; Wisconsin, 1.

## CENSUS OF MANUFACTURES: 1929

TABLE 3.—KNIT GOODS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1923 TO 1929

[The figures for all years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

KIND	1929	1927	1925	1923
1. Knit-goods industry, all products, total value.....	\$800,716,672	\$816,020,494	\$800,060,213	\$848,176,734
2. Knit goods, value.....	\$880,811,820	\$800,096,781	\$702,204,280	\$822,103,383
3. Cotton yarns for sale:¹				
Pounds.....	8,430,308	6,168,831	8,098,479	14,734,700
Value.....	\$3,018,436	\$1,891,301	\$3,638,632	\$0,045,400
4. Cotton waste for sale:¹				
Pounds.....	13,738,311	15,298,067	12,308,808	18,210,170
Value.....	\$111,694	\$1,013,101	\$1,320,815	\$1,080,450
5. Old bagging and ties, value.....	\$10,253	\$14,015	\$86,212	\$41,080
6. Other products (not normally belonging to the industry), value.....	\$6,612,203	\$7,116,708	\$2,030,928	\$3,598,079
7. Receipts for contract work.....	\$8,352,257	\$5,888,588	\$10,580,340	\$13,497,743
8. Knit goods made as secondary products in other industries, value.....	\$364,328	\$720,059	\$2,265,816	\$4,290,570
Knit goods, all industries:				
Aggregate value (sum of 2 and 8).....	\$881,176,157	\$801,426,740	\$704,560,096	\$826,402,962
Hosiery, except infants', athletic, and golf hose—				
Total dozen pairs.....	111,190,705	103,160,976	99,777,406	97,432,927
Total value.....	\$500,831,773	\$440,572,650	\$403,864,233	\$378,732,878
Full-fashioned—				
Dozen pairs.....	31,020,245	21,035,100	13,899,973	11,230,807
Value.....	\$311,634,126	\$232,785,096	\$148,151,061	\$129,250,871
Seamless—				
Dozen pairs.....	70,261,400	82,131,777	85,877,433	86,202,060
Value.....	\$188,747,647	\$207,786,654	\$255,713,172	\$249,473,007
Infants' hose—				
Total dozen pairs.....	6,174,838	6,838,939	(?)	(?)
Total value.....	\$11,244,403	\$13,020,707	(?)	(?)
Full-fashioned—				
Dozen pairs.....	50,500	35,246	(?)	(?)
Value.....	\$180,357	\$109,515	(?)	(?)
Seamless—				
Dozen pairs.....	6,115,242	6,803,693	(?)	(?)
Value.....	\$11,064,046	\$12,911,192	(?)	(?)
Underwear, total value.....	\$135,092,008	\$148,604,366	\$163,276,772	\$160,901,752
Shirts and drawers—				
Total dozen pieces.....	8,801,024	8,619,188	11,201,521	12,746,531
Total value.....	\$37,669,519	\$38,961,030	\$60,845,028	\$61,683,038
All-cotton—				
Dozen pieces.....	7,179,702	7,175,728	9,300,880	11,558,420
Value.....	\$23,088,586	\$24,022,053	\$36,822,270	\$44,325,231
All-wool—				
Dozen pieces.....	50,105	60,597	46,865	111,530
Value.....	\$815,505	\$1,393,111	\$1,186,700	\$2,235,010
Cotton and wool mixed—				
Dozen pieces.....	380,355	373,059	605,955	722,815
Value.....	\$4,300,713	\$4,696,334	\$8,715,897	\$8,194,167
Silk—				
Dozen pieces.....	110,958	150,200	485,398	251,077
Value.....	\$1,902,450	\$2,305,830	\$7,050,794	\$5,923,360
Silk and rayon mixed—				
Dozen pieces.....	57,001	24,454	(?)	(?)
Value.....	\$497,449	\$355,550	(?)	(?)
Rayon—				
Dozen pieces.....	1,092,098	754,458	501,377	(?)
Value.....	\$6,960,273	\$5,702,554	\$4,446,000	(?)
Other—				
Dozen pieces.....	11,085	80,692	165,046	102,680
Value.....	\$104,543	\$424,589	\$1,723,352	\$1,005,204
Union suits—				
Total dozens.....	8,891,124	9,785,908	11,500,387	10,745,970
Total value.....	\$70,837,155	\$83,684,762	\$99,214,890	\$99,218,714
All-cotton—				
Dozens.....	7,377,755	8,339,636	10,248,867	0,411,840
Value.....	\$60,307,842	\$69,268,975	\$73,700,339	\$74,130,254
All-wool—				
Dozens.....	136,063	104,285	69,652	25,222
Value.....	\$3,076,000	\$2,960,489	\$2,452,112	\$935,505
Cotton and wool mixed—				
Dozens.....	811,105	702,110	808,457	1,134,046
Value.....	\$11,725,176	\$14,293,925	\$16,402,041	\$19,658,827
Silk—				
Dozens.....	30,620	53,241	124,793	63,195
Value.....	\$802,887	\$965,940	\$2,655,186	\$2,542,155
Silk and rayon mixed—				
Dozens.....	34,537	20,762	(?)	(?)
Value.....	\$320,629	\$181,487	(?)	(?)
Rayon—				
Dozens.....	480,612	442,145	137,296	(?)
Value.....	\$4,302,271	\$4,065,710	\$2,678,449	(?)
Other fibers—				
Dozens.....	20,342	123,727	111,322	80,767
Value.....	\$205,390	\$1,042,236	\$1,420,768	\$1,051,073
Bloomers and step-ins—				
Dozens.....	2,382,841	1,750,603	(?)	(?)
Value.....	\$18,310,120	\$17,396,005	(?)	(?)
Slips and petticoats—				
Dozens.....	258,779	217,752	(?)	(?)
Value.....	\$2,119,767	\$3,027,355	(?)	(?)
Infants' underwear, value.....	\$6,146,438	\$5,595,205	\$3,216,854	(?)

See footnotes at end of table.

# KNIT GOODS

305

**TABLE 3.—KNIT GOODS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1923 TO 1929—Continued**

[See note at head of this table]

KIND	1929	1927	1926	1923
Knit goods, all industries—Continued.				
Outerwear, total value.....	\$140,850,408	\$120,070,402	\$147,002,812	\$107,158,178
Sweaters, sweater coats, jerseys, etc.—				
Dozens.....	4,807,422	3,780,648	3,714,034	4,455,006
Value.....	\$80,428,942	\$74,042,092	\$84,898,008	\$111,150,030
Bathing suits—				
Dozens.....	1,021,433	730,807	604,867	072,448
Value.....	\$22,084,308	\$15,857,238	\$16,322,154	\$17,554,058
Scarfs and shawls—				
Dozens.....	120,011	187,754	491,045	070,002
Value.....	\$1,163,118	\$2,214,084	\$4,001,093	\$10,355,051
Headwear, except infants—				
Dozens.....	783,425	700,412	804,028	842,843
Value.....	\$3,788,126	\$3,876,630	\$4,511,372	\$4,813,062
Neckties—				
Dozens.....	627,727	1,810,377	2,705,072	3,323,025
Value.....	\$1,717,051	\$5,852,007	\$8,060,652	\$12,317,321
Athletic and golf hose—				
Dozen pairs.....	1,105,493	950,357	573,016	(1)
Value.....	\$4,770,250	\$4,278,433	\$3,058,520	(1)
Dresses and suits—				
Number.....	1,023,446	808,481	(2)	(2)
Value.....	\$11,100,093	\$6,251,042	(2)	(2)
Infants' outerwear, value.....	\$8,393,707	\$6,890,240	\$9,003,635	(3)
Other outerwear, value.....	\$7,555,804	\$9,214,840	\$14,710,769	\$40,050,056
Knit cloth, total value.....	\$67,818,801	\$50,171,607	\$55,454,344	\$48,520,578
Wool jersey—				
Square yards.....	7,211,700	10,230,203		
Value.....	\$7,742,006	\$11,200,075		
Other knit woolsens—				
Square yards.....	2,508,053	1,874,877		
Value.....	\$4,408,731	\$2,725,556		
Silk jersey, including milanese—				
Square yards.....	4,127,260	3,509,474	42,171,774	38,703,100
Value.....	\$3,115,704	\$2,802,200	\$36,451,207	\$43,307,219
Rayon tubing, including tricolette—				
Square yards.....	49,047,738	28,818,056		
Value.....	\$29,700,519	\$20,873,180		
Other knit rayon—				
Square yards.....	1,013,837	(1)	(1)	(1)
Value.....	\$800,627	(1)	(1)	(1)
Cotton jersey—				
Square yards.....	14,233,053	(1)	(1)	(1)
Value.....	\$4,750,320	(1)	(1)	(1)
Corset cloth—				
Rayon and cotton—				
Square yards.....	1,008,038	(1)	(1)	(1)
Value.....	\$1,581,770	(1)	(1)	(1)
Other corset cloth—				
Square yards.....	3,150,768	(1)	(1)	(1)
Value.....	\$2,000,730	(1)	(1)	(1)
Glove and shoe linings, value.....	\$4,054,000	\$4,773,415	\$4,031,000	\$5,830,150
Stockinette, value.....	\$1,234,004	\$957,368	\$2,107,078	\$2,830,473
Other knit cloth, value.....	\$0,764,310	\$12,743,808	\$12,203,700	\$16,480,727
Other knit goods, value.....	\$10,782,764	\$13,917,918	\$24,871,935	\$21,080,576

<sup>1</sup> Cotton yarns and cotton waste are produced for sale principally by establishments classified in the "Cotton goods" industry and the "Waste" industry, respectively. The figures here given relate only to yarns and waste for sale as secondary products of establishments engaged primarily in the production of knit goods.

<sup>2</sup> No comparable data.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> Not reported separately; included in "Other knit cloth."

<sup>5</sup> See footnote 4.



CENSUS OF MANUFACTURES: 1929

TABLE 4.—PRINCIPAL PRODUCTS OF THE INDUSTRY, BY QUANTITY AND VALUE, 1929, AND BY QUANTITY, 1927, BY STATES

[This table presents statistics for the States for which separate figures can be given without disclosing data for individual establishments. In some cases, however, certain of the "Other States" reported larger quantities and values than some of the States shown separately. The figures for both 1929 and 1927 represent production, not sales. See GENERAL EXPLANATIONS—Value of Products]

PRODUCT AND STATE	VALUE	QUANTITY		PRODUCT AND STATE	VALUE	QUANTITY	
	1929	1929	1927		1929	1929	1927
Hosiery, except infants' hose and athletic and golf hose, total.....	\$500,381,773	Dozen pairs 111,190,705	Dozen pairs 103,166,076	Hosiery, except infants' hose and athletic and golf hose—Continued.		Dozen pairs	Dozen pairs
Alabama.....	3,380,360	1,554,341	2,231,182	Mixtures—Continued.			
Georgia.....	12,410,808	5,559,135	6,163,157	Rayon and cotton, total.....	\$32,017,530	15,304,075	8,759,303
Illinois.....	0,689,279	4,285,304	4,828,754	Georgia.....	2,217,028	979,535	(1)
Indiana.....	26,105,988	2,912,028	(1)	North Carolina.....	12,722,424	7,206,444	3,406,230
Massachusetts.....	9,201,128	1,031,992	2,223,497	Pennsylvania.....	6,319,503	2,924,235	2,352,489
New Hampshire.....	4,285,947	1,110,185	1,230,171	Tennessee.....	3,013,343	1,608,402	1,107,812
New Jersey.....	23,815,185	2,504,830	2,167,097	Wisconsin.....	1,226,525	325,781	326,102
New York.....	18,912,899	2,099,522	2,276,003	Other States.....	5,619,707	2,180,578	1,560,670
North Carolina.....	74,523,643	32,320,985	25,053,988	Triple mixtures, total.....	10,974,041	3,046,260	3,534,771
Pennsylvania.....	211,437,820	20,002,551	24,210,659	North Carolina.....	2,454,080	835,089	638,306
Tennessee.....	35,466,269	11,014,585	12,033,338	Pennsylvania.....	1,260,327	471,732	1,263,186
Virginia.....	4,493,087	2,083,232	2,255,890	Other States.....	7,288,734	1,739,430	1,643,279
Wisconsin.....	37,550,832	5,339,330	5,807,357	Infants' hose, total.....	11,244,403	6,174,838	6,838,039
Other States.....	29,108,528	8,779,625	11,776,883	Pennsylvania.....	4,942,938	2,766,595	3,881,046
Cotton, total.....	49,537,195	33,394,816	43,237,772	Tennessee.....	958,306	706,127	634,898
Alabama.....	1,651,600	1,076,278	1,838,272	Other States.....	5,343,669	2,702,116	2,322,995
Georgia.....	3,612,660	3,330,368	4,700,069	Cotton, total.....	2,577,486	1,777,893	3,062,652
Illinois.....	4,700,187	3,089,344	3,751,131	Pennsylvania.....	516,984	387,246	1,304,724
North Carolina.....	15,559,490	11,037,652	13,553,953	Tennessee.....	829,872	629,457	601,210
Pennsylvania.....	4,708,712	2,888,080	4,231,326	Other States.....	1,230,630	761,100	1,150,100
Tennessee.....	10,308,882	5,822,126	6,706,314	Wool.....	272,145	87,033	243,950
Virginia.....	1,008,966	657,804	1,328,773	Silk.....	280,419	57,424	88,596
Wisconsin.....	1,897,133	648,115	1,068,774	Pure-thread silk with lisle or cotton tops, heels, and toes.....	922,904	499,802	187,058
Other States.....	5,989,559	3,045,049	5,064,260	Rayon with cotton tops, heels, and toes, total.....	2,364,268	1,252,413	1,653,820
Wool, total.....	1,868,330	448,428	565,471	Pennsylvania.....	2,305,081	1,216,670	1,430,378
Pennsylvania.....	90,818	12,293	30,688	Other States.....	58,587	35,743	214,442
Wisconsin.....	520,068	135,234	196,578	Cotton and wool mixed.....	404,976	138,176	171,810
Other States.....	1,257,444	300,901	338,205	Rayon and cotton mixed, total.....	2,512,630	1,407,805	960,597
Silk, total.....	73,747,896	6,974,811	3,566,455	Pennsylvania.....	692,324	434,446	668,066
Indiana.....	14,070,873	1,248,061	(1)	Other States.....	1,820,306	1,035,419	202,591
Massachusetts.....	5,068,217	361,087	135,435	Other fibers.....	1,909,485	803,633	481,038
New Jersey.....	3,985,723	302,562	298,451	Shirts and drawers, total.....	37,669,510	Dozen pieces 8,801,924	Dozen pieces 8,610,188
New York.....	3,500,345	204,199	(1)	Massachusetts.....	3,013,534	524,070	723,990
North Carolina.....	4,377,020	561,374	(1)	New York.....	14,571,066	2,085,183	3,125,751
Pennsylvania.....	36,278,578	3,430,576	1,654,599	Pennsylvania.....	8,484,512	3,105,060	2,731,350
Other States.....	0,457,240	876,952	1,517,970	Other States.....	11,600,407	2,187,611	2,038,049
Pure-thread silk with lisle or cotton tops, heels, and toes, total.....	219,334,957	23,646,432	10,297,406	Cotton, total.....	23,088,586	7,170,762	7,175,728
Massachusetts.....	2,418,512	228,081	314,457	Massachusetts.....	1,870,763	394,093	528,300
New Jersey.....	19,076,735	2,062,491	1,865,098	New York.....	9,155,483	2,395,639	2,715,753
New York.....	5,438,136	590,325	481,032	Other States.....	6,032,505	2,745,245	2,341,736
North Carolina.....	14,450,992	1,696,891	988,020	Other States.....	6,029,835	1,644,780	1,589,039
Pennsylvania.....	122,512,785	12,832,250	10,760,542	Wool, total.....	815,505	50,105	60,597
Tennessee.....	10,305,603	1,451,104	871,114	New York.....	476,856	36,148	27,976
Wisconsin.....	24,392,514	2,173,802	2,012,071	Other States.....	339,149	13,957	32,621
Other States.....	20,730,680	2,611,438	1,996,072	Cotton and wool mixed, total.....	4,300,713	380,355	373,050
Rayon with cotton tops, heels, and toes, and all-rayon, total.....	46,741,256	16,400,918	11,541,268	Connecticut.....	1,780,417	119,840	143,627
North Carolina.....	20,715,264	8,858,506	6,152,746	New York.....	1,049,921	89,337	134,835
Pennsylvania.....	11,094,615	2,538,124	1,040,998	Other States.....	1,470,375	171,169	94,507
Tennessee.....	5,012,772	1,793,512	1,146,950	Silk, total.....	1,902,450	119,958	160,200
Other States.....	9,918,605	3,210,776	3,200,574	New York.....	1,129,764	66,087	73,820
Mixtures:				Other States.....	772,686	53,871	76,371
Cotton and wool, total.....	10,555,368	3,700,579	4,204,480	Rayon, total.....	6,960,273	1,002,098	754,458
New Hampshire.....	990,367	374,328	509,596	New York.....	2,046,827	388,403	153,165
Pennsylvania.....	991,095	263,895	328,294	Pennsylvania.....	1,400,121	261,886	259,290
Wisconsin.....	1,376,354	348,913	430,008	Other States.....	2,853,325	351,809	342,003
Other States.....	7,107,552	2,773,443	2,936,678	Other fibers.....	601,992	69,616	105,146
Silk and wool.....	1,435,743	155,621	361,271	Union suits, total.....	70,837,155	Dozens 8,801,124	Dozens 9,785,906
Silk and cotton.....	28,834,575	2,926,442	697,830	Connecticut.....	723,477	30,600	31,393
Silk and rayon, total.....	20,630,651	4,176,375	6,301,328	Georgia.....	2,077,275	336,319	356,217
North Carolina.....	3,608,200	993,119	958,114	Massachusetts.....	3,788,075	305,055	285,222
Pennsylvania.....	7,946,724	1,390,876	1,683,697	New York.....	18,484,366	2,225,993	2,471,595
Tennessee.....	2,064,401	511,135	798,053	North Carolina.....	4,572,983	663,427	625,333
Wisconsin.....	1,527,884	294,944	690,737	Pennsylvania.....	9,910,151	1,667,276	2,170,940
Other States.....	5,453,442	1,016,301	2,220,727	Virginia.....	1,759,528	260,431	270,049
Rayon and wool, total.....	4,684,231	955,048	1,099,615	Wisconsin.....	1,661,337	120,645	274,008
New Hampshire.....	595,427	118,780	(1)	Other States.....	27,850,964	2,981,378	3,313,198
Pennsylvania.....	916,522	201,325	363,006				
Wisconsin.....	1,396,782	222,228	174,474				
Other States.....	1,775,500	412,709	572,135				

See footnotes at end of table.



KNIT GOODS

TABLE 4.—PRINCIPAL PRODUCTS OF THE INDUSTRY, BY QUANTITY AND VALUE, 1929, AND BY QUANTITY, 1927, BY STATES—Continued

[See note at head of this table]

PRODUCT AND STATE	VALUE	QUANTITY		PRODUCT AND STATE	VALUE	QUANTITY	
	1929	1929	1927		1929	1929	1927
Union suits—Continued.							
Cotton, total.....	\$50,307,842	Dozens 7,377,755	Dozens 8,339,630	Scarfs and shawls, total.....	\$1,163,118	Dozens 129,911	Dozens 187,764
Georgia.....	2,033,291	331,368	307,999	New York.....	803,305	85,040	129,845
Massachusetts.....	1,161,749	153,417	132,097	Other States.....	350,813	41,865	69,909
New York.....	12,033,040	1,795,613	2,228,678	Knit headwear, except infants', total.....	3,783,126	783,425	709,412
North Carolina.....	4,500,088	562,875	625,333	New York.....	1,500,004	259,376	172,086
Pennsylvania.....	7,825,477	1,054,815	1,030,443	Ohio.....	1,204,015	359,332	289,630
Virginia.....	1,759,323	209,431	200,040	Wisconsin.....	742,436	121,869	209,321
Other States.....	21,018,269	2,519,236	2,849,044	Other States.....	159,581	45,848	31,655
Wool, total.....	3,070,000	136,063	104,285	Neckties, total.....	1,717,051	627,727	1,819,377
New York.....	1,512,418	67,013	50,615	New York.....	639,710	424,312	414,175
Other States.....	1,557,582	69,050	53,670	Pennsylvania.....	806,251	414,054	1,290,421
Cotton and wool mixed, total.....	11,725,176	811,195	792,110	Other States.....	274,090	89,331	99,781
Massachusetts.....	2,127,343	124,853	132,293	Athletic and golf hose, total.....	4,770,259	Dozen pairs 1,105,498	Dozen pairs 959,357
New York.....	3,538,302	249,276	119,740	New York.....	1,410,167	213,295	89,444
Other States.....	6,059,531	437,066	459,167	Pennsylvania.....	393,673	51,966	667,835
Silk.....	892,887	39,620	53,241	Other States.....	3,168,519	810,327	299,678
Rayon, total.....	4,392,271	489,612	442,145	Dresses and suits, total.....	11,169,993	Number 1,023,446	Number 869,481
New York.....	1,037,733	103,160	61,986	New Jersey.....	1,491,330	114,257	(1)
Pennsylvania.....	1,176,623	207,192	121,899	New York.....	6,842,834	599,759	365,169
Other States.....	2,087,915	179,260	258,263	Pennsylvania.....	1,954,882	163,391	(1)
Other fibers.....	532,019	54,879	144,489	Other States.....	1,773,047	157,039	1,563,315
Bloomers and step-ins, total.....	18,319,129	2,382,841	1,759,693	Infants' outerwear, value.....	8,393,797	(1)	(1)
New York.....	5,576,121	643,997	791,895	Wool jersey, total.....	7,742,099	Square yards 7,211,799	Square yards 10,236,293
Pennsylvania.....	6,617,293	953,319	488,177	New York.....	1,954,884	1,328,991	499,368
Other States.....	7,125,805	785,534	590,531	Other States.....	5,787,122	5,882,778	9,775,925
Cotton, total.....	1,795,683	482,097	458,218	Other knit woollens, total.....	4,498,731	2,598,653	1,874,877
New York.....	559,726	139,398	223,098	New York.....	1,768,054	1,000,673	831,585
Pennsylvania.....	1,035,676	312,819	195,285	Other States.....	2,730,677	1,597,980	1,023,312
Other States.....	119,281	29,880	39,835	Silk jersey, including milanese, total.....	3,115,764	4,127,209	3,599,474
Silk.....	1,924,878	92,053	149,674	New York.....	1,049,697	1,818,293	2,169,078
Rayon, total.....	13,811,839	1,714,869	1,995,188	Other States.....	1,476,067	2,309,057	1,340,396
New York.....	3,736,044	442,859	468,684	Rayon tubing, including trilcollette, total.....	29,769,519	49,947,738	28,818,659
Pennsylvania.....	3,632,432	559,985	219,596	New York.....	9,239,748	18,795,927	23,614,155
Other States.....	6,443,463	711,725	431,199	Other States.....	20,529,771	31,151,811	6,204,501
Other fibers.....	879,729	94,221	56,623	Other knit rayon.....	899,927	1,013,897	(1)
Slips and petticoats, total.....	2,119,767	258,779	217,762	Cotton jersey.....	4,756,329	14,233,953	(1)
Rayon.....	1,542,289	184,476	99,492	Corset cloth, total.....	4,491,512	4,837,899	(1)
Other fibers.....	577,487	74,304	121,269	Rayon and cotton.....	1,581,770	1,998,038	(1)
Infants' underwear, value.....	9,149,438	(1)	(1)	Other.....	2,909,739	3,159,798	(1)
Sweaters, sweater coats, and jerseys, total.....	89,428,942	4,897,422	3,789,648	Stockinette.....	1,234,094	(1)	(1)
California.....	2,817,637	95,074	107,745	Glove and shoe linings.....	4,654,999	(1)	(1)
Illinois.....	2,029,197	59,159	54,929	Other knit cloth.....	9,794,319	(1)	(1)
Massachusetts.....	6,639,075	249,891	148,582	Cotton yarns for sale.....	3,018,436	Pounds 8,439,398	Pounds 6,198,831
New Jersey.....	2,294,223	82,074	145,873				
New York.....	43,667,092	2,699,537	2,242,926				
Ohio.....	10,329,795	891,874	593,928				
Pennsylvania.....	13,699,998	697,419	389,531				
Wisconsin.....	4,353,734	122,054	109,059				
Other States.....	3,919,281	237,753	87,181				
Bathing suits, total.....	22,084,398	1,921,433	739,897				
California.....	2,724,929	69,399	94,899				
Illinois.....	822,479	23,291	33,081				
Massachusetts.....	2,318,097	191,759	123,999				
New York.....	5,215,919	277,195	138,199				
Pennsylvania.....	3,914,526	193,881	197,687				
Other States.....	7,088,460	297,931	181,694				

1 Included in item for "Other States."  
 2 See footnote 1.  
 3 Revised.  
 4 No data.  
 5 See footnote 1, Table 3.

## CENSUS OF MANUFACTURES: 1929

TABLE 5.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE INDUSTRY AND ITS BRANCHES, FOR THE UNITED STATES: 1929

KIND	Total for the knit-goods industry	PRODUCTS OF ESTABLISHMENTS ENGAGED PRIMARILY IN THE MANUFACTURE OF—			
		Hosiery	Underwear	Outerwear	Knit cloth
Aggregate value.....	\$899,716,672	\$628,700,187	\$150,842,016	\$147,249,277	\$72,925,192
Hosiery, except infants' hose and athletic and golf hose: 1					
Total dozen pairs.....	111,100,705	110,415,395	500,012	124,398	60,000
Total value.....	\$500,381,773	\$497,424,795	\$2,610,500	\$290,478	\$150,000
Full-fashioned—					
Total dozen pairs.....	31,929,245	31,827,732	101,613		
Total value.....	\$311,634,126	\$310,038,318	\$995,808		
Seamless—					
Total dozen pairs.....	79,261,460	78,587,663	489,399	124,398	60,000
Total value.....	\$188,747,647	\$186,796,477	\$1,520,692	\$290,478	\$150,000
Men's—					
Total dozen pairs.....	44,787,001	44,215,015	401,448	100,638	60,000
Total value.....	\$97,244,004	\$95,521,759	\$1,363,537	\$209,368	\$150,000
Full-fashioned—					
Total dozen pairs.....	714,957	714,057			
Total value.....	\$4,783,408	\$4,753,408			
Seamless—					
Total dozen pairs.....	44,072,044	43,500,958	401,448	100,638	60,000
Total value.....	\$92,461,286	\$90,738,351	\$1,363,537	\$209,368	\$150,000
All-cotton—					
Full-fashioned—					
Dozen pairs.....	25,985	25,085			
Value.....	\$132,682	\$132,682			
Seamless—					
Dozen pairs.....	16,405,002	16,320,353	21,017	58,232	
Value.....	\$19,959,400	\$19,881,740	\$20,470	\$51,181	
All pure-thread silk—					
Full-fashioned—					
Dozen pairs.....	62,570	62,570			
Value.....	\$653,054	\$653,054			
Seamless—					
Dozen pairs.....	396,019	396,019			
Value.....	\$1,352,043	\$1,352,043			
Pure-thread silk with lisle or cotton tops, heels, and toes—					
Full-fashioned—					
Dozen pairs.....	315,926	315,926			
Value.....	\$2,085,711	\$2,085,711			
Seamless—					
Dozen pairs.....	1,430,588	1,339,120	40,033	1,426	
Value.....	\$6,895,804	\$6,073,608	\$218,021	\$3,575	
Rayon with cotton tops, heels, and toes, and all-rayon—					
Full-fashioned—					
Dozen pairs.....	100,045	100,045			
Value.....	\$290,123	\$290,123			
Seamless—					
Dozen pairs.....	8,127,580	8,122,338	5,242		
Value.....	\$18,158,233	\$18,137,470	\$20,754		
Mixtures—					
Silk and wool—					
Full-fashioned—					
Dozen pairs.....	12,920	12,920			
Value.....	\$164,753	\$164,753			
Seamless—					
Dozen pairs.....	46,138	44,165	1,073		
Value.....	\$300,722	\$280,302	\$14,300		
Silk and rayon—					
Full-fashioned—					
Dozen pairs.....	38,576	38,576			
Value.....	\$272,650	\$272,650			
Seamless—					
Dozen pairs.....	1,690,620	1,588,165	92,455		
Value.....	\$7,540,333	\$7,193,207	\$347,000		
Rayon and wool—					
Full-fashioned—					
Dozen pairs.....	5,786	5,786			
Value.....	\$42,499	\$42,499			
Seamless—					
Dozen pairs.....	337,333	320,925	7,458		
Value.....	\$1,576,124	\$1,540,495	\$35,620		
Rayon and cotton—					
Full-fashioned—					
Dozen pairs.....	20,054	20,054			
Value.....	\$140,862	\$140,862			
Seamless—					
Dozen pairs.....	9,585,937	9,585,937			
Value.....	\$18,263,680	\$18,263,680			
Other hosiery 2—					
Full-fashioned—					
Dozen pairs.....	124,086	124,086			
Value.....	\$1,094,474	\$1,094,474			
Seamless—					
Dozen pairs.....	6,061,577	5,718,327	233,270	40,680	00,000
Value.....	\$18,414,938	\$17,409,608	\$700,628	\$154,612	\$150,000
Women's—					
Total dozen pairs.....	51,215,352	51,068,784	133,068	14,000	
Total value.....	\$372,014,103	\$370,885,089	\$1,052,014	\$77,000	
Full-fashioned—					
Total dozen pairs.....	31,035,182	30,983,669	101,513		
Total value.....	\$306,641,233	\$305,645,425	\$995,808		
Seamless—					
Total dozen pairs.....	20,130,670	20,085,115	31,555	14,000	
Total value.....	\$65,372,870	\$65,239,664	\$56,206	\$77,000	

See footnotes at end of table.

# KNIT GOODS

309

TABLE 5.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE INDUSTRY AND ITS BRANCHES,  
FOR THE UNITED STATES: 1929—Continued

KIND	Total for the knit-goods industry	PRODUCTS OF ESTABLISHMENTS ENGAGED PRIMARILY IN THE MANUFACTURE OF—			
		Hosiery	Underwear	Outerwear	Knit cloth
Hosiery, except infants' hose and athletic and golf hose—Continued.					
Women's—Continued.					
All-cotton—					
Full-fashioned—					
Dozen pairs.....	340, 839	340, 839			
Value.....	\$1, 063, 995	\$1, 063, 995			
Seamless—					
Dozen pairs.....	6, 928, 095	6, 896, 540	31, 555		
Value.....	\$11, 012, 032	\$11, 555, 826	\$56, 200		
All pure-thread silk—					
Full-fashioned—					
Dozen pairs.....	6, 810, 337	5, 802, 852	13, 485		
Value.....	\$67, 403, 086	\$67, 266, 852	\$136, 834		
Seamless—					
Dozen pairs.....	663, 274	663, 274			
Value.....	\$4, 220, 034	\$4, 220, 034			
Pure-thread silk with lisle or cotton tops, heels, and toes—					
Full-fashioned—					
Dozen pairs.....	19, 224, 224	19, 130, 100	88, 028		
Value.....	\$192, 853, 002	\$191, 494, 988	\$853, 974		
Seamless—					
Dozen pairs.....	2, 023, 557	2, 023, 557			
Value.....	\$17, 614, 658	\$17, 614, 658			
Rayon with cotton tops, heels, and toes, and all-rayon—					
Full-fashioned—					
Dozen pairs.....	1, 065, 302	1, 065, 302			
Value.....	\$10, 211, 120	\$10, 211, 120			
Seamless—					
Dozen pairs.....	5, 475, 317	5, 475, 317			
Value.....	\$15, 587, 540	\$15, 587, 540			
Mixtures—					
Cotton and wool and all-wool—					
Full-fashioned—					
Dozen pairs.....	81, 743	81, 743			
Value.....	\$318, 315	\$318, 315			
Seamless—					
Dozen pairs.....	167, 881	153, 881	14, 000		
Value.....	\$816, 305	\$730, 305	\$77, 000		
Silk and wool—					
Full-fashioned—					
Dozen pairs.....	34, 027	34, 027			
Value.....	\$523, 538	\$523, 538			
Seamless—					
Dozen pairs.....	59, 042	59, 042			
Value.....	\$437, 050	\$437, 050			
Silk and cotton—					
Full-fashioned—					
Dozen pairs.....	2, 599, 030	2, 599, 030			
Value.....	\$26, 875, 261	\$26, 875, 261			
Seamless—					
Dozen pairs.....	80, 193	80, 193			
Value.....	\$384, 940	\$384, 940			
Silk and rayon—					
Full-fashioned—					
Dozen pairs.....	1, 038, 141	1, 038, 141			
Value.....	\$6, 275, 641	\$6, 275, 641			
Seamless—					
Dozen pairs.....	1, 327, 094	1, 327, 094			
Value.....	\$6, 174, 245	\$6, 174, 245			
Rayon and wool—					
Full-fashioned—					
Dozen pairs.....	49, 220	49, 220			
Value.....	\$450, 491	\$450, 491			
Seamless—					
Dozen pairs.....	304, 783	304, 783			
Value.....	\$1, 612, 790	\$1, 612, 790			
Rayon and cotton—					
Full-fashioned—					
Dozen pairs.....	183, 557	183, 557			
Value.....	\$652, 976	\$652, 976			
Seamless—					
Dozen pairs.....	2, 026, 179	2, 026, 179			
Value.....	\$4, 860, 198	\$4, 860, 198			
Triple mixtures—					
Full-fashioned—					
Dozen pairs.....	52, 762	52, 762			
Value.....	\$512, 248	\$512, 248			
Seamless—					
Dozen pairs.....	474, 055	474, 055			
Value.....	\$2, 052, 412	\$2, 052, 412			
Boys', misses', and children's—					
Total dozen pairs.....	15, 187, 852	15, 130, 606	56, 396	700	
Total value.....	\$31, 122, 976	\$31, 017, 917	\$190, 949	\$4, 110	
Full-fashioned—					
Total dozen pairs.....	120, 106	129, 100			
Total value.....	\$209, 485	\$209, 485			
Seamless—					
Total dozen pairs.....	15, 068, 746	15, 001, 500	56, 396	700	
Total value.....	\$30, 913, 491	\$30, 808, 432	\$190, 949	\$4, 110	
All cotton—					
Dozen pairs.....	9, 604, 295	9, 637, 899	56, 396		
Value.....	\$16, 789, 077	\$16, 685, 128	\$190, 949		
All-wool—					
Dozen pairs.....	42, 667	41, 907		700	
Value.....	\$191, 948	\$187, 838		\$4, 110	
All pure-thread silk—					
Dozen pairs.....	30, 002	36, 002			
Value.....	\$217, 879	\$217, 879			

## CENSUS OF MANUFACTURES: 1929

TABLE 5.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE INDUSTRY AND ITS BRANCHES, FOR THE UNITED STATES: 1929—Continued

KIND	Total for the knit-goods industry	PRODUCTS OF ESTABLISHMENTS ENGAGED PRIMARILY IN THE MANUFACTURE OF—			
		Hosiery	Underwear	Outerwear	Knit cloth
Hosiery, except infants' hose and athletic and golf hose—Continued.					
Boys', misses', and children's—Continued.					
Pure-thread silk with lisle or cotton tops, heels, and toes—					
Dozen pairs	52, 137	52, 137			
Value	\$384, 822	\$384, 822			
Rayon with cotton tops, heels, and toes, and all-rayon—					
Dozen pairs	1, 032, 674	1, 032, 674			
Value	\$2, 494, 234	\$2, 494, 234			
Mixtures—					
Cotton and wool—					
Dozen pairs	358, 988	358, 988			
Value	\$1, 144, 959	\$1, 144, 959			
Silk and wool and silk and cotton—					
Dozen pairs	7, 723	7, 723			
Value	\$22, 305	\$22, 305			
Silk and rayon—					
Dozen pairs	91, 944	91, 944			
Value	\$367, 782	\$367, 782			
Rayon and wool—					
Dozen pairs	257, 876	257, 876			
Value	\$1, 002, 327	\$1, 002, 327			
Rayon and cotton—					
Dozen pairs	3, 480, 248	3, 480, 248			
Value	\$8, 093, 814	\$8, 093, 814			
Triple mixtures—					
Dozen pairs	133, 298	133, 298			
Value	\$413, 829	\$413, 829			
Infants' hose:					
Total dozen pairs	9, 174, 838	9, 073, 534	101, 304		
Total value	\$11, 244, 403	\$10, 859, 032	\$385, 371		
Full-fashioned—					
Total dozen pairs	59, 596	59, 206	390		
Total value	\$180, 357	\$170, 074	\$1, 283		
Seamless—					
Total dozen pairs	6, 115, 242	6, 014, 328	100, 914		
Total value	\$11, 064, 046	\$10, 670, 958	\$394, 088		
All-cotton—					
Dozen pairs	1, 777, 893	1, 742, 635	35, 258		
Value	\$2, 577, 486	\$2, 476, 179	\$101, 307		
All-wool—					
Dozen pairs	87, 633	86, 280	1, 347		
Value	\$272, 145	\$268, 102	\$4, 043		
All pure-thread silk—					
Dozen pairs	57, 424	57, 424			
Value	\$280, 419	\$280, 419			
Pure-thread silk with lisle or cotton tops, heels, and toes—					
Dozen pairs	499, 802	499, 802			
Value	\$922, 994	\$922, 994			
All-rayon—					
Dozen pairs	34, 280	33, 880	400		
Value	\$60, 314	\$58, 714	\$1, 600		
Rayon with cotton tops, heels, and toes—					
Dozen pairs	1, 252, 413	1, 252, 413			
Value	\$2, 804, 268	\$2, 804, 268			
Mixtures—					
Cotton and wool—					
Dozen pairs	138, 175	130, 108	8, 067		
Value	\$404, 976	\$373, 891	\$31, 085		
Silk and wool—					
Dozen pairs	42, 371	20, 285	16, 136		
Value	\$188, 364	\$101, 634	\$86, 720		
Silk and rayon and silk and cotton—					
Dozen pairs	112, 910	105, 002	7, 818		
Value	\$266, 872	\$257, 923	\$37, 949		
Rayon and wool—					
Dozen pairs	181, 990	182, 557	19, 433		
Value	\$455, 074	\$386, 191	\$69, 483		
Rayon and cotton—					
Dozen pairs	1, 467, 865	1, 457, 933	9, 982		
Value	\$2, 512, 630	\$2, 470, 642	\$41, 988		
Triple mixtures—					
Dozen pairs	522, 082	519, 169	2, 913		
Value	\$909, 271	\$898, 075	\$11, 196		
Knit underwear, total value					
	\$135, 092, 098	\$9, 940, 945	\$122, 081, 491	\$3, 088, 087	\$2, 072, 485
Shirts and drawers—					
Total dozen pieces	8, 801, 924	253, 564	7, 807, 092	329, 222	322, 046
Total value	\$87, 069, 519	\$2, 046, 926	\$32, 504, 638	\$1, 174, 670	\$1, 343, 385
All-cotton—					
Dozen pieces	7, 179, 792	34, 424	6, 552, 279	298, 929	294, 130
Value	\$23, 088, 586	\$171, 007	\$20, 950, 615	\$871, 547	\$1, 005, 417
All-wool—					
Dozen pieces	50, 105		47, 914	30	2, 161
Value	\$816, 505		\$750, 611	\$2, 914	\$62, 080
Cotton and wool mixed—					
Dozen pieces	380, 355	1, 073	377, 823	380	479
Value	\$4, 800, 713	\$34, 911	\$4, 255, 131	\$3, 900	\$6, 792
Silk—					
Dozen pieces	119, 958	54, 909	46, 298	18, 640	120
Value	\$1, 902, 460	\$637, 603	\$757, 609	\$205, 878	\$1, 800
Silk and rayon mixtures—					
Dozen pieces	57, 991	4, 321	53, 640		
Value	\$497, 449	\$42, 744	\$454, 705		
Rayon—					
Dozen pieces	1, 002, 098	158, 011	813, 717	5, 383	24, 987
Value	\$6, 960, 273	\$1, 468, 220	\$5, 303, 520	\$27, 862	\$170, 671

KNIT GOODS

TABLE 5.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE INDUSTRY AND ITS BRANCHES, FOR THE UNITED STATES: 1929—Continued

KIND	Total for the knit-goods industry	PRODUCTS OF ESTABLISHMENTS ENGAGED PRIMARILY IN THE MANUFACTURE OF—			
		Hosiery	Underwear	Outerwear	Knit cloth
Knit underwear—Continued.					
Shirts and drawers—Continued.					
Other—					
Dozen pieces.....	11,085	235	5,421	5,860	180
Value.....	\$104,543	\$2,381	\$32,447	\$63,000	\$6,715
Union suits—					
Total dozens.....	8,801,124	70,944	8,501,038	244,002	75,140
Total value.....	\$70,837,165	\$1,002,051	\$60,831,215	\$2,412,400	\$541,480
All-cotton—					
Dozens.....	7,377,755	40,972	7,040,478	217,088	73,217
Value.....	\$60,307,842	\$370,501	\$47,722,752	\$1,794,526	\$500,073
All-wool—					
Dozens.....	130,003	4	134,000	1,000	.....
Value.....	\$3,070,900	\$58	\$2,050,005	\$117,897	.....
Cotton and wool mixed—					
Dozens.....	911,195	1,281	805,553	4,361	.....
Value.....	\$11,725,176	\$27,615	\$11,569,160	\$128,392	.....
Silk—					
Dozens.....	30,620	8,300	3,720	18,510	.....
Value.....	\$802,887	\$304,255	\$148,043	\$350,589	.....
Silk and rayon mixtures—					
Dozens.....	34,537	.....	34,537	.....	.....
Value.....	\$326,020	.....	\$326,020	.....	.....
Rayon—					
Dozens.....	480,012	10,723	400,505	2,083	1,241
Value.....	\$4,302,271	\$254,143	\$4,016,453	\$20,000	\$10,079
Other—					
Dozens.....	20,342	3,574	10,086	.....	682
Value.....	\$205,800	\$45,880	\$139,104	.....	\$20,837
Bloomers and step-ins—					
Total dozens.....	2,382,841	226,008	2,119,248	8,537	28,358
Total value.....	\$18,319,129	\$2,940,000	\$15,133,184	\$50,700	\$182,540
All-cotton—					
Dozens.....	482,007	3,408	465,547	1,018	11,074
Value.....	\$1,705,083	\$25,085	\$1,614,800	\$4,908	\$59,870
Cotton and wool mixed—					
Dozens.....	4,004	.....	4,004	.....	.....
Value.....	\$23,943	.....	\$23,943	.....	.....
Silk—					
Dozens.....	02,063	53,220	37,785	790	240
Value.....	\$1,024,878	\$1,186,071	\$720,500	\$13,307	\$5,000
Silk and rayon mixtures—					
Dozens.....	87,162	8,885	48,277	.....	.....
Value.....	\$751,275	\$128,702	\$622,493	.....	.....
Rayon—					
Dozens.....	1,714,560	161,110	1,530,580	6,720	16,144
Value.....	\$13,811,839	\$1,605,758	\$12,040,887	\$38,515	\$117,079
Other—					
Dozens.....	82,155	.....	82,155	.....	.....
Value.....	\$101,511	.....	\$101,511	.....	.....
Slops and petticoats—					
Dozens.....	268,779	11,831	243,002	2,548	408
Value.....	\$2,110,707	\$353,600	\$1,730,570	\$22,603	\$3,904
Infants' underwear, value.....	\$6,146,438	\$672	\$5,822,084	\$321,024	\$1,153
Outerwear, total value.....	\$140,641,838	\$2,836,277	\$7,134,210	\$137,102,107	\$2,569,235
Sweaters, sweater coats, jerseys, etc.—					
Dozens.....	4,700,822	25,034	374,443	4,360,185	31,180
Value.....	\$80,273,103	\$380,731	\$4,505,320	\$83,000,164	\$480,881
Bathing suits—					
Dozens.....	1,021,433	550	70,105	871,638	70,140
Value.....	\$22,034,308	\$10,000	\$804,838	\$20,551,023	\$628,397
Scarfs and shawls—					
Dozens.....	120,911	12	.....	125,049	950
Value.....	\$1,103,118	\$400	.....	\$1,143,846	\$18,872
Headwear (except infants')—					
Dozens.....	783,425	210	77,878	705,828	14
Value.....	\$3,783,126	\$4,000	\$629,846	\$3,251,487	\$193
Neckties—					
Dozens.....	627,727	78	.....	573,809	54,250
Value.....	\$1,717,051	\$1,085	.....	\$1,027,457	\$57,609
Athletic and golf hose—					
Dozen pairs.....	1,008,057	257,486	1,000	840,165	.....
Value.....	\$4,711,520	\$1,087,306	\$16,020	\$3,007,294	.....
Dresses and suits—					
Number.....	1,023,446	.....	20,018	992,736	10,692
Value.....	\$11,160,033	.....	\$169,280	\$10,859,470	\$101,343
Infants' outerwear, value.....	\$8,393,707	.....	\$95,340	\$8,298,367	.....
Other outerwear, value.....	\$7,355,804	\$1,351,255	\$625,610	\$3,820,009	\$1,251,040
Knit cloth, total value.....	\$67,609,043	\$2,252,725	\$2,174,671	\$1,052,514	\$61,280,133
Wool jersey—					
Square yards.....	7,211,760	.....	80,325	495,262	6,636,162
Value.....	\$7,742,000	.....	\$84,451	\$603,031	\$6,063,024
Other knit wools—					
Square yards.....	2,568,653	.....	184,225	200,355	2,064,073
Value.....	\$4,408,731	.....	\$372,805	\$443,205	\$3,592,721
Silk jersey (including milanese)—					
Square yards.....	4,127,200	2,120,087	87,122	330,295	1,579,856
Value.....	\$3,116,764	\$1,346,020	\$69,513	\$281,449	\$1,418,782
Rayon tubing (including tricolette)—					
Square yards.....	40,947,738	.....	302,305	.....	40,645,433
Value.....	\$29,760,519	.....	\$197,641	.....	\$29,562,878

CENSUS OF MANUFACTURES: 1929

TABLE 5.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE INDUSTRY AND ITS BRANCHES, FOR THE UNITED STATES: 1929—Continued

KIND	Total for the knit-goods industry	PRODUCTS OF ESTABLISHMENTS ENGAGED PRIMARILY IN THE MANUFACTURE OF—			
		Hosiery	Underwear	Outerwear	Knit cloth
Knit cloth—Continued.					
Other knit rayons—					
Square yards.....	1,613,837				1,613,837
Value.....	\$890,027				\$890,027
Cotton jersey—					
Square yards.....	14,233,953		1,715,826	401,149	12,026,978
Value.....	\$4,766,329		\$435,559	\$329,009	\$3,901,761
Corset cloth—					
Rayon and cotton—					
Square yards.....	1,698,038				1,698,038
Value.....	\$1,581,770				\$1,581,770
Other—					
Square yards.....	3,159,768				3,159,768
Value.....	\$2,909,736				\$2,909,736
Glove and shoe linings, value	\$4,654,990	\$906,705			\$3,748,285
Stockinette, value	\$1,234,004				\$1,234,004
Other knit cloth, value	\$6,614,561		\$1,014,702	\$204,920	\$5,394,039
Other knit goods, value	\$16,782,764	\$768,992	\$9,119,198	\$1,179,388	\$5,715,196
Cotton yarn for sale: <sup>1</sup>					
Pounds.....	8,430,308	1,664,870	5,533,937	18,679	1,212,822
Value.....	\$3,018,436	\$629,427	\$1,965,200	\$6,756	\$410,954
Cotton waste for sale: <sup>2</sup>					
Pounds.....	13,738,311	1,612,469	10,196,526	617,635	1,312,291
Value.....	\$911,694	\$105,547	\$692,495	\$48,052	\$65,600
Old bagging and ties, value	\$10,253	\$1,512	\$6,139	\$762	\$1,840
Other products (not normally belonging to the industry), value	\$6,612,293	\$1,235,402	\$4,162,759	\$1,093,282	\$120,700
Receipts for contract work	\$8,352,257	\$5,636,533	\$603,874	\$1,587,851	\$523,999

<sup>1</sup> The figures for infants' hose follow those for hosiery, and the figures for athletic and golf hose appear under "Outerwear."

<sup>2</sup> Principally wool and cotton mixed, silk and cotton mixed, and triple mixtures, but includes a small quantity of all-wool hose. None of these items could be shown separately without disclosing an approximation of the output of individual establishments.

<sup>3</sup> See footnote 1, Table 3.

TABLE 6.—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY, BY KIND, COST, AND QUANTITY, 1929, AND BY KIND AND QUANTITY, 1927 AND 1925

[The difference between the sum of the costs of the several kinds of materials shown in this table and the total cost of materials as given in Tables 1 and 2 is due to the fact that this table covers only certain specified materials, whereas Tables 1 and 2 cover all materials. For consumption of raw fibers and of purchased yarns in all textile industries, see tables on pp. 222 and 223, respectively]

KIND	COST	QUANTITY (pounds)			KIND	COST	QUANTITY (pounds)		
		1929	1927	1925			1929	1927	1925
Cotton, total.....	\$14,906,749	71,654,827	66,771,576	66,068,116	Cotton waste.....	\$2,781,968	18,283,973	21,490,118	21,249,739
Domestic.....	14,814,113	71,146,549	66,417,396	65,561,506	Silk waste and noils.....	110,283	463,035	685,171	125,204
Foreign.....	162,636	508,278	354,180	506,610	Wool waste and noils.....	4,059,556	10,597,453	8,981,018	9,083,827
Wool:					Recovered wool fiber.....	1,041,529	3,186,056	4,393,938	3,414,632
In condition in which purchased, total.....	4,803,773	6,598,580	4,909,056	6,222,931	Yarns, purchased:				
Domestic.....	4,227,073	5,587,231	4,124,811	4,545,911	Cotton, not mercerized.....	51,736,262	129,893,439	157,762,735	155,899,349
Foreign.....	576,700	1,011,349	784,245	1,377,020	Cotton, mercerized.....	45,225,470	60,463,053	52,917,187	67,043,700
Equivalent in scoured condition.....		5,429,746	4,215,413	4,213,014	Woolen.....	8,896,760	7,775,255	7,029,463	10,352,910
Raw silk.....	52,897,088	9,483,063	8,023,195	4,921,127	Worsted.....	48,535,997	31,183,676	28,280,425	24,540,360
					Woolen and cotton mixed.....	3,234,544	3,608,082	5,112,050	10,000,402
					Worsted and cotton mixed.....	3,405,210	2,867,286	3,092,050	8,789,521
					Silk, thrown or spun.....	74,532,749	13,200,769	11,537,459	23,679,599
					Rayon.....	76,375,476	56,368,443	36,580,505	790,624
					Other yarns.....	5,995,260	3,714,552	2,425,238	

# KNIT GOODS

**TABLE 7.—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY, BY KIND, COST, AND QUANTITY, 1929, AND BY KIND AND QUANTITY, 1929, 1927, AND 1925, BY STATES**

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. In some cases, however, certain of the "Other States" reported larger quantities and costs than some of the States shown separately. For consumption of raw fibers and of purchased yarns in all textile industries, see tables on pp. 222 and 223, respectively.]

MATERIAL AND STATE	QUANTITY (Pounds)				MATERIAL AND STATE	QUANTITY (Pounds)			
	1929	1929	1927	1925		1929	1929	1927	1925
<b>Cotton, raw, total.....</b>	<b>\$14,000,749</b>	<b>71,654,827</b>	<b>66,771,576</b>	<b>66,068,110</b>	<b>Cotton yarn, mercerized—Con.</b>				
Georgia.....	1,055,780	5,660,047	7,635,952	6,963,704	Tennessee.....	\$4,060,004	6,795,092	6,800,480	7,635,048
New York.....	3,929,778	18,665,802	19,304,499	21,002,226	Virginia.....	479,701	804,589	817,992	1,005,959
Tennessee.....	3,295,513	17,105,562	22,784,744	14,370,202	Wisconsin.....	2,634,541	3,261,549	4,083,123	4,441,872
Other States.....	6,454,678	30,223,416	16,986,474	23,731,834	Other States.....	3,554,070	4,495,948	5,988,001	10,000,989
<b>Cotton waste, total.....</b>	<b>2,781,908</b>	<b>18,283,973</b>	<b>21,490,118</b>	<b>21,249,739</b>	<b>Woolen yarn, total.....</b>	<b>8,806,750</b>	<b>7,776,255</b>	<b>7,029,463</b>	<b>10,352,910</b>
New York.....	1,335,095	9,724,741	15,580,139	16,800,817	Illinois.....	481,094	358,684	343,793	370,560
Other States.....	1,446,873	8,559,242	5,909,979	4,388,922	Massachusetts.....	753,841	872,676	1,189,092	1,465,733
<b>Wool:</b>					New Jersey.....	155,695	139,570	160,950	227,351
In condition in which purchased, total.....	4,803,773	6,598,580	4,900,056	6,222,031	New York.....	4,631,178	3,770,441	2,401,180	3,958,810
New York.....	2,487,092	2,556,844	2,250,403	3,737,691	Ohio.....	300,532	320,587	207,468	811,811
Other States.....	2,316,711	4,041,736	2,649,653	2,485,240	Pennsylvania.....	1,037,298	800,634	710,275	1,190,019
Equivalent of above in scoured condition, total.....		5,429,746	4,216,418	4,218,014	Wisconsin.....	612,112	799,294	1,103,327	1,241,812
New York.....		2,170,800	2,079,482	2,409,597	Other States.....	804,100	704,599	929,834	1,070,005
Other States.....		3,258,946	2,136,931	1,713,417	<b>Worsted yarn, total.....</b>	<b>48,535,997</b>	<b>31,183,676</b>	<b>28,289,425</b>	<b>24,516,360</b>
<b>Recovered wool fiber, total.....</b>	<b>1,041,529</b>	<b>3,186,656</b>	<b>4,393,038</b>	<b>3,414,632</b>	California.....	1,710,382	1,065,556	695,871	880,070
New York.....	567,630	1,192,835	1,103,872	625,012	Illinois.....	1,106,322	678,137	769,475	941,446
Other States.....	473,893	1,993,821	3,290,066	2,789,620	Massachusetts.....	6,656,821	4,764,838	3,394,232	3,358,484
<b>Wool waste and noils, total.....</b>	<b>4,059,556</b>	<b>10,507,453</b>	<b>8,081,918</b>	<b>9,983,827</b>	Michigan.....	486,904	355,670	332,065	186,110
New York.....	2,088,372	6,209,374	4,672,443	6,946,695	New Hampshire.....	810,972	412,627	538,332	200,604
Other States.....	1,971,184	4,298,079	4,309,475	3,037,162	New Jersey.....	1,298,122	766,378	611,621	785,090
<b>Raw silk, total.....</b>	<b>52,897,688</b>	<b>9,483,663</b>	<b>8,023,195</b>	<b>4,921,127</b>	New York.....	18,354,490	11,551,148	9,649,645	7,009,893
New Jersey.....	4,187,644	800,426	818,302	542,517	Ohio.....	3,755,713	2,669,631	2,530,103	1,785,223
New York.....	7,993,438	1,307,100	1,412,078	1,164,379	Pennsylvania.....	7,823,950	5,135,162	5,000,451	4,950,223
Pennsylvania.....	30,820,961	5,598,311	4,774,093	2,024,352	Rhode Island.....	808,676	697,775	1,460,111	780,065
Other States.....	10,995,642	1,867,826	1,017,422	1,249,879	Utah.....	277,324	148,647	135,770	124,733
<b>Cotton yarn, not mercerized, total.....</b>	<b>51,736,262</b>	<b>129,893,439</b>	<b>157,762,735</b>	<b>155,899,349</b>	Wisconsin.....	2,448,059	1,394,365	1,515,310	1,426,119
Alabama.....	1,948,173	4,062,485	4,437,442	1,845,343	Other States.....	2,043,172	1,794,436	1,628,699	1,511,825
California.....	7,823	215,307	214,449	103,731	<b>Wool or worsted and cotton yarn, mixed, total.....</b>	<b>6,639,754</b>	<b>6,475,968</b>	<b>8,204,748</b>	<b>10,090,462</b>
Connecticut.....	298,866	449,709	509,733	616,374	Connecticut.....	136,557	91,647	68,816	148,240
Georgia.....	2,640,270	6,826,710	7,967,194	6,591,187	Illinois.....	435,591	349,479	339,030	82,895
Illinois.....	1,096,260	4,620,256	5,079,456	4,415,157	Massachusetts.....	654,280	638,482	601,696	731,085
Indiana.....	1,187,670	2,936,337	2,897,333	2,401,737	New York.....	1,836,848	1,940,841	2,104,629	2,431,220
Massachusetts.....	2,298,141	5,131,799	5,710,694	6,220,679	Ohio.....	393,080	679,630	797,943	1,407,623
Michigan.....	309,010	1,031,821	2,144,341	4,704,531	Pennsylvania.....	1,048,050	824,085	1,580,939	2,219,506
New Hampshire.....	777,071	2,170,887	1,890,093	1,466,078	Rhode Island.....	176,831	160,549	180,560	231,854
New Jersey.....	206,936	499,775	295,411	559,189	Wisconsin.....	413,312	358,836	437,557	745,000
New York.....	10,673,032	28,971,181	36,211,667	37,924,396	Other States.....	1,647,395	1,602,419	2,087,048	2,933,639
North Carolina.....	5,004,826	13,309,434	22,800,007	20,018,591	<b>Silk yarn, thrown or spun, total.....</b>	<b>74,532,740</b>	<b>13,200,769</b>	<b>11,637,459</b>	<b>8,789,521</b>
Ohio.....	2,528,768	6,516,972	6,201,189	6,483,766	Massachusetts.....	1,601,756	263,656	389,423	283,688
Pennsylvania.....	8,308,634	20,401,576	25,553,531	26,358,162	New Jersey.....	4,715,774	793,940	367,464	494,610
Rhode Island.....	1,077,283	4,057,872	5,192,695	4,204,289	New York.....	1,504,969	277,468	337,830	830,210
South Carolina.....	643,947	1,455,179	1,434,290	754,324	North Carolina.....	7,696,064	1,422,460	809,815	( <sup>1</sup> )
Tennessee.....	4,657,637	9,760,577	11,212,093	13,430,212	Pennsylvania.....	36,267,594	6,454,008	5,047,298	3,892,012
Utah.....	61,245	127,706	172,181	161,996	Tennessee.....	4,524,327	783,260	1,473,200	( <sup>1</sup> )
Vermont.....	775,097	1,733,256	2,000,224	2,546,105	Wisconsin.....	8,746,828	1,417,916	1,624,204	841,074
Virginia.....	1,014,751	5,676,493	5,142,698	3,572,230	Other States.....	9,556,437	1,794,061	1,607,710	2,447,909
Wisconsin.....	1,107,597	2,632,987	3,000,094	3,528,583	<b>Rayon yarn, total.....</b>	<b>70,375,470</b>	<b>59,368,443</b>	<b>36,580,505</b>	<b>23,679,599</b>
Other States.....	2,378,321	6,009,555	7,478,025	7,703,819	California.....	462,165	200,400	88,794	52,126
<b>Cotton yarn, mercerized, total.....</b>	<b>45,225,470</b>	<b>60,463,053</b>	<b>62,017,187</b>	<b>67,043,700</b>	Georgia.....	1,491,260	989,836	637,744	344,980
Georgia.....	610,214	1,152,560	1,558,584	( <sup>2</sup> )	Illinois.....	875,738	613,433	620,726	193,110
Illinois.....	585,686	892,110	1,189,511	2,468,598	Massachusetts.....	1,448,131	1,008,481	1,065,667	1,485,902
Massachusetts.....	788,860	1,161,242	2,064,466	1,833,807	New Hampshire.....	678,379	378,137	236,343	366,446
Michigan.....	337,537	426,842	420,446	465,410	New Jersey.....	4,780,825	3,411,646	1,321,735	1,544,051
New Jersey.....	1,072,147	1,330,090	743,509	1,287,035	New York.....	14,537,684	10,695,154	13,392,257	7,712,491
New York.....	2,621,926	3,811,665	3,107,092	4,416,605	North Carolina.....	11,683,373	8,307,148	4,221,530	1,009,037
North Carolina.....	11,183,755	17,309,288	11,428,012	7,473,871	Ohio.....	720,263	625,054	628,803	293,460
Ohio.....	280,933	364,374	353,837	348,253	Pennsylvania.....	25,742,014	20,212,000	5,888,059	5,979,569
Pennsylvania.....	10,115,700	18,717,120	14,420,574	24,993,644	Tennessee.....	3,082,541	2,564,767	2,171,206	1,019,500
					Virginia.....	1,854,427	1,412,277	1,395,119	637,950
					Wisconsin.....	2,199,110	1,523,257	883,686	795,892
					Other States.....	6,399,902	4,330,737	3,428,836	1,445,174

<sup>1</sup> Included in item for "Other States."

<sup>2</sup> Includes data for Georgia.

<sup>3</sup> Includes data for North Carolina and Tennessee.

CENSUS OF MANUFACTURES: 1929

TABLE 8.—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY AND ITS BRANCHES, BY KIND AND QUANTITY: 1929

[For consumption of raw fibers and of purchased yarns in all industries, see tables on pp. 222 and 223, respectively]

KIND	Total	MATERIALS USED IN ESTABLISHMENTS EN-GAGED PRIMARILY IN THE MANUFACTURE OF—				KIND	Total	MATERIALS USED IN ESTABLISHMENTS EN-GAGED PRIMARILY IN THE MANUFACTURE OF—			
		Hosiery	Under-wear	Outer-wear	Knit cloth			Hosiery	Under-wear	Outer-wear	Knit cloth
Cotton, total.....	<i>Pounds</i> 71,054,827	<i>Pounds</i> 8,435,413	<i>Pounds</i> 45,051,334	<i>Pounds</i> 3,502,047	<i>Pounds</i> 14,066,033	Wool waste and noils.....	<i>Pounds</i> 10,507,453	<i>Pounds</i> 3,784,056	<i>Pounds</i> 3,265,633	<i>Pounds</i> 2,540,228	<i>Pounds</i> 911,536
Domestic.....	71,146,549	8,250,895	44,790,810	3,502,047	14,626,707	Recovered wool fiber.....	3,186,650	274,228	2,607,705		
Foreign.....	508,278	184,518	284,524		39,236	Yarns, purchased:					
Wool:						Cotton, not mercerized.....	129,893,439	37,258,439	61,634,103	14,462,241	16,538,656
In condition in which purchased, total.....	6,598,580	2,062,170	1,509,854	1,514,414	1,512,142	Cotton, mercerized.....	60,463,053	51,700,440	5,192,634	2,467,603	1,042,316
Domestic.....	5,687,231	1,602,044	1,348,704	1,514,414	1,121,979	Woolen.....	7,775,255	613,148	109,489	5,595,404	1,487,154
Foreign.....	1,011,349	460,126	161,060		390,163	Worsted.....	31,183,670	1,242,544	1,178,380	25,057,461	2,805,291
Equivalent in scoured condition.....	5,420,746	2,014,070	1,555,284	977,868	1,084,534	Woolen and cotton mixed.....	3,608,682	1,027,095	950,083	1,631,504	
Raw silk.....	9,483,663	9,052,874	151,293	63,761	215,735	Worsted and cotton mixed.....	2,867,286	763,193	1,404,553	568,390	131,150
Cotton waste.....	18,283,973	1,955,407	5,964,815	4,494,809	5,808,942	Silk, thrown or spun.....	13,206,769	12,823,678	171,881	179,084	32,726
Silk waste and noils.....	463,635	113,000	171,757	170,482	8,396	Rayon.....	50,368,443	19,677,989	12,090,273	2,421,611	22,178,570
						Other yarns.....	3,714,652	3,148,727	160,338	315,340	90,147

TABLE 9.—PRIME MOVERS, MOTORS, AND GENERATORS, BY NUMBER AND CAPACITY, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY, FOR THE INDUSTRY AND ITS BRANCHES

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919

THE KNIT-GOODS INDUSTRY

Prime movers and electric motors driven by purchased energy, aggregate.....	41,045	<i>Horsepower</i> 181,879	31,471	<i>Horsepower</i> 177,216	25,223	<i>Horsepower</i> 176,630	11,800	<i>Horsepower</i> 149,438	5,333	<i>Horsepower</i> 122,919	100.0	100.0
Prime movers, total.....	525	70,201	527	75,940	572	88,053	878	89,758	965	99,635	38.6	60.1
Steam, total.....	434	59,106	407	64,173	423	72,446	589	76,003	737	89,884	32.5	50.9
Engines.....	410	49,636	380	57,254	394	60,184	560	68,569	(1)	(1)	27.3	45.9
Turbines.....	24	9,470	27	6,919	29	12,262	20	7,434	(1)	(1)	5.2	5.0
Internal-combustion engines.....	14	1,467	22	1,000	33	3,009	53	814	74	1,108	0.8	0.5
Water wheels and water turbines.....	77	9,668	98	10,767	116	12,508	236	12,941	154	14,643	5.3	8.7
Electric motors driven by purchased energy.....	40,520	111,588	30,944	101,270	24,651	88,547	10,928	59,080	4,368	26,284	61.4	39.9
Electric motors, total.....	48,903	144,477	38,445	129,073	32,010	127,932	15,509	91,137	6,888	46,117	100.0	100.0
Driven by purchased energy.....	40,520	111,588	30,944	101,270	24,651	88,547	10,928	59,080	4,368	26,284	77.2	65.5
Driven by energy generated in establishments reporting.....	8,383	32,889	7,501	28,697	7,059	39,385	4,581	31,457	2,520	19,833	22.8	34.5
Electric generators.....	218	<i>Kilowatts</i> 20,148	261	<i>Kilowatts</i> 30,226	269	<i>Kilowatts</i> 34,649	(?)	(?)	(?)	(?)		
Electric energy purchased.....		<i>Kilowatt-hours</i> 172,940,810		(?)		(?)		(?)		(?)		

See footnotes at end of table.



TABLE 9.—PRIME MOVERS, MOTORS, AND GENERATORS, BY NUMBER AND CAPACITY, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY, FOR THE INDUSTRY AND ITS BRANCHES—Continued

TYPE	HOSIERY						UNDERWEAR					
	1920		1927		1925 <sup>a</sup>		1920		1927		1925 <sup>a</sup>	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
Prime movers and electric motors driven by purchased energy, aggregate.....	26,100	Horsepower 82,425	18,815	Horsepower 76,431	13,700	Horsepower 67,947	6,124	Horsepower 58,014	5,633	Horsepower 67,456	4,597	Horsepower 70,755
Prime movers, total.....	285	24,371	244	27,605	270	28,885	145	28,995	190	37,004	201	43,033
Steam, total.....	255	21,000	187	23,856	207	25,123	100	23,836	145	30,464	144	35,140
Engines.....	245	18,865	177	21,681	195	21,862	98	17,780	136	26,096	132	27,196
Turbines.....	10	3,125	10	2,175	12	3,261	11	6,055	9	4,908	12	7,944
Internal-combustion engines.....	3	110	9	200	16	455	7	1,275	7	640	10	2,455
Water wheels and water turbines.....	27	2,271	48	3,530	47	3,307	29	3,885	38	5,900	47	6,338
Electric motors driven by purchased energy.....	25,914	58,054	18,571	48,830	13,520	30,062	5,979	29,010	5,443	30,451	4,390	26,822
Electric motors, total.....	31,187	71,352	22,025	61,094	17,810	51,187	7,948	42,840	7,504	42,218	7,062	43,660
Driven by purchased energy.....	25,914	58,054	18,571	48,830	13,520	30,062	5,979	29,010	5,443	30,451	4,390	26,822
Driven by energy generated in establishments reporting.....	5,273	13,298	4,354	12,258	4,290	12,125	1,969	13,821	2,061	11,767	2,660	16,838
Electric generators.....	98	Kilowatts 9,830 Kilowatt-hours	138	Kilowatts 11,241	118	Kilowatts 13,301	70	Kilowatts 13,444 Kilowatt-hours	85	Kilowatts 14,374	102	Kilowatts 15,702
Electric energy purchased <sup>b</sup> .....		102,677,854		( <sup>c</sup> )		( <sup>c</sup> )		40,183,089		( <sup>c</sup> )		( <sup>c</sup> )

  

TYPE	OUTERWEAR						KNIT CLOTH					
	1920		1927		1925 <sup>a</sup>		1920		1927		1925 <sup>a</sup>	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity
Prime movers and electric motors driven by purchased energy, aggregate.....	6,184	Horsepower 22,411	5,035	Horsepower 21,008	5,523	Horsepower 23,580	2,538	Horsepower 19,020	1,388	Horsepower 11,002	1,310	Horsepower 14,342
Prime movers, total.....	53	7,503	65	7,460	64	7,000	42	9,422	28	3,875	37	7,260
Steam, total.....	42	6,886	52	6,173	45	6,328	28	6,455	23	3,080	27	5,855
Engines.....	40	6,736	44	5,797	41	5,038	27	6,305	23	3,080	26	5,188
Turbines.....	2	150	8	370	4	300	1	150			1	667
Internal-combustion engines.....	2	47	3	106	6	119	2	25	3	45	1	40
Water wheels and water turbines.....	9	570	10	1,187	13	1,552	12	2,042	2	150	9	1,371
Electric motors driven by purchased energy.....	6,131	14,908	5,570	14,202	5,402	15,587	2,496	9,607	1,300	7,787	1,273	7,076
Electric motors, total.....	6,628	17,115	6,197	16,042	5,742	17,520	3,140	13,170	1,819	10,619	1,687	15,559
Driven by purchased energy.....	6,131	14,908	5,570	14,202	5,402	15,587	2,496	9,607	1,300	7,787	1,273	7,076
Driven by energy generated in establishments reporting.....	497	2,207	627	1,840	280	1,930	644	3,563	450	2,832	714	8,483
Electric generators.....	21	Kilowatts 2,400 Kilowatt-hours	25	Kilowatts 2,704	31	Kilowatts 3,000	20	Kilowatts 3,375 Kilowatt-hours	13	Kilowatts 1,907	18	Kilowatts 2,646
Electric energy purchased <sup>b</sup> .....		17,440,423		( <sup>c</sup> )		( <sup>c</sup> )		12,639,444		( <sup>c</sup> )		( <sup>c</sup> )

<sup>1</sup> Not called for separately on schedule.

<sup>2</sup> Not called for on schedule.

<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>4</sup> Data incomplete.

<sup>5</sup> Not tabulated separately for years prior to 1925.

CENSUS OF MANUFACTURES: 1929

TABLE 10.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, FOR THE INDUSTRY, 1929, 1925, 1919, 1914, AND 1909, AND FOR ITS BRANCHES, 1929 AND 1925, AND BY STATES, FOR THE INDUSTRY AND ITS BRANCHES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by italic figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
<b>THE KNIT-GOODS INDUSTRY</b>															
United States:															
1929	208,488	<i>195,158</i>	200,576	205,256	205,902	206,538	207,297	205,186	207,995	214,097	<b>221,593</b>	219,950	212,310	88.1	
1925	186,068	<i>176,892</i>	182,280	185,296	186,059	186,974	186,554	183,775	185,753	189,687	<b>193,748</b>	193,430	189,552	91.3	
1919	172,572	<i>168,304</i>	163,582	<i>160,438</i>	162,956	166,713	168,617	173,887	177,339	177,244	<b>181,315</b>	184,046	186,423	86.1	
1914	150,520	<i>152,974</i>	155,683	157,636	157,654	155,273	153,071	148,572	<i>142,779</i>	143,747	<b>147,513</b>	146,356	145,582	90.6	
1909	120,275	<i>128,308</i>	125,181	128,052	129,017	129,270	128,890	127,845	<i>128,231</i>	130,329	<b>132,907</b>	134,540	133,340	91.7	
Alabama	2,007	<i>2,298</i>	2,319	2,604	2,546	2,552	2,577	2,545	2,468	2,695	2,787	2,849	2,970	77.1	
California	1,834	1,812	1,856	1,844	1,796	1,708	1,795	1,791	1,835	1,809	1,848	1,889	1,972	80.7	
Connecticut	1,343	1,369	1,393	1,400	1,400	1,400	1,402	1,376	1,209	1,202	1,290	1,344	1,334	85.7	
Georgia	6,018	<i>6,772</i>	6,925	6,018	5,938	5,880	5,904	5,846	5,942	6,057	6,188	6,456	6,291	80.4	
Illinois	4,137	4,134	4,110	4,094	4,019	3,994	4,015	4,091	<i>3,956</i>	4,166	4,439	4,422	4,215	80.1	
Indiana	5,953	5,710	<i>5,671</i>	5,703	5,712	5,684	5,746	5,916	6,095	6,276	6,480	6,344	6,118	87.8	
Kentucky	1,195	1,252	1,263	1,230	1,240	1,119	1,078	<i>1,074</i>	1,147	1,202	1,246	1,252	1,240	85.0	
Maryland	843	849	873	985	865	815	831	<i>737</i>	889	888	811	804	774	74.8	
Massachusetts	8,817	<i>8,225</i>	8,405	8,687	8,660	8,727	8,764	8,461	8,668	9,139	9,660	9,388	9,117	86.0	
Michigan	2,789	2,806	2,741	2,784	2,800	2,876	2,790	2,671	<i>2,658</i>	2,750	2,809	2,883	2,841	92.2	
Minnesota	2,162	2,130	2,160	2,208	2,254	2,232	2,204	<i>1,985</i>	2,131	2,174	2,195	2,165	2,100	88.1	
New Hampshire	2,077	1,730	1,760	1,973	2,046	2,069	2,056	2,105	2,186	2,221	2,318	2,240	2,221	74.6	
New Jersey	6,827	<i>6,787</i>	6,683	6,939	7,015	7,104	7,170	6,687	6,631	6,765	6,951	7,052	6,594	88.9	
New York	31,558	<i>28,849</i>	30,234	31,196	31,613	31,601	31,288	30,685	31,332	32,939	<b>34,166</b>	33,301	31,492	84.4	
North Carolina	22,930	<i>20,871</i>	21,638	22,262	22,491	22,616	23,074	23,077	23,403	23,664	24,113	24,348	23,541	85.7	
Ohio	4,157	3,888	4,146	4,177	4,120	4,002	4,245	4,157	4,059	4,522	4,625	4,184	<i>3,865</i>	85.4	
Pennsylvania	62,141	<i>58,234</i>	59,011	60,792	61,118	61,586	61,440	61,064	61,536	63,830	66,614	65,528	64,448	87.6	
Rhode Island	1,351	1,301	1,169	1,237	1,208	1,325	1,319	1,372	1,270	1,340	1,515	1,552	1,530	75.3	
South Carolina	933	951	955	1,007	1,004	1,008	973	971	988	<i>940</i>	988	987	1,022	92.0	
Tennessee	17,839	<i>16,374</i>	17,254	17,430	17,274	17,338	17,646	17,607	18,207	18,266	18,867	19,264	18,015	87.6	
Utah	400	<i>277</i>	295	340	372	389	428	481	512	508	471	421	308	54.1	
Vermont	1,084	1,025	1,070	1,108	1,126	1,133	1,145	1,015	<i>948</i>	1,063	1,090	1,110	1,141	82.8	
Virginia	3,125	<i>2,748</i>	3,033	3,122	3,066	3,041	3,073	3,182	3,359	3,255	3,346	3,369	2,909	81.6	
Washington	180	164	166	196	191	191	166	<i>139</i>	173	195	199	193	182	69.8	
Wisconsin	11,118	<i>10,787</i>	10,837	10,947	10,959	10,933	11,027	10,960	11,069	11,219	11,770	11,500	11,315	91.6	
<b>HOSIERY</b>															
United States:															
1929	129,542	<i>122,604</i>	124,887	127,278	127,344	127,943	128,081	127,450	129,063	131,939	136,022	136,835	133,804	89.6	
1925	103,930	<i>98,625</i>	100,906	102,311	103,325	104,304	104,889	104,206	104,810	105,259	106,255	106,475	105,780	92.6	
Alabama	1,544	1,384	1,399	1,568	1,452	1,438	1,471	1,405	<i>1,374</i>	1,593	1,710	1,801	1,926	71.3	
Georgia	4,536	<i>4,375</i>	4,467	4,608	4,501	4,523	4,456	4,410	4,507	4,588	4,692	4,758	4,656	92.0	
Illinois	2,813	2,825	2,834	2,779	2,702	<i>2,686</i>	2,730	2,803	2,691	2,831	3,033	3,004	2,839	88.6	
Indiana	5,034	4,817	<i>4,779</i>	4,801	4,809	4,801	4,863	5,036	5,179	5,360	5,480	5,355	5,127	87.2	
Massachusetts	2,528	2,543	2,560	2,681	2,542	2,483	2,355	<i>2,321</i>	2,432	2,540	2,686	2,701	2,688	85.9	
Michigan	1,117	1,180	1,211	1,221	1,228	1,211	1,114	<i>975</i>	982	1,019	1,046	1,116	1,101	79.4	
New Hampshire	1,533	<i>1,139</i>	1,172	1,372	1,447	1,490	1,525	1,598	1,680	1,733	1,796	1,741	1,700	63.4	
New Jersey	4,934	<i>4,650</i>	4,792	4,965	5,069	5,181	5,321	4,888	4,745	4,734	4,944	5,056	4,863	87.4	
New York	4,652	4,879	4,628	4,665	4,622	4,617	4,598	<i>4,428</i>	4,622	4,664	4,707	4,850	4,788	91.3	
North Carolina	19,670	<i>17,732</i>	18,336	18,980	19,212	19,312	19,814	19,817	20,255	20,365	20,842	21,030	20,328	84.3	
Pennsylvania	48,810	<i>46,107</i>	46,980	47,861	48,128	48,470	48,387	47,938	48,057	49,771	51,999	51,173	50,840	88.7	
Rhode Island	327	310	304	324	322	310	314	325	340	338	350	346	342	86.9	
Tennessee	13,402	<i>12,810</i>	13,027	13,158	12,952	13,002	13,183	13,065	13,500	13,615	14,086	14,580	13,701	87.9	
Virginia	1,898	1,803	1,850	1,840	1,787	<i>1,765</i>	1,804	1,883	1,934	1,992	2,063	2,087	1,971	84.6	
Wisconsin	8,178	8,039	8,009	8,072	8,066	8,148	8,278	8,131	8,041	8,083	8,413	8,444	8,413	94.5	
<b>UNDERWEAR</b>															
United States:															
1929	41,487	<i>38,327</i>	39,754	40,912	41,699	41,900	41,827	41,384	41,056	42,102	43,122	43,713	42,053	87.7	
1925	48,328	<i>45,353</i>	47,599	48,593	48,682	49,028	47,884	46,601	47,075	48,243	49,804	50,580	50,032	90.6	
Connecticut	1,192	1,218	1,245	1,252	1,248	1,243	1,246	1,225	1,052	<i>1,049</i>	1,130	1,195	1,180	83.8	
Georgia	1,113	998	1,060	1,097	1,050	983	1,073	1,054	1,088	1,120	1,144	1,360	1,324	72.6	
Massachusetts	2,691	2,696	2,720	2,742	2,715	2,683	2,712	2,643	2,667	2,663	2,718	2,696	<i>2,636</i>	96.1	
Michigan	1,452	1,457	1,355	1,392	1,438	1,441	1,446	1,473	1,422	1,450	1,483	1,532	1,534	88.3	
New York	12,615	<i>10,891</i>	11,778	12,342	12,819	13,063	12,862	12,740	12,328	12,910	13,379	13,517	12,754	80.6	
North Carolina	2,458	<i>2,350</i>	2,492	2,433	2,451	2,514	2,506	2,491	2,473	2,432	2,432	2,468	2,396	93.5	
Ohio	1,149	<i>1,053</i>	1,072	1,080	1,122	1,141	1,137	1,164	1,186	1,177	1,229	1,250	1,187	84.6	
Pennsylvania	6,800	<i>6,275</i>	6,414	6,609	6,697	6,726	6,701	6,706	6,810	6,965	7,137	7,393	7,230	85.6	
Utah	105	79	91	110	122	122	117	103	124	125	112	88	<i>66</i>	52.8	
Vermont	906	870	900	934	940	957	972	842	770	909	907	919	947	79.2	
Virginia	680	690	696	698	672	661	638	675	711	717	740	769	661	79.1	
Wisconsin	424	407	471	412	454	426	419	378	374	389	441	433	429	79.4	

See footnote at end of table.

# KNIT GOODS

317

**TABLE 10.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, FOR THE INDUSTRY, 1929, 1925, 1919, 1914, AND 1909, AND FOR ITS BRANCHES, 1929 AND 1925, AND BY STATES, FOR THE INDUSTRY AND ITS BRANCHES, 1929—Continued**

[See note at head of this table]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
<b>OUTERWEAR</b>															
United States:															
1929	28,908	26,113	27,646	28,680	28,922	28,025	28,750	28,190	20,201	30,910	32,224	30,328	28,008	81.0	
1925 <sup>1</sup>	27,986	26,002	27,408	28,027	27,082	27,492	27,029	20,017	27,463	29,281	30,892	29,785	27,267	84.2	
California	1,280	1,276	1,314	1,290	1,239	1,205	1,234	1,232	1,202	1,201	1,201	1,323	1,402	85.0	
Illinois	511	521	465	489	494	505	470	481	462	485	503	605	505	76.4	
Massachusetts	1,061	1,587	1,702	1,829	1,915	2,045	2,170	1,080	1,625	1,942	2,133	2,186	2,220	71.5	
Michigan	167	143	145	154	177	180	173	174	160	193	191	150	142	73.6	
Minnesota	125	77	90	102	133	148	141	124	135	150	153	142	108	40.0	
New Jersey	938	758	883	914	802	808	880	842	960	1,067	1,132	1,090	924	66.5	
New York	11,836	10,888	11,222	11,633	11,812	11,601	11,555	11,230	12,033	12,833	13,379	12,361	11,470	81.3	
Ohio	2,560	2,418	2,654	2,686	2,584	2,431	2,017	2,507	2,460	2,697	2,814	2,461	2,208	70.0	
Pennsylvania	4,571	4,048	4,341	4,420	4,480	4,530	4,405	4,513	4,634	4,034	5,186	4,884	4,403	78.4	
Utah	205	198	204	230	250	267	311	375	388	383	359	333	242	51.0	
Washington	180	164	166	166	191	191	166	199	173	195	199	193	182	69.8	
Wisconsin	2,516	2,381	2,357	2,403	2,439	2,359	2,330	2,451	2,654	2,747	2,916	2,722	2,473	78.2	
<b>KNIT CLOTH</b>															
United States:															
1929	8,491	8,112	8,289	8,377	8,057	8,070	8,039	8,153	8,075	0,147	0,535	0,080	8,385	84.2	
1925 <sup>1</sup>	6,424	6,432	6,376	6,365	6,370	6,150	6,152	6,051	6,405	6,804	6,807	6,010	6,404	87.6	
Massachusetts	1,637	1,509	1,423	1,535	1,488	1,516	1,527	1,517	1,744	1,904	2,123	1,805	1,573	65.9	
Michigan	53	26	30	17	17	41	57	49	85	88	89	70	64	19.1	
New York	2,455	2,406	2,606	2,550	2,300	2,320	2,275	2,278	2,349	2,532	2,643	2,573	2,471	66.0	
Pennsylvania	1,060	1,504	1,867	1,896	1,813	1,860	1,857	1,907	2,035	2,160	2,212	2,138	1,975	81.9	
Rhode Island	360	336	256	263	274	309	322	389	391	396	482	405	428	53.1	

<sup>1</sup> Not tabulated separately for years prior to 1925.

## LACE GOODS

**Description of the industry.**—The principal products of this industry are machine-made lace goods, of cotton, silk, rayon, and other materials. Nearly all the mills purchase their yarns, some of which are imported. These imported yarns are used chiefly on the Nottingham lace curtain, levers-lace, and bobbinet machines.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1914 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	42	6,854	\$7,670,122	\$10,112,353	\$29,237,434	\$10,125,081	10,466
1927	43	6,482	7,584,848	11,392,379	27,298,150	15,905,780	11,309
1925	42	7,066	7,620,100	13,361,423	30,843,507	17,482,084	9,507
1923	39	7,307	8,034,908	14,631,019	35,791,878	21,160,850	9,545
1921	37	6,366	6,208,992	11,321,446	25,981,093	14,650,647	(4)
1919	44	6,490	6,036,557	13,075,904	29,396,853	16,320,850	9,078
1914 <sup>3</sup>	41	7,440	3,468,031	5,676,948	13,296,785	7,529,337	8,817
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	(4)	5.7	1.1	-11.2	7.1	20.2	-7.5
1925-1927	(4)	-7.6	-0.5	-14.7	-11.5	-9.0	19.0
1923-1925	(4)	-4.1	-5.7	-8.7	-13.8	-17.4	-0.4
1921-1923	(4)	14.2	30.2	20.2	37.8	44.3	-----
1919-1921	(4)	-1.4	2.0	-13.4	-11.6	-10.2	-----
1919-1929	(4)	5.6	26.0	-22.7	-0.5	17.2	15.3

<sup>1</sup> The figures for all years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.  
<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>3</sup> No comparable figures available for earlier years.  
<sup>4</sup> Not called for on schedule.  
<sup>5</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. Certain of the "Other States," however, reported larger values of products than some of the States shown separately]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	42	836	6,854	10,466	7,337	3,120	\$2,899,867	\$7,670,122	\$10,112,353	\$9,710,089	\$306,264	\$29,237,434	\$10,125,081
	1927	43	752	6,482	11,309	8,348	2,961	2,213,902	7,584,848	11,392,379	10,920,334	472,045	27,298,150	15,905,780
	1919	44	698	6,490	9,078	6,960	2,118	2,024,441	6,036,557	13,075,994	12,676,005	399,089	29,396,853	16,320,850
New Jersey	1929	4	28	215	725	522	203	70,894	267,539	338,100	304,240	33,860	910,000	571,966
	1927	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
	1919	6	32	202	149	15	134	96,582	211,470	419,732	409,111	10,616	998,722	578,990
New York	1929	9	127	892	1,583	1,175	408	385,918	1,067,853	1,434,681	1,308,857	65,824	4,164,016	2,730,235
	1927	9	120	860	1,567	1,504	363	216,988	1,064,671	1,533,211	1,455,030	78,181	3,534,241	2,001,030
	1919	6	91	822	1,370	1,367	3	261,792	749,057	1,992,281	1,927,996	64,285	4,146,000	2,153,719
Pennsylvania	1929	12	470	3,634	5,571	4,735	830	1,931,317	3,723,273	5,156,604	4,988,030	168,634	15,840,820	10,684,163
	1927	12	400	3,723	6,030	5,884	770	1,472,400	4,301,100	6,909,629	6,653,797	255,832	10,990,637	10,080,903
	1919	13	345	3,140	5,185	4,523	602	1,105,333	2,776,982	6,410,317	6,216,894	193,423	14,813,995	8,403,678
Rhode Island	1929	11	80	1,005	1,456	355	1,101	279,076	1,133,353	1,554,521	1,489,074	65,447	4,261,995	2,707,474
	1927	10	44	840	1,411	355	1,050	155,638	927,298	1,143,037	1,057,888	55,149	2,792,672	1,649,635
	1919	10	68	941	1,181	470	711	182,420	969,987	1,872,335	1,811,763	60,572	4,110,416	2,238,984
Other States	5 1929	6	125	1,108	1,131	550	581	226,662	1,448,104	1,628,387	1,565,888	62,499	4,059,628	2,431,241
	6 1927	12	182	1,027	1,371	605	796	368,816	1,231,713	1,806,592	1,723,619	82,883	3,983,769	2,174,207
	7 1919	9	162	1,385	1,193	585	608	375,314	1,379,661	2,381,320	2,310,236	71,093	5,327,717	2,946,393

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 4; 1927, 16; 1919, 8. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 7,694; 1927, 7,250; 1919, 7,106.  
<sup>2</sup> The figures for all years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.  
<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>4</sup> Withheld from publication in order to avoid disclosing data for individual establishments.  
<sup>5</sup> Connecticut, 4 establishments; Illinois, 1; Ohio, 1.  
<sup>6</sup> Connecticut, 6 establishments; Illinois, 1; New Hampshire, 1; New Jersey, 3; Ohio, 1.  
<sup>7</sup> Connecticut, 5 establishments; Illinois, 1; New Hampshire, 2; Ohio, 1.

# LACE GOODS

319

**TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1929, 1927, 1925, AND 1923**

[The figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments]

KIND AND STATE	1929	1927	1925	1923
1. Lace-goods industry, all products, total value.....	\$29,237,434	\$27,298,159	\$30,843,507	\$35,701,875
2. Lace goods.....	27,885,844	24,171,744	29,836,628	35,593,207
3. Other products (not normally belonging to the industry).....	1,351,590	3,126,415	1,006,879	198,671
4. Lace goods made as secondary products in other industries, value.....	44,863	1,188,680	312,820	-----
Lace goods, all industries: Aggregate value (sum of 2 and 4).....	\$27,930,707	\$24,360,404	\$30,149,448	\$35,593,207
Nottingham lace curtains— Total pairs.....	6,112,561	15,061,119	4,559,617	6,038,378
Total value.....	\$11,249,575	\$10,797,895	\$10,276,737	\$12,944,108
Pennsylvania— Pairs.....	4,893,837	4,535,574	3,570,127	4,704,101
Value.....	\$8,950,565	\$8,713,042	\$8,092,517	\$10,297,891
Other States— Pairs.....	1,218,724	1,125,545	989,490	1,334,277
Value.....	\$2,299,010	\$2,083,853	\$2,184,220	\$2,646,287
Nottingham lace-curtain nets— Total linear yards.....	14,812,593	10,107,410	28,612,343	30,277,712
Total value.....	\$4,074,705	\$5,618,338	\$8,823,034	\$10,311,870
Pennsylvania— Linear yards.....	12,212,333	15,001,634	22,833,004	22,040,630
Value.....	\$3,802,728	\$4,822,801	\$6,951,813	\$8,106,360
Other States— Linear yards.....	2,100,260	3,295,776	5,778,739	8,237,082
Value.....	\$872,067	\$1,195,447	\$1,871,221	\$2,115,610
Levers laces, total value.....	\$8,755,972	\$6,292,931	\$6,647,830	\$8,029,404
New Jersey.....	\$748,080	(?)	(?)	(?)
New York.....	\$1,311,704	\$950,468	\$300,230	(?)
Pennsylvania.....	\$1,114,834	\$908,640	(?)	(?)
Rhode Island.....	\$3,855,665	\$2,641,834	\$2,063,204	\$3,795,684
Other States.....	\$1,725,703	\$1,752,080	\$3,278,300	\$4,233,720
Allovers— Total square yards.....	4,058,230	3,010,667	(?)	(?)
Total value.....	\$4,367,380	\$2,469,590	(?)	(?)
Cotton— Total square yards.....	1,855,672	789,683	(?)	(?)
Total value.....	\$1,460,680	\$555,484	(?)	(?)
New York— Square yards.....	292,156	(?)	(?)	(?)
Value.....	\$208,840	(?)	(?)	(?)
Pennsylvania— Square yards.....	643,092	(?)	(?)	(?)
Value.....	\$530,004	(?)	(?)	(?)
Rhode Island— Square yards.....	412,668	(?)	(?)	(?)
Value.....	\$301,097	(?)	(?)	(?)
Other States— Square yards.....	600,756	(?)	(?)	(?)
Value.....	\$414,730	(?)	(?)	(?)
Rayon— Square yards.....	382,302	262,937	(?)	(?)
Value.....	\$420,538	\$220,222	(?)	(?)
Other— Square yards.....	2,720,365	1,067,147	(?)	(?)
Value.....	\$2,450,115	\$1,693,893	(?)	(?)
Edgings, insertions, galoons, and flouncings, total value.....	\$4,358,583	\$3,798,332	(?)	(?)
Cotton, total value.....	\$2,018,980	\$2,173,593	(?)	(?)
Pennsylvania.....	815,579	609,091	(?)	(?)
Rhode Island.....	779,549	778,786	(?)	(?)
Other States.....	923,852	885,026	(?)	(?)
Rayon.....	750,655	270,912	(?)	(?)
Silk.....	80,593	51,487	(?)	(?)
Other.....	1,499,355	1,288,430	(?)	(?)
Bobbinet, value.....	830,873	405,752	155,726	(?)
Other nets and laces, value.....	2,413,492	1,315,488	4,346,121	4,307,825

<sup>1</sup> Revised.  
<sup>2</sup> Included in item for "Other States" to avoid disclosing output of individual establishments.  
<sup>3</sup> Not reported separately.  
<sup>4</sup> Not shown separately in order to avoid disclosing output of individual establishments.

**TABLE 4.—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY, BY KIND, QUANTITY, AND COST: 1929**

[The difference between the sum of the costs of the several kinds of materials shown in this table and the total cost of materials as given in Tables 1 and 2 is due to the fact that this table covers only certain specified materials, whereas the others cover all materials]

KIND	Pounds	Cost	KIND	Pounds	Cost
Yarn:			Silk:		
Cotton.....	6,452,854	\$4,231,091	Raw.....	64,909	\$357,427
Rayon.....	1,301,520	1,830,858	Thrown.....	62,922	300,078

## CENSUS OF MANUFACTURES: 1929

TABLE 5.—MACHINERY, ACTIVE AND IDLE, BY CLASS AND NUMBER: 1929, 1927, AND 1925

CLASS	1929			1927			1925		
	Total	Active	Idle	Total	Active	Idle	Total	Active	Idle
Spindles:									
Frame—									
Domestic.....	22,375	22,375		22,368	22,368		22,368	22,368	
Doubling and twisting—									
Domestic.....	14,073	14,073		14,360	14,360		12,584	12,584	
Lace and net machines:									
Nottingham lace-curtain—									
Foreign.....	451	420	25	533	380	144	518	485	33
Bobbinet—									
Foreign.....	60	58	2	85	80	5	28	20	2
Levers—									
Foreign.....	518	493	25	490	434	56	474	441	33
Domestic.....	4	4		10	10		4	4	
Warp—									
Foreign.....	32	32		30	27	3	41	31	10
Domestic.....	54	33	21	208	87	181	16	16	
Barnet—									
Foreign.....	500	405	44	610	511	99			
Domestic.....	166	166		284	155	129	730	668	71
Other.....							249	205	44
Foreign.....	15	13	2	21	13	8			
Domestic.....	13	10	3	18	8	10			
Other machines.....	617	585	32	644	530	114	563	563	

TABLE 6.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
											Horse-power	Horse-power
Prime movers and electric motors driven by purchased energy, aggregate.....	1,354	10,466	1,185	11,300	998	9,507	714	9,078	447	8,817	100.0	100.0
Prime movers, total.....	57	7,337	79	8,348	62	6,960	74	6,960	67	7,002	70.1	76.6
Steam, total.....	54	7,177	73	8,121	54	6,578	66	6,708	56	6,594	68.6	73.9
Engines.....	39	3,717	59	3,698	44	3,410	64	6,423	(1)	(1)	35.5	70.8
Turbines.....	15	3,460	14	4,423	10	3,168	2	285	(1)	(1)	33.1	3.1
Internal-combustion engines.....			2	37	1	6	4	77	2	36		0.8
Water wheels and water turbines.....	3	160	4	190	7	375	4	175	9	972	1.5	1.9
Electric motors driven by purchased energy.....	1,297	3,129	1,106	2,961	936	2,548	640	2,118	380	1,215	29.9	23.4
Electric motors, total.....	3,323	10,913	3,011	10,722	2,625	10,032	1,266	4,734	1,074	4,730	100.0	100.0
Driven by purchased energy.....	1,297	3,129	1,106	2,961	936	2,548	640	2,118	380	1,215	28.7	44.7
Driven by energy generated in establishments reporting.....	2,026	7,784	1,905	7,761	1,689	7,484	616	2,616	694	3,515	71.3	55.3
Electric generators.....		Kilowatts		Kilowatts	30	5,341	(1)	(1)	(1)	(1)		
Electric energy purchased <sup>2</sup> .....		Kilowatt-hours		Kilowatt-hours								
		2,954,472		(1)		(1)		(1)		(1)		

<sup>1</sup> Not called for separately on schedule.  
<sup>2</sup> Not called for on schedule.

<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>4</sup> Data incomplete.

TABLE 7.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929.....	6,854	6,774	7,019	7,198	7,137	6,940	6,738	6,593	<b>6,478</b>	6,652	6,884	6,901	6,938	90.1	
1925.....	7,006	7,061	6,976	7,405	7,225	7,197	7,209	6,988	6,918	6,793	<b>6,754</b>	6,773	6,770	91.2	
1919.....	6,490	<i>5,941</i>	5,975	6,003	5,961	6,074	6,420	6,533	6,781	6,871	7,015	7,000	7,300	81.4	
1914.....	7,440	7,944	7,999	8,182	7,955	7,594	7,307	7,220	7,188	7,150	7,365	6,758	<b>6,612</b>	82.7	
New Jersey.....	215	200	233	237	232	218	192	175	187	215	231	228	235	73.8	
New York.....	892	875	915	950	922	877	838	837	841	868	929	909	936	88.1	
Pennsylvania.....	3,634	3,630	3,718	3,742	3,710	3,704	3,641	3,610	3,522	<b>3,521</b>	3,537	3,633	3,643	94.1	
Rhode Island.....	1,005	995	997	1,047	1,089	993	983	917	<i>916</i>	1,006	1,059	1,030	1,051	85.7	

## LINOLEUM AND ASPHALTED-FELT-BASE FLOOR COVERING

Description of the industries.—The establishments classified under the industry designation "Linoleum" are those whose principal products are plain, printed, and inlaid linoleum, and a form of linoleum known as cork carpet. Linoleum is made on a textile (burlap) foundation or backing. This foundation material is not made within the industry but is purchased, and therefore the process of manufacture consists principally in mixing and applying the ingredients with which the fabric is coated.

The "Asphalted-felt-base floor covering" industry consists in the manufacture of a floor covering which resembles linoleum, made by printing or painting on the surface of a foundation of asphalted felt.

Omission of State statistics.—In order to avoid disclosing the data reported by individual establishments, no State statistics are given for these industries.

TABLE 1.—SUMMARY FOR THE INDUSTRIES IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES: 1921 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
<b>TOTAL FOR THE INDUSTRIES</b>							
1929	21	7,889	\$12,061,421	\$11,768,058	\$80,190,411	\$47,371,353	62,730
1927	10	7,800	11,871,462	40,402,077	81,543,026	41,140,040	50,836
1925	17	7,390	0,790,460	34,807,117	77,531,036	42,034,810	41,415
1923	16	7,043	10,570,460	30,417,226	77,807,206	41,300,041	25,005
1921 <sup>3</sup>	10	5,693	7,207,043	26,636,056	48,622,153	22,087,008	(4)
Per cent of increase or decrease (—):							
1927-1929	(5)	1.1	1.6	3.4	9.3	15.1	24.6
1925-1927	(5)	0.4	22.0	15.8	5.3	-3.5	21.5
1923-1925	(5)	-7.6	-8.0	-4.2	-0.4	3.0	59.9
1921-1923	(5)	30.5	46.8	42.1	60.0	80.1	-----
<b>LINOLEUM</b>							
1929	7	5,544	\$8,500,183	\$27,480,263	\$57,250,440	\$20,701,100	51,647
1927	7	5,364	8,176,644	24,215,618	47,442,441	23,226,823	41,432
1925	6	4,872	6,303,609	10,066,620	44,000,453	25,032,827	31,840
1923	7	6,261	8,375,830	27,277,311	52,627,106	25,240,705	23,205
1921 <sup>3</sup>	9	4,877	6,226,341	21,018,444	38,474,848	16,556,404	(4)
Per cent of increase or decrease (—):							
1927-1929	(5)	3.4	4.7	13.5	20.7	28.1	24.7
1925-1927	(5)	10.1	27.0	21.3	5.6	-7.2	30.1
1923-1925	(5)	-23.2	-23.7	-26.8	-14.3	-0.9	37.2
1921-1923	(5)	28.4	34.5	24.4	30.5	52.5	-----
<b>ASPHALTED-FELT-BASE FLOOR COVERING</b>							
1929	14	2,345	\$3,501,288	\$14,278,805	\$31,888,002	\$17,610,157	11,092
1927	12	2,442	3,604,808	16,180,450	34,100,585	17,914,126	8,904
1925	11	2,464	3,337,770	14,030,491	32,552,433	17,601,092	9,575
1923	9	1,682	2,203,011	0,189,014	25,280,100	16,140,246	2,700
1921 <sup>3</sup>	10	816	981,602	3,710,011	10,147,305	6,430,694	(4)
Per cent of increase or decrease (—):							
1927-1929	(5)	-4.0	-5.2	-11.8	-0.5	-1.7	24.6
1925-1927	(5)	-0.9	10.7	8.4	4.8	1.8	-7.0
1923-1925	(5)	40.5	51.5	63.4	28.7	9.1	254.6
1921-1923	(5)	100.1	124.5	145.0	140.1	151.0	-----

<sup>1</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> No comparable data for years prior to 1921.

<sup>4</sup> Not called for on schedule.

<sup>5</sup> Per cent not computed where base is less than 100.

CENSUS OF MANUFACTURES: 1929

TABLE 2.—GENERAL STATISTICS FOR THE INDUSTRIES IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES: 1929 AND 1927

	Cen- sus year	Num- ber of estab- lish- ments	Salaried officers and em- ployees <sup>1</sup>	Wage earners (aver- age for the year)	HORSEPOWER (RATED CA- PACITY) OF POWER EQUIP- MENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufac- ture <sup>3</sup>
					Total	Prime movers	Motors run by pur- chased energy			Total	Materials	Fuel and purchased energy		
Total for the industries.	1929 1927	21 19	1,758 1,174	7,889 7,806	62,739 50,336	12,181 12,127	50,558 38,209	\$3,504,647 2,572,002	\$12,061,421 11,871,452	\$41,768,058 46,402,077	\$40,008,526 38,375,024	\$1,759,532 2,027,053	\$89,139,411 81,543,026	\$47,371,353 41,140,949
Linoleum.	1929 1927	7 7	1,350 783	5,544 5,364	51,647 41,432	10,372 10,119	41,275 31,313	2,470,590 1,767,082	8,560,183 8,176,644	27,489,253 24,215,618	26,240,763 22,891,587	1,248,490 1,324,031	57,250,440 47,442,441	29,761,196 23,226,823
Asphalted-felt-base floor covering.	1929 1927	14 12	408 391	2,345 2,442	11,092 8,904	1,809 2,008	9,283 6,899	1,124,057 814,920	3,501,238 3,694,808	14,278,805 16,186,459	13,767,762 15,483,437	511,042 703,022	31,888,962 34,100,585	17,610,157 17,911,129

<sup>1</sup> Not including one proprietor reported for each year by the "Asphalted-felt-base floor covering" industry.  
<sup>2</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.  
<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.  
<sup>4</sup> New Jersey, 4 establishments; New York, 1; Pennsylvania, 2.  
<sup>5</sup> California, 1 establishment; Delaware, 1; Maine, 1; Massachusetts, 1; New Jersey, 7; Ohio, 1; Pennsylvania, 2.

TABLE 3.—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1929

[The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

KIND	1929	1927	1925	KIND	1929	1927	1925
Linoleum and asphalted-felt-base floor covering industries, all products, total value.....	\$89,139,411	\$81,543,026	\$77,531,936	Linoleum, etc.—Continued.			
Linoleum and asphalted-felt-base floor covering, value.....	\$85,687,539	\$76,939,317	\$74,541,946	Asphalted-felt-base floor covering:			
Other products (not normally be- longing to the industries).....	\$3,451,875	\$4,603,709	\$2,989,990	Total square yards.....	117,969,725	111,793,136	77,888,099
Linoleum:				Total value.....	\$36,943,057	\$34,900,265	\$30,629,431
Total square yards.....	48,272,133	49,921,494	52,830,194	Piece goods—			
Total value.....	\$48,744,479	\$42,039,002	\$44,512,515	Total square yards.....	57,026,300	50,710,079	55,450,697
Piece goods—				Total value.....	\$14,680,017	\$14,983,205	\$17,625,922
Total square yards.....	45,403,008	43,166,261	46,840,281	12/4—			
Total value.....	\$46,810,167	\$37,865,030	\$40,273,814	Total square yards.....	6,960,553	10,528,809	(1)
Inlaid—				Total value.....	\$2,632,865	\$3,150,549	(1)
Total square yards.....	23,268,418	18,176,590	19,104,285	Made on less than "050"- gauge felt—			
Total value.....	\$27,033,683	\$19,100,680	\$18,529,339	Square yards.....	2,169,111	(1)	(1)
Straight-line—				Value.....	\$509,821	(1)	(1)
Square yards.....	14,170,638	10,969,322	(1)	Made on "050"-gauge felt or thicker—			
Value.....	\$10,288,893	\$11,501,578	(1)	Square yards.....	4,791,442	(1)	(1)
Molded—				Value.....	\$1,523,044	(1)	(1)
Square yards.....	9,037,780	7,207,268	(1)	8/4—			
Value.....	\$10,744,885	\$7,599,102	(1)	Total square yards.....	44,400,278	44,401,230	(1)
Plain—				Total value.....	\$11,621,078	\$10,681,852	(1)
Total square yards.....	10,315,862	9,284,062	8,881,585	Made on less than "050"- gauge felt—			
Total value.....	\$13,087,809	\$10,303,419	\$10,381,581	Square yards.....	23,809,293	(1)	(1)
Battleship and A—				Value.....	\$5,470,032	(1)	(1)
Square yards.....	7,003,574	6,617,295	(1)	Made on "050"-gauge felt or thicker—			
Value.....	\$10,031,534	\$8,393,733	(1)	Square yards.....	20,590,985	(1)	(1)
B, C, D, and E—				Value.....	\$6,150,440	(1)	(1)
Square yards.....	2,712,288	2,067,667	(1)	Narrower than 8/4—			
Value.....	\$2,456,355	\$1,909,086	(1)	Total square yards.....	5,665,529	4,780,640	(1)
Printed—				Total value.....	\$1,026,074	\$1,156,804	(1)
Total square yards.....	11,471,135	15,183,571	18,304,219	Made on less than "050"- gauge felt—			
Total value.....	\$6,235,966	\$7,946,262	\$10,817,132	Square yards.....	5,494,659	(1)	(1)
12/4 and 16/4—				Value.....	\$965,874	(1)	(1)
Square yards.....	4,870,019	4,760,981	(1)	Made on "050"-gauge felt or thicker—			
Value.....	\$2,774,913	\$2,623,250	(1)	Square yards.....	170,870	(1)	(1)
8/4 and 10/4—				Value.....	\$60,200	(1)	(1)
Square yards.....	6,601,116	10,413,500	(1)	Rugs—			
Value.....	\$3,461,053	\$5,323,003	(1)	Total square yards.....	60,943,365	52,082,457	22,432,302
Cork carpet—				Total value.....	\$22,263,040	\$19,917,660	\$12,403,509
Square yards.....	408,193	521,138	490,192	Made on less than "050"-gauge felt—			
Value.....	\$452,644	\$514,725	\$545,712	Square yards.....	27,299,303	(1)	(1)
Rugs—				Value.....	\$7,758,888	(1)	(1)
Square yards.....	2,803,525	6,755,233	5,980,913	Made on "050"-gauge felt or thicker—			
Value.....	\$1,934,312	\$4,173,976	\$4,238,701	Square yards.....	33,044,062	(1)	(1)
				Value.....	\$14,504,152	(1)	(1)

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



TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS, ELECTRIC MOTORS, AND GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929; FOR THE INDUSTRIES IN COMBINATION AND SEPARATELY

TYPE	1929		1927		1925		Per cent distribution of rated horsepower capacity, 1929
	Number	Capacity	Number	Capacity	Number	Capacity	
<b>TOTAL FOR THE INDUSTRIES</b>							
Prime movers and electric motors driven by purchased energy, aggregate.....	3,706	<i>Horsepower</i> 62,730	2,031	<i>Horsepower</i> 60,336	2,304	<i>Horsepower</i> 41,415	100.0
Prime movers, total.....	60	12,181	51	12,127	50	11,079	19.4
Steam, total.....	62	10,081	60	12,122	60	11,079	16.1
Engines.....	51	8,001	38	0,384	40	0,542	13.9
Turbines.....	8	1,300	12	2,738	10	2,137	2.2
Internal-combustion engines.....			1	5			
Water wheels and water turbines.....	4	2,100					3.3
Electric motors driven by purchased energy.....	3,640	50,558	2,880	38,209	2,314	20,736	80.6
Electric motors, total.....	4,348	62,905	3,516	47,845	2,888	30,548	100.0
Driven by purchased energy.....	3,640	50,558	2,880	38,209	2,314	20,736	80.3
Driven by energy generated in establishments reporting.....	708	12,407	636	0,636	572	9,812	19.7
Electric generators.....	20	<i>Kilowatts</i> 6,220 <i>Kilowatt-hours</i> 50,843,853	34	<i>Kilowatts</i> 5,961	32	<i>Kilowatts</i> 6,630	
Electric energy purchased <sup>1</sup> .....				( <sup>2</sup> )		( <sup>2</sup> )	
<b>LINOLEUM</b>							
Prime movers and electric motors driven by purchased energy, aggregate.....	2,574	<i>Horsepower</i> 51,047	2,087	<i>Horsepower</i> 41,432	1,600	<i>Horsepower</i> 31,840	100.0
Prime movers, total.....	50	10,372	44	10,119	38	9,801	20.1
Steam, total.....	52	8,272	43	10,114	38	9,801	16.0
Engines.....	48	8,077	33	8,346	31	8,308	15.0
Turbines.....	4	106	10	1,768	7	1,553	0.4
Internal-combustion engines.....			1	5			
Water wheels and water turbines.....	4	2,100					4.1
Electric motors driven by purchased energy.....	2,518	41,275	2,043	31,313	1,562	21,979	79.9
Electric motors, total.....	3,090	52,870	2,556	40,021	1,908	30,595	100.0
Driven by purchased energy.....	2,518	41,275	2,043	31,313	1,562	21,979	78.5
Driven by energy generated in establishments reporting.....	578	11,295	513	8,708	436	8,616	21.5
Electric generators.....	20	<i>Kilowatts</i> 3,037 <i>Kilowatt-hours</i> 44,080,002	29	<i>Kilowatts</i> 5,030	28	<i>Kilowatts</i> 5,993	
Electric energy purchased <sup>1</sup> .....				( <sup>2</sup> )		( <sup>2</sup> )	
<b>ASPHALTED-FELT-BASE FLOOR COVERING</b>							
Prime movers and electric motors driven by purchased energy, aggregate.....	1,132	<i>Horsepower</i> 11,002	844	<i>Horsepower</i> 8,004	704	<i>Horsepower</i> 9,575	100.0
Prime movers, total.....	10	1,809	7	2,008	12	1,818	16.3
Steam, total.....	10	1,809	7	2,008	12	1,818	16.3
Engines.....	0	614	5	1,038	0	1,234	5.5
Turbines.....	4	1,195	2	970	3	584	10.8
Electric motors driven by purchased energy.....	1,122	9,283	837	6,806	752	7,757	83.7
Electric motors, total.....	1,252	10,395	960	7,824	888	8,953	100.0
Driven by purchased energy.....	1,122	9,283	837	6,806	752	7,757	89.3
Driven by energy generated in establishments reporting.....	130	1,112	123	928	136	1,196	10.7
Electric generators.....	0	<i>Kilowatts</i> 1,592 <i>Kilowatt-hours</i> 6,763,141	5	<i>Kilowatts</i> 925	4	<i>Kilowatts</i> 635	
Electric energy purchased <sup>1</sup> .....				( <sup>2</sup> )		( <sup>2</sup> )	

<sup>1</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>2</sup> Data incomplete.

## CENSUS OF MANUFACTURES: 1929

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE INDUSTRIES IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES: 1929 AND 1925

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

	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
<b>TOTAL FOR THE INDUSTRIES</b>															
United States:															
1929.....	7,889	<b>8,481</b>	8,391	7,934	7,697	<i>7,455</i>	7,511	7,613	7,840	7,858	7,843	8,016	8,118	87.9	
1925 <sup>1</sup> .....	7,336	<b>7,646</b>	7,916	8,205	8,198	7,971	7,679	7,276	<i>6,965</i>	6,746	6,582	6,678	6,776	77.6	
<b>LINOLEUM</b>															
United States:															
1929.....	5,544	<b>5,936</b>	5,866	5,665	5,456	5,366	<i>5,360</i>	5,397	5,528	5,477	5,378	5,506	5,602	90.3	
1925 <sup>1</sup> .....	4,872	<b>5,189</b>	5,322	5,477	5,472	5,338	5,139	4,880	<i>4,001</i>	4,396	4,256	4,390	4,604	73.1	
<b>ASPHALTED-FELT-BASE FLOOR COVERING</b>															
United States:															
1929.....	2,345	<b>2,545</b>	2,525	2,269	2,141	<i>2,089</i>	2,151	2,216	2,318	2,381	2,465	2,510	2,526	82.1	
1925 <sup>1</sup> .....	2,464	<b>2,457</b>	2,594	2,728	2,726	2,633	2,540	2,398	2,364	2,350	2,326	2,288	2,172	79.6	

<sup>1</sup> No comparable figures for earlier years.

# MATS AND MATTING, GRASS AND COIR

Description of the industry.—The establishments classified in this industry are engaged primarily in the manufacture of doormats, floor mattings, rugs, and carpets from such materials as wire grass, reeds, and coir yarn (coir being the fiber prepared from the outer husk of the coconut).

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	7	407	\$430,802	\$684,051	\$1,692,200	\$1,007,249	1,203
1927	7	422	398,420	608,856	1,536,567	807,711	1,425
1925	10	902	760,871	1,520,453	3,491,538	1,965,085	2,147
1923	11	980	806,989	1,500,467	3,890,359	2,380,892	1,980
1921	13	628	570,134	1,020,348	2,321,710	1,301,362	( <sup>3</sup> )
1919	12	1,073	810,607	2,102,580	4,860,856	2,758,275	1,670
1914	12	869	455,247	1,170,214	2,235,867	1,065,653	1,043
1909	12	937	385,434	1,066,566	2,431,615	1,305,040	1,408
1904	12	625	249,104	574,168	1,242,996	668,828	1,234
1899	9	1,107	237,282	516,137	1,165,330	640,193	1,733
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929		10.7	10.4	2.4	10.1	16.1	-0.3
1925-1927	( <sup>4</sup> )	-53.2	-18.0	-50.2	-50.0	-55.8	-33.6
1923-1925	( <sup>4</sup> )	-8.5	-14.5	1.1	-10.3	-17.5	8.4
1921-1923	( <sup>4</sup> )	57.0	57.3	47.9	47.6	83.0	
1919-1921	( <sup>4</sup> )	-41.5	-29.7	-51.5	-52.2	-52.8	
1919-1929	( <sup>4</sup> )	-56.5	-45.7	-67.4	-65.2	-63.5	-22.6
1909-1919	( <sup>4</sup> )	14.5	119.3	97.1	99.9	102.1	18.6
1899-1909	( <sup>4</sup> )	-21.7	62.4	109.6	108.7	110.3	-18.8

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Includes value of miscellaneous products not normally belonging to the industry, valued at \$374,030. Does not include \$467,363, the value of mats and matting, grass and coir, made as secondary products by establishments classified in other industries. No comparable data for years prior to 1920 can be presented.

<sup>4</sup> Not called for on schedule.

<sup>5</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929, 1927, AND 1919

[No State statistics can be given without disclosing data for individual establishments]

Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>	
				Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy			
United States	1929	7	52	407	1,203	930	363	\$145,975	\$430,802	\$684,051	\$656,526	\$28,425	\$1,692,200	\$1,007,249
	1927	7	53	422	1,425	1,100	325	115,991	398,420	608,856	642,590	26,266	1,536,567	807,711
	1919	12	93	1,073	1,670	1,325	345	220,644	810,607	2,102,580	2,051,382	51,198	4,860,856	2,758,275

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 4; 1927, 3; 1919, 7. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 523; 1927, 478; 1919, 1,173.

<sup>2</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> California, 1 establishment; Minnesota, 1; New York, 2; Pennsylvania, 1; Wisconsin, 2.

## CENSUS OF MANUFACTURES: 1929

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	107	Horse-power 1,293	103	Horse-power 1,425	134	Horse-power 2,147	143	Horse-power 1,670	62	Horse-power 1,643	100.0	100.0
Prime movers, total.....	5	930	3	1,100	5	1,445	8	1,325	12	1,455	71.9	79.3
Steam, total.....	5	930	3	1,100	5	1,445	7	1,255	9	1,370	71.9	75.1
Engines.....	5	930	2	1,050	4	1,425	6	1,245	(1)	(1)	71.9	74.6
Turbines.....			1	50	1	20	1	10	(1)	(1)		0.5
Internal-combustion engines.....							1	70	3	86		4.2
Electric motors driven by purchased energy.....	102	363	100	325	120	702	135	345	50	188	28.1	20.7
Electric motors, total.....	113	490	110	534	210	1,255	170	700	88	401	100.0	100.0
Driven by purchased energy.....	102	363	100	352	120	702	135	345	50	188	73.2	49.8
Driven by energy generated in establishments reporting.....	11	133	10	182	81	553	35	355	38	303	26.8	50.7
Electric generators.....	3	Kilo-watts 150	3	Kilo-watts 150	4	Kilo-watts 450	(2)	(2)	(2)	(2)		
Electric energy purchased <sup>1</sup> .....		Kilo-watt-hours 155,581		(1)		(1)		(2)		(2)		

<sup>1</sup> Not called for separately on schedule.

<sup>2</sup> Not called for on schedule.

<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>4</sup> Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES: 1929, 1925, 1919, 1914, AND 1909

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

	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
United States:														
1929 <sup>1</sup> .....	467	500	538	584	630	504	366	294	274	365	404	484	503	43.5
1925.....	902	943	977	977	950	854	813	801	704	801	949	1,015	1,044	67.4
1919.....	1,073	1,186	1,170	1,119	1,063	987	920	893	927	1,002	1,095	1,222	1,232	69.1
1914.....	869	1,467	1,285	1,221	1,119	1,072	1,074	902	472	316	339	457	664	21.7
1909.....	937	881	906	970	1,001	1,032	967	941	801	907	879	902	957	85.2

<sup>1</sup> No statistics for States can be shown without disclosing data for individual establishments.

# MILLINERY

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture, for sale to the trade, of women's and children's trimmed hats, hat frames, millinery brims, millinery trimmings, and hat linings, and of infants' headwear. Many of the trimmed hats are made from wool-felt and fur-felt bodies purchased in the rough.

Knit headwear is not treated as a product of this industry, but is classified in the knit-goods industry.

Custom millinery shops are not canvassed.

The millinery industry was given a separate classification for the first time at the census for 1927. At preceding censuses it had formed a part of an industry designated as "Millinery and lace goods, not elsewhere classified." No comparable figures can be given, therefore, for years prior to 1927.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1929 AND 1927

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	1,203	32,200	\$42,715,050	\$98,080,050	\$105,003,457	\$97,603,708	10,176
1927 <sup>3</sup>	1,148	33,311	46,787,735	103,489,714	200,404,828	100,005,114	7,020
PER CENT OF INCREASE OR DECREASE (-)							
1927-1929	12.6	-3.3	-8.7	-5.2	-6.6	-7.0	28.5

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for 1927, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> No comparable figures available for years prior to 1927. (See "Description of the industry," above.)

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929 AND 1927

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	1,203	5,167	32,200	10,176	1,650	8,517	\$15,898,015	\$42,715,050	\$98,080,050	\$97,001,667	\$1,087,692	\$195,693,457	\$97,603,708
	1927	1,148	5,345	33,311	7,020	1,781	6,139	14,020,920	46,787,735	103,489,714	102,558,100	931,564	209,494,828	100,005,114
Individual States:														
California	1929	92	329	2,702	462	—	462	710,173	2,081,300	4,539,947	4,495,668	44,270	10,651,799	6,111,852
	1927	56	204	1,958	207	—	207	494,697	2,010,182	3,643,183	3,523,542	19,641	8,102,279	4,550,087
Connecticut	1929	4	7	95	21	—	21	31,100	98,417	234,062	232,414	2,538	402,750	167,798
Georgia	1929	6	69	554	205	75	130	192,460	427,204	990,347	975,150	15,197	1,974,252	983,905
	1927	6	46	540	177	75	102	140,639	424,323	1,008,731	997,064	11,607	1,928,161	910,430
Illinois	1929	110	401	3,598	1,572	775	797	1,542,030	4,588,851	10,260,807	10,170,127	90,680	19,947,850	9,087,052
	1927	138	618	4,268	1,617	747	870	1,798,441	5,060,793	12,589,628	12,469,296	120,332	26,913,402	14,323,774
Indiana	1929	3	28	189	25	—	25	61,528	117,026	255,461	251,880	3,581	487,072	232,511
	1927	3	17	217	12	—	12	37,952	198,076	300,038	304,032	2,006	600,867	354,849
Iowa	1929	4	12	158	52	—	52	54,040	136,581	168,655	166,915	1,740	524,245	355,501
	1927	4	7	160	12	—	12	14,800	130,203	227,700	227,500	200	548,506	320,800
Massachusetts	1929	28	82	1,307	854	175	679	133,802	1,344,511	2,612,138	2,589,326	72,812	5,131,571	2,510,453
	1927	33	110	1,445	830	278	552	253,076	1,361,602	2,818,299	2,247,418	65,881	4,493,074	2,180,375
Minnesota	1929	7	23	161	39	—	39	50,904	134,453	284,385	283,074	6,311	544,368	279,983
	1927	7	106	369	366	175	181	212,412	307,296	786,716	773,084	12,732	1,543,413	765,097
Missouri	1929	45	310	2,042	483	60	417	982,516	1,709,322	4,921,148	4,870,237	50,911	9,622,148	4,701,000
	1927	58	488	2,978	591	256	335	1,035,303	2,712,436	5,505,103	5,449,240	55,803	12,214,602	6,709,499
New Jersey	1929	13	43	400	126	3	123	165,869	408,384	1,164,941	1,146,845	18,096	2,241,453	1,070,512
	1927	11	14	308	45	—	45	47,482	280,785	384,990	379,105	5,885	807,145	512,155
New York	1929	853	3,226	16,655	4,290	30	4,254	10,407,484	29,708,270	64,124,911	63,472,090	652,821	125,957,160	61,832,249
	1927	705	3,100	16,633	2,810	65	2,745	8,454,398	29,300,876	67,787,779	67,245,573	542,206	133,961,262	60,173,483

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929 AND 1927—Continued

[See note at head of this table]

STATE	Cen- sus year	Num- ber of estab- lish- ments	Salaried officers and emp- loyees <sup>1</sup>	Wage earners (aver- age for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIP- MENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufac- ture <sup>3</sup>
					Total	Prime mov- ers	Motors run by pur- chased energy			Total	Materials and con- tainers	Fuel and purchased energy		
Individual States—Con.														
Ohio	1929	22	74	807	354		354	\$240,707	\$701,500	\$1,471,703	\$1,451,813	\$10,800	\$3,153,044	\$1,682,241
	1927	20	121	950	120		126	280,500	948,085	1,834,442	1,815,871	18,571	3,903,342	2,069,000
Oregon	1929	6	28	130	14		14	75,318	122,705	130,017	130,010	2,098	420,787	200,770
Pennsylvania	1929	33	126	1,071	602	250	343	328,432	1,121,818	2,254,041	2,211,550	42,401	4,806,024	2,642,583
	1927	41	147	982	171		171	308,112	1,059,524	2,381,094	2,358,040	23,045	4,373,810	1,902,125
Texas	1929	17	84	397	37		37	200,501	338,263	853,503	843,125	10,378	1,800,170	1,045,667
	1927	9	68	391	20		20	166,951	240,430	720,150	717,305	2,845	1,404,007	684,757
Utah	1929	5	18	102	29		29	29,678	71,353	138,270	136,004	1,606	346,220	207,950
Washington	1929	9	39	268	25		25	91,692	250,834	418,790	415,759	3,031	882,802	404,012
	1927	9	53	222	27		27	135,222	222,670	423,237	420,706	2,531	862,114	438,877
Wisconsin	1929	9	77	952	572	110	462	308,208	945,999	1,944,060	1,916,128	28,538	3,787,013	1,842,347
	1927	8	98	1,000	558	110	448	320,570	951,878	1,802,731	1,838,193	24,538	3,878,988	2,016,257
Groups of States:														
Ala., 1 est.; Va., 3	1929	4	49	177	36		36	112,666	135,891	290,633	288,677	1,950	687,051	397,318
R. I., 2 est.; Md., 9	1929	11	30	178	47		47	33,255	139,035	489,130	484,928	4,202	905,710	416,580
Other States (Ariz., 1 est.; Colo., 3; Mich., 5; Nebr., 1; Okla., 2)	1929	12	22	263	331	100	171	70,906	353,132	552,214	537,438	14,776	1,218,658	660,444
States not shown separately	1927	41	148	801	292	75	217	304,809	903,027	1,814,293	1,790,682	23,611	3,808,336	1,994,043

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 782; 1927, 843. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 38,155; 1927, 39,499.

<sup>2</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Alabama, 1 establishment, Colorado, 1; Connecticut, 5; Louisiana, 3; Maryland, 9; Michigan, 8; Nebraska, 3; Oklahoma, 1; Oregon, 3; South Carolina, 1; South Dakota, 1; Tennessee, 3; Virginia, 2.

TABLE 3.—PRODUCTS, BY CLASS AND VALUE, BY STATES: 1929

[The figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments]

CLASS AND STATE	Value	CLASS AND STATE	Value
1. Millinery industry, all products, total value	\$195,693,457	Millinery, all industries—Continued.	
2. Millinery	193,734,388	Trimmed hats—Continued.	
3. Other products (not normally belonging to the industry)	952,221	Wool-felt hats made from purchased bodies—Continued.	
4. Receipts for contract work	1,006,848	Ohio	\$1,473,835
5. Millinery made as a secondary product in other industries	2,240,443	Pennsylvania	878,695
Millinery, all industries:		Texas	643,862
Aggregate value (sum of 2 and 5)	195,974,831	Washington	320,024
Trimmed hats, total	173,518,281	Wisconsin	1,024,716
California	10,625,998	Other States (Ala., Ariz., Colo., Conn., Ind., Mich., Nebr., Okla., Ore., R. I., Utah, Va.)	1,084,332
Georgia	1,934,274	Fur-felt hats made from purchased bodies, total	27,535,507
Illinois	18,332,880	California	2,265,403
Iowa	502,246	Illinois	1,734,302
Maryland	670,410	Massachusetts	208,761
Massachusetts	3,939,873	Missouri	608,730
Minnesota	544,368	New York	20,218,328
Missouri	8,853,561	Ohio	325,950
New Jersey	1,796,052	Pennsylvania	442,031
New York	100,601,445	Texas	204,425
Ohio	3,094,400	Other States (Colo., Conn., Ga., Ind., Iowa, Md., Minn., Okla., Ore., Utah, Va., Wash., Wis.)	1,527,658
Pennsylvania	3,345,603	Other trimmed hats, total	80,851,335
Texas	1,765,229	California	5,100,084
Utah	301,375	Illinois	10,178,901
Washington	778,141	Massachusetts	2,215,698
Wisconsin	3,769,713	Missouri	5,412,234
Other States (Ala., Ariz., Colo., Conn., Ind., Mich., Nebr., Okla., Ore., R. I., Va.)	3,362,698	New Jersey	560,886
Wool-felt hats made from purchased bodies, total	65,131,340	New York	46,807,158
California	3,169,811	Ohio	1,294,612
Georgia	648,834	Pennsylvania	2,024,877
Illinois	6,419,626	Texas	916,942
Iowa	70,180	Other States (Ala., Ariz., Colo., Conn., Ga., Ind., Iowa, Md., Mich., Minn., Nebr., Okla., Ore., R. I., Utah, Va., Wash., Wis.)	6,179,983
Maryland	317,293	Hat frames, total	800,830
Massachusetts	1,515,414	New York	504,555
Minnesota	83,305	Other States (Calif., Conn., Ill., Iowa, Mo., Ohio, Ore., Pa., Utah, Wash.)	305,281
Missouri	2,832,597		
New Jersey	1,226,166		
New York	42,815,959		

# MILLINERY

329

TABLE 3.—PRODUCTS, BY CLASS AND VALUE, BY STATES: 1929—Continued

[See note at head of this table]

CLASS AND STATE	Value	CLASS AND STATE	Value
Millinery, all industries—Continued.		Millinery, all industries—Continued.	
Hat linings, total.....	\$7,428,685	Millinery braids—Continued.	
Illinois.....	836,378	Other braids, total.....	\$1,208,624
New York.....	6,152,528	New York.....	769,886
Other States (Mass., Mo.).....	439,784	Other States (Ill., Pa., Tex.).....	438,738
Millinery braids, total.....	3,968,681	Millinery trimmings, total.....	2,464,918
Real horsehair, total.....	218,846	California.....	9,451
New York.....	141,040	New York.....	1,392,520
Texas.....	40,606	Other States (Colo., Ga., Ill., Iowa, Mo., Oreg., Pa., R. I., Tex., Utah, Wash., Wis.).....	1,002,947
Other States (Iowa, Pa., Wis.).....	37,200	Infants' headwear, total.....	5,200,079
Artificial or imitation horsehair, total.....	1,284,850	New York.....	4,842,166
New York.....	627,760	Other States (Iowa, Mo., N. J., Pa., Tex., Utah).....	447,913
Other States (Calif., Ill., Iowa, Mo., N. J., Pa., Tex.).....	657,090	Other millinery products.....	2,464,918
Artificial or imitation straw, total.....	1,250,606		
New York.....	899,155		
Other States (Calif., Ill., Iowa, Mo., Ohio, Oreg., Pa., Tex., Utah).....	357,451		

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS, ELECTRIC MOTORS, AND GENERATORS, 1929 AND 1927; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		Per cent distribution of rated horse-power capacity, 1929	TYPE	1929		1927		Per cent distribution of rated horse-power capacity, 1929
	Number	Capacity	Number	Capacity			Number	Capacity	Number	Capacity	
Prime movers and electric motors driven by purchased energy, aggregate.....	4,660	Horse-power 10,176	4,247	Horse-power 7,920	100.0	Electric motors, total.....	4,706	Horse-power 9,376	4,355	Horse-power 6,776	100.0
Prime movers, total.....	32	1,659	31	1,781	16.3	Driven by purchased energy.....	4,568	8,517	4,210	6,139	90.8
Steam, total.....	32	1,659	29	1,701	16.3	Driven by energy generated in establishments reporting.....	198	859	130	637	9.2
Engines.....	29	1,675	26	1,754	15.5	Electric generators.....	10	Kilowatts 800	0	Kilowatts 675	
Turbines.....	3	84	3	7	0.8	Electric energy purchased <sup>1</sup> .....	17,913,802	Kilowatt-hours	(?)		
Internal-combustion engines.....			2	20							
Electric motors driven by purchased energy.....	4,568	8,517	4,210	6,139	83.7						

<sup>1</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>2</sup> Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, BY STATES: 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italicized* figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
United States.....	32,206	32,090	34,939	37,760	36,681	32,196	28,823	<b>26,881</b>	32,100	35,371	33,510	<b>28,762</b>	27,841	69.9
California.....	2,702	2,570	2,760	3,298	3,228	2,944	2,412	2,268	2,874	3,134	2,848	2,130	<i>1,958</i>	59.4
Connecticut.....	95	100	97	118	116	89	82	75	102	98	97	88	88	64.7
Georgia.....	554	597	698	770	703	540	497	421	492	585	410	421	53.2	
Illinois.....	3,598	3,432	3,816	4,201	4,892	3,639	3,267	2,889	3,587	4,069	3,743	3,153	3,011	67.3
Indiana.....	180	181	238	272	214	165	130	107	209	223	190	180	136	44.1
Iowa.....	158	177	181	214	198	163	160	144	183	177	143	<i>109</i>	110	47.7
Massachusetts.....	1,307	1,427	1,619	1,649	1,563	1,394	1,284	1,162	1,283	1,322	1,054	<i>944</i>	1,057	57.2
Minnesota.....	161	170	232	254	220	162	110	121	201	197	118	93	49	19.3
Missouri.....	2,042	2,110	2,329	2,457	2,270	1,970	1,720	1,821	2,084	2,165	1,944	1,746	1,870	70.0
New Jersey.....	400	396	442	400	432	346	348	334	374	361	408	471	464	70.9
New York.....	10,655	10,437	17,356	18,512	18,180	16,498	14,943	13,639	16,457	18,248	18,071	16,219	15,287	73.7
Ohio.....	807	839	989	1,062	1,013	747	700	624	867	1,000	871	596	463	43.6
Oregon.....	130	115	152	170	183	147	119	96	120	145	125	<i>64</i>	112	35.0
Pennsylvania.....	1,071	1,197	1,263	1,263	1,172	1,115	970	884	940	1,006	1,034	985	1,039	70.6
Texas.....	397	373	478	469	440	361	301	310	431	443	407	350	360	61.6
Utah.....	102	97	105	124	130	121	102	61	115	131	126	67	47	35.9
Washington.....	268	207	277	335	297	255	214	235	326	353	306	216	186	55.5
Wisconsin.....	952	1,011	1,243	1,279	1,230	936	921	677	876	907	905	682	716	49.4

## NETS AND SEINES

Description of the industry.—This industry embraces those establishments whose principal products are fish nets and netting, seines, and laundry nets.

Omission of State statistics.—In order to avoid disclosing data reported by individual establishments, no State statistics are given for this industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929.....	19	903	\$768,871	\$3,789,356	\$6,164,403	\$2,375,047	1,165
1927.....	21	869	776,326	3,347,719	5,401,173	2,053,454	1,162
1925.....	21	885	762,489	3,478,993	5,157,491	1,678,498	1,190
1923.....	17	882	749,482	3,157,327	4,627,692	1,470,365	1,082
1921.....	15	705	496,015	1,945,740	3,015,865	1,070,110	(3)
1919.....	19	869	591,282	3,048,206	5,114,414	1,466,208	959
1914.....	16	1,058	378,741	2,257,063	3,088,042	830,949	1,931
1909.....	13	964	289,767	1,377,918	1,897,997	820,079	1,458
1904.....	12	824	243,561	1,140,516	1,724,912	584,366	200
1899.....	19	748	222,146	865,908	1,476,622	610,114	254
PER CENT OF INCREASE OR DECREASE (-)							
1927-1929.....	(4)	3.9	-1.0	13.2	14.1	15.7	-0.6
1925-1927.....	(4)	-1.8	1.8	-3.8	4.7	22.3	-2.4
1923-1925.....	(4)	0.3	1.7	10.2	11.4	14.2	10.0
1921-1923.....	(4)	25.1	61.4	62.3	53.4	37.4	-----
1919-1921.....	(4)	-17.9	-11.8	-46.7	-41.0	-27.0	-----
1919-1929.....	(4)	5.1	37.0	3.9	20.5	62.0	20.4
1909-1919.....	(4)	-10.0	93.7	184.8	169.5	181.0	-34.2
1899-1909.....	(4)	27.5	30.4	59.1	28.6	-14.8	474.0

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929, 1927, AND 1919

[Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States.....	<sup>4</sup> 1929	19	138	903	1,155	533	622	\$314,014	\$768,871	\$3,789,356	\$3,753,047	\$36,309	\$6,164,403	\$2,375,047
	<sup>5</sup> 1927	21	120	869	1,162	733	429	412,786	776,326	3,347,719	3,316,253	31,466	5,401,173	2,053,454
	<sup>6</sup> 1919	19	79	79	859	959	755	204	209,205	591,282	3,048,206	3,024,737	23,469	5,114,414

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 7; 1927, 11; 1919, 5. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 1,048; 1927, 1,000; 1919, 943.

<sup>2</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, fuel and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Connecticut, 3 establishments; Georgia, 1; Illinois, 3; Maryland, 2; Massachusetts, 2; Mississippi, 1; Missouri, 1; New Jersey, 2; Ohio, 1; Pennsylvania, 1; Rhode Island, 1; Washington, 1.

<sup>5</sup> Connecticut, 3 establishments; Georgia, 1; Illinois, 3; Maryland, 2; Massachusetts, 3; Missouri, 1; New Jersey, 3; New York, 1; Ohio, 1; Pennsylvania, 1; Rhode Island, 1; Wisconsin, 1.

<sup>6</sup> California, 1 establishment; Connecticut, 4; Illinois, 2; Maine, 1; Maryland, 2; Massachusetts, 3; Missouri, 1; New Jersey, 1; Pennsylvania, 2; Rhode Island, 1; Washington, 1.



TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	325	Horse-power 1,155	231	Horse-power 1,102	218	Horse-power 1,100	99	Horse-power 959	89	Horse-power 1,034	100.0	100.0
Prime movers, total	3	533	5	733	7	743	5	755	8	1,700	40.1	78.7
Steam engines	2	530	4	730	4	730	4	780	5	1,725	45.9	76.1
Internal-combustion engines	1	3	1	3	1	3	1	25	2	35	0.2	2.6
Water wheels and water turbines					2	10			1	30		
Electric motors driven by purchased energy	322	922	226	429	211	447	94	204	81	144	53.9	21.3
Electric motors, total	542	1,030	283	1,005	234	732	150	516	154	1,081	100.0	100.0
Driven by purchased energy	322	922	226	429	211	447	94	204	81	144	50.9	39.5
Driven by energy generated in establishments reporting	220	417	57	576	23	285	55	312	73	1,537	40.1	60.5
Electric generators	2	Kilowatts 400 Kilowatt-hours 489,084	4	Kilowatts 554	2	Kilowatts 520	(1)	(1)	(1)	(1)		
Electric energy purchased <sup>1</sup>				(2)		(2)		(1)		(1)		

<sup>1</sup> Not called for on schedule.

<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>3</sup> Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914

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

	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
1929	903	910	938	945	919	891	892	910	918	948	<b>871</b>	873	858	87.7
1925	885	907	904	909	898	874	835	<b>827</b>	839	854	935	924	924	88.1
1919	859	894	<b>919</b>	910	878	890	834	841	854	927	<i>749</i>	871	806	81.6
1914	1,058	1,098	1,131	1,099	1,060	1,030	970	1,014	1,029	1,048	1,098	1,073	1,067	85.3

# OILCLOTH

Description of the industry.—The establishments classified under the industry designation "Oilcloth" are those engaged primarily in the manufacture of enameled, table and shelf, and wall oilcloth. Oilcloth is made on a textile foundation of unbleached cotton sheeting or drill. This foundation material is not made within the industry but is purchased, so

that the process of manufacture consists principally in mixing and applying the ingredients with which the fabric is coated.

Omission of State statistics.—In order to avoid disclosing the data reported by individual establishments, no State statistics are given for this industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929	9	1,412	\$2,144,067	\$14,024,651	\$23,107,272	\$8,182,621	5,017
1927	8	1,072	1,745,575	11,818,624	17,642,442	5,823,818	3,565
1925	9	1,160	1,675,299	13,549,171	17,843,375	4,294,204	3,484
1923	9	1,208	1,781,016	12,165,028	17,710,064	5,564,020	2,880
1921	10	947	1,337,120	9,283,963	13,601,448	4,407,455	(3)
1919	11	1,180	1,200,877	11,140,723	15,436,875	4,290,162	4,251
1914	13	1,228	608,947	6,523,987	7,996,025	1,472,088	3,490
1909	12	976	516,141	5,404,785	7,525,691	2,120,906	1,967
1904	11	528	223,819	3,270,746	4,404,009	1,133,263	1,374
1899	9	512	300,878	2,690,412	3,596,516	899,103	1,140
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929	(4)	31.7	22.8	26.3	31.0	40.5	40.7
1925-1927	(4)	-7.6	4.2	-12.8	-1.1	35.0	2.3
1923-1925	(4)	-3.6	-5.9	11.4	.7	-22.7	20.7
1921-1923	(4)	27.0	33.2	31.0	20.4	26.0	-----
1919-1921	(4)	-16.2	11.3	-16.7	-11.3	2.0	-----
1919-1929	(4)	25.0	78.5	34.0	49.7	90.5	18.0
1909-1919	(4)	15.8	132.7	106.1	105.1	102.6	116.1
1899-1909	(4)	90.6	71.5	100.4	100.3	135.0	72.5

<sup>1</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929, 1927, AND 1919

	Census year	Number of establishments	Salaried officers and employees <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	9	257	1,412	5,017	2,777	2,240	\$625,157	\$2,144,067	\$14,024,651	\$14,648,554	\$276,097	\$23,107,272	\$8,182,621
	1927	8	192	1,072	3,565	2,260	1,305	511,558	1,745,575	11,818,624	11,465,437	353,187	17,642,442	5,823,818
	1919	11	185	1,180	4,251	960	3,301	403,877	1,200,877	11,140,723	10,871,320	260,397	15,436,875	4,290,152

<sup>1</sup> Not including 4 proprietors and firm members reported for 1919. None reported for 1927 or 1929. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 1,669; 1927, 1,204; 1919, 1,319.

<sup>2</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Illinois, 1 establishment; Maine, 1; Massachusetts, 2; New Jersey, 3; New York, 1; Ohio, 1.

TABLE 3.—PRODUCTION, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1923 TO 1929

[The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

KIND	1929	1927	1925	1923
1. Oilcloth industry, all products, total value.....	\$23, 107, 272	\$17, 642, 442	\$17, 843, 375	\$17, 719, 054
2. Oilcloth.....	\$22, 067, 070	\$17, 501, 137	\$17, 606, 749	\$17, 245, 618
3. Other products (not normally belonging to the industry).....	\$130, 596	\$141, 305	\$140, 626	\$473, 636
4. Oilcloth made as a secondary product in other industries, value.....	\$671, 007	\$1, 261, 824	\$1, 125, 118	\$1, 408, 433
<b>Oilcloth, all industries:</b>				
Total square yards.....	125, 670, 840	105, 284, 402	87, 373, 411	81, 026, 642
Total value (sum of 2 and 4).....	\$23, 630, 583	\$18, 762, 061	\$18, 821, 867	\$18, 713, 051
<b>Enameled—</b>				
Square yards.....	18, 470, 395	10, 703, 632	7, 034, 223	8, 747, 783
Value.....	\$5, 350, 088	\$2, 190, 187	\$1, 853, 609	\$2, 683, 000
<b>Table and shelf—</b>				
Square yards.....	80, 078, 544	75, 600, 076		
Value.....	\$14, 524, 607	\$12, 551, 320		
<b>Wall—</b>				
Square yards.....	18, 127, 001	19, 020, 794	79, 430, 188	72, 278, 859
Value.....	\$3, 755, 988	\$4, 012, 454	\$16, 968, 358	\$16, 630, 891

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSE-POWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	388	Horse-power 5, 017	236	Horse-power 3, 506	195	Horse-power 3, 484	440	Horse-power 4, 251	101	Horse-power 3, 490	100.0	100.0
Prime movers, total.....	14	2, 777	10	2, 260	10	2, 370	8	950	27	2, 445	55.4	22.3
Steam, total.....	14	2, 777	10	2, 260	10	2, 370	8	950	24	1, 965	55.4	22.3
Engines.....	13	2, 702	9	2, 185	9	2, 280	7	875	(1)	(1)	53.9	20.5
Turbines.....	1	75	1	75	1	90	1	75	(1)	(1)	1.5	1.8
Internal-combustion engines.....									3	490		
Electric motors driven by purchased energy.....	874	2, 240	226	1, 305	185	1, 114	438	3, 301	134	1, 045	44.6	77.7
Electric motors, total.....	1, 063	6, 213	705	4, 623	711	4, 539	498	3, 501	315	2, 693	100.0	100.0
Driven by purchased energy.....	374	2, 240	226	1, 305	185	1, 114	438	3, 301	134	1, 045	36.1	94.3
Driven by energy generated in establishments reporting.....	689	3, 973	479	3, 318	526	3, 425	60	200	181	1, 648	63.9	5.7
Electric generators.....	22	Kilo-watts 1, 488 Kilo-watt-hours	18	Kilo-watts 1, 088	20	Kilo-watts 1, 000	(2)	(2)	(2)	(2)		
Electric energy purchased *.....		2, 614, 787		(1)		(1)		(2)		(2)		

<sup>1</sup> Not called for separately on schedule.

<sup>2</sup> Not called for on schedule.

<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>4</sup> Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES: 1929, 1925, 1919, 1914, AND 1909

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

	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent minimum is of maximum		
		January	February	March	April	May	June	July	August	September	October	November	December			
United States:																
1929.....	1, 412	1, 405	1, 359	1, 395	1, 394	<i>1, 330</i>	1, 370	1, 366	1, 386	1, 438	1, 497	1, 481	1, 566	88.9		
1925.....	1, 160	1, 200	1, 249	1, 100	1, 184	1, 176	1, 086	<i>1, 079</i>	1, 101	1, 125	1, 153	1, 197	1, 188	86.1		
1919.....	1, 130	<i>872</i>	880	920	1, 010	1, 120	1, 158	1, 107	1, 218	1, 240	1, 301	1, 303	1, 323	65.9		
1914.....	1, 223	1, 208	1, 303	1, 205	1, 275	1, 224	1, 208	<i>1, 156</i>	1, 180	1, 166	1, 188	1, 184	1, 193	88.7		
1909.....	976	982	960	987	965	<i>938</i>	949	958	955	975	997	1, 024	1, 021	91.1		

## REGALIA, BADGES, AND EMBLEMS

Description of the industry.—The principal products of this industry are robes, costumes, badges, lodge paraphernalia, church vestments, religious medals, printed ribbons, etc., for use by military, naval, fraternal, and religious organizations.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products <sup>1,2</sup>	Value added by manufacture <sup>3</sup>	Horsepower
1929.....	77	1,757	\$1,824,590	\$3,227,230	\$7,027,214	\$4,090,978	1,105
1927.....	70	1,075	1,700,438	3,018,948	7,001,253	4,072,305	1,015
1925.....	85	1,992	2,032,832	3,902,201	9,623,018	5,060,757	1,068
1923.....	84	2,146	2,090,012	4,242,715	10,685,846	6,343,131	1,160
1921.....	81	2,204	2,048,356	4,422,824	10,359,340	5,936,525	(4)
1919.....	115	2,223	1,800,393	4,287,055	9,395,470	5,108,415	1,321
1914.....	138	2,010	970,903	2,205,068	5,025,451	2,820,383	655
1909.....	156	2,638	1,170,690	2,722,523	6,129,640	3,407,117	784
1904.....	140	2,498	1,012,768	2,019,007	4,753,206	2,734,199	676
1899.....	109	1,569	471,114	1,596,875	3,049,481	1,452,606	205
PER CENT OF INCREASE OR DECREASE (—)							
1927-1929.....	(5)	4.9	3.6	0.9	3.1	0.6	8.9
1925-1927.....	(5)	-15.9	-13.4	-23.8	-20.1	-17.5	-5.0
1923-1925.....	(5)	-7.2	-2.7	-6.6	-9.1	-10.8	-7.9
1921-1923.....	(5)	-2.6	2.0	-4.1	2.2	6.8	-----
1919-1921.....	-29.6	-0.9	13.8	3.2	10.3	10.2	-----
1919-1929.....	-33.0	-21.0	1.3	-24.7	-15.6	-8.0	-16.4
1909-1919.....	-20.3	-15.7	53.8	57.5	53.3	49.9	68.5
1899-1909.....	43.1	68.1	148.5	70.5	101.0	134.6	282.4

<sup>1</sup> For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Includes values of miscellaneous products normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of regalia, badges, and emblems, as follows: For 1929, \$113,440; 1927, \$589,524; 1925, \$656,355; corresponding amounts for earlier years not available. Does not include values of regalia, badges, and emblems made as secondary products by establishments classified in other industries, as follows: For 1929, \$628,789; 1927, \$815,791; 1925, \$421,060; 1923, \$707,773; 1921, \$348,003; 1919, \$177,062; corresponding amounts for earlier years not available.

<sup>3</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Not called for on schedule.

<sup>5</sup> Per cent not computed where base is less than 100.

# REGALIA, BADGES, AND EMBLEMS

335

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Certain of the States, however, for which statistics are shown in combination with those for others reported larger values of products than some of the States shown separately. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employes <sup>1</sup>	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
					Total	Primo movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States.....	1929	77	361	1,767	1,105	359	740	\$802,513	\$1,824,500	\$3,227,230	\$3,104,457	\$62,779	\$7,927,214	\$4,000,078
	1927	70	474	1,075	1,015	374	641	1,001,050	1,760,438	3,018,948	2,060,870	52,078	7,691,253	4,072,305
	1919	115	606	2,223	4,321	313	41,008	951,005	1,800,383	4,287,055	4,233,760	53,206	9,395,470	5,108,415
Individual States:														
Illinois.....	1929	9	42	90	80	-----	80	84,366	132,751	211,240	200,218	5,022	533,274	322,034
	1927	12	64	152	81	-----	81	103,006	192,638	200,201	280,710	6,494	705,419	409,215
	1919	14	70	217	97	-----	97	107,150	160,983	470,751	471,530	6,221	937,141	400,300
Maryland.....	1929	5	11	48	38	-----	38	10,744	40,555	48,833	40,731	2,102	140,093	91,260
	1927	3	13	44	15	-----	15	20,405	38,091	50,647	55,594	1,053	130,051	79,401
	1919	5	11	52	13	-----	13	14,293	30,141	50,400	48,842	3,624	135,793	85,297
Massachusetts.....	1929	9	22	70	95	-----	50	38,771	82,542	111,180	100,196	4,084	300,250	189,070
	1927	9	21	91	105	-----	96	35,837	90,934	112,200	109,341	2,919	306,247	163,087
	1919	7	20	103	69	-----	60	30,348	92,293	174,410	171,405	2,915	308,204	229,884
New Jersey.....	1929	0	12	47	37	-----	3	33,728	62,575	80,538	86,483	3,055	232,282	142,744
	1927	3	8	27	20	-----	3	21,672	34,093	40,512	45,319	1,163	120,505	83,083
	1919	10	14	87	70	-----	43	38,657	68,290	83,904	82,140	2,854	233,854	148,860
New York.....	1929	16	72	288	130	-----	130	207,004	319,782	750,487	742,698	7,789	1,700,353	1,046,866
	1927	17	65	204	71	-----	71	124,180	230,870	557,441	552,534	4,907	1,212,209	684,768
	1919	31	59	232	76	-----	70	113,688	237,310	600,103	602,778	7,325	1,220,580	620,477
Ohio.....	1929	7	129	720	334	-----	34	300,004	740,173	1,204,074	1,214,383	10,691	3,018,372	1,754,298
	1927	6	132	620	306	-----	31	334,010	630,101	1,144,878	1,128,681	16,197	2,830,069	1,005,011
	1919	10	217	894	304	-----	34	300,380	732,321	1,713,078	1,695,330	19,630	3,087,065	2,272,087
Pennsylvania.....	1929	6	14	54	30	-----	30	27,232	62,004	90,041	90,041	2,460	224,471	124,530
	1927	7	16	70	20	-----	20	28,124	66,505	147,705	144,825	3,940	286,015	137,250
	1919	18	20	74	20	-----	20	27,737	52,687	158,735	150,463	2,275	329,993	191,305
Groups of States:														
D. C., 1 est.; S. C., 1; Tenn., 1.....	1929	3	4	19	9	-----	9	12,850	13,328	15,724	14,780	944	50,800	34,576
Ind., 1 est.; Iowa, 1; Mo., 4.....	1929	6	28	88	84	-----	84	64,923	98,340	104,280	100,788	3,501	303,100	198,910
Mich., 1 est. Minn., 3; Wis., 1.....	1929	5	13	256	240	-----	240	20,052	240,607	428,820	410,040	12,174	1,064,712	635,802
Other States (Calif., 3 est.; Colo., 1; Kans., 1).....	1929	5	14	59	10	-----	10	32,800	55,103	103,110	102,053	1,057	263,905	160,708
States not shown separately.....														
	<sup>a</sup> 1927	19	155	461	391	-----	391	335,708	458,380	657,241	640,806	16,374	1,086,808	1,329,567
	<sup>b</sup> 1919	20	180	504	384	-----	384	243,803	411,500	1,020,615	1,015,173	11,442	2,162,730	1,130,115

<sup>1</sup> Not including proprietors and firm members, as follows: For 1929, 43; 1927, 42; 1919, 60. <sup>2</sup> The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 2,161; 1927, 2,161; 1919, 2,910.

<sup>3</sup> The figures for 1929 refer to sales (shipments or deliveries) by manufacturers. Those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.

<sup>4</sup> Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>5</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

<sup>6</sup> California, 3 establishments; Colorado, 1; District of Columbia, 1; Georgia, 1; Indiana, 1; Michigan, 2; Minnesota, 3; Missouri, 4; Tennessee, 1; Texas, 1; Wisconsin, 1.

<sup>7</sup> California, 2 establishments; Colorado, 1; Connecticut, 1; District of Columbia, 1; Georgia, 1; Indiana, 1; Louisiana, 1; Michigan, 1; Minnesota, 1; Missouri, 6; Rhode Island, 1; Tennessee, 1; Wisconsin, 2.

## CENSUS OF MANUFACTURES: 1929

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate.....	465	<i>Horsepower</i> 1,105	302	<i>Horsepower</i> 1,015	351	<i>Horsepower</i> 1,068	370	<i>Horsepower</i> 1,321	193	<i>Horsepower</i> 655	100.0	100.0
Prime movers, total.....	5	359	5	374	8	439	6	313	8	270	32.5	23.7
Steam engines.....	3	310	3	325	3	350	2	260	3	66	28.1	10.7
Internal-combustion engines.....	1	3	1	3	4	43	4	53	5	204	0.2	4.0
Water wheels and water turbines.....	1	46	1	46	1	46					4.2	
Electric motors driven by purchased energy.....	460	746	387	641	343	629	364	1,008	185	385	67.5	76.3
Electric motors, total.....	561	1,147	443	872	408	907	418	1,202	236	673	100.0	100.0
Driven by purchased energy.....	460	746	387	641	343	629	364	1,008	185	385	65.0	83.9
Driven by energy generated in establishments reporting.....	101	401	56	231	65	278	54	194	51	188	35.0	16.1
Electric generators.....	2	<i>Kilowatts</i> 135	2	<i>Kilowatts</i> 135	2	<i>Kilowatts</i> 141	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )		
Electric energy purchased <sup>2</sup> .....		<i>Kilowatt-hours</i> 707,778		( <sup>3</sup> )		( <sup>3</sup> )		( <sup>1</sup> )		( <sup>1</sup> )		

<sup>1</sup> Not called for on schedule.

<sup>2</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

<sup>3</sup> Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

(This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.)

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929.....	1,757	<i>1,623</i>	1,657	1,647	1,684	1,746	1,770	1,771	1,790	1,877	1,921	1,802	1,712	84.5	
1925.....	1,992	<i>1,907</i>	1,939	1,958	2,053	2,095	2,090	2,014	1,962	1,944	2,010	1,983	1,945	91.0	
1919.....	2,223	<i>2,081</i>	2,128	2,118	2,103	2,223	2,260	2,251	2,259	2,202	2,285	2,358	2,348	88.3	
1914.....	2,010	<i>1,971</i>	2,007	2,086	2,188	2,121	2,100	1,997	<i>1,916</i>	1,928	2,005	1,943	1,918	90.0	
Illinois.....	90	92	95	90	90	105	100	114	110	100	93	90	88	77.2	
Maryland.....	48	<i>47</i>	<i>47</i>	<i>47</i>	<i>47</i>	<i>47</i>	48	49	49	48	50	50	49	94.0	
Massachusetts.....	70	78	77	79	81	85	84	82	80	79	78	77	70	89.4	
New Jersey.....	47	<i>48</i>	51	47	46	46	50	51	47	47	49	49	43	84.3	
New York.....	288	<i>255</i>	263	264	267	272	298	294	311	333	339	301	257	75.2	
Ohio.....	720	<i>680</i>	672	668	682	707	709	707	718	768	803	790	742	82.2	
Pennsylvania.....	54	54	54	53	56	57	57	52	<i>51</i>	<i>51</i>	55	51	51	89.5	

## SILK AND RAYON MANUFACTURES

**Description of the industry.**—This industry embraces two classes of establishments: (1) Those engaged primarily in the manufacture of silk and rayon fabrics and other finished silk and rayon products, not including knit fabrics, hosiery, and other knit goods made of silk and rayon, which are treated as a part of the "Knit goods" industry and covered by a separate report; (2) those engaged primarily in the manufacture of silk yarn (known technically as organzine, tram, and hard or crêpe twist), spun silk, and rayon yarn (thrown, twisted, or otherwise changed into different forms from those in which purchased) and in the dressing of warps. (Organzine and tram, which

when used in weaving constitute, respectively, the warp and the filling of silk fabrics, are made from raw silk by the process of "throwing." Hard or crêpe twist is yarn to which an extra twist has been given. Spun silk is produced by spinning the short-fibered silk from pierced cocoons or from waste silk which can not be thrown by the usual method.) The greater part of the work performed by throwsters and by warpers is done on contract.

Separate statistics for the two branches of the industry are given in Tables 4, 7, and 8, but in the other tables the industry is treated as a whole.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under \$5,000 in value included for 1910 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Paid for contract work	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>	Horsepower
1929.....	1,491	130,467	\$137,547,140	\$36,799,952	\$112,181,200	\$731,200,231	\$310,018,971	220,225
1927.....	1,648	127,643	140,053,688	33,270,040	445,390,076	750,123,705	304,735,029	221,240
1925.....	1,659	132,509	142,733,539	41,604,435	484,122,527	808,079,309	324,856,872	212,009
1923.....	1,598	125,234	120,840,454	30,340,090	470,038,203	701,322,119	282,283,856	200,020
1921.....	1,565	121,378	113,396,026	30,682,395	337,658,709	583,418,756	245,859,957	(3)
1919.....	1,369	120,782	108,220,330	43,146,201	383,460,022	686,469,523	300,000,601	173,748
1914.....	902	108,170	47,108,469	14,650,792	144,442,321	254,011,257	100,568,036	111,417
1909.....	852	99,037	38,670,085	12,008,744	107,700,016	196,011,607	80,144,751	92,073
1904.....	624	79,001	26,707,943	6,869,686	75,861,188	133,288,072	57,426,884	67,021
1899.....	483	65,416	20,982,194	6,670,209	62,400,065	107,256,258	44,849,593	53,565
PER CENT OF INCREASE OR DECREASE (—)								
1927-1929.....	-0.5	2.2	-1.8	-3.9	-7.5	-2.5	4.7	-0.5
1925-1927.....	-0.7	-3.7	-1.0	-7.9	-8.0	-7.3	-6.2	4.1
1923-1925.....	3.8	5.8	12.5	37.0	1.1	6.3	15.1	3.2
1921-1923.....	2.1	3.2	11.9	-1.1	41.9	36.5	14.8	-----
1919-1921.....	14.3	-4.3	4.8	-28.9	-13.1	-15.3	-13.0	-----
1919-1929.....	8.0	2.9	27.1	-14.7	6.1	6.2	6.3	26.7
1909-1919.....	60.7	28.0	180.6	250.3	200.5	249.6	236.5	88.7
1899-1909.....	76.4	51.4	83.8	82.8	72.7	83.6	98.8	71.9

<sup>1</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>3</sup> Not called for on schedule.

CENSUS OF MANUFACTURES: 1929

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. Certain of the "Other States," however, were more important in the industry than some of the States shown separately. Data for establishments with products under \$5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Cen- sus year	Num- ber of estab- lish- ments	Sala- ried offi- cers and em- ploy- ees <sup>1</sup>	Wage earn- ers (av- er- age for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	Paid for contract work	COST OF MATERIALS, CONTAIN- ERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by man- ufacture <sup>3</sup>
					Total	Prime movers	Motors run by pur- chased energy				Total	Materials and con- tainers	Fuel and purchased energy		
United States	1929	1,401	7,851	130,487	220,225	67,093	153,132	Dollars 23,093,437	Dollars 137,647,140	Dollars 36,799,952	Dollars 412,131,200	Dollars 403,684,701	Dollars 8,496,559	Dollars 731,200,231	Dollars 319,018,971
	1927	1,648	8,415	127,043	221,249	77,130	144,110	21,920,563	140,053,588	38,276,049	445,390,676	436,192,400	9,198,270	750,123,705	304,733,029
	1919	1,369	6,882	120,782	173,748	98,514	76,234	26,370,962	108,226,330	43,146,201	388,460,022	382,267,575	6,201,447	688,469,523	300,000,501
Connecticut	1929	38	680	10,501	16,165	6,851	9,314	2,503,836	12,845,892	1,265,495	27,745,170	27,050,300	694,870	54,208,469	26,553,209
	1927	35	762	9,183	17,842	8,656	9,186	2,437,179	11,400,520	1,011,586	25,416,690	24,767,006	849,038	47,498,321	22,081,022
	1919	41	899	11,254	18,367	12,046	9,311	3,233,696	11,523,047	1,144,105	37,525,860	36,641,924	883,945	68,063,420	30,527,500
Maryland	1929	7	34	809	808	-----	808	71,515	602,253	-----	413,124	349,020	64,104	1,514,726	1,101,602
	1927	9	43	935	1,408	-----	1,408	71,923	716,147	40,761	690,503	70,201	1,808,890	1,178,387	
	1919	6	28	339	1,505	535	970	78,357	456,115	5,544	707,801	665,204	42,507	1,534,218	826,417
Massachusetts	1929	42	385	7,390	18,341	5,032	13,309	1,174,731	7,105,466	3,838,219	20,059,608	20,513,886	445,782	37,412,704	16,453,036
	1927	33	443	7,557	20,111	5,243	14,868	1,136,763	7,615,872	3,201,685	23,218,826	22,758,327	465,499	38,220,144	15,001,318
	1919	21	430	5,697	9,811	4,878	4,933	1,135,502	5,039,601	1,370,674	19,243,483	19,000,721	242,762	34,103,051	14,950,469
New Jersey	1929	631	1,581	21,419	26,910	7,525	19,385	5,144,892	28,099,752	3,331,128	68,892,921	67,637,973	1,254,948	126,307,698	67,414,677
	1927	819	2,174	24,482	31,796	8,804	22,992	6,076,760	33,476,420	8,620,473	88,678,434	87,055,976	1,022,458	168,007,060	75,288,626
	1919	986	2,445	32,326	29,005	18,690	15,309	7,546,845	32,832,211	17,988,470	123,441,248	122,356,778	1,084,470	215,050,560	91,609,312
New York	1929	157	804	10,261	22,537	4,728	17,809	2,423,240	11,620,501	7,313,776	56,107,321	55,363,077	804,244	90,238,425	34,071,104
	1927	181	1,096	11,204	24,626	5,302	19,324	2,764,778	13,128,885	6,320,728	65,036,467	68,718,046	1,319,821	100,447,466	35,416,999
	1919	181	1,211	13,342	10,904	14,268	3,364,125	11,757,847	4,980,300	-----	46,300,750	45,667,918	722,832	81,682,572	35,291,822
North Carolina	1929	18	162	2,922	3,640	1,000	2,640	466,041	2,802,780	-----	10,935,209	10,799,142	136,127	18,587,608	7,652,339
	1929	497	3,101	61,544	102,385	30,249	72,130	8,456,116	59,013,179	10,087,943	173,601,077	169,372,590	4,228,487	320,035,551	147,334,474
	1927	490	3,091	60,608	99,269	35,241	64,028	7,279,050	57,601,075	17,166,597	180,117,899	175,855,397	4,262,502	306,524,028	126,406,129
Pennsylvania	1919	373	3,384	58,052	73,826	42,985	30,841	9,271,578	38,120,477	15,608,271	126,287,243	123,028,779	2,063,464	231,711,352	105,424,100
	1929	43	376	7,589	14,589	6,400	8,180	1,261,408	8,558,192	132,550	20,762,238	20,389,894	372,344	35,638,421	14,876,183
	1927	31	270	6,500	12,856	7,500	5,356	791,384	7,853,236	247,835	20,698,146	20,347,312	350,834	32,511,106	11,812,060
Rhode Island	1919	30	185	4,160	7,224	5,090	2,134	692,231	4,160,940	1,170,794	16,814,873	16,532,722	282,151	27,210,238	10,404,365
	1929	6	34	607	850	-----	850	69,982	321,142	-----	521,087	491,726	29,361	1,187,332	666,245
	1929	19	111	2,249	3,568	650	2,918	360,509	1,695,460	711,837	5,372,832	5,209,577	163,255	9,700,804	4,328,032
Virginia	1927	14	64	1,525	2,764	583	2,181	184,574	1,258,980	498,441	4,339,308	4,205,239	134,069	8,208,030	3,869,322
	1919	10	53	661	1,811	1,335	476	93,024	367,354	40,274	677,200	577,200	31,447	1,550,712	941,975
	1929	34	397	5,066	10,532	4,658	5,874	1,151,167	4,882,579	1,118,998	26,810,558	26,507,516	308,037	35,378,533	8,507,080
Other States	1927	38	472	6,849	10,577	5,720	4,857	1,198,138	6,942,447	1,155,943	37,194,394	36,871,201	323,193	50,878,060	13,083,666
	1919	21	347	5,461	9,064	6,985	2,970	655,604	3,059,738	831,679	17,449,018	17,201,140	247,869	27,473,491	10,024,473

<sup>1</sup> Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry are as follows: For 1929, total, 139,039; proprietors and firm members, 721. For 1927, total, 136,973; proprietors and firm members, 920. For 1919, total, 136,776; proprietors and firm members, 1,011.

<sup>2</sup> The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

<sup>4</sup> Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

<sup>5</sup> Alabama, 3 establishments; California, 4; Delaware, 1; Georgia, 2; Illinois, 8; Indiana, 1; Maine, 2; Michigan, 1; Minnesota, 1; New Hampshire, 3; Ohio, 1; Oregon, 1; South Carolina, 3; West Virginia, 3.

<sup>6</sup> Alabama, 1 establishment; California, 5; Delaware, 1; Georgia, 2; Illinois, 7; Indiana, 1; Maine, 1; Michigan, 1; Minnesota, 1; New Hampshire, 2; North Carolina, 8; Ohio, 1; Oregon, 2; Tennessee, 3; West Virginia, 2.

<sup>7</sup> California, 1 establishment; Delaware, 1; Georgia, 1; Illinois, 4; Maine, 3; Michigan, 2; New Hampshire, 2; North Carolina, 3; Ohio, 1; Tennessee, 2; West Virginia, 1.



# SILK AND RAYON MANUFACTURES

339

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1929

[The figures refer to production, not to sales. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments. Certain of the "Other States," however, reported larger production than some of the States shown separately]

PRODUCT AND STATE	Quantity		Value	PRODUCT AND STATE	Quantity		Value
	Pounds	Square yards			Pounds	Square yards	
1. Silk and rayon industry, all products, total value.....			\$731,200,231	Silk and rayon products—Continued.			
2. Silk and rayon products, including receipts for contract work.....			727,592,865	Velvets, total.....	3,003,377	9,650,631	\$25,112,377
3. Other products (not normally belonging to the industry).....			3,607,366	All-silk.....	90,947	321,561	976,086
4. Silk and rayon products made in other industries, except cotton and rayon woven fabrics made in cotton mills.....			10,165,940	Silk-and-rayon-mixed.....	1,114,604	3,823,011	12,886,604
Silk and rayon products:			737,758,805	Silk-and-cotton-mixed.....	810,958	2,204,359	4,802,661
Aggregate value (sum of 2 and 4).....			737,758,805	Other mixtures.....	977,888	3,301,700	6,387,046
Broad goods (except velvets, plushes, upholsteries, and tapestries), total.....	81,523,379	597,113,792	488,208,166	Plushes.....	1,763,149	1,956,654	3,829,769
Connecticut.....	2,850,815	22,200,287	18,570,004	Upholsteries (except velvets and plushes), total.....	699,463	2,860,041	5,206,631
Massachusetts.....	3,563,657	28,573,144	22,942,570	All-silk.....	68,893	521,659	951,056
New Jersey.....	13,988,656	108,855,734	92,431,542	All-rayon and silk-and-rayon-mixed.....	177,817	880,250	1,340,100
New York.....	5,788,592	51,770,137	45,830,836	Silk-and-cotton-mixed and rayon-and-cotton-mixed.....	331,873	1,171,030	2,207,857
North Carolina.....	3,080,753	18,457,817	13,421,013	Other.....	122,880	200,102	707,528
Pennsylvania.....	32,561,470	252,306,420	231,875,323	Tapestries.....	240,702	534,602	915,240
Rhode Island.....	5,685,310	42,413,838	23,340,962	Threads and yarns, for sale--			
Virginia.....	896,111	10,250,302	7,402,302	Silk--			
Other States.....	13,238,099	62,274,113	32,380,888	Organzine, tram, and crêpe twist, total.....	12,121,022		69,740,353
All-silk, total.....	46,830,804	424,607,181	385,773,207	New York.....	3,732,123		21,888,615
Connecticut.....	2,850,815	22,200,287	18,570,004	Pennsylvania.....	3,608,117		22,956,033
Massachusetts.....	2,639,522	23,325,371	21,627,950	Other States (Conn., Ill., Mass., Mich., N. J., N. C., R. I., Tenn., Va.).....	4,780,782		24,896,705
New Jersey.....	9,157,410	85,707,537	71,321,775	Spun silk.....	3,709,133		12,915,545
New York.....	4,054,842	44,170,689	41,828,672	Machine twist, total.....	515,111		4,822,210
North Carolina.....	857,163	6,802,063	7,902,090	Connecticut.....	341,344		3,227,680
Pennsylvania.....	22,347,271	190,501,553	193,036,292	Other States (Mass., Mich., N. Y., Pa.).....	173,767		1,604,030
Rhode Island.....	2,540,388	24,668,092	16,510,972	Sewing thread.....	237,070		2,217,041
Virginia.....	896,028	9,610,113	7,028,399	Embroidery and other loss silks.....	96,747		640,123
Other States (Ala., Del., Me., Mich., N. H., Ohio, S. C., Tenn.).....	1,082,402	8,424,076	7,940,553	Rayon--			
All-rayon, total.....	13,140,354	66,024,378	34,738,207	Sewing, embroidery, and loss rayons.....	1,305,441		2,174,026
Massachusetts.....	1,014,135	5,247,773	1,314,026	Other rayon yarns, total.....	2,886,213		5,029,397
New Jersey.....	1,903,235	9,330,091	5,795,815	New York.....	1,328,013		2,050,646
New York.....	420,602	1,764,241	908,279	Pennsylvania.....	516,918		1,008,922
North Carolina.....	2,223,590	11,664,854	5,518,923	Other States (Conn., Ill., Mass., N. J., N. C., R. I.).....	1,041,282		1,940,429
Pennsylvania.....	4,210,035	20,453,581	12,903,080	Other yarns (principally silk-and-rayon-mixed).....	3,736,503		7,199,709
Virginia.....	95,183	640,189	374,003	Ribbons, total.....			25,007,932
Other States (Conn., Me., Mich., N. H., Ohio, R. I.).....	3,279,574	17,016,749	7,777,041	All-silk.....			4,443,661
Silk-and-rayon-mixed, total.....	4,583,262	31,730,493	24,428,490	Silk-and-rayon-mixed.....			6,473,806
New Jersey.....	1,520,004	8,267,680	9,663,495	Silk-and-cotton-mixed.....			6,971,629
New York.....	316,638	3,313,180	1,673,467	Other.....			4,118,636
Pennsylvania.....	1,054,437	14,456,178	10,878,711	New Jersey, total.....			7,806,177
Rhode Island.....	51,754	284,851	164,177	All-silk.....			1,843,225
Other States (Conn., Del., Me., Mass., Mich., N. H., N. C., Va.).....	730,539	5,417,095	2,048,650	Silk-and-rayon-mixed.....			1,814,297
Silk-and-cotton-mixed, total.....	5,201,652	27,712,920	17,781,357	Silk-and-cotton-mixed.....			3,215,730
New Jersey.....	434,030	1,984,341	1,809,413	Other.....			932,916
New York.....	132,904	577,284	493,210	Pennsylvania, total.....			13,701,610
Pennsylvania.....	1,805,133	9,329,220	6,707,463	All-silk.....			1,884,041
Rhode Island.....	1,610,912	11,495,861	4,340,295	Silk-and-rayon-mixed.....			6,780,480
Other States (Conn., Mass., Mich., N. H., Va.).....	1,230,673	4,826,223	4,430,970	Silk-and-cotton-mixed.....			2,877,040
Rayon-and-cotton-mixed, total.....	8,907,423	37,240,087	10,616,667	Other.....			2,212,443
New Jersey.....	737,114	2,213,574	2,505,536	Other States (Ala., Calif., Conn., Md., Mass., N. Y., W. Va.), total.....			3,940,245
New York.....	91,242	381,224	147,550	All-silk.....			715,395
Pennsylvania.....	1,497,642	4,812,704	3,325,790	Silk-and-rayon-mixed.....			1,373,023
Rhode Island.....	1,373,262	5,964,134	2,325,548	Silk-and-cotton-mixed.....			878,650
Other States (Conn., Me., Mass., N. H., N. C., S. C., Va.).....	5,268,163	23,869,051	8,222,243	Other.....			973,277
Other mixed goods, total.....	2,703,884	9,789,124	8,870,088	Fringes and gimps, total.....			7,838,964
New Jersey.....	200,873	1,351,702	1,245,508	All-rayon.....			550,864
New York.....	172,374	1,554,519	700,682	Silk-and-cotton-mixed.....			493,893
Pennsylvania.....	680,940	3,063,184	4,903,087	Rayon-and-cotton-mixed.....			6,445,868
Other States (Ala., Conn., Me., Mass., R. I., Va.).....	1,637,088	8,219,719	1,060,831	Other.....			348,849

<sup>1</sup> Not including production in cotton mills.

<sup>2</sup> The figures for this item refer to rayon yarns thrown, twisted, or otherwise changed into different forms from those in which they left the plants in which they were manufactured. (See "Description of the Industry," page 337.) For production of rayon yarns, see "Rayon and allied products" report, pages 729 and 730.

## CENSUS OF MANUFACTURES: 1929

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1929—Continued

[See note at head of this table]

PRODUCT AND STATE	Value	PRODUCT AND STATE	Value
Silk and rayon products—Continued.		Silk and rayon products—Continued.	
Braids, total.....	\$4,387,644	Woven labels, total.....	\$4,646,590
All-rayon.....	1,403,889	All-silk.....	407,003
Rayon-and-cotton-mixed.....	2,055,965	Silk-and-rayon-mixed.....	955,422
Other.....	807,790	Silk-and-cotton-mixed.....	2,882,311
New York, total.....	2,820,007	Other.....	340,804
All-rayon.....	1,072,678	Silk warps, for sale.....	1,582,074
Rayon-and-cotton-mixed.....	1,201,546	Other silk and rayon products, value <sup>1</sup> .....	7,023,748
Other.....	545,783	Amount received for contract work, total.....	57,273,880
Other States (Ala., Calif., Conn., Ill., Me., Mass., N. J., Pa., Va.), total.....	1,507,637	Connecticut.....	702,402
All-rayon.....	391,211	Massachusetts.....	1,280,279
Rayon-and-cotton-mixed.....	854,419	New Jersey.....	10,352,074
Other.....	322,007	New York.....	3,852,006
Bindings, total.....	474,877	North Carolina.....	520,437
Silk-and-cotton-mixed.....	275,425	Pennsylvania.....	34,084,521
Other.....	199,452	Rhode Island.....	2,208,335
		Virginia.....	1,018,427
		Other States (Ala., Ga., Ill., Ind., Md., Tenn., W. Va.).....	2,405,700

<sup>1</sup> Tassels, cords, trimmings, and miscellaneous silk and rayon products.

TABLE 4.—PRODUCTS, BY CLASS, QUANTITY, AND VALUE, BY CHARACTER OF ESTABLISHMENT, FOR THE UNITED STATES: 1929 AND 1927

[This table presents statistics for establishments classified in the "Silk and rayon manufactures" industry only. The figures for both years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

CLASS	1929			1927		
	Total for the industry	Establishments engaged primarily in—		Total for the industry	Establishments engaged primarily in—	
		Manufacturing finished silk and rayon products	Throwing, winding, spinning, or warping		Manufacturing finished silk and rayon products	Throwing, winding, spinning, or warping
Aggregate value.....	\$731,200,231	\$610,860,501	\$120,839,730	\$750,123,705	\$620,405,840	\$120,717,866
Thrown silk:						
Total pounds.....	12,121,022	1,898,901	10,222,121	11,408,721	1,806,565	9,602,156
Total value.....	\$69,740,353	\$11,559,235	\$58,181,118	\$70,247,417	\$10,006,178	\$59,641,239
Organzine—						
Pounds.....	698,352	4,904	693,448	1,223,528	293,176	930,352
Value.....	\$4,430,910	\$27,481	\$4,403,435	\$7,851,853	\$2,050,749	\$5,795,104
Tram—						
Pounds.....	8,550,147	1,710,340	6,845,798	7,702,000	1,133,384	6,568,715
Value.....	\$47,023,474	\$10,323,432	\$36,700,042	\$46,293,246	\$9,188,610	\$40,104,636
Crêpe twist—						
Pounds.....	2,806,523	183,648	2,622,875	2,483,094	380,005	2,103,089
Value.....	\$18,285,963	\$1,208,322	\$17,077,641	\$16,102,318	\$2,360,819	\$13,741,499
Spun silk:						
Pounds.....	3,760,133	856,425	2,912,708	4,455,900	1,262,705	3,193,295
Value.....	\$12,915,545	\$3,279,806	\$9,635,739	\$15,696,105	\$4,725,823	\$10,970,282
Machine twist, and sewing, embroidery, and other floss silk and rayon:						
Pounds.....	2,802,752	2,017,330	785,413	1,382,170	1,352,042	30,137
Value.....	\$10,465,128	\$8,846,505	\$1,618,533	\$12,242,259	\$11,064,843	\$277,416
Other rayon yarns:						
Pounds.....	2,507,795	324,562	2,243,233	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Value.....	\$4,381,900	\$707,674	\$3,674,226	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Other products (mainly broad goods), <sup>2</sup> value.....	\$576,423,425	\$565,699,917	\$10,723,508	\$603,372,287	\$584,610,412	\$18,752,875
Amount received for contract work.....	\$57,273,880	\$20,767,274	\$36,506,606	\$48,565,577	\$17,480,593	\$31,075,984
Raw silk thrown on commission, total pounds.....	36,456,492	1,105,086	35,261,406	27,963,571	720,374	27,243,197
Organzine.....	4,822,193	186,254	4,675,939	3,825,702	202,085	3,563,617
Tram.....	14,000,978	259,488	14,050,520	9,751,533	73,695	9,077,838
Crêpe twist.....	16,634,321	749,374	15,934,947	14,386,286	384,594	14,001,692
Rayon thrown on commission, total pounds.....	6,486,403	90,079	6,396,324	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> No data.<sup>2</sup> See Table 3.

SILK AND RAYON MANUFACTURES

TABLE 5.—PRINCIPAL MATERIALS CONSUMED IN THE SILK AND RAYON INDUSTRY, BY COST, 1929, AND BY QUANTITY, 1929, 1927, 1925, AND 1919, BY STATES

[This table presents statistics for all States for which separate figures can be given without disclosing data reported by individual establishments. In the consumption of certain classes of materials, however, some of the "Other States" outranked some of those shown separately. The difference between the sum of the costs of the several kinds of materials shown in this table and the total cost of materials as given in Tables 1 and 2 is due to the fact that this table covers only certain specified materials, whereas the others cover all materials. See "Raw fibers consumed in textile mills" and "Purchased yarns consumed in textile mills," pp. 222 and 223, respectively.]

MATERIAL AND STATE	COST					QUANTITY (POUNDS)					
	1929	1929	1927	1925	1919	1929	1929	1927	1925	1919	
Raw silk, total.....	\$207,027,248	54,473,331	38,277,925	35,187,590	25,890,728	Rayon, total.....	\$44,937,707	32,551,605	23,158,452	15,728,202	3,039,257
Connecticut.....	14,745,694	3,416,120	2,005,000	2,245,157	1,777,775	Connecticut.....	5,071,095	3,340,296	729,272	939,858	202,870
Massachusetts.....	13,040,708	2,909,477	1,857,770	1,319,238	1,109,943	Massachusetts.....	1,959,648	1,577,585	216,550	165,630	64,183
New Jersey.....	42,892,200	8,778,634	7,413,240	7,476,799	7,066,034	New Jersey.....	6,254,976	4,560,868	3,746,717	3,854,446	655,728
New York.....	40,410,080	7,870,896	6,837,788	5,400,592	2,274,136	New York.....	4,076,947	4,103,109	5,274,685	4,272,300	1,510,000
Pennsylvania.....	117,539,653	23,749,742	14,119,008	13,399,918	10,007,698	North Carolina.....	5,361,689	3,606,145	(1)	(1)	(1)
Rhode Island.....	10,076,312	2,305,069	993,708	1,385,317	808,048	Pennsylvania.....	14,458,024	6,208,458	9,170,740	4,844,131	481,273
Virginia.....	3,111,356	743,237	341,417	145,211	(1)	Rhode Island.....	4,636,702	3,514,021	513,827	213,144	(1)
Other States (1929: Ala., Calif., Del., Ill., Me., Md., Mich., N. H., N. C., Ohio, S. C., Tenn.).....	24,305,236	5,002,556	4,709,880	3,815,358	1,040,294	Other States (1929: Ala., Calif., Del., Ill., Me., Md., Mich., Minn., N. H., Ohio, Oreg., S. C., Va., W. Va.).....	3,117,720	2,401,123	3,506,652	1,438,684	224,285
Organzine, tram, and hard and crepe twist, total.....	48,475,059	8,682,134	20,326,137	10,341,619	6,125,400	Cotton yarns, total.....	8,121,631	13,260,609	16,858,767	15,300,174	17,058,012
Connecticut.....	2,459,683	305,715	489,800	1,699,129	240,429	Connecticut.....	800,034	1,250,400	2,395,668	2,056,445	4,581,867
Massachusetts.....	1,544,240	358,188	816,475	110,459	42,143	Massachusetts.....	695,435	1,105,120	1,428,089	1,340,680	1,520,080
New Jersey.....	13,570,308	2,527,167	5,480,859	5,453,185	3,504,001	New Jersey.....	1,398,553	1,955,062	2,636,827	2,631,837	2,038,178
New York.....	3,367,650	667,369	1,715,600	2,350,549	715,018	New York.....	1,074,398	1,094,821	1,070,496	1,516,421	2,597,189
Pennsylvania.....	21,048,409	3,595,070	10,013,066	8,285,785	1,425,402	Pennsylvania.....	2,455,725	3,912,373	5,838,232	5,114,523	4,438,514
Rhode Island.....	2,000,120	357,807	848,156	717,008	(1)	Rhode Island.....	610,124	1,635,254	1,472,709	1,508,745	710,190
Virginia.....	1,748,984	302,710	256,815	237,971	(1)	Other States (1929: Ala., Calif., Ill., Me., Md., Minn., N. H., N. C., Ohio).....	1,051,447	1,085,904	1,422,836	1,221,518	1,466,004
Other States (1929: Calif., Ill., Me., Md., Minn., N. H., N. C., Ohio).....	2,645,587	427,109	704,376	487,556	194,837	Other yarns, total.....	3,059,629	2,217,004	3,075,705	2,930,040	1,681,124
Spun silk, total.....	3,918,537	1,158,224	3,856,715	4,507,454	4,707,070	Massachusetts.....	95,193	37,367	152,505	(1)	(1)
Connecticut.....	943,900	208,051	424,683	1,036,544	1,000,472	New Jersey.....	468,959	167,847	180,272	369,321	182,531
Massachusetts.....	327,729	175,621	113,854	98,443	(1)	New York.....	1,185,833	703,470	341,325	447,462	212,622
New Jersey.....	530,298	168,608	204,973	353,008	724,068	Pennsylvania.....	1,707,151	1,190,332	1,122,830	1,320,989	543,669
New York.....	39,696	11,920	37,627	210,421	505,239	Other States (1929: Calif., Conn., Ill., Minn., R. I., Va.).....	202,493	97,988	2,178,723	702,268	742,405
Pennsylvania.....	1,267,251	333,831	1,425,817	1,789,878	1,118,958						
Rhode Island.....	764,068	255,352	1,416,795	833,670	621,040						
Other States (1929: Calif., Mich.).....	45,496	13,851	233,436	274,590	201,852						
Floured cocoons, noils, and other waste.....	7,628,687	8,827,122	7,499,109	(2)	(2)						

<sup>1</sup> Included in figure for "Other States" to avoid disclosing the data reported by individual establishments.  
<sup>2</sup> Not called for on schedule.

TABLE 6.—RAW SILK AND RAYON THROWN ON COMMISSION—QUANTITY, BY CLASS, BY STATES: 1919 TO 1929

[This table presents statistics for all States for which separate figures can be given without disclosing data reported by individual establishments. In the cases of certain classes of products, however, some of the "Other States" outranked some of those shown separately.]

STATE	RAW SILK THROWN (POUNDS)				Rayon thrown (pounds)	STATE	RAW SILK THROWN (POUNDS)				Rayon thrown (pounds)
	Total	Into organzine	Into tram	Into hard or crepe twist			Total	Into organzine	Into tram	Into hard or crepe twist	
United States:						New York—Contd.					
1929.....	36,456,492	4,862,193	14,900,978	16,684,321	6,480,403	1923.....	2,063,933	554,002	1,335,512	174,110	(1)
1927.....	27,993,571	3,825,702	9,751,683	14,380,286	(1)	1924.....	2,400,780	1,270,850	1,004,618	116,309	(1)
1925.....	26,401,650	4,322,805	10,125,132	11,043,722	(1)	1919.....	2,080,124	1,142,082	750,340	177,700	(1)
1923.....	21,587,070	4,326,830	10,265,884	6,995,256	(1)	Pennsylvania:					
1921.....	21,190,254	6,331,792	10,030,789	4,830,673	(1)	1929.....	20,707,761	3,540,495	10,108,090	13,050,167	4,890,261
1919.....	18,475,714	6,286,728	7,393,872	4,795,114	(1)	1927.....	21,000,570	2,386,884	6,024,674	11,689,018	(1)
New Jersey:						1925.....	20,265,730	2,723,757	7,456,968	10,075,014	(1)
1929.....	2,300,040	409,878	699,583	1,370,570	324,438	1923.....	14,835,941	2,016,940	7,013,950	4,006,045	(1)
1927.....	2,135,240	383,768	436,272	1,315,200	(1)	1921.....	14,321,870	4,198,476	6,203,900	3,910,434	(1)
1925.....	1,632,005	431,121	492,482	709,002	(1)	1919.....	12,409,711	4,177,655	4,493,723	3,738,333	(1)
1923.....	2,404,070	399,757	911,627	1,153,686	(1)	Other States:					
1921.....	2,160,595	428,740	1,095,534	636,321	(1)	1929.....	4,010,044	228,780	2,350,404	1,421,764	1,801,704
1919.....	2,252,631	693,900	1,063,788	494,043	(1)	1927.....	2,848,662	306,140	1,425,723	1,059,793	(1)
New York:						1925.....	2,036,542	550,499	1,217,584	868,450	(1)
1929.....	3,348,647	674,034	1,832,802	841,811	(2)	1923.....	2,223,132	457,131	1,004,495	761,606	(1)
1927.....	1,979,084	685,904	964,914	325,260	(1)	1921.....	2,316,003	424,717	1,726,677	164,000	(1)
1925.....	1,876,773	627,428	958,098	291,247	(1)	1919.....	1,733,248	272,191	1,077,015	384,042	(1)

<sup>1</sup> No data.  
<sup>2</sup> Included in figure for "Other States" to avoid disclosing data reported by individual establishments.

## CENSUS OF MANUFACTURES: 1929

TABLE 7.—SILK SPINDLES, ACTIVE—NUMBER, BY CLASS, BY STATES: 1929, 1927, AND 1925

[Spindles active some time within the census year]

STATE	Census year	PRODUCING SPINDLES						WINDING SPINDLES (RAW SILK ONLY)	
		Total		In plants engaged primarily in throwing, winding, etc.		In other silk mills		In plants engaged primarily in throwing, winding, etc.	In other silk mills
		Spinning and twisting	Spinning only (spun silk)	Spinning and twisting	Spinning only (spun silk)	Spinning and twisting	Spinning only (spun silk)		
United States.....	1929	3,180,005	245,381	2,307,182	148,704	882,483	96,017	858,386	381,316
	1927	2,793,437	195,952	2,062,852	108,120	730,585	87,832	710,009	355,200
	1925	2,722,870	171,871	2,032,366	93,267	690,510	78,604	651,410	340,390
Alabama.....	1920	288				288			
California.....	1929	2,412				2,412			1,110
	1927	6,404				6,404			2,656
	1925	3,026				3,026			1,349
Connecticut.....	1929	116,656	42,784	26,360	5,680	90,296	37,104	4,150	29,105
	1927	123,047	37,216	34,188		89,459	37,216	5,280	30,209
	1925	152,845	37,210	43,008		109,837	37,216	5,710	37,994
Georgia.....	1929	31,404		18,844		12,560		2,652	1,500
	1927	20,302		20,944		8,448		2,588	2,100
	1925	10,948		10,948				2,052	
Illinois.....	1929	37,900		37,900				55,704	
	1927	32,529		32,529				50,911	
	1925	22,503		22,503				37,258	
Indiana.....	1929	6,200		6,200				9,700	
	1927	2,688		2,688				9,700	
Maine.....	1929	1,106				1,106			350
	1927	352				352			
	1925	1,034				1,034			650
Maryland.....	1929	33,158		32,558		600		11,520	342
	1927	38,768		32,558		1,200		11,320	684
	1925	36,794		31,354		4,440		10,300	689
Massachusetts.....	1929	166,548	76,272	19,220	39,784	137,328	36,488	11,370	28,481
	1927	138,800	75,702	11,386	26,970	127,414	48,732	9,136	24,605
	1925	127,964	66,419	10,192	25,031	117,772	41,388	6,882	22,820
Michigan.....	1929	11,536				11,536			2,700
	1927	16,500				16,500			5,800
	1925	16,570				16,570			5,740
New Hampshire.....	1929	1,200	2,520	1,200	2,520				
	1927	600	2,520	600	2,520				
	1925	440	2,520	440	2,520				
New Jersey.....	1929	265,046	20,992	187,846	19,922	77,200	700	80,530	56,515
	1927	265,938	2,922	171,010	2,922	94,328		59,851	89,442
	1925	300,167	2,922	189,729	2,922	110,438		69,969	76,560
New York.....	1929	240,718	23,997	167,774	22,480	72,944	1,517	62,350	20,679
	1927	243,234	25,044	151,996	23,184	91,238	1,800	59,598	31,169
	1925	225,003	23,584	163,448	23,584	61,555		56,230	23,712
North Carolina.....	1929	11,643		4,643		7,000		5,520	4,900
	1927							62	
	1925	5,019		1,925		3,094		2,700	4,718
Pennsylvania.....	1929	2,138,674	24,904	1,720,565	4,156	418,109	20,808	559,473	184,197
	1927	1,797,993	13,848	1,534,679	13,824	263,314	24	475,387	138,186
	1925	1,743,469	16,210	1,494,475	16,210	248,994		421,096	135,880
Rhode Island.....	1929	68,024	23,152	9,120	23,152	48,904		4,340	30,646
	1927	38,208	23,200	9,280	23,200	31,928		3,040	29,052
	1925	18,924	23,000	6,080	23,000	12,844		1,440	29,020
South Carolina.....	1929								1,080
Tennessee.....	1929	27,120		24,920		2,200		12,484	2,472
	1927	9,864		9,864				14,474	
	1925	8,700		8,700				9,370	
Virginia.....	1929	38,742	31,000	38,742	31,000			21,272	2,246
	1927	44,330	15,500	44,330	15,500			13,234	1,244
	1925	31,774		31,774				11,202	1,200
West Virginia.....	1929	11,200		11,200				8,300	
	1927	9,200		9,200				7,520	
	1925	17,700		17,700				25,720	

# SILK AND RAYON MANUFACTURES

343

TABLE 8.—SILK SPINDLES, IDLE—NUMBER, BY CLASS, BY STATES: 1920, 1927, AND 1925

[Spindles idle throughout the census year]

STATE	Cen- sus year	PRODUCING SPINDLES						WINDING SPINDLES (RAW SILK ONLY)	
		Total		In plants engaged pri- marily in throwing, winding, etc.		In other silk mills		In plants engaged primarily in throwing, winding, etc.	In other silk mills
		Spinning and twisting	Spinning only (spun silk)	Spinning and twist- ing	Spinning only (spun silk)	Spinning and twist- ing	Spinning only (spun silk)		
United States.....	1920	80,457	11,422	30,771	512	46,686	10,910	10,691	27,774
	1927	138,238	22,840	80,423	13,824	48,815	9,010	40,760	24,650
	1925	105,377	27,047	78,738	27,935	26,639	12	54,926	17,950
California.....	1920	1,310				1,310			682
Connecticut.....	1920	5,440	240	1,200	240	4,240		770	4,264
	1927	4,809				4,809			2,398
	1925	3,921		150		3,771			2,000
Georgia.....	1927	2,112				2,112			500
Illinois.....	1920	81		81				5,045	
	1927							7,480	
	1925	1,672		1,648		24		6,360	
Maine.....	1920	3,228				3,228			418
	1927	3,982				3,982			
	1925	2,400				2,400			118
Maryland.....	1920	600				600			342
Massachusetts.....	1920	2,206	6,952		272	2,206	6,680	60	1,073
	1927	4,238	9,810		904	4,238	8,810	112	988
	1925	2,888	2,267		2,255	2,888	12		307
Michigan.....	1920	204				204			518
	1927	1,380				1,380			2,010
	1925	1,116				1,116			4,260
New Jersey.....	1920	5,856	4,230	3,796		2,060	4,230	500	1,275
	1927	13,378	990	3,358	990	10,020		1,220	6,550
	1925	11,822	990	6,342	990	5,480		1,032	3,566
New York.....	1920	10,654				10,654		770	5,128
	1927	4,548	12,040	1,084	11,840	2,504	200	764	1,328
	1925	23,884	23,400	20,740	22,400	3,144		6,604	2,836
North Carolina.....	1920	1,085		1,085				440	
Pennsylvania.....	1920	54,563		32,385		22,178		6,794	13,702
	1927	95,831		81,181		14,650		36,734	10,252
	1925	40,534	2,200	43,718	2,200	2,816		28,176	4,009
Rhode Island.....	1920							200	342
	1927	5,000				5,000			600
	1925	5,000				5,000			90
Tennessee.....	1920	624		624				306	
	1925							70	
Virginia.....	1927	2,500		2,500				450	
	1925	6,140		6,140				12,618	
West Virginia.....	1920	600		600				720	
	1927	400		400					

CENSUS OF MANUFACTURES: 1929

TABLE 9.—ACTIVE AND IDLE LOOMS<sup>1</sup>—NUMBER, BY MAJOR CLASSES, BY STATES: 1919 TO 1929

CLASS	ACTIVE SOME TIME WITHIN THE CENSUS YEAR									IDLE THROUGHOUT THE CENSUS YEAR								
	United States	Connecticut	Massachusetts	New Jersey	New York	Pennsylvania	Rhode Island	Virginia	Other States	United States	Connecticut	Massachusetts	New Jersey	New York	Pennsylvania	Rhode Island	Virginia	Other States
Aggregate number: 1929.....	113,860	6,931	6,612	27,228	7,355	46,775	10,465	1,754	6,740	7,119	170	394	2,037	575	3,161	639	-----	143
Automatic (with filling change).....	20,630	1,866	1,052	5,027	1,635	7,248	830	16	2,956	887	-----	126	381	111	97	150	-----	22
Nonautomatic (without filling change).....	93,230	5,065	5,560	22,201	5,720	39,527	9,635	1,738	3,784	6,232	170	268	1,656	464	3,064	489	-----	121
1927.....	114,819	5,707	5,300	34,235	7,798	47,720	9,038	1,304	3,717	8,743	850	431	2,490	732	3,768	83	111	278
1925.....	111,513	5,688	3,883	34,773	8,359	46,102	8,058	1,087	3,563	6,801	1,124	502	3,423	961	3,086	136	-----	569
1923 <sup>2</sup> .....	102,647	5,951	3,474	32,324	8,781	39,830	7,806	1,036	3,415	14,302	561	192	4,842	1,278	6,740	131	109	449
1919.....	96,438	5,141	3,218	34,681	7,392	37,482	5,240	-----	538	10,358	319	185	3,654	1,331	3,248	880	292	470
On broad silks: <sup>3</sup> 1929.....	108,382	6,793	6,576	25,548	6,760	44,062	10,465	1,754	6,424	6,026	166	394	1,420	461	2,756	639	-----	90
Automatic (with filling change).....	19,468	1,866	1,016	4,339	1,552	7,029	830	16	2,810	631	-----	126	185	83	86	150	-----	1
Nonautomatic (without filling change).....	88,924	4,927	5,560	21,209	5,208	37,033	9,635	1,738	3,614	5,295	166	268	1,235	378	2,670	489	-----	89
1927.....	108,308	5,524	5,300	31,875	6,746	45,108	9,038	1,304	3,413	6,403	850	428	1,603	409	2,824	83	111	195
1925.....	103,513	5,570	3,883	31,472	7,213	42,935	8,068	1,087	3,295	7,353	1,107	502	2,093	515	2,467	136	-----	533
1923 <sup>2</sup> .....	94,172	5,759	3,474	29,298	7,058	36,551	7,806	1,036	3,190	11,456	522	192	3,379	1,002	5,697	131	109	334
1919.....	87,215	4,974	3,218	30,683	6,144	33,853	5,240	-----	538	7,890	216	185	2,837	863	2,164	880	292	448
On ribbons: 1929.....	5,478	138	36	1,680	595	2,713	-----	-----	316	1,193	4	-----	617	114	405	-----	-----	53
Automatic (with filling change).....	1,172	-----	36	688	83	210	-----	-----	146	250	-----	-----	196	28	11	-----	-----	21
Nonautomatic (without filling change).....	4,306	138	-----	992	512	2,494	-----	-----	170	937	4	-----	421	86	304	-----	-----	32
1927.....	6,511	183	-----	2,360	1,052	2,612	-----	-----	304	2,340	-----	3	987	323	944	-----	-----	83
1925.....	8,000	118	-----	3,301	1,146	3,167	-----	-----	268	2,448	17	-----	1,330	446	619	-----	-----	36
1923 <sup>2</sup> .....	8,475	222	-----	3,026	1,723	3,279	-----	-----	225	2,846	39	-----	1,463	186	1,043	-----	-----	115
1919.....	6,223	167	-----	3,998	1,248	3,629	-----	-----	181	2,498	103	-----	817	463	1,084	-----	-----	31
PER CENT OF INCREASE OR DECREASE (—)																		
Aggregate number: 1927-1929.....	-0.8	21.4	24.8	-20.5	-5.7	-2.0	15.8	34.5	81.3	-18.6	-80.0	-8.6	-18.2	-21.4	-16.1	669.9	-----	-48.6
1925-1927.....	3.0	0.3	36.5	-1.5	-6.7	3.5	12.2	20.0	4.3	-10.8	-24.4	-14.1	-27.3	-23.3	22.1	-39.0	-----	-51.1
1925-1929.....	2.1	21.0	70.3	-21.7	-12.0	1.5	20.9	61.4	89.2	-27.4	-84.9	-21.5	-40.5	-40.2	2.4	309.9	-----	-74.9
1923-1925.....	8.6	-4.9	11.8	7.6	-4.8	16.7	3.2	4.9	4.3	-31.5	100.4	161.5	-20.3	-24.8	-54.2	3.8	-----	26.7
1919-1929.....	18.1	34.8	105.5	-21.5	-0.5	24.8	99.7	226.0	145.4	-31.5	-46.7	113.0	-44.3	-56.8	-2.7	-27.4	-----	-70.1
On broad silks: 1927-1929.....	( <sup>4</sup> )	23.0	24.1	-19.8	0.2	-2.3	15.8	34.5	88.2	-7.4	-80.5	-7.9	-5.5	12.7	-2.4	669.9	-----	-53.8
1925-1927.....	4.6	-0.8	36.5	1.3	-6.5	5.1	12.2	20.0	3.6	-12.9	-23.2	-14.7	-28.2	-20.6	14.5	-39.0	-----	-63.4
1925-1929.....	4.7	22.0	69.4	-18.8	-6.3	2.6	20.0	61.4	95.0	-19.4	-85.0	-21.5	-32.2	-10.5	11.7	309.9	-----	-53.1
1923-1925.....	9.9	-3.3	11.8	7.4	2.2	17.5	3.2	4.9	3.3	-35.8	112.1	161.5	-38.1	-52.8	-56.7	3.8	-----	50.6
1919-1929.....	24.3	36.6	104.4	-16.7	10.0	30.2	99.7	226.0	150.4	-24.9	-23.1	113.0	-49.9	-46.9	27.4	-27.4	-----	-70.9
On ribbons: 1927-1929.....	-15.9	-24.6	-----	-28.8	-43.4	3.9	-----	-----	3.0	-40.0	-----	-----	-37.5	-64.7	-57.1	-----	-----	( <sup>5</sup> )
1925-1927.....	-18.6	55.1	-----	-28.5	-8.2	-17.5	-----	-----	13.4	-4.4	-----	-----	-25.8	-27.6	52.5	-----	-----	( <sup>5</sup> )
1925-1929.....	-31.5	16.9	-----	-49.1	-48.1	-14.3	-----	-----	17.9	-51.3	( <sup>5</sup> )	-----	-53.6	-74.4	34.0	-----	-----	( <sup>5</sup> )
1923-1925.....	-5.8	-46.8	-----	9.1	-33.5	-3.4	-----	-----	19.1	-14.0	( <sup>5</sup> )	-----	-9.1	139.8	-40.7	-----	-----	-68.7
1919-1929.....	-40.6	-17.4	-----	-58.0	-52.3	-25.2	-----	-----	74.6	-52.2	-96.1	-----	-24.5	-75.4	-62.6	-----	-----	( <sup>5</sup> )

<sup>1</sup> With or without Jacquard attachments.  
<sup>2</sup> No data for 1921.  
<sup>3</sup> Including velvet looms.  
<sup>4</sup> Less than one-tenth of 1 per cent.  
<sup>5</sup> Per cent not computed where base is less than 100.

# SILK AND RAYON MANUFACTURES

345

TABLE 10.—LOOMS<sup>1</sup> AND JACQUARD MACHINES, ACTIVE AND IDLE—NUMBER, BY CLASS, BY STATES:  
1929 AND 1927

MACHINERY	UNITED STATES		CONNECTICUT		MASSACHUSETTS		NEW JERSEY		NEW YORK		PENNSYLVANIA		RHODE ISLAND		VIRGINIA		OTHER STATES	
	1929	1927	1929	1927	1929	1927	1929	1927	1929	1927	1929	1927	1929	1927	1929	1927	1929	1927
	ACTIVE SOME TIME WITHIN THE CENSUS YEAR																	
Looms, <sup>1</sup> aggregate.....	113,800	114,819	6,931	5,707	6,612	5,306	27,228	34,235	7,355	7,798	46,775	47,720	10,465	9,038	1,754	1,304	6,740	3,717
Automatic.....	20,030	(?)	1,866	(?)	1,652	(?)	5,027	(?)	1,635	(?)	7,248	(?)	830	(?)	16	(?)	2,950	(?)
Nonautomatic.....	93,230	(?)	5,065	(?)	5,560	(?)	22,201	(?)	5,720	(?)	30,527	(?)	9,635	(?)	1,738	(?)	3,784	(?)
Other than velvet and ribbon, total.....	105,666	106,225	5,159	3,977	6,476	5,300	24,940	31,692	6,718	6,706	43,780	44,805	10,465	9,038	1,701	1,304	6,424	3,413
Automatic.....	10,192	(?)	1,728	(?)	916	(?)	4,311	(?)	1,552	(?)	7,029	(?)	830	(?)	16	(?)	2,810	(?)
Nonautomatic.....	86,474	(?)	3,431	(?)	5,560	(?)	20,629	(?)	5,166	(?)	36,751	(?)	9,635	(?)	1,688	(?)	3,614	(?)
Reed space over 40 inches, total.....	83,427	88,068	4,632	3,328	5,566	4,637	10,391	25,372	5,222	4,965	33,771	38,441	8,590	7,955	1,572	1,123	4,683	2,247
Automatic.....	14,468	(?)	1,728	(?)	696	(?)	2,874	(?)	1,074	(?)	5,701	(?)	394	(?)	16	(?)	1,985	(?)
Nonautomatic.....	68,959	(?)	2,904	(?)	4,870	(?)	16,517	(?)	4,149	(?)	28,070	(?)	8,196	(?)	1,556	(?)	2,698	(?)
Reed space 40 inches and under, total.....	22,239	18,157	527	549	910	663	5,549	6,320	1,496	1,741	10,009	6,454	1,875	1,083	132	181	1,741	1,166
Automatic.....	4,724	(?)	527	(?)	226	(?)	1,437	(?)	478	(?)	1,328	(?)	430	(?)		(?)	925	(?)
Nonautomatic.....	17,515	(?)		(?)	684	(?)	4,112	(?)	1,018	(?)	8,681	(?)	1,430	(?)	132	(?)	916	(?)
Velvet, total.....	2,716	2,083	1,634	1,617	100		608	183	42	40	282	213			50			
Automatic.....	266	(?)	138	(?)	100		28	(?)		(?)		(?)						
Nonautomatic.....	2,450	(?)	1,496	(?)			580	(?)	42	(?)	282	(?)			50			
Ribbon, total.....	5,478	6,511	138	183	36		1,680	2,360	505	1,052	2,713	2,612					316	304
Automatic.....	1,172	(?)		(?)	36		688	(?)	83	(?)	219	(?)					146	(?)
Nonautomatic.....	4,306	(?)	138	(?)			992	(?)	512	(?)	2,494	(?)					170	(?)
Jacquard machines.....	7,774	8,042	208	264	79	98	4,581	3,901	228	292	2,214	3,137	458	77		10	6	167
Braiding machines.....	12,725	23,677	161	192	1,181	1,411	1,398	3,903	4,643	12,020	3,576	4,216			100		1,566	1,935
IDLE THROUGHOUT THE CENSUS YEAR																		
Looms, <sup>1</sup> aggregate.....	7,119	8,743	170	850	394	431	2,037	2,490	576	732	3,161	3,768	639	89		111	143	278
Automatic.....	887	(?)		(?)	126	(?)	381	(?)	111	(?)	97	(?)	150	(?)		(?)	22	(?)
Nonautomatic.....	6,232	(?)	170	(?)	268	(?)	1,656	(?)	464	(?)	3,064	(?)	489	(?)		(?)	121	(?)
Other than velvet and ribbon, total.....	5,751	5,971	117	526	308	428	1,396	1,448	455	401	2,746	2,779	639	83		111	90	195
Automatic.....	541	(?)		(?)	40	(?)	181	(?)	83	(?)	86	(?)	150	(?)			1	(?)
Nonautomatic.....	5,210	(?)	117	(?)	268	(?)	1,215	(?)	372	(?)	2,660	(?)	489	(?)			89	(?)
Reed space over 40 inches, total.....	3,636	4,606	94	447	260	412	984	1,007	262	261	1,683	2,242	263	63		111	90	63
Automatic.....	241	(?)		(?)	40	(?)	108	(?)	34	(?)	58	(?)		(?)		(?)	1	(?)
Nonautomatic.....	3,395	(?)	94	(?)	220	(?)	876	(?)	228	(?)	1,625	(?)	263	(?)		(?)	89	(?)
Reed space 40 inches and under, total.....	2,115	1,365	23	79	48	10	412	441	193	140	1,003	537	370	20				132
Automatic.....	300	(?)		(?)		(?)	73	(?)	49	(?)	28	(?)	150	(?)				(?)
Nonautomatic.....	1,815	(?)	23	(?)	48	(?)	339	(?)	144	(?)	1,035	(?)	220	(?)				(?)
Velvet, total.....	175	432	40	324	86		24	55	6	8	10	45						
Automatic.....	80	(?)		(?)	86		4	(?)		(?)		(?)						
Nonautomatic.....	85	(?)	40	(?)			20	(?)	6	(?)	10	(?)						
Ribbon, total.....	1,192	2,340	4			3	617	987	114	323	405	944					53	83
Automatic.....	250	(?)					106	(?)	28	(?)	11	(?)					21	(?)
Nonautomatic.....	937	(?)	4			3	421	(?)	86	(?)	394	(?)					32	(?)
Jacquard machines.....	1,495	1,436	94	40	76	56	517	553	116	227	663	535		26			20	
Braiding machines.....	5,032	(?)	129	(?)	525	(?)	330	(?)	1,817	(?)	118	(?)		(?)	200	(?)	1,913	(?)

<sup>1</sup> With or without Jacquard attachments.

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

<sup>3</sup> No data.

CENSUS OF MANUFACTURES: 1929

TABLE 11.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	90,064	Horse-power 220,225	76,373	Horse-power 221,240	60,801	Horse-power 212,600	23,203	Horse-power 173,748	6,036	Horse-power 111,417	100.0	100.0
Prime movers, total	309	67,093	358	77,130	450	86,101	624	98,514	653	87,669	30.5	50.7
Steam, total	230	54,898	207	66,511	362	77,304	504	88,221	527	78,302	24.9	50.8
Engines	202	38,445	248	52,116	301	60,221	469	75,695	(1)	(1)	17.4	43.5
Turbines	28	16,453	19	14,395	61	17,083	35	12,526	(1)	(1)	7.5	7.3
Internal-combustion engines	34	4,081	40	3,786	46	3,237	51	1,966	53	1,762	1.9	1.1
Water wheels and water turbines	45	8,114	45	6,842	42	5,650	69	8,327	73	7,605	3.7	4.8
Electric motors driven by purchased energy	90,045	153,132	76,015	144,110	60,351	120,418	22,579	75,234	5,383	23,748	69.5	43.3
Electric motors, total	107,500	182,230	93,297	172,071	78,601	156,108	35,310	107,682	13,054	47,401	100.0	100.0
Driven by purchased energy	90,045	153,132	76,015	144,110	60,351	120,418	22,579	75,234	5,383	23,748	84.0	69.7
Driven by energy generated in establishments reporting	16,855	29,098	17,282	27,061	18,250	20,690	12,731	32,748	8,571	23,653	16.0	30.3
Electric generators	180	Kilowatts 32,450 Kilowatt-hours	178	Kilowatts 35,323	253	Kilowatts 45,345	(2)	(2)	(2)	(2)		
Electric energy purchased <sup>1</sup>		280,456,407		(4)		(4)		(2)		(2)		

<sup>1</sup> Not called for separately on schedule.  
<sup>2</sup> Not called for on schedule.  
<sup>3</sup> This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.  
<sup>4</sup> Data incomplete.

TABLE 12.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by italic figures]

STATE	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November	December		
United States:															
1929	130,467	129,090	131,854	132,670	132,509	131,615	128,804	128,596	129,066	130,328	131,548	130,010	<i>127,919</i>	127,919	96.4
1925	132,509	123,682	126,709	129,107	129,551	130,561	130,564	132,589	135,166	136,614	137,882	139,068	138,840	138,840	89.0
1919	126,782	118,907	<i>118,901</i>	120,863	123,114	125,317	125,601	127,671	128,938	129,660	130,019	135,517	137,259	137,259	88.1
1914	108,170	107,769	109,712	110,879	111,706	112,791	111,779	111,141	109,700	107,193	105,213	100,142	<i>100,045</i>	100,045	88.7
1909	99,037	97,170	99,473	100,753	100,314	99,212	97,782	<i>96,534</i>	98,351	99,528	99,629	99,400	100,294	100,294	95.8
Connecticut	10,501	10,452	10,278	10,484	10,608	10,665	10,593	10,846	10,891	10,775	10,530	10,011	<i>9,973</i>	9,973	91.0
Maryland	899	889	887	871	847	873	852	830	855	873	894	818	830	830	90.4
Massachusetts	7,399	7,435	7,599	7,072	7,505	7,480	7,336	7,157	7,155	7,173	7,350	7,347	7,383	7,383	93.3
New Jersey	21,419	21,565	22,114	22,003	22,100	21,758	21,148	20,717	21,072	21,480	21,459	21,180	<i>20,421</i>	20,421	92.3
New York	10,261	10,230	10,568	10,545	10,460	10,209	10,068	10,103	10,313	10,070	10,302	10,346	<i>9,912</i>	9,912	93.8
North Carolina	2,922	<i>2,737</i>	2,768	2,844	2,886	2,900	2,844	2,868	2,891	3,018	3,034	3,152	3,107	3,107	86.8
Pennsylvania	61,544	<i>60,371</i>	61,954	62,695	62,288	62,017	60,872	60,960	61,115	61,582	62,040	61,019	60,720	60,720	96.3
Rhode Island	7,589	7,627	7,829	8,024	8,121	7,823	7,364	60,960	61,115	61,582	62,040	61,019	7,474	7,474	88.3
Tennessee	667	620	643	667	685	663	663	712	742	747	717	618	<i>571</i>	571	76.4
Virginia	2,240	2,131	<i>2,106</i>	2,190	2,196	2,370	2,333	2,281	2,308	2,232	2,321	2,288	2,238	2,238	88.9