

CHAPTER V.—TYPE OF ORGANIZATION

INTRODUCTION

The classification of manufacturing establishments according to corporate and noncorporate forms of organization is, in a sense, of considerably less significance to-day than it was in those years when the corporate structure was in the experimental stage. The fact that 92.1 per cent of the gross value of manufactured products and 89.9 per cent of the wage earners employed in 1929 were reported by incorporated establishments attests the nearly universal adoption of the corporate form of organization by the more important manufacturing companies. (See Table 2.)

On the other hand, 51.7 per cent of the total number of individual establishments for which returns were made were not incorporated. Of this total of 109,144 unincorporated enterprises, which comprised partnerships, proprietorships, cooperative associations, and other miscellaneous types of organization, nearly all were single-unit, independently owned plants with an average of only 8 wage earners each. In contrast, in the average establishment of the independent, incorporated concern 48 wage earners were employed.

Another form of classification, by which manufacturing establishments are distributed according to central-administrative-office (plural-unit) and independent (single-unit) organization, assists in understanding an industrial trend of considerable importance. (See GENERAL EXPLANATIONS—Persons engaged—Central-administrative-office employees, page 5.) During the postwar decade there was an acceleration of an earlier expansion movement by which independent establishments were brought under common control. The purpose in some instances was to place competing plants of a similar nature under

unified ownership; in other instances it was to bring together plants whose operations supplemented one another and whose combination brought about a vertical integration of processes; a third objective was integration by the addition of dissimilar products the manufacture of which would utilize unused space or equipment or would make possible the continuous employment of the factory force.

In a study of operating combinations of manufacturing establishments,¹ based on incomplete census data for 1919, it was shown that the establishments operated by the 5,838 central-office groups which made satisfactory returns represented nearly 8 per cent of the total number of establishments and employed approximately one-third of the total number of wage earners in all manufacturing industries. Nearly 60 per cent of the total number of establishments in central-office combinations were found in four industry groups, as follows: Food and kindred products, 21.2 per cent; textiles and their products, 13.2 per cent; forest products, 13.2 per cent; chemicals and allied products, 11.2 per cent.

During the decade from 1919 to 1929, as has been said, considerable impetus was given to the consolidation movement. Returns covering 1929 from 8,246 central-office groups indicate that with only 12.5 per cent of the total number of manufacturing establishments the multiplant groups employed 48.4 per cent of all the industrial wage earners and turned out 54.3 per cent of the total manufactured product. Similar comparisons by industry groups may be made from Table 1.

¹ Fourteenth Census Monograph III, The Integration of Industrial Operations, by Willard L. Thorp.

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TABLE 1.—TYPE OF OPERATION—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE (PLURAL-UNIT) OR INDEPENDENT (SINGLE-UNIT) OPERATION, BY INDUSTRY GROUPS: 1929

[The term "central administrative office," as used for census purposes, signifies an office which operates two or more plants at least one of which is not located in the same city in which the office is located. In cases where the items for central administrative office and independent establishments can not be given separately without disclosing data for individual establishments, they have been combined, as explained in the footnotes. In the totals for all groups the data for each establishment are included in the column in which such data properly belong, and therefore the totals differ from the sums of the items in the respective columns]

GROUP	ESTABLISHMENTS				WAGE EARNERS (average for the year)					
	Total	Central-administrative office (plural unit)		Independent (single unit)		Total	Central-administrative office (plural unit)		Independent (single unit)	
		Number	Per cent of total	Number	Per cent of total		Number	Per cent of total	Number	Per cent of total
Groups of industries, total.....	210,959	26,286	12.5	184,673	87.5	8,838,743	4,275,377	48.4	4,563,366	51.6
Food and kindred products.....	56,320	7,522	13.4	48,798	86.6	753,247	330,073	45.1	413,274	54.9
Textiles and their products.....	27,404	3,008	11.0	24,396	89.0	1,707,798	694,295	40.7	1,013,503	59.3
Forest products.....	26,912	2,397	8.9	24,515	91.1	876,383	1,248,632	28.4	1,027,751	71.6
Paper and allied products.....	3,125	958	30.6	2,168	69.4	233,303	131,079	56.2	102,314	43.8
Printing, publishing, and allied industries.....	27,622	617	2.2	26,905	97.8	357,988	42,407	11.8	315,581	88.2
Chemicals and allied products.....	8,278	2,094	25.3	6,184	74.7	280,808	186,271	66.3	94,537	33.7
Products of petroleum and coal.....	1,497	951	63.5	546	36.5	147,216	111,872	76.0	35,344	24.0
Rubber products.....	4,525	102	2.3	4,423	97.7	149,148	82,347	55.2	66,801	44.8
Leather and its manufactures.....	4,277	498	11.6	3,779	88.4	318,415	184,081	42.3	134,334	57.7
Stone, clay, and glass products.....	8,514	1,566	18.3	6,948	81.7	328,417	170,292	51.9	158,125	48.1
Iron and steel and their products, not including machinery.....	6,640	1,155	17.4	5,485	82.6	880,882	548,510	62.3	332,363	37.7
Nonferrous metals and their products.....	7,622	450	5.9	7,172	94.0	314,741	132,276	42.0	182,465	58.0
Machinery, not including transportation equipment.....	12,955	1,398	10.8	11,557	89.2	1,091,289	450,993	46.7	640,296	53.3
Transportation equipment, air, land, and water.....	2,550	417	16.4	2,133	83.6	583,355	366,887	62.9	216,468	37.1
Railroad repair shops.....	2,297	2,162	94.1	135	5.9	308,156	391,727	98.4	16,429	1.6
Miscellaneous industries.....	14,620	1,001	6.8	13,619	93.2	417,467	182,517	43.7	234,950	56.3

¹ Item for wage earners in central-administrative-office establishments included with that for wage earners in independent establishments in "Billiard and pool tables, bowling alleys, and accessories" industry, to avoid disclosing data for individual establishments.
² Item for wage earners in central-administrative-office establishments included with that for wage earners in independent establishments in "Cardboard, not made in paper mills" industry, to avoid disclosing data for individual establishments.
³ Item for wage earners in central-administrative-office establishments included with that for wage earners in independent establishments in "Candles" industry, to avoid disclosing data for individual establishments.
⁴ Item for wage earners in central-administrative-office establishments included with that for wage earners in independent establishments in "Windmills and windmill towers" industry, to avoid disclosing data for individual establishments.
⁵ Item for wage earners in central-administrative-office establishments included with that for wage earners in independent establishments in "Motorcycles, bicycles, and parts" industry, to avoid disclosing data for individual establishments.
⁶ Item for wage earners in independent establishments included with that for wage earners in central-administrative-office establishments in "Car and general construction and repairs, steam-railroad repair shops" industry, to avoid disclosing data for individual establishments.

TABLE 2.—TYPE OF OWNERSHIP AND TYPE OF OPERATION—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL) AND AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE (PLURAL-UNIT) OR INDEPENDENT (SINGLE-UNIT) OPERATION: 1929 AND 1919

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in the 1929 census of manufactures; and they also include data for all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. The 1919 total for "Number of establishments" is, therefore, somewhat larger, and the total number of wage earners and the total value of products for 1919 are slightly larger, than the corresponding totals given in many other tables, in which the data for the "Automobile repairing" industry and for establishments reporting products less than \$5,000 in value have been deducted from the 1919 figures in order to render them strictly comparable with those for later years]

TYPE OF OWNERSHIP OR CONTROL, AND OF OPERATION	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (average for the year)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE
	1929	1919	1929	1919	1929	1919	1929
Total.....	210,959	290,105	8,838,743	9,096,372	\$70,434,863,443	\$62,418,078,773	\$31,885,283,711
Corporate ownership or control.....	101,815	91,517	7,945,478	7,875,132	64,000,690,898	54,744,392,855	29,174,714,978
Central-administrative office (plural unit).....	24,461	(1)	4,203,478	(1)	37,790,066,617	(1)	15,600,772,499
Independent (single unit).....	77,354	(1)	3,742,000	(1)	27,110,628,781	(1)	13,567,942,479
Other forms of ownership or control (individual, partnership, etc.).....	109,144	198,588	893,265	1,221,240	5,534,173,045	7,673,685,918	2,710,568,733
Central-administrative office (plural unit).....	1,825	(1)	71,899	(1)	436,320,984	(1)	190,517,159
Independent (single unit).....	107,319	(1)	821,366	(1)	5,097,852,061	(1)	2,520,051,574

¹ No data for 1919.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—TYPE OF OWNERSHIP—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL), BY INDUSTRIES: 1929 AND 1919

(In cases where the item for a certain group can not be given separately without disclosing data for individual establishments, it has been combined with that for another group. In such cases an (x) is shown in the column in which the item has been omitted, and the item for the group with which it has been consolidated is printed in *italics*. In the totals for all industries the data for each establishment are included in the item for the group in which the establishment properly belongs, and therefore the totals differ from the sums of the items in the respective columns. See headnote on Table 2)

INDUSTRY	Census year	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (Average for the year)			VALUE OF PRODUCTS		
		Total	Owned by—		Total	In establishments owned by—		Total	Of establishments owned by—	
			Corporations	Individuals, partnerships, etc.		Corporations	Individuals, partnerships, etc.		Corporations	Individuals, partnerships, etc.
All industries, total.....	1929 1919	210,959 290,105	101,815 91,517	109,144 198,588	8,838,743 9,096,372	7,045,478 7,875,132	893,265 1,221,240	\$70,434,863,443 62,418,078,773	\$64,900,600,398 54,744,302,855	\$5,534,173,045 7,673,685,918
Agricultural implements.....	1929 1919	293 521	196 308	97 213	41,663 54,368	40,981 53,020	682 1,339	277,854,462 304,961,265	274,271,440 297,301,964	3,583,013 7,059,301
Aircraft and parts.....	1929 1919	132 31	120 26	12 5	14,710 3,543	14,567 3,478	143 65	71,152,924 14,372,643	70,528,389 14,090,963	624,535 275,680
Alcohol, ethyl, and distilled liquors.....	1929 1919	30 34	29 32	1 2	1,484 1,380	1,484 1,380	(x) (x)	54,284,665 31,854,085	54,284,665 31,854,085	(x) (x)
Aluminum manufactures.....	1929 1919	150 83	105 65	45 18	21,210 11,402	20,867 11,211	343 191	163,457,248 75,277,948	151,492,055 74,390,005	1,965,193 887,943
Ammunition and related products.....	1929 1919	21 42	19 38	2 4	7,223 22,816	7,223 22,698	(x) 118	43,808,520 88,038,223	43,808,520 87,895,531	(x) 142,692
Artificial and preserved flowers and plants.....	1929 1919	191 224	72 46	119 178	3,216 4,138	1,626 1,627	1,590 2,511	14,425,420 16,143,165	8,300,736 6,306,828	6,004,684 9,836,337
Artificial leather.....	1929 1919	17 17	17 (1)	(1) (1)	2,590 2,011	2,590 (1)	(1) (1)	32,961,252 26,281,966	32,961,252 (1)	(1) (1)
Artists' materials.....	1929 1919	68 58	31 24	37 34	1,167 926	1,033 823	134 103	9,459,565 5,507,056	8,370,655 4,941,986	1,088,907 565,070
Asbestos products, other than steam packing or pipe and boiler covering.....	1929 1919	67 40	57 37	10 9	8,092 3,654	7,728 3,610	364 38	56,164,036 23,977,557	53,599,604 23,798,619	2,564,342 178,938
Asphalted-felt-base floor covering ²	1929 1919	14 14	12 2	2 2	2,345 2,345	2,345 (x)	(x) (x)	31,888,962 31,888,962	31,888,962 (x)	(x) (x)
Awnings, tents, sails, and canvas covers.....	1929 1919	1,002 595	309 196	663 699	7,162 6,028	4,287 3,730	2,875 2,298	40,237,576 45,690,390	31,445,003 30,615,582	17,792,573 15,074,808
Bags, other than paper, not made in textile mills.....	1929 1919	202 216	125 96	77 120	11,828 10,756	10,633 9,529	1,195 1,227	170,175,893 214,059,474	157,983,346 202,019,428	12,192,547 12,040,040
Bags, paper, exclusive of those made in paper mills.....	1929 1919	95 75	81 48	14 27	6,970 4,168	6,556 3,694	414 474	64,621,192 47,263,090	59,592,448 43,786,339	5,028,744 3,477,651
Baking powders, yeast, and other leavening compounds.....	1929 1919	48 88	37 52	11 36	3,006 3,331	2,988 3,302	18 20	52,336,812 40,230,312	52,158,792 45,875,006	178,020 355,306
Baskets and rattan and willow ware, not including furniture.....	1929 1919	273 375	139 65	134 310	9,353 4,533	6,945 2,734	2,408 1,799	22,851,043 11,821,167	17,168,733 7,212,151	5,682,310 4,609,016
Belting other than leather and rubber, not made in textile mills ²	1929 1919	9 207	5 135	4 72	255 2,602	241 2,225	14 377	2,788,627 35,631,682	2,683,722 31,432,071	104,905 4,199,611
Belting, leather.....	1929 1919	172 5,154	112 1,718	60 3,436	2,705 28,281	2,377 18,742	388 9,539	40,480,054 270,323,803	36,128,595 194,027,016	4,352,059 76,296,787
Beverages ²	1929 1919	40 49	19 17	21 32	1,390 2,101	1,247 1,962	143 139	8,821,363 15,733,047	7,937,863 14,985,190	883,500 747,938
Billiard and pool tables, bowling alleys, and accessories.....	1929 1919	170 220	104 97	66 123	1,617 2,455	1,435 2,455	182 470	24,681,836 26,284,072	22,156,068 19,855,659	2,525,768 5,428,413
Bluing.....	1929 1919	20 57	11 21	9 36	105 360	79 229	26 131	1,364,510 2,731,277	910,616 1,809,425	453,894 921,852
Bolts, nuts, washers, and rivets, not made in plants operated in connection with rolling mills.....	1929 1919	117 144	101 117	16 27	16,175 17,967	15,911 17,488	264 479	102,392,099 89,743,882	100,649,608 87,720,343	1,742,491 2,023,539
Bone black, carbon black, and lampblack.....	1929 1919	77 35	63 26	14 9	1,915 675	1,873 536	42 139	20,169,722 6,186,204	19,768,412 4,698,912	401,310 1,488,192
Bookbinding and blank-book making.....	1929 1919	1,308 1,113	460 291	648 822	24,754 20,361	19,505 13,727	5,249 6,634	102,783,405 66,020,677	84,785,902 47,427,127	17,997,503 18,593,550
Boot and shoe cut stock, not made in boot and shoe factories.....	1929 1919	210 252	100 95	110 157	9,499 9,715	8,177 7,504	1,322 2,211	133,447,914 161,203,310	117,265,270 122,796,117	16,182,635 38,407,193
Boot and shoe findings, not made in boot and shoe factories.....	1929 1919	382 427	218 143	164 284	10,376 8,941	8,390 5,038	1,977 3,903	58,025,445 62,825,408	45,336,678 34,803,174	13,288,767 28,022,234
Boots and shoes, other than rubber.....	1929 1919	1,341 1,449	1,017 898	324 551	205,640 211,049	192,534 184,167	13,106 26,882	965,922,694 1,155,041,436	912,220,402 1,017,908,259	53,702,292 137,133,177
Boots and shoes, rubber.....	1929 1919	22 25	22 24	1 1	25,659 32,875	25,659 32,875	26,882 (x)	102,537,625 116,917,434	102,537,625 116,917,434	(x) (x)
Boxes, cigar, wooden.....	1929 1919	118 189	48 52	70 137	4,374 5,218	2,950 2,325	1,424 2,893	12,459,425 13,110,213	8,973,443 6,113,391	3,485,982 6,996,822
Boxes, paper, not elsewhere classified.....	1929 1919	1,249 1,201	926 692	323 509	55,654 55,862	49,100 44,757	6,554 11,105	294,263,296 206,419,343	209,351,939 174,405,722	24,901,357 32,013,621
Boxes, wooden, except cigar boxes.....	1929 1919	1,792 1,140	486 552	306 588	30,554 42,445	26,156 33,934	4,398 8,511	135,025,675 177,818,454	117,173,494 140,301,684	17,852,181 37,516,770
Bread and other bakery products.....	1929 1919	20,785 25,095	3,021 1,748	17,764 23,347	200,841 141,592	126,821 76,008	74,020 65,584	1,526,110,811 1,161,896,318	1,029,541,293 596,559,963	496,569,518 565,336,355
Brooms.....	1929 1919	407 1,034	87 154	320 880	4,542 6,313	2,420 3,264	2,122 3,059	19,166,363 30,205,267	9,578,639 14,585,499	9,587,714 15,619,768
Brushes, other than rubber.....	1929 1919	303 379	150 135	153 244	7,261 7,968	5,989 5,367	1,272 2,601	45,549,270 39,005,607	36,375,442 26,394,991	8,673,828 12,610,616
Butter.....	1929 1919	3,527 3,738	2,358 1,070	1,169 2,668	19,097 17,641	16,085 11,497	3,012 6,144	746,417,620 583,163,011	625,928,930 348,528,290	120,488,690 234,634,721
Buttons.....	1929 1919	242 557	116 167	126 390	9,034 15,577	7,068 11,760	1,966 3,817	28,977,919 41,840,459	22,637,787 31,108,265	6,340,132 10,732,194
Candles.....	1929 1919	20 19	16 11	4 8	781 541	735 494	46 47	6,686,194 3,350,806	6,390,384 3,004,701	295,810 346,105
Canning and preserving: Fish, crabs, shrimps, oysters, and clams.....	1929 1919	348 475	243 275	105 200	13,612 12,437	12,075 9,921	1,537 2,516	80,848,513 80,260,423	75,025,621 71,121,358	5,822,892 9,139,065

¹ No data.

² No data available for 1919.

TYPE OF ORGANIZATION

TABLE 3.—TYPE OF OWNERSHIP—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL), BY INDUSTRIES: 1929 AND 1919—Continued

[See headnote on first page of this table]

INDUSTRY	Cen- sus year	NUMBER OF ESTABLISH- MENTS			WAGE EARNERS (average for the year)			VALUE OF PRODUCTS		
		Total	Owned by—		Total	In establishments owned by—		Total	Of establishments owned by—	
			Corporations	Individ- uals, part- nerships, etc.		Corporations	Individ- uals, part- nerships, etc.		Corporations	Individuals, partnerships, etc.
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces	1929 1919	2,997 3,805	1,639 1,336	1,358 2,469	98,866 77,486	85,056 55,635	13,810 21,851	\$750,342,041 548,027,502	\$684,437,209 428,016,024	\$65,904,832 120,010,878
Car and general construction and repairs, electric-railroad repair shops	1929 1919	446 624	435 619	11 5	29,475 31,272	28,550 31,173	910 99	85,481,577 75,210,701	82,720,544 74,864,135	2,781,033 346,560
Car and general construction and repairs, steam-railroad repair shops	1929 1919	1,851 1,744	1,844 1,743	7 1	368,681 484,437	368,148 484,437	533 (x)	1,184,435,262 1,279,235,393	1,182,706,874 1,279,235,393	1,728,888 (x)
Carbon paper and inked ribbons ²	1929	57	42	15	1,251	1,175	70	17,295,140	10,648,028	740,212
Cardboard, not made in paper mills	1929	13	12	1	609	609	(x)	5,629,498	6,620,498	(x)
Card cutting and designing	1929	16	14	2	1,425	1,425	(x)	9,138,415	9,138,415	(x)
Carpets and rugs, rag	1929	70	41	29	2,338	1,908	430	10,648,170	17,370,789	2,271,390
Carpets and rugs, wool, other than rag	1929	75	22	53	1,148	758	390	5,323,349	3,614,306	1,708,983
Carpets and rugs, wool, other than rag	1929	94	32	62	1,530	1,050	479	5,610,768	4,155,546	1,855,222
Carpets and rugs, wool, other than rag	1919	330	32	307	2,016	612	1,404	5,597,057	1,749,401	3,847,656
Carpets and rugs, wool, other than rag	1929	67	55	12	32,623	30,600	2,017	170,915,364	165,205,120	11,710,244
Carpets and rugs, wool, other than rag	1919	75	49	26	22,933	20,806	2,127	123,253,828	107,881,235	15,372,593
Carriage, wagon, sleigh, and sled materials	1929	45	25	20	681	497	184	2,792,228	2,107,672	684,556
Carriages and sleds, children's	1929	258	111	147	6,509	5,628	881	26,765,316	23,221,788	3,543,528
Carriages and sleds, children's	1929	70	62	8	7,102	6,804	298	28,817,890	27,472,985	1,344,905
Carriages and sleds, children's	1919	103	51	52	6,686	6,211	475	24,566,596	22,670,174	1,896,422
Carriages, wagons, sleighs, and sleds ²	1929	88	71	17	2,873	2,734	139	16,449,879	15,710,671	739,208
Cars, electric and steam railroad, not built in railroad repair shops	1929 1919	147 106	144 104	3 2	40,015 55,218	39,822 55,218	193 (x)	328,220,204 556,664,807	326,319,783 556,664,807	1,000,421 (x)
Cash registers and adding, calculating, and card-tabulating machines	1929 1919	46 65	37 48	9 17	16,840 16,544	16,803 16,457	37 37	110,000,986 83,539,025	109,837,840 83,163,697	163,146 375,828
Caskets, coffins, burial cases, and other morticians' goods	1929 1919	414 361	233 235	131 116	13,033 11,890	11,715 10,421	1,318 1,469	88,281,872 64,377,133	80,388,725 56,678,630	7,893,147 7,698,603
Cast-iron pipe	1929 1919	72 59	67 56	5 3	19,741 12,625	19,213 12,417	528 208	80,260,560 50,235,101	78,812,417 40,402,668	1,448,133 832,433
Cement	1929 1919	174 193	150 118	18 5	33,308 25,524	28,831 25,322	4,537 202	267,509,260 175,204,910	235,871,262 174,148,701	31,637,998 1,116,200
Cereal preparations	1929 1919	121 105	70 (1)	42 (1)	6,488 7,624	6,314 (1)	174 (1)	175,223,126 169,223,465	170,230,030 (1)	4,993,090 (1)
Cheese	1929 1919	2,768 3,530	875 505	1,893 3,025	3,401 143,455	1,953 143,455	1,448 2,709	110,044,732 143,455,704	51,880,129 20,670,217	58,764,603 113,779,487
Chemicals, not elsewhere classified	1929 1919	551 836	515 (1)	36 (1)	62,199 76,918	60,904 (1)	1,295 (1)	738,048,386 614,278,849	722,377,298 (1)	15,671,088 (1)
Chewing gum	1929 1919	37 62	29 47	8 15	2,265 3,190	2,216 3,007	49 183	80,100,123 51,240,156	59,707,309 40,043,350	452,817 1,296,806
China firing and decorating, not done in potteries	1929 1919	27 43	9 5	18 38	317 244	221 70	96 174	1,564,003 866,762	907,397 255,193	556,006 611,569
Chocolate and cocoa products, not including confectionery	1929 1919	59 48	54 40	5 8	6,249 9,083	6,098 8,770	151 313	119,540,693 139,268,206	117,070,452 131,150,108	1,870,241 8,099,188
Cigars and cigarettes	1929 1919	1,636 9,926	414 796	1,222 9,130	105,308 138,773	90,665 96,849	14,643 41,924	1,066,968,888 773,662,405	1,022,198,805 630,487,463	44,710,083 134,175,932
Clay products (other than pottery) and nonclay refractories	1929 1919	1,749 2,414	1,318 1,415	431 999	93,336 76,915	89,258 64,857	7,078 12,058	294,934,513 208,422,920	270,417,400 179,095,183	18,517,113 29,327,737
Cleaning and polishing preparations	1929 1919	429 490	271 224	158 275	2,713 1,955	2,236 1,659	477 396	50,779,632 26,793,109	44,471,542 22,062,909	6,308,000 4,650,200
Clocks, clock movements, time-recording devices, and time stamps	1929 1919	56 46	51 37	5 9	10,401 8,252	10,385 8,241	16 11	42,165,875 23,380,190	42,032,275 23,382,715	133,600 47,475
Clothing (except work clothing), men's, youths', and boys', not elsewhere classified ²	1929	3,691	1,113	2,578	149,868	101,613	48,250	901,104,205	698,787,813	302,316,392
Clothing, men's, buttonholes	1929	32	3	29	292	39	253	573,909	71,103	502,806
Clothing, men's, buttonholes	1919	107	4	103	484	126	358	1,090,040	353,241	736,808
Clothing, women's, not elsewhere classified	1929 1919	8,082 7,711	3,113 1,641	4,969 6,070	187,500 165,640	100,816 62,144	86,684 103,505	1,709,580,505 1,208,543,128	1,009,315,417 398,060,635	700,265,088 810,482,493
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's ²	1929	511	310	201	38,201	31,094	7,107	138,450,078	111,963,175	26,486,903
Cloth sponging and refinishing	1929 1919	46 67	30 32	16 35	902 1,206	745 755	157 451	3,361,221 3,690,858	2,714,028 2,341,908	647,193 1,348,950
Coffee and spice, roasting and grinding	1929 1919	928 794	611 440	317 354	9,053 10,540	7,966 8,327	1,097 2,213	424,344,837 304,791,677	387,267,891 239,246,585	37,076,946 65,545,092
Coke, not including gas-house coke	1929 1919	153 278	150 251	3 27	20,552 29,319	20,445 28,664	107 655	416,348,458 316,515,838	415,842,765 309,441,015	605,098 7,074,823
Collapsible tubes ²	1929	17	17	—	1,821	1,821	—	8,912,977	8,912,977	—
Collars, men's	1929 1919	15 30	10 20	5 19	2,952 11,103	2,952 9,889	41 1,714	8,740,396 47,864,949	8,647,680 41,986,024	92,716 5,878,325
Combs and hairpins, not made from metal or rubber	1929 1919	24 45	20 22	4 23	656 2,229	635 1,509	21 720	2,482,419 6,566,365	2,398,266 4,267,140	84,163 2,299,225
Compressed and liquefied gases ²	1929	354	350	4	3,390	3,379	11	52,189,779	52,025,045	163,834
Concrete products	1929 1919	2,438 2,785	1,064 533	1,374 2,252	16,505 8,378	11,580 4,225	4,925 4,153	62,900,749 33,664,332	69,017,161 17,132,138	23,883,588 16,532,194
Condensed and evaporated milk	1929 1919	535 401	486 373	49 28	7,065 13,075	6,857 13,053	208 622	209,109,700 339,505,774	204,153,855 323,254,554	4,955,845 16,252,220
Confectionery	1929 1919	2,021 3,149	946 (1)	1,075 (1)	63,501 70,493	54,659 (1)	8,842 (1)	393,269,849 447,726,103	345,032,644 (1)	48,237,205 (1)
Cooperage	1929 1919	586 1,099	312 384	274 715	10,691 13,219	9,155 10,307	1,536 2,912	64,841,788 88,238,061	55,108,274 67,792,015	9,733,514 20,444,046

No data.

² No data available for 1919.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—TYPE OF OWNERSHIP—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL), BY INDUSTRIES: 1929 AND 1919—Continued

[See headnote on first page of this table]

INDUSTRY	Cen- sus year	NUMBER OF ESTABLISH- MENTS			WAGE EARNERS (average for the year)			VALUE OF PRODUCTS		
		Total	Owned by—		Total	In establishments owned by—		Total	Of establishments owned by—	
			Corpo- rations	Individ- uals, partnerships, etc.		Corpo- rations	Individ- uals, part- nerships, etc.		Corporations	Individuals, partnerships, etc.
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	1929	2, 161	913	1, 248	28, 593	21, 350	7, 243	\$222, 434, 625	\$178, 883, 158	\$43, 621, 467
	1919	4, 796	914	3, 882	27, 640	14, 614	13, 026	160, 313, 945	83, 703, 505	66, 610, 350
Cordage and twine.....	1929	123	108	15	14, 489	13, 887	602	91, 455, 117	89, 519, 690	1, 935, 457
	1919	120	95	25	17, 622	17, 003	619	133, 360, 476	129, 976, 070	3, 300, 408
Cork products.....	1929	35	26	9	3, 842	3, 811	31	23, 023, 329	22, 832, 563	190, 760
	1919	62	39	23	3, 545	3, 412	133	10, 282, 289	15, 430, 855	861, 384
Corn sirup, corn sugar, corn oil, and starch.....	1929	35	19	16	6, 730	6, 689	71	105, 983, 789	155, 479, 952	503, 787
	1919	56	30	26	7, 705	7, 674	121	180, 250, 260	185, 149, 779	1, 106, 481
Corsets and allied garments.....	1929	213	139	74	13, 004	12, 291	1, 373	70, 802, 190	69, 199, 228	12, 342, 731
	1919	188	109	79	18, 415	15, 185	3, 230	75, 541, 959	69, 180, 461	7, 615, 738
Cotton goods.....	1929	1, 281	1, 187	94	424, 016	419, 295	5, 621	1, 524, 177, 087	1, 503, 219, 132	20, 057, 955
	1919	1, 288	1, 164	124	430, 966	424, 402	6, 564	2, 125, 272, 193	2, 000, 733, 247	34, 538, 846
Cotton small wares ¹	1929	202	140	62	15, 281	14, 035	1, 246	65, 100, 753	59, 287, 257	5, 882, 406
	1919	11	11	(¹)	321	321	(¹)	2, 044, 724	2, 944, 724	(¹)
Cutlery (not including silver and plated cutlery) and edge tools.....	1929	239	154	85	14, 991	14, 188	803	78, 660, 872	75, 134, 482	3, 526, 390
	1919	304	182	122	10, 859	18, 651	1, 208	66, 623, 570	63, 339, 679	3, 280, 801
Dairymen's supplies; creamery, cheese-factory, and butter-factory equipment; and poultrymen's and apiarists' supplies.....	1929	172	97	75	5, 450	4, 651	799	42, 246, 758	36, 188, 413	6, 058, 345
	1919	244	119	125	6, 437	5, 021	516	37, 397, 448	33, 997, 168	3, 400, 280
Dental goods and equipment ²	1929	87	51	36	4, 559	4, 357	202	35, 180, 165	31, 850, 912	3, 323, 253
Doors, shutters, and window sash and frames, metal.....	1929	148	118	30	0, 557	0, 136	418	72, 160, 388	69, 736, 555	2, 423, 333
	1919	57	43	14	2, 677	1, 991	86	10, 877, 001	10, 486, 090	300, 311
Druggists' preparations.....	1929	439	302	127	10, 688	10, 018	670	124, 778, 487	117, 702, 331	7, 076, 156
	1919	594	323	201	15, 568	14, 220	1, 339	114, 598, 486	104, 760, 090	9, 842, 820
Drug grinding.....	1929	26	21	5	677	615	62	9, 669, 220	8, 986, 022	683, 198
	1919	31	19	12	1, 347	1, 265	82	16, 937, 098	16, 174, 223	763, 475
Dyeing and finishing textiles.....	1929	732	581	151	79, 327	75, 573	3, 754	465, 820, 629	447, 910, 823	17, 909, 806
	1919	628	400	228	55, 985	48, 874	7, 111	323, 967, 633	268, 058, 455	55, 909, 228
Electrical machinery, apparatus, and supplies.....	1929	1, 802	1, 400	303	328, 722	324, 883	3, 839	2, 300, 915, 572	2, 278, 192, 801	22, 722, 771
	1919	1, 404	1, 066	338	212, 374	209, 704	2, 670	997, 968, 119	983, 023, 816	14, 344, 303
Electroplating.....	1929	534	184	350	5, 928	3, 825	2, 103	23, 727, 016	15, 138, 808	8, 590, 108
	1919	515	94	421	3, 024	1, 134	1, 890	10, 389, 617	4, 587, 352	5, 802, 265
Embroideries ²	1929	813	100	653	6, 622	2, 314	4, 308	25, 286, 706	9, 175, 167	16, 111, 629
Emery wheels and other abrasive and polishing appliances.....	1929	67	53	14	3, 873	3, 605	178	32, 154, 311	30, 786, 891	1, 367, 420
	1919	60	44	16	5, 601	5, 544	57	30, 949, 270	30, 713, 305	235, 965
Engines, turbines, tractors, and water wheels.....	1929	199	179	20	61, 148	60, 918	230	457, 217, 669	455, 899, 588	1, 318, 081
	1919	370	306	64	77, 617	76, 693	924	464, 774, 735	460, 334, 108	4, 440, 627
Engravers' materials.....	1929	19	15	4	313	293	20	3, 129, 483	2, 998, 181	131, 302
	1919	21	11	10	174	142	32	2, 248, 122	2, 111, 970	136, 143
Engraving (other than steel, copperplate, or wood), chasing, etching, and die sinking.....	1929	189	48	141	2, 240	1, 710	530	10, 933, 741	8, 614, 079	2, 319, 662
	1919	478	29	449	1, 878	1, 025	853	7, 350, 602	3, 210, 072	3, 134, 530
Engraving, steel and copperplate, and plate printing.....	1929	450	193	263	10, 130	8, 321	1, 809	47, 161, 641	39, 086, 555	7, 475, 086
	1919	421	132	289	7, 014	5, 021	1, 993	24, 209, 154	18, 063, 803	6, 145, 351
Engraving, wood.....	1929	27	6	21	142	58	84	738, 951	238, 483	500, 468
	1919	55	9	46	235	157	78	1, 153, 618	752, 151	401, 467
Envelopes.....	1929	171	145	26	10, 367	9, 844	523	61, 286, 992	58, 263, 402	3, 023, 590
	1919	106	85	21	8, 129	7, 745	384	39, 064, 077	38, 142, 967	1, 521, 110
Excelsior.....	1929	03	30	36	1, 241	940	301	5, 008, 769	3, 938, 447	1, 070, 322
	1919	95	(¹)	(¹)	1, 242	(¹)	(¹)	4, 913, 450	(¹)	(¹)
Explosives.....	1929	95	88	7	5, 614	5, 575	39	72, 539, 724	72, 104, 026	435, 098
	1919	118	113	5	9, 240	9, 230	10	92, 474, 813	92, 338, 674	136, 139
Fancy and miscellaneous articles, not elsewhere classified.....	1929	814	366	448	18, 722	12, 993	5, 729	85, 388, 901	61, 873, 126	23, 515, 835
	1919	661	231	430	13, 961	9, 087	4, 874	64, 054, 481	40, 338, 534	23, 715, 947
Feathers, plumes, and manufactures thereof.....	1929	39	13	26	257	131	126	1, 141, 418	529, 700	611, 628
	1919	216	41	175	3, 504	925	2, 579	15, 377, 953	3, 955, 434	11, 422, 519
Feeds, prepared, for animals and fowls ²	1929	750	408	282	10, 223	9, 263	955	402, 752, 534	376, 102, 006	26, 650, 528
	1919	54	49	5	5, 540	5, 033	507	45, 465, 823	42, 133, 362	3, 332, 461
Felt goods, wool, hair, or jute.....	1929	40	46	3	5, 236	5, 236	(x)	39, 229, 540	39, 229, 540	(x)
	1919	638	537	101	20, 926	20, 197	729	282, 610, 986	224, 115, 167	8, 395, 769
Fertilizers.....	1929	600	482	118	26, 266	25, 291	1, 005	281, 143, 687	270, 178, 402	10, 970, 185
	1919	33	27	6	3, 974	3, 923	51	14, 114, 878	13, 873, 292	241, 086
Files.....	1929	60	35	15	5, 767	5, 498	274	17, 616, 563	16, 983, 861	632, 702
	1919	21	17	4	6, 838	6, 300	38	21, 970, 367	21, 845, 448	124, 919
Firearms.....	1929	28	19	7	11, 287	10, 529	758	30, 181, 370	28, 440, 469	1, 740, 901
	1919	26	20	8	740	717	23	8, 656, 089	8, 412, 199	153, 890
Fire extinguishers, chemical.....	1929	32	18	14	777	681	96	5, 563, 180	4, 850, 563	712, 617
	1919	50	37	13	1, 811	1, 740	71	6, 883, 502	6, 378, 244	205, 258
Fireworks.....	1929	57	33	24	1, 222	1, 167	55	4, 029, 984	4, 491, 594	138, 390
	1919	54	25	29	688	798	140	3, 835, 824	3, 104, 924	730, 900
Flavoring extracts and flavoring sirups.....	1929	79	27	52	1, 065	722	343	5, 346, 089	3, 708, 561	1, 637, 523
	1919	642	386	256	5, 041	4, 480	611	129, 086, 237	121, 040, 597	8, 045, 640
Flax and hemp, dressed.....	1929	602	275	327	3, 586	2, 964	622	76, 923, 650	66, 870, 182	10, 053, 468
	1919	6	5	1	47	47	(x)	197, 036	197, 036	(x)
Flour and other grain-mill products.....	1929	29	10	10	420	316	104	2, 369, 114	1, 702, 555	666, 549
	1919	4, 022	1, 310	2, 712	27, 028	22, 894	4, 134	1, 060, 269, 418	980, 753, 911	99, 515, 507
Food preparations, not elsewhere classified ²	1929	10, 708	2, 667	8, 041	45, 481	34, 841	10, 640	2, 052, 434, 386	1, 713, 800, 083	338, 634, 302
	1919	862	400	462	10, 616	8, 824	1, 792	171, 860, 987	152, 167, 900	19, 693, 037
Forgings, iron and steel, not made in plants operated in connection with rolling mills.....	1929	218	184	34	20, 882	20, 153	729	156, 248, 947	150, 746, 030	5, 502, 917
	1919	261	211	50	29, 135	28, 653	482	177, 119, 105	174, 674, 274	2, 444, 831

¹No data.

²No data available for 1919.

TYPE OF ORGANIZATION

TABLE 3.—TYPE OF OWNERSHIP—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL), BY INDUSTRIES: 1929 AND 1919—Continued

[See headnote on first page of this table]

INDUSTRY	Cen- sus year	NUMBER OF ESTABLISH- MENTS			WAGE EARNERS (average for the year)			VALUE OF PRODUCTS		
		Total	Owned by—		Total	In establishments owned by—		Total	Of establishments owned by—	
			Corporations	Individ- uals, partn- erships, etc.		Corporations	Individ- uals, part- nerships, etc.		Corporations	Individu- als, partnerships, etc.
Foundry and machine-shop products, not else- where classified	1929	8,605	5,644	2,981	454,441	429,241	25,200	\$2,701,461,064	\$2,660,461,599	\$131,000,365
Foundry supplies	1919	10,934	5,508	5,366	482,767	437,378	45,389	2,289,250,859	2,092,275,809	190,975,050
Fuel: Briquettes and boulets	1929	59	51	8	853	810	43	10,458,589	10,096,004	362,585
Fur goods	1919	78	62	14	906	823	83	9,954,676	9,355,887	598,789
Furnishing goods, men's, not elsewhere classified	1929	23	23	—	426	426	—	9,497,657	9,497,657	—
Furniture, including store and office fixtures	1919	11	10	1	171	171	(x)	1,973,877	1,973,877	(x)
Furs, dressed	1929	2,855	726	2,129	15,752	6,438	9,314	277,592,752	99,808,560	177,784,192
Galvanizing and other coating, not done in plants operated in connection with rolling mills	1919	1,815	213	1,602	13,039	4,806	8,773	173,137,730	52,198,984	120,938,755
Gas and electric fixtures; lamps, lanterns, and reflectors	1929	598	277	321	26,588	20,016	6,572	150,903,603	104,588,946	46,374,657
Gas machines, gas meters, and water and other liquid meters	1919	487	169	318	18,944	12,322	6,622	107,834,695	62,803,294	45,031,401
Glass	1929	3,778	2,381	1,397	193,399	175,176	18,223	948,116,358	853,159,942	94,956,416
Glass products (except mirrors) made from pur- chased glass	1919	3,279	(1)	(1)	140,252	(1)	(1)	579,906,396	(1)	(1)
Gloves and mittens, cloth or cloth and leather combined, made from purchased fabrics	1929	248	144	104	5,167	4,405	702	40,237,192	31,431,999	8,805,193
Gloves and mittens, leather	1919	141	62	79	5,075	3,894	1,181	20,384,569	13,520,018	6,864,551
Glue and gelatin	1929	65	43	22	1,125	997	128	7,666,541	6,047,759	718,782
Gold leaf and foil	1919	52	31	21	1,665	1,551	114	14,475,682	13,524,150	951,532
Gold, silver, and platinum, reducing and refining, not from the ore	1929	614	397	217	23,580	21,593	1,987	144,965,706	131,398,956	13,566,750
Graphite, ground and refined	1919	512	286	226	18,155	16,456	1,699	80,366,870	71,873,843	8,493,027
Grease and tallow, not including lubricating greases	1929	72	65	7	0,101	6,067	34	40,623,344	40,368,235	255,109
Haircloth	1919	105	88	17	5,589	5,533	56	26,267,074	25,918,877	348,197
Hair work	1929	784	703	51	43,065	42,158	907	512,652,595	503,115,710	9,536,885
Handkerchiefs ¹	1919	1,022	951	71	42,908	41,970	938	329,278,908	325,164,125	4,114,783
Hand stamps and stencils and brands	1929	263	243	20	67,527	65,443	2,084	303,818,560	297,808,010	5,950,550
Hardware not elsewhere classified	1919	371	342	29	77,520	75,468	2,052	261,884,080	256,643,158	5,240,922
Hat and cap materials, men's	1929	481	167	264	6,029	4,063	1,966	33,273,093	23,396,647	9,876,356
Hats and caps, except felt and straw, men's	1919	616	225	391	6,480	4,195	2,285	28,443,321	18,798,613	9,644,708
Hats, fur-felt	1929	125	80	45	9,279	8,376	903	29,882,958	26,787,432	3,095,526
Hats, straw, men's ²	1919	182	106	76	3,986	7,504	1,182	23,220,113	24,019,694	4,200,509
Hats, wool-felt	1929	257	103	154	9,203	5,977	3,226	39,122,729	25,402,498	13,720,231
Hones, whetstones, and similar products ¹	1919	355	108	247	10,685	5,757	4,928	46,940,511	23,341,093	23,599,418
Horse blankets, fly nets, and related products	1929	74	58	16	2,993	2,934	59	32,458,019	31,700,013	688,006
House-furnishing goods, not elsewhere classified	1919	62	47	15	4,264	4,092	172	32,134,037	30,734,528	1,399,509
Ice cream	1929	75	10	65	1,177	433	739	3,078,024	1,030,822	2,038,202
Ice, manufactured	1919	87	13	74	950	281	669	4,461,568	2,080,440	2,372,128
Ink, printing	1929	69	34	35	931	740	191	67,959,140	56,840,864	11,118,276
Ink, writing	1919	87	26	61	944	470	174	55,483,215	46,041,125	9,442,090
Instruments, professional and scientific	1929	11	8	3	494	471	23	3,750,069	3,136,660	623,309
Iron and steel: Blast furnaces	1919	24	16	8	497	445	52	2,230,587	1,853,628	386,959
Iron and steel, processed ²	1929	297	166	131	5,475	4,726	749	61,607,990	53,212,070	8,395,920
Iron and steel: Steel works and rolling mills	1919	482	164	318	6,647	5,654	993	67,265,206	57,018,655	10,246,551
Ivory, shell, and bone work, not including but- tons, combs, or hairpins	1929	13	7	6	318	318	132	3,855,388	2,180,742	1,674,646
Jewelry	1919	18	7	11	425	186	239	3,315,113	1,559,753	1,755,360
	1929	59	25	34	359	210	149	1,693,588	964,196	729,392
	1919	198	24	174	1,084	384	700	6,963,033	2,336,682	4,626,351
	1929	105	50	46	6,014	4,819	1,195	29,553,777	22,611,068	6,942,709
	1919	332	142	190	2,971	2,291	680	15,036,023	11,133,701	3,902,322
	1929	382	99	283	2,136	1,541	595	9,336,558	6,003,323	2,738,235
	1919	485	347	138	52,306	48,492	3,814	229,477,607	213,884,804	15,592,793
	1929	585	350	235	46,180	43,709	2,471	168,661,444	168,988,507	9,672,937
	1919	112	56	56	2,664	2,115	449	25,030,943	21,039,497	3,991,446
	1929	133	44	89	3,000	2,268	741	20,521,212	20,685,733	5,835,479
	1919	576	171	405	5,826	2,830	2,996	35,900,604	16,885,056	19,015,608
	1929	709	137	572	7,539	3,017	4,522	44,539,861	16,264,350	28,275,511
	1919	159	108	51	16,539	15,664	875	102,004,165	96,652,066	5,352,099
	1929	176	78	98	18,510	15,194	3,316	82,745,308	64,012,720	18,732,588
	1919	50	41	9	3,380	3,250	130	18,738,994	18,077,928	661,066
	1929	14	12	2	2,028	2,028	(x)	9,055,590	(x)	(x)
	1919	40	15	25	1,448	1,176	272	6,739,652	5,438,792	1,300,860
	1929	6	4	2	174	174	(x)	868,811	(x)	(x)
	1919	14	10	4	682	530	52	2,895,158	2,706,594	188,564
	1929	28	13	15	766	584	182	6,020,612	5,116,294	904,318
	1919	964	445	519	15,794	10,790	5,004	127,602,002	87,487,936	40,114,016
	1929	467	169	298	7,853	5,912	1,941	60,211,804	43,470,405	16,741,399
	1919	3,150	1,456	1,694	22,399	18,368	4,031	328,413,911	278,955,503	49,458,408
	1929	3,475	(1)	(1)	19,155	(1)	(1)	189,453,095	(1)	(1)
	1919	4,110	2,800	1,220	32,184	26,823	5,361	120,952,264	187,795,991	23,156,273
	1929	2,897	1,911	956	30,247	26,183	4,064	237,004,798	119,718,423	17,286,375
	1919	147	117	30	2,448	2,181	267	42,749,992	33,746,976	4,003,016
	1929	90	62	28	1,988	1,822	166	26,244,470	23,976,593	2,267,877
	1919	29	16	13	416	390	26	4,694,974	4,338,047	256,927
	1929	61	23	38	702	627	75	6,453,941	5,836,842	597,099
	1919	276	179	97	16,876	15,965	911	89,740,309	84,979,293	4,767,016
	1929	351	179	172	15,931	14,748	1,183	58,130,691	53,163,155	4,968,536
	1919	105	105	—	24,960	24,960	—	771,425,464	771,425,464	—
	1929	195	187	8	41,660	40,722	938	794,460,588	735,954,414	58,512,144
	1919	46	33	13	511	453	58	3,895,480	3,427,391	468,089
	1929	486	475	11	394,674	393,494	1,090	3,365,788,805	3,359,575,637	6,213,168
	1919	500	481	19	375,088	373,442	1,646	2,828,902,370	2,820,937,996	7,964,380
	1929	21	7	14	391	172	219	1,260,426	563,639	697,887
	1919	44	13	31	842	521	321	2,816,530	1,874,618	941,912
	1929	1,536	577	959	27,922	19,725	8,197	177,336,932	123,301,013	54,085,919
	1919	2,054	522	1,532	30,871	13,184	12,687	203,939,230	112,945,666	90,993,564

¹ No data.

² No data available for 1919.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—TYPE OF OWNERSHIP—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL), BY INDUSTRIES: 1929 AND 1919—Continued

[See headnote on first page of this table]

INDUSTRY	Census year	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (average for the year)			VALUE OF PRODUCTS		
		Total	Owned by—		Total	In establishments owned by—		Total	Of establishments owned by—	
			Corporations	Individuals, partnerships, etc.		Corporations	Individuals, partnerships, etc.		Corporations	Individuals, partnerships, etc.
Jewelry and instrument cases	1929	113	41	72	2,269	1,476	793	\$8,826,727	\$5,428,366	\$3,398,361
	1919	142	39	103	2,734	1,786	968	8,126,300	4,757,113	3,369,187
Jute goods	1929	20	16	4	4,631	4,891	40	21,869,757	21,664,022	205,735
	1919	26	15	11	7,138	3,998	3,140	34,442,698	18,090,794	15,451,904
Knit goods	1929	1,888	1,303	585	208,488	190,782	17,706	890,716,672	815,919,233	83,797,439
	1919	2,050	1,096	954	172,572	147,052	25,520	713,139,659	593,140,241	119,999,418
Labels and tags	1929	153	110	43	4,474	4,116	358	28,042,325	25,902,998	2,139,327
	1919	119	69	50	5,227	4,708	519	24,243,092	22,007,500	2,236,492
Lace goods	1929	42	34	8	6,854	6,644	210	29,237,434	28,571,822	665,612
	1919	44	39	5	6,490	6,451	39	29,396,853	29,212,094	184,759
Lapidary work	1929	100	17	83	503	225	281	11,942,421	5,621,543	6,320,878
	1919	124	25	99	1,155	622	533	30,051,460	14,988,648	15,062,812
Lasts and related products	1929	58	44	14	1,780	1,615	145	7,689,555	7,123,288	566,267
	1919	64	38	26	2,910	2,484	426	12,470,539	10,034,341	1,836,198
Leather goods, not elsewhere classified	1929	392	159	233	6,035	4,140	1,895	25,951,013	24,220,795	11,730,218
	1919	503	165	338	8,045	5,301	3,044	52,952,772	33,184,311	19,768,461
Leather: Tanned, curried, and finished	1929	471	405	66	49,332	43,453	5,879	481,340,209	470,319,822	11,020,477
	1919	680	453	227	72,476	64,624	7,852	928,501,701	828,803,606	99,788,095
Lime	1929	237	179	58	8,554	7,570	975	85,815,658	83,231,845	2,583,813
	1919	478	224	254	11,405	9,623	1,782	33,970,463	29,231,305	4,739,158
Linen goods	1929	18	16	2	2,195	2,195	0	9,736,898	9,736,898	0
	1919	10	10	(x)	1,890	1,890	(x)	9,998,046	9,998,046	0
Linoleum ¹	1929	7	7	0	5,544	5,544	0	57,250,449	57,250,449	0
	1919	24	16	8	186	167	19	2,447,912	2,090,997	347,915
Liquors, vinous	1929	342	40	302	1,011	709	302	17,454,104	12,235,726	5,218,468
	1919	376	307	69	18,079	18,085	894	121,014,321	116,146,780	4,867,532
Lithographing	1929	331	225	106	15,618	14,899	1,219	73,151,115	68,114,319	5,036,796
	1919	16	13	3	11,045	11,008	37	83,558,072	83,558,072	0
Locomotives, not made in railroad repair shops	1929	17	16	1	26,715	26,715	(x)	166,269,730	166,269,730	(x)
Lubricating oils and greases, not made in petroleum refineries ²	1929	177	150	27	2,577	2,460	117	69,584,246	67,335,895	2,248,351
Lumber and timber products, not elsewhere classified	1929	12,915	2,428	10,487	419,084	326,480	92,604	1,273,472,320	1,064,278,713	209,193,607
	1919	26,119	3,829	22,290	480,945	351,890	129,115	1,387,471,413	1,050,373,023	337,098,390
Macaroni, spaghetti, vermicelli, and noodles	1929	353	132	221	5,072	4,010	1,062	47,074,230	37,603,047	9,471,183
	1919	557	(1)	(1)	4,543	(1)	(1)	37,057,198	(1)	(1)
Machine-tool accessories and small metal-working tools, not elsewhere classified ²	1929	722	420	302	26,682	23,127	3,555	144,410,890	127,110,637	17,300,253
	1919	280	242	38	47,391	46,470	921	244,578,088	239,790,006	4,788,082
Machine tools	1929	403	320	83	53,111	50,100	3,011	212,400,168	200,730,860	11,669,298
	1919	28	27	1	590	590	(x)	23,692,938	23,692,938	(x)
Malt	1929	55	51	4	1,352	1,321	31	39,340,414	38,518,315	822,099
	1919	1,881	833	1,048	37,817	29,190	8,627	192,163,916	147,787,090	44,376,826
Marble, granite, slate, and other stone products	1929	4,240	782	3,478	32,768	29,599	12,169	129,164,653	67,046,632	61,218,021
	1919	21	20	1	3,700	3,700	(x)	20,351,025	20,351,025	(x)
Matches	1929	21	18	3	3,726	3,708	18	18,495,876	18,439,256	56,620
	1919	7	5	2	467	467	(x)	1,692,200	1,692,200	(x)
Mats and matting, grass and coir	1929	12	9	3	1,073	955	118	4,860,855	4,451,851	409,004
	1919	951	413	538	17,187	14,216	2,971	193,279,717	101,538,508	21,741,209
Mattresses and bed springs, not elsewhere classified	1929	1,041	325	716	12,637	9,161	3,476	83,662,609	59,637,099	24,025,510
	1919	1,277	731	546	122,505	118,228	4,277	3,434,654,098	3,288,863,852	145,790,246
Meat packing, wholesale	1929	1,304	582	722	100,990	155,379	5,617	4,240,290,614	4,049,077,511	197,213,103
	1919	1,293	779	514	32,206	23,234	8,972	105,093,487	140,233,829	55,459,628
Millinery ¹	1929	88	80	8	1,670	1,615	54	16,093,056	16,056,773	36,283
	1919	178	98	80	4,446	3,857	589	19,237,897	16,254,733	2,983,164
Minerals and earths, ground or otherwise treated ²	1929	429	110	319	4,708	3,608	1,100	18,384,562	13,159,157	5,225,405
	1919	304	187	117	4,782	3,862	920	31,842,740	25,478,979	6,363,761
Mirrors, framed and unframed	1929	186	81	105	2,599	1,640	959	20,830,775	15,150,310	7,680,465
	1919	804	193	611	6,778	3,147	3,631	30,621,074	14,591,940	16,029,134
Models and patterns, not including paper patterns	1929	928	145	783	6,949	3,160	3,789	25,300,389	12,033,698	13,266,691
Motion pictures, not including projection in theaters ²	1929	142	106	36	10,784	10,658	126	184,102,419	182,895,337	1,207,082
	1919	1,154	758	396	221,332	217,888	3,444	1,537,928,793	1,521,075,416	16,854,377
Motor-vehicle bodies and motor-vehicle parts	1929	2,515	956	1,559	132,556	123,685	8,871	692,170,692	652,229,009	39,941,683
	1919	244	217	27	226,116	225,820	296	3,722,793,274	3,719,386,462	3,406,812
Motor vehicles, not including motorcycles	1929	315	292	23	210,559	210,181	378	2,387,908,287	2,384,898,510	3,004,777
	1919	21	18	3	4,392	4,334	58	23,894,805	23,074,008	220,797
Motorcycles, bicycles, and parts	1929	51	37	14	10,886	10,477	409	53,105,895	51,335,671	1,770,224
Mucilage, paste, and other adhesives, except glue and rubber cement ²	1929	84	41	43	414	310	104	6,638,387	5,228,114	1,410,273
Musical instrument parts and materials: Piano and organ	1929	67	56	11	3,090	3,008	82	11,883,098	11,599,044	283,454
	1919	113	80	33	11,000	10,339	670	36,789,627	34,663,884	2,125,743
Musical instruments and parts and materials, not elsewhere classified	1929	106	62	44	3,176	2,809	367	14,274,078	12,633,924	1,640,154
	1919	240	62	178	4,113	3,573	540	12,506,334	10,369,266	2,137,068
Musical instruments: Organs	1929	62	31	31	2,389	2,146	243	11,322,736	10,187,655	1,135,081
	1919	68	34	34	1,941	1,549	392	5,973,288	4,555,004	1,418,284
Musical instruments: Pianos	1929	81	73	8	9,970	9,707	263	42,501,375	41,507,828	993,547
	1919	191	107	24	22,967	22,167	800	107,088,050	103,156,420	3,931,630
Nails, spikes, etc., not made in wire mills or in plants operated in connection with rolling mills	1929	55	45	10	2,027	1,908	124	12,854,745	12,130,310	724,435
	1919	65	42	23	3,355	3,029	326	17,583,344	15,068,921	1,914,423
Needles, pins, hooks and eyes, and snap fasteners	1929	43	36	7	6,242	6,184	58	22,030,950	21,871,088	159,862
	1919	92	66	26	9,294	8,749	545	26,304,995	27,871,068	1,433,937
Nets and seines	1929	19	11	8	903	816	87	6,164,403	5,621,025	543,378
	1919	19	14	5	859	810	49	5,114,414	4,702,681	411,733
Nonferrous-metal alloys and products, not including aluminum products	1929	1,225	763	462	79,183	75,868	3,315	909,804,050	881,925,587	27,878,463
	1919	1,252	666	586	78,512	73,373	5,139	569,455,010	528,634,903	32,820,107

¹ No data.² No data available for 1919.

TYPE OF ORGANIZATION

TABLE 3.—TYPE OF OWNERSHIP—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL), BY INDUSTRIES: 1929 AND 1919—Continued

[See headnote on first page of this table]

INDUSTRY	Cen- sus year	NUMBER OF ESTABLISH- MENTS			WAGE EARNERS (average for the year)			VALUE OF PRODUCTS		
		Total	Owned by—		Total	In establishments owned by—		Total	Of establishments owned by—	
			Corpo- rations	Individ- uals, partn- erships, etc.		Corpo- rations	Individ- uals, part- nerships, etc.		Corporations	Individuals, partnerships, etc.
Oil, cake, and meal, cottonseed.....	1929	553	513	40	15,825	14,956	869	\$208,376,039	\$277,522,405	\$20,853,574
	1919	711	628	83	26,766	24,781	1,985	581,244,798	546,088,450	34,556,348
Oil, cake, and meal, linseed.....	1929	29	27	2	2,715	2,716	(x)	119,926,867	119,926,867	(x)
	1919	26	24	2	2,173	2,173	(x)	120,638,100	120,638,100	(x)
Oils, essential.....	1929	22	18	9	265	249	16	6,653,353	6,525,555	127,798
	1919	78	17	61	321	223	98	5,693,403	4,744,002	954,311
Oils, not elsewhere classified ²	1929	75	61	14	1,234	1,175	59	45,159,825	44,415,193	744,632
	1919	9	9		1,412	1,412		23,107,272	23,107,272	
Oilcloth.....	1919	11	9	2	1,130	1,130	(x)	15,436,375	15,436,375	(x)
Oleomargarine, not made in meat-packing estab- lishments.....	1929	41	38	3	1,534	1,512	22	40,521,823	45,959,043	562,150
	1919	42	41	1	2,851	2,851	(x)	79,815,580	79,815,580	(x)
Optical goods ²	1929	117	70	47	9,701	9,126	575	40,662,459	37,282,831	3,279,628
Paints and varnishes.....	1929	1,003	879	184	29,211	28,129	1,082	503,975,838	548,903,361	20,012,477
	1919	830	628	202	21,507	20,237	1,270	340,346,803	320,828,085	19,518,718
Paper ²	1929	685	656	29	103,320	102,367	953	967,186,026	959,172,596	8,013,431
Paper goods, not elsewhere classified.....	1929	436	336	100	20,227	19,143	1,084	182,047,712	174,594,982	8,052,730
	1919	308	223	85	14,135	13,255	880	107,284,759	101,709,213	5,575,546
Patent or proprietary medicines and compounds.....	1929	1,522	1,046	476	16,434	14,726	1,708	318,906,928	297,734,617	21,172,311
	1919	2,467	1,214	1,253	17,444	14,567	2,877	212,162,255	185,370,034	26,792,221
Paving materials: Asphalt, tar, crushed slag, and mixtures ²	1929	126	114	12	2,375	2,272	103	29,275,369	28,253,481	1,021,888
Peanuts, walnuts, and other nuts, processed or shelled ²	1929	169	117	52	7,933	6,705	1,228	49,608,894	41,578,812	8,030,082
Pencils, lead (including mechanical).....	1929	38	34	4	5,703	5,629	74	27,772,955	27,491,074	281,881
	1919	12	12		5,970	5,970		24,134,159	24,134,159	
Pens, fountain and stylographic; pen points, gold, steel, and brass.....	1929	76	49	27	4,600	4,098	502	34,211,384	31,507,478	2,703,906
	1919	75	(1)	(1)	4,430	(1)	(1)	19,477,809	(1)	(1)
Perfumes, cosmetics, and other toilet preparations.....	1929	815	536	279	13,109	12,029	1,080	193,440,550	182,180,390	11,260,154
	1919	569	281	288	5,405	4,130	1,275	59,613,391	47,497,168	12,116,223
Petroleum refining.....	1929	390	373	17	80,596	80,295	301	2,639,065,001	2,632,831,308	6,833,693
	1919	320	297	23	53,889	58,521	368	1,632,532,766	1,617,993,917	14,838,849
Photographs.....	1929	59	53	6	14,416	14,345	71	96,840,048	96,485,393	353,155
	1919	166	132	34	28,721	28,363	358	158,547,870	156,736,680	1,811,190
Photo-engraving, not done in printing establish- ments.....	1929	654	470	184	12,353	10,840	1,513	77,382,259	63,834,227	8,548,032
	1919	422	255	167	6,789	5,691	1,078	29,589,386	24,197,848	5,191,538
Photographic apparatus and materials.....	1929	115	74	41	12,967	12,662	305	102,827,386	101,107,940	1,719,446
	1919	187	(1)	(1)	13,465	(1)	(1)	88,393,022	(1)	(1)
Pipes (tobacco).....	1929	24	15	9	1,680	1,578	102	5,557,982	5,271,923	286,056
	1919	56	17	39	2,539	1,592	947	11,553,777	6,999,849	4,553,928
Planting-mill products (including general mill- work), not made in planing mills connected with sawmills.....	1929	4,849	2,692	2,157	90,134	73,966	16,168	553,683,498	456,727,991	96,855,507
	1919	5,309	2,349	2,960	86,956	68,062	18,894	68,439,258	397,594,639	102,843,719
Plated ware.....	1929	96	77	19	10,728	10,335	393	55,420,959	53,459,833	1,970,126
	1919	68	51	17	9,492	9,178	314	41,684,535	40,336,443	1,298,142
Plumbers' supplies, not including pipe or vitreous- china sanitary ware ²	1929	255	212	43	27,900	27,462	438	120,673,734	126,367,152	3,306,632
	1919	290	172	118	10,430	7,971	2,459	68,627,515	51,599,169	17,028,349
Pocketbooks, purses, and card cases.....	1929	139	86	53	2,905	1,378	1,527	14,549,659	5,963,039	8,586,620
Pottery, including porcelain ware.....	1929	313	239	74	35,409	33,828	1,581	110,622,453	105,686,700	4,935,754
	1919	340	211	129	27,934	26,175	1,759	74,919,138	71,011,800	3,907,336
Poultry killing, dressing, and packing, wholesale ²	1929	485	335	150	7,769	6,494	1,275	130,161,230	103,357,610	24,803,620
Printing and publishing, book and job.....	1929	12,712	4,914	7,798	150,649	118,000	32,649	1,006,656,768	805,493,101	201,163,667
	1919	13,108	3,376	9,732	123,408	90,804	32,604	599,101,610	446,454,667	152,736,943
Printing and publishing, music.....	1929	124	85	39	810	700	50	15,240,268	13,645,993	1,594,275
	1919	160	76	84	899	760	139	14,592,177	12,100,708	2,491,469
Printing and publishing, newspaper and periodical.....	1929	11,524	4,801	6,723	129,660	105,808	23,856	1,738,298,892	1,571,323,566	166,975,326
	1919	17,362	4,856	12,506	120,381	90,688	29,693	924,152,378	768,916,217	156,236,661
Printing materials, not including type or ink.....	1929	84	64	20	1,004	928	76	8,579,006	7,882,300	696,706
	1919	82	56	26	723	666	57	4,918,799	4,460,229	458,570
Pulp goods ²	1929	45	34	11	3,558	3,281	277	27,219,892	26,155,394	1,064,498
Pulp (wood and other fiber) ²	1929	198	192	6	24,729	24,421	308	238,928,279	236,720,522	2,207,757
Pumps (hand and power) and pumping equipment.....	1929	322	232	90	23,106	22,097	1,009	164,009,397	157,868,780	6,140,617
	1919	239	163	76	16,072	14,036	1,436	85,401,940	76,980,665	8,421,275
Rayon and allied products ²	1929	29	28	1	39,106	39,106	(x)	149,546,107	149,546,107	(x)
Refrigerators and refrigerator cabinets, exclusive of mechanical refrigerating equipment.....	1929	188	124	64	9,784	9,124	660	60,483,314	55,618,034	4,865,280
	1919	122	73	49	5,786	5,193	593	26,048,808	22,868,301	3,180,507
Refrigerators, mechanical ²	1929	34	32	2	10,883	16,333	(x)	161,565,676	161,565,676	(x)
Regalia, badges, and emblems.....	1929	77	41	36	1,757	1,539	218	7,927,214	6,942,177	985,037
	1919	115	41	74	2,223	1,862	361	9,395,470	7,879,329	1,516,141
Rice cleaning and polishing.....	1929	60	45	15	1,589	1,387	202	48,793,777	42,421,307	6,372,470
	1919	86	63	23	2,113	1,902	211	90,038,412	78,667,433	11,080,979
Roofing, built-up and roll; asphalt shingles; roof coatings other than paint.....	1929	102	88	14	6,027	5,946	81	103,500,090	102,449,060	1,056,130
	1919	178	122	56	8,871	8,642	229	85,895,359	83,966,532	1,929,827
Rubber goods other than tires, inner tubes, and boots and shoes ²	1929	412	325	87	40,226	38,076	2,150	244,745,737	229,437,269	15,308,468
	1919	91	83	8	33,263	33,058	205	770,176,890	768,386,193	1,790,697
Rubber tires and inner tubes ²	1929	200	116	144	3,339	2,588	751	23,338,555	18,260,164	5,078,391
Saddlery and harness.....	1929	1,823	253	1,570	10,411	7,434	2,977	83,713,010	61,663,014	22,059,996
	1919	27	20	7	3,033	2,922	111	10,862,192	18,844,628	617,564
Safes and vaults ²	1929	58	53	5	5,458	5,337	121	37,868,697	37,315,597	553,100
	1919	86	67	19	6,495	6,180	315	37,513,821	36,604,513	909,308
Salt.....	1929	40	37	3	566	540	26	2,970,923	2,823,676	147,247
	1919	32	30	2	504	504	(x)	1,663,062	1,663,062	(x)

¹ No data.

² No data available for 1919.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—TYPE OF OWNERSHIP—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL), BY INDUSTRIES: 1929 AND 1919—Continued

[See headnote on first page of this table]

INDUSTRY	Cen- sus year	NUMBER OF ESTABLISH- MENTS			WAGE EARNERS (average for the year)			VALUE OF PRODUCTS		
		Total	Owned by—		Total	In establishments owned by—		Total	Of establishments owned by—	
			Corporations	Individ- uals, part- nerships, etc.		Corporations	Individ- uals, part- nerships, etc.		Corporations	Individuals, partnerships, etc.
Sandpaper, emery paper, and other abrasive paper and cloth.....	1929	11	9	2	1,228	1,228	(x)	\$17,218,590	\$17,218,590	(x)
	1919	12	10	2	771	771	(x)	9,303,734	9,303,734	(x)
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments.....	1929	681	224	457	5,897	3,025	1,972	108,246,194	70,265,021	\$37,980,273
	1919	633	99	534	3,471	1,314	2,157	50,610,092	21,068,784	34,641,308
Saws.....	1929	81	44	37	4,137	3,941	196	22,614,958	21,501,054	1,023,004
	1919	112	53	59	5,610	5,274	236	31,400,557	30,207,577	1,252,080
Scales and balances.....	1929	59	42	17	4,118	3,655	463	30,381,424	28,540,550	1,840,875
	1919	79	53	26	5,432	5,088	344	20,641,038	10,576,362	1,064,676
Screw-machine products and wood screws.....	1929	273	194	79	19,881	13,582	1,299	105,974,662	98,504,268	7,380,394
	1919	154	104	50	15,151	14,609	542	55,475,042	53,303,694	2,171,348
Sewing machines and attachments ¹	1929	39	24	15	10,467	10,420	38	45,004,600	44,785,674	308,926
Ship and boat building, steel and wooden, in- cluding repair work.....	1929	624	332	292	55,089	52,084	3,005	231,300,165	218,742,938	12,557,227
	1919	1,075	448	627	387,446	380,433	7,013	1,622,361,261	1,597,770,403	24,590,858
Shirts.....	1929	863	459	404	59,830	44,008	15,822	223,321,616	163,055,891	64,365,725
	1919	896	359	537	39,603	25,100	14,494	205,327,133	123,807,360	81,510,784
Shortenings (not including lard) and vegetable cooking oils ¹	1929	40	40	—	2,712	2,712	—	154,553,197	154,553,197	—
	1919	1,239	564	675	20,000	16,282	3,718	118,044,157	97,541,060	20,503,097
Signs and advertising novelties.....	1929	779	265	514	10,432	9,020	1,412	43,343,093	36,017,401	6,425,692
	1919	1,491	995	496	130,467	117,903	12,564	731,200,231	648,653,173	82,547,058
Silk and rayon manufactures.....	1929	1,369	811	558	128,782	108,531	18,251	688,469,523	681,413,071	107,056,452
	1919	83	52	31	5,007	4,722	285	30,452,300	28,513,984	1,938,312
Silversmithing and silverware.....	1929	99	57	42	6,453	5,779	674	20,126,133	25,871,473	3,254,000
	1919	29	26	3	14,544	14,544	—	994,783,862	994,783,862	—
Smelting and refining, copper.....	1929	34	34	—	17,345	17,345	—	651,101,591	651,101,591	—
	1919	19	19	—	4,819	4,819	—	232,115,009	232,115,009	—
Smelting and refining, lead.....	1929	25	24	1	6,438	6,438	(x)	196,794,519	196,794,519	(x)
	1919	106	79	27	4,134	3,950	184	105,882,655	96,890,025	8,992,630
Smelting and refining, metals other than gold, silver, or platinum, not from the ore.....	1929	81	51	30	2,167	1,913	254	50,246,088	42,761,050	7,485,038
	1919	30	30	—	11,618	11,618	—	118,901,070	118,901,070	—
Smelting and refining, zinc.....	1929	39	39	—	13,796	13,796	—	104,122,938	104,122,938	—
	1919	282	203	79	14,363	14,093	270	310,191,530	307,377,050	2,814,480
Soap.....	1929	348	222	126	20,436	10,780	9,656	316,740,115	308,620,995	8,119,120
	1919	54	35	19	2,784	2,686	78	24,509,783	23,897,893	611,890
Soda-water apparatus.....	1929	66	33	33	2,599	2,383	216	15,185,370	13,927,787	1,257,583
Sporting and athletic goods, not including firearms or ammunition.....	1929	242	150	92	10,793	9,847	946	58,288,728	54,598,360	3,690,368
	1919	188	79	109	6,412	5,476	936	23,839,961	20,664,730	3,275,232
Springs, steel, except wire, not made in plants operated in connection with rolling mills.....	1929	86	71	15	5,842	5,763	79	46,672,319	46,279,034	393,285
	1919	112	70	36	8,981	8,729	252	51,479,535	50,827,882	1,151,653
Stamped ware, enameled ware, and metal stamp- ing, enameling, japanning, and lacquering.....	1929	582	442	140	40,000	38,435	1,565	204,306,134	197,575,450	6,730,678
	1919	433	276	157	35,237	33,640	1,597	147,069,783	140,823,873	6,245,910
Stationery goods, not elsewhere classified.....	1929	208	152	51	11,078	10,494	584	74,062,047	71,134,868	2,927,179
	1919	223	130	93	11,261	9,774	1,487	58,363,244	51,720,048	6,643,196
Statuary and art goods, factory product.....	1929	171	64	107	2,112	1,410	702	10,045,159	6,692,467	3,352,692
	1919	195	44	151	1,460	885	575	5,019,521	3,162,461	1,857,060
Steam and other packing, pipe and boiler covering, and gaskets, not elsewhere classified.....	1929	171	119	52	7,268	6,936	330	45,433,135	43,164,702	2,268,433
	1919	169	113	56	6,147	5,859	288	40,524,779	38,901,199	1,833,580
Steam fittings and steam and hot-water heating apparatus.....	1929	240	208	32	39,621	39,205	416	228,310,254	225,141,048	3,169,206
	1919	261	207	54	36,686	35,998	718	160,285,488	155,834,324	4,451,164
Steel barrels, kegs, and drums.....	1929	53	45	8	4,110	3,759	351	37,825,027	34,875,133	2,949,894
	1919	33	26	7	3,322	3,280	62	24,942,650	24,476,381	466,269
Stereotyping and electrotyping, not done in print- ing establishments.....	1929	230	175	55	6,487	5,809	678	35,617,207	31,905,391	3,651,806
	1919	171	112	59	3,664	2,977	687	15,919,014	13,051,357	2,887,657
Stoves and ranges (other than electric) and warm- air furnaces.....	1929	609	471	138	46,616	44,391	2,225	271,747,009	260,422,330	11,324,679
	1919	588	436	152	43,433	41,620	1,813	201,509,992	191,923,537	9,586,455
Structural and ornamental iron and steel work, not made in plants operated in connection with roll- ing mills.....	1929	1,482	923	559	54,947	49,743	5,204	477,036,827	440,818,418	36,218,409
	1919	1,146	612	534	43,962	38,969	4,993	294,962,419	266,047,598	28,914,821
Sugar, beet.....	1929	82	82	—	7,496	7,496	—	108,552,581	108,552,581	—
	1919	85	84	1	11,781	11,781	(x)	149,155,892	149,155,892	(x)
Sugar, cane, not including products of refineries.....	1929	70	49	21	2,319	1,856	463	18,325,792	15,008,093	3,317,699
	1919	202	102	100	6,101	4,575	1,526	57,741,320	45,157,099	12,584,221
Sugar refining, cane.....	1929	21	19	2	13,012	13,012	(x)	507,380,262	507,380,262	(x)
	1919	20	17	3	18,292	16,237	1,965	730,986,706	647,849,852	83,136,854
Surgical and orthopedic appliances, including artificial limbs.....	1929	363	173	190	7,910	7,079	831	71,607,119	66,704,459	4,902,660
	1919	445	142	303	7,061	6,133	928	46,805,266	42,572,605	4,232,661
Suspenders, garters, and other elastic woven goods, made from purchased webbing ¹	1929	91	38	53	4,341	3,438	903	30,473,169	25,484,511	4,988,658
Tanning materials, natural dyestuffs, mordants and assistants, and sizes.....	1929	126	102	24	2,419	2,326	93	39,836,035	37,915,884	1,920,151
	1919	144	96	48	4,342	4,160	182	53,744,283	49,691,965	4,052,318
Textile machinery and parts.....	1929	376	211	165	27,019	25,276	1,743	122,438,514	114,776,700	7,661,805
	1919	432	202	230	31,823	28,805	2,928	122,089,264	111,446,110	10,643,154
Theatrical scenery and stage equipment.....	1929	55	20	28	547	376	171	3,892,827	3,892,827	—
	1919	17	12	5	149	134	15	1,067,939	886,719	1,614,958
Tin and other foils, not including gold foil ¹	1929	7	7	—	1,710	1,710	—	20,964,849	20,964,849	—

¹ No data available for 1919.

TYPE OF ORGANIZATION

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TABLE 3.—TYPE OF OWNERSHIP—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM (OR CONTROL), BY INDUSTRIES: 1929 AND 1919—Continued

[See headnote on first page of this table]

INDUSTRY	Cen- sus year	NUMBER OF ESTABLISH- MENTS			WAGE EARNERS (average for the year)			VALUE OF PRODUCTS		
		Total	Owned by—		Total	In establishments owned by—		Total	Of establishments owned by—	
			Corporations	Individuals, partnerships, etc.		Corporations	Individuals, partnerships, etc.		Corporations	Individuals, partnerships, etc.
Tin cans and other tinware, not elsewhere classified.....	1929	232	192	40	31,497	30,942	555	\$296,901,426	\$204,547,834	\$2,353,592
	1919	301	188	113	34,386	32,783	1,603	233,964,000	226,411,023	8,552,377
Tobacco: Chewing and smoking, and snuff.....	1929	152	60	92	10,811	10,225	586	179,332,951	174,828,806	4,504,085
	1919	365	105	260	18,324	17,180	1,144	239,270,718	230,246,044	9,024,074
Tools, not including edge tools, machine tools, files, or saws.....	1929	534	281	253	19,305	17,719	1,586	99,462,032	90,082,324	9,379,708
	1919	1,125	537	588	35,585	31,037	4,548	144,201,068	127,489,805	16,711,863
Toys (not including children's wheel goods or sleds), games, and playground equipment.....	1929	476	278	198	16,660	13,506	3,154	74,828,981	59,884,689	14,944,292
	1919	541	223	318	14,201	10,519	3,682	45,650,803	33,271,893	12,384,910
Trimmings (not made in textile mills) and stamped art goods for embroidering ²	1929	639	217	422	7,634	4,732	3,202	45,170,933	20,648,905	15,531,028
	1919	467	281	236	11,359	9,292	2,067	63,968,929	50,925,017	13,042,912
Trunks, suitcases, and bags.....	1929	597	194	403	11,470	8,237	3,233	63,932,206	43,572,070	20,360,196
	1919	1,183	116	1,067	40,157	8,190	31,967	63,281,632	7,999,981	28,281,651
Turpentine and rosin.....	1929	1,191	247	944	28,067	11,552	16,515	53,051,294	24,946,448	28,104,840
	1919	19	8	11	467	428	39	2,003,619	2,443,851	159,798
Type founding.....	1929	23	14	9	810	742	68	2,089,757	1,856,645	233,112
	1919	26	25	1	16,945	16,945	(x)	61,857,615	61,857,615	(x)
Typewriters and parts ²	1929	141	46	95	2,855	1,675	1,180	17,994,376	9,471,928	8,522,448
	1919	198	37	161	3,368	1,689	1,679	25,308,826	12,110,471	13,198,355
Umbrellas, parasols, and canes.....	1929	53	28	25	1,410	1,141	269	11,234,192	9,833,184	1,401,008
	1919	51	(1)	(1)	1,557	(1)	(1)	8,694,295	(1)	(1)
Upholstering materials, not elsewhere classified.....	1929	172	91	81	979	759	220	10,450,332	8,478,102	1,972,230
	1919	720	135	585	1,981	1,441	540	24,722,610	18,285,189	6,437,421
Wall paper.....	1929	66	65	1	4,705	4,705	(x)	30,007,649	30,007,649	(x)
	1919	48	45	3	4,262	4,134	128	23,047,901	22,107,298	940,603
Wall plaster, wall board, insulating board, and floor composition ²	1929	230	192	44	7,462	6,972	490	70,062,746	67,490,084	3,163,712
Washing machines, wringers, driers, and ironing machines, for household use.....	1929	65	55	10	8,189	7,989	200	82,320,924	79,918,698	2,411,226
	1919	105	75	30	5,956	5,782	174	40,771,285	39,214,285	1,557,256
Waste.....	1929	136	90	46	3,905	3,151	754	39,013,705	29,826,382	9,187,323
	1919	98	(1)	(1)	2,810	(1)	(1)	30,683,825	(1)	(1)
Watch and clock materials and parts, except watch cases.....	1929	17	6	11	311	138	173	930,837	474,215	456,622
	1919	27	10	17	582	342	240	1,341,007	853,441	488,256
Watchcases.....	1929	40	24	16	3,404	3,185	219	13,491,045	12,073,086	1,417,959
	1919	33	22	11	3,900	3,852	48	10,018,773	10,152,853	466,920
Watches and watch movements.....	1929	8	8		10,738	10,738		34,370,300	34,370,300	
	1919	18	16	2	15,888	15,888	(x)	82,044,299	82,044,299	(x)
Whips.....	1929	6	2	4	57	(x)	57	224,219	(x)	224,219
	1919	26	6	20	717	512	205	2,086,285	2,202,109	784,176
Windmills and windmill towers.....	1929	15	11	4	1,554	1,480	74	8,640,265	8,213,443	426,822
	1919	31	22	9	1,932	1,860	72	9,032,555	9,698,992	233,693
Window and door screens and weather strip.....	1929	280	125	155	4,034	3,259	775	24,451,700	20,385,281	4,066,419
	1919	214	63	151	2,179	1,766	413	10,082,867	9,204,164	1,038,693
Window shades and fixtures.....	1929	482	131	351	4,708	3,644	1,064	30,964,694	27,257,758	3,706,936
	1919	287	76	211	4,411	3,624	787	29,190,649	22,020,224	7,170,425
Wire, drawn from purchased bars or rods.....	1929	81	78	3	22,467	22,259	208	213,997,410	213,194,674	802,836
	1919	66	58	8	19,741	19,478	263	102,151,236	100,925,667	1,225,569
Wirework, not elsewhere classified.....	1929	547	325	222	22,388	20,986	1,402	146,805,049	139,769,087	7,035,962
	1919	555	237	318	15,224	13,754	1,470	90,649,245	83,847,204	6,802,041
Wood distillation and charcoal manufacture.....	1929	91	74	17	4,648	4,416	232	29,693,672	28,788,664	905,008
	1919	150	115	41	5,155	4,813	342	33,134,732	32,338,463	796,269
Wood preserving.....	1929	199	189	10	13,077	12,942	135	190,044,045	188,896,120	2,048,525
	1919	73	72	1	3,978	3,978	(x)	33,239,313	33,239,313	(x)
Wood turned and shaped and other wooden goods, not elsewhere classified.....	1929	894	420	474	18,712	13,501	5,211	69,619,690	52,330,179	17,289,811
	1919	967	335	632	17,092	12,748	4,344	56,640,400	43,087,775	13,552,625
Woolen goods.....	1929	460	372	88	58,474	54,592	3,912	290,938,949	274,623,028	16,315,921
	1919	560	(1)	(1)	62,957	(1)	(1)	304,896,650	(1)	(1)
Wool pulling.....	1929	18	13	5	596	466	130	13,048,064	10,271,215	3,376,849
	1919	24	12	12	705	544	161	17,361,231	8,119,221	9,242,010
Wool scouring.....	1929	21	18	3	1,302	1,090	212	6,241,264	5,754,522	486,742
	1919	33	20	7	2,177	1,628	549	13,679,584	12,080,046	1,599,538
Wool shoddy.....	1929	50	36	14	1,762	1,641	121	15,344,978	14,147,172	1,197,806
	1919	78	36	42	2,566	2,005	561	28,254,398	18,207,275	10,047,123
Worsted goods.....	1929	264	231	33	88,485	83,298	5,187	536,067,369	507,654,710	28,512,659
	1919	292	(1)	(1)	103,830	(1)	(1)	700,637,482	(1)	(1)
Wrought pipe, welded and heavy riveted, not made in plants operated in connection with rolling mills.....	1929	50	46	4	11,417	11,083	331	124,658,966	122,082,257	2,576,709
	1919	50	42	8	10,426	10,205	161	81,869,116	81,161,224	707,891

¹ No data.

² No data available for 1919.

TYPE OF ORGANIZATION

TABLE 4.—TYPE OF OWNERSHIP—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL), BY GEOGRAPHIC DIVISIONS AND STATES: 1929 AND 1919—Continued

[See headnote to Table 2]

DIVISION AND STATE	Census year	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (average for the year)			VALUE OF PRODUCTS		
		Total	Owned by—		Total	In establishments owned by—		Total	Of establishments owned by—	
			Corporations	Individuals, partnerships, etc.		Corporations	Individuals, partnerships, etc.		Corporations	Individuals, partnerships, etc.
EAST SOUTH CENTRAL:										
Kentucky.....	1929	2,246	1,054	1,192	77,825	71,433	6,392	\$502,638,722	\$469,693,405	\$32,945,317
	1919	3,957	1,150	2,807	69,340	63,897	10,443	395,660,417	338,640,978	57,019,439
Tennessee.....	1929	2,855	1,281	1,574	128,400	115,274	13,126	730,508,612	673,353,597	57,155,015
	1919	4,639	1,286	3,353	95,167	79,334	15,833	556,253,162	474,208,615	82,044,547
Alabama.....	1929	2,848	1,011	1,837	119,559	100,800	18,759	560,378,132	505,238,171	55,139,961
	1919	3,654	941	2,713	107,159	89,404	17,695	492,730,895	437,969,430	54,761,465
Mississippi.....	1929	1,911	607	1,304	52,086	40,397	11,689	220,917,682	186,269,000	34,648,682
	1919	2,455	498	1,957	57,560	41,920	15,640	197,746,987	149,371,210	48,375,777
WEST SOUTH CENTRAL:										
Arkansas.....	1929	1,731	599	1,132	44,205	34,687	9,518	210,903,228	179,010,461	31,892,767
	1919	3,123	601	2,432	49,954	36,567	13,387	200,312,858	149,038,772	51,274,086
Louisiana.....	1929	1,939	1,111	878	87,345	79,351	7,994	685,036,857	640,727,282	44,309,575
	1919	2,617	1,118	1,499	98,205	86,357	11,908	676,189,770	609,292,719	66,897,051
Oklahoma.....	1929	1,658	704	864	31,605	27,360	4,335	455,905,267	426,120,059	29,779,208
	1919	2,445	708	1,737	29,503	25,267	4,236	401,302,869	367,461,271	33,901,598
Texas.....	1929	5,198	2,474	2,724	134,498	116,076	18,422	1,450,246,481	1,341,760,257	108,486,224
	1919	5,724	1,653	4,071	107,522	86,638	20,884	990,995,796	882,136,923	117,858,873
MOUNTAIN:										
Montana.....	1929	589	269	320	14,869	13,436	1,433	271,094,446	262,597,564	8,496,882
	1919	1,290	353	937	17,160	14,839	2,321	166,604,518	163,484,868	13,119,650
Idaho.....	1929	562	267	295	15,648	14,288	1,360	96,352,026	87,195,194	9,156,832
	1919	922	284	638	13,917	12,084	1,833	80,510,749	70,230,068	10,280,681
Wyoming.....	1929	248	121	127	6,253	5,872	386	96,348,076	98,625,061	2,722,415
	1919	576	165	411	6,634	6,014	620	31,445,394	77,333,678	4,111,716
Colorado.....	1929	1,548	811	737	82,890	29,527	3,363	300,071,031	286,317,889	20,753,142
	1919	2,631	884	1,747	35,254	30,911	4,343	275,022,335	260,927,940	24,094,395
New Mexico.....	1929	250	99	151	4,476	3,857	619	21,667,148	18,584,795	3,112,353
	1919	387	135	252	5,786	5,158	678	17,856,602	15,061,235	2,855,367
Arizona.....	1929	348	166	182	10,550	9,589	951	200,002,217	193,428,134	6,574,083
	1919	480	161	319	8,528	7,660	868	120,769,112	115,651,362	5,117,750
Utah.....	1929	651	379	272	16,001	14,433	1,168	214,628,855	204,828,480	9,800,375
	1919	1,160	453	707	18,868	17,096	1,772	156,933,071	146,593,052	10,340,019
Nevada.....	1929	123	64	59	2,200	1,987	213	33,717,059	31,655,781	2,061,278
	1919	166	67	99	3,119	2,929	190	22,874,311	21,615,875	1,258,436
PACIFIC:										
Washington.....	1929	3,672	1,872	1,800	114,830	104,816	10,014	795,561,861	740,908,431	54,653,430
	1919	4,918	1,913	3,005	132,928	120,361	12,567	809,622,984	739,630,897	69,993,087
Oregon.....	1929	2,463	1,133	1,330	65,505	57,965	7,540	411,768,976	372,047,551	39,721,424
	1919	2,707	934	1,773	58,559	50,880	7,679	366,782,627	322,331,966	44,450,661
California.....	1929	12,019	4,603	7,416	290,911	244,153	46,758	3,103,349,668	2,763,409,654	339,880,014
	1919	11,942	3,132	8,810	243,692	199,538	44,154	1,981,204,701	1,646,355,622	334,849,079

CENSUS OF MANUFACTURES: 1929

TABLE 5.—TYPE OF OPERATION—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE (PLURAL-UNIT) OR INDEPENDENT (SINGLE-UNIT) OPERATION, BY INDUSTRIES: 1929

[The term "central administrative office," as used for census purposes, signifies an office which operates two or more plants at least one of which is not located in the same city in which the office is located. In cases where the item for a certain group can not be given separately without disclosing data for individual establishments, it has been combined with that for another group. In such cases an (x) is shown in the column in which the item has been omitted, and the item for the group with which it has been consolidated is printed in *italics*. In the totals for all industries the data for each establishment are included in the item for the group in which the establishment properly belongs, and therefore the totals differ from the sums of the items in the respective columns.]

INDUSTRY	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (average for the year)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)
All industries, total.....	26,286	184,673	4,275,377	4,563,366	\$38,226,387,601	\$32,208,475,842	\$15,797,289,058	\$16,087,904,053
Agricultural implements.....	50	243	34,326	7,337	220,019,298	47,935,104	135,268,013	28,610,965
Aircraft and parts.....	9	123	4,723	9,937	18,762,720	52,390,198	12,900,298	30,878,523
Alcohol, ethyl, and distilled liquors.....	22	8	1,162	322	42,098,044	12,186,621	15,589,291	3,640,311
Aluminum manufactures.....	27	123	16,443	4,767	110,632,141	33,825,107	41,584,413	17,830,372
Ammunition and related products.....	11	10	6,324	899	38,345,928	5,462,592	21,490,231	2,470,624
Artificial and preserved flowers and plants.....	2	189	(x)	3,216	(x)	14,425,420	(x)	8,897,969
Artificial leather.....	8	9	1,913	677	23,410,495	9,550,757	7,063,094	3,030,220
Artists' materials.....	5	63	275	892	2,110,817	7,348,748	1,230,760	4,067,488
Asbestos products, other than steam packing or pipe and boiler covering.....	18	49	5,684	2,508	37,884,502	18,279,534	21,001,609	9,754,425
Asphalted-felt-base floor covering.....	10	4	1,956	389	28,937,195	2,951,707	16,445,795	1,164,362
Awnings, tents, sails, and canvas covers.....	14	988	1,070	6,965	1,485,407	47,762,109	518,686	23,300,750
Bags, other than paper, not made in textile mills.....	51	151	6,866	4,942	109,365,074	60,810,819	14,808,684	11,091,832
Bags, paper, exclusive of those made in paper mills.....	33	62	3,867	3,103	38,806,967	25,814,225	11,026,860	10,355,940
Baking powders, yeast, and other leavening compounds.....	21	27	2,237	790	37,802,671	15,034,141	20,081,282	9,067,162
Baskets and rattan and willow ware, not including furniture.....	33	240	2,757	6,590	6,088,065	16,762,978	3,738,227	10,292,650
Belting other than leather and rubber, not made in textile mills.....	1	8	(x)	255	(x)	2,788,687	(x)	1,460,537
Belting, leather.....	16	101	1,023	1,579	15,515,366	20,116,316	6,385,880	8,566,024
Beverages.....	363	4,801	4,333	23,948	60,313,785	210,010,018	37,111,703	130,185,920
Billiard and pool tables, bowling alleys, and accessories.....	1	39	(x)	1,590	(x)	8,821,593	(x)	5,532,967
Blacking, stains, and dressings.....	13	157	463	1,154	8,432,118	16,249,718	6,652,518	9,684,084
Bluing.....	5	15	48	57	759,238	605,272	627,140	308,503
Bolts, nuts, washers, and rivets, not made in plants operated in connection with rolling mills.....	20	88	9,393	6,782	63,037,266	39,354,843	35,681,111	22,499,203
Bone black, carbon black, and lampblack.....	57	20	1,673	242	17,504,628	2,065,094	10,010,879	1,022,746
Bookbinding and blank-book making.....	23	1,085	3,099	21,655	18,666,006	84,117,399	12,741,476	69,287,152
Boot and shoe cut stock, not made in boot and shoe factories.....	22	188	5,965	3,634	84,729,602	48,718,312	14,715,367	11,186,780
Boot and shoe findings, not made in boot and shoe factories.....	58	324	3,641	6,835	17,145,408	41,480,037	8,995,171	17,065,873
Boots and shoes, other than rubber.....	199	1,142	91,334	114,306	450,817,872	515,104,822	194,589,974	266,277,474
Boots and shoes, rubber.....	10	12	6,882	16,777	47,080,555	65,457,070	33,067,867	35,073,292
Boxes, cigar, wooden.....	10	108	909	3,465	3,160,259	9,299,166	1,079,609	5,541,607
Boxes, paper, not elsewhere classified.....	183	1,068	17,773	37,881	121,027,910	173,225,386	47,167,882	87,245,837
Boxes, wooden, except cigar boxes.....	147	645	9,082	21,472	50,978,491	84,047,184	21,130,187	39,813,551
Bread and other bakery products.....	1,021	10,704	74,442	120,399	657,549,843	868,560,968	372,960,404	416,044,907
Brooms.....	7	400	280	4,262	1,040,743	18,125,610	504,728	9,013,937
Brushes, other than rubber.....	14	289	1,613	5,043	8,642,041	36,909,629	3,859,267	20,001,750
Butter.....	468	3,069	6,983	12,114	271,338,837	475,078,783	35,437,167	75,056,867
Buttons.....	68	174	4,929	4,105	14,975,121	14,002,798	8,524,152	8,952,303
Candles.....	2	18	(x)	781	(x)	6,686,194	(x)	3,435,567
Canning and preserving: Fish, crabs, shrimps, oysters, and clams.....	102	240	5,756	7,856	30,409,687	50,433,826	10,798,763	16,800,839
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	975	2,022	50,080	39,780	498,637,185	251,704,856	195,456,075	92,823,838
Car and general construction and repairs, electric-railroad repair shops.....	313	133	23,046	6,429	66,646,581	18,834,996	41,031,660	11,668,804
Car and general construction and repairs, steam-railroad repair shops.....	1,849	2	368,681	(x)	1,184,435,262	(x)	668,872,310	(x)
Carbon paper and inked ribbons.....	5	52	290	961	4,215,409	13,079,731	2,284,609	7,010,778
Cardboard, not made in paper mills.....	1	12	(x)	609	(x)	5,622,498	(x)	2,964,240
Card cutting and designing.....	0	64	617	1,721	8,450,449	11,197,730	4,331,851	6,030,397
Carpets and rugs, rag.....	1	93	(x)	7,629	(x)	5,610,788	(x)	5,851,331
Carpets and rugs, wool, other than rag.....	14	53	10,137	22,489	59,636,364	117,279,600	31,181,037	69,068,435
Carriage, wagon, sleigh, and sled materials.....	3	42	69	612	490,334	2,301,894	167,433	1,142,757
Carriages and sleds, children's.....	10	69	2,263	4,849	8,743,781	20,074,079	4,617,923	10,686,150
Carriages, wagons, sleighs, and sleds.....	4	84	359	2,514	2,252,703	14,197,170	1,028,674	6,962,911
Cars, electric and steam railroad, not built in railroad repair shops.....	116	31	32,979	7,036	274,480,313	53,739,891	85,712,436	18,618,371
Cash registers and adding, calculating, and card-tabulating machines.....	6	40	2,419	14,421	12,520,582	97,471,404	9,681,637	89,553,336
Caskets, coffins, burial cases, and other morticians' goods.....	37	377	3,120	9,913	20,485,207	67,799,605	12,100,590	36,771,026
Cast-iron pipe.....	34	38	11,608	8,048	40,321,014	30,939,636	26,841,215	10,129,970
Cement.....	138	36	29,638	4,330	231,159,696	36,849,604	149,040,126	22,620,637
Cereal preparations.....	23	98	5,044	1,444	132,965,233	42,857,893	60,129,573	13,622,032
Cheese.....	492	2,266	1,200	2,111	94,746,187	75,598,545	12,320,978	12,320,978
Chemicals, not elsewhere classified.....	310	232	54,217	7,982	652,141,038	85,908,448	336,206,721	38,204,854
Chewing gum.....	6	31	1,116	1,347	24,491,749	35,068,377	18,793,922	28,135,032
China firing and decorating, not done in potteries.....	1	27	(x)	319	(x)	1,654,008	(x)	913,642
Chocolate and cocoa products, not including confectionery.....	13	46	3,230	3,019	68,790,550	50,760,113	22,647,818	17,943,504
Cigars and cigarettes.....	210	1,417	72,281	33,027	941,048,107	124,060,691	654,007,868	76,123,007
Clay products (other than pottery) and monclay refractories.....	577	1,172	51,284	42,052	175,293,200	119,871,813	126,452,003	86,788,783
Cleaning and polishing preparations.....	24	405	421	2,292	6,985,366	43,794,266	3,736,722	27,643,869
Clocks, clock movements, time-recording devices, and time stamps.....	6	50	4,429	5,972	18,889,579	23,276,266	14,932,561	16,568,201
Clothing (except work clothing), men's, youths', and boys', not elsewhere classified.....	186	3,505	31,836	118,032	166,255,097	734,849,108	80,720,722	379,878,504
Clothing, men's, buttonholes.....		32		292		573,900		813,117
Clothing, women's, not elsewhere classified.....	286	7,816	20,761	166,739	111,986,868	1,597,593,637	52,403,335	722,763,487
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	76	435	9,252	28,949	34,041,080	104,408,302	13,732,559	41,165,804
Cloth sponging and refinishing.....	2	44	(x)	906	(x)	8,861,221	(x)	5,872,831
Coffee and spice, roasting and grinding.....	107	821	2,282	6,771	158,791,018	265,552,010	30,850,464	61,944,473
Coke, not including gas-house coke.....	129	24	18,119	2,433	374,580,977	41,767,481	117,627,700	17,128,328
Collapsible tubes.....	4	13	569	1,222	2,991,051	5,921,026	1,264,171	2,262,900
Collars, men's.....	5	10	2,713	239	8,291,495	5,448,601	4,777,331	2,332,897
Combs and hairpins, not made from metal or rubber.....	1	23	(x)	656	(x)	2,482,419	(x)	1,475,595
Compressed and liquefied gases.....	304	60	2,026	464	46,139,293	6,050,486	32,907,467	4,663,700
Concrete products.....	217	2,221	3,214	13,291	20,788,770	72,111,979	13,039,115	45,826,450
Condensed and evaporated milk.....	395	140	6,173	892	184,137,333	24,922,367	39,913,324	5,409,558

TYPE OF ORGANIZATION

TABLE 5.—TYPE OF OPERATION—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE (PLURAL-UNIT) OR INDEPENDENT (SINGLE-UNIT) OPERATION, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (average for the year)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)
Confectionery.....	128	1,893	10,287	53,264	\$63,449,837	\$329,820,012	\$28,403,801	\$149,673,574
Cooperage.....	217	369	5,428	5,263	35,425,716	29,416,072	11,613,779	11,712,500
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	71	2,090	4,714	23,879	50,645,326	171,839,299	19,249,136	90,687,377
Cordage and twine.....	34	89	6,891	7,598	43,818,351	47,630,765	16,415,032	20,466,826
Cork products.....	6	29	2,691	1,161	17,291,435	5,731,894	7,924,685	2,490,122
Corn sirup, corn sugar, corn oil, and starch.....	11	24	4,872	1,858	129,132,525	36,851,214	40,405,807	12,293,015
Corsets and allied garments.....	27	186	4,305	9,359	25,343,429	51,458,770	13,673,698	27,695,422
Cotton goods.....	510	771	231,975	192,941	853,120,190	671,056,897	340,940,091	285,208,019
Cotton small wares.....	30	172	6,212	9,069	24,551,856	40,617,897	12,840,284	18,684,261
Crucibles.....	2	9	(x)	321	(x)	2,944,724	(x)	1,909,810
Cutlery (not including silver and plated cutlery) and edge tools.....	28	211	3,791	11,200	18,609,137	60,051,735	13,872,667	49,998,870
Dairymen's supplies; creamery, cheese-factory, and butter-factory equipment; and poultrymen's and apiarists' supplies.....	17	155	2,558	2,892	21,022,500	21,224,108	13,452,742	12,422,900
Dental goods and equipment.....	6	81	1,776	2,783	12,607,637	22,572,628	6,850,040	11,003,368
Doors, shutters, and window sash and frames, metal.....	10	138	2,094	7,463	18,048,815	54,111,573	10,124,194	31,858,033
Druggists' preparations.....	24	405	1,930	8,758	23,212,343	101,556,144	13,354,448	67,648,013
Drug grinding.....	13	13	411	260	5,913,091	3,750,129	2,452,144	1,641,097
Dyeing and finishing textiles.....	108	664	46,761	32,566	281,408,838	184,351,791	132,638,759	97,474,714
Electrical machinery, apparatus, and supplies.....	300	1,602	205,874	122,848	1,492,393,196	808,552,376	858,159,768	471,736,181
Electroplating.....	10	524	318	5,610	1,601,251	22,120,005	1,017,608	17,911,641
Embroideries.....	7	806	319	9,303	639,155	24,647,641	543,870	18,134,086
Emery wheels and other abrasive and polishing appliances.....	9	58	2,294	1,579	20,469,107	11,688,294	13,124,389	6,613,269
Engines, turbines, tractors, and water wheels.....	30	169	28,848	32,300	222,502,107	234,715,623	121,721,300	132,595,989
Engravers' materials.....	6	13	65	248	1,000,796	2,068,988	369,206	936,473
Engraving (other than steel, copperplate, or wood), chasing, etching, and desinking.....	189	449	2,550	7,680	14,280,622	10,933,741	11,444,447	8,350,702
Engraving, steel and copperplate, and plate printing.....	7	27	142	7,520	32,881,019	738,951	11,444,447	23,856,430
Engraving, wood.....	21	150	3,784	6,583	23,004,176	38,192,810	10,440,205	20,913,104
Envelopes.....	15	50	604	737	2,354,827	2,053,942	1,220,751	1,348,488
Excelsior.....	83	12	5,319	295	67,909,847	4,609,877	38,309,018	2,400,369
Explosives.....	9	805	524	18,198	2,716,345	82,072,010	1,301,677	48,857,430
Fancy and miscellaneous articles, not elsewhere classified.....	139	611	4,327	5,896	200,502,433	1,141,418	30,359,362	755,082
Feathers, plumes, and manufactures thereof.....	20	34	2,155	3,385	20,295,100	26,170,723	6,940,740	35,473,426
Feeds, prepared, for animals and fowls.....	277	361	12,769	8,157	143,675,806	88,836,070	44,732,225	12,801,116
Felt goods, wool, hair, or jute.....	7	20	2,922	1,052	10,306,848	3,747,530	8,432,205	27,077,616
Fertilizers.....	27	15	3,814	3,024	12,590,051	9,380,316	10,527,532	6,229,408
Files.....	6	28	794	1,017	2,858,400	3,725,042	1,770,240	7,325,736
Firearms.....	12	38	794	1,017	2,858,400	3,725,042	1,770,240	4,878,668
Fire extinguishers, chemical.....	3	51	298	640	921,740	2,914,075	608,164	2,348,340
Fireworks.....	70	572	1,228	3,813	61,333,305	67,752,872	37,828,172	1,561,340
Flags and banners.....	6	6	6	47	197,035	197,035	103,568	103,568
Flavoring extracts and flavoring sirups.....	364	3,058	12,544	14,484	537,578,779	492,690,939	68,880,456	97,807,393
Flax and hemp, dressed.....	86	776	3,845	6,721	77,894,939	93,956,348	36,591,423	38,881,925
Flour and other grain-mill products.....	36	182	6,323	14,559	50,769,820	105,479,127	25,672,082	58,969,901
Food preparations, not elsewhere classified.....	826	7,779	162,123	292,818	1,046,018,086	1,744,547,978	631,443,246	1,121,652,626
Foundry and machine-shop products, not elsewhere classified.....	15	44	279	674	2,894,969	7,503,020	1,426,352	3,497,939
Foundry supplies.....	12	11	275	151	8,088,473	1,409,187	2,975,366	6,006,408
Fuel: Briquettes and boulets.....	12	2,843	227	15,252	2,071,506	275,521,187	1,098,890	100,886,052
Fur goods.....	69	499	11,810	14,778	44,008,614	100,057,689	20,248,662	47,088,133
Furnishing goods, men's, not elsewhere classified.....	232	3,546	42,695	150,794	217,648,321	730,408,937	116,254,831	400,407,308
Furniture, including store and office fixtures.....	12	286	930	4,237	5,537,856	34,699,336	3,400,233	18,188,005
Furs, dressed.....	3	62	84	1,281	376,087	7,290,454	208,276	3,518,848
Galvanizing and other coating, not done in plants operated in connection with rolling mills.....	18	590	5,361	18,219	35,008,249	100,057,467	21,956,333	65,090,066
Gas and electric fixtures; lamps, lanterns, and reflectors.....	6	66	1,209	4,892	7,516,682	33,105,602	5,391,874	20,044,482
Gas machines, gas meters, and water and other liquid meters.....	550	198	25,728	17,839	312,845,401	90,807,194	203,649,698	120,586,714
Gas, manufactured, illuminating and heating.....	108	155	40,436	27,991	205,739,559	98,079,001	133,728,827	60,795,794
Glass.....	21	410	682	5,347	3,647,987	20,625,016	1,842,617	16,111,753
Glass products (except mirrors) made from purchased glass.....	40	85	6,445	2,834	20,820,555	0,053,403	7,122,100	3,471,624
Gloves and mittens, cloth or cloth and leather combined, made from purchased fabrics.....	14	243	2,220	6,983	8,819,126	30,803,603	3,711,173	15,205,816
Gloves and mittens, leather.....	23	51	2,045	948	19,514,738	12,043,281	8,057,638	5,422,854
Glue and gelatin.....	8	67	419	753	1,029,022	2,949,002	684,487	1,460,870
Gold leaf and oil.....	6	63	153	778	22,945,327	45,013,813	1,845,661	5,043,386
Gold, silver, and platinum, reducing and refining, not from the ore.....	4	7	41	453	988,622	2,771,347	331,063	1,970,446
Graphite, ground and refined.....	63	234	2,578	2,897	28,289,947	33,318,043	10,122,761	11,842,702
Grease and tallow, not including lubricating greases.....	1	12	(x)	450	(x)	3,856,588	(x)	1,504,825
Haircloth.....	2	57	359	1,093,588	(x)	1,093,588	(x)	1,156,109
Hair work.....	21	84	2,928	3,091	14,402,970	15,150,807	6,148,820	7,062,222
Handkerchiefs.....	10	322	1,236	2,836	610,232	14,425,791	357,371	10,897,494
Hand stamps and stencils and brands.....	47	438	18,618	33,888	87,055,521	142,421,086	57,875,948	96,121,349
Hardware not elsewhere classified.....	7	105	404	7,459,999	7,459,999	17,570,944	967,544	6,758,284
Hat and cap materials, men's.....	6	570	3,025	5,524	1,708,383	34,192,281	933,976	18,059,027
Hats and caps, except felt and straw, men's.....	6	153	2,511	14,028	16,203,211	85,800,954	9,334,854	37,371,266
Hats, fur-felt.....	6	44	507	2,783	3,695,910	15,043,084	2,457,200	7,577,077
Hats, straw, men's.....	1	13	(x)	2,028	(x)	9,055,590	(x)	4,377,101
Hats, wool-felt.....	2	4	(x)	174	(x)	368,811	(x)	628,142
Hones, whetstones, and similar products.....	3	11	406	176	2,010,791	884,367	993,272	481,216
Horse blankets, fly nets, and related products.....	43	921	2,380	13,414	20,662,323	100,909,177	8,020,468	42,956,545
House-furnishing goods, not elsewhere classified.....	538	2,612	0,583	12,816	160,295,734	168,118,177	84,409,601	87,979,864
Ice cream.....	1,585	2,525	16,377	16,807	116,179,648	94,772,616	96,335,558	74,808,542
Ice, manufactured.....	41	108	1,397	1,051	26,774,062	15,975,930	13,817,107	9,728,170
Ink, printing.....	12	29	416	416	4,594,974	4,594,974	2,602,401	2,602,401
Ink, writing.....	41	264	7,567	9,309	33,431,311	56,315,068	20,029,748	41,398,191
Instruments, professional and scientific.....	92	13	23,527	1,433	740,294,112	31,131,352	153,899,130	7,232,634
Iron and steel: Blast furnaces.....	1	45	611	(x)	(x)	3,865,450	(x)	2,776,808
Iron and steel, processed.....	258	228	320,298	74,276	2,003,792,093	461,096,712	1,211,233,341	260,472,307

CENSUS OF MANUFACTURES: 1929

TABLE 5.—TYPE OF OPERATION—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE (PLURAL-UNIT) OR INDEPENDENT (SINGLE-UNIT) OPERATION, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (average for the year)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)
Ivory, shell, and bone work, not including buttons, combs, or hairpins		21		391		\$1,200,426		\$743,101
Jewelry	16	1,520	1,679	26,243	\$6,831,319	170,555,613	\$4,449,722	93,132,593
Jewelry and instrument cases	6	107	335	2,434	1,284,975	7,541,752	719,688	4,782,580
Knit goods	7	13	2,793	2,138	14,005,716	7,864,041	6,483,883	3,418,296
Labels and tags	316	1,572	86,871	121,617	352,393,745	547,322,927	181,731,431	261,284,283
Lace goods	10	143	452	4,022	2,433,177	25,609,148	1,008,001	15,878,650
Lapidary work	1	32	2,564	4,200	10,302,075	18,844,750	6,557,261	12,567,820
Lasts and related products	1	98	(x)	5,566	(x)	11,942,421	(x)	3,707,532
Leather goods, not elsewhere classified	15	43	811	949	3,787,261	3,902,294	2,017,704	2,757,194
Leather: Tanned, curried, and finished	159	312	368	5,392	4,108,473	31,782,540	1,934,387	16,003,137
Linen goods	119	118	27,354	22,578	284,443,386	196,896,913	74,860,561	68,881,870
Linoleum	7	2	5,612	2,942	25,570,794	10,244,864	15,675,220	6,232,669
Liquors, vinous	5	18	1,594	601	7,291,894	2,442,004	3,333,001	1,189,460
Lithography	28	348	5,644	(x)	57,250,449	(x)	29,761,196	(x)
Locomotives, not made in railroad repair shops	5	11	112	74	1,395,791	1,052,121	1,104,702	674,353
Lubricating oils and greases, not made in petroleum refineries	31	146	3,891	15,098	23,744,219	97,270,102	10,670,013	65,846,166
Lumber and timber products, not elsewhere classified	903	12,012	8,630	2,415	65,368,958	18,489,300	22,741,562	8,308,604
Macaroni, spaghetti, vermicelli, and noodles	6	347	1,594	1,013	39,375,644	30,208,002	16,842,425	13,170,448
Machine-tool accessories and small metal-working tools, not elsewhere classified	18	704	4,443	22,230	20,234,253	115,176,637	24,250,803	93,167,456
Machine tools	24	256	10,769	36,632	54,986,704	180,591,384	40,807,634	139,486,432
Malt	13	15	245	345	10,494,729	13,108,209	2,576,611	2,102,578
Marble, granite, slate, and other stone products	125	1,756	10,007	27,810	44,149,709	148,014,207	32,783,663	101,742,415
Matches	7	14	2,401	1,359	14,167,565	6,183,460	5,310,828	2,513,870
Mats and matting, grass and coir	1	6	(x)	467	(x)	1,692,200	(x)	1,007,249
Mattresses and bed springs, not elsewhere classified	68	883	6,713	10,474	50,989,977	72,239,740	28,738,743	33,013,948
Meat packing, wholesale	141	1,136	77,232	45,273	2,011,020,679	1,423,633,410	271,976,162	188,550,179
Millinery	22	1,271	944	31,282	4,240,832	191,452,625	2,314,342	95,280,456
Minerals and earths, ground or otherwise treated	29	59	778	901	8,521,758	8,887,298	4,069,024	4,402,149
Mirror and picture frames	3	175	79	4,307	397,326	18,840,571	259,217	12,446,156
Mirrors, framed and unframed	35	269	795	3,987	5,408,720	20,434,020	2,564,893	13,618,798
Models and patterns, not including paper patterns	11	793	317	6,461	1,052,604	28,908,470	1,436,600	23,871,106
Motion pictures, not including projection in theaters	24	118	8,147	2,637	137,510,173	46,592,246	105,844,278	39,817,116
Motor-vehicle bodies and motor-vehicle parts	123	1,031	149,277	72,055	1,072,420,757	465,503,036	438,054,824	242,589,332
Motor vehicles, not including motorcycles	79	165	148,259	77,867	2,525,217,395	1,197,575,879	875,535,482	445,746,020
Motorcycles, bicycles, and parts	1	20	(x)	4,302	(x)	23,894,805	(x)	12,615,478
Mucilage, paste, and other adhesives, except glue and rubber cement	5	79	84	380	1,658,554	4,079,833	685,277	2,284,403
Musical instrument parts and materials: Piano and organ	14	53	1,145	1,945	4,914,442	6,968,656	3,130,096	4,505,083
Musical instruments and parts and materials, not elsewhere classified	4	102	167	3,019	603,733	13,665,345	363,087	10,085,697
Musical instruments: Organs	2	60	(x)	2,389	(x)	11,322,736	(x)	8,232,060
Musical instruments: Pianos	19	62	4,580	5,381	18,689,740	23,811,635	10,550,439	13,084,499
Nails, spikes, etc., not made in wire mills or in plants operated in connection with rolling mills	13	42	914	1,113	5,929,344	6,925,401	3,222,226	3,676,858
Needles, pins, hooks and eyes, and snap fasteners	4	39	2,327	3,915	8,533,125	18,497,825	6,525,613	9,317,015
Nets and seines	5	14	562	341	3,713,722	2,450,681	1,367,308	1,007,739
Nonferrous-metal alloys and products, not including aluminum products	128	1,097	44,919	34,264	607,514,647	302,289,403	179,994,401	129,398,735
Oil, cake, and meal, cottonseed	200	353	7,101	8,724	140,917,461	157,458,578	21,766,331	27,589,908
Oil, cake, and meal, linseed	21	8	2,430	285	108,183,833	11,743,034	10,577,608	1,786,572
Oils, essential	4	18	77	188	1,977,425	4,675,928	493,146	2,355,980
Oils, not elsewhere classified	12	63	503	731	25,840,441	19,319,334	3,444,188	4,820,131
Oilcloth	3	6	649	763	9,061,311	13,145,961	4,305,243	4,305,243
Oleomargarine, not made in meat-packing establishments	12	29	648	886	19,130,816	27,301,007	6,110,924	6,520,824
Optical goods	7	110	3,735	5,966	16,755,129	23,807,330	12,111,272	16,592,059
Paints and varnishes	188	875	14,889	14,889	303,180,707	265,786,131	120,160,296	114,033,477
Paper	434	251	71,822	31,498	709,540,886	257,645,140	278,162,049	114,415,999
Paper goods, not elsewhere classified	77	359	7,240	12,987	66,624,791	110,022,921	26,969,714	55,309,322
Patent or proprietary medicines and compounds	113	1,404	5,769	10,675	124,461,879	104,445,049	80,635,618	137,501,477
Paving materials: Asphalt, tar, crushed slag, and mixtures	90	36	1,748	627	22,934,746	6,340,023	11,469,009	4,217,858
Peanuts, walnuts, and other nuts, processed or shelled	50	119	2,080	5,853	18,184,885	31,424,009	2,992,830	7,080,578
Pencils, lead (including mechanical)	7	31	3,392	2,311	19,661,906	8,111,499	11,274,285	5,742,374
Pens, fountain and stylographic; pen points, gold, steel, and brass	1	75	(x)	4,600	(x)	34,211,334	(x)	22,751,073
Perfumes, cosmetics, and other toilet preparations	30	785	3,183	9,926	50,491,843	142,945,707	36,845,910	98,295,761
Petroleum refining	223	107	66,188	14,408	2,225,727,564	413,937,437	533,370,724	74,952,869
Photographs	15	44	11,908	2,508	79,010,679	16,938,369	48,851,689	10,674,222
Photo-engraving, not done in printing establishments	20	634	1,168	11,185	7,764,126	69,618,133	5,729,019	60,650,119
Photographic apparatus and materials	13	102	9,338	3,129	80,161,462	22,665,924	56,912,165	15,522,690
Pipes (tobacco)	1	23	(x)	1,630	(x)	5,557,832	(x)	3,308,760
Planing-mill products (including general millwork), not made in planing mills connected with sawmills	371	4,478	18,382	71,752	120,234,261	433,349,237	47,006,835	210,563,164
Plated ware	18	76	6,182	4,546	36,800,233	18,669,725	25,811,145	12,867,820
Plumbers' supplies, not including pipe or vitreous-china sanitary ware	33	222	11,964	15,996	52,569,404	77,104,380	33,558,069	47,083,116
Pocketbooks, purses, and cardcases	7	283	551	9,879	2,820,919	65,506,566	1,408,661	31,867,250
Poultry, including porcelain ware	64	249	15,385	20,024	52,165,112	65,457,841	37,724,620	45,890,460
Poultry killing, dressing, and packing, wholesale	202	283	3,870	3,890	60,637,363	69,523,837	9,725,258	13,670,466
Printing and publishing, book and job	231	12,431	15,407	135,242	105,455,143	901,201,625	77,562,261	662,345,142
Printing and publishing, music	2	122	(x)	810	(x)	15,240,288	(x)	13,693,226
Printing and publishing, newspaper and periodical	251	11,273	14,798	114,957	240,678,431	1,497,622,461	183,369,907	1,163,101,230
Printing materials, not including type or ink	35	40	599	405	5,128,418	3,450,588	3,865,244	2,529,218
Pulp goods	15	30	2,717	841	23,520,755	4,669,137	12,409,730	2,742,402
Pulp (wood and other fiber)	179	19	23,624	1,105	223,787,005	15,101,274	83,161,866	7,013,684
Pumps (hand and power) and pumping equipment	44	278	8,252	14,854	60,806,775	103,202,622	33,778,409	63,428,616
Rayon and allied products	18	11	35,769	8,847	142,402,336	7,143,731	111,689,609	4,521,745
Refrigerators and refrigerator cabinets, exclusive of mechanical refrigerating equipment	11	177	1,931	7,853	11,669,197	48,814,117	5,860,696	28,371,470
Refrigerators, mechanical	5	29	13,765	3,118	137,860,884	23,704,792	77,230,032	11,922,597
Regalia, badges, and emblems	1	76	(x)	1,767	(x)	7,927,214	(x)	4,699,978
Rice cleaning and polishing	19	41	610	979	20,115,090	28,678,687	4,305,022	6,045,226

TYPE OF ORGANIZATION

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TABLE 5.—TYPE OF OPERATION—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE (PLURAL-UNIT) OR INDEPENDENT (SINGLE-UNIT) OPERATION, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (average for the year)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)
Roofing, built-up and roll; asphalt shingles; roof coatings other than paint	52	50	5,281	746	\$90,321,568	\$13,184,522	\$36,058,409	\$5,456,031
Rubber goods other than tires, inner tubes, and boots and shoes	69	343	10,147	21,070	124,485,304	120,260,433	67,567,388	62,504,105
Rubber tires and inner tubes	23	68	53,318	20,945	506,901,903	263,274,987	220,522,004	120,047,915
Saddlery and harness	4	256	379	2,960	2,717,977	20,820,578	958,210	8,546,221
Safes and vaults	2	25	(x)	3,088	(x)	19,368,192	(x)	18,069,731
Salt	35	23	4,286	1,172	30,163,380	7,705,308	18,869,161	4,811,739
Sand-lime brick	5	35	480	421,947	421,947	2,548,976	283,586	1,742,803
Sandpaper, emery paper, and other abrasive paper and cloth	5	6	769	450	10,293,364	6,925,226	5,004,789	8,338,524
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments	31	650	715	5,182	7,467,847	100,778,347	2,039,106	24,235,311
Saws	12	69	2,192	1,945	10,773,320	11,841,632	7,878,008	7,852,529
Scales and balances	0	50	1,407	2,711	8,487,818	21,893,600	6,448,933	10,404,301
Screw-machine products and wood screws	14	259	7,015	12,860	31,088,636	78,986,020	20,237,648	46,274,451
Sewing machines and attachments	8	31	8,474	1,993	33,407,265	11,687,335	10,806,719	8,739,456
Ship and boat building, steel and wooden, including repair work	67	557	20,338	34,751	89,913,628	141,386,537	50,830,784	85,670,691
Shirts	284	570	34,277	25,553	128,214,939	100,106,677	60,409,981	51,293,139
Shortenings (not including lard) and vegetable cooking oils	27	13	2,402	310	138,376,960	16,176,287	13,288,466	2,283,777
Signs and advertising novelties	70	1,169	2,654	17,346	20,254,047	97,780,610	15,188,221	67,154,624
Silk and rayon manufactures	468	1,023	78,493	51,974	452,200,480	278,900,751	103,449,760	125,569,211
Silversmithing and silverware	6	77	2,200	2,807	14,460,330	15,983,036	16,113,513	10,204,145
Smelting and refining, copper	20	6	12,438	2,106	875,020,083	119,763,779	65,790,038	8,042,883
Smelting and refining, lead	18	1	4,819	(x)	832,115,009	(x)	83,201,279	(x)
Smelting and refining, metals other than gold, silver, or platinum, not from the ore	10	87	1,850	2,284	44,126,505	61,750,150	9,954,825	12,482,012
Smelting and refining, zinc	24	6	9,561	2,057	104,332,845	14,538,225	40,498,009	3,042,073
Soap	36	246	10,058	4,305	230,161,255	80,030,275	93,362,499	30,476,047
Soda-water apparatus	4	50	932	1,832	10,053,824	14,456,959	5,717,933	8,301,970
Sporting and athletic goods, not including firearms or ammunition	29	213	3,915	6,878	25,242,265	33,046,463	14,022,097	19,783,795
Springs, steel, except wire, not made in plants operated in connection with rolling mills	12	74	1,279	4,563	15,156,961	31,615,338	5,549,777	15,750,034
Stamped ware, enameled ware, and metal stamping, enameling, japanning, and lacquering	37	545	7,852	32,148	48,237,184	150,018,950	25,702,037	90,064,602
Stationery goods, not elsewhere classified	23	180	4,108	6,970	29,049,927	45,012,120	15,968,990	25,915,170
Statuary and art goods, factory product	1	170	(x)	2,112	(x)	10,046,159	(x)	8,000,204
Steam and other packing, pipe and boiler covering, and gaskets, not elsewhere classified	36	135	4,210	3,056	22,110,335	23,322,800	10,861,084	12,974,662
Steam fittings and steam and hot-water heating apparatus	70	170	28,175	11,446	152,163,694	76,140,560	104,547,725	51,054,261
Steel barrels, kegs, and drums	17	36	1,829	2,281	16,133,595	21,601,432	7,570,181	8,368,287
Stereotyping and electrotyping, not done in printing establishments	11	219	589	5,898	2,859,725	32,757,572	2,121,837	26,948,579
Stoves and ranges (other than electric) and warm-air furnaces	45	504	10,297	30,319	60,005,948	211,741,061	37,122,073	133,877,887
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills	116	1,360	20,239	34,708	196,164,804	280,882,023	91,400,460	140,940,113
Sugar, beet	74	8	6,971	525	103,526,201	5,026,380	35,938,389	1,652,784
Sugar, cane, not including products of refineries	20	60	911	1,408	8,126,128	10,199,604	3,004,460	3,008,774
Sugar refining, cane	15	6	11,777	2,135	416,175,925	91,213,337	59,545,944	9,444,167
Surgical and orthopedic appliances, including artificial limbs	22	341	3,555	4,355	40,974,497	24,632,622	10,674,828	15,927,447
Suspenders, garters, and other elastic woven goods, made from purchased webbing	6	85	1,600	2,741	13,924,582	16,548,537	6,041,280	6,526,141
Tanning materials, natural dyestuffs, mordants and assistants, and sizes	53	73	1,676	743	25,180,851	14,705,184	8,523,780	5,973,626
Textile machinery and parts	53	323	11,989	15,030	56,904,925	65,473,539	41,342,871	44,539,344
Theatrical scenery and stage equipment		55		547		5,507,827		3,409,320
Tin and other foils, not including gold foil	4	3	1,478	232	17,242,305	3,712,434	6,437,690	968,760
Tin cans and other tinware, not elsewhere classified	110	122	25,586	5,011	262,190,110	34,711,316	84,726,505	17,138,118
Tobacco: Chewing and smoking, and snuff	18	134	6,482	4,329	127,757,390	51,575,561	75,777,788	31,000,836
Tools, not including edge tools, machine tools, files or saws	41	493	5,892	13,413	29,178,156	70,283,876	17,886,623	49,464,902
Toys (not including children's wheel goods or sleds), games, and playground equipment	6	470	785	15,925	3,715,823	71,113,155	2,568,771	42,278,683
Trimmings (not made in textile mills) and stamped art goods for embroidering	3	636	91	7,843	544,355	44,635,578	334,277	24,062,430
Trunks, suitcases, and bags	13	454	1,671	9,688	7,470,559	56,493,370	3,671,998	28,502,990
Turpentine and rosin	95	1,088	6,679	33,478	6,393,104	29,885,468	4,730,083	21,251,595
Type founding	3	10	336	131	2,198,736	404,883	1,626,886	320,619
Typewriters and parts	16	11	15,108	1,837	53,673,696	8,183,919	47,592,553	7,010,461
Umbrellas, parasols, and canes	4	137	461	2,394	2,427,969	15,506,407	895,352	6,191,651
Upholstering materials, not elsewhere classified	7	46	427	983	4,000,058	7,234,134	1,719,238	2,468,620
Vinegar and cider	36	136	343	636	3,420,158	7,030,174	1,424,437	3,009,866
Wall paper	14	42	1,900	2,805	12,874,997	17,132,952	7,454,435	9,073,009
Wall plaster, wall board, insulating board, and floor composition	82	154	4,820	2,642	41,510,474	29,152,272	22,181,810	20,108,299
Washing machines, wringers, driers, and ironing machines, for household use	3	62	397	7,792	4,096,304	78,233,620	2,184,500	39,437,991
Waste	17	119	699	3,206	6,279,084	29,734,621	1,798,662	8,532,123
Watch and clock materials and parts, except watchcases	1	16	(x)	311	(x)	390,897	(x)	678,865
Watchcases	3	37	799	2,605	3,258,699	10,232,346	2,284,778	6,676,042
Watches and watch movements	2	6	(x)	10,738	(x)	34,870,599	(x)	25,914,478
Whips		8		57		224,219		143,616
Windmills and windmill towers	1	14	(x)	1,554	(x)	8,640,266	(x)	5,028,726
Window and door screens and weather strip	19	261	1,134	2,900	6,634,558	17,817,142	3,561,193	10,377,761
Window shades and fixtures	27	455	1,863	2,845	12,874,275	24,090,419	6,305,170	10,814,174
Wire, drawn from purchased bars or rods	34	47	14,717	7,760	153,104,560	80,892,860	50,311,508	31,503,473
Wirework, not elsewhere classified	65	482	7,780	14,008	93,213,925	83,591,124	32,049,311	46,611,601
Wood distillation and charcoal manufacture	54	37	3,707	941	23,631,639	5,962,633	12,374,350	2,428,211
Wood preserving	149	50	11,003	2,074	159,966,999	30,977,946	35,435,610	7,806,311
Wood turned and shaped and other wooden goods, not elsewhere classified	110	784	4,596	14,116	16,291,042	53,328,948	8,766,178	32,426,240
Woolen goods	89	371	18,466	40,008	90,373,124	200,565,825	37,077,463	87,079,423
Wool pulling	4	14	450	146	3,449,187	10,198,877	682,240	2,048,824
Wool scouring		21		1,302		6,241,204		3,219,635
Wool shoddy	9	41	345	1,417	3,156,708	12,188,270	850,335	4,361,925
Worsted goods	84	180	47,220	41,265	293,235,836	242,631,563	107,819,501	91,568,439
Wrought pipe, welded and heavy riveted, not made in plants operated in connection with rolling mills	20	30	7,882	4,035	71,813,719	52,845,247	32,520,324	22,017,701

CENSUS OF MANUFACTURES: 1929

TABLE 6.—TYPE OF OPERATION—SUMMARY FOR ESTABLISHMENTS CLASSIFIED AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE (PLURAL-UNIT) OR INDEPENDENT (SINGLE-UNIT) OPERATION, BY GEOGRAPHIC DIVISIONS AND STATES: 1929

[The term "central administrative office," as used for census purposes, signifies an office which operates two or more plants at least one of which is not located in the same city in which the office is located]

DIVISION AND STATE	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (average for the year)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)	Central-administrative office (plural unit)	Independent (single unit)
UNITED STATES.....	26,286	184,673	4,275,377	4,563,360	\$88,226,387,601	\$32,208,475,842	\$15,797,280,658	\$16,087,904,053
GEOGRAPHIC DIVISION:								
New England.....	2,466	15,866	522,739	575,775	3,267,944,849	3,140,269,836	1,567,776,412	1,672,022,082
Middle Atlantic.....	6,423	58,307	1,204,838	1,357,502	10,812,926,564	10,546,047,411	4,735,630,932	5,440,324,401
East North Central.....	6,773	40,623	1,296,005	1,245,571	11,804,103,408	9,859,185,633	5,061,996,118	4,911,494,199
West North Central.....	2,275	15,517	240,037	234,078	3,172,778,810	2,204,609,174	851,564,754	1,018,425,919
South Atlantic.....	3,006	17,854	423,596	488,652	3,100,252,803	2,169,023,622	1,441,022,836	1,017,198,491
East South Central.....	1,423	8,437	130,874	137,996	1,093,880,531	920,562,627	491,731,869	432,696,288
West South Central.....	2,051	8,625	141,471	156,272	1,655,751,736	1,146,340,077	491,690,423	458,762,606
Mountain.....	805	3,514	61,204	41,288	933,036,337	306,874,521	229,882,754	140,172,588
Pacific.....	2,064	10,090	195,014	276,232	2,395,717,563	1,014,962,941	925,984,560	966,897,389
NEW ENGLAND:								
Maine.....	334	1,234	40,098	30,061	250,725,672	141,025,062	104,940,246	69,435,208
New Hampshire.....	189	886	39,855	25,656	222,771,235	109,763,518	90,273,748	56,858,682
Vermont.....	158	769	10,879	16,542	57,825,678	85,693,869	29,682,112	47,577,662
Massachusetts.....	1,115	8,757	243,046	314,448	1,584,188,409	1,807,973,828	767,064,271	942,765,173
Rhode Island.....	200	1,501	52,088	73,980	286,476,646	379,891,564	131,396,240	192,081,899
Connecticut.....	470	2,659	136,773	115,088	865,954,209	615,921,395	443,510,795	362,703,493
MIDDLE ATLANTIC:								
New York.....	2,602	36,793	408,480	697,486	3,768,393,019	6,210,163,124	1,750,062,635	3,214,857,523
New Jersey.....	1,241	7,147	247,750	194,578	2,673,887,096	1,263,269,679	1,108,304,706	663,124,943
Pennsylvania.....	2,580	14,367	548,608	405,438	4,370,646,449	3,073,214,608	1,808,263,501	1,562,341,935
EAST NORTH CENTRAL:								
Ohio.....	1,003	10,252	367,095	374,048	3,279,821,142	2,748,081,995	1,425,862,438	1,463,941,865
Indiana.....	830	4,261	182,135	132,563	1,658,594,410	881,299,439	694,853,824	441,608,808
Illinois.....	1,023	13,710	337,930	353,625	3,203,282,910	3,078,800,330	1,381,749,005	1,548,288,756
Michigan.....	839	5,797	299,991	230,644	2,609,287,834	2,047,430,162	1,126,970,390	940,304,489
Wisconsin.....	828	6,003	109,454	155,291	1,063,117,062	1,103,564,707	432,551,461	517,290,221
WEST NORTH CENTRAL:								
Minnesota.....	437	3,878	46,275	57,139	616,608,787	556,604,819	179,793,885	225,201,392
Iowa.....	477	2,849	39,555	42,123	478,314,505	421,898,767	148,261,214	175,558,329
Missouri.....	733	5,032	102,038	109,841	1,083,521,063	833,634,212	312,827,613	464,669,589
North Dakota.....	68	305	2,220	1,804	32,785,634	22,535,958	7,376,988	8,260,142
South Dakota.....	67	548	8,973	2,662	71,108,468	26,589,168	12,081,920	10,599,292
Nebraska.....	173	1,318	16,226	11,986	362,693,918	121,474,491	68,180,685	51,813,014
Kansas.....	320	1,596	29,750	17,623	529,741,435	221,871,759	123,042,449	82,324,170
SOUTH ATLANTIC:								
Delaware.....	103	357	13,499	10,143	82,324,225	67,371,817	41,147,771	28,003,583
Maryland.....	443	2,788	66,069	64,430	704,940,961	414,132,328	226,683,368	195,413,379
District of Columbia.....	35	512	1,687	8,065	15,723,266	73,249,619	0,816,672	42,956,143
Virginia.....	512	2,775	70,164	50,109	480,828,647	265,081,428	260,851,269	119,234,465
West Virginia.....	335	1,153	56,544	28,782	357,793,134	155,219,166	168,374,346	83,240,168
North Carolina.....	480	3,317	84,173	125,653	819,602,594	492,421,758	478,396,417	214,616,245
South Carolina.....	267	1,392	47,296	61,481	182,853,958	203,038,294	70,339,668	89,010,981
Georgia.....	512	3,667	60,124	98,650	355,495,417	366,958,886	130,440,346	164,208,360
Florida.....	319	1,893	23,629	41,339	100,781,601	131,604,826	54,972,979	30,515,208
EAST SOUTH CENTRAL:								
Kentucky.....	274	1,972	39,108	38,717	240,041,710	256,597,012	118,645,985	117,433,971
Tennessee.....	440	2,415	63,064	65,336	385,829,642	344,684,970	167,607,219	155,290,843
Alabama.....	453	2,415	65,057	54,502	355,163,866	205,214,266	165,476,534	102,648,210
Mississippi.....	276	1,635	22,645	29,441	106,851,813	114,066,379	50,002,131	57,323,204
WEST SOUTH CENTRAL:								
Arkansas.....	312	1,419	20,065	24,140	99,949,206	110,954,022	43,514,915	50,730,838
Louisiana.....	400	1,589	37,235	50,110	333,865,528	351,171,329	115,615,415	130,881,348
Oklahoma.....	333	1,325	16,909	14,786	300,550,163	155,849,134	85,647,981	63,755,819
Texas.....	1,066	4,192	67,262	67,236	921,380,839	528,865,592	246,921,112	213,385,091
MOUNTAIN:								
Montana.....	95	494	9,608	5,261	231,012,139	40,082,307	43,294,776	17,954,232
Idaho.....	127	435	9,274	6,374	60,063,058	36,283,963	24,746,832	19,741,689
Wyoming.....	57	191	5,023	1,235	87,739,085	8,558,991	29,846,074	4,281,918
Colorado.....	247	1,301	18,202	14,688	197,524,918	108,546,113	70,555,811	51,775,667
New Mexico.....	44	206	2,726	1,750	13,342,104	8,554,954	6,470,017	4,807,682
Arizona.....	57	291	6,478	5,073	150,828,582	49,173,635	15,368,978	16,910,644
Utah.....	145	506	9,089	6,512	163,282,485	51,946,370	34,097,940	22,628,804
Nevada.....	33	90	1,804	306	20,183,831	4,523,178	6,002,326	2,062,862
PACIFIC:								
Washington.....	377	3,295	33,165	31,665	336,355,208	450,206,653	118,789,322	243,359,513
Oregon.....	263	2,200	21,826	43,679	172,166,480	239,602,515	70,767,196	136,774,589
California.....	1,424	10,595	140,023	150,888	1,887,195,895	1,216,153,773	736,428,042	612,763,287