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STAMPED AND PRESSED METAL PRODUCTS; ENAMELING, JAPANING, AND LACQUERING

[A preliminary report for this industry was issued Mar. 17, 1937]

Description of the industry.—This industry classification embraces (1) establishments engaged primarily in the manufacture, from sheet metal other than aluminum, of automotive and other industrial stampings, kitchen utensils and other household ware, and such commodities as license plates, bottle seals, jar caps, etc.; and (2) those engaged in custom stamping, enameling, japanning, and lacquering. The classification does not cover all metal stamping, however. Among the exceptions are enameled plumbers' ware, a product of the Plumbers' Supplies industry, and various commodities classified as hardware, lighting fixtures, metal furniture, etc. Many of the products of this industry are used as materials by manufacturers classified elsewhere. Stamped aluminum ware is a product of the Aluminum Products industry. Unfinished stampings for motor vehicles are treated as products of this industry, but finished stamped motor-vehicle parts, such as fenders, are products of the Motor-Vehicle Bodies and Motor-Vehicle Parts industry.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	698	552	566	582	26.4	10.9
Proprietors and firm members.....	214	177	(1)	164	20.9	30.5
Salaried personnel, total ¹	6,709	(²)	(1)	5,888	(²)	13.9
Salaried officers of corporations.....	1,007	(²)	(1)	884	(²)	13.9
Supervisory, technical, and clerical employees.....	4 5,702	4 4,185	(1)	5,004	36.2	13.9
Salaries paid, total ²	\$16,148,127	(²)	(1)	\$17,025,920	(²)	-8.4
To salaried officers of corporations.....	\$5,906,048	(²)	(1)	\$6,644,789	(²)	-11.1
To supervisory, technical, and clerical employees.....	4 \$10,240,079	4 \$6,178,028	(1)	\$10,981,131	65.7	-6.7
Wage earners (average for year) ³	50,014	32,302	28,378	40,000	54.8	25.0
Wages.....	\$51,182,706	\$26,633,559	\$30,661,855	\$50,091,700	92.2	2.2
Cost of materials, etc., total.....	101,122,194	54,682,155	53,618,345	87,639,495	84.9	15.4
Cost of materials and supplies.....	96,239,950	(1)	(1)	83,073,493	(1)	15.4
Cost of fuel.....	2,284,283	(1)	(1)	2,613,464	(1)	-12.6
Cost of purchased electric energy.....	2,597,961	(1)	(1)	1,952,538	(1)	33.1
Value of products.....	208,671,891	117,372,026	122,696,407	204,306,134	77.8	2.1
Value added by manufacture ⁷	107,549,697	62,689,871	69,075,062	116,660,639	71.6	-7.3

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 1,565; salaries, \$4,569,476. Technical, 275; salaries, \$671,471. Clerical, 3,862; salaries, \$4,999,132. See sec. 10, p. 7.

⁵ Supervisory, 1,033; salaries, \$2,749,611. Clerical and other, 3,152; salaries, \$3,428,417. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States..	698	6,709	50,014	\$16,146,127	\$51,182,706	\$101,122,194	\$208,671,891	\$107,549,697
California.....	34	131	632	238,311	633,906	1,419,289	3,109,628	1,690,339
Colorado.....	3	12	54	20,720	61,888	70,700	206,881	136,181
Connecticut.....	26	199	2,089	536,079	2,137,178	2,767,824	6,676,305	3,908,481
Illinois.....	89	785	4,936	1,954,117	5,324,513	10,983,683	23,182,113	12,198,430
Indiana.....	27	329	2,290	762,133	2,230,934	4,575,446	9,350,087	4,774,641
Maryland.....	13	236	1,899	601,791	1,848,620	4,798,254	10,812,582	6,014,328
Massachusetts.....	43	269	1,898	783,855	1,933,451	3,149,815	7,000,760	3,850,945
Michigan.....	67	683	6,462	1,859,354	7,177,744	14,380,867	29,027,506	14,646,649
Minnesota.....	6	17	66	43,146	72,466	103,897	345,163	241,266
Missouri.....	18	116	893	288,653	795,099	1,974,197	3,878,281	1,904,084
New Jersey.....	35	226	1,663	534,749	1,604,827	1,962,926	5,177,097	3,214,171
New York.....	126	862	4,673	2,186,906	4,908,852	9,364,324	20,659,007	11,294,683
Ohio.....	106	1,584	12,673	3,833,343	13,248,339	27,105,384	53,348,665	26,243,311
Pennsylvania.....	45	517	3,785	1,010,093	3,695,330	6,104,615	13,177,105	7,072,490
Rhode Island.....	12	46	410	102,031	333,442	323,965	938,084	614,099
Tennessee.....	4	35	586	97,351	365,244	784,932	1,572,430	787,499
Washington.....	4	11	77	32,576	85,112	137,787	324,375	186,588
West Virginia.....	5	142	1,906	274,615	1,778,313	5,175,225	8,740,214	3,564,989
Wisconsin.....	21	438	2,553	809,052	2,566,853	4,746,041	8,943,839	4,197,798
Other States ¹	14	71	469	177,252	380,595	1,193,073	2,201,799	1,008,726

¹ Delaware, 1 establishment; Iowa, 4; Kansas, 1; Kentucky, 2; Maine, 1; Nebraska, 1; New Hampshire, 1; Texas, 1; Utah, 1; Virginia, 1. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year ¹	NUMBER REPORTED FOR—														
		January	February	March	April	May	June	July	August	September	October	November	December			
United States																
1935.....	50,033	47,679	50,464	52,078	51,519	51,213	47,545	45,909	46,378	49,157	51,900	53,210	53,249			
1933.....	32,302	(*)	(*)	24,713	(*)	(*)	32,146	(*)	(*)	38,796	(*)	(*)	36,109			
States, 1935																
California.....	632	494	519	551	617	604	683	630	657	698	689	670	674			
Colorado.....	54	45	52	57	54	54	62	59	61	51	50	53	53			
Connecticut.....	2,092	1,978	1,953	1,927	1,956	2,084	2,047	2,036	2,089	2,150	2,245	2,310	2,325			
Illinois.....	4,936	4,548	4,947	5,226	5,357	5,356	4,923	4,644	4,494	4,893	5,120	4,800	4,870			
Indiana.....	2,289	2,466	2,630	2,820	2,421	2,300	1,775	1,812	2,071	2,154	2,263	2,331	2,427			
Iowa.....	163	146	152	154	165	173	177	166	167	169	164	164	161			
Maryland.....	1,899	1,698	1,787	1,817	1,902	1,917	1,950	1,981	1,954	1,955	1,948	1,954	1,930			
Massachusetts.....	1,911	1,783	1,963	1,928	1,876	1,794	1,823	1,866	1,848	1,919	2,050	2,124	1,960			
Michigan.....	6,462	6,990	7,687	7,542	7,243	6,607	5,552	5,212	4,866	5,601	6,181	6,860	7,143			
Minnesota.....	66	38	41	50	53	67	54	79	71	86	83	86	86			
Missouri.....	896	786	827	897	945	922	940	896	907	917	935	918	868			
New Jersey.....	1,602	1,562	1,624	1,635	1,704	1,697	1,691	1,803	1,529	1,489	1,519	1,902	1,794			
New York.....	4,673	4,262	4,415	4,631	4,807	4,839	4,802	4,499	4,672	4,779	4,806	4,842	4,725			
Ohio.....	12,673	11,730	12,373	12,975	12,628	12,921	11,714	11,202	11,665	12,471	13,794	14,115	14,486			
Pennsylvania.....	3,785	3,665	3,794	3,985	4,012	4,007	3,691	3,438	3,461	3,737	3,920	3,895	3,815			
Rhode Island.....	410	409	392	368	340	329	337	379	471	482	526	481	401			
Tennessee.....	586	398	439	518	501	523	582	613	697	758	844	637	519			
Washington.....	77	55	58	61	73	81	82	83	90	95	84	85	81			
West Virginia.....	1,906	1,902	2,039	2,122	2,033	1,854	1,853	1,787	1,827	1,903	1,760	1,866	1,891			
Wisconsin.....	2,553	2,464	2,477	2,527	2,568	2,596	2,497	2,468	2,479	2,543	2,679	2,596	2,645			

* Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

¹As the averages for 1935 given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

TABLE 4.—PRODUCTS, BY KIND AND VALUE: 1929 TO 1935

	1935	1933	1931	1929
1. "Stamped and Pressed Metal Products; Enameling, Japanning, and Lacquering" industry, all products, total value.....	\$208, 671, 891	\$117, 372, 026	\$122, 606, 407	\$204, 306, 134
2. Stamped and pressed metal products, etc. . . .	175, 053, 931	98, 980, 132	108, 611, 076	171, 046, 794
3. Other products (not normally belonging to the industry), value.....	25, 088, 554	13, 562, 262	10, 871, 877	21, 584, 296
4. Receipts for custom stamping, enameling, japanning, and lacquering.....	8, 529, 406	4, 829, 632	5, 213, 454	11, 075, 044
5. Stamped and pressed metal products, value, and receipts for custom stamping, enameling, japanning, and lacquering, reported by establishments in other industries.....	77, 896, 251	31, 779, 088	23, 625, 705	44, 806, 002
Stamped and pressed metal products, etc., aggregate value, and receipts for custom work (sum of 2, 4, and 5).....	261, 479, 588	135, 588, 852	135, 450, 205	227, 617, 840
Stamped household ware other than vitreous-enameled and aluminum ware, total value.....	21, 632, 506	17, 974, 768	18, 453, 871	33, 213, 148
Galvanized-iron ware.....	6, 298, 305	5, 739, 926	6, 583, 028	8, 585, 481
Tinware.....	6, 146, 789	6, 331, 909	7, 716, 436	11, 743, 960
Japanned, lacquered, and paint-enameled ware.....	4, 113, 087	2, 321, 129	2, 162, 703	4, 421, 370
Other household ware.....	5, 074, 325	3, 531, 794	1, 991, 104	8, 462, 328
Motor-vehicle stampings.....	114, 632, 611	38, 516, 158	25, 837, 880	56, 985, 027
Other stampings, and stampings not reported by kind.....	57, 713, 323	28, 550, 252	35, 230, 988	55, 838, 399
Vitreous-enameled ware, ¹ total value.....	25, 506, 146	18, 770, 140	23, 082, 816	35, 017, 003
Household ware.....	17, 271, 169	12, 818, 672	16, 075, 467	23, 500, 048
Hospital ware.....	475, 701	5, 951, 477	7, 007, 340	11, 510, 955
Other vitreous-enameled ware.....	7, 759, 276	1, 492, 957	1, 887, 563	4, 300, 194
Perforated metals.....	2, 670, 095			
Bottle caps:				
Beverage crowns.....	12, 876, 597	23, 432, 123	25, 393, 025	30, 588, 125
Screw caps.....	17, 466, 138			
Receipts for custom work on materials owned by others, total value.....	8, 982, 172	5, 314, 772	5, 513, 252	11, 076, 044
Custom stamping.....	821, 241	2, 105, 717	1, 127, 181	4, 558, 800
Vitreous-enameling.....	4, 961, 659	2, 495, 664	3, 209, 234	4, 698, 891
Japanning, lacquering, and paint-enameling.....	3, 199, 272	713, 391	1, 176, 837	2, 417, 263
Stamped and pressed metal products not reported in detail.....		1, 537, 683		

¹ Produced to a large extent in the Motor-Vehicle Bodies and Motor-Vehicle Parts industry. See last sentence, "Description of the industry," p. 918.

² Not including enameled-iron sanitary ware (plumbers' goods). See report for Plumbers' Supplies industry.

1120

STEEL BARRELS, KEGS, AND DRUMS

[A preliminary report for this industry was issued May 7, 1937]

Description of the industry.—The principal products of the establishments classified in this industry are portable steel barrels, kegs, and drums, for shipping and storage purposes.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	64	58	52	53	(*)	(*)
Proprietors and firm members.....	11	7	(1)	8	(*)	(*)
Salaried personnel, total ¹	720	(3)	(1)	556	(3)	29.5
Salaried officers of corporations.....	71	(3)	(1)	88	(3)	(*)
Supervisory, technical, and clerical employees.....	⁴ 649	⁴ 498	(1)	468	30.3	38.7
Salaries paid, total ²	\$1,785,227	(3)	(1)	\$1,896,232	(3)	-5.9
To salaried officers of corporations.....	\$507,653	(3)	(1)	\$779,079	(3)	-34.8
To supervisory, technical, and clerical employees.....	⁴ \$1,277,574	⁴ \$932,656	(1)	\$1,117,153	37.0	14.4
Wage earners (average for year) ⁶	5,761	6,517	3,253	4,110	-11.6	40.2
Wages.....	\$5,839,272	\$6,025,934	\$3,512,696	\$5,769,097	-3.1	1.2
Cost of materials, etc., total.....	21,030,463	18,035,099	12,989,820	21,946,559	16.6	-4.2
Cost of materials and supplies.....	20,472,190	(1)	(1)	21,506,424	(1)	-4.8
Cost of fuel.....	190,517	(1)	(1)	226,215	(1)	-15.8
Cost of purchased electric energy.....	367,756	(1)	(1)	213,920	(1)	71.9
Value of products.....	34,649,993	30,399,426	21,644,288	37,825,027	14.0	-8.4
Value added by manufacture ⁷	13,619,530	12,364,327	8,654,468	15,878,468	10.2	-14.2

*Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 194; salaries, \$535,884. Technical, 46; salaries, \$98,498. Clerical, 409; salaries, \$648,202. See sec. 10, p. 7.

⁵ Supervisory, 147; salaries, \$446,836. Clerical and other, 351; salaries, \$486,320. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States.....	64	720	5,761	\$1,785,227	\$5,839,272	\$21,030,463	\$34,649,993	\$13,619,530
Illinois.....	5	107	897	258,110	866,663	2,796,041	4,620,003	1,823,982
Louisiana.....	3	11	124	27,248	95,258	443,272	876,277	433,005
New Jersey.....	6	51	435	128,948	551,609	2,120,636	3,338,465	1,217,829
Ohio.....	13	202	1,472	502,389	1,396,356	5,628,564	8,870,863	3,242,299
Pennsylvania.....	7	33	273	103,795	282,857	1,715,379	2,480,892	765,513
Texas.....	3	16	209	54,530	129,506	993,211	1,483,225	490,014
Other States ¹	27	300	2,352	710,207	2,517,023	7,333,360	12,980,288	5,646,908

¹ Alabama, 3 establishments; California, 5; Indiana, 1; Kentucky, 1; Maryland, 1; Michigan, 1; Minnesota, 2; Missouri, 4; New York, 4; Oklahoma, 1; Virginia, 1; Washington, 1; West Virginia, 1; Wisconsin, 1. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	5,761	5,102	5,298	5,469	5,660	5,746	5,944	5,973	5,786	5,794	6,353	6,160	5,835
1933.....	6,517	4,878	4,775	4,458	4,659	4,780	6,146	7,932	8,576	8,619	8,016	7,908	7,399
<i>States, 1935</i>													
Alabama.....	45	40	39	42	37	46	42	41	45	48	60	52	51
California.....	598	486	582	623	646	648	669	633	582	578	583	580	554
Illinois.....	897	773	833	845	903	978	997	933	853	819	987	987	857
Louisiana.....	124	108	115	113	120	129	125	125	122	120	138	152	116
Missouri.....	279	259	255	279	283	289	290	295	284	292	280	279	264
New Jersey.....	435	394	402	404	420	418	429	423	410	436	539	495	442
New York.....	135	126	126	126	107	133	132	126	136	145	155	156	155
Ohio.....	1,472	1,359	1,410	1,428	1,430	1,421	1,498	1,511	1,534	1,485	1,618	1,503	1,470
Pennsylvania.....	273	249	240	254	289	206	189	238	246	294	381	351	339
Texas.....	209	214	210	203	210	219	206	227	207	203	203	202	200

TABLE 4.—STEEL BARRELS, KEGS, AND DRUMS—PRODUCTION, BY KIND AND VALUE: 1935 AND 1933

[No comparable figures available for earlier years]

	1935	1933
1. Steel Barrels, Kegs, and Drums industry, all products, total value.....	\$34,649,993	\$30,399,426
2. Steel barrels, kegs, and drums.....	29,264,436	24,271,197
3. Other products (not normally belonging to the industry), value, and receipts for repair work.....	5,385,557	6,128,229
4. Steel barrels, kegs, and drums made as secondary products in other industries.....	3,839,028	6,029,411
Steel barrels, kegs, and drums, aggregate value (sum of 2 and 4).....	33,103,464	30,300,608
Barrels (except beer), kegs, and drums.....	30,419,748	(1)
Beer barrels.....	2,683,716	

¹ No data.

TABLE 5.—PRINCIPAL MATERIALS CONSUMED, BY KIND, QUANTITY, AND COST: 1935

[Quantities and costs of principal materials consumed were reported by only 47 of the 64 establishments in this industry. The combined value of products reported by these 47 establishments amounted to \$26,147,207, or 75.5 percent of the aggregate value of products of the 64 establishments in the industry. A further reason for the difference between the sum of the costs of the several kinds of materials as shown in this table and the total cost of materials as given in tables 1 and 2 is found in the fact that this table covers only certain specified materials, whereas the others cover all materials.]

	Total cost	QUANTITY REPORTED		Quantity not reported, cost
		Pounds	Cost	
Iron and steel—sheets and other forms.....	\$12,526,209	339,777,259	\$11,050,733	\$1,475,476
Copper, brass, and bronze.....	17,152	140,048	17,152	-----
Other metals.....	490,688	2,648,228	167,161	323,477

1112

STEEL-WORKS AND ROLLING-MILL PRODUCTS

[A preliminary report for this industry was issued Mar. 3, 1937]

Description of the industry.—This industry consists in the conversion of pig iron and scrap into steel and the rolling of iron and steel. In many cases the processes of conversion and rolling are performed in the same plants, and in such cases the value of products represents only the finished products. Some steel plants, however, produce crude steel or partly rolled steel, which is used as a material by other steel plants, and this causes some degree of duplication in the figures for value of products and cost of materials.

The amount of duplication in the total value of products for the industry cannot be accurately determined, but it is equal to the sum of (1) the major part of the value (\$211,600,686) of the ingots and semifinished rolled products (except for forgings) made for sale and for transfer to other plants operated under the same ownership or by affiliated companies and (2) a considerable but indeterminable part of the value (\$104,833,460) of the "interplant transfers" of direct steel castings, forgings, and finished rolled products made in certain plants and transferred to other plants operated under the same ownership or by affiliated companies for use as materials in further manufacture. All but a small portion of the ingots and semifinished rolled products manufactured for sale and for interplant transfer, and to a large extent the steel castings, forgings, and finished rolled products transferred to other plants, are used as materials within the industry, and therefore their values are again included in the total value of finished products. The tonnage produced and consumed in different departments of the same plant does not carry an assigned value, so no duplication arises from this source.

In many establishments the manufacturing processes are carried beyond the rolling stage. For example: Tin-dipping departments are operated by some of the black-plate rolling mills, wire-drawing departments by wire-rod mills, and pipe-and-tube departments by skelp mills. For this reason the industry overlaps a number of others, and the products include certain commodities identical in character with the primary products of other industries. (See table, p. 959; table 5, p. 966; and table 5, p. 932.)

A large part of the pig iron used as a material by steel works is delivered, mostly in a molten state, by blast furnaces operated in conjunction with the steel works. (See "Relation of Blast-Furnace Products and Steel-Works and Rolling-Mill Products industries," p. 874.)

Detailed statistics of products.—Statistics relating to individual products or classes of products are given in tables 4 to 9, inclusive. The presentation in table 4 is made under eight general headings, namely: Unrolled steel; semifinished rolled products; finished hot-rolled

products and forgings; scrap iron and steel; cinder and scale; miscellaneous products other than iron or steel; custom work and repairing; products further manufactured from finished rolling-mill and foundry products.

Table 4 has been prepared in such form as to show separately the tonnage produced and consumed in the same works, the tonnage produced and transferred to other plants under the same ownership or operated by affiliated companies, and the tonnage produced for sale. The tonnage transferred to other plants under the same ownership carries an assigned value, but no value is assigned to the tonnage produced and consumed in different departments of the same works.

In many cases rolling mills operate departments for the conversion of rolling-mill products into pipe and tubes, bolts and nuts, cut nails and spikes, and other finished iron and steel products. These products, when manufactured in plants other than departments of rolling mills, although in some cases under the same ownership, are classified in other industries. The total output of these products, by kind, quantity, and value, as reported for all industries, is shown, so far as practicable, in table 5, p. 932.

Tin plate and terneplate are manufactured almost exclusively and wire and wire products are made to a considerable extent in departments operated in connection with rolling mills. Statistics showing the total output of these commodities will be found in separate sections of this report. (See Tin Plate and Terneplate, p. 959, and table 5, Wire and Wire Products, p. 966.)

Steel castings.—Steel foundries are classified for Census purposes in the Steel-Works and Rolling-Mill Products industry. No attempt has been made since the 1929 census to compile separate figures for wage earners, wages, and cost of materials, fuel, and purchased electric energy for independent steel foundries. Table 6 shows, by States, the production of steel castings, including those made as secondary products in other industries. The figures include data for the tonnage produced and consumed in further manufacture by the establishments classified in this industry, but do not include such data for certain establishments classified in other industries—for example, those engaged in the manufacture of engines, pumps, motor vehicles, and agricultural implements—that are not required to report such production and consumption. The total production as given in this report does not, therefore, represent the entire production of steel castings in all industries, but it does cover with substantial completeness the total production by establishments classified in the Steel-Works and Rolling-Mill Products industry and that made for sale and for interplant transfer by establishments classified in other industries.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
					Number of establishments.....	396	304	446	486	0.5	-18.5
Proprietors and firm members..	4	3	(¹)	17	(*)	(²)
Salaried personnel, total ³	29,808	(³)	(¹)	36,987	(³)	-19.3
Salaried officers of corporations.....	711	(³)	(¹)	901	(³)	-21.1
Supervisory, technical, and clerical employees.....	⁴ 29,097	⁵ 23,387	(¹)	36,036	24.4	-19.3
Salaries paid, total ¹	\$73,282,760	(³)	(¹)	\$103,432,728	(³)	-29.1
To salaried officers of corporations.....	\$6,313,235	(³)	(¹)	\$9,836,747	(³)	-35.8
To supervisory, technical, and clerical employees.....	⁴ \$66,969,525	⁵ \$45,296,077	(¹)	\$93,595,970	47.8	-23.4
Wage earners (average for year) ⁶	359,630	276,847	264,634	394,574	29.9	-8.9
Wages.....	\$439,668,575	\$258,802,974	\$338,386,533	\$689,015,541	69.9	-36.2
Cost of materials, etc., total.....	1,110,462,593	692,088,923	831,883,897	1,904,083,157	60.5	-41.7
Cost of materials and supplies.....	977,527,237	(¹)	(¹)	1,695,804,135	(¹)	-42.4
Cost of fuel.....	104,312,253	(¹)	(¹)	176,054,440	(¹)	-40.8
Cost of purchased electric energy.....	23,623,103	(¹)	(¹)	32,224,582	(¹)	-11.2
Value of products.....	1,931,318,220	1,143,889,074	1,402,843,188	3,365,768,805	68.8	-42.6
Value added by manufacture ⁷	820,855,627	451,800,151	570,959,291	1,461,705,048	81.7	-43.8

*Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 9,357; salaries, \$32,356,783. Technical, 2,897; salaries, \$6,742,622. Clerical, 17,153; salaries, \$27,870,120. See sec. 10, p. 7.

⁵ Supervisory, 8,181; salaries, \$24,377,501. Clerical and other, 15,206; salaries, \$20,918,576. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, fuel, and purchased energy	Value of products	Value added by manufacture
United States.....	396	29,808	359,630	\$73,282,760	\$439,668,575	\$1,110,462,593	\$1,931,318,220	\$820,855,627
California.....	19	392	5,680	1,088,320	7,395,947	10,993,105	26,639,447	15,540,342
Illinois.....	35	3,089	24,787	7,200,591	34,140,780	95,372,409	162,516,399	67,143,990
Indiana.....	16	2,877	31,478	6,527,981	43,541,767	132,637,417	222,751,675	90,114,288
Michigan.....	18	661	15,731	2,117,521	22,151,219	47,753,460	85,813,130	38,059,670
New Jersey.....	11	932	6,292	2,089,871	6,434,013	9,991,238	24,509,615	14,518,382
New York.....	21	1,467	12,649	3,482,775	16,043,177	37,960,541	66,602,112	28,641,571
Ohio.....	63	4,798	81,695	12,201,437	102,996,315	289,482,875	478,608,677	189,143,802
Oregon.....	3	71	301	180,016	349,000	477,234	1,160,819	689,585
Pennsylvania.....	125	10,999	123,643	27,549,463	139,717,982	332,109,925	575,915,179	243,805,254
West Virginia.....	12	477	15,064	1,145,536	18,753,002	43,894,142	75,434,989	32,040,847
Wisconsin.....	12	357	2,982	812,403	3,457,143	6,053,299	11,429,551	5,376,252
Other States ¹	61	3,688	39,328	8,886,796	44,688,225	104,262,953	200,038,627	95,775,674

¹ Alabama, 8 establishments; Colorado, 3; Connecticut, 3; Delaware, 3; Georgia, 2; Iowa, 2; Kentucky, 3; Louisiana, 1; Maine, 1; Maryland, 5; Massachusetts, 6; Minnesota, 3; Missouri, 7; Oklahoma, 2; Rhode Island, 1; Tennessee, 2; Texas, 2; Utah, 1; Virginia, 2; Washington, 4. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935
 (See secs. 11 and 23, pp. 7 and 12)

		NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States		359,770	356,290	360,537	369,261	356,164	351,118	350,612	360,675	362,466	369,078	373,406	377,685
1933		276,847	220,841	204,025	218,871	233,084	270,477	310,840	334,063	337,307	336,590	316,754	317,658
States, 1935		7,948	8,059	8,153	8,080	8,127	7,335	7,249	7,506	7,767	8,412	8,440	8,515
Alabama		5,372	5,322	5,437	5,577	5,755	5,775	5,764	5,820	5,830	5,800	5,772	5,821
California		2,683	2,631	2,237	2,237	2,602	2,570	2,572	2,693	2,302	2,297	2,537	2,821
Colorado		777	815	825	798	799	793	792	796	824	866	910	944
Connecticut		649	631	667	673	688	687	683	704	701	696	683	686
Delaware		23,201	23,050	24,802	24,970	24,907	23,521	23,188	24,315	24,625	25,351	26,323	27,091
Illinois		20,985	20,937	30,364	31,002	30,494	30,523	30,494	32,172	32,792	33,234	33,980	35,404
Indiana		4,874	5,236	5,420	5,342	5,142	4,900	4,858	5,173	5,350	5,361	5,404	5,400
Kentucky		11,371	11,518	11,919	11,959	11,845	11,908	12,004	12,702	12,784	13,093	13,301	13,316
Maryland		2,468	2,470	2,475	2,416	2,435	2,452	2,399	2,406	2,466	2,452	2,503	2,473
Massachusetts		14,496	15,917	16,169	15,770	14,835	15,060	14,995	15,186	15,463	16,058	17,729	17,129
Michigan		1,168	1,254	1,360	1,534	1,590	1,501	1,522	1,482	1,484	1,406	1,498	1,369
Minnesota		1,935	2,056	2,249	2,357	2,488	2,515	2,422	2,799	2,788	2,773	2,679	2,792
Missouri		6,230	6,307	6,301	6,280	6,285	6,275	6,232	6,195	6,246	6,411	6,411	6,474
New Jersey		12,699	13,378	13,621	12,936	12,701	11,624	11,782	12,335	12,584	13,239	13,052	13,655
New York		77,972	81,146	82,822	82,605	81,328	80,522	79,319	82,105	82,105	82,721	83,388	84,307
Ohio		301	318	318	312	316	308	316	304	318	297	291	289
Oregon		119,678	123,067	124,235	123,724	122,312	123,803	122,065	124,135	123,202	125,708	126,606	127,241
Pennsylvania		611	649	688	673	642	649	655	660	611	605	621	611
Texas		14,351	15,227	15,048	14,301	14,717	13,171	15,211	15,298	16,400	16,347	15,457	15,233
Virginia		2,922	3,003	3,019	3,091	3,100	3,074	3,012	2,959	2,848	2,883	2,871	2,937
Washington													
West Virginia													
Wisconsin													

¹ As the 1935 averages given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935

[See "Description of the industry," p. 923. The term "interplant transfer" refers to transfers of the products of one plant for use as materials in another plant operated under the same or affiliated ownership]

	1935	1933	1931	1929
Total value.....	¹ \$1,931,318,220	\$1,143,889,074	\$1,402,843,188	\$3,365,788,805
Unrolled steel, total tons ²	34,404,809	23,162,713	25,895,640	56,160,683
Ingots, total tons.....	33,891,061	22,883,941	25,436,339	54,793,683
Made for sale:				
Tons.....	60,121	27,283	50,680	195,634
Value.....	\$2,900,261	\$1,058,096	\$1,687,923	\$6,239,183
Interplant transfers:				
Tons.....	176,755	105,520	192,660	465,309
Value.....	\$6,572,913	\$2,873,834	\$3,800,568	\$10,910,385
Produced and consumed in same works, tons.....	33,654,185	22,751,138	25,192,999	54,132,740
Direct steel castings, total tons.....	513,748	278,772	459,301	1,367,000
Made for sale:				
Tons.....	¹ 374,867	210,936	352,437	1,158,823
Value.....	¹ \$64,027,497	\$30,857,582	\$57,153,225	\$183,480,786
Interplant transfers:				
Tons.....	30,110	11,396	18,116	52,952
Value.....	\$3,414,074	\$1,438,261	\$2,403,450	\$7,916,915
Produced and consumed in same works, tons.....	108,771	56,440	88,748	155,225
Semifinished rolled products, total tons ³	32,001,089	21,543,943	23,584,587	48,528,607
Made for sale:				
Tons.....	2,819,260	3,226,874	2,728,266	6,714,525
Value.....	\$85,071,271	\$82,620,442	\$81,521,225	\$235,550,793
Interplant transfers:				
Tons.....	4,600,644	2,243,413	2,904,488	6,064,635
Value.....	\$124,760,214	\$55,336,589	\$80,151,350	\$185,776,910
Produced and consumed in same works, tons.....	24,581,185	16,073,656	17,951,833	35,749,447
Blooms, billets, and slabs, except for forging, total tons ⁴	25,182,000	16,549,999	18,724,175	38,819,107
Made for sale:				
Tons.....	1,555,744	1,485,563	871,887	2,727,604
Value.....	\$48,768,935	\$40,269,687	\$27,545,558	\$100,373,379
Interplant transfers:				
Tons.....	2,770,884	1,539,326	2,235,427	4,633,624
Value.....	\$76,685,190	\$39,229,254	\$63,564,140	\$144,418,740
Produced and consumed in same works, tons.....	20,855,372	13,525,110	15,616,861	31,457,879
Rolled blooms and billets for forging, total tons.....	266,564	121,195	172,946	657,808
Made for sale and for interplant transfer:				
Tons.....	201,164	64,138	69,398	269,675
Value.....	\$7,703,973	\$2,008,338	\$2,494,287	\$10,326,862
Produced and consumed in same works, tons.....	65,400	57,057	103,548	388,133
Sheet and tin-plate bars, total tons.....	6,463,010	4,787,084	4,564,915	8,710,921
Made for sale:				
Tons.....	1,106,542	1,677,654	1,791,833	3,751,311
Value.....	\$30,323,056	\$40,284,633	\$51,548,862	\$125,657,607
Interplant transfers:				
Tons.....	1,767,282	691,632	647,265	1,310,421
Value.....	\$45,476,328	\$15,741,738	\$15,741,618	\$36,658,608
Produced and consumed in same works, tons.....	3,589,186	2,417,798	2,125,817	3,649,189
Muck and scrap bar, total tons.....	89,515	85,665	122,551	340,771
Made for sale and for interplant transfer:				
Tons.....	18,288	11,974	16,944	86,525
Value.....	\$874,003	\$423,381	\$778,110	\$3,892,507
Produced and consumed in same works, tons.....	71,227	73,691	105,607	254,246

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935—Continued

[See note at head of table]

	1935	1933	1931	1929
Finished hot-rolled products and forgings, total tons ¹	24,318,077	16,160,603	18,396,161	39,882,941
Made for sale:				
Tons.....	13,769,099	9,947,844	11,899,187	27,261,988
Value.....	\$730,796,944	\$447,986,367	\$563,674,141	\$1,451,841,437
Interplant transfers:				
Tons.....	2,399,643	1,218,382	1,298,423	3,088,283
Value.....	\$101,419,386	\$47,558,798	\$51,282,126	\$152,991,522
Produced and consumed in same works, tons.....	8,149,335	4,994,377	5,198,551	9,532,670
Piercing billets, rounds, and blanks, for seamless pipes and tubes, total tons.....	962,233			
Number of establishments.....	16			
Made for sale and for interplant transfer:		(⁴)	(⁴)	(⁴)
Tons.....	73,639			
Value.....	\$3,920,021			
Produced and consumed in same works, tons.....	888,594			
Rails, total tons.....	693,300	397,508	1,141,404	2,602,016
Number of establishments.....	15	15	14	17
Made for sale and for interplant transfer:				
Tons.....	691,841	393,144	1,130,069	2,666,208
Value.....	\$25,541,173	\$15,157,302	\$48,190,793	\$113,924,509
Produced and consumed in same works, tons.....	1,459	4,364	11,425	25,808
Rerolled or renewed rails (not including rails rerolled by makers of ingots from new seconds):				
Number of establishments.....	4	4	3	7
Made for sale and for interplant transfer:			(⁴)	{
Tons.....	19,729	18,267		56,830
Value.....	\$685,307	\$637,065		\$1,932,790
Rail joints and fastenings, tie-plates, etc., total tons.....	271,935	201,641	383,705	877,066
Number of establishments.....	29	30	27	30
Made for sale and for interplant transfer:				
Tons.....	270,230	107,713	379,288	872,340
Value.....	\$12,885,408	\$9,316,031	\$19,095,588	\$47,760,823
Produced and consumed in same works, tons.....	1,705	3,928	4,417	4,717
Structural shapes (not assembled or fabricated), total tons.....	1,742,209	1,059,950	2,048,603	4,626,234
Number of establishments.....	55	48	40	43
Heavy (leg or web 3 inches and over):				
Made for sale:				
Tons.....	1,026,364			
Value.....	\$41,640,130			
Interplant transfers:		767,605	1,681,955	3,861,637
Tons.....	174,410	\$27,000,722	\$59,873,185	\$161,661,642
Value.....	\$7,234,207			
Light (leg or web less than 3 inches):				
Made for sale:				
Tons.....	370,904			
Value.....	\$16,530,422			
Interplant transfers:		224,167	302,640	608,125
Tons.....	45,992	\$8,215,356	\$11,795,046	\$27,336,049
Value.....	\$1,903,408			
Heavy and light, produced and consumed in same works, tons.....	124,539	68,178	64,098	156,272
Concrete-reinforcing bars (including twisted bars):				
Number of establishments.....	61	57	55	57
Made for sale and for interplant transfer:				
Tons.....	522,630	357,053	617,420	972,053
Value.....	\$22,244,016	\$12,308,788	\$23,081,083	\$42,416,829

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935—Continued

[See note at head of table]

	1935	1933	1931	1929
Finished hot-rolled products and forgings—Continued.				
Merchant bars, mill shafting, etc., total tons.....	3, 716, 204	2, 485, 717	2, 569, 576	6, 874, 440
Number of establishments.....	105	100	107	120
Steel bars, total tons.....	3, 662, 976	2, 438, 746	2, 515, 723	6, 676, 166
Open-hearth and Bessemer:				
Made for sale:				
Tons.....	2, 773, 733	2, 063, 602	2, 037, 143	5, 082, 380
Value.....	\$135, 501, 759	\$84, 774, 089	\$87, 848, 330	\$252, 121, 971
Interplant transfers:				
Tons.....	419, 019	154, 402	129, 753	984, 803
Value.....	\$20, 139, 679	\$6, 888, 740	\$5, 364, 389	\$53, 188, 755
Electric and crucible steel bars made for sale and for interplant transfer:				
Tons.....	122, 488	57, 469	64, 206	160, 991
Value.....	\$31, 715, 556	\$16, 176, 741	\$18, 424, 031	\$53, 290, 087
Stainless-steel bars made for sale and for interplant transfer:				
Tons.....	6, 822	(⁹)	(⁹)	(⁹)
Value.....	\$3, 650, 463	(⁹)	(⁹)	(⁹)
Produced and consumed in same works (open-hearth, Bessemer, electric, crucible, and stainless-steel bars), tons.....	340, 914	163, 273	284, 621	447, 992
Iron bars (merchant, etc.), total tons.....	53, 228	46, 971	53, 853	198, 274
Made for sale and for interplant transfer:				
Tons.....	51, 206	45, 247	52, 593	187, 076
Value.....	\$3, 622, 874	\$3, 348, 380	\$3, 695, 882	\$13, 283, 853
Produced and consumed in same works, tons.....	2, 022	1, 724	1, 260	11, 198
Wire rods, total tons.....	2, 378, 180	2, 033, 028	1, 845, 135	3, 151, 858
Number of establishments.....	46	49	47	48
Made for sale:				
Tons.....	549, 642	441, 793	437, 311	783, 052
Value.....	\$21, 470, 499	\$15, 396, 200	\$15, 470, 319	\$33, 045, 170
Interplant transfers:				
Tons.....	370, 611	293, 736	212, 764	372, 130
Value.....	\$14, 603, 671	\$10, 783, 139	\$7, 940, 955	\$16, 996, 928
Produced and consumed in same works, tons.....	1, 457, 927	1, 297, 499	1, 195, 060	1, 996, 676
Bolt and nut rods and spike and chain rods, total tons.....	237, 453	151, 196	179, 538	433, 283
Number of establishments.....	25	25	27	30
Made for sale and for interplant transfer:				
Tons.....	39, 804	33, 969	19, 842	120, 980
Value.....	\$1, 798, 445	\$1, 360, 886	\$842, 686	\$5, 683, 340
Bolt and nut rods produced and consumed in same works, tons.....	108, 866	63, 948	87, 901	155, 417
Spike and chain rods produced and consumed in same works, tons.....	88, 788	53, 279	71, 795	156, 886

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935—Continued

[See note at head of table]

	1935	1933	1931	1929
Finished hot-rolled products and forgings—Continued.				
Plates, No. 12 (0.109") and thicker (except stainless-steel), not coated, total tons.....	1,817,262	1,460,246	2,046,426	5,284,870
Number of establishments.....	55	52	56	60
Universal plates:				
Made for sale and for interplant transfer:				
Tons.....	462,544			
Value.....	\$19,886,955			
Produced and consumed in same works, tons.....	27,891			
Sheared plates:		1,398,485		
Made for sale and for interplant transfer:		\$51,280,330		
Tons.....	1,276,417	56,318		
Value.....	\$57,220,591		1,986,173	5,215,040
Produced and consumed in same works, tons.....	44,039		\$75,853,041	\$228,236,180
Saw plates made for sale and for interplant transfer:			60,253	65,930
Tons.....	6,371	5,442		
Value.....	\$1,673,451	\$1,179,310		
Sheets, No. 13 (0.095") and thinner (except stainless-steel), not coated, total tons.....	7,780,898	5,018,160	4,171,262	7,284,905
Number of establishments.....	78	75	88	92
Plain:				
Made for sale:				
Tons.....	2,888,831			
Value.....	\$160,832,690	2,554,698	1,907,182	3,897,840
Interplant transfers:		\$124,873,300	\$118,268,614	\$296,757,106
Tons.....	567,729			
Value.....	\$21,133,007			
Produced and consumed in same works, tons.....	2,107,365	674,449	798,076	1,416,663
Black for tinning (tin-mill black plate):				
Made for sale and for interplant transfer:				
Tons.....	416,046	122,748	114,034	143,200
Value.....	\$27,409,684	\$7,082,148	\$7,651,769	\$10,179,155
Produced and consumed in same works, tons.....	1,810,927	1,666,265	1,351,970	1,827,193
Stainless-steel plates and sheets made for sale and for interplant transfer:				
Tons.....	13,615	10,377	(⁹)	(⁹)
Value.....	\$9,147,892	\$6,011,656		
Strips, bands, flats, scroll, and hoops, narrower than 24 inches, total tons.....	2,182,135	1,492,213	1,402,820	2,726,171
Number of establishments.....	61	53	47	44
Hot-rolled strips and flats for cold-rolling:				
Made for sale:				
Tons.....	835,091	431,500		381,859
Value.....	\$40,409,221	\$17,087,744		\$16,687,505
Interplant transfers:			402,437	
Tons.....	99,335	23,093	\$18,052,479	96,799
Value.....	\$4,996,142	\$952,993		\$4,659,018
Stainless-steel strips and flats made for sale and for interplant transfer:				
Tons.....	7,506	(¹⁰)	(¹⁰)	(¹⁰)
Value.....	\$3,894,799			
Hot-rolled strips and flats for cold rolling, and stainless-steel strips and flats, produced and consumed in same works, tons.....	316,267	270,080	280,523	583,502
Other hoops, bands, and strips:				
Made for sale:				
Tons.....	803,074	674,880	592,866	1,456,923
Value.....	\$40,034,394	\$27,604,764	\$27,123,101	\$70,201,164
Interplant transfers:				
Tons.....	24,891	21,260	64,671	70,873
Value.....	\$1,218,097	\$824,589	\$2,729,512	\$3,583,073
Produced and consumed in same works, tons.....	95,971	71,400	62,323	136,209

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935—Continued

[See note at head of table]

	1935	1933	1931	1929
Finished hot-rolled products and forgings—Continued.				
Cotton ties:				
Number of establishments.....	4	4	4	5
Made for sale:				
Tons.....	23,767	45,733	47,551	38,216
Value.....	\$1,072,415	\$1,487,954	\$1,931,934	\$1,842,250
Skelp, total tons.....	1,376,481	1,016,913	1,472,213	3,558,050
Number of establishments.....	36	33	34	39
Made for sale:				
Tons.....	434,496	275,329	306,568	654,721
Value.....	\$15,840,783	\$8,938,355	\$10,412,935	\$25,414,922
Interplant transfers:				
Tons.....	267,312	192,232	312,733	616,634
Value.....	\$9,374,916	\$6,267,654	\$10,906,937	\$24,706,274
Produced and consumed in same works, tons.....	674,673	549,352	852,912	2,286,695
Axles, rolled and forged:				
Number of establishments.....	8	8	10	11
Made for sale and for interplant transfer:				
Tons.....	42,854	54,578	26,894	150,448
Value.....	\$3,041,687	\$2,788,392	\$2,238,631	\$12,038,622
Car and locomotive wheels, rolled and forged:				
Number of establishments.....	6	6	8	8
Made for sale and for interplant transfer:				
Tons.....	82,675	69,288	84,405	209,182
Value.....	\$7,909,318	\$6,486,221	\$7,689,367	\$19,352,111
Armor plate and ordnance:				
Number of establishments.....	8	7	5	6
Made for sale:				
Tons.....	21,278	7,510	17,212	9,939
Value.....	\$8,846,045	\$2,080,491	\$6,184,386	\$3,287,261
Sheet piling, plain:				
Number of establishments.....	5	4	3	(5)
Made for sale and for interplant transfer:				
Tons.....	127,166	42,451	63,276	(5)
Value.....	\$5,939,196	\$1,637,825	\$2,525,044	(5)
Rolled and forged iron and steel products not elsewhere specified, total tons.....	296,068	238,774	278,532	937,371
Made for sale:				
Tons.....	203,293	143,478	167,591	534,419
Value.....	\$25,679,460	\$15,367,546	\$19,059,587	\$57,482,580
Interplant transfers:				
Tons.....	35,387	44,976	39,024	141,440
Value.....	\$1,568,549	\$2,320,414	\$2,634,019	\$8,862,992
Produced and consumed in same works, tons.....	57,388	50,320	71,917	261,512
Scrap iron and steel, total tons.....	10,172,362	7,206,690	8,305,174	16,818,460
For sale:				
Tons.....	678,774	687,199	850,290	1,871,891
Value.....	\$8,673,272	\$6,991,501	\$10,450,074	\$28,894,147
Interplant transfers:				
Tons.....	857,855	343,753	558,644	958,170
Value.....	\$8,642,093	\$3,263,656	\$6,194,577	\$13,207,281
Produced and consumed in same works, tons.....	8,635,733	6,175,738	6,896,240	13,988,399
Cinder and scale, total tons.....	1,943,984	1,355,853	1,508,525	3,340,568
For sale:				
Tons.....	214,490	173,167	217,162	432,010
Value.....	\$652,541	\$380,466	\$509,088	\$1,163,744
Interplant transfers:				
Tons.....	1,046,504	535,514	403,300	762,322
Value.....	\$2,308,939	\$882,355	\$799,308	\$1,537,313
Produced and consumed in same works, tons.....	682,990	647,172	888,063	2,146,236

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935—Continued

[See note at head of table]

	1935	1933	1931	1929
Further-manufactured products made in departments operated in connection with steel works and rolling mills from finished rolling-mill and foundry products, value ¹	\$786,376,946	\$460,008,981	\$539,858,816	\$1,080,005,515
Miscellaneous products other than iron and steel, and electric energy sold, value.....	\$4,078,551	\$1,828,963	\$1,993,508	\$3,131,099
Receipts for contract, custom, and repair work.....	\$1,623,318	\$798,214	\$1,360,803	\$3,110,675

¹ In addition, 58,289 tons of steel castings, valued at \$8,254,925, were produced in 1935 for sale and for interplant transfer by establishments classified in other industries. Steel castings are also produced for consumption in further manufacture to some extent in other industries, but no data in regard to such production are collected.

² See table 7, p. 937, for distribution by process.

³ Figures for prior years not strictly comparable with those for 1935; see footnotes 4 and 8.

⁴ Data on the production of piercing billets, rounds, and blanks for seamless pipes and tubes were not reported separately in censuses prior to 1935. The tonnage produced and further processed in works for years prior to 1935 is included in the corresponding item under "Blooms, billets, and slabs," p. 927, whereas the tonnage and value made for sale and for interplant transfer are included in some cases in the corresponding figures under "Blooms, billets, and slabs" and in other cases in those under "Rolled and forged iron and steel products not elsewhere specified," p. 931.

⁵ Not reported separately; included in figures for "Rolled and forged iron and steel products not elsewhere specified," p. 931.

⁶ Not reported separately; probably included in figures for "Open-hearth and Bessemer" and "Electric and crucible" steel bars.

⁷ Includes 1,409 tons of stainless-steel rods.

⁸ The total tonnage of plain sheets shown for 1933, 1931, and 1929 is comparable with that reported for 1935. The break-down of this tonnage into "Made for sale," "Interplant transfers," and "Produced and consumed in same works" for 1933, 1931, and 1929 is not, however, comparable with that for 1935 because of the fact that data for cold-rolled sheets, which were not reported separately for 1933, 1931, and 1929, are included for these years in the "Made for sale" and "Interplant transfers" figures, whereas for 1935 the tonnage further processed by cold rolling is included in the figure for "Produced and consumed in same works," and the corresponding value, \$83,753,173, is included in the amount given for "Further-manufactured products made in departments operated in connection with steel works and rolling mills from finished rolling-mill and foundry products," p. 932. The detailed figures are given in table 5, below.

⁹ Not reported separately; included in figures for other types of plates and sheets.

¹⁰ Not reported separately; included in figures for other classifications under "Strips, bands, flats, scroll, and hoops."

¹¹ In addition to rolled and forged products not specified, the figures cover tonnage of axles, car and locomotive wheels, concrete-reinforcing bars, rolled rails, and sheet piling produced and consumed in same works, for which separate figures cannot be given without disclosing, exactly or approximately, the production reported by individual establishments.

¹² Tin plate and terneplate (see table, p. 959); wire and wire products (see table 5, p. 966); wrought pipe and tubes; bolts, nuts, washers, and rivets; cut nails, spikes, and tacks; galvanized plates and sheets; corrugated sheets; cold-rolled sheets and strips; cold-finished steel bars; horseshoes; railroad spikes; iron and steel rolls for rolling mills; and ball and roller bearings (see table 5, below).

TABLE 5.—PRINCIPAL MANUFACTURES FROM ROLLING-MILL PRODUCTS, OTHER THAN TIN PLATE AND TERNEPLATE AND WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, AND NUMBER OF ESTABLISHMENTS REPORTING: 1929 TO 1935

[The phrase "Made in Rolling-Mill industry," as here used, refers to products manufactured in departments operated in steel works and rolling mills]

	1935	1933	1931	1929
Railroad spikes: ¹				
Establishments.....	20	19	19	19
Kegs (200 pounds).....	1,030,157	678,417	829,029	1,857,105
Value.....	\$5,050,972	\$3,140,852	\$4,337,736	\$10,337,883
Bolts, nuts, rivets, washers, etc., total value ²	\$69,031,344	\$43,013,297	\$49,845,849	\$126,507,797
Made in Rolling-Mill industry:				
Establishments.....	24	26	23	27
Value.....	\$10,436,515	\$6,792,073	\$8,477,039	\$18,800,021
Made in other industries:				
Establishments.....	226	172	185	185
Value.....	\$58,594,829	\$36,221,224	\$41,368,810	\$107,017,776

For footnotes, see end of table.

TABLE 5.—PRINCIPAL MANUFACTURES FROM ROLLING-MILL PRODUCTS, OTHER THAN TIN PLATE AND TERNEPLATE AND WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, AND NUMBER OF ESTABLISHMENTS REPORTING: 1929 TO 1935—Continued

[See note at head of table]

	1935 ¹	1933	1931	1929
Bolts, etc.—Continued.				
Iron and steel—				
Bolts and nuts:				
Quantity reported:				
Kegs (200 pounds).....	2,814,563	2,183,330		
Value.....	\$34,838,594	\$25,744,378		
Quantity not reported, value.....	\$12,175,918	\$5,798,286		
Rivets:				
Quantity reported:				
Kegs (200 pounds).....	710,262	637,900		
Value.....	\$5,512,375	\$4,391,024		
Quantity not reported, value.....	\$2,085,485	\$374,345		
Washers:			(4)	(4)
Quantity reported:				
Kegs (200 pounds).....	285,433	121,551		
Value.....	\$4,238,941	\$1,784,695		
Quantity not reported, value.....	\$2,731,556	\$1,322,619		
Turnbuckles, toggle bolts, etc., value.....	\$3,359,723	\$1,311,484		
Nonferrous bolts, nuts, rivets, washers, etc., value.....	\$4,088,752	\$1,578,378		
Not reported by kind or by quantity, value.....		\$708,088		
Cut and wrought nails, spikes, and tacks, total value ²	\$5,142,276	\$4,715,758	\$5,059,805	\$7,503,760
Establishments.....	32	30	34	33
Cut nails and spikes:				
Pounds.....	27,403,000	* 23,409,340	45,796,200	} \$6,436,835 \$6,370,918
Value.....	\$1,518,583	* \$1,326,276	\$2,267,060	
Cut tacks:				
Quantity reported:				
Pounds.....	26,763,517	* 24,446,663	25,236,567	} \$2,290,599
Value.....	\$2,905,433	* \$2,332,631	\$2,290,599	
Quantity not reported, value.....	\$113,602	\$460,017		
Horseshoe nails:				
Kegs (100 pounds).....	52,302	57,915	43,900	98,750
Value.....	\$604,678	\$596,834	\$502,146	\$1,132,842
Nails and tacks not reported by kinds specified above, value:				
Thumb tacks.....	\$217,525	(7)	(7)	(7)
Upholstery nails.....	\$270,445			
Copper and brass nails, tacks, and staples separately reported:				
Pounds.....	2,521,900	(7)	(7)	(7)
Value.....	\$527,143			
Galvanized plates, sheets, and strips, made for sale as such, total value ²	\$71,087,474	\$44,303,711	\$49,810,801	\$103,929,658
Establishments.....	30	30	31	30
Plain:				
Tons (2,240 pounds).....	587,969	430,809	444,654	959,524
Value.....	\$43,475,708	\$28,381,251	\$31,429,894	\$77,566,887
Corrugated or crimped:				
Tons (2,240 pounds).....	358,886	243,542	262,307	306,423
Value.....	\$27,611,766	\$15,922,460	\$18,380,907	\$26,362,771
Corrugated or crimped sheets, not galvanized, made in Rolling-Mill industry:				
Tons (2,240 pounds).....	6,506	2,338	3,026	5,285
Value.....	\$542,981	\$140,486	\$175,218	\$380,388
Wrought pipe and tubing, total value.....	\$214,699,964	\$120,623,427	\$200,224,982	\$455,276,528
Wrought-welded, total value.....	\$122,010,637	\$70,056,236	\$133,781,984	\$296,094,404
Boiler tubes: ³				
Establishments.....	4	5	7	7
Tons (2,240 pounds).....	15,721	17,344	16,939	40,628
Value.....	\$1,916,047	\$1,829,922	\$1,920,016	\$4,851,283
Oil-country casing, tubing, and pipe: Made in Rolling-Mill industry:				
Establishments.....	7	8	8	9
Tons (2,240 pounds).....	67,687	69,146	151,640	888,338
Value.....	\$4,783,022	\$4,487,753	\$9,822,162	\$61,707,710

For footnotes, see end of table.

TABLE 5.—PRINCIPAL MANUFACTURES FROM ROLLING-MILL PRODUCTS, OTHER THAN TIN PLATE AND TERNEPLATE AND WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, AND NUMBER OF ESTABLISHMENTS REPORTING: 1929 TO 1935—Continued

[See note at head of table]

	1935 ¹	1933	1931	1929
Wrought pipe and tubing—Continued.				
Wrought-welded—Continued.				
Oil-country casing—Continued.				
Made in other industries:				
Establishments.....	7	11	17	13
Tons (2,240 pounds).....	170, 246	82, 228	434, 215	493, 330
Value.....	\$14, 354, 966	\$6, 202, 359	\$33, 172, 356	\$39, 662, 352
Other black pipe:				
Made in Rolling-Mill industry:				
Establishments.....	16	18	17	15
Tons.....	398, 815	293, 510	465, 115	948, 065
Value.....	\$28, 086, 540	\$18, 354, 205	\$32, 270, 539	\$72, 067, 952
Made in other industries:				
Establishments.....	35	29	38	23
Tons (2,240 pounds).....	262, 386	187, 111	265, 866	531, 259
Value.....	\$25, 234, 034	\$13, 522, 360	\$21, 679, 210	\$45, 172, 186
Galvanized pipe:				
Made in Rolling-Mill industry:				
Establishments.....	10	11	11	11
Tons (2,240 pounds).....	176, 988	174, 472	192, 723	402, 497
Value.....	\$15, 130, 097	\$13, 562, 171	\$18, 019, 000	\$38, 708, 341
Made in other industries:				
Establishments.....	15	14	13	8
Tons (2,240 pounds).....	126, 249	77, 365	116, 673	171, 029
Value.....	\$13, 371, 260	\$6, 833, 836	\$11, 552, 418	\$19, 239, 584
Mechanical tubing: ³				
Establishments.....	20	13	15	15
Quantity reported:				
Tons (2,240 pounds).....	90, 029	31, 906	28, 627	77, 178
Value.....	\$16, 475, 021	\$5, 213, 630	\$4, 770, 907	\$11, 486, 952
Quantity not reported, value.....	\$2, 659, 650		\$575, 376	\$3, 147, 544
Heavy riveted and lock-joint: ⁴				
Establishments.....	29	44	(?)	(?)
Value.....	\$2, 152, 290	\$1, 211, 813	\$4, 022, 933	\$10, 252, 415
Seamless: ² total value.....	\$90, 537, 037	\$49, 355, 378	\$62, 420, 065	\$148, 929, 700
Boiler tubes:				
Establishments.....	11	11	9	9
Tons (2,240 pounds).....	83, 672	62, 737	70, 784	185, 360
Value.....	\$10, 711, 738	\$7, 083, 230	\$8, 594, 836	\$21, 723, 457
Oil-country casing, tubing, and pipe:				
Establishments.....	10	11	12	13
Tons (2,240 pounds).....	612, 770	319, 343	568, 733	882, 732
Value.....	\$55, 617, 249	\$26, 850, 145	\$40, 386, 530	\$81, 369, 301
Other black pipe and galvanized pipe:				
Establishments.....	8	8	7	5
Tons (2,240 pounds).....	43, 656	18, 562	12, 788	31, 702
Value.....	\$4, 475, 061	\$1, 690, 788	\$1, 603, 177	\$3, 028, 517
Mechanical tubing:				
Establishments.....	12	14	12	12
Tons (2,240 pounds).....	118, 545	75, 543	69, 687	229, 035
Value.....	\$19, 732, 989	\$13, 731, 215	\$11, 835, 522	\$42, 208, 344
Horse and mule shoes: ²				
Establishments.....	9	8	8	9
Kegs (100 pounds).....	248, 235	311, 398	293, 538	417, 182
Value.....	\$1, 584, 492	\$1, 950, 408	\$1, 428, 968	\$2, 663, 713
Horse and mule shoe calks:				
Establishments.....	5	4	8	10
Value.....	\$206, 751	\$220, 561	\$250, 794	\$538, 603
Cold-rolled sheets (not including black for tin-ning), 24 inches and over in width: ^{2, 9}				
Establishments.....	25	(?)	(?)	(?)
Tons (2,240 pounds).....	1, 269, 909			
Value.....	\$83, 761, 068			
Cold-rolled strip steel, flat bright, except cold-rolled from drawn wire: ¹⁰				
Total tons (2,240 pounds).....	556, 739	405, 221	341, 409	(?)
Total value.....	\$54, 763, 486	\$35, 410, 147	\$34, 017, 294	
Made in Rolling-Mill industry:				
Establishments.....	19	19	16	(?)
Tons (2,240 pounds).....	297, 688	250, 306	200, 002	
Value.....	\$28, 154, 322	\$20, 210, 567	\$19, 113, 018	
Made in other industries:				
Establishments.....	22	30	25	(?)
Tons (2,240 pounds).....	259, 051	154, 915	141, 407	
Value.....	\$26, 609, 164	\$15, 199, 580	\$14, 904, 270	

For footnotes, see end of table.

TABLE 5.—PRINCIPAL MANUFACTURES FROM ROLLING-MILL PRODUCTS, OTHER THAN TIN PLATE AND TERNEPLATE AND WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE, AND NUMBER OF ESTABLISHMENTS REPORTING: 1929 TO 1935—Continued

[See note at head of table]

	1935 ¹	1933	1931	1929
Cold-rolled strip steel—Continued.				
Widths 6 inches and narrower:				
Razor-blade strip (0.01" and thinner):				
Tons (2,240 pounds).....	908			
Value.....	\$697,369			
Other:				
Tons (2,240 pounds).....	306,684	212,599	166,071	348,480
Value.....	\$33,773,183	\$21,445,747	\$19,155,441	\$39,536,721
Wider than 6 inches but under 12 inches:				
Tons (2,240 pounds).....	133,803	86,661	75,858	220,729
Value.....	\$11,473,910	\$6,844,433	\$7,256,391	\$18,335,481
Widths 12 inches and over but under 24 inches:				
Tons (2,240 pounds).....	115,344	105,961	99,480	(⁴)
Value.....	\$8,819,024	\$7,119,967	\$7,611,462	
Cold-finished steel bars, total value.....	\$44,846,386	\$26,026,818	\$24,833,337	\$71,755,645
Made in Rolling-Mill industry:				
Establishments.....	13	11	9	12
Tons (2,240 pounds).....	169,832	106,333	93,826	271,727
Value.....	\$13,447,775	\$6,976,986	\$7,090,499	\$22,782,963
Made in other industries:				
Establishments.....	25	24	27	36
Tons (2,240 pounds).....	454,330	(⁷)	(⁷)	(⁷)
Value.....	\$31,398,611	\$19,049,832	\$17,742,838	\$48,972,682
Drawn in coils:				
Tons (2,240 pounds).....	51,404			
Value.....	\$4,449,536			
Drawn in straight lengths:				
Tons (2,240 pounds).....	572,758	372,224	329,489	728,731
Value.....	\$40,396,850	\$25,191,504	\$24,135,650	\$58,286,896
Cold-finished steel bars not reported by quantity, value.....		\$835,314	\$697,087	\$13,468,749
Ball bearings and roller bearings and parts, total value.....	\$86,571,271	\$40,530,143	\$50,528,087	\$120,033,812
Establishments.....	60	47	56	70
Ball bearings and parts, total.....	\$44,617,502	\$21,153,613	\$28,309,509	\$66,880,624
Ball bearings.....	¹¹ \$41,484,062			
Balls made for sale as such.....	¹¹ \$2,247,868	(¹²)	(¹²)	(¹²)
Other parts made for sale as such.....	¹¹ \$785,572			
Roller bearings and parts, total.....	\$42,053,769	\$19,376,530	\$22,218,578	\$53,153,188
Roller bearings.....	¹¹ \$41,148,965			
Rollers made for sale as such.....	¹¹ \$804,665	(¹²)	(¹²)	(¹²)
Other parts made for sale as such.....	¹¹ \$100,139			
Rolls for rolling mills:				
Steel: ²				
Tons (2,240 pounds).....	31,204	22,679	32,404	45,752
Value.....	\$5,652,608	\$3,771,236	\$5,413,104	\$6,852,598
Iron:				
Tons (2,240 pounds).....	77,093	79,369	66,460	126,074
Value.....	\$9,297,250	\$9,313,077	\$7,935,177	\$14,533,031

¹ In addition to the products covered by this table, steel works and rolling mills reported, for 1935, the manufacture, for sale, of the following commodities: Fabricated structural steel, 73,818 tons (2,240 pounds), valued at \$4,593,365; switches, frogs, and crossings, 30,493 tons, \$5,154,204; grey-iron and malleable-iron castings, 257,534 tons, \$9,101,056; heat-corrosion-resistant alloy castings, 1,176 tons, \$1,028,611; nonferrous-metal castings, 378,706; polished, planished, and glanced sheets and pressed, stamped, and other shapes not advanced beyond pressing, 152,911 tons, \$12,125,225; machinery, \$22,073,489; miscellaneous products, including steel springs, \$41,968,498. Figures showing the total output of these products in all industries in which they are manufactured are given, so far as available, in the reports for the industries to which they normally belong. For production of tin plate and terneplate and of wire and wire products, including that reported by departments operated in connection with steel works and rolling mills, see table on p. 950, and table 5, p. 966.

² Made wholly or almost wholly in Rolling-Mill industry.

³ Not including machine screws. For statistics on production of machine screws, cap and set screws, and other screw-machine products, and wood screws, see report entitled "Screw-Machine Products and Wood Screws."

⁴ No comparable figures available.

⁵ For production of wire nails, brads, spikes, tacks, and staples, see table 5, p. 966.

⁶ Revised.

⁷ No data.

⁸ Production in Rolling-Mill industry and in other industries given in combination only, to avoid disclosing approximations of data reported by individual establishments.

⁹ Includes sheets (less than 2 percent of tonnage) slit to widths under 24 inches.

¹⁰ For production of cold-rolled from drawn wire, see table 5, p. 966.

¹¹ The figures for ball bearings and for roller bearings include the values of balls or rollers and other parts made for sale as such, not reported separately by certain manufacturers, and as a result these figures overstate slightly, while those for balls, rollers, and other parts made for sale as such understate somewhat, the actual values of the respective classes of products made in 1935.

¹² Not reported separately.

TABLE 6.—PRODUCTION (TONS) OF STEEL (BY PROCESS), FINISHED ROLLED PRODUCTS AND FORGINGS, AND STEEL CASTINGS, FOR THE UNITED STATES, 1929 TO 1935, AND FOR STATES, 1935

[This table presents statistics for all States for which separate figures can be published without disclosing exact or approximate data for individual establishments. Certain of the "Other States," however, reported the production of larger quantities of steel than did some of those for which separate figures are given]

[Ton, 2,240 pounds]

STATE	STEEL, BY PROCESS				Finished rolled products and forgings ¹	Steel castings ¹
	Total	Open-hearth	Bessemer	Openble and electric		
<i>United States</i>						
1935.....	34,404,809	30,857,898	2,839,397	707,514	24,318,077	572,037
1933.....	23,162,713	20,337,784	2,428,585	396,344	16,160,603	309,538
1931.....	25,895,640	22,518,208	3,018,938	358,494	18,396,161	486,427
1929.....	56,160,683	48,237,387	7,109,923	813,373	39,882,941	1,454,530
<i>States, 1935</i>						
Alabama and Georgia.....	(²)	(²)	-----	(²)	792,637	(²)
California.....	(²)	(²)	-----	(²)	570,592	20,975
Colorado.....	(²)	(²)	-----	(²)		3,333
Illinois.....	3,000,061	6,973,440	{ (²)	{ (²)	2,036,925	54,777
Indiana.....	4,533,407				(²)	(²)	3,219,646	41,690
Louisiana.....	(²)	-----	-----	(²)	-----	1,141
Michigan.....	(²)	(²)	(²)	(²)	1,246,625	(²)
Missouri.....	(²)	(²)	-----	(²)	(²)	7,762
New Jersey.....	(²)	(²)	(²)	(²)	84,069	8,260
New York.....	1,294,849	1,232,455	-----	(²)	928,571	32,355
Ohio.....	9,367,441	7,745,122	1,862,039	260,280	5,952,306	79,362
Pennsylvania.....	8,830,431	7,900,901	766,221	163,309	6,446,010	189,852
Washington.....	(²)	(²)	-----	(²)	(²)	1,675
West Virginia.....	(²)	(²)	(²)	(²)	940,455	(²)
Wisconsin.....	(²)	(²)	-----	(²)	(²)	31,763
Other States.....	4 7,378,620	4 7,005,980	4 711,137	4 283,925	4 2,099,332	4 6 99,202

¹ Not including rolled blooms and billets for forging. Figures for prior years not strictly comparable with those for 1935. See footnote 4, table 4.

² The figures in this column cover the production of steel castings for sale in all industries from which such production was reported. They also include data for steel castings produced for consumption in the same plants in the Steel-Works and Rolling-Mill Products industry. Establishments in other industries—for example, Motor Vehicles, Engines, Pumps, and Agricultural Implements—that produce steel castings for use in further manufacture in the same plants do not report this production to the Census Bureau.

³ Withheld to avoid disclosing approximations of data for individual establishments or corporations; included in figures for "Other States."

⁴ Includes data for States covered by footnote 3.

⁵ Includes a considerable tonnage of steel castings transferred from one plant to another operated by the same company.

TABLE 7.—STEEL INGOTS AND CASTINGS—PRODUCTION (TONS), BY QUANTITY AND BY PROCESS, FOR THE UNITED STATES: 1929 TO 1935

[Ton, 2,240 pounds]

PROCESS	1935	1933	1931	1929
Ingots and castings, total.....	34,404,809	23,162,713	25,895,640	56,160,683
Open-hearth, total.....	30,857,898	20,337,784	22,518,208	48,237,887
Basic.....	30,418,913	20,033,695	22,131,176	47,141,354
Acid.....	438,985	304,089	387,032	1,096,033
Bessemer.....	2,839,397	2,428,585	3,018,938	7,109,923
Electric or electrically refined.....	706,333	395,375	357,140	806,789
Crucible.....	1,181	969	1,354	6,584
Ingots, total.....	33,891,061	22,883,941	25,436,339	54,793,683
Open-hearth, total.....	30,538,918	20,151,878	22,200,675	47,196,242
Basic.....	30,301,403	19,961,197	22,009,391	46,617,671
Acid.....	237,515	190,681	191,284	578,571
Bessemer.....	2,835,137	2,426,266	3,011,394	7,096,275
Electric or electrically refined and crucible.....	517,006	305,797	224,270	501,166
Direct steel castings, total ¹	513,748	278,772	459,301	1,367,000
Open-hearth, total.....	318,980	185,906	317,533	1,041,145
Basic.....	117,510	72,498	121,785	523,683
Acid.....	201,470	113,408	195,748	517,462
Bessemer.....	4,260	2,319	7,544	13,648
Electric or electrically refined and crucible.....	190,508	90,547	134,224	312,207

¹ For total production of steel castings, see table 6.

TABLE 8.—STEEL INGOTS AND CASTINGS—PRODUCTION FOR CONSUMPTION AND FOR SALE, FOR THE UNITED STATES: 1929 TO 1935, AND BY PROCESS, 1935

	Total production, tons (2,240 lbs.)	FOR CONSUMPTION BY PRODUCING COMPANY			FOR SALE	
		Total	In works where produced	In other works of same company	Ingots	Castings
Total:						
1935.....	34,404,809	33,969,821	33,762,956	206,865	60,121	374,867
1933.....	23,162,713	22,924,494	22,807,578	116,916	27,283	210,936
1931.....	25,895,640	25,492,523	25,281,747	210,776	50,680	352,437
1929.....	56,160,683	54,806,226	54,287,965	518,261	195,634	1,158,828
BY PROCESS, 1935						
Open-hearth, total.....	30,857,898	30,597,353	30,414,890	182,463	260,545	
Basic.....	30,418,913	30,273,601	30,138,298	135,303	145,312	
Acid.....	438,985	323,752	276,592	47,160	115,233	
Bessemer.....	2,839,397	2,835,440	2,828,770	6,670	3,957	
Electric and electrically refined.....	706,333	537,028	519,296	17,732	170,486	
Crucible.....	1,181					

TABLE 9.—ALLOY STEEL—PRODUCTION (TONS), BY PROCESS, FOR THE UNITED STATES: 1929 TO 1935,

[Tons, 2,240 pounds]

PROCESS	1935	1933	1931	1929
Number of establishments.....	97	114	102	133
Aggregate production.....	1 2, 137, 197	1, 394, 692	1, 336, 323	3, 243, 347
Open-hearth, total ¹	1, 736, 415	1, 138, 648	1, 138, 557	2, 791, 355
Basic ²	1, 657, 043	1, 104, 992	1, 077, 715	2, 675, 160
Acid.....	79, 372	33, 656	60, 842	116, 255
Crucible and electric.....	400, 782	256, 044	197, 766	451, 642
Ingots.....	2, 080, 615	1, 371, 144	1, 267, 875	3, 085, 305
Castings.....	56, 582	23, 548	68, 448	158, 042

¹ Includes data for 46,043 tons of stainless steel.² Includes a very small production of Bessemer alloy steel, figures for which are withheld to avoid disclosing approximations of production reported by individual companies.

TABLE 10.—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY, BY KIND, QUANTITY, AND COST, FOR THE UNITED STATES: 1935 AND 1929

[No detailed data on consumption of materials were collected for 1933 or 1931]

KIND	1935			1929		
	Number of establishments	Quantity	Cost	Number of establishments	Quantity	Cost
Iron ore.....	163	<i>Long tons</i> 1, 319, 722	\$8, 499, 452	(1)	<i>Long tons</i> (1)	(1)
Pig iron.....	205	18, 040, 387	268, 153, 164	252	34, 087, 157	\$547, 280, 159
Iron and steel scrap ¹ (interplant-transferred and purchased).....	306	11, 387, 335	129, 755, 214	359	20, 356, 522	449, 354, 764
Steel ingots.....	32	250, 772	7, 479, 890	153	8, 011, 192	293, 801, 755
Blooms, billets, and slabs.....	105	3, 976, 532	118, 347, 077			
Ferro-alloys.....	215	476, 648	44, 141, 981	255	733, 414	70, 937, 018
Zinc.....	58	<i>Short tons</i> 121, 065	11, 084, 205	57	<i>Short tons</i> 120, 138	17, 556, 540
Aluminum.....	162	9, 063	3, 243, 652	177	9, 830	3, 920, 569
Pig tin.....	59	32, 835	32, 851, 113	66	31, 638	30, 298, 673
Nickel.....	137	<i>Pounds</i> 29, 729, 224	9, 148, 755	111	36, 811, 847	11, 331, 770
Copper.....	69	83, 911, 615	7, 085, 587			
Copper scrap (interplant-transferred and purchased).....	31	6, 217, 926	334, 354	91	115, 244, 188	19, 012, 267
Nonferrous-alloy scrap (interplant-transferred and purchased).....	23	21, 947, 997	1, 822, 221			

¹ No data.² Not including scrap produced and reworked in same plants. For figures on such scrap, see table 4, p. 927;

TABLE 11.—CONSUMPTION OF PIG IRON AND OF SCRAP IRON AND SCRAP STEEL (PURCHASED FROM OUTSIDE SOURCES OR TRANSFERRED FROM OTHER PLANTS UNDER SAME OWNERSHIP), BY QUANTITY AND COST, FOR SELECTED INDUSTRIES: 1935

[This table covers the principal industries in which pig iron and scrap iron and steel are consumed]

INDUSTRY	PIG IRON		SCRAP IRON AND SCRAP STEEL	
	Tons (2,240 pounds)	Cost	Tons (2,240 pounds)	Cost
Total.....	20,197,339	\$309,662,055	17,267,074	\$166,587,960
Blast-furnace products.....			13,546,651	113,109,617
Cast-iron pipe and fittings.....	470,952	7,409,807	259,333	2,533,194
Foundries (iron).....	1,148,809	23,753,943	1,710,560	17,327,535
Plumbers' supplies.....	118,292	2,308,825	42,364	418,246
Pumps and pumping equipment.....	23,988	470,164	12,123	130,313
Steam and hot-water heating apparatus and steam fittings.....	152,075	3,087,153	217,093	2,334,250
Steel-works and rolling-mill products.....	18,040,387	268,153,164	11,337,335	129,755,214
Stoves and ranges.....	242,336	4,473,939	91,615	929,541

¹ Includes data for 2,534,529 tons of cinder and scale, costing \$4,917,344.

² In addition, 8,635,733 tons of scrap iron and scrap steel and 682,990 tons of cinder and scale were produced and reworked in the same plants.

TABLE 12.—STEEL FURNACES (ACTIVE ESTABLISHMENTS)—CAPACITY AND OUTPUT, BY PROCESS, FOR THE UNITED STATES, 1935, 1931, AND 1929, AND FOR STATES, 1935

[This table presents statistics for each State represented by 3 or more establishments operating steel furnaces. Certain of the "Other States," however, reported greater capacity and greater production than some of those for which separate figures are given. No corresponding figures are available for 1933]

STATE	Number of establishments operating steel furnaces	DAILY CAPACITY (24 HOURS), TONS OF 2,240 POUNDS			Production during year, tons of 2,240 pounds
		Total	Open-hearth and Bessemer	Crucible and electric	
<i>United States</i>					
1935.....	267	222,326	215,043	6,383	34,404,809
1931.....	283	234,933	228,352	6,581	25,895,640
1929.....	296	224,705	217,845	6,860	56,160,653
<i>States, 1935</i>					
Illinois.....	23	21,704	20,988	716	3,000,061
Indiana.....	10	27,241	26,997	244	4,633,407
New York.....	16	11,369	10,758	611	1,294,849
Ohio.....	37	46,182	44,850	1,332	9,367,441
Pennsylvania.....	77	74,091	72,685	1,406	8,330,431
California.....	18	2,422	2,115	307	7,373,620
Massachusetts.....	4	736	736	44	
Michigan.....	14	5,802	5,220	582	
New Jersey.....	6	1,881	1,713	168	
West Virginia.....	7	5,028	4,990	38	
Alabama.....	4	9,742	24,935	935	
Colorado.....	3	2,542			
Connecticut.....	3	480			
Delaware.....	3	1,090			
Minnesota.....	3	863			
Missouri.....	5	1,097			
Oregon.....	3	27			
Washington.....	4	457			
Wisconsin.....	10	529			
Other States ¹	17	9,033			

¹ Georgia, 2 establishments; Iowa, 2; Kentucky, 2; Louisiana, 1; Maryland, 2; Oklahoma, 2; Rhode Island, 1; Tennessee, 1; Texas, 2; Utah, 1; Virginia, 1.

TABLE 13.—STEEL FURNACES AND METAL MIXERS (ACTIVE ESTABLISHMENTS)—
NUMBER AND CAPACITY, BY PROCESS, FOR THE UNITED STATES: 1935, 1931,
AND 1929

[No corresponding figures available for 1933]

[Ton, 2,240 pounds]

	1935	1931	1929
Open-hearth furnaces:			
Basic:			
Number of establishments.....	105	107	110
Number of furnaces.....	945	985	988
Daily capacity (24 hours), tons.....	171,173	172,671	163,513
Acid:			
Number of establishments.....	54	57	62
Number of furnaces.....	124	138	152
Daily capacity (24 hours), tons.....	7,664	8,190	8,825
Converters:			
Number of establishments.....	29	37	34
Number of converters.....	64	79	76
Daily capacity (24 hours), tons.....	37,106	47,491	45,507
Electric furnaces:			
Number of establishments.....	140	148	158
Number of furnaces.....	287	271	265
Daily capacity (24 hours), tons.....	6,281	6,407	6,572
Crucible furnaces:			
Number of establishments.....	0	17	21
Number of furnaces.....	124	36	46
Daily capacity (24 hours), tons.....	102	174	288
Metal mixers:			
Number of mixers.....	83	97	95
Capacity.....	47,421	54,025	51,523

¹ Number of pots, 298.

(1) 1119

(2) 1121

STOVES AND RANGES, HEATING APPARATUS, AND STEAM FITTINGS

[A preliminary report for these industries was issued Apr. 16, 1937]

Description of the industries.—This report covers two industries, namely, (1) Steam and Hot-Water Heating Apparatus and Steam Fittings and (2) Stoves and Ranges (Other Than Electric) and Warm-Air Furnaces. The first-named industry embraces establishments engaged primarily in the manufacture of steam and hot-water heating boilers and radiators; fittings; accessories, such as valves, gauges, thermostats, etc.; and domestic and commercial oil burners. The principal products of the second industry are stoves, ranges, water heaters, and warm-air furnaces. (The manufacture of electric heating and cooking apparatus is classified in the Electrical Machinery, Apparatus, and Supplies industry.)

TABLE 1.—GENERAL STATISTICS FOR THE INDUSTRIES, IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
THE INDUSTRIES IN COMBINATION						
Number of establishments.....	834	770	827	849	8.3	-1.8
Proprietors and firm members.....	154	130	(1)	191	18.5	-19.4
Salaried personnel, total ¹	11,359	(2)	(1)	14,330	(2)	-20.7
Salaried officers of corporations.....	1,344	(2)	(1)	1,431	(2)	-6.1
Supervisory, technical, and clerical employees.....	10,015	8,481	(1)	12,899	18.1	-22.4
Salaries paid, total ²	\$22,495,726	(2)	(1)	\$38,473,457	(2)	-41.5
To salaried officers of corporations.....	\$6,674,376	(2)	(1)	\$10,369,693	(2)	-35.6
To supervisory, technical, and clerical employees.....	\$15,821,350	\$13,843,509	(1)	\$28,103,764	14.3	-43.7
Wage earners (average for year) ³	68,820	52,494	61,576	86,237	31.1	-20.2
Wages.....	\$73,040,861	\$46,510,097	\$64,832,704	\$124,121,383	67.0	-41.2
Cost of materials, etc., total.....	\$113,329,884	\$66,344,391	\$91,537,293	\$173,455,317	70.8	-34.7
Cost of materials and supplies.....	106,197,419	(1)	(1)	162,975,566	(1)	-34.8
Cost of fuel.....	4,187,565	(1)	(1)	6,519,561	(1)	-35.8
Cost of purchased electric energy.....	2,944,900	(1)	(1)	3,960,190	(1)	-25.6
Value of products.....	297,364,279	186,970,776	271,607,011	500,057,263	69.0	-40.5
Value added by manufacture ⁴	184,034,395	120,626,385	180,069,718	326,601,946	62.6	-43.7

For footnotes, see end of table.

TABLE 1.—GENERAL STATISTICS FOR THE INDUSTRIES, IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES: 1929 TO 1935—Continued

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE(-)	
					1933-1935	1929-1935
STEAM AND HOT-WATER HEATING APPARATUS AND STEAM FITTINGS						
Number of establishments.....	275	227	238	240	21.1	14.6
Proprietors and firm members.....	51	26	(¹)	25	(*)	(¹)
Salaried personnel, total ²	5,039	(³)	(¹)	6,209	(³)	-20.0
Salaried officers of corporations.....	411	(³)	(¹)	376	(³)	8.3
Supervisory, technical, and clerical employees.....	⁸ 4,628	⁸ 3,473	(¹)	5,923	33.3	-21.9
Salaries paid, total ²	\$9,870,848	(³)	(¹)	\$16,527,334	(³)	-40.3
To salaried officers of corporations.....	\$2,179,826	(³)	(¹)	\$2,900,020	(³)	-27.2
To supervisory, technical, and clerical employees.....	⁸ \$7,691,020	⁸ \$6,152,096	(¹)	\$13,531,308	25.0	-43.2
Wage earners (average for year) ⁴	27,081	22,301	28,996	39,621	21.4	-31.6
Wages.....	\$28,819,325	\$19,541,144	\$29,557,784	\$68,974,874	47.5	-51.1
Cost of materials, etc., total.....	\$37,446,029	\$20,060,855	\$29,704,072	\$72,708,268	86.7	-48.5
Cost of materials and supplies.....	\$34,365,984	(¹)	(¹)	\$67,247,385	(¹)	-48.9
Cost of fuel.....	\$1,804,496	(¹)	(¹)	\$3,497,941	(¹)	-48.4
Cost of purchased electric energy.....	\$1,275,549	(¹)	(¹)	\$1,962,942	(¹)	-35.0
Value of products.....	\$111,749,501	\$69,234,058	\$102,500,918	\$228,310,254	61.4	-51.1
Value added by manufacture ⁷	\$74,303,472	\$49,173,203	\$72,796,846	\$155,601,986	51.1	-52.2
STOVES AND RANGES (OTHER THAN ELECTRIC) AND WARM-AIR FURNACES						
Number of establishments.....	559	543	589	609	2.9	-8.2
Proprietors and firm members.....	103	104	(¹)	106	-1.0	-38.0
Salaried personnel, total ²	6,320	(³)	(¹)	8,031	(³)	-21.3
Salaried officers of corporations.....	933	(³)	(¹)	1,055	(³)	-11.6
Supervisory, technical, and clerical employees.....	¹⁰ 5,387	¹¹ 5,008	(¹)	6,976	7.0	-22.8
Salaries paid, total ²	\$12,624,880	(³)	(¹)	\$21,946,123	(³)	-42.5
To salaried officers of corporations.....	\$4,494,550	(³)	(¹)	\$7,373,067	(³)	-39.0
To supervisory, technical, and clerical employees.....	¹⁰ \$8,130,330	¹¹ \$7,091,413	(¹)	\$14,572,456	5.7	-44.2
Wage earners (average for year) ⁴	41,739	30,193	32,580	46,016	38.2	-10.5
Wages.....	\$44,221,536	\$26,968,953	\$35,274,920	\$65,146,509	64.0	-32.1
Cost of materials, etc., total.....	\$75,883,855	\$46,283,536	\$61,833,221	\$100,747,049	64.0	-24.7
Cost of materials and supplies.....	71,831,435	(¹)	(¹)	95,728,181	(¹)	-25.0
Cost of fuel.....	2,383,069	(¹)	(¹)	3,021,620	(¹)	-21.1
Cost of purchased electric energy.....	1,669,351	(¹)	(¹)	1,997,248	(¹)	-16.4
Value of products.....	185,614,778	117,736,718	169,106,093	271,747,009	57.7	-31.7
Value added by manufacture ⁷	109,730,923	71,453,182	107,272,872	170,999,900	53.6	-35.8

* Percent not computed where base is less than 100.

¹ No data.² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.³ Data incomplete.⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 2,423; salaries, \$6,090,115. Technical, 703; salaries, \$1,447,098. Clerical, 6,889; salaries, \$8,284,137.⁵ Supervisory, 1,731; salaries, \$4,674,440. Clerical and other, 6,750; salaries, \$9,169,099.⁶ See sec. 11, p. 7.⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 13, p. 11.⁸ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 1,168; salaries, \$2,939,544. Technical, 379; salaries, \$812,623. Clerical, 3,081; salaries, \$3,888,853.⁹ Supervisory, 817; salaries, \$2,312,369. Clerical and other, 2,656; salaries, \$3,830,727.¹⁰ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 1,255; salaries, \$3,100,571. Technical, 624; salaries, \$634,475. Clerical, 3,808; salaries, \$4,395,284.¹¹ Supervisory, 914; salaries, \$2,362,071. Clerical and other, 4,094; salaries, \$5,320,342.

HEATING AND COOKING APPARATUS AND STEAM FITTINGS 943

TABLE 2.—SUMMARY FOR THE INDUSTRIES, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
STEAM AND HOT-WATER HEATING APPARATUS								
United States.....	275	5, 039	27, 051	\$9, 870, 846	\$28, 819, 325	\$37, 446, 029	\$111,749,501	\$74, 303, 472
California.....	18	87	452	175, 112	513, 260	1, 045, 140	2, 250, 946	1, 205, 806
Connecticut.....	14	393	1, 493	638, 644	1, 674, 885	2, 239, 681	6, 242, 693	4, 003, 012
Illinois.....	42	1, 503	8, 196	2, 935, 075	9, 063, 032	10, 376, 758	32, 258, 488	21, 881, 730
Indiana.....	10	78	482	136, 517	402, 568	682, 498	1, 568, 220	885, 922
Maryland.....	3	12	21	20, 537	21, 264	28, 990	82, 743	53, 758
Massachusetts.....	25	355	1, 195	660, 002	1, 312, 185	1, 693, 312	5, 110, 686	3, 417, 374
Michigan.....	19	241	1, 449	525, 093	1, 635, 260	2, 525, 610	6, 785, 637	4, 260, 027
Missouri.....	5	49	170	148, 948	124, 085	252, 260	727, 916	475, 656
New Jersey.....	16	219	983	465, 851	1, 215, 297	1, 040, 534	5, 588, 052	3, 647, 518
New York.....	33	332	3, 197	694, 102	3, 421, 879	5, 060, 798	13, 277, 696	8, 216, 898
Ohio.....	21	536	2, 349	1, 046, 880	2, 330, 553	2, 682, 473	8, 289, 743	5, 607, 270
Pennsylvania.....	35	652	4, 352	1, 154, 148	4, 173, 732	4, 699, 722	14, 714, 007	10, 014, 285
Washington.....	3	7	30	6, 748	13, 755	34, 271	75, 559	41, 288
Wisconsin.....	8	251	811	443, 725	901, 088	1, 490, 227	4, 141, 687	2, 651, 460
Other States ¹	23	324	1, 902	319, 464	2, 016, 482	2, 693, 755	10, 635, 228	7, 941, 473
STOVES AND RANGES								
United States.....	559	6, 320	41, 739	12, 624, 880	44, 221, 536	75, 883, 855	185,614,778	109,730,923
Alabama.....	8	77	1, 265	150, 901	921, 897	964, 842	2, 950, 166	1, 988, 324
California.....	54	365	2, 135	745, 131	2, 528, 626	5, 168, 363	11, 415, 294	6, 246, 931
Connecticut.....	18	151	208	351, 286	216, 175	1, 454, 942	2, 600, 717	1, 045, 776
Georgia.....	6	41	589	122, 813	474, 709	410, 122	1, 490, 726	1, 080, 604
Illinois.....	62	921	6, 167	1, 746, 929	6, 734, 460	11, 387, 874	27, 352, 541	15, 964, 667
Indiana.....	21	187	1, 279	364, 851	1, 363, 485	2, 541, 405	5, 714, 178	3, 172, 772
Iowa.....	15	111	363	254, 599	415, 208	903, 064	2, 326, 295	1, 423, 231
Kentucky.....	3	63	304	138, 054	291, 443	411, 422	991, 752	580, 330
Maryland.....	10	127	481	237, 501	434, 681	924, 980	1, 813, 892	888, 912
Massachusetts.....	31	317	2, 145	651, 180	2, 470, 944	4, 021, 871	10, 735, 224	6, 713, 353
Michigan.....	31	691	4, 372	1, 293, 414	5, 153, 365	10, 099, 847	25, 558, 096	15, 458, 249
Minnesota.....	14	215	640	382, 853	610, 092	1, 220, 703	2, 938, 852	1, 718, 149
Missouri.....	21	245	1, 456	537, 577	1, 584, 586	2, 679, 918	7, 848, 740	5, 188, 822
New Jersey.....	15	131	484	231, 486	513, 324	1, 006, 643	2, 642, 789	1, 636, 146
New York.....	48	276	1, 159	550, 866	1, 237, 491	2, 763, 988	5, 648, 482	2, 884, 494
Ohio.....	64	1, 083	8, 017	2, 098, 219	8, 992, 930	13, 548, 958	34, 731, 208	21, 182, 250
Oregon.....	8	21	209	40, 091	275, 738	380, 773	1, 012, 544	631, 771
Pennsylvania.....	49	588	3, 558	1, 147, 970	3, 926, 376	6, 338, 176	14, 451, 764	8, 118, 588
Rhode Island.....	6	19	60	48, 490	79, 369	353, 202	762, 534	409, 382
Tennessee.....	18	193	3, 725	410, 979	2, 859, 854	4, 491, 033	10, 828, 826	6, 337, 793
Virginia.....	4	23	156	53, 750	143, 975	143, 545	519, 522	375, 977
Washington.....	11	40	297	87, 860	328, 472	461, 473	1, 131, 685	669, 612
West Virginia.....	4	28	144	48, 189	123, 710	150, 852	396, 707	245, 855
Wisconsin.....	18	311	2, 034	684, 418	1, 995, 935	3, 435, 097	7, 643, 848	4, 608, 251
Other States ²	20	96	491	245, 473	644, 727	620, 761	1, 909, 406	1, 288, 735

¹ Alabama, 1 establishment; Florida, 2; Iowa, 2; Minnesota, 6; New Hampshire, 1; Oklahoma, 1; Oregon, 3; Rhode Island, 4; Tennessee, 1; Utah, 1; Vermont, 1. See sec. 23, p. 12.

² Arkansas, 1 establishment; Colorado, 3; District of Columbia, 1; Florida, 1; Kansas, 4; Maine, 3; New Hampshire, 2; North Carolina, 2; Oklahoma, 1; Texas, 2.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE INDUSTRIES, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935
 [See secs. 11 and 23, pp. 7 and 12]

Industry	Average number employed during year ¹	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
STEAM AND HOT-WATER HEATING APPARATUS													
<i>United States</i>													
1935.....	27,078	25,424	25,516	25,577	26,159	26,174	25,799	27,436	28,806	30,031	30,078	29,314	
1933.....	22,301	(*)	17,982	(*)	(*)	21,218	(*)	(*)	27,145	(*)	(*)	24,337	
<i>States, 1935</i>													
California.....	452	376	401	427	450	421	405	449	470	549	578	536	
Connecticut.....	1,337	1,391	1,450	1,481	1,475	1,408	1,474	1,452	1,467	1,592	1,658	1,638	
Illinois.....	8,191	7,929	7,881	7,965	7,872	7,913	7,926	8,021	8,261	8,642	8,984	8,976	
Indiana.....	482	474	474	476	476	356	492	495	513	531	517	503	
Maryland.....	21	21	20	19	20	21	21	21	22	23	22	23	
Massachusetts.....	1,195	1,251	1,034	1,013	992	976	1,049	1,255	1,321	1,389	1,415	1,420	
Michigan.....	1,449	1,350	1,408	1,438	1,443	1,494	1,472	1,479	1,584	1,635	1,543	1,455	
Minnesota.....	1,076	1,063	1,002	951	1,002	1,097	1,211	1,244	1,322	1,194	1,241	1,455	
Missouri.....	170	163	180	182	161	184	143	164	179	183	183	1,187	
New Jersey.....	983	973	982	1,053	1,047	1,062	569	1,026	1,072	1,101	1,089	1,062	
New York.....	3,197	2,964	2,973	2,709	2,989	3,009	2,980	3,345	3,598	3,698	3,670	3,278	
Ohio.....	2,349	2,278	2,294	2,304	2,336	2,301	2,258	2,323	2,322	2,416	2,580	2,500	
Oregon.....	76	53	53	61	69	78	87	94	93	97	97	78	
Pennsylvania.....	4,352	3,937	4,072	3,988	4,361	4,361	4,216	4,435	4,833	4,870	4,671	4,493	
Rhode Island.....	73	72	72	71	71	74	72	68	71	74	78	80	
Washington.....	30	26	26	29	26	28	26	33	39	35	37	29	
Wisconsin.....	811	682	656	671	698	763	791	835	914	997	1,019	1,007	
STOVES AND RANGES													
<i>United States</i>													
1935.....	41,801	37,333	39,105	40,694	41,069	41,888	42,111	44,022	45,740	47,704	46,237	42,232	
1933.....	30,193	(*)	22,427	(*)	(*)	28,608	(*)	(*)	39,497	(*)	(*)	32,454	

HEATING AND COOKING APPARATUS AND STEAM FITTINGS 945

States, 1935

Alabama.....	1, 265	1, 158	1, 176	1, 204	1, 243	1, 375	1, 424	1, 515	1, 473	1, 254
California.....	2, 193	1, 694	1, 980	2, 079	2, 031	2, 215	2, 268	2, 474	2, 571	2, 449
Colorado.....	23	13	182	172	17	21	34	300	63	70
Connecticut.....	210	189	168	172	183	209	288	300	232	223
Georgia.....	589	572	595	622	614	572	511	585	597	601
Illinois.....	6, 177	4, 532	6, 413	6, 146	6, 369	6, 628	6, 951	7, 006	6, 621	5, 928
Indiana.....	1, 279	993	1, 137	1, 157	1, 207	1, 335	1, 508	1, 599	1, 537	1, 526
Iowa.....	365	286	304	308	350	414	483	475	415	369
Kansas.....	141	85	149	149	148	151	153	156	152	125
Kentucky.....	304	239	235	266	295	359	462	424	301	239
Maine.....	144	110	139	138	149	156	156	161	156	152
Maryland.....	451	442	515	541	525	425	469	540	498	492
Massachusetts.....	2, 143	1, 868	2, 014	2, 035	2, 100	2, 274	2, 345	2, 471	2, 500	2, 335
Michigan.....	4, 356	3, 517	4, 131	4, 180	4, 188	4, 472	4, 771	5, 038	4, 785	4, 548
Minnesota.....	640	539	600	597	641	718	669	657	679	674
Missouri.....	1, 456	1, 254	1, 447	1, 414	1, 418	1, 458	1, 599	1, 711	1, 610	1, 435
New Jersey.....	484	391	478	467	473	476	510	566	547	535
New York.....	1, 150	801	1, 067	1, 169	1, 181	1, 212	1, 303	1, 312	1, 226	1, 185
Ohio.....	8, 047	6, 315	7, 032	7, 967	7, 900	8, 622	8, 825	9, 527	9, 163	7, 969
Oregon.....	209	161	190	200	200	228	241	255	245	200
Pennsylvania.....	3, 566	3, 185	3, 423	3, 490	3, 560	3, 651	3, 853	3, 976	3, 693	3, 778
Rhode Island.....	60	59	54	55	57	57	66	74	74	60
Tennessee.....	3, 725	3, 148	3, 693	3, 616	3, 653	3, 962	4, 076	4, 257	3, 893	3, 477
Virginia.....	156	117	154	160	155	161	162	168	172	159
Washington.....	297	255	278	280	286	301	326	354	353	306
West Virginia.....	144	114	129	130	129	151	179	186	198	202
Wisconsin.....	2, 063	1, 675	2, 312	2, 286	2, 311	2, 235	1, 871	1, 665	2, 022	1, 919

*Data incomplete. See last sentence, second paragraph, sec. 11, D. 7.
 † As the 1935 averages given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year.

TABLE 4.—PRODUCTS, BY KIND, NUMBER, AND VALUE: 1935, 1931, AND 1929

[No comparable figures available for 1933]

	1935	1931	1929
1. "Steam and Hot-Water Heating Apparatus and Steam Fittings" and "Stoves and Ranges (other than Electric) and Warm-Air Furnaces" industries, all products, total value.....	\$297,364,279	\$271,607,011	\$500,087,263
2. Heating and cooking apparatus (other than electric), steam fittings, valves, and specialties.....	276,858,995	254,251,616	467,039,346
3. Other products (not normally belonging to the industries), value, and receipts for repair work.....	20,505,284	17,355,395	33,017,917
4. Heating and cooking apparatus (other than electric) made as secondary products in other industries.....	24,267,597	14,328,207	32,444,190
Steam and hot-water heating apparatus, stoves and ranges (other than electric), steam fittings, valves, and specialties, aggregate value (sum of 2 and 4).....	301,126,592	268,579,823	499,483,536
Steam and hot-water heating apparatus, total value.....	31,452,217	36,030,485	81,440,505
Steam and hot-water heating boilers and parts, total value.....	18,190,220	19,057,427	40,324,406
Cast-iron steam and hot-water heating boilers:			
Number reported:			(?)
Number.....	64,011	99,424	
Value.....	\$6,257,995	\$9,358,999	
Number not reported, value.....	\$7,372,844	\$5,087,252	\$33,152,631
Steel steam and hot-water heating boilers:			
Number.....	7,770	16,894	(?)
Value.....	\$2,496,009	\$3,401,081	\$5,332,172
Parts for heating boilers, value.....	\$2,063,372	\$1,240,065	\$1,839,603
Radiators, total value.....	\$13,261,997	\$16,973,058	\$41,116,099
Cast-iron.....	\$12,035,645	\$15,326,304	\$37,919,080
Copper.....	\$993,921	\$1,339,379	\$2,757,207
Gas- and oil-fired radiators.....	\$232,431	\$307,375	\$439,812
Warm-air furnaces, parts, and registers, total value.....	\$22,808,359	\$24,641,587	\$43,311,273
Warm-air furnaces:			
Number reported:			
Number.....	211,385	207,375	378,546
Value.....	\$14,396,691	\$18,274,414	\$32,579,551
Number not reported, value.....	\$2,080,799		
Parts and registers.....	\$6,330,969	\$6,367,173	\$10,731,722
Unit heaters, total value.....	\$4,522,726	\$5,166,870	\$9,238,556
Number reported:			
Number.....	18,067	20,255	48,491
Value.....	\$2,483,503	\$3,531,339	\$7,761,791
Number not reported, value.....	\$2,039,223	\$1,635,531	\$1,476,765
Stoves, ranges, water heaters, and parts, total value.....	\$134,279,156	\$106,811,177	\$181,437,004
Coal and wood, total value.....	\$43,026,660	\$31,484,160	\$66,593,923
Coal and wood cooking stoves and ranges, total value.....	\$24,112,922	\$17,896,490	\$32,098,463
Porcelain-enameled:			
Number reported:			
Number.....	363,488	211,701	353,741
Value.....	\$17,365,676	\$12,924,046	\$21,375,485
Number not reported, value.....	\$1,406,188		
Other than porcelain-enameled:			
Number reported:			
Number.....	321,518	203,633	324,296
Value.....	\$5,007,292	\$4,972,444	\$8,792,852
Number not reported, value.....	\$333,768		
Not separately reported as to finish:			
Number.....			61,486
Value.....			\$1,960,126
Coal and wood heating stoves, total value.....	\$13,886,250	\$10,448,329	\$23,621,431
Cast-iron and cast-steel:			
Porcelain-enameled:			
Number reported:			
Number.....	318,156	270,074	425,506
Value.....	\$8,572,902	\$7,290,498	\$18,014,935
Number not reported, value.....	\$632,934		

For footnotes, see end of table.

HEATING AND COOKING APPARATUS AND STEAM FITTINGS 947

TABLE 4.—PRODUCTS, BY KIND, NUMBER, AND VALUE: 1935, 1931, AND 1929—
Continued

[See note at head of table]

	1935	1931	1929
Steam and hot-water heating apparatus, etc.—Continued.			
Stoves, ranges, water heaters, and parts—Continued.			
Coal and wood—Continued.			
Coal and wood heating stoves—Continued.			
Cast-iron and cast-steel—Continued.			
Other:			
Number reported:			
Number.....	397, 286	230, 984	} \$ 461, 215
Value.....	\$3, 659, 876	\$2, 717, 369	
Number not reported, value.....	\$272, 509		} \$5, 606, 496
Sheet-metal (air-tight, etc.):			
Number reported:			
Number.....	367, 329	167, 516	
Value.....	\$748, 029	\$341, 820	
Number not reported, value.....		\$98, 642	
Coal and wood water heaters (domestic-supply), total value.....	\$2, 652, 051	\$1, 123, 495	\$1, 443, 897
With storage tanks attached:			
Number reported:			
Number.....	42, 588		
Value.....	\$955, 840		
Number not reported, value.....	\$150, 485	160, 455	(2)
Without storage tanks:		\$1, 123, 495	\$1, 443, 897
Number.....	202, 504		
Value.....	\$1, 545, 726		
Coal and wood stoves, ranges, and water heaters not separately reported, value.....			\$5, 784, 105
Parts for coal and wood stoves, ranges, and water heaters.....	\$2, 375, 437	\$2, 015, 840	\$3, 646, 027
Gas, total value.....	\$56, 240, 825	\$56, 273, 708	\$93, 772, 195
Gas cooking stoves and ranges, total value.....	\$41, 839, 669	\$36, 902, 234	\$57, 354, 006
Porcelain-enameled:			
With ovens:			
Number reported:			
Number.....	1, 019, 662		
Value.....	\$39, 647, 651		
Number not reported, value.....	\$1, 021, 246	\$01, 185	1, 304, 472
Without ovens:		\$31, 332, 586	\$49, 820, 252
Number.....	6, 205		
Value.....	\$197, 507		
Other than porcelain-enameled, with and without ovens:			
Number.....	17, 764	201, 009	297, 955
Value.....	\$973, 265	\$5, 629, 648	\$7, 533, 754
Gas hot plates:			
Number.....	120, 256	167, 442	} (4)
Value.....	\$339, 378	\$545, 286	
Gas room heaters:			
Number reported:			
Number.....	396, 558	446, 996	
Value.....	\$2, 829, 142	\$4, 513, 255	
Number not reported, value.....	\$382, 603		\$11, 569, 718
Gas water heaters (domestic-supply), total value.....	\$9, 061, 060	\$11, 935, 229	\$18, 203, 497
With storage tanks attached:			
Number reported:			
Number.....	205, 342		
Value.....	\$6, 024, 559		
Number not reported, value.....	\$1, 405, 525	637, 783	894, 785
Without storage tanks:		\$11, 935, 229	\$18, 203, 497
Number.....	295, 840		
Value.....	\$1, 630, 976		
Gas stoves, ranges, and heaters not reported separately, value.....			\$3, 627, 477
Parts for gas stoves, ranges, and heaters, value.....	\$1, 788, 973	\$2, 317, 704	\$3, 017, 497

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, NUMBER, AND VALUE: 1935, 1931, AND 1929—
Continued

[See note at head of table]

	1935	1931	1929
Steam and hot-water heating apparatus, etc.—Continued.			
Stoves, ranges, water heaters, and parts—Continued.			
Kerosene, distillate, and fuel-oil, total value.....	\$22,166,778	\$11,462,619	\$14,090,040
Kerosene, etc., cooking stoves and ranges, total value....	\$10,855,747	\$7,310,432	\$11,352,202
Porcelain-enameled:			
Number.....	170,490	158,952	262,152
Value.....	\$3,507,229	\$2,842,821	\$5,793,806
Other than porcelain-enameled:			
Number.....	710,738	327,890	496,378
Value.....	\$7,348,518	\$4,467,611	\$5,558,396
Kerosene, etc., room heaters:			
Circulating or radiant type:			
Number.....	347,377		
Value.....	\$6,538,134	*123,771	*196,060
Other types (wick, etc.):			
Number.....	266,354	*\$1,104,870	*\$1,112,400
Value.....	\$1,597,658		
Kerosene, etc., water heaters (domestic supply):			
Number.....	64,486	12,086	26,582
Value.....	\$736,958	\$226,089	\$447,903
Parts for kerosene, etc., cooking stoves, ranges, and heaters, value.....	\$2,388,281	\$2,821,228	\$1,177,535
Gasoline, total value.....	\$2,904,047	\$3,093,533	\$3,850,533
Gasoline cooking stoves (except camp stoves) and ranges:			
Number.....	79,751	(²)	(²)
Value.....	\$1,878,758	\$1,643,635	\$2,181,760
Gasoline camp stoves:			
Number reported:			
Number.....	84,270	86,675	130,501
Value.....	\$261,832	\$281,302	\$538,018
Number not reported, value.....	\$55,242	\$101,282	
Gasoline water heaters, and parts for gasoline cooking stoves, ranges, and heaters, value.....	\$708,215	\$1,067,314	\$1,130,155
Combination (coal, wood, and gas) cooking stoves and ranges, total value.....	\$6,235,912	\$2,394,537	
Porcelain-enameled:			
Number reported:			
Number.....	65,675	27,341	
Value.....	\$5,305,410	\$2,190,473	
Number not reported, value.....	\$619,855		
Other than porcelain-enameled:			
Number reported:			
Number.....	3,394	2,272	\$3,130,313
Value.....	\$310,647	\$204,064	
Laundry, orchard, etc., value.....	\$788,668	\$1,048,719	
Stoves, ranges, water heaters, etc., not specified by kind, value.....	\$2,916,266	\$1,053,901	
Other heating and cooking apparatus and equipment:			
Oil burners: ³			
Domestic (for central heating systems and water heating), total value.....	\$15,885,800	\$15,170,828	\$10,693,666
Mechanical or forced draft:			
Number reported:			
Number.....	112,870	86,011	
Value.....	\$12,451,079	\$14,945,314	
Number not reported, value.....	\$1,577,571		101,950
Atmospheric (natural) draft:			\$10,693,666
Number.....	2,627	2,747	
Value.....	\$103,838	\$225,514	
Draft not specified, value.....	\$1,753,262		
Commercial oil burners, mechanical-draft:			
Number.....	2,050	(⁴)	(⁴)
Value.....	\$401,257		
Distillate-oil burners for cooking and heating stoves:			
Number reported:			
Number.....	110,971	108,759	(⁴)
Value.....	\$1,172,205	\$2,759,510	\$1,661,152
Number not reported, value.....	\$253,169	\$314,759	
Oil burners not reported by kind, value.....	\$245,783	\$878,140	

For footnotes, see end of table.

HEATING AND COOKING APPARATUS AND STEAM FITTINGS 949

 TABLE 4.—PRODUCTS, BY KIND, NUMBER, AND VALUE: 1935, 1931, AND 1929—
Continued

[See note at head of table]

	1935	1931	1929
Steam and hot-water heating apparatus, etc.—Continued.			
Other heating and cooking apparatus and equipment—Contd.			
Oil burners—Continued.			
Fuel-oil boiler-burner units:			
Number reported:			
Number.....	9,835		
Value.....	\$2,447,968		
Number not reported, value.....	\$325,509	(¹)	(¹)
Fuel-oil furnace-burner units:			
Number.....	3,710		
Value.....	\$1,003,959		
Gas burners, total value.....	\$2,809,466	\$1,499,097	(¹)
Domestic, commercial, and industrial types, value.....	\$1,640,935		
Gas boiler-burner units (complete with boilers or fur-			
naces):			
Number reported:			
Number.....	23,316	(¹)	(¹)
Value.....	\$635,125		
Number not reported, value.....	\$533,406		
Parts for oil and gas burners, value.....	\$1,714,501	\$977,990	(¹)
Incinerators, value.....	\$147,249	\$496,188	\$908,391
Portable ovens (detachable ovens for use on oil, gasoline, and			
other stoves):			
Number.....	554,138	381,400	734,850
Value.....	\$802,924	\$976,540	\$2,882,153
Steam tables (except electric), value.....	\$187,398	\$304,957	\$1,321,867
Other cafeteria, hotel, and kitchen apparatus, value.....	\$3,542,824	\$3,990,303	\$7,241,420
Heating and cooking equipment not reported by kind, value.....	\$3,216,063	\$2,874,945	
Fittings and valves, value ²	\$45,028,520	\$37,474,967	\$90,180,053
Specialties, total value.....	\$23,923,861	\$22,443,076	\$50,550,322
Thermostats, total value.....	\$15,791,973	\$11,445,891	
Number reported:			
Number.....	7,927,236	1,169,800	
Value.....	\$12,297,011	\$7,913,344	
Number not reported, value.....	\$3,494,962	\$3,532,547	(¹)
Regulators, value.....	\$2,372,694	\$2,574,227	
Traps, value.....	\$2,143,560	\$2,799,208	
Other specialties, value.....	\$3,615,634	\$5,623,750	
Incubators, value.....	\$3,347,152	\$3,598,678	\$6,956,822
Brooders, value.....	\$1,608,526	\$2,169,826	\$2,660,352

^{*} Kerosene only. Figures for 1931 revised.

¹ Revised.

² Data incomplete.

³ Includes data for a small number of stoves not reported by kind.

⁴ No data.

⁵ Industrial oil-burners are treated as products of the "Machine Shops" industry. The production of such burners—both as primary products of that industry and as secondary products of other industries—was reported as follows:

	1935	1931	1929
Number.....	4,583	12,088	No data
Value.....	\$704,458	\$1,290,198	\$4,305,921
Number not reported, value.....	\$911,092	\$944,543	

⁶ As reported in this industry; for total production, see table 5, report for Plumbers' Supplies, p. 907.

TABLE 5.—PRINCIPAL MATERIALS CONSUMED, BY KIND, QUANTITY, AND COST: 1935 AND 1929

[Quantities and costs of principal materials were reported by only 537 of the 834 establishments in the two industries. The combined value of products reported by these establishments amounted to \$258,015,619, or 86.8 percent of the aggregate value of products for the industries. Another reason for the difference between the sum of the costs of the several kinds of materials for which figures are given in this table and the total cost of materials as given in table 1 is found in the fact that this table covers only certain specified materials, whereas table 1 covers all materials. No detailed data on materials consumed were collected for 1933 or 1931.]

KIND	Total cost	QUANTITY REPORTED		Quantity not re-ported, cost
		Quantity	Cost	
Pig iron:		<i>Tons, 2,240 lb.</i>		
1935.....	\$7,561,092	383,887	\$7,358,248	\$202,840
1929.....	17,143,718	874,169	17,143,718	-----
Iron and steel scrap purchased as such:				
1935.....	3,263,791	302,420	3,200,031	63,760
1929.....	5,459,227	360,872	5,459,227	-----
Iron and steel castings purchased as such:		<i>Tons, 2,000 lb.</i>		
1935.....	5,267,466	37,055	3,952,761	1,314,705
1929.....	13,728,067	332,160	10,494,495	3,233,572
Iron and steel pipe:				
1935.....	1,063,420	13,888	1,443,378	520,042
1929.....	3,119,636	35,181	2,521,855	597,781
Steel (sheets, plates, strips, etc.):				
1935.....	13,616,153	169,180	10,846,407	2,769,746
1929.....	18,326,429	234,790	15,453,302	2,873,127
Nickel and nickel alloys:		<i>Pounds</i>		
1935.....	209,823	524,462	180,199	29,624
1929.....	801,091	2,004,752	649,672	151,419
Copper, brass, and bronze:				
1935.....	5,723,905	33,209,651	4,023,033	1,700,222
1929.....	15,298,952	76,830,702	13,550,606	1,742,286

1122

STRUCTURAL AND ORNAMENTAL METAL WORK, MADE IN PLANTS NOT OPERATED IN CONNEC- TION WITH ROLLING MILLS

[A preliminary report for this industry was issued Jan. 18, 1937]

Description of the industry.—The establishments classified in this industry are engaged primarily in fabricating metal for structural and ornamental purposes. Some of the chief products are structural steel for buildings and bridges, ornamental iron and steel work, balconies, bank fixtures, coal chutes, elevator inclosures, iron fences, fire escapes, and gratings. Some fabrication work, such as cutting and punching beams and plates, is done by establishments whose principal business is construction work or the buying and selling of steel and other metal, but the Census figures relate to *shop fabrication only*.

The phrase "made in plants not operated in connection with rolling mills" refers to production in plants operated entirely independently of rolling mills, although in some cases under the same ownership.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935¹

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	1,111	962	1,302	1,482	15.5	-25.0
Proprietors and firm members.....	427	309	(¹)	732	38.2	-41.7
Salaried personnel, total ²	7,575	(³)	(¹)	13,658	(³)	-44.5
Salaried officers of corporations.....	1,442	(³)	(¹)	1,972	(³)	-26.9
Supervisory, technical, and clerical employees.....	6,133	5,170	(¹)	11,686	18.6	-47.5
Salaries paid, total ²	\$14,464,634	(³)	(¹)	\$39,081,519	(³)	-63.0
To salaried officers of corporations.....	\$4,662,063	(³)	(¹)	\$12,124,400	(³)	-61.5
To supervisory, technical, and clerical employees.....	\$9,802,571	\$7,659,731	(¹)	\$26,957,119	28.0	-63.6
Wage earners (average for year) ⁴	27,243	21,377	37,510	54,947	27.4	-50.4
Wages.....	\$28,225,011	\$18,624,134	\$47,874,684	\$87,785,606	51.6	-67.8
Cost of materials, etc., total.....	92,572,507	63,169,061	131,648,905	244,696,254	46.5	-62.2
Cost of materials and supplies.....	90,141,058	(¹)	(¹)	239,934,645	(¹)	-62.4
Cost of fuel.....	864,421	(¹)	(¹)	2,160,578	(¹)	-60.0
Cost of purchased electric energy.....	1,567,028	(¹)	(¹)	2,601,031	(¹)	-39.8
Value of products.....	160,762,487	107,612,309	238,033,284	477,036,827	49.4	-66.3
Value added by manufacture ⁷	68,189,980	44,443,248	106,384,379	232,340,573	53.4	-70.7

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 1,145; salaries, \$2,766,378. Technical, 926; salaries, \$1,749,586. Clerical, 4,062; salaries, \$5,286,107. See sec. 10, p. 7.

⁵ Supervisory, 1,208; salaries, \$2,711,060. Clerical and other, 3,962; salaries, \$4,948,671. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States...	1, 111	7, 575	27, 243	\$14,464,634	\$28,225,011	\$92,572,507	\$160,762,487	\$68,189,080
Alabama.....	13	68	511	141,800	450,738	2,071,612	3,553,083	1,481,471
California.....	87	468	1,913	881,805	2,151,135	7,060,754	12,052,623	4,991,869
Colorado.....	10	57	116	106,310	121,909	643,754	1,087,230	443,476
Connecticut.....	18	73	160	172,986	187,289	447,881	867,704	419,883
District of Columbia	15	35	144	80,643	171,873	446,456	857,687	411,131
Florida.....	15	37	136	71,720	123,985	211,960	477,930	265,070
Georgia.....	5	22	81	31,020	71,302	347,332	489,731	142,390
Illinois.....	86	553	1,847	1,077,928	1,852,681	6,546,077	11,466,618	4,920,541
Indiana.....	24	345	1,414	559,591	1,592,286	5,026,467	7,722,093	2,695,626
Iowa.....	11	120	297	193,664	276,622	1,383,814	2,145,156	761,342
Kansas.....	8	108	374	231,048	349,203	1,259,447	2,132,252	872,805
Kentucky.....	8	100	209	192,430	210,913	418,560	1,200,393	781,743
Louisiana.....	5	35	97	53,133	84,262	184,426	337,027	152,601
Maryland.....	9	78	183	128,210	202,551	607,647	994,683	487,636
Massachusetts.....	44	180	422	382,492	486,383	1,390,869	2,687,164	1,296,295
Michigan.....	40	341	1,207	690,066	1,678,091	4,799,271	8,047,600	3,248,329
Minnesota.....	21	176	612	330,140	560,122	1,275,745	2,595,142	1,319,367
Missouri.....	33	194	567	447,261	587,004	2,088,640	3,757,826	1,669,186
Nebraska.....	5	57	249	117,189	239,333	714,046	1,330,412	615,466
New Jersey.....	57	187	544	334,308	584,815	1,818,535	3,498,829	1,680,294
New York.....	248	1,008	2,689	1,888,268	3,342,933	8,491,110	15,048,219	7,457,109
North Carolina.....	8	60	108	97,280	89,318	590,369	906,710	316,341
Ohio.....	75	638	2,612	1,206,482	2,826,658	10,121,266	18,146,751	8,028,455
Oklahoma.....	11	140	481	281,001	382,345	2,443,675	3,834,593	1,399,828
Oregon.....	6	18	92	31,197	95,126	285,378	524,900	230,522
Pennsylvania.....	119	1,527	7,083	2,957,027	6,639,128	21,134,951	35,804,005	14,609,054
Tennessee.....	15	55	376	94,089	287,965	981,468	1,645,592	694,034
Texas.....	33	257	853	424,793	729,500	2,902,197	4,856,167	1,953,070
Utah.....	5	21	43	36,649	53,017	152,677	296,525	149,848
Virginia.....	17	196	474	416,574	442,616	1,709,002	3,000,342	1,291,340
Washington.....	12	45	175	94,491	173,872	374,407	850,829	478,392
West Virginia.....	6	31	239	72,056	239,302	985,143	1,047,766	662,623
Wisconsin.....	22	243	681	442,233	701,289	2,785,365	4,352,746	1,597,391
Other States ¹	20	102	254	198,770	237,445	991,216	1,643,469	652,253

¹ Arizona, 3 establishments; Arkansas, 1; Delaware, 2; Maine, 2; Mississippi, 1; Montana, 1; New Hampshire, 2; Rhode Island, 4; South Carolina, 2; South Dakota, 1; Vermont, 1. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year ¹	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	27,254	25,838	25,055	25,424	25,900	26,873	27,202	28,259	28,690	28,958	28,914	28,098	27,747
1933.....	21,377	(*)	(*)	18,322	(*)	(*)	20,955	(*)	(*)	24,554	(*)	(*)	22,950
<i>States, 1935</i>													
Alabama.....	511	523	532	426	498	478	481	534	580	555	468	493	561
Arizona.....	66	70	51	50	53	69	84	68	63	56	70	78	81
California.....	1,913	1,842	1,800	1,880	1,905	2,073	1,863	1,920	2,061	1,985	1,960	1,897	1,769
Colorado.....	116	85	97	113	118	113	111	113	117	120	138	133	129
Connecticut.....	160	108	107	106	139	153	158	183	221	196	206	174	173
Dist. of Columbia.....	143	128	123	129	153	156	152	154	151	152	142	129	151
Florida.....	136	100	99	91	98	94	100	103	132	172	167	216	258
Georgia.....	81	68	74	72	73	80	80	79	82	84	93	91	92
Illinois.....	1,849	1,606	1,564	1,606	1,763	1,923	1,955	1,996	2,066	2,040	1,932	1,937	1,758
Indiana.....	1,414	1,511	1,396	1,379	1,344	1,319	1,360	1,451	1,487	1,500	1,487	1,439	1,291
Iowa.....	297	213	221	247	268	310	322	325	299	323	346	349	340
Kansas.....	375	370	364	347	346	343	349	417	459	413	363	351	376
Kentucky.....	209	200	193	172	204	215	246	213	231	225	203	209	199
Louisiana.....	97	91	98	101	94	97	94	90	96	104	99	101	105
Maryland.....	183	216	159	173	176	203	197	169	170	190	188	188	173
Massachusetts.....	422	401	358	360	372	418	434	431	472	458	461	463	431
Michigan.....	1,210	1,014	1,004	981	1,070	943	1,092	1,227	1,439	1,576	1,597	1,322	1,251
Minnesota.....	612	635	599	601	609	630	620	521	541	530	713	674	667
Missouri.....	567	446	482	550	565	563	637	607	612	605	571	571	590
Nebraska.....	249	210	210	227	203	225	230	284	299	310	287	253	249
New Jersey.....	544	453	477	513	503	529	609	605	610	562	538	530	603
New York.....	2,695	2,359	2,324	2,364	2,619	2,755	2,708	2,819	2,906	2,987	2,980	2,807	2,720
North Carolina.....	108	108	104	105	100	112	109	123	103	100	104	113	119
Ohio.....	2,612	2,341	2,362	2,446	2,461	2,517	2,541	2,750	2,623	2,754	2,820	2,831	2,898
Oklahoma.....	481	403	524	530	493	498	383	510	519	509	496	452	458
Oregon.....	92	85	97	95	110	129	96	84	91	87	72	74	87
Pennsylvania.....	7,083	7,325	6,796	6,729	6,761	6,890	7,189	7,353	7,124	7,167	7,339	7,266	7,057
Rhode Island.....	64	68	60	62	58	68	70	70	65	61	64	59	58
Tennessee.....	376	366	356	372	357	400	388	419	402	405	354	330	367
Texas.....	852	737	811	758	777	866	893	962	922	890	865	858	891
Utah.....	43	33	34	32	34	37	36	48	56	57	47	47	57
Virginia.....	474	475	426	560	504	458	444	467	466	467	455	476	437
Washington.....	175	237	168	179	165	167	213	183	160	203	134	135	159
West Virginia.....	238	209	222	232	229	234	255	257	254	241	242	243	244
Wisconsin.....	681	684	656	717	661	680	570	593	680	735	744	689	766

*Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

¹ As the 1935 averages given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE: 1935 AND 1931

[No comparable figures are available for 1933 or 1929]

	1935		1931	
	Tons (2,000 pounds)	Value	Tons (2,000 pounds)	Value
1. Structural and Ornamental Metal Work industry, all products, total value.....		\$160,762,487		\$238,033,284
2. Structural and ornamental metal work.....		138,691,151		1216,504,800
3. Other products (not normally belonging to the industry), value, and receipts for custom and repair work.....		22,071,336		121,528,484
4. Structural and ornamental metal work made as a secondary product in other industries, value.....		17,869,979		18,080,027
Structural and ornamental metal work, aggregate value (sum of 2 and 4).....		156,561,130		1234,584,827
Structural steel, fabricated, total.....		111,077,045		169,446,340
Quantity reported.....	1,234,592	92,776,646	2,079,942	142,674,729
Quantity not reported.....		18,300,399		26,771,611
For buildings, total.....		51,374,935		80,852,266
Quantity reported.....	570,517	42,362,902	1,081,902	78,231,685
Quantity not reported.....		9,012,033		7,620,581
For bridges, total.....		27,000,102		26,892,813
Quantity reported.....	368,894	26,179,012	377,641	26,109,123
Quantity not reported.....		821,090		753,690
Other than for buildings and bridges, total.....		20,186,124		12,164,052
Quantity reported.....	167,636	15,752,641	93,163	6,765,274
Quantity not reported.....		4,433,483		5,398,778
Structural steel not reported by use, total.....		12,515,884		49,537,209
Quantity reported.....	127,645	8,482,091	527,236	38,568,647
Quantity not reported.....		4,033,793		12,968,562
Stairs and staircases, total.....		2,658,969		6,685,635
Quantity reported.....	7,840	1,328,857	31,767	4,850,093
Quantity not reported.....		1,330,112		2,335,542
Fire escapes, total.....		1,322,243		1,903,250
Quantity reported.....	5,110	675,959	10,605	1,281,139
Quantity not reported.....		646,284		622,111
Bars and rods for reinforcing concrete, total.....		8,025,285		9,640,596
Quantity reported.....	124,426	6,760,072	175,718	8,381,242
Quantity not reported.....		1,265,213		1,259,354
Expanded-metal lath, total.....		6,198,313		5,508,913
Quantity reported.....	45,418	4,654,653	45,921	3,986,731
Quantity not reported.....		1,543,660		1,522,182
Iron fence and gates, other than wire.....		1,500,603		7,908,556
Grilles and railings, total.....		2,031,348		4,925,391
Quantity reported.....	4,295	935,622	8,642	2,152,447
Quantity not reported.....		1,095,726		2,772,944
Ornamental iron and steel, total.....		7,384,428		14,098,306
Quantity reported.....	17,253	3,036,981	45,029	8,623,897
Quantity not reported.....		4,347,447		5,474,409
Ornamental bronze work.....		2,721,178		7,129,795
Other nonferrous ornamental work for buildings.....		1,441,733		1,989,274
Structural and ornamental work not reported by kind.....		4,325,418		2,405,648
Other structural and ornamental metal products.....		7,874,567		2,943,123

¹ Revised.² Includes an indeterminate amount representing value of woven-wire lath.

TABLE 5.—PRINCIPAL MATERIALS CONSUMED, BY KIND, QUANTITY, AND COST: 1935

[Quantities and costs of principal materials consumed were reported by only 781 of the 1,111 establishments in this industry. The combined value of products reported by these 781 establishments amounted to \$127,534,783, or 79.3 per cent of the aggregate value of products of the 1,111 establishments in the industry. A further reason for the difference between the sum of the costs of the several kinds of materials as shown in this table and the total cost of materials as given in tables 1 and 2 is found in the fact that this table covers only certain specified materials, whereas the others cover all materials.]

	Total cost	QUANTITY REPORTED		Quantity not reported— cost
		Quantity	Cost	
		<i>Tons (2,000 lbs.)</i>		
Structural-steel shapes	\$41,464,889	919,316	\$39,184,700	\$2,280,189
Steel sheets	10,808,306	237,271	10,265,096	543,210
Other iron and steel	9,224,682	160,861	7,905,053	1,319,629
		<i>Pounds</i>		
Copper, brass, and bronze	809,684	2,867,073	568,244	241,440

1123

TIN CANS AND OTHER TINWARE NOT ELSEWHERE CLASSIFIED

[A preliminary report for this industry was issued Dec. 5, 1936]

Description of the industry.—This industry, as defined for Manufactures Census purposes, embraces establishments engaged primarily in the manufacture of tin cans of all kinds, and of tinware except stamped ware (which is assigned to the Stamped and Pressed Metal Products industry). Tin-can departments operated by establishments that manufacture cans for use as containers for their own products are also classified in this industry.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (-)	
					1933-1935	1929-1935
Number of establishments.....	204	194	199	232	5.2	-12.1
Proprietors and firm members.....	18	18	(1)	58	-----	(*)
Salaried personnel, total ²	4,190	(3)	(1)	3,757	(3)	11.5
Salaried officers of corporations.....	183	(3)	(1)	197	(3)	-7.1
Supervisory, technical, and clerical employees.....	4,007	2,540	(1)	3,560	57.8	12.6
Salaries paid, total ²	\$9,240,648	(3)	(1)	\$8,288,015	(3)	11.5
To salaried officers of corporations.....	\$1,248,554	(3)	(1)	\$1,474,605	(3)	-16.3
To supervisory, technical, and clerical employees.....	4,992,094	4,910,641	(1)	\$6,813,410	62.8	17.3
Wage earners (average for year) ⁴	27,484	23,343	25,271	31,497	17.7	-12.7
Wages.....	\$27,825,964	\$22,692,907	\$27,977,932	\$38,173,246	22.6	-27.1
Cost of materials, etc., total.....	206,033,852	137,046,144	149,121,078	194,986,803	50.3	5.7
Cost of materials and supplies.....	203,943,058	(1)	(1)	192,511,654	(1)	5.9
Cost of fuel.....	1,018,183	(1)	(1)	1,431,740	(1)	-23.9
Cost of purchased electric energy.....	1,072,611	(1)	(1)	1,043,409	(1)	2.8
Value of products.....	292,388,012	207,946,457	223,634,271	206,901,426	40.6	-1.5
Value added by manufacture ⁷	86,354,160	70,900,313	74,513,193	101,914,023	21.8	-15.3

* Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 1,452; salaries, \$4,288,066. Technical, 155; salaries, \$372,749. Clerical, 2,400; salaries, \$3,331,270. See sec. 10, p. 7.

⁵ Supervisory, 763; salaries, \$2,400,646. Clerical and other, 1,777; salaries, \$2,500,995. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States...	204	4, 190	27, 484	\$9, 240, 648	\$27,825,964	\$206,033,852	\$292,388,012	\$86, 354, 160
California.....	18	439	2, 503	934, 799	2, 669, 050	31, 500, 993	44, 304, 763	12, 803, 770
Illinois.....	27	926	6, 189	1, 935, 165	6, 518, 317	45, 887, 728	67, 533, 297	21, 455, 569
Maryland.....	14	522	3, 749	1, 195, 089	3, 812, 427	25, 020, 643	34, 146, 720	9, 128, 077
Massachusetts.....	8	91	440	257, 530	491, 545	1, 297, 111	2, 447, 782	1, 150, 671
Missouri.....	8	133	656	227, 354	547, 124	1, 983, 159	3, 428, 839	1, 445, 680
New Jersey.....	11	367	2, 180	738, 192	2, 467, 044	14, 206, 755	20, 657, 327	6, 450, 572
New York.....	38	460	3, 121	1, 148, 874	3, 243, 390	15, 986, 188	24, 534, 181	8, 547, 993
Ohio.....	13	219	1, 538	595, 737	1, 575, 532	9, 224, 221	14, 041, 827	4, 817, 606
Pennsylvania.....	15	204	1, 917	537, 226	1, 632, 902	14, 233, 633	17, 921, 219	3, 687, 586
Texas.....	4	84	799	170, 140	811, 088	3, 377, 308	5, 021, 864	1, 644, 556
Wisconsin.....	4	10	227	16, 185	219, 308	3, 584, 438	3, 955, 274	350, 836
Other States ¹	44	735	4, 165	1, 484, 857	3, 838, 237	39, 731, 675	54, 414, 919	14, 683, 244

¹ Colorado, 1 establishment; Florida, 3; Georgia, 2; Indiana, 5; Kentucky, 1; Louisiana, 4; Maine, 2; Michigan, 3; Minnesota, 3; Nebraska, 1; Oregon, 2; Rhode Island, 1; Tennessee, 2; Utah, 1; Vermont, 2; Virginia, 3; Washington, 6; West Virginia, 3. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year ¹	NUMBER REPORTED FOR—															
		January	February	March	April	May	June	July	August	September	October	November	December				
United States																	
1935.....	27, 485	24, 267	24, 400	25, 081	25, 747	26, 955	28, 389	29, 769	31, 180	30, 964	29, 171	27, 307	26, 587				
1933.....	23, 343	19, 766	20, 086	20, 058	20, 898	22, 167	23, 853	24, 655	26, 554	26, 915	25, 197	24, 430	25, 534				
States, 1935																	
California.....	2, 503	2, 072	2, 076	2, 248	2, 243	2, 305	2, 441	2, 827	3, 163	2, 902	2, 985	2, 379	2, 395				
Florida.....	42	50	50	46	47	48	50	22	20	21	23	30	102				
Illinois.....	6, 200	5, 237	5, 204	5, 336	5, 591	5, 898	6, 517	6, 878	7, 165	7, 153	6, 800	6, 366	6, 261				
Indiana.....	377	300	308	301	330	320	350	395	573	656	348	320	324				
Louisiana.....	714	738	684	695	608	647	715	729	732	758	825	767	672				
Maryland.....	3, 749	3, 345	3, 289	3, 311	3, 263	3, 483	3, 917	4, 106	4, 448	4, 457	4, 013	3, 767	3, 622				
Massachusetts.....	440	421	444	491	477	430	437	431	436	433	422	408	408				
Michigan.....	308	374	360	366	355	285	288	247	286	289	340	214	303				
Minnesota.....	236	237	236	243	250	249	258	248	236	227	213	218	222				
Missouri.....	656	637	678	647	698	692	700	672	655	636	630	615	607				
New Jersey.....	2, 180	1, 872	1, 877	1, 955	2, 063	2, 141	2, 046	2, 183	2, 463	2, 374	2, 465	2, 422	2, 303				
New York.....	3, 121	2, 891	2, 922	2, 980	3, 078	3, 162	3, 205	3, 253	3, 141	3, 271	3, 255	3, 150	3, 140				
Ohio.....	1, 538	1, 369	1, 363	1, 368	1, 380	1, 430	1, 513	1, 671	1, 924	1, 890	1, 874	1, 569	1, 407				
Pennsylvania.....	1, 904	1, 674	1, 817	1, 840	1, 951	2, 028	2, 099	2, 086	2, 085	1, 919	1, 877	1, 815	1, 662				
Texas.....	799	640	666	701	733	857	906	916	873	849	820	843	789				
Virginia.....	223	225	210	200	213	216	247	285	270	250	200	183	177				
Washington.....	312	291	329	349	339	379	312	301	342	315	256	267	258				
West Virginia.....	783	757	762	764	834	892	874	840	779	760	730	692	717				
Wisconsin.....	227	208	220	228	223	234	243	243	240	229	224	225	212				

¹ As the 1935 averages given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

TABLE 4.—TIN CANS AND OTHER TINWARE—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1929 TO 1935

	1935	1933	1931	1929
1. "Tin Cans and Other Tinware not Elsewhere Classified" industry, all products, total value.....	\$292,388,012	\$207,946,457	\$223,634,271	\$206,901,426
2. Tin cans, utensils, etc.....	\$288,014,608	\$205,391,538	\$221,060,181	\$270,962,638
3. Other products (not normally belonging to the industry).....	\$4,373,404	\$2,554,919	\$2,568,090	¹ \$16,938,763
4. Tin cans, utensils, etc., made as secondary products in other industries, value.....	\$2,805,160	\$2,087,385	\$3,227,110	\$3,847,105
Tin cans, utensils, etc., aggregate value (2 and 4).....	\$290,819,768	\$207,478,923	\$224,293,291	\$283,809,763
Venthole-top cans (chiefly for evaporated milk):				
Number.....	1,774,961,311	1,736,937,202	1,446,442,428	1,711,601,017
Value.....	\$17,200,813	\$14,721,113	\$14,454,541	\$20,734,311
Sanitary cans, including sweetened-condensed-milk cans:				
Number.....	7,608,709,640	5,436,278,955	4,851,606,135	5,526,838,732
Value.....	\$151,562,868	\$94,842,452	\$93,767,520	\$122,020,557
Ice-cream cans:				
Number.....	759,838	540,481	701,233	1,007,828
Value.....	\$411,649	\$399,403	\$325,235	\$1,819,903
Dairy milk cans, total value.....	\$3,580,113	\$2,558,002	\$2,578,769	\$3,970,303
Number and value reported:				
Number.....	1,118,040	866,233	831,474	1,704,267
Value.....	\$3,333,690	\$2,277,601	\$2,197,163	\$3,079,393
Number not reported, value.....	\$246,423	\$280,401	\$381,606	-----
Other cans and packages, total value.....	\$111,111,551	\$89,272,931	\$107,966,463	\$129,528,875
Number and value reported:				
Number.....	3,209,354,957	2,846,121,935	3,109,046,076	2,008,271,060
Value.....	\$99,956,251	\$82,495,640	\$99,918,322	\$120,965,466
Number not reported, value.....	\$11,155,300	\$6,777,291	\$8,048,141	\$8,563,409
Other tinware, except stamped, value.....	\$6,952,774	\$5,685,022	\$4,700,763	\$5,720,722

¹ Because of a change in classification (the transfer of establishments engaged in stamping tinware other than tin cans from the Tin Cans and Other Tinware industry to the Stamped and Pressed Metal Products industry), this figure is not comparable with those for subsequent years.

TABLE 5.—PRINCIPAL MATERIALS CONSUMED, BY KIND, QUANTITY, AND COST: 1935 AND 1929

[Quantities and costs of the principal materials consumed were reported by 184 of the 204 establishments in this industry. The combined value of products reported by these 184 establishments amounted to \$287,882,216, or 98.4 percent of the aggregate value of products for the industry. The principal reason for the difference between the sum of the costs of the several kinds of materials shown in this table and the total cost of materials as given in tables 1 and 2 is found in the fact that this table covers only certain specified materials, whereas the others cover all materials. No detailed data on materials consumed were collected for 1933 or 1931.]

KIND	1935				1929		
	Number of establishments	Quantity reported		Quantity not reported, cost	Number of establishments	Quantity	Cost
		Quantity	Cost				
Tin plate.....	179	<i>Tons</i> (2,000 lbs.) 1,404,948	\$151,321,879	\$8,616,141	(1)	<i>Tons</i> (2,000 lbs.) 1,449,067	\$102,253,067
Terneplate.....	51	61,193	5,488,253	423,283	(1)	3,206	309,210
Blackplate.....	75	63,745	4,650,488	165,101	(1)	(1)	(1)
Lead.....	12	<i>(Pounds)</i> 927,318	96,896	1,000	(1)	<i>(Pounds)</i> 6,628,075	477,502
Solder ¹	157	14,139,827	3,522,007	285,252	(1)	11,217,833	2,704,263

¹ No data.

² Not including solder made in the same plant in which it was used as a material.

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TIN PLATE AND TERNEPLATE

[A preliminary production report on tin plate and terneplate was issued Nov. 7, 1936]

Description of the industry.—This industry, as defined for census purposes, consists in the coating of black plates with tin or with terne mixture (an alloy of tin and lead, in varying proportions). The manufacture of black plates is a rolling-mill operation, and 31 of the 32 tin-plate and terneplate establishments that reported for 1935 were operated as dipping departments of the mills that rolled the plates. The other establishment was operated by a tin-can manufacturer who did no rolling but purchased black plates for coating.

The numbers of wage earners, amounts of wages paid, cost of materials, etc., are not reported separately for the dipping departments of rolling mills and other establishments that operate such departments, but are included in the respective items for the "Steel-Works and Rolling-Mill Products" and the "Tin Cans and Other Tinware" industries.

TIN PLATE AND TERNEPLATE—PRODUCTION, BY KIND, QUANTITY, AND VALUE, AND EQUIPMENT, BY NUMBER OF SETS AND BY CAPACITY: 1929 TO 1935

	1935	1933	1931	1929
Number of establishments.....	32	32	31	31
PRODUCTS				
Total value.....	\$195,845,066	\$151,601,254	\$142,697,503	\$213,084,656
Tin plate and terneplate:				
Total pounds.....	4,216,002,467	3,962,956,085	3,268,025,278	4,377,448,538
Total value.....	\$192,323,404	\$148,770,839	\$140,984,351	\$209,675,187
Tin plate:				
Total pounds.....	3,789,159,497	3,764,702,348	3,108,668,090	4,081,856,278
Total value.....	\$175,730,008	\$142,434,487	\$135,374,970	\$194,107,222
Coke plate:				
Pounds.....	3,757,086,898	3,744,404,436	3,071,029,750	3,958,323,114
Value.....	\$173,865,908	\$141,452,854	\$133,193,780	\$189,050,613
Charcoal plate:				
Pounds.....	32,072,599	20,297,912	37,638,340	73,583,164
Value.....	\$1,864,100	\$981,633	\$2,181,190	\$5,056,609
Terneplate, including long terne:				
Pounds.....	426,842,970	198,253,737	159,357,188	345,592,260
Value.....	\$16,593,396	\$6,336,352	\$5,609,381	\$15,567,965
Other products, including tin dross, scruff, scrap, etc., value.....	\$3,521,662	\$2,830,415	\$1,713,152	\$3,409,469
EQUIPMENT IN ACTIVE PLANTS				
Number of dipping sets at end of year, total.....	474	479	482	509
Tin plate:				
Mechanical.....	354	385	387	370
Hand-fed.....	66	63	57	94
Terneplate.....	54	31	38	45
Daily capacity (24-hour basis), total pounds.....	22,411,830	22,516,695	21,396,120	20,846,020
Tin plate.....	19,743,465	20,749,375	19,661,820	19,314,120
Terneplate.....	2,668,365	1,767,320	1,734,300	1,531,900
Number of sets building.....	13	5	3	2

1125

TOOLS, NOT INCLUDING EDGE TOOLS, MACHINE TOOLS, FILES, OR SAWS

Description of the industry.—The principal products of this industry are hand tools (not including power-driven hand tools) other than edge tools, files, and saws. The group covers so large a variety of tools that it is impossible to collect separate data for each type or kind, many of the manufacturers being unable to supply such data. Some of the principal types included are hammers, wrenches, pliers, and rules; shovels, forks, rakes, and hoes; picks and mattocks; and a variety of special tools used by jewelers, plumbers, stonecutters, ironworkers, etc. Because of the inability of many of the manufacturers to supply detailed data on products, it is necessary to restrict the presentation in table 4 to four broad classes of tools. No comparable figures for years prior to 1935 are available.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	343	294	355	534	16.7	-35.8
Proprietors and firm members.....	118	105	(1)	279	12.4	-57.7
Salaried personnel, total ¹	2,430	(2)	(1)	3,513	(2)	-30.9
Salaried officers of corporations.....	383	(2)	(1)	516	(2)	-25.8
Supervisory, technical, and clerical employees.....	⁴ 2,047	⁵ 1,706	(1)	3,002	20.0	-31.8
Salaries paid, total ¹	\$5,083,475	(2)	(1)	\$9,744,359	(2)	-47.6
To salaried officers of corporations.....	\$1,800,744	(2)	(1)	\$3,221,645	(2)	-44.1
To supervisory, technical, and clerical employees.....	⁴ \$3,282,731	⁵ \$2,516,133	(1)	\$6,522,714	30.5	-40.7
Wage earners (average for year) ⁶	12,636	9,598	10,833	19,305	31.7	-34.5
Wages.....	\$13,297,806	\$8,157,961	\$11,205,740	\$25,808,289	63.0	-49.5
Cost of materials, etc., total.....	18,701,663	10,520,871	13,724,818	32,110,507	77.8	-41.8
Cost of materials, supplies, and containers.....	17,098,358	(1)	(1)	29,578,831	(1)	-42.2
Cost of fuel.....	880,175	(1)	(1)	1,481,758	(1)	-40.6
Cost of purchased electric energy.....	723,130	(1)	(1)	1,049,918	(1)	-31.1
Value of products.....	52,544,030	34,199,007	42,416,660	99,462,032	53.6	-47.2
Value added by manufacture ⁷	33,842,367	23,678,136	23,691,842	67,351,525	42.9	-49.8

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 587; salaries, \$1,495,701. Technical, 73; salaries, \$155,084. Clerical, 1,387; salaries, \$1,631,946. See sec. 10, p. 7.

⁵ Supervisory, 343; salaries, \$896,811. Clerical and other, 1,363; salaries, \$1,619,322. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, containers, fuel, and purchased electric energy. See sec. 13, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Sal- aried officers and em- ployees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and pur- chased energy	Value of products	Value added by manufac- ture
United States.....	343	2, 430	12, 636	\$5, 083, 475	\$13, 297, 806	\$18, 701, 663	\$52, 544, 030	\$33, 842, 367
California.....	12	21	44	28, 933	55, 028	86, 655	218, 060	131, 405
Connecticut.....	24	424	1, 688	753, 896	1, 807, 825	2, 103, 746	6, 118, 472	4, 014, 726
Illinois.....	56	267	1, 481	690, 153	1, 577, 024	2, 918, 631	7, 699, 361	4, 780, 730
Indiana.....	8	47	271	65, 654	223, 737	326, 504	918, 880	592, 378
Iowa.....	7	29	117	51, 778	104, 110	184, 268	604, 203	419, 935
Massachusetts.....	38	283	1, 662	508, 039	1, 625, 220	2, 224, 222	5, 827, 670	3, 603, 448
Michigan.....	12	136	644	287, 972	580, 626	630, 128	2, 469, 219	1, 839, 091
Minnesota.....	8	40	104	81, 599	198, 216	228, 248	663, 625	435, 377
Missouri.....	7	33	94	95, 001	108, 864	227, 436	588, 700	361, 264
New Jersey.....	20	118	521	253, 579	543, 551	604, 381	1, 986, 896	1, 292, 015
New York.....	46	316	1, 974	671, 989	2, 267, 194	2, 468, 661	7, 410, 945	4, 951, 284
Ohio.....	27	287	1, 630	686, 630	1, 774, 040	3, 007, 977	8, 129, 899	5, 121, 922
Pennsylvania.....	34	214	1, 135	490, 655	1, 131, 141	1, 312, 771	4, 011, 661	2, 788, 890
Rhode Island.....	6	1	21	1, 655	25, 188	49, 559	58, 191	48, 632
Vermont.....	6	35	197	67, 559	180, 675	294, 337	900, 536	606, 199
Wisconsin.....	8	59	199	87, 291	281, 885	548, 827	1, 015, 809	666, 982
Other States ¹	24	120	864	263, 092	815, 482	1, 435, 312	3, 823, 403	2, 388, 091

¹ Arkansas, 1 establishment; Colorado, 2; Delaware, 2; Florida, 1; Louisiana, 1; Maine, 1; Maryland, 2; Nebraska, 1; Oregon, 1; South Dakota, 1; Tennessee, 4; Texas, 1; Washington, 2; West Virginia, 4. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year ¹	NUMBER REPORTED FOR—													
		January	February	March	April	May	June	July	August	September	October	November	December		
United States															
1935.....	12, 672	11, 690	12, 235	12, 480	12, 660	12, 570	12, 336	12, 150	11, 885	12, 653	13, 270	13, 864	14, 274		
1933.....	9, 598	(*)	(*)	7, 785	(*)	(*)	8, 797	(*)	(*)	11, 172	(*)	(*)	12, 043		
States, 1935															
California.....	44	40	41	43	49	47	49	48	41	45	41	43	42		
Connecticut.....	1, 688	1, 543	1, 587	1, 627	1, 642	1, 636	1, 645	1, 626	1, 665	1, 722	1, 800	1, 865	1, 903		
Illinois.....	1, 481	1, 430	1, 474	1, 519	1, 544	1, 505	1, 459	1, 414	1, 442	1, 479	1, 508	1, 503	1, 493		
Indiana.....	271	258	269	273	277	272	278	258	271	272	278	277	275		
Iowa.....	129	124	126	131	126	118	126	108	119	122	132	160	159		
Massachusetts.....	1, 562	1, 434	1, 510	1, 583	1, 597	1, 637	1, 592	1, 587	1, 145	1, 557	1, 591	1, 735	1, 771		
Michigan.....	646	593	599	596	629	603	601	538	633	657	736	787	784		
Minnesota.....	194	153	178	174	178	186	195	206	205	218	220	211	206		
Missouri.....	94	83	95	90	95	108	103	102	106	84	77	92	93		
New Jersey.....	521	416	431	432	447	450	452	453	498	581	699	717	680		
New York.....	1, 974	1, 843	1, 955	1, 971	2, 071	1, 984	1, 919	1, 921	1, 921	1, 964	2, 014	2, 016	2, 113		
Ohio.....	1, 636	1, 541	1, 575	1, 602	1, 566	1, 628	1, 628	1, 607	1, 599	1, 618	1, 639	1, 734	1, 895		
Pennsylvania.....	1, 148	1, 045	1, 102	1, 109	1, 099	1, 130	1, 100	1, 109	1, 123	1, 143	1, 195	1, 281	1, 336		
Rhode Island.....	21	20	21	24	23	21	20	19	19	21	21	21	22		
Tennessee.....	78	83	82	91	74	87	76	70	72	73	71	74	88		
Vermont.....	199	175	204	218	226	199	188	183	177	184	192	214	219		
West Virginia.....	664	614	677	682	692	643	599	554	524	588	731	795	866		
Wisconsin.....	199	182	189	191	200	196	205	201	202	199	206	211	208		

*Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

¹ As the 1935 averages given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

TABLE 4.—PRODUCTS, BY CLASS AND VALUE, FOR THE UNITED STATES: 1935

[No comparable figures available for earlier years. See "Description of the industry," p. 960]

	1935
1. "Tools, Not Including Edge Tools, Machine Tools, Files, or Saws" industry, all products, total value.....	\$52,544,030
2. Tools.....	44,508,537
3. Other products (not normally belonging to the industry), value, and receipts for repair work.....	8,035,493
4. Tools made as secondary products in other industries.....	5,820,274
Tools (not including edge tools, machine tools, files, or saws), aggregate value (sum of 2 and 4).....	50,328,811
Forks, hoes, rakes, shovels, spades, etc.....	10,885,004
Mechanics' hand tools.....	16,861,968
Household kitchen tools.....	2,729,424
Other tools.....	19,851,515

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WIRE DRAWN FROM PURCHASED RODS

[A preliminary report on the production of wire and wire products was issued Jan. 22, 1937]

Description of the industry.—The Wire industry, as defined for census purposes, consists in the drawing of wire from purchased rods of iron, steel, copper, or other metals, and does not, therefore, include production by the wire-drawing departments of rolling mills. The statistics in tables 1, 2, 3, and 7 relate only to the Wire industry proper, but the detailed figures given in tables 4, 5, 6, 8, and 9 refer to all establishments reporting the production of wire or of wire products, regardless of the industries in which classified. As will be seen by reference to table 4, the output of wire and wire products by the wire departments of steel works and rolling mills exceeds that reported for mills in the Wire industry proper.

Production of wire and wire products, all industries.—In many cases establishments engaged in drawing wire also operate departments in which they manufacture nails, woven-wire fencing, insulated wire, and other wire products. When these products are manufactured by establishments that do not draw their own wire, they are normally classified in other industries, particularly "Wirework Not Elsewhere Classified" and "Electrical Machinery, Apparatus, and Supplies." Table 4 of this report shows separately the values of wire and wire products manufactured in each of the several industries, and table 5 gives detailed quantity and value figures covering the total production of wire and of the chief classes of wire products reported by establishments in all industries in which wire and wire products are made. The figures do not, however, include data for certain products which, although made from purchased wire, are not usually considered as wire products; for example, needles and pins, bolts, and many minor items of hardware.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	88	78	82	81	(*)	(*)
Proprietors and firm members.....	1	1	(1)	3	-----	(*)
Salaried personnel, total ¹	2,660	(3)	(1)	2,554	(3)	4.2
Salaried officers of corporations.....	145	(3)	(1)	148	(3)	-2.0
Supervisory, technical, and clerical employees.....	4 2,515	5 1,933	(1)	2,406	30.1	4.5
Salaries paid, total ²	\$6,266,878	(3)	(1)	\$6,979,078	(3)	-10.2
To salaried officers of corporations...	\$1,352,593	(3)	(1)	\$1,527,886	(3)	-11.5
To supervisory, technical, and clerical employees.....	4 \$4,914,285	5 \$3,447,711	(1)	\$5,451,192	42.5	-9.8
Wage earners (average for year) ⁶	21,550	14,656	14,476	22,467	47.0	-4.1
Wages.....	\$24,451,876	\$14,321,233	\$17,179,057	\$35,110,335	70.7	-30.4

For footnotes, see end of table.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935—Con.

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Cost of materials, etc., total.....	\$63,526,010	\$39,614,635	\$45,187,263	\$126,182,429	73.0	-45.7
Cost of materials and supplies.....	64,078,167	(1)	(1)	120,696,188	(1)	-46.9
Cost of fuel.....	2,250,246	(1)	(1)	2,851,243	(1)	-21.1
Cost of purchased electric energy.....	2,197,597	(1)	(1)	2,634,998	(1)	-16.6
Value of products.....	127,417,195	75,475,581	83,370,125	213,997,410	68.8	-40.5
Value added by manufacture ⁷	58,891,185	35,860,946	38,182,862	87,814,981	64.2	-32.9

* Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 828; salaries, \$2,398,110. Technical, 153; salaries, \$331,491. Clerical, 1,534; salaries, \$2,184,684. See sec. 10, p. 7.

⁵ Supervisory, 562; salaries, \$1,556,986. Clerical and other, 1,371; salaries, \$1,890,725. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States.....	88	2,660	21,550	\$6,266,878	\$24,451,876	\$68,526,010	\$127,417,195	\$58,891,185
California.....	3	33	228	94,742	250,236	988,681	1,774,760	780,079
Connecticut.....	8	184	1,511	456,959	1,631,882	3,450,802	8,344,060	4,863,267
Illinois.....	12	576	3,934	1,319,315	4,234,849	17,187,599	27,230,510	10,048,920
Indiana.....	4	154	1,080	338,654	1,091,285	4,473,804	7,621,838	3,148,034
Massachusetts.....	13	412	3,597	995,238	4,715,430	7,938,220	17,109,022	9,170,802
New Jersey.....	13	363	2,806	785,819	3,257,095	8,425,127	15,710,080	7,284,959
New York.....	7	195	1,834	565,335	2,136,990	4,410,901	9,403,573	4,992,672
Ohio.....	6	140	1,672	369,275	2,123,012	5,421,342	10,000,878	4,579,536
Pennsylvania.....	11	292	1,843	679,192	1,945,380	5,221,637	11,752,905	6,531,268
Other States ¹	11	311	3,045	662,349	3,065,717	11,007,897	18,463,545	7,455,648

¹ Iowa, 1 establishment; Maine, 1; Maryland, 1; Michigan, 3; Missouri, 1; Rhode Island, 1; Texas, 1; Wisconsin, 2. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year ¹	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	21,607	20,346	21,142	21,404	21,563	21,468	20,785	20,620	21,353	22,074	22,763	22,993	22,769
1933.....	14,656	11,212	11,589	11,228	11,292	11,951	13,249	15,355	17,646	18,627	18,253	17,653	17,817
<i>States, 1935</i>													
California.....	228	211	215	204	233	238	238	236	230	231	236	236	233
Connecticut.....	1,511	1,334	1,416	1,476	1,435	1,435	1,401	1,442	1,709	1,672	1,648	1,709	1,458
Illinois.....	3,991	3,698	3,873	3,893	3,880	3,913	3,812	3,752	3,917	4,133	4,262	4,352	4,412
Indiana.....	1,080	1,071	1,077	1,108	1,139	1,133	1,117	1,041	989	994	1,053	1,117	1,122
Massachusetts.....	3,597	3,538	3,643	3,596	3,492	3,581	3,476	3,499	3,521	3,595	3,673	3,670	3,779
Michigan.....	2,026	1,950	2,127	2,215	2,240	2,126	1,744	1,705	1,833	2,126	2,213	2,068	1,967
New Jersey.....	2,806	2,546	2,563	2,605	2,731	2,695	2,685	2,695	2,806	2,895	3,152	3,195	3,110
New York.....	1,834	1,799	1,842	1,824	1,831	1,823	1,780	1,766	1,783	1,848	1,874	1,934	1,911
Ohio.....	1,672	1,650	1,710	1,723	1,703	1,689	1,664	1,638	1,642	1,673	1,645	1,657	1,672
Pennsylvania.....	1,843	1,674	1,770	1,789	1,767	1,806	1,830	1,798	1,865	1,831	1,952	1,981	2,053

¹ As the 1935 averages given in this table are derived from the figures for the 12 months in the calendar year, those for the United States and Illinois differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

TABLE 4.—WIRE AND WIRE PRODUCTS—PRODUCTION, BY INDUSTRY AND BY VALUE: 1929 TO 1935

	1935	1933	1931	1929
1. "Wire Drawn from Purchased Rods" industry, all products, total value.....	\$127,417,195	\$75,475,581	\$83,370,125	\$213,997,410
2. Bare wire made for sale and for interplant transfer.....	42,712,022	31,666,005	33,377,187	95,128,565
3. Wire products.....	76,043,939	1 37,849,689	1 43,953,654	97,313,199
4. Other products (not normally belonging to the industry), value, and receipts for custom drawing.....	8,661,234	1 6,259,887	1 6,039,284	21,557,646
5. "Wirework Not Elsewhere Classified" industry, all products, total value.....	117,568,335	74,520,498	86,693,807	146,805,049
6. Wire products.....	108,321,818	69,322,829	79,916,576	135,865,696
7. Other products (not normally belonging to the industry).....	9,246,517	5,197,669	6,777,231	10,939,353
8. Wire and wire products made by wire-drawing departments of steel works and rolling mills:				
9. Bare wire for sale and for interplant transfer.....	52,321,967	36,346,639	36,096,566	83,562,304
10. Wire products.....	76,064,430	1 55,303,693	63,222,372	116,634,982
11. Wire and wire products made by wire-drawing departments of nonferrous rolling mills and other establishments (except steel works and rolling mills):				
12. Bare wire made for sale and for interplant transfer.....	27,717,666	17,168,646	30,509,173	104,372,625
13. Wire products.....	29,217,949	1 15,543,682	1 48,740,404	56,499,863
14. Wire products made as secondary products in other industries, insulated wire and cable made in "Electrical Machinery, Apparatus, and Supplies" industry, and wire nails, tacks, etc., made in "Nails, spikes, etc." industry.....	63,670,181	1 39,922,751	1 73,553,186	1 242,002,636
15. Bare wire made for sale and for interplant transfer, total (2, 9, and 12).....	122,751,655	85,181,290	99,982,926	283,061,404
16. Wire products, total (3, 6, 10, 13, and 14).....	353,318,317	1 217,647,644	1 309,386,192	1 648,316,376
Wire products except insulated wire and cable.....	231,062,456	1 52,010,336	1 183,225,538	324,334,444
Insulated wire and cable.....	122,225,861	1 65,637,308	1 126,160,654	1 323,981,932

¹ Revised to include value of armored wire and cable.

TABLE 5.—WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1929 TO 1935

[This table presents statistics for the production of wire and wire products in all industries in which such commodities are manufactured, so far as separately reported to the Census Bureau. See "Production of wire and wire products, all industries," p. 968.]

[Ton, 2,000 pounds; keg, 100 pounds]

	1935	1933	1931	1929
BARE WIRE				
Aggregate value.....	\$122,751,655	\$85,181,290	\$99,982,926	\$283,061,404
Iron and steel wire:				
Plain, total tons.....	2,349,143	1,962,076	1,865,758	3,097,239
Made for sale:				
Tons.....	749,895	611,169	531,129	1,074,076
Value.....	\$53,183,249	\$39,856,395	\$35,661,372	\$78,992,238
For interplant transfer (transfer to other plants of same company or of affiliated companies):				
Tons.....	92,402	55,819	72,166	129,597
Value.....	\$7,080,156	\$3,729,716	\$4,830,850	\$9,463,755
Produced and consumed in same works, including wire subsequently galvanized or otherwise coated, or cold-rolled, tons (no value assigned).....	1,506,846	1,295,088	1,262,473	1,893,560
Galvanized:				
Made for sale and for interplant transfer:				
Tons.....	195,434	167,925	171,722	268,793
Value.....	\$14,334,897	\$9,936,208	\$10,963,179	\$19,656,350
Produced and consumed in same works, tons (no value assigned).....	451,230	384,547	397,045	574,402
Other coated wire:				
Made for sale and for interplant transfer:				
Tons.....	36,821	33,575	43,398	52,242
Value.....	\$4,645,566	\$4,184,477	\$5,163,961	\$8,143,031
Produced and consumed in same works, tons (no value assigned).....	6,240	3,624	3,490	4,805
Cold-rolled from drawn wire: ¹				
Made for sale and for interplant transfer:				
Tons.....	18,601	15,434	13,726	28,757
Value.....	\$3,338,816	\$2,882,228	\$2,361,291	\$4,265,839
Produced and consumed in same works, tons (no value assigned).....	2,436	2,045	13,859	14,271
Copper wire, total pounds.....	428,712,543	278,623,060	455,881,987	1,104,497,194
Made for sale and for interplant transfer:				
Pounds.....	143,581,441	99,135,393	137,920,561	544,740,189
Value.....	\$19,505,998	\$10,304,898	\$22,833,779	\$118,627,983
Produced and consumed in same works, pounds (no value assigned).....	272,267,759	219,714,212	242,389,775	407,996,224
Drawn on contract or custom basis from rods or bars owned by others, pounds.....	12,863,343	9,673,455	25,571,651	151,760,781
Brass and bronze wire, total pounds.....	74,815,030	62,506,499	53,097,552	92,386,093
Made for sale:				
Pounds.....	58,469,953	50,064,287	43,628,853	81,482,823
Value.....	\$10,124,545	\$6,894,199	\$7,293,389	\$19,061,773
For interplant transfer:				
Pounds.....	5,174,209	4,950,424	4,402,352	5,322,571
Value.....	\$749,434	\$633,062	\$611,107	\$1,240,719
Produced and consumed in same works and drawn on contract or custom basis from rods or bars owned by others, pounds (no value assigned).....	11,170,868	7,491,788	5,066,347	5,580,699
Other nonferrous wire: ³				
Made for sale and for interplant transfer:				
Quantity reported:				
Pounds.....	19,395,034	14,002,270	26,750,195	48,487,180
Value.....	\$9,115,823	\$6,447,111	\$10,213,998	\$23,589,716
Quantity not reported, value.....	\$673,171	\$312,996		
Produced and consumed in same works and drawn on contract or custom basis from rods or bars owned by others, pounds (no value assigned).....	801,393	46,509	30,566	20,900

For footnotes, see end of table.

TABLE 5.—WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1929 TO 1935—Continued

[See note at head of table]

[Ton, 2,000 pounds; keg, 100 pounds]

	1935	1933	1931	1929
WIRE PRODUCTS				
Aggregate value.....	\$353,318,317	\$217,647,644	\$309,386,192	\$648,316,376
Iron and steel wire products: Nails, brads, and spikes: †				
Total kegs.....	9,580,413	9,101,157	8,177,139	13,600,673
Total value.....	\$30,621,003	\$24,311,566	\$22,531,504	\$44,934,890
Bright, not including galvanized and other coated:				
Kegs.....	7,602,247	7,327,136	6,469,423	10,302,272
Value.....	\$22,566,505	\$18,154,003	\$16,547,768	\$31,738,404
Galvanized:				
Kegs.....	842,230	678,400	583,957	1,008,176
Value.....	\$4,158,200	\$2,894,922	\$2,674,003	\$5,385,063
Cement-coated:				
Kegs.....	1,135,936	1,095,621	1,123,759	2,290,225
Value.....	\$3,896,298	\$3,202,641	\$3,309,733	\$7,811,428
Tacks: †				
Quantity reported: Pounds.....	4,563,096	3,182,368	2,620,399	6,540,281
Value.....	\$387,600	\$263,352	\$218,325	\$640,072
Quantity not reported, value.....		\$111,133		
Staples:				
Quantity reported: Pounds.....	50,210,928	55,353,039	44,863,149	58,878,705
Value.....	\$1,653,377	\$1,483,493	\$1,384,732	\$2,342,378
Quantity not reported, value.....		\$273,487		
Barbed wire, plain and coated:				
Tons.....	195,996	182,441	161,813	221,809
Value.....	\$10,772,272	\$8,608,271	\$8,280,455	\$13,824,143
Rope and cable, except insulated:				
Tons.....	76,861	49,020	57,289	153,304
Value.....	\$26,593,330	\$13,614,901	\$18,411,707	\$40,876,871
Strand, galvanized:				
Tons.....	24,355	20,080	35,580	48,565
Value.....	\$3,124,638	\$2,098,249	\$3,288,509	\$5,617,900
Poultry netting:				
Tons.....	33,922	29,304	31,988	46,733
Value.....	\$3,868,750	\$3,724,796	\$4,164,838	\$7,536,147
Woven-wire fence, except poultry netting:				
Tons.....	232,842	203,357	242,295	365,505
Value.....	\$17,633,659	\$13,907,455	\$17,897,171	\$31,041,091
Fly screening:				
Pounds.....	46,872,253	242,985,562	31,718,816	64,728,176
Value.....	\$6,334,913	\$5,862,059	\$4,622,679	\$9,942,027
Other wire cloth:				
Quantity reported: Pounds.....	39,493,807	26,391,878	24,949,168	31,106,928
Value.....	\$4,927,809	\$3,135,794	\$4,176,747	\$4,995,659
Quantity not reported, value.....				\$1,559,316
Concrete-reinforcement wire:				
Quantity reported: Tons.....	71,864	54,990	140,131	138,830
Value.....	\$4,761,965	\$2,961,820	\$8,177,315	\$11,788,472
Quantity not reported, value.....		\$703,000		
Other woven wire:				
Tons.....	26,447	28,068	27,834	
Value.....	\$4,797,837	\$4,836,598	\$5,521,705	
Bale ties:				
Pounds.....	151,768,871	124,090,271	109,340,434	148,474,426
Value.....	\$5,541,558	\$3,679,805	\$5,592,828	\$5,088,035
Wire springs, total value.....	\$45,135,381	\$24,104,363	\$26,685,588	\$47,903,132
Furniture and other upholstery (in- cluding mattress) springs, value.....	\$25,043,511	\$14,167,877	\$15,093,268	\$25,344,315
Value springs for internal-combustion engines, value.....	\$1,030,130	\$811,532	\$1,884,702	\$3,314,728
Miscellaneous spiral springs, value.....	\$10,547,562	\$4,392,561	\$5,528,510	\$10,954,730
Flat springs, coiled, value.....	\$1,688,871	\$1,672,278	\$1,300,714	\$3,107,429
Other wire springs, value.....	\$5,925,207	\$3,060,115	\$2,878,394	\$5,181,930
Motor-vehicle skid chains:				
Quantity reported: Tons.....	30,894	11,878	22,375	31,445
Value.....	\$6,772,140	\$2,752,513	\$5,284,627	\$8,987,494
Quantity not reported, value.....	\$486,265	\$583,550	\$702,211	\$2,503,907

For footnotes, see end of table.

TABLE 5.—WIRE AND WIRE PRODUCTS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1929 TO 1935—Continued

[See note at head of table]

[Ton, 2,000 pounds; keg, 100 pounds]

	1935	1933	1931	1929
WIRE PRODUCTS—continued				
Iron and steel wire products—Continued.				
Other wire chain:				
Quantity reported:				
Tons.....	20,552	14,364		
Value.....	\$3,875,807	\$2,569,165		
Quantity not reported, value.....	\$1,050,515		\$1,558,123	
Welding wire: ¹				
Pounds.....	28,385,207	23,327,526	22,795,327	
Value.....	\$2,147,795	\$1,581,391	\$1,429,702	\$42,872,310
Garment hangers:				
Quantity reported:				
Pounds.....	15,290,008			
Value.....	\$789,256			
Quantity not reported, value.....	\$460,173			
Wire hoops:				
Pounds.....	6,961,738	\$16,954,865	\$24,377,510	
Value.....	\$251,230			
Other iron and steel wire products, value ²				
	\$31,763,079			
Nonferrous-wire products:				
Fly screening:				
Copper and bronze:				
Pounds.....	10,979,281	9,696,939		
Value.....	\$2,998,094	\$2,324,037	\$9,820,125	15,203,927
Other metals:				
Pounds.....	162,274	91,344	\$3,160,476	\$5,104,487
Value.....	\$97,305	\$63,837		
Fourdrinier and cylinder wire cloth:				
Pounds.....	2,670,080	1,985,427	1,899,155	3,107,604
Value.....	\$4,112,671	\$3,188,779	\$3,081,552	\$4,764,936
Other nonferrous wire cloth:				
Copper and bronze:				
Quantity reported:				
Pounds.....	1,856,997			
Value.....	\$931,820			
Quantity not reported, value.....	\$178,906			
Other metals:				
Quantity reported:				
Pounds.....	518,424	2,488,321	1,624,803	2,618,126
Value.....	\$629,858	\$1,073,305	\$1,234,652	\$1,271,475
Quantity not reported, value.....	\$120,511	\$153,820		
Copper strand, not insulated:				
Pounds.....	42,540,716	24,770,510	59,050,013	92,305,338
Value.....	\$5,986,001	\$2,479,905	\$7,383,100	\$18,610,600
Other nonferrous wire products, except insulated wire, value.....				
	\$2,083,529	\$2,350,223	\$5,670,408	\$9,125,079
Wire products not reported by kind, value.....				
		\$2,254,804	\$306,984	
Insulated wire and cable, armored and not armored, total.....				
	\$122,225,861	\$65,637,308	\$126,160,654	\$323,981,032
Rubber-insulated:				
Lighting and power circuit:				
Braided, value.....				
	25,477,664	12,787,678	22,675,481	51,130,555
Leaded, value.....				
	4,661,298	3,088,649	8,850,493	23,037,318
Telephone, value.....				
	4,611,445	3,262,066	6,648,539	11,742,261
Flexible cords (rubber-insulated, cotton, silk, and rayon covered), value.....				
	11,491,130	6,650,289	7,717,411	20,180,102
Paper-insulated lighting and power circuit and telephone and telegraph cable (including submarine), value.....				
	8,128,718	6,031,530	37,020,651	96,227,728
Varnished-cambrie-insulated, value.....				
	4,120,541	1,978,831	3,389,266	7,209,800
Magnet:				
Cotton, silk, and rayon covered, value.....				
	8,429,711	5,155,879	4,877,549	18,777,088
Enameled, value.....				
	8,469,254	4,984,631	6,157,775	30,641,417
Armored cable or conductor, value.....				
	6,845,128	4,410,823	5,963,352	11,389,839
Cotton-insulated:				
Weatherproof, value.....				
	11,224,127	5,614,306	13,055,853	42,011,680
Slow-burning, value.....				
	1,120,291			
Asbestos-insulated, value.....				
	3,040,808	1,634,079	2,530,446	
Other insulated wire and cable and that not reported by kind of insulation, value.....				
	24,605,746	10,038,547	7,264,808	

¹ For production of cold-rolled strip steel, see Steel-Works and Rolling-Mill Products, table 5, p. 932.² Revised.³ Aluminum, nickel, and alloys.⁴ Revised to include value of armored wire and cable.⁵ For cut nails and spikes and cut tacks, see Steel-Works and Rolling-Mill Products, table 5, p. 932.⁶ Not including electrodes. For production of electrodes, see report for Electrical Machinery, Apparatus, and Supplies.⁷ Wire guards, partitions and grilles, lamp-shade frames, kitchen wire goods, baskets, cages, florists' designs, etc.

TABLE 6.—NUMBERS OF ESTABLISHMENTS MANUFACTURING WIRE AND SPECIFIED WIRE PRODUCTS: 1935, 1931 and 1929

	TOTAL			1935			
	1935	1931	1929	Wire mills	Wire departments of iron and steel rolling mills	Wire departments of non-ferrous rolling mills and other establishments	Establishments manufacturing from purchased wire
Iron and steel wire:							
Plain wire.....	106	96	97	62	39	5	
Galvanized wire.....	54	52	52	23	30	1	
Other coated wire.....	32	27	30	19	12	1	
Iron and steel wire products:							
Bale ties.....	32	29	33	4	14		14
Concrete-reinforcement wire.....	65	33	(1)	2	14		49
Rope and cable, not insulated.....	22	22	25	8	2		12
Strand, galvanized.....	30	26	23	9	12	1	8
Wire nails, brads, and spikes.....	53	64	61	12	25		16
Wire tacks and staples.....	48	50	66	10	21		17
Fly screening, except nonferrous.....	18	21	22	2	2		14
Other wire cloth, except nonferrous.....	36	29	31	6	2		28
Barbed wire.....	34	33	41	7	24		3
Poultry netting.....	17	19	22	7	6		4
Woven-wire fence, except poultry netting.....	64	58	65	5	19		40
Welding wire.....	17	(1)	(1)	7	3		7
Wire springs.....	145	134	99	7	2		136
Motor-vehicle skid chains.....	17	24	20	1			16
Garment hangers.....	20	(1)	(1)				20
Nonferrous wire:							
Copper wire, plain.....	53	43	39	25	8	20	
Brass and bronze wire.....	37	32	20	12	4	21	
Wire of other metals and alloys.....	30	25	20	13	1	16	
Nonferrous-wire products:							
Fly screening, nonferrous.....	19	19	23	3	2		14
Foudrinier and cylinder wire cloth.....	21	20	21				21
Other wire cloth, nonferrous.....	28	21	21	1	2		25
Copper strand, not insulated.....	22	15	20	7	3	11	1
Insulated wire.....	103	93	98	18	2	12	71

¹ No data.

TABLE 7.—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY, BY KIND, QUANTITY, AND COST: 1935 AND 1929

Quantities and costs of principal materials were reported by 76 of the 88 establishments in this industry. The combined value of products reported by these 76 establishments amounted to \$122,663,157, or 96.3 percent of the aggregate value of products for the industry. No detailed data on consumption of materials were collected for 1933 or 1931]

KIND	1935			1929	
	Number of establishments	Quantity	Cost	Quantity	Cost
Wire rods, iron and steel.....	58	Tons (2,000 lbs.) 684, 773	\$27, 064, 319	Tons (2,000 lbs.) 955, 861	\$39, 980, 106
Copper bars and rods.....	21	Pounds 139, 152, 686	13, 446, 438	Pounds 353, 767, 941	61, 942, 945
Brass and bronze bars and rods.....	11	4, 606, 390	757, 841	(1)	(1)
Zinc.....	27	24, 576, 849	1, 092, 775	(1)	(1)

¹ No comparable figures available.

TABLE 8.—WIRE-DRAWING EQUIPMENT IN ACTIVE ESTABLISHMENTS, BY KIND, NUMBER, AND CAPACITY: 1935 AND 1931¹

[This table covers wire-drawing equipment in active establishments in all industries from which wire drawing was reported. No data on wire-drawing equipment were collected for 1933, and no comparable figures are available for 1929]

KIND	Frame or bench equipment—number of blocks	CONTINUOUS MACHINES			Total annual capacity (24-hour basis), based on rod ripping equipment, tons (2,000 pounds)
		Total ¹	Machines for which drafts were reported ¹		
			Number of machines	Number of drafts	
Wire-drawing blocks or machines—Rod, total.....	7,405	679	679	4,243	5,848,935
..... 1931.....	8,431	620	410	2,402	5,699,530
Wire industry (wire drawn from purchased rods).....	2,623	211	211	1,208	1,499,633
..... 1931.....	2,871	170	160	971	1,690,829
Wire departments of iron and steel rolling mills.....	4,534	319	319	1,805	3,734,030
..... 1931.....	5,287	333	141	582	3,388,598
Wire departments of nonferrous-metal rolling mills.....	248	149	149	1,230	615,247
..... 1931.....	273	117	109	849	614,103
Redrawing blocks or machines.....	10,142	1,305	1,305	9,776	.....
..... 1931.....	12,234	980	806	6,204	.....
Fine-wire blocks or machines (below No. 20).....	8,703	3,171	3,171	43,054	.....
..... 1931.....	10,952	3,385	3,064	26,570	.....

¹ Some of the wire manufacturers failed to report complete number of drafts for 1931.

TABLE 9.—EQUIPMENT (IN ACTIVE ESTABLISHMENTS) FOR MANUFACTURING WIRE PRODUCTS—SELECTED CLASSES, BY NUMBER AND CAPACITY: 1935, 1931, AND 1929

[Annual capacity on 24-hour basis. Keg, 100 pounds; ton, 2,000 pounds. No corresponding figures available for 1933]

CLASS	TOTAL			1935			
	1935	1931	1929	Wire industry	Wire departments of iron and steel rolling mills	Wire-work industry	Nail, spike, etc., plants other than departments of rolling mills and wire mills
Wire-nail machines:							
Number.....	5,655	5,675	6,708	1,007	4,136	2	510
Annual capacity, kegs.....	26,434,139	24,972,439	28,118,212	5,128,850	20,530,780	20	774,489
Barbed-wire machines:							
Number.....	1,156	1,100	1,338	222	915		19
Annual capacity, tons.....	653,392	609,811	685,535	119,752	528,140	5,500	.....
Woven-wire-fence machines:							
Number.....	748	774	840	110	341		297
Annual capacity, tons.....	1,144,035	1,061,189	1,160,947	206,855	627,070	310,160	.....
Poultry-netting machines:							
Number.....	299	243	296	122	106		71
Annual capacity, tons.....	146,386	105,711	115,497	84,951	40,100	21,335	.....
Stands for cold-rolling machines:							
Number.....	991	985	1,184	612	337		42
Annual capacity, tons.....	305,820	308,338	267,537	113,597	183,223	9,000	.....

WIREWORK NOT ELSEWHERE CLASSIFIED

[A preliminary report on the production of wire and wire products was issued Jan. 22, 1937]

Description of the industry—This classification embraces establishments engaged in the manufacture, from purchased wire, of commodities such as woven-wire fencing, fly screening, wire cloth and netting, Fourdrinier and cylinder wire cloth, wire rope and cable, barbed wire, tire chains, bale ties, concrete-reinforcing wire, welding wire, wire guards, partitions and grille work, wire trays and baskets, kitchen wire goods, and wire springs. It does not cover plants which manufacture insulated wire from purchased plain wire, such plants being classified in the Electrical Machinery, Apparatus, and Supplies industry.

Detailed statistics of products.—Wire products are manufactured to a considerable extent in departments of wire-drawing plants and in wire departments of iron and steel-rolling mills. The total output of such products, as reported by all classes of establishments in which they are manufactured, is shown in detail in table 5 of the report for Wire Drawn from Purchased Rods, p. 966.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	536	429	494	547	24.9	-2.0
Proprietors and firm members.....	231	142	(1)	294	62.7	-21.4
Salaried personnel, total ¹	3,632	(2)	(1)	3,221	(3)	12.8
Salaried officers of corporations.....	620	(2)	(1)	561	(3)	10.5
Supervisory, technical, and clerical employees.....	\$ 3,012	\$ 2,637	(1)	2,660	14.2	13.2
Salaries paid, total ²	\$3,384,545	(2)	(1)	\$9,588,683	(3)	-12.6
To salaried officers of corporations..	\$3,178,789	(2)	(1)	\$3,731,258	(3)	-14.8
To supervisory, technical, and clerical employees.....	\$ 5,205,756	\$ 4,278,279	(1)	\$5,857,425	21.7	-11.1
Wage earners (average for year) ⁴	25,165	17,633	17,226	22,388	42.7	12.4
Wages.....	\$25,426,092	\$14,154,682	\$17,381,566	\$27,912,231	79.6	-8.9
Cost of materials, etc., total.....	55,653,794	35,220,272	40,307,517	68,144,047	58.0	-18.3
Cost of materials and supplies.....	53,720,820	(1)	(1)	66,278,423	(1)	-18.9
Cost of fuel.....	761,099	(1)	(1)	804,575	(1)	-5.4
Cost of purchased electric energy...	1,171,875	(1)	(1)	1,061,049	(1)	10.4
Value of products.....	117,569,335	74,520,498	86,693,807	146,865,049	57.8	-19.9
Value added by manufacture ⁷	61,915,541	39,300,226	46,386,290	78,661,002	57.6	-21.3

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 904; salaries, \$2,324,650. Technical, 133; salaries, \$339,088. Clerical 1,975; salaries, \$2,542,018. See sec. 10, p. 7.

⁵ Supervisory, 647; salaries, \$1,604,616. Clerical and other, 1,990; salaries, \$2,673,663. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States.....	536	3, 632	25, 165	\$3, 384, 545	\$25, 426, 092	\$55, 053, 794	\$117, 569, 335	\$61, 015, 541
California.....	45	160	992	314, 720	1, 014, 864	3, 166, 061	5, 656, 725	2, 490, 664
Connecticut.....	26	287	1, 462	675, 914	1, 642, 483	2, 646, 109	6, 560, 025	3, 913, 856
Illinois.....	65	411	2, 193	932, 387	2, 257, 224	5, 970, 858	11, 830, 111	5, 859, 233
Indiana.....	18	142	1, 034	322, 518	921, 896	2, 641, 201	4, 957, 608	2, 316, 465
Iowa.....	6	28	241	54, 940	215, 225	683, 985	1, 114, 515	430, 330
Maryland.....	13	53	319	104, 158	232, 899	838, 398	1, 495, 880	657, 482
Massachusetts.....	27	202	1, 036	401, 506	1, 119, 187	2, 076, 490	4, 566, 394	2, 489, 904
Michigan.....	42	742	3, 819	1, 754, 975	8, 529, 814	14, 556, 728	30, 638, 144	16, 081, 416
Minnesota.....	11	24	189	56, 687	153, 817	373, 677	779, 779	403, 162
Missouri.....	15	144	627	403, 066	679, 450	2, 440, 370	5, 272, 441	2, 832, 071
New Jersey.....	31	151	944	505, 521	967, 957	1, 962, 337	4, 708, 137	2, 745, 800
New York.....	94	429	1, 890	909, 353	1, 867, 844	3, 935, 328	8, 786, 717	4, 851, 389
Ohio.....	42	344	2, 156	953, 831	2, 759, 859	5, 468, 031	12, 178, 577	6, 710, 246
Pennsylvania.....	47	381	2, 633	680, 830	2, 353, 674	7, 196, 550	15, 215, 573	8, 016, 183
Rhode Island.....	6	8	46	9, 368	32, 805	62, 637	140, 419	77, 883
Tennessee.....	4	20	200	45, 880	135, 412	373, 022	648, 577	275, 555
Texas.....	4	8	17	9, 155	10, 643	78, 565	143, 450	64, 991
Washington.....	6	20	71	40, 320	74, 067	385, 117	804, 265	479, 148
Wisconsin.....	17	57	316	170, 838	376, 419	483, 487	1, 460, 371	970, 884
Other States ¹	17	21	100	38, 518	75, 653	311, 883	554, 403	242, 520

¹ Alabama, 2 establishments; District of Columbia, 1; Florida, 1; Georgia, 1; Kansas, 1; Louisiana, 1; Nebraska, 2; North Carolina, 1; Oklahoma, 2; Oregon, 4; South Carolina, 1. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year ¹	NUMBER REPORTED FOR—																
		January	February	March	April	May	June	July	August	September	October	November	December					
United States																		
1935.....	25, 179	23, 945	24, 936	25, 564	25, 871	25, 556	24, 268	23, 143	22, 651	23, 421	26, 558	28, 071	28, 175					
1933.....	17, 633	(*)	(*)	14, 393	(*)	(*)	17, 367	(*)	(*)	20, 612	(*)	(*)	19, 023					
States, 1935																		
California.....	992	833	915	954	1, 043	1, 068	1, 017	989	970	865	1, 029	1, 102	1, 121					
Connecticut.....	1, 462	1, 409	1, 439	1, 450	1, 437	1, 429	1, 409	1, 398	1, 455	1, 485	1, 587	1, 543	1, 508					
Illinois.....	2, 199	1, 869	2, 034	2, 027	2, 097	2, 146	2, 095	2, 128	2, 166	2, 262	2, 520	2, 488	2, 545					
Indiana.....	1, 043	851	1, 022	1, 125	1, 233	1, 234	1, 121	1, 018	909	935	968	1, 052	1, 019					
Iowa.....	241	282	319	320	288	265	256	261	191	172	178	170	190					
Maryland.....	319	295	296	306	308	311	303	314	315	328	320	356	372					
Massachusetts.....	1, 036	996	997	1, 073	1, 064	1, 083	1, 003	985	1, 016	1, 020	1, 040	1, 068	1, 090					
Michigan.....	8, 819	8, 508	9, 307	9, 703	9, 838	9, 523	8, 633	7, 985	7, 066	7, 057	8, 612	9, 687	9, 916					
Minnesota.....	169	186	156	148	154	150	161	155	151	168	205	195	198					
Missouri.....	627	623	611	626	629	619	612	613	603	634	661	655	638					
New Jersey.....	944	891	889	907	931	923	923	924	897	974	1, 016	1, 040	1, 014					
New York.....	1, 890	1, 836	1, 907	1, 804	1, 828	1, 809	1, 831	1, 559	1, 804	1, 934	2, 166	2, 163	2, 033					
Ohio.....	2, 156	1, 867	1, 899	2, 185	2, 116	2, 109	2, 066	2, 087	2, 125	2, 175	2, 487	2, 415	2, 396					
Oregon.....	16	15	18	16	13	20	19	17	15	16	16	15	15					
Pennsylvania.....	2, 533	2, 302	2, 428	2, 180	2, 147	2, 119	2, 033	2, 002	2, 236	2, 630	3, 034	3, 381	3, 359					
Rhode Island.....	46	42	36	46	50	58	52	59	52	51	44	31	32					
Tennessee.....	200	197	205	217	204	192	191	179	192	203	215	199	200					
Texas.....	17	11	13	11	13	13	11	14	14	20	30	32	20					
Washington.....	71	63	60	65	70	77	80	76	81	79	70	68	68					
Wisconsin.....	317	300	312	329	327	327	313	307	313	323	315	317	316					

¹Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

²As the 1935 averages given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar years. See sec. 11, p. 7.

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WROUGHT PIPE, WELDED AND HEAVY RIVETED, MADE IN PLANTS NOT OPERATED IN CONNECTION WITH ROLLING MILLS

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of boiler tubes, oil-country casing, tubing, and pipe, other black and galvanized wrought pipe, electrical conduit, and heavy riveted pipe. The production of wrought pipe in rolling mills, however, greatly exceeds that in the Wrought Pipe industry. The production of seamless tubes from pierced billets is classified in the Rolling Mill industry. Detailed statistics covering the total production of wrought pipe in all industries in which it is made are given in table 5 of the report for Steel-Works and Rolling-Mill Products (p. 932).

The phrase "made in plants not operated in connection with rolling mills" refers to production in plants operated entirely independently of rolling mills, although in some cases under the same ownership.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	48	44	51	50	(*)	(*)
Proprietors and firm members.....	5	4	(1)	3	(*)	(*)
Salaried personnel, total ¹	1,070	(2)	(1)	1,419	(2)	-24.6
Salaried officers of corporations.....	83	(1)	(1)	73	(2)	(*)
Supervisory, technical, and clerical employees.....	987	717	(1)	1,346	37.7	-26.7
Salaries paid, total ¹	\$2,937,480	(2)	(1)	\$4,395,003	(2)	-33.2
To salaried officers of corporations.....	\$784,309	(2)	(1)	\$811,787	(2)	-3.4
To supervisory, technical, and clerical employees.....	\$2,153,171	\$1,310,708	(1)	\$3,583,216	64.3	-39.9
Wage earners (average for year) ²	10,720	6,552	8,045	11,417	63.6	-6.1
Wages.....	\$11,793,078	\$5,579,736	\$9,889,930	\$18,762,303	111.4	-37.1
Cost of materials, etc., total.....	42,000,791	20,821,333	42,291,098	70,120,941	101.7	-40.1
Cost of materials and supplies.....	40,200,418	(1)	(1)	67,539,463	(1)	-40.5
Cost of fuel.....	1,028,008	(1)	(1)	1,861,934	(1)	-44.8
Cost of purchased electric energy.....	772,365	(1)	(1)	719,544	(1)	7.3
Value of products.....	78,848,840	34,956,654	75,040,579	124,658,966	111.3	-40.8
Value added by manufacture ³	31,848,049	14,135,321	32,749,481	54,538,025	125.3	-41.6

*Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 341; salaries, \$1,154,473. Technical, 59; salaries, \$159,601. Clerical, 587; salaries, \$539,097. See sec. 10, p. 7.

⁵ Supervisory, 238; salaries, \$715,478. Clerical and other, 479; salaries, \$595,230. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States.....	48	1,070	10,720	\$2,937,480	\$11,793,078	\$42,000,791	\$73,848,840	\$31,848,049
California.....	13	57	491	157,431	610,878	2,647,681	4,484,939	1,837,258
Illinois.....	3	152	478	408,068	592,166	2,387,868	4,227,471	1,836,608
Michigan.....	5	176	1,500	569,438	1,675,721	4,585,077	9,457,404	4,872,327
Pennsylvania.....	10	377	4,319	1,045,414	4,082,800	16,760,653	26,174,941	9,414,288
Other States ¹	17	308	3,932	757,129	4,882,013	15,619,512	29,504,085	13,884,573

¹ Indiana, 3 establishments; Massachusetts, 1; Nevada, 1; New York, 3; Ohio, 6; Texas, 1; Washington, 1; Wisconsin, 1. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	10,720	9,659	10,352	10,495	11,153	10,474	10,893	10,029	11,242	11,128	11,239	11,390	10,596
1933.....	6,552	(*)	(*)	4,934	(*)	(*)	6,291	(*)	(*)	7,697	(*)	(*)	7,268
<i>States, 1935</i>													
California.....	491	428	443	387	414	539	484	472	425	618	603	539	537
Illinois.....	478	434	412	440	413	446	463	454	656	539	539	450	490
Indiana.....	674	716	670	746	720	557	406	445	603	672	796	876	876
Michigan.....	1,500	1,397	1,568	1,638	1,620	1,553	1,361	1,253	1,147	1,418	1,630	1,079	1,739
New York.....	423	360	357	368	469	442	422	436	433	434	443	461	464
Ohio.....	2,171	1,996	1,978	1,971	2,365	2,226	2,483	1,998	2,547	2,250	2,058	2,078	2,101
Pennsylvania.....	4,319	3,759	4,263	4,341	4,526	4,024	4,550	4,286	4,596	4,389	4,430	4,666	4,001

*Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

Group 12.—NONFERROUS METALS AND THEIR PRODUCTS

THE INDUSTRIES AS A GROUP

[See p. 42]

This group comprises industries engaged in the production of nonferrous metals from the ores or from scrap metals; in the refining or alloying of such metals; and in the manufacture, from these metals or alloys as basic materials, of finished products or products for use in further manufacturing processes.

The principal metals or ores which form the basic materials used in these industries are copper, lead, zinc, tin, gold, silver, and aluminum. It should be noted, however, that these same basic metals are used to a large extent in certain industries assigned to other groups; for example, "Electrical machinery, apparatus, and supplies" and other industries of the "Machinery, not including transportation equipment" group. A number of industries in Groups 11 and 16 also manufacture various commodities made wholly or in part from metals other than iron and steel.

Since the metals and alloys produced by the basic industries of Group 12 are used as materials by other industries in the group, the total cost of materials and the total value of products for the group as a whole include considerable amounts of duplication. (See "Duplication in cost of materials and value of products," p. 10.)

The basic industries that extract the metals from the ore or refine or alloy them usually add relatively little to the value of the raw materials which they use, while the more highly elaborated manufacturing processes employed by the industries that use these metals and alloys as materials add very considerably to their value.

Change in classification.—The "Stamped and pressed metal products; enameling, japanning, and lacquering" industry, formerly classified in this group, has been transferred to Group 11.

SUMMARY FOR GROUP 12.—NONFERROUS METALS AND THEIR PRODUCTS:
1929 TO 1935

[See "Changes in industry groups, classifications, and titles," p. 13]

INDUSTRY	Cen- sus year	Num- ber of es- tab- lish- ments	Wage earners (average for the year)	Wages	Cost of ma- terials, con- tainers, fuel, and pur- chased elec- tric energy	Value of products	Value added by manu- facture ¹
Aggregate for the group. ²	1935	5,411	214,986	\$232,650,890	\$1,080,146,109	\$1,068,561,121	\$570,414,022
	1933	4,367	155,969	140,087,988	580,444,408	951,381,385	304,030,977
	1931	5,744	180,477	209,515,255	808,569,135	1,326,505,155	517,090,020
	1929	6,940	274,741	393,374,923	2,377,804,703	3,392,751,583	1,014,940,880
Smelting and refin- ing, total.	1935	249	27,242	29,815,043	600,122,352	695,267,930	95,145,578
	1933	214	18,236	17,022,889	302,327,629	359,011,960	56,084,331
	1931	237	21,906	27,063,949	401,151,441	484,081,787	83,530,346
	1929	250	36,046	56,447,479	1,344,040,270	1,519,041,730	175,601,466
Primary, total.....	1935	62	22,478	24,887,302	476,366,430	554,627,095	78,260,665
	1933	59	14,567	13,549,271	231,884,679	273,285,575	41,400,816
	1931	76	18,477	22,716,192	335,713,021	408,588,705	72,875,744
	1929	75	30,981	49,239,319	1,199,026,250	1,345,799,941	140,774,682
Smelting and refining, cop- per.	1935	20	10,449	11,154,196	310,707,456	348,257,020	37,450,570
	1933	19	5,596	5,386,550	142,672,253	158,610,400	16,938,153
	1931	27	8,642	10,708,010	226,519,918	269,383,991	42,864,673
	1929	26	14,544	23,951,955	920,351,441	994,783,862	74,432,421
Smelting and refining, lead..	1935	16	3,187	3,423,931	121,996,705	137,210,290	15,222,525
	1933	14	2,105	2,324,913	60,533,709	70,453,420	9,919,729
	1931	16	2,584	3,569,193	78,744,573	90,720,257	11,981,684
	1929	19	4,810	7,577,094	203,913,730	232,115,000	28,201,279
Smelting and refining, zinc..	1935	26	8,842	10,309,175	43,572,209	69,150,779	25,578,570
	1933	26	6,866	5,837,808	28,678,726	44,221,740	15,543,014
	1931	33	7,251	8,438,989	30,448,530	48,478,517	18,029,687
	1929	30	11,618	17,710,270	74,760,088	118,901,070	44,146,982
Secondary, total.....	1935	187	4,764	4,927,741	123,755,922	140,640,835	16,884,913
	1933	155	3,669	3,473,618	70,442,950	85,726,385	15,283,435
	1931	161	3,420	4,347,757	65,438,420	76,093,022	10,654,602
	1929	175	5,065	7,203,160	145,015,011	173,841,795	28,826,784
Gold, silver, and platinum, refining and alloying.	1935	88	1,002	1,317,833	71,740,420	78,018,054	6,208,025
	1933	61	745	980,020	39,036,288	44,603,744	5,547,456
	1931	63	803	1,185,570	36,892,897	41,397,662	4,504,715
	1929	69	931	1,633,838	61,570,093	67,959,140	6,380,047
Smelting and refining, non- ferrous metals other than gold, silver, and platinum, not from the ore.	1935	99	3,762	3,609,908	52,006,493	62,622,781	10,610,288
	1933	94	2,924	2,493,598	31,406,062	41,122,641	9,115,070
	1931	98	2,626	3,162,187	28,545,523	34,695,360	6,149,837
	1929	106	4,134	5,574,322	83,444,018	105,882,055	22,437,737
Alloys and manufac- tures of metals and of alloys, total. ²	1935	5,162	187,744	202,835,847	480,028,847	978,263,191	484,269,344
	1933	4,153	137,734	123,065,099	284,116,779	592,369,425	308,252,046
	1931	5,507	158,305	182,451,306	407,417,694	841,883,308	434,405,714
	1929	6,690	238,695	336,927,444	1,033,764,433	1,873,109,847	830,945,414
Aluminum products.....	1935	170	19,271	20,345,278	58,431,066	104,067,370	45,636,304
	1933	109	13,634	11,900,016	34,027,142	61,463,949	27,436,807
	1931	138	13,803	16,100,331	41,606,065	76,299,567	34,604,692
	1929	150	21,210	29,692,727	94,036,403	153,457,248	50,420,785
Clocks, watches, time-re- cording devices, and ma- terials and parts except watches.	1935	76	18,026	18,279,007	22,546,172	61,203,517	38,657,345
	1933	53	12,850	10,003,392	9,468,454	31,056,023	22,187,560
	1931	75	16,213	15,685,615	12,890,080	45,563,375	32,683,289
	1929	81	21,450	25,750,088	21,388,018	77,467,111	56,079,093
Collapsible tubes.....	1935	16	1,961	1,749,674	4,965,729	8,505,190	3,539,401
	1933	17	1,756	1,482,341	3,834,400	6,024,109	3,089,640
	1931	17	1,737	1,634,463	4,142,410	7,034,190	3,491,780
	1929	17	1,821	1,782,024	5,385,006	8,912,977	3,527,071
Electroplating.....	1935	538	6,238	6,941,180	4,602,431	18,327,692	13,725,201
	1933	423	3,956	3,715,379	2,352,202	10,032,076	7,679,874
	1931	464	4,107	5,641,654	2,802,451	13,084,240	10,281,780
	1929	594	5,928	9,536,800	4,795,667	23,727,010	18,920,240
Fire extinguishers, chemical.	1935	25	806	964,857	2,472,352	5,342,793	2,870,441
	1933	22	589	603,628	1,720,483	3,775,061	2,054,578
	1931	25	571	616,882	1,796,421	4,452,815	2,056,394
	1929	28	740	958,570	4,187,524	8,566,089	4,378,665

For footnotes, see end of table.

SUMMARY FOR GROUP 12.—NONFERROUS METALS AND THEIR PRODUCTS:
1929 to 1935—Continued

[See "Changes in industry groups, classifications, and titles," p. 13]

INDUSTRY	Cen- sus year	Num- ber of es- tab- lish- ments	Wage earn- ers (aver- age for the year)	Wages	Cost of ma- terials, con- tainers, fuel, and pur- chased elec- tric energy	Value of products	Value added by manu- facture ¹
Gold leaf and foil.....	1935	27	557	\$402,521	\$958,988	\$1,782,599	\$823,611
	1933	31	608	348,000	683,757	1,401,556	717,799
	1931	48	865	636,784	1,015,086	2,217,366	1,202,280
	1929	75	1,177	1,134,044	1,932,667	3,978,024	2,045,357
Jewelers' findings and ma- terials. ²	1935	73	2,663	2,728,445	10,952,760	17,170,469	6,217,709
	1933	60	1,811	1,604,012	5,503,051	9,249,919	3,746,868
	1931	99	1,899	2,343,295	7,120,906	11,975,592	4,854,686
Jewelry ³	1935	994	17,096	17,840,986	30,246,929	70,916,670	40,669,741
	1933	779	13,069	11,323,027	16,783,095	42,651,611	25,868,516
	1931	1,052	16,724	20,230,957	28,684,460	75,122,643	46,438,183
Jewelry (including jewelers' findings and materials). ⁴	1929	1,536	27,922	38,979,810	79,804,617	177,386,932	97,582,315
Lighting equipment.....	1935	501	16,677	17,231,798	39,902,667	85,700,128	45,797,461
	1933	357	10,538	9,506,299	19,240,956	46,173,480	26,932,524
	1931	523	14,790	18,150,368	30,312,448	75,050,429	44,737,981
	1929	614	23,580	33,268,595	57,918,407	144,965,706	87,047,299
Needles, pins, hooks and eyes, and snap fasteners.	1935	50	10,104	9,493,911	9,288,233	32,829,505	23,541,272
	1933	45	6,412	5,707,885	5,817,912	22,757,609	16,939,697
	1931	46	5,354	5,066,534	4,842,405	20,342,038	15,499,633
	1929	43	6,242	6,565,732	6,187,822	22,030,950	15,843,128
Nonferrous-metal alloys; nonferrous-metal products, except aluminum, not elsewhere classified.	1935	1,098	62,935	72,000,571	219,679,813	393,226,934	173,547,121
	1933	875	47,784	43,729,228	128,356,064	239,155,936	110,799,872
	1931	1,056	48,913	55,108,824	195,337,534	331,438,974	136,101,440
	1929	1,225	79,183	116,943,996	600,410,913	909,804,050	309,393,137
Sheet-metal work, not spe- cifically classified.	1935	1,400	17,369	19,550,967	57,765,134	109,332,596	51,567,462
	1933	1,229	13,050	12,657,804	35,463,376	68,807,223	33,343,847
	1931	1,762	19,365	25,158,017	56,341,919	116,442,534	60,100,615
	1929	2,161	28,593	43,254,611	112,648,112	222,484,625	109,836,513
Silverware and plated ware.	1935	139	10,194	11,078,434	15,224,961	43,371,697	28,146,736
	1933	126	9,177	8,228,642	12,425,202	34,332,544	21,907,342
	1931	163	11,077	12,712,986	11,792,370	45,814,831	34,022,461
	1929	179	15,735	22,577,965	26,885,693	85,882,325	58,996,632
Tin and other foils, not in- cluding gold foil.	1935	11	1,831	1,899,016	9,226,421	14,533,139	5,306,718
	1933	7	1,337	1,189,058	7,680,282	11,330,927	3,650,645
	1931	8	1,218	997,847	7,382,938	12,225,641	4,842,703
	1929	7	1,710	1,856,371	13,543,399	20,954,849	7,406,450
Watchcases.....	1935	29	2,016	2,328,602	2,760,191	6,982,892	4,222,701
	1933	20	1,169	1,006,388	760,343	2,657,402	1,897,059
	1931	31	1,669	1,766,749	1,361,195	4,219,133	2,857,938
	1929	40	3,404	4,626,111	4,631,225	13,491,045	8,859,820

¹ Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 18, p. 11.

² Figures for years prior to 1935 revised to exclude data for "Stamped and pressed metal products; enameling, japanning, and lacquering," transferred to Group 11.

³ Revised; revision not carried into aggregate for group.

⁴ The manufacture of jewelers' findings and materials was treated as a part of the Jewelry industry at the census for 1929.

⁵ Revised; revision carried into total for subgroup but not into aggregate for group.

1201

ALUMINUM PRODUCTS

[A preliminary report for this industry was issued Feb. 25, 1937]

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of aluminum plates and sheets; motor-vehicle and other commercial castings; kitchen and other household ware (except electrical appliances); and other aluminum products. This report does not cover the entire production of aluminum articles, since many establishments engaged in the manufacture of products in which aluminum parts are incorporated do their own spinning, casting, or stamping of this metal. Aluminum is also an important material in some products specifically classified in other industries, such as collapsible tubes, foil, electrical household appliances, and lighting equipment. The Aluminum Products industry does not include the primary production of the metal (the reduction of bauxite) nor the recovery of aluminum from scrap, the former being treated as a part of the "Chemicals Not Elsewhere Classified" industry and the latter being assigned to the "Smelting and Refining, Non-ferrous Metals Other Than Gold, Silver, and Platinum, Not from the Ore" industry. Data for aluminum ingots and castings made from scrap are, however, included in the figures for "Castings (not included above)" and "Ingots produced for sale," in table 3, p. 981.

Duplication in cost of materials and value of products.—The figures for cost of materials and value of products include an indeterminable amount of duplication due to the use, by establishments producing castings and other aluminum products, of ingots and pigs made by other establishments in the industry.

Omission of State statistics except for wage-earner employment.—As no figures can be given for the most important State in this industry, namely, Pennsylvania, without disclosing approximations of data for individual establishments, and as those States for which it would be possible to publish separate figures without disclosing such approximations of data accounted for less than one-half of the total activity of the industry (as measured by number of wage earners employed) in the United States in 1935, no State statistics are included in this report except in table 2, in which figures are given for each State represented by three or more establishments, even though one or two of these establishments reported most of the wage earners employed in the industry in the State. (See sec. 23, p. 12.)

ALUMINUM PRODUCTS

979

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (-)	
					1933-1935	1929-1935
Number of establishments.....	1 170	109	138	150	56.0	13.8
Proprietors and firm members.....	80	32	(¹)	61	(⁴)	(⁵)
Salaried personnel, total ²	2,802	(¹)	(²)	2,517	(¹)	11.8
Salaried officers of corporations.....	167	(¹)	(²)	179	(¹)	-6.7
Supervisory, technical, and clerical employees.....	³ 2,635	⁴ 1,865	(²)	2,338	41.3	12.7
Salaries paid, total ³	\$5,307,921	(¹)	(²)	\$5,749,124	(¹)	-7.7
To salaried officers of corporations.....	\$889,117	(¹)	(²)	\$1,180,024	(¹)	-24.7
To supervisory, technical, and clerical employees.....	⁵ \$4,418,804	⁴ \$2,961,513	(²)	\$4,569,100	49.2	-3.3
Wage earners (average for year) ⁷	19,271	13,634	13,803	21,210	41.3	-9.1
Wages.....	\$20,345,278	\$11,900,016	\$16,106,331	\$29,692,727	71.0	-31.5
Cost of materials, etc., total.....	58,431,066	34,027,142	41,605,065	94,036,463	71.7	-37.9
Cost of materials and supplies.....	55,966,157	(¹)	(²)	90,920,082	(¹)	-38.4
Cost of fuel.....	1,331,329	(¹)	(²)	1,922,313	(¹)	-30.7
Cost of purchased electric energy.....	1,133,580	(¹)	(²)	1,193,168	(¹)	-5.0
Value of products.....	104,067,370	61,463,949	76,209,597	153,457,248	69.3	-32.2
Value added by manufacture ⁸	45,636,304	27,436,807	34,694,592	59,420,785	66.3	-23.2

^{*}Percent not computed where base is less than 100.

¹ California, 20 establishments; Colorado, 1; Connecticut, 7; Illinois, 15; Indiana, 4; Kansas, 1; Kentucky, 1; Maryland, 1; Massachusetts, 5; Michigan, 13; Missouri, 6; Nebraska, 2; New Jersey, 8; New York, 24; Ohio, 20; Pennsylvania, 11; Tennessee, 2; Texas, 2; Washington, 3; West Virginia, 1; Wisconsin, 14.

² No data.

³ No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

⁴ Data incomplete.

⁵ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 606; salaries, \$1,735,976. Technical, 159; salaries, \$319,075. Clerical, 1,870; salaries, \$2,363,753. See sec. 10, p. 7.

⁶ Supervisory, 473; salaries, \$1,386,345. Clerical and other, 1,392; salaries, \$1,575,168. See sec. 10, p. 7.

⁷ See sec. 11, p. 7.

⁸ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

Average number employed during year	NUMBER REPORTED FOR—											
	January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>												
1935.....	17,256	18,939	20,150	20,029	19,290	17,985	17,601	18,487	19,932	20,428	20,996	20,881
1933.....	11,264	11,460	11,284	11,458	11,833	12,755	14,052	15,942	16,710	16,385	15,343	15,108
<i>States, 1935</i>												
California.....	188	197	191	216	210	206	198	185	197	198	197	198
Connecticut.....	380	360	464	496	466	471	428	400	441	408	525	563
Illinois.....	676	696	751	736	709	724	549	572	619	600	702	696
Indiana.....	50	40	46	48	48	48	52	53	52	55	64	56
Massachusetts.....	37	44	46	42	45	40	33	30	34	33	30	31
Michigan.....	1,949	2,240	2,799	2,792	2,728	1,911	2,069	2,283	2,253	2,157	2,187	2,228
Missouri.....	146	180	201	195	191	200	178	184	193	195	202	190
New Jersey.....	841	877	1,009	1,015	1,042	1,050	1,067	1,154	1,358	1,520	1,601	1,536
New York.....	719	856	881	832	814	1,822	1,797	1,850	1,895	1,890	1,877	1,889
Ohio.....	2,920	3,240	3,408	3,383	3,284	2,944	2,787	2,804	3,372	3,504	3,582	3,469
Pennsylvania.....	4,285	4,261	4,321	4,293	4,254	4,179	4,115	4,336	4,584	4,905	5,256	5,127
Washington.....	44	43	45	45	42	45	46	45	45	45	41	42
Wisconsin.....	3,354	3,456	3,580	3,702	3,606	3,521	3,378	3,422	3,309	3,473	3,474	3,468

¹ As this average is derived from the figures for the 12 months in the calendar year, it differs somewhat from the corresponding average in table 1, which is derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

ALUMINUM PRODUCTS

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TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929
1. Aluminum Products industry, all products, total value.....	\$104,067,370	\$61,463,949	\$76,299,567	\$153,457,248
2. Aluminum products ¹	\$97,857,747	\$59,507,345	\$71,891,137	\$147,351,351
3. Other products (not normally belonging to the industry), value, and receipts for contract and custom work.....	\$6,209,623	\$1,956,604	\$4,408,430	\$6,105,897
4. Aluminum products made as secondary products in other industries.....	\$15,274,974	\$6,643,960	\$7,623,448	\$14,643,047
Aluminum products, aggregate value (2 and 4) ..	\$113,132,721	\$66,151,305	\$79,514,585	\$161,994,898
Aluminum ware, stamped, spun, and cast (except electrical appliances), value.....	\$24,550,818	\$16,400,412	\$22,278,985	\$35,100,001
Motor-vehicle accessories and parts and pistons for internal-combustion engines:				
Pounds.....	41,646,275	20,909,320	6,037,877	15,333,432
Value.....	\$13,400,209	\$7,363,455	\$2,788,426	\$7,466,752
Castings (not included above):				
Quantity reported:				
Pounds.....	48,353,894	26,991,826	39,938,447	82,979,337
Value.....	\$17,923,660	\$9,246,533	\$17,070,705	\$38,267,674
Quantity not reported, value.....	\$1,104,662			
Ingot produced for sale (from pig and scrap):				
Quantity reported:				
Pounds.....	96,503,615	70,763,755	(²)	120,721,143
Value.....	\$16,153,834	\$9,918,532		\$26,299,723
Quantity not reported, value.....	\$161,271		\$37,376,469	
Other aluminum products made for sale ³	\$39,838,267	\$23,222,373		\$54,860,248

¹Not including electrical appliances and other aluminum products (wire, foil, collapsible tubes, etc.) specifically classified in other industries. (See "Description of the industry," p. 978.)

²No data.

³Includes rolled forms (bars and rods, plates and sheets, structural shapes), moldings, tubing, powder, etc.

1202

CLOCKS, WATCHES, TIME-RECORDING DEVICES, AND MATERIALS AND PARTS EXCEPT WATCHCASES

[A preliminary report for this industry was issued Jan. 25, 1937]

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of clocks, watches, and other devices operated by clockwork, such as time-recording instruments and stamps, time switches and locks, etc.; and of clock and watch parts and materials (not including watchcases). Establishments that install purchased watch movements in cases of their own manufacture or install movements of their own manufacture in purchased cases are classified as manufacturers of watches, but those that merely install purchased movements in purchased cases do not come within the scope of the Census.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (-)	
					1933-1935	1929-1935
Number of establishments.....	76	53	75	81	(*)	(*)
Proprietors and firm members.....	14	7	(1)	15	(*)	(1)
Salaried personnel, total ¹	2,265	(2)	(1)	2,474	(2)	-8.4
Salaried officers of corporations.....	137	(2)	(1)	137	(2)	-----
Supervisory, technical, and clerical employees.....	² 2,128	² 1,392	(1)	2,337	52.0	-8.9
Salaries paid, total ¹	\$4,316,516	(2)	(1)	\$5,072,232	(2)	-23.9
To salaried officers of corporations.....	\$1,008,339	(2)	(1)	\$1,276,017	(2)	-21.0
To supervisory, technical, and clerical employees.....	³ \$3,308,177	³ \$2,241,837	(1)	\$4,396,215	47.0	-24.7
Wage earners (average for year) ⁴	18,026	12,850	10,213	21,450	40.3	-16.0
Wages.....	\$18,279,607	\$10,003,392	\$15,685,615	\$25,750,088	82.7	-20.0
Cost of materials, etc., total.....	\$22,546,172	\$9,468,454	\$12,880,086	\$21,383,018	138.1	5.4
Cost of materials and supplies.....	\$22,107,604	(1)	(1)	\$20,800,231	(1)	6.3
Cost of fuel.....	270,805	(1)	(1)	411,071	(1)	-34.1
Cost of purchased electrical energy.....	167,763	(1)	(1)	176,716	(1)	-5.1
Value of products.....	61,203,517	\$31,656,023	\$45,563,375	77,467,111	93.3	-21.0
Value added by manufacture ⁵	33,657,345	22,187,569	32,683,239	56,070,003	74.2	-31.1

* Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 473; salaries, \$1,391,126. Technical, 76; salaries, \$180,565. Clerical, 1,577; salaries, \$1,736,486. See sec. 10, p. 7.

⁵ Supervisory, 415; salaries, \$1,173,001. Clerical and other, 977; salaries, \$1,008,886. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Num-ber of estab-lish-ments	Sal-iaried officers and em-ploy-ees	Wage earners (aver-age for the year)	Salaries	Wages	Cost of ma-terials, etc., fuel, and purchased energy	Value of products	Value added by manu-fac-ture
United States ..	76	2,265	18,026	\$4,316,516	\$18,279,607	\$22,546,172	\$61,203,517	\$38,657,345
Connecticut.....	10	683	7,342	1,214,536	7,173,048	5,371,393	15,395,186	10,023,793
Illinois.....	11	555	5,265	1,145,818	5,481,795	5,282,262	19,698,787	14,416,525
Massachusetts.....	11	366	2,760	717,487	2,772,092	2,468,134	8,542,823	6,074,689
New Jersey.....	6	22	98	68,524	85,314	162,595	461,021	288,426
New York.....	23	206	944	451,030	1,106,151	2,468,464	5,577,579	3,109,115
Other States ¹	15	433	1,617	719,121	1,661,207	6,793,324	11,538,121	4,744,797

¹ California, 2 establishments; Indiana, 1; Michigan, 2; Ohio, 5; Pennsylvania, 3; Rhode Island, 2. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed dur-ing year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	Septem-ber	October	Novem-ber	Decem-ber
<i>United States</i>													
1935.....	18,026	17,338	17,672	17,724	17,191	17,367	17,499	17,169	17,519	18,985	19,814	19,771	18,266
1933.....	12,850	11,130	11,447	11,013	10,547	10,781	11,667	12,466	13,661	14,742	15,770	15,969	15,009
<i>States, 1935</i>													
Connecticut.....	7,342	7,204	7,236	7,104	7,022	7,141	7,189	7,073	7,074	7,545	7,905	7,884	7,722
Illinois.....	5,265	4,697	4,798	4,980	4,901	4,835	4,836	4,916	5,178	5,832	5,930	6,139	6,290
Massachusetts.....	2,760	3,125	3,133	3,083	2,721	2,850	2,847	2,711	2,539	2,543	2,991	2,836	1,442
New Jersey.....	98	114	119	120	69	71	70	71	94	104	116	110	121
New York.....	944	825	873	862	907	913	969	801	1,005	1,083	1,032	1,035	1,023
Ohio.....	140	117	138	146	147	106	133	125	123	147	180	178	143
Pennsylvania.....	1,226	1,122	1,141	1,179	1,197	1,209	1,216	1,231	1,242	1,255	1,278	1,311	1,329

TABLE 4.—PRODUCTS, BY KIND, NUMBER, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929
1. "Clocks, Watches, Time-Recording Devices, and Materials and Parts Except Watchcases" industry, all products, total value.....	\$61,203,517	\$31,656,023	\$45,563,375	\$77,467,111
2. Clocks, watches, time-recording devices and materials and parts, value.....	56,340,496	27,272,683	41,769,109	73,537,328
3. Other products (not normally belonging to the industry), value, and receipts for contract, custom, and repair work.....	4,863,021	4,383,340	3,794,266	3,929,783
4. Clocks, watches, etc., made as secondary products in other industries, value.....	532,993	254,992	1,061,247	1,710,576
Clocks, watches, time-recording devices, and materials and parts, except watchcases, aggregate value (sum of 2 and 4).....	\$56,873,449	\$27,527,675	\$42,830,356	\$75,253,904
Clocks, complete, for use as timepieces only:				
Total number.....	12,894,569	9,651,111	10,657,263	12,295,211
Total value.....	\$17,115,033	\$11,473,919	\$20,300,885	\$25,512,288
Electric clocks:				
Total number.....	2,673,758	2,009,008	3,797,499	446,634
Total value.....	\$7,454,213	\$4,821,384	\$12,904,760	\$5,103,243
Frequency-motor:				
Alarm:				
Number.....	816,427			
Value.....	\$1,519,892			
Mantel:				
Number.....	903,186			
Value.....	\$1,948,415			
Tower, post, and bracket:				
Number.....	15,312	(1)	{ 3,625,800 }	(1)
Value.....	\$151,326		{ \$11,924,801 }	
Other:				
Number.....	478,744			
Value.....	\$1,615,170			
Motor-wound (not including master clocks):				
Automobile:				
Number.....	422,473			
Value.....	\$1,710,517			
Mantel:				
Number.....	33,018			
Value.....	\$127,119			
Tower, post, and bracket:				
Number.....	22	(1)	{ 171,639 }	(1)
Value.....	\$32,399		{ \$979,850 }	
Other:				
Number.....	33			
Value.....	\$2,580			
Master clocks (for electric-clock systems) and magnet-operated secondary clocks:				
Number.....	9,543			
Value.....	\$349,795			
Alarm clocks, except electric:				
Number.....	8,385,774	6,098,778	5,680,537	9,402,293
Value.....	\$4,906,409	\$5,159,296	\$5,111,068	\$10,765,117
Other clocks:				
Total number.....	1,830,037	943,235	1,179,227	2,386,284
Total value.....	\$2,754,411	\$1,492,739	\$2,375,067	\$9,553,923
With domestic movements:				
Total number.....	1,813,837	903,089	1,117,528	2,223,682
Total value.....	\$2,728,370	\$1,363,038	\$2,110,515	\$8,358,042
One-day clocks, except automobile:				
Number.....	1,119,786	(1)	491,241	
Value.....	\$1,091,328	(1)	\$399,361	
Eight-day clocks, except automobile and chime:				
Number.....	336,214			
Value.....	\$916,804			
Chime clocks:				
Number.....	14,537	(1)	{ 453,951 }	{ 1,975,650 }
Value.....	\$211,890		{ \$1,137,810 }	{ \$7,173,312 }
Automobile clocks:				
Number.....	343,300	(1)	172,336	248,032
Value.....	\$508,348	(1)	\$570,344	\$1,184,730

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, NUMBER, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935—Continued

	1935	1933	1931	1929
Clocks, watches, time-recording devices, etc.—Con.				
Clocks, complete, etc.—Continued.				
Other clocks.—Continued.				
With imported movements:				
Total number.....	16,200	40,146	61,699	162,602
Total value.....	\$26,041	\$129,651	\$258,552	\$1,195,886
Automobile clocks:				
Number.....	1,200			
Value.....	\$6,600			
Other clocks:		(¹)	(¹)	(¹)
Number.....	15,000			
Value.....	\$19,441			
Clock movements made for sale separately:				
Total number.....	955,198	309,495	864,394	907,714
Total value.....	\$1,274,130	\$542,739	\$1,518,577	\$2,363,465
Clock movements, complete, for use as time-				
pieces only:				
Number.....	479,814	215,729	715,115	668,636
Value.....	\$415,550	\$288,353	\$951,509	\$729,935
Clock movements for use in recording instru-				
ments and gauges, timestamps, time switches,				
time locks, etc.:				
Number.....	475,384	93,766	149,279	239,078
Value.....	\$858,580	\$254,386	\$567,068	\$1,633,530
Instruments and devices, complete, with clock-work				
mechanism:				
Total number.....	177,841	47,579	57,833	176,693
Total value.....	\$2,650,481	\$1,248,852	\$2,461,241	\$6,950,294
Timestamps, watchmen's clocks, time switches,				
time locks, interval timers, etc.:				
Number.....	154,688	35,694	38,175	129,310
Value.....	\$1,116,639	\$738,325	\$981,765	\$1,790,382
Time-recording clocks:				
Number.....	23,153	11,885	10,658	47,383
Value.....	\$1,533,842	\$510,527	\$1,479,476	\$5,159,912
Clock materials and parts, including cases, value....	\$416,665	\$320,341	\$1,854,292	\$1,071,430
Watches, watch movements, and parts, except				
watchcases, total value.....	\$35,417,140	\$13,932,824	\$16,605,361	\$39,356,427
Nonjeweled watches, complete:				
Total number.....	8,612,060	5,746,507	5,136,869	9,479,979
Total value.....	\$8,235,655	\$5,181,859	\$4,541,430	\$9,672,554
Pocket:				
Number.....	3,996,654			
Value.....	\$2,364,350			
Wrist:		(¹)	(¹)	(¹)
Number.....	4,615,406			
Value.....	\$5,871,305			
Jeweled watches, complete: ²				
Total number.....		687,898	859,494	1,523,826
Total value.....	\$20,050,256	\$7,040,113	\$10,287,706	\$23,772,847
Pocket:				
Number reported:				
Number.....	58,321			
Value.....	\$1,056,292			
Number not reported, value.....	\$356,803			
Wrist:		(¹)	(¹)	(¹)
Number reported:				
Number.....	1,268,058			
Value.....	\$17,797,188			
Number not reported, value.....	\$811,963			
Standard jeweled movements:				
Number reported:				
Number.....	630,997			
Value.....	\$4,960,488	\$1,710,852	\$1,776,225	\$5,911,026
Number not reported, value.....	\$901,516			
Watch materials and parts, except watchcases,				
value.....	\$1,269,225			

¹ No data.² Not including watches assembled by establishments which purchase both cases and movements. See "Description of the industry," p. 982.

1203

COLLAPSIBLE TUBES

[A preliminary report for this industry was issued Mar. 30, 1937]

Description of the industry.—This industry embraces establishments whose principal products are collapsible tubes, made chiefly of tin, lead, and aluminum, for use as containers for toilet preparations, adhesives, etc. This report does not cover the production of collapsible tubes for use as containers for products made by the same manufacturers.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (-)	
					1933-1935	1929-1935
Number of establishments.....	16	17	17	17	(*)	(*)
Proprietors and firm members.....			(1)			
Salaried personnel, total ²	177	(3)	(1)	147	(3)	29.4
Salaried officers of corporations.....	36	(3)	(1)	31	(3)	(3)
Supervisory, technical, and clerical employees.....	⁴ 141	⁵ 131	(1)	116	7.6	21.6
Salaries paid, total ²	\$556,512	(3)	(1)	\$346,006	(3)	-14.0
To salaried officers of corporations.....	\$290,622	(3)	(1)	\$350,007	(3)	-17.1
To supervisory, technical, and clerical employees.....	⁴ \$265,890	⁵ \$252,621	(1)	\$206,389	5.3	-10.3
Wage earners (average for year) ⁶	1,961	1,750	1,737	1,821	12.1	7.7
Wages.....	\$1,749,674	\$1,482,341	\$1,634,463	\$1,782,024	18.0	-1.8
Cost of materials, etc., total.....	\$4,965,729	\$3,834,460	\$4,142,410	\$5,385,006	20.5	-7.8
Cost of materials and supplies.....	\$4,853,686	(1)	(1)	\$5,286,217	(1)	-8.2
Cost of fuel.....	56,816	(1)	(1)	49,452	(1)	14.9
Cost of purchased electric energy.....	55,227	(1)	(1)	50,237	(1)	9.9
Value of products.....	8,505,190	\$6,924,109	\$7,634,190	8,912,977	22.8	-4.6
Value added by manufacture ⁷	3,539,461	3,089,649	3,491,780	3,527,071	14.0	0.4

*Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 44; salaries, \$119,928. Technical, 7; salaries, \$22,640. Clerical, 90; salaries, \$123,322. See sec. 10, p. 7.

⁵ Supervisory, 49; salaries, \$148,026. Clerical and other, 82; salaries, \$104,595. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States.....	16	177	1,961	\$556,512	\$1,749,674	\$4,965,729	\$3,505,190	\$3,539,461
New Jersey.....	6	51	591	241,036	505,928	2,089,099	3,354,861	1,285,762
Pennsylvania.....	3	49	273	104,929	216,295	577,860	1,128,878	551,018
Other States ¹	7	77	1,097	210,547	1,026,451	2,318,770	4,021,451	1,702,681

¹ Connecticut, 1 establishment; Delaware, 1; Illinois, 1; New York, 2; Rhode Island, 1; West Virginia, 1. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	1,961	1,928	1,974	2,039	2,068	1,882	1,938	1,844	1,894	2,014	2,091	1,934	1,926
1933.....	1,750	1,572	1,588	1,561	1,523	1,542	1,605	1,704	1,939	2,106	2,007	1,982	1,872
<i>States, 1935</i>													
New Jersey.....	591	630	619	626	597	556	577	551	551	644	639	559	544
Pennsylvania.....	273	246	264	274	273	274	281	244	290	293	292	279	262

TABLE 4.—COLLAPSIBLE TUBES—PRODUCTION FOR SALE, BY QUANTITY AND VALUE, FOR THE UNITED STATES: 1929 TO 1935

[The figures given in this table cover the total production, for sale separately, of collapsible tubes, including those made as secondary products by establishments classified in other industries]

	1935	1933	1931	1929
Gross.....	3,622,352	3,332,502	3,729,671	3,447,938
Value ¹	\$7,831,826	\$6,857,050	\$7,767,842	\$8,564,450

¹ These values include those of collapsible tubes made as secondary products in other industries (see head-note) but do not include the values of other commodities made as secondary products in the Collapsible Tubes industry. They differ, therefore, from the "Value of products" figures for the corresponding years, as given in table 1. See sixth paragraph, sec. 14, p. 8.

1205

ELECTROPLATING

Description of the industry.—The establishments classified in this industry are engaged primarily in the plating, by electrolysis of various metal articles, such as motor-vehicle accessories, lighting fixtures, musical instruments, and jewelry, with gold, silver, chromium, copper, nickel, and zinc. The "value of products" represents, to a large extent, receipts for electroplating done on articles owned by others. Many establishments that manufacture jewelry and other commodities do their own electroplating and do not report its value separately, and therefore the report for this industry does not cover all the electroplating done.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	553	423	404	534	30.7	3.6
Proprietors and firm members.....	417	303	(1)	470.	37.6	-11.3
Salaried personnel, total ²	968	(3)	(1)	915	(2)	5.8
Salaried officers of corporations.....	360	(3)	(1)	304	(2)	18.4
Supervisory, technical, and clerical employees.....	⁴ 608	⁵ 479	(1)	611	26.9	-0.5
Salaries paid, total ¹	\$2,033,005	(2)	(1)	\$2,557,402	(2)	-20.5
To salaried officers of corporations.....	\$1,212,976	(2)	(1)	\$1,331,095	(2)	-8.9
To supervisory, technical, and clerical employees.....	⁴ \$820,029	⁵ \$579,685	(1)	\$1,226,307	41.5	-33.1
Wage earners (average for year) ⁶	6,238	3,956	4,107	5,028	57.7	5.2
Wages.....	\$6,941,180	\$3,715,379	\$5,041,654	\$9,536,800	80.8	-27.2
Cost of materials, etc., total.....	\$4,602,431	\$2,352,202	\$2,802,451	\$4,798,667	95.7	-4.1
Cost of materials and supplies.....	\$3,647,781	(1)	(1)	\$3,918,792	(1)	-0.0
Cost of fuel.....	250,789	(1)	(1)	253,081	(1)	-0.9
Cost of purchased electric energy.....	703,861	(1)	(1)	626,794	(1)	12.3
Value of products and receipts for contract work ⁷	18,327,692	\$10,032,076	\$13,084,240	23,727,916	82.7	-22.8
Value added by manufacture ⁸	13,725,261	7,679,874	10,281,789	18,929,249	78.7	-27.5

¹ No data.² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.³ Data incomplete.⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 173; salaries, \$369,514. Technical, 27; salaries, \$38,648. Clerical, 408; salaries, \$381,867. See sec. 10, p. 7.⁵ Supervisory, 108; salaries, \$201,253. Clerical and other, 371; salaries, \$378,432. See sec. 10, p. 7.⁶ See sec. 11, p. 7.⁷ See "Description of the industry," above.⁸ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 13, p. 11;

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 8, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States.....	553	968	6,238	\$2,033,005	\$6,941,180	\$4,002,431	\$18,327,692	\$13,725,261
California.....	58	62	390	95,076	480,588	234,344	1,181,623	947,279
Connecticut.....	15	37	272	80,683	228,211	174,618	700,074	525,456
District of Columbia.....	3	6	14	11,090	19,336	7,746	57,418	49,672
Illinois.....	73	163	1,197	474,272	1,388,767	1,241,337	4,274,321	3,033,084
Indiana.....	18	28	183	56,478	187,307	124,818	481,420	356,602
Iowa.....	4	2	32	1,820	31,036	14,172	63,733	49,561
Maryland.....	7	3	34	2,024	40,160	13,165	83,880	70,715
Massachusetts.....	32	43	297	81,100	325,507	164,146	752,514	588,368
Michigan.....	31	81	828	194,148	891,186	572,900	2,071,318	1,498,418
Minnesota.....	12	11	169	34,027	175,548	93,552	406,251	312,699
Missouri.....	14	27	119	39,907	143,986	74,104	324,313	250,209
Nebraska.....	3	6	10	3,503	11,855	7,080	35,441	28,361
New Jersey.....	23	20	197	38,755	208,579	129,140	495,180	366,040
New York.....	107	205	957	420,982	1,184,985	697,724	3,085,617	2,387,893
Ohio.....	56	109	750	218,804	834,810	501,993	2,129,402	1,627,404
Oklahoma.....	3	1	9	3,000	8,567	4,280	25,403	21,123
Oregon.....	4	4	8	3,653	9,523	6,363	35,366	29,002
Pennsylvania.....	37	50	301	90,091	314,534	271,728	935,958	664,230
Rhode Island.....	16	28	135	69,952	122,168	86,842	358,488	271,646
Texas.....	8	5	44	6,836	36,176	19,241	89,880	70,639
Wisconsin.....	11	22	182	61,779	187,548	102,012	454,480	352,474
Other States ¹	18	25	110	34,025	110,739	61,221	285,607	224,386

¹ Colorado, 2 establishments; Delaware, 1; Florida, 2; Georgia, 3; Kansas, 1; Kentucky, 2; Louisiana, 2; New Hampshire, 1; Tennessee, 1; Virginia, 1; Washington, 2. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States	6,238	5,917	6,173	6,166	6,158	6,172	5,963	5,705	5,774	6,135	6,840	7,029	6,826
1933.....	3,956	(*)	(*)	3,101	(*)	(*)	3,862	(*)	(*)	4,854	(*)	(*)	4,337
States 1935													
California.....	360	345	355	368	371	386	384	383	397	412	418	437	423
Connecticut.....	272	280	227	246	254	265	280	261	254	272	300	350	321
District of Columbia.....	14	12	13	14	15	14	12	14	15	13	15	16	16
Georgia.....	28	26	26	26	27	28	28	30	33	33	33	29	25
Illinois.....	1,197	1,103	1,110	1,116	1,183	1,139	1,107	1,178	1,199	1,302	1,348	1,328	1,261
Indiana.....	183	171	172	190	193	185	190	185	189	185	185	170	175
Iowa.....	32	28	31	28	34	40	40	40	40	34	26	23	25
Maryland.....	34	35	32	35	36	35	35	33	32	36	35	34	32
Massachusetts.....	297	255	256	274	298	295	281	280	287	318	344	343	332
Michigan.....	828	830	845	983	965	1,027	875	645	545	610	802	878	935
Minnesota.....	169	360	433	190	116	105	107	97	118	132	129	123	122
Missouri.....	119	96	110	120	118	134	119	114	111	119	118	123	142
Nebraska.....	10	8	10	11	11	11	12	10	10	11	11	10	10
New Jersey.....	197	195	194	195	202	196	188	189	197	198	198	205	211
New York.....	957	846	900	953	917	894	907	904	926	1,005	1,086	1,111	1,032
Ohio.....	750	721	763	731	718	750	704	607	698	657	814	874	962
Oklahoma.....	9	9	9	8	9	10	10	10	9	9	9	9	9
Oregon.....	8	6	6	6	6	10	9	9	9	10	10	10	10
Pennsylvania.....	301	225	226	239	252	260	272	290	286	310	445	456	353
Rhode Island.....	135	116	132	132	119	91	99	118	132	158	186	179	161
Texas.....	44	42	42	46	46	44	48	43	45	44	48	44	42
Wisconsin.....	182	188	206	169	184	175	175	184	174	184	200	189	158

*Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

1206

FIRE EXTINGUISHERS, CHEMICAL

Description of the industry.—The principal products of the establishments classified in this industry are portable fire extinguishers, hose reels, and other apparatus (except motor-propelled apparatus) and appliances for extinguishing fire by means of chemicals; chemical preparations for use with such apparatus and appliances; hand grenades for extinguishing fire, etc.

Omission of State statistics except for wage-earner employment.—As no figures can be given for the most important State in this industry, namely, New Jersey, without disclosing data for individual establishments, and as those States for which it would be possible to publish separate figures without disclosing such data (exactly or approximately) accounted for less than one-half of the total activity of the industry (as measured by number of wage earners employed) in the United States in 1935, no State statistics are included in this report except in table 2, in which figures are given for each State represented by three or more establishments, even though one or two of these establishments may have reported most of the wage earners employed in the industry in the State. (See sec. 23, p. 12.)

TABLE 1.—GENERAL STATISTICS FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	125	22	25	28	(*)	(*)
Proprietors and firm members.....	9	7	(?)	8	(*)	(*)
Salaried personnel, total ²	300	(4)	(?)	330	(4)	-10.7
Salaried officers of corporations.....	25	(4)	(?)	42	(4)	(*)
Supervisory, technical, and clerical employees.....	⁵ 275	⁶ 311	(?)	204	-11.0	-0.5
Salaries paid, total ³	\$501,065	(4)	(?)	\$907,375	(4)	-44.8
To salaried officers of corporations.....	\$96,489	(4)	(?)	\$302,777	(4)	-68.1
To supervisory, technical, and clerical employees.....	⁵ \$404,576	⁶ \$453,968	(?)	\$604,598	-10.0	-33.1
Wage earners (average for year) ⁷	806	589	571	740	36.8	8.0
Wages.....	\$964,857	\$603,628	\$616,882	\$958,570	59.8	0.7
Cost of materials, etc., total.....	\$2,472,352	\$1,720,483	\$1,796,421	\$4,187,524	43.7	-41.0
Cost of materials and supplies.....	\$2,401,872	(?)	(?)	\$4,118,974	(?)	-41.7
Cost of fuel.....	27,093	(?)	(?)	27,090	(?)	-3.2
Cost of purchased electric energy.....	43,387	(?)	(?)	40,500	(?)	7.0
Value of products.....	5,342,793	\$3,775,061	\$4,452,815	8,566,089	41.5	-37.6
Value added by manufacture ⁴	2,870,441	2,054,578	2,056,304	4,378,565	39.7	-34.4

*Percent not computed where base is less than 100.

¹ California, 1 establishment; Colorado, 1; Illinois, 2; Massachusetts, 4; Michigan, 2; Minnesota, 1; Missouri, 1; New Hampshire, 1; New Jersey, 2; New York, 5; Ohio, 4; Pennsylvania, 1.

² No data.

³ No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

⁴ Data incomplete.

⁵ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 46; salaries, \$125,208. Technical, 26; salaries, \$49,529. Clerical, 203; salaries, \$229,839. See sec. 10, p. 7.

⁶ Supervisory, 44; salaries, \$117,022. Clerical and other, 287; salaries, \$338,946. See sec. 10, p. 7.

⁷ See sec. 11, p. 7.

⁸ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	806	711	705	731	803	794	815	784	845	843	851	886	910
1933.....	589	531	533	505	507	568	640	566	587	623	642	678	693
<i>States, 1935</i>													
Massachusetts.....	28	23	22	23	23	22	22	24	22	24	31	43	58
New York.....	186	172	172	171	176	181	189	189	190	195	200	201	199
Ohio.....	89	77	85	93	116	105	107	92	91	76	75	75	79

1208

GOLD LEAF AND FOIL

[A preliminary report for this industry was issued Oct. 27, 1936]

Description of the industry.—This industry, as constituted for Census purposes, embraces manufacturers generally known as gold-beaters, and covers the production of gold leaf both in packs and in rolls.

Omission of State statistics except for wage-earner employment.—As no figures can be given for the most important State in this industry, namely, Connecticut, without disclosing data for an individual establishment, and as those States for which it would be possible to publish separate figures without disclosing such data (exactly or approximately) accounted for less than one-half of the total activity of the industry (as measured by number of wage earners employed) in the United States in 1935, no State statistics are included in this report except in table 2, in which figures are given for each State represented by three or more establishments, even though one or two of these establishments may have reported most of the wage earners employed in the industry in the State. (See sec. 23, p. 12.)

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE(—)	
					1933-1935	1929-1935
Number of establishments.....	127	31	48	75	(*)	(*)
Proprietors and firm members.....	23	25	(2)	00	(*)	(*)
Salaried personnel, total ¹	71	(4)	(2)	81	(4)	(*)
Salaried officers of corporations.....	7	(4)	(2)	15	(4)	(*)
Supervisory, technical, and clerical employees.....	² 64	² 59	(2)	66	(*)	(*)
Salaries paid, total ³	\$141,000	(4)	(2)	\$261,700	(3)	-46.1
To salaried officers of corporations.....	\$43,401	(4)	(2)	\$126,808	(3)	-65.6
To supervisory, technical, and clerical employees.....	⁴ \$97,659	⁴ \$83,139	(2)	\$135,488	17.5	-27.0
Wage earners (average for year) ⁵	557	608	805	1,177	-8.4	-52.7
Wages.....	\$402,521	\$348,000	\$630,784	\$1,134,044	15.7	-64.5
Cost of materials, etc., total.....	\$958,988	\$683,757	\$1,015,086	\$1,932,667	40.3	-50.4
Cost of materials, supplies, and containers.....	\$939,496	(2)	(3)	\$1,903,904	(2)	-50.7
Cost of fuel.....	6,602	(2)	(3)	15,327	(2)	-50.9
Cost of purchased electric energy.....	12,890	(2)	(2)	13,436	(2)	-4.1
Value of products.....	1,782,599	\$1,401,556	\$2,217,366	3,978,024	27.2	-55.2
Value added by manufacture ⁶	823,611	717,799	1,202,280	2,045,357	14.7	-59.7

* Percent not computed where base is less than 100.

¹ California, 2 establishments; Connecticut, 1; Illinois, 3; Maryland, 1; Massachusetts, 3; New Jersey, 3; New York, 11; Pennsylvania, 2; Rhode Island, 1.

² No data.

³ No data of employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

⁴ Data incomplete.

⁵ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 22; salaries, \$48,789. Technical, 3; salaries, \$4,523. Clerical, 39; salaries, \$44,347. See sec. 10, p. 7.

⁶ Supervisory, 14; salaries, \$29,591. Clerical and other, 45; salaries, \$63,548. See sec. 10, p. 7.

⁷ See sec. 11, p. 7.

⁸ Value of products less cost of materials, supplies, containers, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	557	533	561	553	564	546	561	554	560	562	562	561	563
1933.....	608	597	598	592	581	582	589	598	609	629	640	640	637
<i>States, 1935</i>													
Illinois.....	55	59	58	60	58	55	57	46	52	55	57	48	54
Massachusetts.....	9	9	9	9	9	9	9	9	9	9	9	9	9
New Jersey.....	22	22	22	22	22	22	22	22	22	22	23	23	23
New York.....	112	89	110	107	113	102	112	119	113	120	117	123	120

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929
Gold Leaf and Foil industry, all products total value.....	\$1,782,599	\$1,401,556	\$2,217,366	\$3,978,024
Gold leaf ¹	\$1,531,949	\$1,271,632	\$1,963,360	\$3,872,481
In packs (500 sheets):				
Number.....	86,123			
Value.....	\$1,187,571			
In rolls, sized and unsized, 100' x 1":		(²)	(²)	(²)
Number.....	² 87,152			
Value.....	\$344,378			
Other products, including imitation gold leaf and aluminum, silver, and other leaf, value.....	\$250,650	\$129,924	\$254,006	\$105,543

¹ Includes small quantity of gold foil.² Includes number of rolls of 67' x 1" converted to 100' x 1".³ No data.

1209

GOLD, SILVER, AND PLATINUM, REFINING AND ALLOYING

Description of the industry.—This industry, as constituted for Manufactures Census purposes, consists in the refining and alloying of gold, silver, and platinum from bullion, sweepings, scrap, and old metal. The recovery of gold and silver in the refining of copper and lead is covered by the "Smelting and Refining, Copper" and "Smelting and Refining, Lead" industries, respectively. A small quantity of platinum is also obtained in the electrolytic refining of copper. The extraction of metals by washing and milling does not come within the scope of the Census of Manufactures.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	88	61	63	69	(*)	(*)
Proprietors and firm members.....	59	27	(1)	40	(*)	(*)
Salaried personnel, total ²	514	(3)	(1)	430	(3)	17.1
Salaried officers of corporations.....	75	(3)	(1)	61	(3)	(*)
Supervisory, technical, and clerical employees.....	⁴ 439	⁵ 346	(1)	378	26.9	16.1
Salaries paid, total ²	\$1,331,019	(3)	(1)	\$1,303,597	(3)	2.1
To salaried officers of corporations.....	\$507,836	(3)	(1)	\$381,834	(3)	33.0
To supervisory, technical, and clerical employees.....	⁴ \$823,183	⁵ \$694,411	(1)	\$921,763	18.5	-10.7
Wage earners (average for year) ⁶	1,002	745	803	931	34.5	7.0
Wages.....	\$1,317,833	\$980,020	\$1,185,570	\$1,633,838	34.5	-19.3
Cost of materials, etc., total.....	\$71,749,429	\$39,036,283	\$36,892,807	\$61,570,003	83.8	16.5
Cost of materials and supplies.....	\$71,497,497	(1)	(1)	\$61,354,738	(1)	16.5
Cost of fuel.....	153,587	(1)	(1)	142,578	(1)	11.2
Cost of purchased electric energy.....	93,345	(1)	(1)	72,777	(1)	28.3
Value of products.....	78,018,054	\$44,603,744	\$41,397,602	67,959,140	74.9	14.3
Value added by manufacture ⁷	6,268,625	5,567,466	4,604,765	6,389,047	12.0	-1.0

* Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 73; salaries, \$252,703. Technical, 67; salaries, \$185,220. Clerical, 299; salaries, \$385,260. See sec. 10, p. 7.

⁵ Supervisory, 67; salaries, \$240,054. Clerical and other, 279; salaries, \$454,357. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

GOLD, SILVER, AND PLATINUM, REFINING AND ALLOYING 995

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Sal- aried officers and em- ployees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and pur- chased energy	Value of products	Value added by manufac- ture
United States...	88	514	1,002	\$1,331,019	\$1,317,833	\$71,749,429	\$78,018,054	\$6,268,625
California.....	7	9	28	23,694	42,485	1,633,338	1,826,755	193,417
Massachusetts.....	5	15	19	27,483	21,572	2,351,316	2,484,519	133,203
Michigan.....	5	12	7	14,010	10,652	128,156	171,980	43,824
New Jersey.....	15	208	535	579,940	744,854	35,964,377	39,047,290	3,082,913
New York.....	21	83	86	237,851	131,852	8,791,437	9,693,991	902,554
Ohio.....	4	8	11	16,994	15,915	644,705	721,944	77,239
Pennsylvania.....	5	32	45	68,588	61,551	949,415	1,185,845	236,430
Rhode Island.....	9	23	28	57,353	37,174	1,824,575	2,082,645	258,070
Other States ¹	17	124	243	304,201	261,778	19,462,110	20,803,085	1,340,975

¹ Colorado, 1 establishment; Connecticut, 2; Illinois, 4; Indiana, 1; Minnesota, 1; Missouri, 1; Nebraska, 1; Tennessee, 1; Texas, 2; and Washington, 3. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	1,002	938	959	948	949	982	1,021	999	976	1,032	1,038	1,071	1,107
1933.....	745	687	690	657	668	682	715	763	759	785	848	854	861
<i>States, 1935</i>													
California.....	28	28	27	28	27	28	28	27	28	27	27	28	28
Illinois.....	133	123	137	122	111	131	135	121	105	158	135	155	166
Massachusetts.....	19	21	21	17	17	17	18	20	20	18	20	20	20
Michigan.....	7	7	7	7	7	7	7	7	7	7	7	7	7
New Jersey.....	535	490	501	502	513	527	559	551	534	539	558	564	585
New York.....	86	84	84	85	85	84	84	85	85	88	90	92	91
Ohio.....	11	11	11	11	11	11	11	11	11	11	11	11	10
Pennsylvania.....	45	37	36	36	38	41	43	41	46	48	55	54	61
Rhode Island.....	28	29	29	29	29	28	28	28	28	28	29	29	29

JEWELRY

1910

1224 JEWELERS' FINDINGS AND MATERIALS

[A preliminary report for these industries was issued Jan. 16, 1937]

Description of the industries.—The Jewelry industry embraces establishments engaged primarily in manufacturing articles—chiefly for personal adornment but also including related products such as cigarette cases and lighters, compacts, vanity cases, novelties, trophies, religious articles, chains, dress and bag ornaments, etc.—of gold, silver, platinum, gold-filled metal, rolled-gold plate, and other metals, plain, engraved, or chased, and with or without precious or semi-precious stones.

The Jewelers' Findings and Materials industry covers the manufacture of jewelry findings—unassembled parts except gems and stones—and jewelers' materials or stock shop products.

Because of changes made in the questionnaire for 1935, the detailed production statistics for the Jewelry industry as published in former Manufactures Census reports are not comparable with those for the current census, and therefore no figures for earlier years are given in table 4.

As the products of the Jewelers' Findings and Materials industry are used chiefly as materials in the Jewelry industry, combined figures for the two industries for cost of materials, etc., and for value of products would include large amounts of duplication, and therefore these items are omitted in the first section of table 1.

TABLE 1.—GENERAL STATISTICS FOR THE INDUSTRIES AS A GROUP, 1929 TO 1935, AND FOR THE INDUSTRIES, 1931 TO 1935, FOR THE UNITED STATES

[The Jewelry and the Jewelers' Findings and Materials industries were not classified separately prior to 1931]

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
THE INDUSTRIES AS A GROUP						
Number of establishments.....	1,067	839	(1)	1,536	27.2	-30.5
Proprietors and firm members.....	726	530	(1)	1,340	37.0	-45.8
Salaries paid, total ²	4,095	(3)	(1)	5,535	(3)	-20.0
Salaries paid, total ¹	920	(3)	(1)	1,153	(3)	-20.2
Supervisory, technical, and clerical employees.....	3,175	2,709	(1)	4,382	17.2	-27.5
Salaries paid, total ¹	\$8,039,004	(3)	(1)	\$16,000,552	(3)	-50.0
To salaried officers of corporations.....	\$3,744,900	(3)	(1)	\$7,362,735	(3)	-40.1
To supervisory, technical, and clerical employees.....	\$4,294,104	\$3,530,157	(1)	\$8,727,817	21.6	-50.8
Wage earners (average for year) ⁴	19,759	14,880	18,623	27,922	32.8	-20.2
Wages.....	\$20,569,431	\$12,927,039	\$22,574,252	\$38,070,810	69.1	-47.2
Value added by manufacture ⁵	\$46,887,450	\$29,615,384	\$51,292,809	\$97,582,316	58.3	-52.0

For footnotes, see end of table.

TABLE 1.—GENERAL STATISTICS FOR THE INDUSTRIES AS A GROUP, 1929 TO 1935, AND FOR THE INDUSTRIES, 1931 TO 1935, FOR THE UNITED STATES—Continued

[See note at head of table]

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (-)	
					1933-1935	1931-1935
JEWELRY						
Number of establishments.....	994	779	1,052		27.6	-5.5
Proprietors and firm members.....	690	514	(1)		34.2	(1)
Salaried personnel, total ²	3,659	(3)	(1)		(3)	(1)
Salaried officers of corporations.....	830	(3)	(1)		(3)	(1)
Supervisory, technical, and clerical employees.....	⁸ 2,829	⁹ 2,405	(1)		17.6	(1)
Salaries paid, total ²	\$6,902,357	(3)	(1)		(3)	(1)
To salaried officers of corporations.....	\$3,243,810	(3)	(1)		(3)	(1)
To supervisory, technical, and clerical employees.....	⁸ \$3,658,547	⁹ \$3,021,171	(1)		21.1	(1)
Wage earners (average for year) ⁶	17,096	13,069	16,724		30.8	2.2
Wages.....	\$17,340,986	\$11,323,027	\$20,230,937		57.6	-11.8
Cost of materials, etc., total.....	\$30,246,929	\$16,783,095	\$28,684,460		80.2	5.4
Cost of materials, supplies, and containers.....	\$29,725,200	(1)	(1)		(1)	(1)
Cost of fuel.....	\$157,061	(1)	(1)		(1)	(1)
Cost of purchased electric energy.....	\$364,668	(1)	(1)		(1)	(1)
Value of products.....	\$70,916,670	\$42,651,611	\$75,122,643		66.3	-5.6
Value added by manufacture ⁷	\$40,669,741	\$25,868,516	\$46,438,183		57.2	-12.4
JEWELERS' FINDINGS AND MATERIALS						
Number of establishments.....	73	60	99		(*)	(*)
Proprietors and firm members.....	36	16	(1)		(*)	(1)
Salaried personnel, total ²	436	(3)	(1)		(3)	(1)
Salaried officers of corporations.....	90	(3)	(1)		(3)	(1)
Supervisory, technical, and clerical employees.....	¹⁰ 346	¹¹ 304	(1)		13.8	(1)
Salaries paid, total ²	\$1,136,647	(3)	(1)		(3)	(1)
To salaried officers of corporations.....	\$501,090	(3)	(1)		(3)	(1)
To supervisory, technical, and clerical employees.....	¹⁰ \$635,557	¹¹ \$508,986	(1)		24.9	(1)
Wage earners (average for year) ⁶	2,663	1,811	1,899		47.0	40.2
Wages.....	\$2,728,445	\$1,604,012	\$2,343,295		70.1	16.4
Cost of materials, etc., total.....	\$10,952,760	\$5,503,051	\$7,120,906		99.0	53.8
Cost of materials, supplies, and containers.....	\$10,771,437	(1)	(1)		(1)	(1)
Cost of fuel.....	\$65,789	(1)	(1)		(1)	(1)
Cost of purchased electric energy.....	\$115,534	(1)	(1)		(1)	(1)
Value of products.....	\$17,170,469	\$9,249,919	\$11,975,592		85.6	43.4
Value added by manufacture ⁷	\$6,217,709	\$3,746,363	\$4,854,686		65.9	28.1

*Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only. Supervisory, 474; salaries, \$1,269,651. Technical, 273; salaries, \$523,469. Clerical, 2,425; salaries, \$2,500,984.

⁵ Supervisory, 549; salaries, \$1,262,425. Clerical and other, 2,160; salaries, \$2,267,732.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, containers, fuel, and purchased electric energy. See sec. 18, p. 11.

⁸ Supervisory, technical, and clerical employees reported separately for 1935 only. Supervisory, 398; salaries, \$1,002,913. Technical, 238; salaries, \$435,800. Clerical, 2,193; salaries, \$2,219,834.

⁹ Supervisory, 466; salaries, \$1,023,618. Clerical and other, 1,939; salaries, \$1,937,553.

¹⁰ Supervisory, technical, and clerical employees reported separately for 1935 only. Supervisory, 76; salaries, \$266,738. Technical, 38; salaries, \$87,669. Clerical, 232; salaries, \$231,150. See sec. 10, p. 7.

¹¹ Supervisory, 83; salaries, \$238,807. Clerical and other, 221; salaries, \$270,179. See sec. 10, p. 7.

TABLE 2.—SUMMARY FOR THE INDUSTRIES, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
JEWELRY								
United States.....	994	3,659	17,096	\$6,902,357	\$17,840,986	\$30,246,929	\$70,916,070	\$40,606,741
California.....	61	133	477	207,927	659,090	986,999	2,250,743	1,280,744
Colorado.....	7	8	30	8,363	35,741	59,582	141,714	82,132
District of Columbia.....	3	4	7	5,046	13,432	14,083	40,242	35,159
Georgia.....	4	13	28	22,980	37,823	33,509	122,555	89,046
Illinois.....	51	198	547	372,612	655,770	1,342,702	2,923,325	1,580,623
Indiana.....	10	88	231	200,316	312,480	769,203	1,704,177	934,974
Iowa.....	7	5	14	5,899	14,837	9,004	44,859	35,855
Kentucky.....	4	10	22	14,960	26,372	53,564	134,050	81,356
Maryland.....	9	16	38	29,334	44,171	92,774	215,556	122,782
Massachusetts.....	72	434	3,320	931,672	3,306,001	3,721,310	10,477,437	6,756,127
Michigan.....	14	62	103	107,922	127,013	311,517	797,085	486,468
Minnesota.....	10	116	215	169,370	237,386	509,304	1,405,408	950,014
Missouri.....	17	75	196	102,888	214,888	241,714	691,107	449,363
Nebraska.....	3	5	11	5,871	13,016	10,866	35,740	24,880
New Jersey.....	58	352	1,274	765,285	1,436,671	2,785,874	6,722,990	3,937,116
New York.....	419	1,000	3,437	1,942,605	4,421,816	10,951,279	21,995,783	11,044,564
Ohio.....	30	110	235	153,378	272,517	552,184	1,330,761	778,577
Oregon.....	3	3	25	1,416	31,335	22,332	79,534	57,202
Pennsylvania.....	31	62	199	86,670	254,407	458,636	1,029,343	570,707
Rhode Island.....	141	870	6,310	1,598,070	5,349,852	6,968,261	17,454,637	10,480,376
Texas.....	10	3	41	2,700	45,978	36,749	144,006	107,857
Utah.....	4	4	19	2,730	19,402	20,275	64,117	43,842
Washington.....	10	8	69	9,780	78,383	65,523	198,611	133,088
Wisconsin.....	7	17	33	19,919	38,943	54,310	150,041	95,731
Other States ¹	13	65	209	134,644	193,662	175,285	685,443	510,158
JEWELERS' FINDINGS AND MATERIALS								
United States.....	73	436	2,663	1,136,647	2,728,445	10,952,760	17,170,469	6,217,700
Massachusetts.....	18	127	912	354,001	1,072,690	4,374,934	6,442,560	2,067,635
New York.....	13	38	100	123,927	106,652	1,868,327	2,401,175	592,848
Rhode Island.....	36	199	1,197	488,554	1,080,802	3,865,826	6,409,705	2,543,870
Other States ²	6	72	453	170,165	468,301	843,673	1,857,020	1,013,347

¹ Arizona, 1 establishment; Connecticut, 3; Louisiana, 1; Maine, 1; Nevada, 1; New Mexico, 3; North Dakota, 1; Oklahoma, 2. See sec. 23, p. 12.

² Illinois, 1 establishment; New Jersey, 5. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE INDUSTRIES, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

		NUMBER REPORTED FOR—											
Average number employed during year ¹		January	February	March	April	May	June	July	August	September	October	November	December
JEWELRY													
<i>United States</i>		17,079	16,426	16,490	16,004	15,502	15,212	15,027	16,625	19,082	20,474	19,822	18,143
1933.....		13,069	(*)	11,238	(*)	(*)	11,965	(*)	(*)	15,795	(*)	(*)	13,846
<i>States, 1935</i>													
California.....	477	414	458	469	489	491	469	469	498	518	516	503	523
Colorado.....	36	36	35	36	36	37	37	37	37	36	36	36	37
Connecticut.....	109	97	77	73	57	74	84	84	133	210	207	166	136
District of Columbia.....	7	7	7	7	7	7	7	7	7	7	7	7	8
Georgia.....	28	27	27	27	27	27	27	27	27	29	30	29	29
Illinois.....	547	539	517	507	520	530	493	493	517	521	535	684	659
Indiana.....	230	228	219	218	221	217	192	205	205	234	264	266	268
Iowa.....	14	14	13	13	13	14	14	14	14	13	13	13	14
Kentucky.....	15	15	13	20	23	15	17	20	20	20	26	35	30
Maryland.....	38	38	38	38	38	37	37	37	37	38	39	40	40
Massachusetts.....	3,111	2,960	3,145	3,129	3,015	2,984	3,058	3,058	3,397	3,716	3,946	3,729	3,459
Michigan.....	103	104	104	103	103	104	96	98	98	102	105	106	110
Minnesota.....	223	223	224	225	222	222	209	220	215	220	230	235	235
Missouri.....	196	195	196	198	200	200	183	189	189	186	193	200	209
Nebraska.....	11	12	12	12	12	11	11	11	11	11	11	11	11
New Jersey.....	1,199	1,250	1,238	1,188	1,222	1,196	1,210	1,247	1,247	1,364	1,428	1,381	1,362
New Mexico.....	57	56	57	67	58	60	59	55	55	55	55	55	52
New York.....	3,243	3,350	3,414	3,305	3,312	3,200	2,999	3,083	3,083	3,779	3,999	3,874	3,703
Ohio.....	235	232	237	235	232	226	226	232	232	232	251	251	251
Oregon.....	25	25	25	25	25	25	25	25	25	25	25	25	25
Pennsylvania.....	199	205	209	209	209	201	191	191	189	192	175	211	212
Rhode Island.....	6,300	6,198	6,037	5,703	5,261	5,129	5,186	6,155	6,155	7,384	8,126	7,808	6,541
Texas.....	41	41	41	41	41	41	38	38	39	43	42	43	44
Utah.....	18	18	18	18	19	19	19	18	18	19	19	18	18
Washington.....	69	68	67	69	70	69	68	69	69	70	69	68	72
Wisconsin.....	33	34	34	34	33	33	33	33	35	32	32	32	33

For footnotes, see end of table.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE INDUSTRIES, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935—Con.

[See note at head of table]

	Average number employed during year ¹	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
JEWELERS' FINDINGS AND MATERIALS													
United States													
1935.....	2,683	2,580	2,548	2,513	2,452	2,436	2,407	2,656	3,019	3,197	2,996	2,793	
1933.....	1,811	1,619	1,539	1,545	1,567	1,698	1,805	1,912	2,152	2,106	2,171	1,949	
States, 1935													
Massachusetts.....	912	843	826	798	820	810	851	965	1,078	1,107	1,034	978	
New Jersey.....	137	140	142	122	123	117	123	133	147	157	152	153	
New York.....	100	99	102	83	66	85	88	106	125	118	113	109	
Rhode Island.....	1,197	1,237	1,205	1,217	1,146	1,119	1,043	1,136	1,296	1,394	1,303	1,176	

*Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

¹As the averages for 1935 given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

JEWELRY; JEWELERS' FINDINGS AND MATERIALS 1001

TABLE 4.—JEWELRY—PRODUCTION, BY KIND AND VALUE, FOR THE UNITED STATES: 1935

[No comparable figures available for earlier years. See third paragraph, p. 996]

KIND	Value
1. Jewelry industry, all products, total value.....	\$70,916,670
2. Jewelry and related products.....	66,821,259
3. Other products (not normally belonging to the industry).....	1,687,246
4. Receipts for contract, custom, and repair work.....	2,408,165
5. Jewelry and related products made as secondary products in other industries.....	2,568,748
Jewelry, aggregate value (sum of 2 and 5).....	69,390,007
Platinum (solid), total.....	10,287,618
Rings.....	5,817,284
Men's jewelry.....	163,800
Fraternal, college, and school jewelry and emblems.....	127,051
Other jewelry.....	4,047,342
Other articles ¹	132,141
Gold (solid), total.....	22,633,021
Rings.....	13,452,388
Men's jewelry.....	1,163,514
Fraternal, college, and school jewelry and emblems.....	4,527,492
Other jewelry.....	3,048,187
Other articles ¹	441,440
Gold-filled and rolled-gold-plated, total.....	5,459,866
Rings.....	456,391
Men's jewelry.....	1,884,051
Fraternal, college, and school jewelry and emblems.....	959,390
Other jewelry.....	2,027,776
Other articles ¹	152,258
Silver (sterling), total.....	4,719,590
Rings.....	955,452
Men's jewelry.....	487,680
Fraternal, college, and school jewelry and emblems.....	678,656
Other jewelry.....	2,138,678
Other articles ¹	459,124
Electroplated on base metals with gold, silver, platinum, etc., total.....	12,692,886
Rings.....	830,193
Men's jewelry.....	1,757,984
Fraternal, college, and school jewelry and emblems.....	626,490
Other jewelry.....	6,858,578
Other articles ¹	2,619,632
Other (except imitation pearls and imitation-pearl beads), total.....	9,376,153
Rings.....	217,724
Men's jewelry.....	803,814
Fraternal, college, and school jewelry and emblems.....	199,311
Other jewelry.....	5,442,124
Other articles ¹	2,713,180
Jewelry set with imitation pearls; imitation-pearl beads.....	1,457,125
Other products (belonging to the industry) ²	2,763,748

¹ Cigarette cases and lighters, compacts, vanity cases, etc.

² Novelties, trophies, religious articles, chains, dress and bag ornaments, etc.

TABLE 5.—JEWELERS' FINDINGS AND MATERIALS—PRODUCTION, BY KIND AND VALUE, FOR THE UNITED STATES: 1935, 1933, AND 1931

KIND	1935	1933	1931
1. Jewelers' Findings and Materials industry, all products, total value.....	\$17,170,469	\$9,249,919	\$11,975,592
2. Jewelers' findings and materials.....	15,674,283	8,436,484	11,709,468
3. Other products (not normally belonging to the industry).....	1,496,186	813,435	266,124
4. Jewelers' findings and materials made as secondary products in other industries.....	418,929	523,864	981,066
Jewelers' findings and materials, aggregate value (sum of 2 and 4).....	16,093,212	8,960,348	12,690,534
Findings (unassembled parts, except gems, stones, and stock shop products).....	4,226,890	2,711,248	5,391,236
Materials.....	11,106,571	6,249,100	7,299,298
Platinum stock.....	1,085,730	28,203	85,760
Stock shop products (sheet, wire, and tubing).....	10,020,841	6,220,897	7,213,529
Findings and materials not reported separately.....	146,847		
Other products (belonging to the industry).....	612,904		

1207

LIGHTING EQUIPMENT

[A preliminary report for this industry was issued Feb. 11, 1937]

Description of the industry.—This industry embraces establishments engaged primarily in the production of lighting equipment, chiefly by assembling purchased parts and partly manufactured materials. The products include all types of lighting equipment, such as lighting fixtures for residences and other buildings, portable lamps and lanterns (kerosene, gasoline, etc., as well as electric), motor-vehicle lamps, marine lighting equipment, searchlights and floodlights, and miners' lamps. Some of the manufacturers in the industry make gas mantles, metal reflectors, and similar lighting accessories. This classification does not cover the manufacture of generating apparatus nor of incandescent electric lamps (bulbs) and therapeutic lamps, which are treated as products of the Electrical Machinery, Apparatus, and Supplies industry. Glass lighting equipment and parts, such as lamp bodies and chimneys, lantern globes, glass shades and bowls, and so-called "lenses" for headlights, are classified in the Glass industry; and paper, parchment, and fabric lamp shades are assigned to the Miscellaneous Articles industry. Much of the material used in the Lighting Equipment industry comes, in the form of sheets, tubing, and spun metal, from manufacturers in the Nonferrous-Metal Alloys and Nonferrous-Metal Products industry.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (-)	
					1933-1935	1929-1935
Number of establishments.....	501	357	523	614	40.3	-18.4
Proprietors and firm members.....	194	101	(¹)	270	92.1	-28.1
Salaried personnel, total ²	3,436	(³)	(¹)	4,759	(³)	-27.8
Salaried officers of corporations.....	671	(³)	(¹)	841	(³)	-20.2
Supervisory, technical, and clerical employees.....	⁴ 2,765	⁴ 1,921	(¹)	3,918	43.9	-20.4
Salaries paid, total ²	\$7,110,274	(³)	(¹)	\$13,710,800	(³)	-48.1
To salaried officers of corporations.....	\$2,788,195	(³)	(¹)	\$5,491,689	(³)	-49.2
To supervisory, technical, and clerical employees.....	⁴ \$4,322,079	⁴ \$3,119,117	(¹)	\$8,219,111	38.6	-47.4
Wage earners (average for year) ⁴	16,677	10,538	14,790	23,580	58.3	-29.3
Wages.....	\$17,231,798	\$9,506,299	\$18,150,368	\$33,268,595	81.3	-48.2
Cost of materials, etc., total.....	\$39,902,667	\$19,240,956	\$30,312,448	\$57,918,407	107.4	-31.1
Cost of materials, supplies, and containers.....	\$38,634,277	(¹)	(¹)	\$56,211,179	(¹)	-31.3
Cost of fuel.....	477,051	(¹)	(¹)	667,840	(¹)	-28.6
Cost of purchased electric energy.....	791,339	(¹)	(¹)	1,039,388	(¹)	-23.9
Value of products.....	85,700,128	\$46,173,480	\$75,050,429	144,965,706	85.6	-40.9
Value added by manufacture ⁷	45,797,461	26,932,524	44,737,981	87,047,299	70.0	-47.4

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 590; salaries, \$1,506,445. Technical, 260; salaries, \$559,120. Clerical, 1,915; salaries, \$2,266,514. See sec. 10, p. 7.

⁵ Supervisory, 468; salaries, \$1,206,203. Clerical and other, 1,453; salaries, \$1,912,914. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, containers, fuel, and purchased electric energy. See sec. 13, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States.....	501	3,436	16,677	\$7,110,274	\$17,231,798	\$39,002,667	\$85,700,128	\$45,797,461
California.....	61	151	604	308,559	537,105	1,140,515	2,715,578	1,575,063
Connecticut.....	17	313	1,329	593,424	1,331,642	1,877,622	4,808,947	2,931,325
Illinois.....	76	611	2,840	1,526,634	2,787,178	6,008,522	14,232,047	8,223,525
Maryland.....	4	6	11	6,132	7,795	19,027	45,907	26,880
Massachusetts.....	12	70	303	134,259	332,357	581,350	1,455,852	874,592
Missouri.....	12	92	307	162,858	314,326	547,024	1,440,355	892,434
New Jersey.....	21	155	370	363,835	832,947	2,036,536	3,721,012	1,684,476
New York.....	185	854	3,761	1,657,469	3,604,776	9,384,520	19,073,962	9,680,442
Ohio.....	34	363	2,005	742,753	2,224,399	4,735,938	9,774,013	5,038,075
Pennsylvania.....	35	288	907	559,820	929,123	2,031,678	6,012,500	3,080,822
Washington.....	3	6	28	12,213	29,072	34,470	86,958	52,479
Wisconsin.....	11	56	120	87,761	116,814	288,330	683,091	304,761
Other States ¹	30	471	3,692	954,557	4,184,204	11,216,226	21,640,006	10,433,680

¹ Colorado, 3 establishments; Florida, 1; Indiana, 7; Iowa, 1; Kansas, 2; Kentucky, 3; Michigan, 6; Minnesota, 1; New Mexico, 1; Oklahoma, 1; Oregon, 2; Rhode Island, 1; Texas, 1. See sec 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	16,677	15,118	15,796	16,167	15,658	15,303	15,077	15,016	15,737	17,504	19,541	19,790	19,427
1933.....	10,538	(*)	(*)	8,733	(*)	(*)	9,717	(*)	(*)	12,602	(*)	(*)	11,656
<i>States, 1935</i>													
California.....	504	446	450	465	432	427	460	456	500	522	605	630	630
Colorado.....	16	13	15	14	13	15	15	20	20	21	17	16	15
Connecticut.....	1,329	1,289	1,317	1,351	1,318	1,267	1,241	1,235	1,310	1,350	1,450	1,417	1,384
Illinois.....	2,840	2,363	2,778	3,044	2,746	2,519	2,358	2,555	2,890	3,130	3,374	3,249	3,017
Indiana.....	2,220	2,015	2,107	2,112	2,049	1,998	1,987	1,934	1,854	2,278	2,054	2,781	2,875
Kentucky.....	29	22	29	31	22	26	27	25	33	32	36	33	33
Maryland.....	11	9	8	12	11	8	9	8	12	12	12	16	15
Massachusetts.....	303	263	281	290	303	318	287	281	285	302	335	362	334
Michigan.....	958	1,093	1,211	1,207	1,233	1,174	903	774	672	714	740	827	943
Missouri.....	307	268	272	271	292	277	286	284	335	335	354	348	356
New Jersey.....	870	801	760	706	718	736	742	803	646	1,025	1,150	1,078	961
New York.....	3,761	3,063	3,259	3,301	3,244	3,286	3,460	3,420	3,903	4,220	4,548	4,795	4,628
Ohio.....	2,005	2,009	1,934	1,971	1,921	1,864	1,867	1,798	1,463	1,756	2,417	2,437	2,530
Pennsylvania.....	907	792	789	827	796	822	839	842	884	1,049	1,130	1,098	1,012
Washington.....	28	25	25	26	25	26	26	27	29	34	31	30	32
Wisconsin.....	120	94	96	93	109	115	117	116	119	120	140	160	166

*Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

TABLE 4.—PRODUCTS, BY KIND AND VALUE FOR THE UNITED STATES: 1935, 1931, AND 1929

[No comparable detailed production figures available for 1933. See sec. 4, p. 3]

	1935	1931	1929
1. Lighting equipment industry, all products, total value.....	\$85,700,128	\$75,050,429	\$144,965,706
2. Lighting equipment.....	72,638,914	67,869,305	138,894,751
3. Other products (not normally belonging to the industry), value, and receipts for contract, custom, and repair work.....	13,061,214	7,181,124	6,070,955
4. Lighting equipment made as secondary products in other industries.....	8,882,528	8,276,563	16,889,144
Lighting equipment, aggregate value (sum of 2 and 4).....	81,521,442	76,144,868	155,783,895
Electric-lighting equipment, total value.....	70,884,225	65,588,063	129,325,883
Residence fixtures:			
Ceiling or chandelier type, except kitchen units.....	4,314,907	8,532,179	16,611,810
Wall or bracket type, except kitchen units.....	1,659,706	3,711,524	7,094,845
Kitchen units.....	685,255	508,647	1,539,841
Portable lamps (table, boudoir, bridge, and floor).....	16,558,903	13,241,038	19,787,570
Candelabra, candlesticks, and electric candles (except battery).....	214,904	157,691	739,886
Lanterns and other outdoor fixtures, including cut-outs but not transformers.....	1,059,018	912,905	1,763,093
Other residence fixtures.....	2,228,066	920,965	3,719,735
Commercial fixtures:			
Auditorium, church, and theater.....	1,303,013	2,845,518	5,878,902
Public-building, bank, store, office-building, school, etc.....	3,605,947	4,963,328	8,455,257
Window, show-case, and display lighting equipment:			
Interior floodlights without reflectors.....	191,267		
Interior floodlights with reflectors.....	122,663		
Show-window reflectors, glass.....	470,329	332,720	1,108,520
Show-window reflectors, metal.....	281,757		
Interior directional signs.....	74,806		
Photographing, photo-engraving, and blue-printing.....	295,033	400,347	490,738
Industrial fixtures:			
Factory, office, and drafting-room.....	1,693,666	1,158,412	1,630,983
Explosion-proof and vapor-proof lighting units.....	589,517	(1)	(1)
Miscellaneous electric-lighting equipment:			
Arc electric lamps (except therapeutic).....	983,451	(1)	(1)
Desk and reading lamps.....	690,442	436,583	1,077,356
Floodlights (exterior).....	2,805,039		
Headlights.....	313,695	14,468,736	23,043,096
Other electric.....	9,612,594		
Marine lighting equipment.....	869,322	(1)	(1)
Motor-vehicle lamps, complete.....	20,280,935	13,002,470	36,354,191
Kerosene and gasoline lighting equipment, total value.....	3,418,929	2,264,546	5,676,259
Lamps.....	990,721	874,106	2,084,257
Lanterns.....	2,428,208	1,390,440	3,592,002
Reflectors, metal and glass.....	2,351,212	2,428,176	4,960,813
Incandescent mantles:			
Silk and rayon.....	637,622		
Cotton.....	181,628	1,135,359	1,595,978
Carbide lamps (miners', bicycle, motorcycle, etc.).....	437,724	236,494	751,504
Gas fixtures.....	253,156	186,802	
Other lighting fixtures and equipment.....	818,567	1,280,745	3,785,530
Parts.....	2,538,379	3,024,673	4,767,217
Lighting equipment not reported by kind.....			4,920,711

¹No data.

1211

NEEDLES, PINS, HOOKS AND EYES, AND SLIDE AND SNAP FASTENERS

[A preliminary report for this industry was issued Apr. 30, 1937]

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of needles of all kinds; pins (except those classified as jewelry), including safety pins and metal hairpins; hooks and eyes; and slide and snap fasteners.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE	
					1933-1935	1929-1935
Number of establishments.....	50	45	(1) 46	43	(*)	(*)
Proprietors and firm members.....	3	3	(1)	9	(*)	(*)
Salaried personnel, total ²	1,190	(3)	(1)	772	(3)	54.1
Salaried officers of corporations.....	94	(3)	(1)	68	(3)	(*)
Supervisory, technical, and clerical employees.....	1,096	732	(1)	704	49.7	55.7
Salaries paid, total ²	\$2,979,716	(3)	(1)	\$2,021,477	(3)	47.4
To salaried officers of corporations.....	\$773,492	(3)	(1)	\$565,955	(3)	36.7
To supervisory, technical, and clerical employees.....	\$2,206,224	\$1,364,392	(1)	\$1,455,522	61.7	51.0
Wage earners (average for year) ⁶	10,104	6,412	5,354	3,242	57.0	61.0
Wages.....	\$9,403,911	\$5,767,885	\$5,666,534	\$3,565,732	64.6	44.6
Cost of materials, etc., total.....	\$9,288,233	\$5,817,912	\$4,842,405	\$0,187,822	59.6	50.1
Cost of materials, supplies, and containers.....	\$8,943,472	(1)	(1)	\$5,935,203	(1)	50.7
Cost of fuel.....	152,265	(1)	(1)	134,063	(1)	13.6
Cost of purchased electric energy.....	192,496	(1)	(1)	118,556	(1)	62.4
Value of products.....	32,829,505	\$22,757,609	\$20,342,038	22,030,950	44.3	49.0
Value added by manufacture ⁷	23,541,272	16,939,697	15,499,633	15,843,128	39.0	48.0

*Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 153; salaries, \$625,331. Technical, 99; salaries, \$281,632. Clerical, 844; salaries, \$1,299,261. See sec. 10, p. 7.

⁵ Supervisory, 143; salaries, \$689,370. Clerical and other, 589; salaries, \$674,522. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, containers, fuel, and purchased electric energy. See sec. 13, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials; etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States..	50	1,190	10,104	\$2,979,716	\$9,493,911	\$9,288,233	\$32,829,505	\$23,541,272
Connecticut.....	10	274	2,453	500,173	2,475,413	1,920,444	7,223,493	5,303,049
Illinois.....	4	78	496	247,722	413,962	675,149	2,925,209	2,250,060
New Hampshire.....	4	29	387	64,717	342,611	112,021	630,102	518,081
New Jersey.....	6	44	432	178,816	490,346	371,837	1,314,092	942,255
New York.....	11	170	644	408,612	612,702	1,339,992	3,101,686	1,761,694
Other States ¹	15	595	5,638	1,579,670	5,153,877	4,865,790	17,634,923	12,766,133

¹ California, 1 establishment; Massachusetts, 2; Missouri, 1; Ohio, 1; Pennsylvania, 7; Rhode Island, 1; Vermont, 1; Wisconsin, 1. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	10,104	9,320	9,972	10,329	10,389	10,286	9,972	9,977	10,047	10,315	10,414	10,424	9,808
1933.....	6,412	5,350	5,569	5,379	5,519	5,892	6,399	7,083	7,659	7,363	7,220	6,932	6,564
<i>States, 1935</i>													
Connecticut.....	2,453	2,556	2,531	2,510	2,508	2,442	2,377	2,351	2,336	2,363	2,465	2,499	2,507
Illinois.....	496	486	551	518	502	529	412	442	501	519	520	487	480
New Hampshire.....	387	386	394	402	394	391	381	373	374	383	386	389	391
New Jersey.....	432	465	459	462	484	470	478	465	464	476	536	534	493
New York.....	644	582	621	644	635	616	594	606	608	623	676	747	782
Pennsylvania.....	4,866	4,082	4,627	4,985	5,077	5,059	5,009	5,013	5,031	5,132	5,031	4,953	4,339

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1935, 1931, AND 1929

[No detailed production data were collected for 1933. See sec. 4, p. 3]

	1935	1931	1929
1. Needles, Pins, Hooks and Eyes, and Slide and Snap Fasteners industry, all products, total value.....	\$32,829,505	\$20,342,038	\$22,030,050
2. Needles, pins, fasteners, etc.....	\$31,019,818	\$17,599,841	\$19,073,153
3. Other products (not normally belonging to the industry).....	\$1,809,687	\$2,742,197	\$2,957,797
4. Needles, pins, fasteners, etc., made as secondary products in other industries.....	\$3,517,000	\$961,056	\$1,352,544
Needles, pins, hooks and eyes, slide fasteners, snap fasteners, and clasps, aggregate value (sum of 2 and 4).....	\$34,537,817	\$18,561,490	\$20,425,697
Needles, total value.....	\$7,301,359	\$4,830,318	\$6,488,869
Knitting-machine—			
Latch.....	\$2,236,639		
Spring-beard—			
Hosiery.....	\$871,512	\$3,426,012	\$4,828,865
Underwear.....	\$441,323		
Other needles, including sewing-machine.....	\$3,751,885	\$1,413,306	\$1,660,094
Pins:			
Common or toilet pins, total value.....	\$1,210,305	\$1,368,617	\$1,709,162
Pounds.....	2,694,377	2,163,374	2,015,152
Value.....	\$867,798	\$624,012	\$1,221,101
Packs.....	1,047,772	954,388	1,187,231
Value.....	\$342,597	\$434,005	\$488,061
Hairpins, metal, total value.....	\$2,101,787	\$1,887,371	\$2,335,504
“Bobby” type—			
Made for sale in bulk—			
Pounds.....	104,329		
Value.....	\$75,904	\$1,194,066	
Made and packed for retail—		\$697,539	
Pounds.....	1,732,017		
Value.....	\$1,307,402		
Other types—			
Made for sale in bulk—			
Pounds.....	1,387,489		
Value.....	\$332,371	\$3,199,820	4,799,175
Made and packed for retail—		\$989,832	\$2,335,504
Pounds.....	(1)		
Value.....	\$416,110		
Safety pins—			
Gross.....	11,004,185	8,550,455	8,068,813
Value.....	\$1,329,753	\$1,000,059	\$2,218,897
Slide fasteners or “zippers,” ² and snap fasteners, and clasps, value.....	\$18,744,775	\$7,735,336	\$5,532,700
Hooks and eyes:			
Great gross.....	(1)	336,839	181,656
Value.....	\$385,044	\$218,196	\$200,467
Miscellaneous products (including hook-and-eye tape and eyelets), value.....	\$3,374,704	\$1,422,509	\$1,940,098

¹ Data incomplete.² Separate figures for slide fasteners made in 1935 and 1931 are withheld to avoid disclosing approximations of the output of a single company. Slide fasteners were not reported separately for 1929.

1212

NONFERROUS-METAL ALLOYS; NONFERROUS-METAL PRODUCTS, EXCEPT ALUMINUM, NOT ELSEWHERE CLASSIFIED

SMELTING AND REFINING, NONFERROUS METALS OTHER THAN GOLD, SILVER, AND PLATINUM, NOT FROM THE ORE 1217

[A preliminary report for these industries was issued May 25, 1937]

Description of the Industries.—The “Nonferrous-Metal Alloys; Nonferrous-Metal Products, Except Aluminum, Not Elsewhere Classified” industry, as defined for Census purposes, embraces establishments engaged primarily in the production of (a) nonferrous alloys, (b) products made of nonferrous alloys, except those specifically assigned to other industries, and (c) products made of nonferrous metals other than aluminum, except those specifically assigned to other industries. The chief classes of nonferrous products assigned to other industries are wire, wire products, valves, faucets, fittings, electrical supplies, structural and ornamental metal work, hardware, and screw-machine products. The value of these commodities made as secondary products by establishments classified in this industry is included in item 3, table 4; and detailed production figures for valves, faucets, and fittings, regardless of the industry classification of the establishments by which manufactured, are given in table 6. The smelting and refining of scrap is an important secondary activity of this industry.

The establishments classified in the “Smelting and Refining, Nonferrous Metals Other than Gold, Silver, and Platinum, Not From the Ore” industry are engaged primarily in the recovery of copper, lead, zinc, nickel, and alloys thereof from scrap and dross.

Some of the establishments in these industries produce aluminum ingots from scrap. Data for these establishments are, of course, included in tables 1, 2, and 3; but the production figures for aluminum ingots and castings are included in the report for Aluminum Products. The primary production of aluminum from bauxite is included in the “Chemicals not Elsewhere Classified” industry.

TABLE 1.—GENERAL STATISTICS, FOR THE INDUSTRIES AS A GROUP AND FOR EACH INDUSTRY, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (-)	
					1933-1935	1929-1935
THE INDUSTRIES AS A GROUP						
Number of establishments.....	1,197	969	1,154	1,331	23.5	-10.1
Proprietors and firm members.....	494	382	(1)	640	29.3	-22.8
Salaried personnel, total ²	10,955	(3)	(1)	13,039	(3)	-10.0
Salaried officers of corporations.....	1,258	(3)	(1)	1,509	(3)	-21.3
Supervisory, technical, and clerical employees.....	9,697	7,334	(1)	11,440	32.2	-15.2
Salaries paid, total ²	\$24,163,678	(3)	(1)	\$37,736,884	(3)	-36.0
To salaried officers of corporations.....	\$6,091,820	(3)	(1)	\$10,741,620	(3)	-43.3
To supervisory, technical, and clerical employees.....	\$18,071,858	\$14,106,025	(1)	\$26,995,264	28.1	-33.1
Wage earners (average for year) ⁶	66,697	50,708	51,539	83,317	31.5	-19.9
Wages.....	\$75,610,479	\$46,222,826	\$58,271,011	\$122,518,318	63.0	-38.3
Cost of materials, etc., total.....	\$271,686,306	\$159,762,726	\$223,883,057	\$683,855,831	70.1	-60.3
Cost of materials and supplies.....	\$258,791,042	(1)	(1)	\$604,561,801	(1)	-61.1
Cost of fuel.....	\$7,137,966	(1)	(1)	\$11,560,558	(1)	-38.3
Cost of purchased electric energy.....	\$5,757,298	(1)	(1)	\$7,733,472	(1)	-25.6
Value of products.....	\$455,849,715	\$280,278,577	\$366,134,334	\$1,015,086,705	62.0	-55.1
Value added by manufacture ⁷	\$184,163,409	\$120,515,851	\$142,251,277	\$331,830,874	52.8	-44.5
NONFERROUS-METAL ALLOYS; NONFERROUS-METAL PRODUCTS, EXCEPT ALUMINUM, NOT ELSEWHERE CLASSIFIED						
Number of establishments.....	1,098	875	1,056	1,225	25.5	-10.4
Proprietors and firm members.....	470	358	(1)	604	31.3	-22.2
Salaried personnel, total ²	10,035	(3)	(1)	12,218	(3)	-17.0
Salaried officers of corporations.....	1,132	(3)	(1)	1,444	(3)	-21.0
Supervisory, technical, and clerical employees.....	8,903	6,717	(1)	10,774	32.5	-17.4
Salaries paid, total ²	\$21,872,432	(3)	(1)	\$34,513,121	(3)	-36.6
To salaried officers of corporations.....	\$5,371,493	(3)	(1)	\$9,388,478	(3)	-42.8
To supervisory, technical, and clerical employees.....	\$16,500,939	\$12,952,690	(1)	\$25,124,643	27.4	-34.3
Wage earners (average for year) ⁶	62,935	47,784	48,013	70,183	31.7	-20.5
Wages.....	\$72,000,571	\$43,729,228	\$55,108,824	\$116,043,900	64.7	-38.4
Cost of materials, etc., total.....	\$219,679,813	\$128,356,064	\$195,337,534	\$600,410,913	71.1	-63.4
Cost of materials and supplies.....	\$208,125,112	(1)	(1)	\$582,869,282	(1)	-64.3
Cost of fuel.....	\$6,175,561	(1)	(1)	\$10,186,935	(1)	-39.4
Cost of purchased electric energy.....	\$5,379,140	(1)	(1)	\$7,354,696	(1)	-26.0
Value of products.....	\$393,226,934	\$239,155,936	\$331,438,974	\$909,804,050	64.4	-50.8
Value added by manufacture ⁷	\$178,547,121	\$110,799,872	\$136,101,440	\$309,393,137	56.0	-43.0

For footnotes, see end of table.

NONFERROUS METALS; SMELTING AND REFINING 1011

TABLE 1.—GENERAL STATISTICS, FOR THE INDUSTRIES AS A GROUP AND FOR EACH INDUSTRY, FOR THE UNITED STATES: 1929 TO 1935—Contd.

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
SMELTING AND REFINING, NON-FERROUS METALS OTHER THAN GOLD, SILVER, AND PLATINUM, NOT FROM THE ORE						
Number of establishments.....	99	94	98	106	(*)	-6.6
Proprietors and firm members.....	24	24	(1)	36	-----	(*)
Salaried personnel, total ¹	920	(3)	(1)	821	(3)	12.1
Salaried officers of corporations.....	126	(3)	(1)	155	(3)	-18.7
Supervisory, technical, and clerical employees.....	10 794	11 617	(1)	666	28.7	19.2
Salaries paid, total ²	\$2,291,246	(3)	(1)	\$3,223,763	(3)	-23.9
To salaried officers of corporations.....	\$720,327	(3)	(1)	\$1,353,142	(3)	-46.8
To supervisory, technical, and clerical employees.....	10 \$1,570,919	11 \$1,153,329	(1)	\$1,870,621	36.2	-16.0
Wage earners (average for year) ³	3,762	2,924	2,626	4,134	28.7	-9.0
Wages.....	\$3,609,908	\$2,493,598	\$3,162,187	\$5,574,322	44.8	-35.2
Cost of materials, etc., total.....	\$52,006,493	\$31,406,662	\$28,545,523	\$83,444,918	65.6	-37.7
Cost of materials and supplies.....	\$50,665,930	(1)	(1)	\$81,692,519	(1)	-33.0
Cost of fuel.....	\$962,405	(1)	(1)	\$1,373,623	(1)	-29.9
Cost of purchased electric energy.....	\$378,158	(1)	(1)	\$378,776	(1)	-0.2
Value of products.....	\$62,622,781	\$41,122,641	\$34,695,360	\$105,882,655	52.3	-40.9
Value added by manufacture ⁷	\$10,616,288	\$9,715,979	\$6,149,837	\$22,437,737	9.3	-52.7

* Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 2,399; salaries, \$7,357,851. Technical, 717; salaries, \$1,847,434. Clerical, 6,581; salaries, \$8,866,573. See sec. 10, p. 7.

⁵ Supervisory, 1,829; salaries, \$6,222,113. Clerical and other, 5,505; salaries, \$7,883,912. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

⁸ Supervisory, 2,188; salaries, \$6,688,067. Technical, 577; salaries, \$1,554,879. Clerical, 6,138; salaries, \$8,257,993. See sec. 10, p. 7.

⁹ Supervisory, 1,619; salaries, \$5,635,590. Clerical and other, 5,098; salaries, \$7,317,106. See sec. 10, p. 7.

¹⁰ Supervisory, 211; salaries, \$669,784. Technical, 140; salaries, \$292,555. Clerical, 443; salaries, \$608,530. See sec. 10, p. 7.

¹¹ Supervisory, 210; salaries, \$586,523. Clerical and other, 407; salaries, \$566,806. See sec. 10, p. 7.

TABLE 2.—SUMMARY, FOR THE INDUSTRIES, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

INDUSTRY AND STATE	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
NONFERROUS-METAL ALLOYS; NONFERROUS-METAL PRODUCTS, EXCEPT ALUMINUM, NOT ELSEWHERE CLASSIFIED								
United States..	1,098	10,035	62,935	\$21,872,432	\$72,000,571	\$219,679,813	\$393,220,934	\$173,547,121
Alabama.....	5	10	39	13,678	37,198	66,472	136,202	69,790
California.....	73	134	806	304,152	948,371	3,090,803	5,920,195	2,879,392
Connecticut.....	55	2,483	17,956	5,271,301	20,011,426	49,351,573	94,592,984	45,151,411
Georgia.....	5	8	41	18,972	39,756	255,113	381,385	126,272
Illinois.....	105	803	5,367	1,799,292	6,712,390	21,102,491	35,821,140	14,718,649
Indiana.....	28	168	1,260	422,488	1,456,999	4,071,685	7,627,710	3,550,025
Iowa.....	5	7	56	12,780	56,770	159,179	272,785	113,606
Kentucky.....	8	17	78	30,015	75,816	286,378	406,532	180,154
Massachusetts.....	63	257	1,162	544,342	1,301,462	3,616,841	6,008,522	3,291,651
Michigan.....	74	1,058	7,129	2,549,654	8,560,470	22,557,211	42,371,114	10,813,903
Minnesota.....	17	36	168	97,405	196,902	815,651	1,590,900	775,249
Missouri.....	25	134	651	394,847	693,991	3,650,694	6,094,800	2,444,172
New Jersey.....	69	498	3,353	1,129,033	3,696,082	20,931,095	30,788,846	9,857,751
New York.....	197	1,028	8,642	3,129,333	9,104,068	28,312,401	49,355,007	21,042,516
Ohio.....	110	1,156	7,123	2,617,860	9,080,409	18,012,380	38,707,081	20,695,601
Oregon.....	9	19	75	42,967	80,500	282,007	516,088	234,081
Pennsylvania.....	103	601	3,782	1,290,845	3,953,053	11,430,890	20,366,088	8,935,159
Rhode Island.....	14	144	484	275,569	479,942	3,087,385	4,065,831	1,879,489
Texas.....	15	58	330	125,203	239,406	1,192,846	1,865,506	672,660
Washington.....	19	43	99	114,961	138,003	305,480	783,186	477,706
Wisconsin.....	34	295	1,797	619,161	2,209,396	6,212,923	11,601,611	5,388,688
Other States ¹	65	483	2,538	1,068,684	2,868,661	20,888,216	32,182,345	11,294,129
SMELTING AND REFINING, NONFERROUS METALS OTHER THAN GOLD, SILVER, AND PLATINUM, NOT FROM THE ORE								
United States..	99	920	3,762	2,291,246	3,809,908	52,006,493	62,622,781	10,616,268
California.....	7	79	295	233,470	304,320	3,512,351	4,800,882	1,288,531
Illinois.....	21	225	1,037	686,355	915,705	17,248,803	19,811,511	2,562,708
Indiana.....	3	74	229	173,786	215,183	4,354,962	4,925,610	570,648
Massachusetts.....	6	27	44	65,198	66,680	699,391	930,031	230,640
New Jersey.....	8	56	295	109,626	280,393	3,646,144	4,482,617	836,473
Ohio.....	10	50	208	151,761	204,474	4,372,904	5,119,187	740,293
Pennsylvania.....	14	163	803	373,686	770,364	7,715,854	9,013,086	1,298,132
Other States ²	30	246	853	492,356	872,789	10,456,084	13,538,957	3,682,673

¹ Arizona, 1 establishment; Colorado, 7; Delaware, 2; Florida, 1; Kansas, 3; Louisiana, 2; Maine, 3; Maryland, 18; Montana, 1; Nebraska, 1; New Hampshire, 3; Oklahoma, 4; Tennessee, 4; Utah, 2; Vermont, 2; Virginia, 4; West Virginia, 7.

² Colorado, 1 establishment; Delaware, 1; Maryland, 1; Michigan, 7; Minnesota, 2; Missouri, 1; New Hampshire, 1; New York, 8; North Carolina, 1; Oklahoma, 1; Texas, 1; Washington, 1; West Virginia, 1; Wisconsin, 3.

NONFERROUS METALS; SMELTING AND REFINING 1013

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE INDUSTRIES, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

INDUSTRY AND STATE	Average number employed during year ¹	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
NONFERROUS-METAL ALLOYS; NON-FERROUS-METAL PRODUCTS, EXCEPT ALUMINUM, NOT ELSEWHERE CLASSIFIED													
<i>United States</i>													
1935.....	62,970	58,971	61,148	61,728	62,152	61,501	60,634	60,310	60,728	63,101	67,646	69,319	68,405
1933.....	47,784	(*)	(*)	37,359	(*)	(*)	46,759	(*)	(*)	57,393	(*)	(*)	53,526
<i>States, 1935</i>													
Alabama.....	39	26	25	36	40	41	42	42	45	46	50	39	40
California.....	805	745	760	769	821	818	809	782	801	815	851	878	814
Colorado.....	92	90	102	102	88	89	83	99	93	93	93	93	80
Connecticut.....	17,956	16,721	16,937	17,213	17,245	17,117	16,916	16,861	17,408	18,169	20,183	20,520	20,189
Georgia.....	41	35	35	35	40	40	39	41	44	47	46	43	44
Illinois.....	5,368	5,152	5,262	5,320	5,316	5,135	4,925	4,948	4,839	5,203	5,916	6,272	6,126
Indiana.....	1,286	1,099	1,160	1,172	1,318	1,362	1,336	1,362	1,377	1,313	1,306	1,261	1,261
Iowa.....	56	54	54	57	56	57	55	56	56	55	58	57	52
Kansas.....	79	78	84	79	78	81	78	78	77	75	79	77	79
Kentucky.....	76	75	68	74	77	80	77	76	77	72	78	78	79
Maine.....	87	56	61	77	71	69	67	68	70	66	68	67	66
Maryland.....	1,006	964	1,002	951	953	1,045	996	979	952	1,016	1,048	1,066	985
Massachusetts.....	1,162	1,091	1,103	1,118	1,100	1,131	1,104	1,126	1,209	1,256	1,260	1,240	1,203
Michigan.....	7,124	6,759	7,258	7,411	7,416	7,255	7,103	6,867	6,741	6,849	7,122	7,452	7,255
Minnesota.....	168	141	154	161	165	177	177	181	182	180	173	164	159
Missouri.....	651	582	594	595	626	655	613	641	664	681	707	724	728
New Hampshire.....	17	16	16	15	17	15	15	15	15	16	19	21	21
New Jersey.....	3,363	3,179	3,156	3,184	3,184	3,192	3,248	3,338	3,354	3,464	3,568	3,688	3,690
New York.....	8,656	8,270	8,715	8,614	8,712	8,387	8,382	8,394	8,194	8,523	9,133	9,238	9,264
Ohio.....	7,123	6,526	6,937	7,017	6,993	7,084	6,928	6,641	6,596	7,035	7,552	8,023	8,141
Oklahoma.....	27	22	24	27	29	28	28	28	31	30	27	27	26
Oregon.....	75	68	68	71	74	73	78	81	79	75	80	77	79
Pennsylvania.....	3,782	3,512	3,613	3,781	3,789	3,717	3,682	3,688	3,856	3,890	3,969	3,983	3,906
Rhode Island.....	484	456	457	451	460	468	454	451	503	519	505	514	536
Tennessee.....	63	63	58	59	63	62	63	65	66	66	64	66	64
Texas.....	329	283	281	309	293	299	340	352	340	371	362	337	386
Virginia.....	105	105	105	103	105	105	105	105	105	102	107	105	105
Washington.....	101	95	97	105	108	106	104	96	98	99	103	101	96
West Virginia.....	943	918	910	878	974	908	909	985	931	984	1,010	1,000	961
Wisconsin.....	1,781	1,635	1,804	1,805	1,776	1,740	1,722	1,720	1,785	1,804	1,882	1,895	1,798
SMELTING AND REFINING, NONFERROUS METALS OTHER THAN GOLD, SILVER, AND PLATINUM, NOT FROM THE ORE													
<i>United States</i>													
1935.....	3,766	3,526	3,599	3,505	3,607	3,739	3,716	3,636	3,735	3,914	4,079	4,132	3,998
1933.....	2,924	2,101	2,141	1,998	2,083	2,414	2,320	3,074	3,680	3,825	3,778	3,661	3,516
<i>States, 1935</i>													
California.....	295	262	272	271	284	287	304	285	277	298	325	346	325
Illinois.....	1,037	944	992	980	986	1,051	1,064	1,066	1,044	1,094	1,121	1,083	1,016
Indiana.....	220	180	228	248	244	236	230	217	231	229	235	242	223
Massachusetts.....	44	48	46	48	47	43	43	49	38	40	39	40	41
Michigan.....	244	220	230	244	258	266	232	212	236	237	250	275	265
New Jersey.....	295	292	280	303	303	299	274	280	286	282	322	315	302
New York.....	274	245	257	280	275	280	276	271	269	277	286	285	288
Ohio.....	208	202	202	198	199	210	214	207	212	210	213	215	218
Pennsylvania.....	806	820	788	636	718	784	798	783	764	843	882	934	921
Wisconsin.....	8	9	7	6	6	6	8	8	8	7	8	9	9

¹Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

²As the 1935 averages given in this table are derived from the figures for the 12 months in the calendar year, several of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE: 1929 TO 1935

[This table does not include data for the production of copper, lead, zinc, and other nonferrous metals from the ore, nor the production of secondary metals by establishments engaged in the primary smelting and refining of nonferrous metals. For statistics showing the total output of secondary metals, see reports of the Bureau of Mines]

[Tons, 2,000 pounds]

	1935	1933	1931	1929
1. "Nonferrous-Metal Alloys; Nonferrous-Metal Products, Except Aluminum, Not Elsewhere Classified" and "Smelting and Refining, Nonferrous Metals Other than Gold, Silver, and Platinum, Not from the Ore" industries, all products, total value.....	\$455, 849, 715	\$280, 278, 577	\$366, 134, 334	\$1, 015, 086, 705
2. Nonferrous metals and alloys and nonferrous-metal products classified in these industries, value.....	\$361, 333, 898	\$234, 777, 841	\$280, 470, 444	\$804, 577, 537
3. Other products (not normally belonging to these industries), including nonferrous-metal products specifically classified in other industries, value, and receipts for contract and repair work.....	\$94, 515, 817	\$45, 500, 736	\$76, 663, 890	\$211, 109, 168
4. Nonferrous-metal products belonging to these industries, made as secondary products in other industries, value.....	\$18, 800, 337	\$8, 205, 405	\$17, 048, 938	\$14, 409, 048
Nonferrous metals and alloys and nonferrous-metal products, aggregate value (2 and 4).....	\$380, 134, 235	\$242, 983, 246	\$307, 110, 382	\$810, 046, 585
Ingot and pigs, total value.....	\$83, 559, 875	\$53, 536, 566	\$56, 402, 579	\$161, 545, 334
Made in Smelting and Refining industry.....	\$48, 661, 940	\$34, 047, 723	\$28, 040, 284	\$90, 787, 444
Made in Nonferrous-Metal Alloys and Products industry.....	\$29, 391, 115	\$18, 454, 174	\$25, 025, 570	\$67, 520, 884
Made as secondary products in other industries ¹	\$5, 506, 820	\$1, 034, 669	\$2, 430, 725	\$3, 237, 596
Copper (secondary):				
Tons, total.....	29, 281	20, 277	20, 279	50, 122
Smelting and Refining industry.....	29, 147	20, 164	25, 820	44, 215
Nonferrous-Metal Alloys and Products industry.....	134	113	450	5, 907
Value.....	\$4, 935, 130	\$4, 170, 767	\$3, 756, 378	\$16, 512, 500
Lead (secondary):				
Tons, total.....	129, 512	119, 095	138, 090	153, 042
Smelting and Refining industry:				
Common.....	32, 157	23, 902	20, 887	29, 634
Antimonial.....	72, 705	81, 306	57, 182	78, 288
Nonferrous-Metal Alloys and Products industry:				
Common.....	13, 225	5, 955	36, 942	27, 425
Antimonial.....	11, 425	7, 932	14, 685	17, 697
Value.....	\$11, 428, 581	\$9, 912, 851	\$11, 472, 820	\$21, 538, 673
Zinc (secondary):				
Tons.....	4 31, 058	23, 337	19, 144	30, 843
Value.....	\$3, 044, 215	\$2, 036, 921	\$1, 441, 187	\$5, 519, 127
Tin (secondary):				
Quantity reported:				
Tons, total.....	2, 740	2, 459	3, 344	3, 156
Smelting and Refining industry.....	2, 483	1, 385	1, 274	1, 361
Nonferrous-Metal Alloys and Products industry.....	263	1, 074	2, 070	1, 795
Value.....	\$2, 712, 422	\$1, 686, 704	\$1, 238, 095	\$2, 664, 760
Quantity not reported, value.....	\$44, 146			
Brass and bronze:				
Quantity reported:				
Tons, total.....	74, 388	58, 641	80, 884	145, 490
Smelting and Refining industry.....	60, 999	48, 483	54, 156	112, 259
Nonferrous-Metal Alloys and Products industry.....	13, 389	10, 158	26, 728	33, 231
Value.....	\$14, 381, 354	\$8, 018, 270	\$14, 252, 294	\$43, 568, 172
Quantity not reported, value.....	\$196, 904			

For footnotes, see end of table.

NONFERROUS METALS; SMELTING AND REFINING 1015

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE: 1929 TO 1935—CON.

[See note at head of table]

	1935	1933	1931	1929
Nonferrous metals and alloys—Continued.				
Ingot and pigs—Continued.				
Antifriction-bearing metal, total tons.....	19, 638	12, 814	14, 556	54, 369
White-base:				
Quantity reported:				
Tons, total.....	11, 661			
Smelting and Refining industry.....	4, 893			
Nonferrous-Metal Alloys and Products industry.....	6, 768			
Value.....	\$4, 981, 625			
Quantity not reported, value.....	\$182, 894	4, 975	5, 989	11, 611
Other:		7, 839	8, 597	42, 758
Quantity reported:		\$4, 324, 017	\$3, 782, 847	\$20, 301, 315
Tons, total.....	7, 977			
Smelting and Refining industry.....	918			
Nonferrous-Metal Alloys and Products industry.....	7, 059			
Value.....	\$1, 538, 473			
Quantity not reported, value.....	\$1, 003, 381			
Solders, all kinds:				
Quantity reported:				
Tons, total.....	38, 950	26, 740	35, 077	56, 423
Smelting and Refining industry.....	14, 805	13, 928	10, 859	15, 935
Nonferrous-Metal Alloys and Products industry.....	24, 145	12, 812	24, 218	40, 488
Value.....	\$16, 719, 617	\$11, 241, 400	\$10, 165, 807	\$28, 595, 090
Quantity not reported, value.....	\$2, 010, 274			
Type metal:				
Quantity reported:				
Tons, total.....	28, 381	22, 428	20, 254	42, 290
Smelting and Refining industry.....	9, 707	7, 079	9, 627	11, 845
Nonferrous-Metal Alloys and Products industry.....	18, 674	14, 449	19, 627	30, 445
Value.....	\$4, 233, 567	\$2, 761, 930	\$3, 537, 531	\$7, 885, 354
Quantity not reported, value.....	\$214, 171			
Other and unclassified nonferrous metals and alloys:				
Quantity reported:				
Tons, total.....	50, 919	1 66, 611	1 38, 015	
Smelting and Refining industry.....	27, 041	1 38, 489	1 19, 320	
Nonferrous-Metal Alloys and Products industry.....	23, 878	1 28, 022	1 18, 695	
Value.....	\$9, 578, 078	1 \$8, 644, 148	1 \$6, 755, 611	
Quantity not reported, value.....	\$6, 355, 043	\$730, 558		1 \$14, 960, 343
Plates and sheets, total value 1.....	\$90, 084, 167	\$58, 524, 377	\$76, 473, 006	\$193, 045, 176
Brass and bronze, total tons.....	167, 220	126, 194	125, 976	255, 255
Made for sale:				
Tons.....	145, 452	106, 827	106, 506	215, 575
Value.....	\$42, 334, 580	\$26, 186, 009	\$31, 572, 766	\$91, 024, 037
Transferred to other plants of same company:				
Tons.....	7, 912	10, 732	6, 349	18, 646
Assigned value.....	\$2, 270, 921	\$2, 567, 969	\$1, 722, 125	\$7, 621, 019
Produced and consumed in same works, tons.....	13, 856	8, 635	13, 121	21, 034
Copper, total tons.....	94, 782	70, 514	73, 855	129, 223
Made for sale and for interplant transfer:				
Tons.....	93, 014	69, 287	72, 003	127, 789
Value.....	\$26, 143, 196	\$17, 236, 594	\$23, 250, 967	\$59, 639, 928
Produced and consumed in same works, tons.....	1, 768	1, 227	1, 852	1, 434
Lead, made for sale and for interplant transfer:				
Tons.....	17, 332	12, 284	16, 588	35, 802
Value.....	\$2, 308, 574	\$1, 536, 732	\$2, 227, 438	\$6, 490, 493

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE: 1929 TO 1935—Con.

[See note at head of table]

	1935	1933	1931	1929
Nonferrous metals and alloys—Continued.				
Plates and sheets—Continued.				
Zinc, made for sale and for interplant transfer:				
Tons.....	49,931	24,957	56,562	54,135
Value.....	\$8,130,743	\$4,305,618	\$8,099,399	\$9,543,739
Nickel alloys, total tons.....	15,264	10,823	14,682	27,648
Made for sale and for interplant transfer:				
Tons.....	14,831	10,641	13,594	27,162
Value.....	\$7,712,611	\$5,710,474	\$8,201,927	\$18,337,961
Produced and consumed in same works, tons.....	383	182	1,088	496
Other metals, made for sale and for interplant transfer:				
Quantity reported:				
Tons.....	1,748	1,407	2,627	2,419
Value.....	\$904,871	\$980,981	\$1,398,427	\$1,487,999
Quantity not reported, value.....	\$278,671			
Rods, total value \$.....	\$52,680,875	\$31,095,824	\$44,480,083	\$135,852,141
Brass and bronze, total tons.....	121,270	86,536	143,063	170,228
Made for sale and for interplant transfer:				
Tons.....	94,261	68,821	100,549	125,243
Value.....	\$23,893,990	\$14,278,742	\$22,576,193	\$45,869,031
Produced and consumed in same works, tons.....	27,009	17,715	42,510	44,985
Copper, total tons.....	168,417	142,946	201,084	599,540
Made for sale and for interplant transfer:				
Tons.....	111,334	80,470	90,354	227,304
Value.....	\$22,386,960	\$12,587,789	\$18,552,510	\$31,057,185
Produced and consumed in same works, tons.....	57,083	62,476	110,730	342,239
Nickel alloys and other nonferrous metals and alloys:				
Made for sale and for interplant transfer:				
Tons.....	7,815	4,907	4,137	10,890
Value.....	\$6,899,925	\$4,229,296	\$3,351,371	\$3,925,925
Produced and consumed in same works, tons.....	682	491	1,007	832
Tubing, seamless, and pipe, total value \$.....	\$33,513,839	\$23,901,960	\$34,576,210	\$73,858,613
Brass and bronze, total tons.....	48,449	39,178	49,312	71,599
Made for sale and for interplant transfer:				
Tons.....	47,834	38,730	48,952	71,286
Value.....	\$16,625,707	\$10,760,181	\$16,772,719	\$30,229,721
Produced and consumed in same works, tons.....	615	448	360	313
Copper, made for sale and for interplant transfer:				
Tons.....	33,992	29,575	32,252	40,062
Value.....	\$12,039,493	\$9,054,759	\$12,063,540	\$25,774,350
Lead, made for sale and for interplant transfer:				
Tons.....	16,829	13,485	22,194	37,028
Value.....	\$2,455,493	\$1,952,966	\$2,906,308	\$7,000,578
Nickel alloy, made for sale and for interplant transfer:				
Tons.....	1,304	702	1,226	1,789
Value.....	\$1,521,616	\$599,971	\$1,289,301	\$2,541,819
Other metal, made for sale and for interplant transfer:				
Quantity reported:				
Tons.....	1,218	1,537	2,829	3,636
Value.....	\$323,386	\$1,534,133	\$1,554,336	\$2,342,147
Quantity not reported, value.....	\$48,194			
Tubing, other than seamless, total value.....	\$1,399,440	\$519,953	\$572,732	\$4,013,360
Quantity reported:				
Tons.....	1,098	1,026	1,241	(9)
Value.....	\$259,157	\$519,953	\$572,732	\$4,013,360
Quantity not reported, value.....	\$1,140,283			

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE: 1929 TO 1935—Con.

[See note at head of table]

	1935	1933	1931	1929
Nonferrous metals and alloys—Continued.				
Castings, rough, total value.....	\$41,876,433	\$26,464,517	\$38,810,198	\$110,476,400
Brass and bronze:				
Quantity reported:				
Pounds.....	103,195,968	73,086,627	209,266,147	413,512,944
Value.....	\$19,155,787	\$11,916,972	\$33,468,353	\$98,903,131
Quantity not reported, value.....	\$14,802,635	\$4,658,369		
Copper:				
Quantity reported:				
Pounds.....	3,640,360	2,734,382	3,289,545	9,798,512
Value.....	\$770,687	\$663,636	\$960,518	\$2,690,725
Quantity not reported, value.....	\$644,236			
Heat-corrosion-resistant alloys (not including ferro-alloys):				
Quantity reported:				
Pounds.....	2,123,369	5,366,956	2,928,610	
Value.....	\$1,356,823	\$2,317,878	\$1,694,356	
Quantity not reported, value.....	\$392,154			
Nickel alloys, other than heat-corrosion-resistant:				5,227,046
Quantity reported:				\$2,942,165
Pounds.....	2,388,982	1,259,784	1,139,102	
Value.....	\$1,122,957	\$520,457	\$632,432	
Quantity not reported, value.....	\$27,071			
Other metals:				
Quantity reported:				
Pounds.....	6,564,614	7,967,636	7,10,329,992	7,17,618,678
Value.....	\$1,409,334	\$610,015	\$2,164,539	\$5,940,379
Quantity not reported, value.....	\$334,595			
Nonferrous castings not reported by kind or quantity, value.....	\$2,360,354	\$5,777,290	(^c)	(^e)
Finished products, total value.....	\$77,019,606	\$48,940,049	\$55,804,484	\$139,325,561
Extruded shapes, total value.....	\$5,966,338	\$1,437,951	\$2,281,167	\$6,665,268
Brass and bronze.....	\$4,599,177		\$1,491,401	\$5,245,183
Other metals.....	\$1,367,161	\$1,437,951	\$789,766	\$1,420,085
Bearing and bushings (including anti-friction linings), total value.....	\$21,208,526	\$9,533,483	\$10,303,641	\$27,680,058
Brass and bronze.....	\$13,752,417		\$9,230,791	\$26,599,654
Other metals.....	\$7,456,109	\$9,533,483	\$1,072,850	\$1,080,404
Bells.....	\$351,461	\$160,933	\$478,905	\$309,245
Die castings.....	\$17,560,177	\$7,962,240	\$8,036,806	\$22,076,623
Finished castings, total value.....	\$7,062,842	\$3,529,579	\$6,213,539	\$15,550,907
Brass and bronze.....	\$3,676,135		\$3,573,433	\$12,352,183
Other metals.....	\$3,386,707	\$3,529,579	\$1,640,106	\$3,198,724
Forgings and hot-pressed parts, total value.....	\$2,723,214	\$1,781,400	\$2,854,750	\$7,768,582
Brass and bronze.....	\$2,316,404		\$2,807,187	\$7,651,635
Other metals.....	\$406,810	\$1,781,400	\$47,583	\$119,947
Spun and stamped ware, total value.....	\$8,159,829	\$4,733,072	\$7,375,441	\$10,754,460
Brass and bronze.....	\$6,045,040		\$7,375,441	\$16,754,450
Other metals.....	\$2,114,789	\$4,733,072		
Other nonferrous products.....	\$12,775,159	\$16,419,351	\$19,260,235	\$42,020,428
Unclassified nonferrous-metal products.....	\$1,212,060	\$3,382,040		

¹ These figures include \$16,591,874 for 1935 and \$7,327,604 for 1933, value of valves, faucets, spigots, plumbers' brass goods, and fittings made by establishments classified in the Nonferrous-Metal Alloys and Products industry. For total production of such commodities so far as separately reported, regardless of industry classification, see table 6.

² Revised to exclude data for aluminum ingots and pigs.

³ Data for the quantities of ingots and pigs made as secondary products in other industries are included in the figures for the Nonferrous-Metal Alloys and Products industry items for "Copper," "Lead," "Zinc," etc.

⁴ Figures for production in each industry withheld to avoid disclosing data for an individual establishment.

⁵ Not including value of production consumed in same works.

⁶ No comparable data.

⁷ Revised to exclude data for aluminum castings.

⁸ Revised to exclude values of nonferrous products classified in other industries.

TABLE 5.—MISCELLANEOUS NONFERROUS-METAL PRODUCTS, SPECIFICALLY CLASSIFIED IN OTHER INDUSTRIES, BY KIND AND VALUE: 1929 TO 1935

[The values given in this table, with the exception of that for the first item (Aluminum ingots and castings), represent the production, in the Nonferrous-Metal Alloys and Products industry alone, of certain classes of commodities which are made to a considerable extent in that industry but are classified as primary products of other industries. The total production values of these classes of commodities are shown in the reports for the respective industries in which they are made as primary products].

	1935	1933	1931	1929
Aluminum ingots and castings from scrap ¹	\$13,303,274	\$5,834,853	\$6,252,934	\$13,012,858
Architectural and ornamental work.....	939,839	(²)	749,617	7,657,719
Ornamental grilles, railings, etc.....	238,040	(²)	198,551	8,318,829
Electrical supplies.....	3,085,818	1,268,548	2,175,405	2,749,310
Hardware.....	1,099,968	192,779	825,445	15,289,134
Faucets and spigots other than plumbers'.....	* 1,172,528	*7,327,604	7,835,507	
Valves.....	* 9,198,358			
Plumbers' brass goods (faucets, valves, and other).....	* 2,483,726			
Steam fittings and specialties.....	* 3,737,262			
Screw-machine products.....	3,749,599	694,180	1,826,000	3,189,965
Wire and wire products.....	40,458,716	25,047,707	46,037,740	154,363,040
Pigments and chemicals.....	2,558,774	(²)	(²)	(²)

¹ Produced by establishments classified in the "Smelting and Refining, Nonferrous Metals Other Than Gold, Silver, and Platinum, Not from the Ore" and "Nonferrous-Metal Alloys, Nonferrous-Metal Products, except Aluminum, Not Elsewhere Classified" industries only. For total production, regardless of industry classification of establishments reporting, see table 3, report for Aluminum Products.

² No comparable data available.

³ For total production, see table 6.

TABLE 6.—VALVES, FAUCETS, AND FITTINGS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1935 AND 1933

[This table covers the production of valves, faucets, and fittings, regardless of the industry classification of the establishments by which manufactured, so far as separately reported to the Bureau of the Census]

	1935	1933
Valves (not including valves for steam and internal-combustion engines), faucets, and fittings, total value.....	\$133,175,992	\$69,784,234
Valves reported by kind of metal:		
Brass, bronze, and other nonferrous, value.....	\$31,552,831	\$10,388,113
Iron-body, value.....	\$10,914,255	\$6,381,112
Steel, value.....	\$4,315,312	
Valves not reported by kind of metal, value.....	\$6,850,021	\$932,404
Reducing valves reported separately, value.....	\$2,484,112	(¹)
Faucets and spigots reported separately:		
Number reported:		
Number.....	4,535,856	(¹)
Value.....	\$3,268,913	\$4,699,274
Number not reported, value.....	\$5,026,288	
Plumbers' brass and bronze goods not reported by kind, value.....	\$13,358,525	\$17,341,440
Fittings reported by kind of metal:		
Brass and bronze, value.....	\$14,624,147	
Cast-iron pipe fittings reported separately:		
Soil and plumbers' pipe fittings:		
Quantity reported:		
Tons (2,000 pounds).....	68,410	28,309
Value.....	\$3,860,061	\$1,489,657
Quantity not reported, value.....	\$940,772	
Gas and water pipe fittings:		
Quantity reported:		
Tons (2,000 pounds).....	23,339	20,023
Value.....	\$2,164,950	\$2,122,898
Quantity not reported, value.....	\$167,985	
Other cast-iron pipe fittings and those not reported by kind:		
Quantity reported:		
Tons (2,000 pounds).....	37,443	16,060
Value.....	\$4,104,786	\$1,758,073
Quantity not reported, value.....	\$3,968,438	\$2,668,007
Malleable-iron, value.....	\$12,144,639	\$8,795,783
Steel, value.....	\$4,534,497	\$2,733,029
Other metals, value.....	\$2,107,036	
Fittings not reported by kind of metal, value.....	\$2,662,299	\$4,673,944
Nipples reported separately, value.....	\$4,596,125	

¹ Data incomplete.

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SHEET-METAL WORK, NOT SPECIFICALLY CLASSIFIED

Description of the industry.—The establishments classified in this industry are engaged in the production, *in the shop*, of general copper-smithing and sheet-metal work, such as cornices, gutters, spouts, etc., for the exterior of buildings; and of radiator shields, stove and furnace pipe, ventilators and skylights, tanks and bins, culverts, etc. The value figures represent shop or factory values and do not, therefore, include data for work done outside the shop, such as laying metal roofs and installing cornices, gutters, etc.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	1,400	1,229	1,762	2,161	13.9	—35.2
Proprietors and firm members.....	735	652	(¹)	1,516	12.7	—51.5
Salaried personnel, total ²	4,475	(³)	(¹)	6,954	(³)	—35.6
Salaried officers of corporations... Supervisory, technical, and clerical employees.....	1,198	(³)	(¹)	1,648	(³)	—27.3
	* 3,277	* 3,045	(¹)	5,306	7.6	—38.2
Salaries paid, total ²	\$9,151,264	(³)	(¹)	\$18,413,534	(³)	—50.3
To salaried officers of corporations.....	\$4,295,860	(³)	(¹)	\$7,946,355	(³)	—45.9
To supervisory, technical, and clerical employees.....	* \$4,855,404	* \$4,279,756	(¹)	\$10,467,179	13.5	—53.6
Wage earners (average for year) ⁴	17,369	13,050	19,365	23,593	33.1	—39.3
Wages.....	\$19,550,967	\$12,657,804	\$25,153,017	\$43,254,611	54.5	—54.8
Cost of materials, etc., total.....	57,765,134	35,463,376	50,341,919	112,648,112	62.9	—48.7
Cost of materials and supplies... Cost of fuel..... Cost of purchased electric energy.....	56,680,808	(¹)	(¹)	111,097,444	(¹)	—49.0
	456,594	(¹)	(¹)	670,273	(¹)	—31.9
	627,732	(¹)	(¹)	880,395	(¹)	—28.7
Value of products.....	109,332,596	68,807,223	116,442,534	222,484,625	58.9	—50.9
Value added by manufacture ⁷	51,567,462	33,343,847	60,100,615	109,836,513	54.7	—53.1

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 744; salaries, \$1,822,174. Technical, 211; salaries, \$431,648. Clerical, 2,322; salaries, \$2,601,582. See sec. 10, p. 7.

⁵ Supervisory, 706; salaries, \$1,572,464. Clerical and other, 2,339; salaries \$2,707,292. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 13, p. 11.

CENSUS OF MANUFACTURES: 1935

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States	1,400	4,475	17,369	\$9,151,264	\$19,550,967	\$57,765,134	\$109,332,590	\$51,567,462
Alabama	8	25	169	36,749	114,269	769,100	1,068,125	299,025
Arizona	3	6	35	14,383	38,905	121,703	191,802	70,069
California	160	313	1,274	603,371	1,542,000	3,590,557	7,309,705	3,719,148
Colorado	9	44	155	81,792	176,093	575,159	1,151,213	570,054
Connecticut	28	61	393	119,386	386,526	145,960	1,118,603	652,703
District of Columbia	4	14	29	25,289	35,491	88,534	221,207	132,073
Florida	11	21	86	35,236	71,958	200,290	437,233	236,943
Georgia	15	85	308	140,061	240,411	1,491,083	2,221,072	730,889
Illinois	123	467	1,801	997,221	2,110,732	4,594,214	9,745,661	5,151,447
Indiana	36	153	685	296,010	636,755	1,003,936	3,065,845	1,461,900
Iowa	31	89	308	150,357	277,841	1,320,701	2,282,016	952,315
Kansas	10	20	64	30,034	68,220	238,439	542,081	303,642
Kentucky	15	45	243	74,094	230,520	692,270	1,137,910	445,040
Louisiana	11	43	168	69,134	149,190	339,142	805,639	466,397
Maine	4	12	26	26,249	33,632	143,514	254,409	110,395
Maryland	31	79	296	145,927	316,248	778,147	1,522,765	744,618
Massachusetts	67	173	715	398,211	922,236	1,748,040	3,743,050	1,905,010
Michigan	53	136	502	306,416	601,832	1,771,622	3,336,844	1,505,222
Minnesota	41	125	502	244,193	528,367	1,456,920	2,069,132	1,512,212
Missouri	44	151	476	342,977	497,565	1,326,473	2,692,607	1,306,194
Nebraska	7	24	76	43,623	76,343	322,795	593,653	270,858
New Jersey	69	201	790	396,499	1,025,413	1,937,630	4,047,325	2,109,695
New York	206	514	1,734	1,105,843	2,201,240	4,193,327	9,754,498	5,561,171
North Carolina	6	14	30	21,443	24,227	244,867	341,310	96,443
Ohio	93	450	2,423	1,168,704	2,798,990	13,390,797	20,797,637	7,406,840
Oklahoma	15	18	65	21,462	67,866	156,374	323,027	166,653
Oregon	18	61	228	123,841	239,500	706,510	1,296,092	589,582
Pennsylvania	80	375	1,404	755,887	1,608,858	4,194,505	8,985,336	4,790,831
Rhode Island	15	35	107	66,282	134,439	199,961	507,431	307,470
South Carolina	6	5	24	9,082	21,231	49,392	99,203	49,811
South Dakota	5	16	22	30,499	28,965	121,871	218,467	96,504
Tennessee	11	31	66	65,780	55,609	478,482	738,062	260,480
Texas	35	76	343	131,198	340,951	1,731,019	2,630,116	899,097
Utah	9	12	50	34,876	51,254	297,294	555,367	258,073
Vermont	4	11	32	16,069	38,504	146,946	204,457	147,511
Virginia	5	25	56	37,551	42,995	222,467	336,589	164,122
Washington	44	79	270	123,437	302,540	500,132	1,195,278	695,146
West Virginia	7	55	323	112,219	319,871	610,170	1,398,345	788,178
Wisconsin	43	375	978	694,240	1,085,041	4,314,283	8,294,273	3,979,900
Other States ¹	18	36	115	55,639	113,300	621,508	1,057,301	435,883

¹ Arkansas, 4 establishments; Delaware, 2; Idaho, 2; Mississippi, 2; Montana, 3; New Hampshire, 1; North Dakota, 4. See sec. 23, p. 12.

SHEET-METAL WORK

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TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year ¹	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	17,364	15,057	15,536	16,064	16,840	17,307	17,340	17,624	18,166	18,623	18,995	18,559	18,259
1933.....	18,050	(*)	(*)	10,423	(*)	(*)	18,098	(*)	(*)	15,190	(*)	(*)	14,349
<i>States, 1935</i>													
Alabama.....	169	167	151	170	171	179	199	180	178	163	180	174	177
Arizona.....	35	26	36	30	43	33	30	36	40	36	33	31	39
Arkansas.....	50	41	52	59	52	46	48	49	49	49	51	54	46
California.....	1,274	1,087	1,164	1,216	1,237	1,324	1,303	1,273	1,293	1,333	1,315	1,356	1,381
Colorado.....	155	125	137	147	152	143	160	153	136	160	166	189	194
Connecticut.....	393	327	328	333	348	367	363	361	389	443	444	508	509
Dist. of Columbia.....	30	29	26	29	27	30	30	29	29	30	30	31	31
Florida.....	86	78	75	79	82	82	95	98	85	84	89	84	84
Georgia.....	308	256	248	285	309	302	248	432	437	291	297	299	290
Illinois.....	1,801	1,614	1,624	1,672	1,730	1,872	1,789	1,782	1,911	1,960	1,935	1,849	
Indiana.....	684	633	648	723	715	738	617	613	623	713	757	708	728
Iowa.....	308	270	278	269	274	296	296	299	313	317	337	360	386
Kansas.....	64	56	53	59	71	74	72	68	63	60	64	69	61
Kentucky.....	243	228	228	262	265	248	298	241	244	225	241	247	245
Louisiana.....	168	135	156	146	140	150	206	215	179	179	172	174	170
Maine.....	26	20	17	18	28	23	32	27	25	29	27	37	28
Maryland.....	300	276	260	270	295	305	308	298	287	316	321	336	314
Massachusetts.....	717	625	606	638	674	685	710	780	794	797	765	766	780
Michigan.....	502	443	471	458	450	432	467	485	564	564	577	572	535
Minnesota.....	502	352	444	470	531	538	543	548	520	520	522	506	495
Missouri.....	476	387	376	437	468	501	485	510	527	560	537	487	443
Montana.....	16	10	10	18	13	17	19	21	20	19	16	16	15
Nebraska.....	76	70	71	76	83	83	82	85	80	74	76	67	67
New Jersey.....	779	672	713	728	747	719	735	747	801	839	866	890	890
New York.....	1,734	1,554	1,549	1,540	1,645	1,666	1,720	1,736	1,790	1,870	1,960	1,895	1,883
North Carolina.....	30	28	25	29	29	34	43	39	29	30	24	27	28
North Dakota.....	23	20	19	21	23	25	23	23	23	27	25	23	21
Ohio.....	2,423	2,011	2,171	2,181	2,314	2,376	2,523	2,450	2,641	2,604	2,733	2,487	2,467
Oklahoma.....	65	53	55	58	59	69	64	65	77	69	71	68	69
Oregon.....	228	183	180	218	237	243	254	254	244	253	236	232	205
Pennsylvania.....	1,404	1,284	1,298	1,284	1,378	1,412	1,356	1,419	1,453	1,471	1,525	1,506	1,464
Rhode Island.....	107	94	84	92	110	107	102	106	110	110	115	122	127
South Carolina.....	24	19	19	20	37	37	36	30	19	19	19	18	18
South Dakota.....	22	16	15	17	19	19	21	22	27	27	27	27	26
Tennessee.....	66	64	65	66	64	62	61	65	63	67	70	68	73
Texas.....	343	313	318	321	311	326	321	322	364	374	384	391	368
Utah.....	50	31	31	30	43	49	59	60	64	60	64	54	52
Vermont.....	33	33	31	34	32	30	27	29	32	34	36	39	39
Virginia.....	56	62	59	58	53	54	53	50	51	52	59	54	61
Washington.....	270	213	233	226	314	311	303	283	281	295	286	248	241
West Virginia.....	323	251	294	353	315	325	296	319	385	349	340	321	329
Wisconsin.....	978	847	883	896	926	951	947	981	1,013	1,092	1,148	1,056	997

*Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

¹ As the averages for 1935 given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year.

1213

SILVERWARE AND PLATED WARE

[A preliminary report for this industry was issued Jan. 13, 1937]

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of hollow ware and flatware, toilet articles, ornaments, novelties, etc., of solid silver, of metal plated with silver, gold, or other metal, of nickel-silver, or of pewter. It does not cover the production of electrical household appliances nor of jewelry, which are assigned to separate classifications, "Electrical Machinery, Apparatus, and Supplies" and "Jewelry," respectively.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (-)	
					1933-1935	1929-1935
Number of establishments.....	139	126	(1) 163	179	10.3	-22.3
Proprietors and firm members.....	54	33	(1)	77	(*)	(*)
Salaried personnel, total ¹	1,671	(2)	(1)	2,962	(2)	-43.6
Salaried officers of corporations.....	202	(2)	(1)	254	(1)	-20.5
Supervisory, technical, and clerical employees.....	⁴ 1,469	⁵ 1,163	(1)	2,708	26.3	-45.8
Salaries paid, total ¹	\$3,161,950	(2)	(1)	7,700,350	(2)	-58.9
To salaried officers of corporations..	\$926,121	(2)	(1)	\$1,878,891	(2)	-50.7
To supervisory, technical, and clerical employees.....	⁴ \$2,235,829	⁵ \$1,681,947	(1)	\$5,821,459	32.9	-61.6
Wage earners (average for year) ⁶	10,194	9,177	11,077	15,735	11.1	-35.2
Wages.....	\$11,078,434	\$8,228,642	\$12,712,986	\$22,577,965	34.6	-50.9
Cost of materials, etc., total.....	\$15,224,961	\$12,425,202	\$11,792,370	\$26,885,693	22.5	-43.4
Cost of materials, supplies, and containers.....	\$14,507,101	(1)	(1)	\$25,833,003	(1)	-43.8
Cost of fuel.....	392,770	(1)	(1)	603,066	(1)	-34.9
Cost of purchased electric energy.....	325,090	(1)	(1)	449,624	(1)	-27.7
Value of products.....	43,371,697	\$34,332,544	\$45,814,831	85,882,325	26.3	-49.5
Value added by manufacture ⁷	28,146,736	21,907,342	34,022,461	58,996,632	28.5	-52.3

* Percent not computed where base is less than 100.

¹ No data.

² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

³ Data incomplete.

⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 283; salaries, \$778,250. Technical, 86; salaries, \$222,401. Clerical, 1,100; salaries, \$1,235,178. See sec. 10, p. 7.

⁵ Supervisory, 291; salaries, \$800,424. Clerical and other, 872; salaries, \$881,523. See sec. 10, p. 7.

⁶ See sec. 11, p. 7.

⁷ Value of products less cost of materials, supplies, containers, fuel, and purchased electric energy. See sec. 18, p. 11.

SILVERWARE AND PLATED WARE

1023

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States.....	139	1, 671	10, 194	\$3, 161, 950	\$11, 078, 434	\$15, 224, 961	\$43, 371, 697	\$28, 146, 736
California.....	6	4	12	2, 865	16, 897	16, 066	56, 679	40, 513
Connecticut.....	22	467	3, 684	775, 403	3, 977, 541	3, 883, 048	15, 112, 675	11, 229, 527
Illinois.....	7	15	63	25, 794	61, 109	84, 103	190, 842	106, 739
Maryland.....	5	36	188	72, 614	200, 778	574, 136	1, 055, 749	481, 613
Massachusetts.....	28	307	1, 505	716, 110	1, 570, 911	2, 374, 147	6, 112, 444	3, 738, 297
New Jersey.....	12	76	495	182, 516	584, 447	839, 704	1, 776, 716	937, 012
New York.....	47	437	2, 772	807, 147	3, 201, 006	4, 947, 761	12, 562, 543	7, 614, 782
Pennsylvania.....	3	6	30	14, 872	17, 519	12, 415	52, 543	40, 128
Other States ¹	9	323	1, 443	564, 629	1, 468, 226	2, 463, 581	6, 451, 706	3, 958, 125

¹ Indiana, 2 establishments; New Hampshire, 1; Ohio, 2; Rhode Island, 3; Virginia, 1. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—														
		January	February	March	April	May	June	July	August	September	October	November	December			
United States																
1935.....	10, 194	10, 043	9, 776	10, 149	10, 457	10, 431	10, 338	9, 312	9, 930	10, 111	10, 608	10, 750	10, 378			
1933.....	9, 177	8, 018	8, 297	8, 184	8, 255	8, 503	8, 622	8, 776	9, 213	9, 891	10, 841	11, 005	10, 518			
States, 1935																
California.....	12	12	12	12	13	13	13	13	13	12	12	12	12			
Connecticut.....	3, 684	3, 009	3, 660	3, 706	3, 712	3, 718	3, 695	3, 137	3, 726	3, 772	3, 891	3, 856	3, 727			
Illinois.....	63	67	58	59	64	61	57	53	64	65	73	81	77			
Maryland.....	188	194	192	199	187	191	180	185	181	181	188	183	184			
Massachusetts.....	1, 605	1, 475	1, 507	1, 514	1, 504	1, 479	1, 490	1, 486	1, 507	1, 514	1, 552	1, 535	1, 497			
New Jersey.....	495	479	482	485	488	500	508	453	484	484	521	529	498			
New York.....	2, 772	2, 728	2, 350	2, 612	2, 955	3, 042	2, 921	2, 527	2, 552	2, 649	2, 891	3, 084	2, 948			
Pennsylvania.....	30	30	30	32	33	33	33	25	26	30	31	31	31			
Rhode Island.....	721	715	742	772	777	733	713	687	706	702	704	700	700			

TABLE 4.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1935, 1931, AND 1929

[No comparable figures available for 1933]

	1935	1931	1929
1. Silverware and Plated Ware industry, all products, total value.....	\$43, 371, 697	\$45, 814, 831	\$85, 882, 325
2. Silverware and plated ware made in the industry.....	41, 070, 228	43, 331, 057	78, 235, 046
3. Other products (not normally belonging to the industry), value, and receipts for custom and repair work.....	2, 301, 469	2, 483, 774	7, 647, 279
4. Silverware and plated ware made as secondary products in other industries.....	924, 097	481, 581	435, 361
Silverware and plated ware, aggregate value (sum of 2 and 4).....	41, 994, 325	43, 812, 638	78, 670, 407
Silverware (sterling), total value.....	13, 230, 963	14, 489, 095	24, 678, 329
Flatware (including cutlery).....	7, 440, 963	7, 475, 526	11, 254, 910
Hollow ware.....	4, 491, 419	5, 746, 988	10, 432, 147
Novelties.....	748, 713	639, 804	1, 241, 315
Toiletware.....	549, 868	626, 779	1, 749, 957
Electro-silver-plated ware, total value.....	25, 188, 544	21, 855, 554	44, 623, 305
Flatware, hotel patterns (including cutlery).....	2, 102, 040	1, 596, 130	2, 679, 941
Flatware, commercial patterns (including cutlery).....	16, 298, 731	13, 988, 912	27, 092, 186
Hollow ware, hotel services ¹	1, 068, 721	1, 569, 606	2, 522, 418
Hollow ware, commercial lines ¹	4, 655, 343	3, 427, 154	9, 121, 972
Novelties and toiletware.....	449, 198	603, 502	1, 286, 942
Other articles.....	614, 511	665, 250	1, 919, 846
Other plated ware ¹ and sterling silverware not specified above.....	2, 035, 073	1, 760, 093	6, 430, 532
Nickel-silver, not plated.....	1, 438, 411	1, 991, 972	
Pewter.....	101, 334	3, 725, 924	2, 938, 241

¹ Not including electrical household appliances. See "Description of the industry," p. 1022.

(1) 1215
(2) 1216
(3) 1218

SMELTING AND REFINING, COPPER, LEAD, AND ZINC

Description of the industries.—Establishments engaged in smelting and refining nonferrous metals are classified for census purposes under three industry designations, namely: (1) Copper, (2) Lead, and (3) Zinc. Considerable smelting and refining are done on a toll basis, but the cost of materials reported for establishments that treat ore, matte, or bullion for others includes the estimated values of such materials treated, and the value of products reported for these establishments includes the values of the metals produced. Many of the plants classified as smelters and refineries produce considerable quantities of sulphuric acid, nickel and copper sulphate, lithopone, pigments, zinc oxide, and precious metals, the values of which are included in the total values of products of the respective industries.

Duplication in costs of materials and value of products.—The total cost of materials and the total value of products include extensive duplications resulting from the use of the products of certain establishments as materials by others. For example, considerable quantities of the blister copper and lead bullion produced by smelters are used as materials by refineries. Thus the value of this blister copper and lead bullion, which represent intermediate stages in the production of refined copper and lead from the ore, appears twice in the total value of products for the industry; and a corresponding duplication enters into the total cost of materials for the industry.

Industry figures do not represent values of copper, lead, and zinc production.—The annual reports of the Bureau of Mines, Department of the Interior, show the quantities of the several classes of products of the Smelting and Refining industries; but the values of products given for the respective industries in the table below do not apply to the quantities of copper, lead, and zinc reported by the Bureau of Mines, for the reason that the values of products of the respective industries necessarily include the values of the incidental production, within those industries, of gold, silver, and certain chemicals, and because of the further fact that the values of products of the industries include some duplication due to the use of the products of certain establishments (smelters) as materials by others (refineries). (See "Duplication in cost of materials and value of products," above.)

SMELTING AND REFINING, COPPER, LEAD, AND ZINC 1025

TABLE 1.—GENERAL STATISTICS, FOR THE INDUSTRIES AS A GROUP AND FOR EACH INDUSTRY, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
THE INDUSTRIES AS A GROUP						
Number of establishments.....	62	59	76	75	(*)	(*)
Proprietors and firm members.....	2		(1)			
Salaried personnel, total ²	2,789	(³)	(1)	3,947	(³)	-29.3
Salaried officers of corporations. Supervisory, technical, and clerical employees.....	33 4 2,756	(³) 5 1,997	(1) (1)	52 3,895	(³) 38.0	(*) -29.2
Salaries paid, total ²	\$6,113,712	(³)	(1)	\$10,817,701	(³)	-43.5
To salaried officers of corporations.....	\$190,591	(³)	(1)	\$412,915	(³)	-53.8
To supervisory, technical, and clerical employees.....	4 \$5,923,121	5 \$3,869,125	(1)	\$10,404,786	53.1	-43.1
Wage earners (average for year) ⁶	22,478	14,567	18,477	30,981	54.3	-27.4
Wages.....	\$24,837,302	\$13,549,271	\$22,716,192	\$49,239,319	83.7	-49.5
Cost of materials, etc., total.....	\$476,366,430	\$231,884,679	\$335,713,021	\$1,199,025,259	105.4	-60.3
Cost of materials and supplies.....	\$462,541,625	(1)	(1)	\$1,169,003,814	(1)	-60.4
Cost of fuel.....	\$10,255,410	(1)	(1)	\$23,842,472	(1)	-57.0
Cost of purchased electric energy.....	\$3,569,395	(1)	(1)	\$6,178,973	(1)	-42.2
Value of products.....	\$554,627,095	\$273,285,575	\$408,588,765	\$1,345,799,941	102.9	-58.8
Value added by manufacture ⁷	\$78,280,665	\$41,400,896	\$72,875,744	\$146,774,682	89.0	-46.7
SMELTING AND REFINING, COPPER						
Number of establishments.....	20	19	27	26	(*)	(*)
Salaried personnel, total ²	1,430	(³)	(1)	1,993	(³)	-28.2
Salaried officers of corporations. Supervisory, technical, and clerical employees.....	7 8 1,423	(³) 9 939	(1) (1)	14 1,979	(³) 43.9	(*) -28.1
Salaries paid, total ²	\$2,869,232	(³)	(1)	\$5,567,743	(³)	-48.5
To salaried officers of corporations.....	\$59,333	(³)	(1)	\$102,520	(³)	-42.1
To supervisory, technical, and clerical employees.....	8 \$2,809,949	9 \$1,776,679	(1)	\$5,465,223	58.2	-48.6
Wage earners (average for year) ⁶	10,449	5,596	8,642	14,544	86.7	-28.2
Wages.....	\$11,154,196	\$5,386,550	\$10,708,010	\$23,951,955	107.1	-53.4
Cost of materials, etc., total.....	\$310,797,466	\$142,672,253	\$226,519,918	\$920,351,441	117.8	-66.2
Cost of materials and supplies.....	\$305,000,961	(1)	(1)	\$905,614,326	(1)	-66.3
Cost of fuel.....	\$4,666,531	(1)	(1)	\$12,045,477	(1)	-61.3
Cost of purchased electric en- ergy.....	\$1,129,964	(1)	(1)	\$2,691,638	(1)	-58.0
Value of products.....	\$348,257,026	\$158,610,406	\$269,383,991	\$994,783,362	119.6	-65.0
Value added by manufacture ⁷	\$37,459,570	\$15,938,153	\$42,864,073	\$74,432,421	135.0	-49.7
SMELTING AND REFINING, LEAD						
Number of establishments.....	16	14	16	19	(*)	(*)
Proprietors and firm members.....	1		(1)			
Salaried personnel, total ²	532	(³)	(1)	871	(³)	-38.9
Salaried officers of corporations. Supervisory, technical, and clerical employees.....	1 10 631	(³) 11 390	(1) (1)	5 866	(³) 36.2	(*) -38.7

For footnotes, see end of table.

TABLE 1.—GENERAL STATISTICS, FOR THE INDUSTRIES AS A GROUP AND FOR EACH INDUSTRY, FOR THE UNITED STATES: 1929 TO 1935—Continued

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (-)	
					1933-1935	1929-1935
SMELTING AND REFINING, LEAD—continued						
Salaries paid, total ²	\$1,061,143	(³)	(¹)	\$2,206,453	(³)	-51.9
To salaried officers of corporations.....	\$3,000	(³)	(¹)	\$37,000	(³)	-91.9
To supervisory, technical, and clerical employees.....	¹⁰ \$1,058,143	¹¹ \$743,486	(¹)	\$2,169,453	42.3	-51.2
Wage earners (average for year) ⁶	3,187	2,105	2,584	4,819	51.4	-33.9
Wages.....	\$3,423,931	\$2,324,913	\$3,560,193	\$7,577,094	47.3	-54.8
Cost of materials, etc., total.....	\$121,996,765	\$60,533,700	\$78,744,573	\$203,913,730	101.5	-40.2
Cost of materials and supplies.....	\$119,678,823	(¹)	(¹)	\$199,230,316	(¹)	-39.9
Cost of fuel.....	\$1,701,146	(¹)	(¹)	\$3,792,803	(¹)	-55.1
Cost of purchased electrical energy.....	\$610,796	(¹)	(¹)	\$890,611	(¹)	-30.7
Value of products.....	\$137,219,290	\$70,453,429	\$90,726,257	\$232,115,009	94.8	-40.9
Value added by manufacture ⁷	\$15,222,525	\$9,919,729	\$11,981,684	\$28,201,279	53.6	-46.0
SMELTING AND REFINING, ZINC						
Number of establishments.....	26	26	33	30		(³)
Proprietors and firm members.....	1		(¹)			
Salaried personnel, total ²	827	(³)	(¹)	1,083	(³)	-23.6
Salaried officers of corporations.....	25	(³)	(¹)	33	(³)	(³)
Supervisory, technical, and clerical employees.....	¹² 802	¹³ 618	(¹)	1,050	29.8	-23.6
Salaries paid, total ²	\$2,183,287	(³)	(¹)	\$3,043,505	(³)	-28.3
To salaried officers of corporations.....	\$123,258	(³)	(¹)	\$273,395	(³)	-53.1
To supervisory, technical, and clerical employees.....	¹² \$2,055,029	¹³ \$1,348,960	(¹)	\$2,770,110	52.3	-25.8
Wage earners (average for year) ⁶	8,842	6,866	7,261	11,618	28.8	-23.9
Wages.....	\$10,309,175	\$5,837,808	\$8,488,989	\$17,710,270	76.6	-41.8
Cost of materials, etc., total.....	\$43,572,209	\$28,678,726	\$30,448,530	\$74,760,088	51.9	-41.7
Cost of materials and supplies.....	\$37,861,841	(¹)	(¹)	\$64,159,172	(¹)	-41.0
Cost of fuel.....	\$3,887,733	(¹)	(¹)	\$3,004,192	(¹)	-51.4
Cost of purchased electric energy.....	\$1,822,635	(¹)	(¹)	\$2,596,724	(¹)	-29.8
Value of products.....	\$69,150,779	\$44,221,740	\$48,478,517	\$118,901,070	58.4	-41.8
Value added by manufacture ⁷	\$25,578,570	\$15,543,014	\$18,029,987	\$44,140,982	64.6	-42.1

*Percent not computed where base is less than 100.

¹ No data.² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.³ Data incomplete.⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 952; salaries, \$2,590,489. Technical, 501; salaries, \$1,250,818. Clerical, 1,303; salaries, \$2,081,814. See sec. 10, p. 7.⁵ Supervisory, 986; salaries, \$2,526,398. Clerical and other, 1,011; salaries, \$1,342,727. See sec. 10, p. 7.⁶ See sec. 11, p. 7.⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.⁸ Supervisory, 499; salaries, \$1,238,267. Technical, 196; salaries, \$486,237. Clerical, 728; salaries, \$1,085,145. See sec. 10, p. 7.⁹ Supervisory, 409; salaries, \$1,032,336. Clerical and other, 580; salaries, \$744,343. See sec. 10, p. 7.¹⁰ Supervisory, 201; salaries, \$523,160. Technical, 88; salaries, \$167,403. Clerical, 242; salaries, \$367,680. See sec. 10, p. 7.¹¹ Supervisory, 204; salaries, \$496,059. Clerical and other, 186; salaries, \$247,427. See sec. 10, p. 7.¹² Supervisory, 252; salaries, \$829,062. Technical, 217; salaries, \$597,178. Clerical, 333; salaries, \$628,789. See sec. 10, p. 7.¹³ Supervisory, 373; salaries, \$998,003. Clerical and other, 245; salaries, \$350,957. See sec. 10, p. 7.

SMELTING AND REFINING, COPPER, LEAD, AND ZINC 1027

TABLE 2.—SUMMARY, FOR THE INDUSTRIES, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
SMELTING AND REFINING, COPPER								
United States..	20	1,430	10,449	\$2,869,282	\$11,154,196	\$310,797,456	\$348,257,026	\$37,450,570
Arizona.....	5	150	1,243	312,699	1,439,848	25,173,201	30,126,165	4,952,964
New Jersey.....	3	568	3,901	1,116,370	4,150,485	132,447,465	143,525,982	11,078,517
Other States ¹	12	712	5,305	1,440,213	5,563,863	153,176,790	174,604,879	21,423,089
SMELTING AND REFINING, LEAD								
United States..	16	532	3,187	1,061,143	3,423,931	121,996,765	137,219,290	15,222,525
Utah.....	3	142	858	274,802	1,081,614	10,681,035	14,145,140	3,464,105
Other States ²	13	390	2,329	786,341	2,342,317	111,315,730	123,074,150	11,758,420
SMELTING AND REFINING, ZINC								
United States..	26	827	8,842	2,183,287	10,309,175	43,572,209	69,150,779	25,578,570
Illinois.....	6	137	1,048	341,292	2,227,709	6,622,795	11,992,019	5,369,224
Oklahoma.....	3	58	856	156,032	825,565	3,941,707	5,245,884	1,304,177
Pennsylvania.....	4	355	3,688	1,064,870	4,369,806	12,957,446	22,728,873	9,771,427
Other States ³	13	277	2,350	621,093	2,886,095	20,050,261	20,184,003	9,133,742

¹ Maryland, 1 establishment; Michigan, 2; Montana, 2; Nevada, 1; New York, 1; Tennessee, 1; Texas, 2; Utah, 1; Washington, 1.

² California, 1 establishment; Colorado, 3; Idaho, 1; Illinois, 1; Indiana, 2; Kansas, 1; Missouri, 1; Montana, 1; Nebraska, 1; New Mexico, 1.

³ Arkansas, 1 establishment; California, 1; Idaho, 1; Indiana, 1; Montana, 3; Ohio, 2; Texas, 1; West Virginia, 2; Wisconsin, 1.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE INDUSTRIES, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
SMELTING AND REFINING, COPPER													
<i>United States</i>													
1935.....	10,449	9,290	9,490	9,653	9,554	10,050	10,309	10,144	10,255	11,058	11,547	11,000	12,074
1933.....	5,596	4,599	4,586	4,858	4,730	4,581	4,396	4,933	5,949	6,796	7,185	6,810	7,221
<i>States, 1935</i>													
Arizona.....	1,243	1,093	1,091	1,081	1,117	1,133	1,119	1,148	1,113	1,254	1,433	1,632	1,632
New Jersey.....	3,901	3,343	3,524	3,537	3,668	3,828	3,933	3,835	4,047	4,164	4,218	4,313	4,317
SMELTING AND REFINING, LEAD													
<i>United States</i>													
1935.....	3,187	3,062	3,051	2,887	2,868	2,895	2,765	3,040	3,146	3,265	3,621	3,809	3,532
1933.....	2,105	2,080	2,029	2,028	1,602	1,767	1,772	1,850	2,003	2,437	2,609	2,551	2,539
<i>States, 1935</i>													
Colorado.....	278	239	244	255	237	236	262	269	277	281	286	320	322
Utah.....	858	909	842	813	685	673	655	709	750	823	1,002	1,140	1,132
SMELTING AND REFINING, ZINC													
<i>United States</i>													
1935.....	3,342	3,478	3,735	3,771	3,533	3,753	3,823	3,756	3,647	3,955	4,013	3,306	3,330
1933.....	6,366	5,430	5,534	5,554	5,605	5,725	6,379	7,218	8,537	8,078	8,221	8,190	7,561
<i>States, 1935</i>													
Illinois.....	1,948	1,852	1,929	1,866	1,872	1,892	1,908	1,882	1,905	2,007	2,037	2,143	2,032
Oklahoma.....	856	875	872	856	863	866	800	821	807	847	871	868	871
Pennsylvania.....	3,638	3,345	3,461	3,544	3,563	3,648	3,700	3,740	3,731	3,735	3,814	3,911	4,029

1220

TIN AND OTHER FOILS, NOT INCLUDING GOLD FOIL

[A preliminary report for this industry was issued Apr. 28, 1937]

Description of the industry.—The establishments classified in this industry are engaged primarily in the manufacture of tin, lead, aluminum, and composition foils.

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

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	11	7	(?) ⁸	7	(*)	(*)
Proprietors and firm members.....	2					
Salaried personnel, total ²	307	(?)	(?)	288	(?)	6.6
Salaried officers of corporations.....	18	(?)	(?)	28	(?)	(*)
Supervisory, technical, and clerical employees.....	³ 204	⁶ 181	(?)	260	62.4	13.1
Salaries paid, total ²	\$529,656	(?)	(?)	\$1,177,614	(?)	-55.0
To salaried officers of corporations..	\$80,767	(?)	(?)	\$357,685	(?)	-75.7
To supervisory, technical, and clerical employees.....	⁶ \$442,889	⁶ \$396,462	(?)	\$819,929	11.7	-46.0
Wage earners (average for year) ⁷	1,831	1,337	1,218	1,710	36.9	7.1
Wages.....	\$1,899,016	\$1,189,058	\$997,847	\$1,856,371	59.7	2.3
Cost of materials, etc., total.....	\$9,226,421	\$7,680,282	\$7,382,938	\$13,548,399	20.1	-31.9
Cost of materials, supplies, and containers.....	\$3,989,576	(?)	(?)	\$13,271,058	(?)	-32.3
Cost of fuel.....	62,101	(?)	(?)	72,521	(?)	-14.4
Cost of purchased electric energy....	174,744	(?)	(?)	204,820	(?)	-14.7
Value of products.....	14,533,139	\$11,330,927	\$12,225,641	20,954,849	28.3	-30.6
Value added by manufacture ²	5,306,718	3,650,645	4,842,703	7,406,460	45.4	-28.4

*Percent not computed where base is less than 100.

¹California, 1 establishment; Connecticut, 1; Illinois, 2; Kentucky, 1; Missouri, 1; New Jersey, 1; New York, 2; Pennsylvania, 1; Virginia, 1.

²No data.

³No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

⁴Data incomplete.

⁵Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 66; salaries, \$124,402. Technical, 21; salaries, \$49,336. Clerical, 208; salaries, \$269,151. See sec. 10, p. 7.

⁶Supervisory, 26; salaries, \$164,080. Clerical and other, 155; salaries, \$232,392. See sec. 10, p. 7.

⁷See sec. 11, p. 7.

⁸Value of products less cost of materials, supplies, containers, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES: 1935 AND 1933

[See secs. 11 and 23, pp. 7 and 12]

	1935	1933		1935	1933
Average number employed during the year.....	1,831	1,337	Number reported for—		
Number reported for—			June.....	1,792	1,337
January.....	1,906	1,144	July.....	1,760	1,401
February.....	1,939	1,130	August.....	1,772	1,449
March.....	1,932	1,127	September.....	1,758	1,517
April.....	1,912	1,130	October.....	1,807	1,504
May.....	1,856	1,201	November.....	1,780	1,521
			December.....	1,763	1,557

TABLE 3.—PRODUCTS, BY QUANTITY AND VALUE, FOR THE UNITED STATES: 1929 TO 1935

[The figures given in this table cover the total production, for sale separately, of metal foils (except gold foil), including those made as secondary products by establishments classified in other industries]

	1935	1933	1931	1929
Metal foils, other than gold foil, total value ¹	\$14,216,043	\$11,596,326	\$11,780,210	\$21,802,284
Quantity reported:				
Pounds.....	44,066,471	64,165,594	64,736,110	90,188,082
Value.....	\$9,849,886	\$11,596,326	\$11,780,210	\$21,802,284
Quantity not reported, value.....	\$4,366,157			

¹ These values include the values of metal foils, other than gold foil, made as secondary products in other industries (see headnote) but do not include the values of other commodities made as secondary products in the "Tin and Other Foils, Not Including Gold Foil" industry. They differ, therefore, from the "Value of products" figures for the corresponding years, as given in table 1. See sec. 14, p. 9, sixth paragraph.

1222

WATCHCASES

[A preliminary report for this industry was issued Feb. 19, 1937]

Description of the industry.—The establishments classified in this industry are engaged primarily in the manufacture of watchcases for sale as such. Establishments that install purchased movements in cases of their own manufacture are assigned to the "Clocks, Watches, Time-Recording Devices, and Materials and Parts Except Watchcases" industry, and their products are reported as watches.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929	PERCENT OF INCREASE OR DECREASE (—)	
					1933-1935	1929-1935
Number of establishments.....	29	20	31	40	(*)	(*)
Proprietors and firm members.....	12	8	(1)	23	(*)	(*)
Salaried personnel, total ¹	348	(3)	(1)	517	(3)	-32.7
Salaried officers of corporations.....	41	(3)	(1)	59	(3)	(*)
Supervisory, technical, and clerical employees.....	⁴ 307	⁵ 147	(1)	458	108.8	-33.0
Salaries paid, total ²	\$740,934	(3)	(1)	\$1,325,805	(3)	-44.1
To salaried officers of corporations.....	\$258,326	(3)	(1)	\$446,557	(3)	-41.9
To supervisory, technical, and clerical employees.....	⁴ \$482,608	⁵ \$209,132	(1)	\$879,248	130.8	-45.1
Wage earners (average for year) ⁶	2,016	1,169	1,669	3,404	72.5	-40.8
Wages.....	\$2,328,602	\$1,006,388	\$1,766,749	\$4,626,111	131.4	-40.7
Cost of materials, etc., total.....	\$2,760,191	\$760,343	\$1,361,195	\$4,631,225	263.0	-40.4
Cost of materials and supplies.....	\$2,647,478	(1)	(1)	\$4,430,828	(1)	-41.9
Cost of fuel.....	35,406	(1)	(1)	149,028	(1)	-77.6
Cost of purchased electric energy.....	77,307	(1)	(1)	51,369	(1)	54.4
Value of products.....	6,982,892	\$2,657,402	\$4,219,133	13,491,045	162.8	-48.2
Value added by manufacture ⁷	4,222,701	1,897,059	2,857,938	8,859,820	122.6	-52.3

* Percent not computed where base is less than 100.

¹ No data.² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.³ Data incomplete.⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 95; salaries, \$238,220. Technical, 27; salaries, \$59,921. Clerical, 185; salaries, \$184,467. See sec. 10, p. 7.⁵ Supervisory, 39; salaries, \$106,645. Clerical and other, 108; salaries, \$102,437. See sec. 10, p. 7.⁶ See sec. 11, p. 7.⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 13, p. 11

CENSUS OF MANUFACTURES: 1935

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States....	29	348	2,016	\$740,934	\$2,328,602	\$2,760,191	\$6,982,892	\$4,222,701
New York.....	23	87	460	209,057	499,799	1,022,246	2,107,252	1,085,006
Other States ¹	6	261	1,556	531,877	1,828,803	1,737,945	4,875,640	3,137,695

¹ Connecticut, 1 establishment; Illinois, 1; Kentucky, 1; Michigan, 1; New Jersey, 1; Ohio, 1. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR NEW YORK, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	2,016	1,456	1,585	1,727	1,885	1,879	1,910	1,748	2,079	2,312	2,506	2,566	2,437
1933.....	1,169	715	779	892	935	999	1,177	1,212	1,270	1,538	1,584	1,567	1,361
New York, 1935....	460	307	345	355	407	424	457	462	468	528	624	617	529

TABLE 4.—PRODUCTS, BY KIND, NUMBER, AND VALUE, FOR THE UNITED STATES: 1929 TO 1935

	1935	1933	1931	1929
1. Watchcases industry, all products, total value.....	\$6,982,892	\$2,657,402	\$4,219,133	\$13,491,045
2. Watchcases, value.....	5,577,466	1,636,950	3,307,417	11,503,586
3. Other products (not normally belonging to the industry), value, and receipts for custom and repair work.....	1,405,426	1,020,452	911,716	1,987,459
4. Watchcases made as secondary products in other industries, value.....	98,642	35,801	41,500	(¹)
Watchcases (made for sale as such), aggregate value (sum of 2 and 4).....	\$5,676,108	\$1,672,751	\$3,348,917	\$11,503,586
Number reported:				
Number.....	1,446,187	1,491,131	1,231,639	3,756,610
Value.....	\$2,596,848	\$1,672,751	\$2,324,837	\$9,469,938
Number not reported, value.....	\$3,079,260	.....	\$1,024,080	\$2,049,648

¹ No data.

Group 13.—MACHINERY, NOT INCLUDING TRANSPORTATION EQUIPMENT

THE INDUSTRIES AS A GROUP

[See p. 42]

This group comprises those industries whose primary products are machinery (not including transportation equipment) and special castings or parts for use in the manufacture of machinery.

For explanations of changes in classification and titles of some of the industries in this group, see "Group 13.—Machinery, Not Including Transportation Equipment," p. 14.

SUMMARY FOR GROUP 13.—MACHINERY, NOT INCLUDING TRANSPORTATION EQUIPMENT: 1929 TO 1935

[See "Changes in industry groups, classifications, and titles," p. 13]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture ¹
Total for the group.....	1935	11, 778	790, 649	\$913, 301, 819	\$1, 521, 408, 162	\$3, 816, 331, 680	\$2, 294, 923, 518
	² 1933	9, 812	539, 706	503, 075, 438	701, 241, 142	2, 076, 431, 032	1, 285, 189, 590
	³ 1931	11, 468	695, 297	797, 509, 555	1, 218, 138, 513	3, 415, 078, 013	2, 196, 891, 500
	⁴ 1929	13, 265	1, 102, 837	1, 650, 001, 097	2, 725, 453, 239	7, 118, 176, 812	4, 392, 717, 873
Agricultural implements (including tractors).	1935	241	52, 866	64, 320, 565	139, 438, 569	291, 254, 064	151, 915, 495
	³ 1933	194	19, 264	18, 561, 724	29, 005, 798	64, 950, 760	35, 044, 662
	³ 1931	250	29, 245	32, 264, 676	66, 781, 883	163, 317, 630	98, 535, 747
	³ 1929	293	41, 663	58, 941, 939	113, 969, 484	277, 854, 402	163, 884, 978
Cash registers, adding and calculating machines, and other business machines except typewriters. ⁴	1935	93	18, 468	23, 695, 902	13, 770, 767	94, 738, 542	80, 067, 775
	⁵ 1933	73	12, 448	14, 926, 174	7, 849, 014	50, 330, 606	42, 981, 592
	⁵ 1931	41	12, 176	14, 982, 432	5, 268, 857	56, 474, 209	51, 205, 442
	⁵ 1929	46	10, 840	29, 745, 365	10, 766, 013	110, 000, 986	99, 234, 673
Electrical machinery, apparatus, and supplies.	1935	1, 393	179, 641	198, 046, 269	370, 903, 958	990, 430, 400	559, 526, 442
	1933	1, 209	130, 857	115, 749, 609	212, 513, 709	553, 431, 450	340, 017, 741
	⁶ 1931	1, 379	180, 106	204, 438, 041	337, 124, 534	995, 010, 215	667, 835, 679
	⁶ 1931	1, 567	214, 734	237, 753, 467	423, 510, 832	1, 179, 407, 754	755, 896, 802
	⁶ 1929	1, 802	323, 722	456, 377, 629	971, 017, 623	2, 300, 915, 572	1, 329, 897, 649
Engines, turbines, water wheels, and windmills.	1935	149	22, 062	26, 844, 519	42, 071, 167	99, 996, 336	57, 025, 199
	1933	153	15, 411	14, 852, 501	22, 436, 053	56, 618, 692	33, 182, 639
	1931	173	22, 414	28, 075, 289	44, 976, 976	109, 932, 683	64, 065, 707
	1929	214	62, 702	100, 849, 662	206, 471, 969	465, 857, 934	259, 353, 865
Foundry and machine-shop products as a group. ³	1935	7, 610	316, 168	368, 632, 135	558, 407, 239	1, 438, 041, 617	879, 634, 378
	1933	6, 203	219, 990	205, 460, 598	294, 022, 744	801, 793, 072	507, 790, 828
	1931	7, 259	296, 658	329, 417, 706	453, 956, 545	1, 270, 955, 238	816, 096, 633
	1929	8, 647	455, 504	699, 030, 858	1, 041, 806, 142	2, 800, 639, 990	1, 738, 833, 348
Boiler shops ⁹	1935	413	13, 290	14, 769, 993	35, 950, 829	73, 170, 472	37, 219, 643
	1933	292	9, 805	9, 093, 992	23, 480, 698	45, 806, 223	22, 365, 523
Cranes, and dredging, excavating, and road-building machinery. ¹⁰	1935	128	10, 808	12, 571, 730	28, 792, 692	62, 860, 105	34, 067, 413
Foundries (gray-iron and malleable-iron). ⁹	1935	1, 251	89, 894	98, 511, 597	89, 813, 760	250, 460, 230	100, 646, 470
	1933	1, 078	59, 321	49, 414, 218	43, 543, 048	142, 722, 496	69, 179, 448
Machine shops ⁹	1935	3, 026	82, 474	97, 454, 077	172, 563, 257	418, 053, 806	245, 490, 549
	1933	2, 895	70, 947	66, 391, 820	104, 769, 991	274, 567, 632	169, 807, 641
Machinery not elsewhere classified. ¹⁰	1935	2, 554	109, 818	131, 742, 637	218, 237, 851	581, 937, 246	363, 609, 395
Printers' machinery and equipment. ¹⁰	1935	238	9, 884	13, 582, 101	13, 048, 850	51, 569, 758	38, 510, 908
Machine-tool accessories and machinists' precision tools and instruments.	1935	731	23, 138	34, 413, 847	26, 904, 298	90, 837, 534	69, 033, 236
	1933	587	12, 757	14, 159, 179	10, 852, 467	44, 383, 246	33, 500, 719
	1931	718	17, 633	26, 558, 780	16, 319, 750	69, 033, 154	52, 719, 974
	1929	722	26, 682	51, 084, 540	26, 992, 631	144, 410, 590	117, 413, 259
Machine tools.....	1935	259	28, 185	37, 260, 518	36, 347, 430	121, 832, 570	85, 485, 140
	1933	232	12, 714	12, 596, 212	10, 844, 323	41, 433, 523	30, 569, 200
	1931	279	21, 262	25, 149, 816	21, 900, 879	81, 286, 568	59, 385, 689
	1929	280	47, 391	76, 410, 237	64, 284, 022	244, 578, 088	180, 294, 066
Pumps (hand and power) and pumping equipment.	1935	326	14, 990	17, 322, 459	35, 223, 860	86, 965, 124	51, 741, 264
	1933	257	11, 110	10, 379, 492	20, 257, 029	49, 002, 021	28, 744, 982
	1931	303	15, 156	17, 106, 556	33, 734, 650	84, 353, 391	50, 618, 741
	1929	322	23, 108	34, 920, 261	66, 802, 372	164, 009, 397	97, 207, 025
Radio apparatus and phonographs. ¹¹	1935	196	44, 796	42, 906, 018	103, 487, 190	200, 972, 523	97, 435, 333
	1933	156	32, 879	29, 654, 376	58, 520, 587	121, 801, 611	63, 231, 024
	1931	217	36, 490	35, 145, 577	88, 402, 858	193, 142, 845	104, 739, 987
Refrigerators and refrigerating and ice-making apparatus. ¹²	1935	275	37, 146	40, 442, 915	116, 283, 054	224, 113, 941	107, 830, 887
	1933	204	26, 398	24, 335, 228	69, 601, 374	140, 762, 115	71, 160, 741
	1931	227	26, 116	32, 350, 213	88, 561, 761	199, 426, 753	110, 604, 992

For footnotes, see end of table.

MACHINERY, NOT INCLUDING TRANSPORTATION EQUIPMENT¹⁰³⁵

SUMMARY FOR GROUP 13.—MACHINERY, NOT INCLUDING TRANSPORTATION EQUIPMENT: 1929 TO 1935—Continued

[See "Changes in industry groups, classifications, and titles," p. 13]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture ¹
Refrigerators, mechanical and ice, and refrigerator cabinets. ¹²	1929	222	26,667	\$39,377,732	\$98,864,195	\$222,048,990	\$123,184,795
-----	1935	56	2,468	2,633,489	3,785,855	13,388,520	9,597,665
-----	1933	45	2,187	1,825,009	2,161,677	8,332,906	6,171,229
-----	1931	54	2,814	3,232,752	3,644,457	14,561,273	10,916,816
-----	1929	59	4,118	5,995,475	7,438,190	30,381,424	22,943,234
Sewing machines and attachments.	1935	39	7,509	9,053,413	6,027,458	22,635,452	16,607,994
-----	1933	30	6,313	6,034,211	2,862,117	12,926,146	10,064,029
-----	1931	34	8,090	8,791,969	6,090,980	20,148,125	14,057,145
-----	1929	39	10,467	14,976,182	16,458,425	45,094,600	28,636,175
Textile machinery and parts.	1935	349	19,072	21,245,578	28,131,415	68,846,269	45,714,854
-----	1933	314	18,576	18,737,260	18,877,880	60,323,267	41,945,387
-----	1931	330	18,808	21,238,231	18,175,346	65,798,225	47,622,879
-----	1929	376	27,019	37,886,406	36,556,299	122,438,514	85,882,215
Typewriters and parts.-----	1935	20	15,398	16,632,400	8,629,986	38,858,443	25,223,457
-----	1933	14	9,591	7,565,082	3,256,464	16,464,617	13,208,153
-----	1931	20	10,924	10,328,036	3,785,432	22,056,898	18,271,466
-----	1929	26	16,945	22,319,327	7,248,601	61,857,615	54,609,014
Washing machines, wringers, driers, and ironing machines, for household use.	1935	41	8,742	9,851,792	36,995,916	62,425,345	25,429,429
-----	1933	41	6,956	6,362,617	24,361,338	44,542,334	20,180,996
-----	1931	59	6,201	7,212,342	24,520,948	50,928,564	26,407,610
-----	1929	65	8,189	12,071,916	40,707,373	82,329,924	41,622,551

¹ Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 18, P. 11.

² Revised to include data for "Engravers' materials" and "Printers' supplies," formerly treated as separate industries in Group 5, now classified in "Printers' machinery and equipment," Group 13.

³ Figures for 1933 and 1931 revised to include data for manufacturers of tractors, formerly classified in "Engines, turbines, water wheels, and windmills" industry. No corresponding revision made for 1929.

⁴ Formerly "Cash registers and adding, calculating, and card-tabulating machines." Manufacturers of duplicating machines, check-writing machines, and manfolding machines, now classified in this industry, were formerly assigned to "Foundry and machine-shop products." The figures for 1933 have been revised accordingly, but those for earlier years have not been revised.

⁵ See footnote 4.

⁶ At the census for 1931 the manufacture of radio apparatus and tubes, formerly a part of the "Electrical machinery, apparatus, and supplies" industry, was combined with the manufacture of phonographs, formerly a separate industry in Group 16, under the title of "Radio apparatus and phonographs." The 1929 figures for "Electrical machinery, apparatus, and supplies" are not, therefore, strictly comparable with those for later years. The figures in roman for 1931 were adjusted for comparison with 1929. Figures in italics are comparable with those for later years.

⁷ Figures for 1933 and 1931 revised to exclude data for manufacturers of tractors, formerly classified in this industry. See footnote 3. No corresponding revision for 1929.

⁸ Formerly a single industry; now six industries. (See industry titles to which footnotes 9 and 10 are indexed. Figures for years prior to 1935 revised to include data for "Elevators and elevator equipment," formerly classified separately for 1933 and 1931 but now included in the "Machine shops" industry; for gas generators, treated in prior censuses as products of the former "Meters (gas, water, etc.) and gas generators" industry but now assigned to "Machinery not elsewhere classified"; and for "Engravers' materials" and "Printers' supplies," formerly in Group 5 but now included in "Printers' machinery and equipment," Group 13; and to exclude data for certain products formerly assigned to "Foundry and machine-shop products" but now included in "Cash registers, adding and calculating machines," etc.)

⁹ New classification; formerly part of "Foundry and machine-shop products." Figures for 1933 compiled for comparison with 1935.

¹⁰ New classification; formerly part of "Foundry and machine-shop products." No comparable figures available for earlier years.

¹¹ No comparable figures for 1929. See footnote 6.

¹² First classified separately in 1933 census. Comparative figures compiled for 1931, but not for earlier years.

¹³ This designation covers two industries, "Refrigerators and refrigerator cabinets, exclusive of mechanical refrigerating equipment" and "Refrigerators, mechanical," which were classified separately at censuses prior to that for 1933. As the combined figures for these industries do not cover manufacturers of industrial ice-making and refrigerating machinery, they are not comparable with the later figures for "Refrigerators and refrigerating and ice-making apparatus."

¹⁴ Figures for 1929 not strictly comparable with those for later years.

AGRICULTURAL IMPLEMENTS (INCLUDING TRACTORS)

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of tractors and of machines and appliances, usually operated by horse or other power, for plowing, harrowing, planting, cultivating, harvesting, threshing, and other operations and processes pertaining to agriculture. The figures for 1931 and 1933, as given in this report, have been revised to include data for tractor manufacturers, formerly classified in the Engines and Turbines industry.

Detailed production statistics.—The annual collection of detailed data on production and sales of agricultural implements and other farm equipment, begun in 1921 and discontinued after the preparation of the report for 1931, was resumed in 1936 (covering 1935). As detailed production statistics for 1935 will be found in the report for that year, entitled "Manufacture and Sale of Farm Equipment and Related Products," no such statistics are given in the Agricultural Implements report.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1935, 1933, AND 1931

	1935	1933 ¹	1931 ¹	PERCENT OF INCREASE OR DECREASE (—)	
				1933-1935	1931-1935
Number of establishments.....	241	194	250	24.2	-3.6
Proprietors and firm members.....	79	56	(²)	(²)	(²)
Salaried personnel, total ³	8,230	(⁴)	(²)	(⁴)	(²)
Salaried officers of corporations.....	280	(⁴)	(²)	(⁴)	(²)
Supervisory, technical, and clerical employees.....	\$ 7,950	\$ 3,753	(²)	111.8	(²)
Salaries paid, total ³	\$14,806,150	(⁴)	(²)	(⁴)	(²)
To salaried officers of corporations.....	\$1,457,090	(⁴)	(²)	(⁴)	(²)
To supervisory, technical, and clerical employees.....	\$12,349,060	\$ 6,053,375	(²)	112.3	(²)
Wage earners (average for year) ⁷	52,386	19,264	29,245	174.4	80.8
Wages.....	\$64,320,565	\$18,561,724	\$32,204,676	246.5	99.4
Cost of materials, etc., total.....	\$139,438,569	\$29,005,798	\$69,781,883	380.7	99.8
Cost of materials and supplies.....	133,708,389	(²)	(²)	(²)	(²)
Cost of fuel.....	3,804,270	(²)	(²)	(²)	(²)
Cost of purchased electric energy.....	1,925,910	(²)	(²)	(²)	(²)
Value of products.....	291,254,064	64,950,760	168,317,630	348.4	73.0
Value added by manufacture ⁸	151,815,495	35,944,962	98,535,747	322.4	64.1

¹ Percent not computed where base is less than 100.

² Revised to include data for tractor manufacturers. See "Description of the industry," above.

³ No data.

⁴ No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

⁵ Data incomplete.

⁶ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 2,313; salaries, \$5,462,624. Technical, 741; salaries, \$1,405,623. Clerical, 4,890; salaries, \$5,937,813. See sec. 10, p. 7.

⁷ Supervisory, 644; salaries, \$1,815,111. Clerical and other, 3,100; salaries, \$4,238,264. See sec. 10, p. 7.

⁸ See sec. 11, p. 7.

⁹ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

AGRICULTURAL IMPLEMENTS (INCLUDING TRACTORS) 1037

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 3 and 8, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States...	241	8, 230	52, 866	\$14,306,150	\$64,320,565	\$139,438,569	\$291,254,064	\$151,815,485
California.....	14	47	182	105, 941	218, 068	569, 138	1, 310, 764	741, 626
Georgia.....	8	65	368	119, 036	242, 945	1, 156, 282	1, 835, 356	679, 074
Illinois.....	39	4, 137	27, 804	7, 413, 021	35, 285, 774	77, 722, 485	153, 357, 026	75, 634, 541
Indiana.....	14	358	2, 293	604, 302	2, 477, 485	4, 094, 344	9, 882, 824	5, 788, 480
Kansas.....	5	17	40	21, 822	35, 413	151, 497	251, 550	100, 053
Michigan.....	13	72	583	119, 893	406, 925	942, 791	1, 801, 297	858, 506
New York.....	16	259	1, 377	532, 230	1, 489, 029	2, 422, 334	5, 918, 154	3, 495, 820
North Carolina.....	8	27	280	99, 144	229, 136	290, 492	931, 526	641, 034
Ohio.....	20	329	1, 988	702, 797	1, 982, 293	6, 667, 435	12, 353, 966	5, 686, 531
Pennsylvania.....	8	125	726	224, 470	765, 352	1, 163, 332	3, 036, 791	1, 873, 459
Virginia.....	9	34	362	63, 949	272, 253	318, 151	891, 143	572, 992
Washington.....	4	13	46	32, 942	43, 447	136, 247	182, 390	112, 143
Wisconsin.....	25	1, 828	9, 702	2, 863, 995	12, 715, 580	24, 720, 639	55, 756, 102	31, 035, 463
Other States ¹	53	919	7, 115	1, 402, 608	8, 176, 885	19, 083, 402	43, 679, 175	24, 596, 778

¹Alabama, 1 establishment; Colorado, 1; Connecticut, 2; Florida, 2; Iowa, 15; Kentucky, 3; Louisiana, 1; Maine, 2; Massachusetts, 2; Minnesota, 13; Mississippi, 1; Missouri, 1; Nebraska, 2; New Jersey, 1; South Carolina, 1; Tennessee, 4; Texas, 2; West Virginia, 1. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States													
1935.....	55, 944	43, 781	46, 750	51, 736	53, 323	54, 404	58, 994	59, 365	59, 421	59, 738	59, 769	60, 813	63, 233
1933 ¹	19, 264	(*)	(*)	17, 035	(*)	(*)	16, 888	(*)	(*)	20, 815	(*)	(*)	26, 614
States, 1935													
California.....	182	148	182	194	189	224	218	202	182	173	146	164	163
Georgia.....	368	402	400	410	352	335	331	300	338	367	384	388	401
Illinois.....	30, 081	22, 631	24, 805	26, 706	28, 233	28, 568	31, 158	32, 404	32, 457	32, 280	32, 719	33, 732	35, 183
Indiana.....	2, 376	2, 354	1, 133	2, 471	2, 711	2, 709	2, 490	2, 259	2, 198	2, 384	2, 569	2, 533	2, 702
Iowa.....	4, 634	3, 158	3, 800	4, 362	4, 830	5, 146	5, 165	5, 133	4, 820	4, 597	4, 465	4, 322	4, 616
Kansas.....	40	25	27	29	36	40	44	40	43	50	50	47	50
Kentucky.....	397	389	420	415	370	352	352	330	412	418	433	435	435
Michigan.....	683	230	335	414	601	676	787	880	869	879	408	425	493
Minnesota.....	1, 718	998	1, 322	1, 601	1, 925	2, 083	2, 253	2, 112	1, 848	1, 573	1, 630	1, 545	1, 732
Missouri.....	59	59	54	69	73	67	96	44	38	34	32	34	69
New York.....	1, 432	1, 285	1, 310	1, 350	1, 346	1, 385	1, 325	1, 371	1, 381	1, 580	1, 576	1, 736	1, 530
North Carolina.....	280	247	257	257	208	251	274	276	280	310	317	307	281
Ohio.....	2, 004	1, 421	1, 737	1, 865	2, 600	2, 704	2, 533	1, 745	1, 880	1, 927	1, 737	1, 859	1, 995
Pennsylvania.....	726	615	653	716	763	775	775	736	746	763	750	707	709
Tennessee.....	382	443	437	433	427	383	276	346	342	358	373	382	384
Virginia.....	362	397	380	390	363	335	342	287	337	361	374	388	393
Washington.....	46	21	37	48	51	61	69	64	57	60	35	29	29
Wisconsin.....	10, 094	8, 685	9, 174	9, 618	7, 892	8, 005	10, 218	10, 574	10, 946	11, 387	11, 418	11, 468	11, 748

*Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

¹As the averages for 1935 given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

²Revised.

1302 - 1314

BUSINESS MACHINES

CASH REGISTERS, ADDING AND CALCULATING MACHINES, AND OTHER BUSINESS MACHINES EXCEPT TYPEWRITERS

TYPEWRITERS AND PARTS

[A preliminary report for these industries was issued Nov. 5, 1936]

Descriptions of the industries.—This report covers two industries, namely, "Cash Registers, Adding and Calculating Machines, and Other Business Machines Except Typewriters" and "Typewriters and Parts."

The principal products of the establishments classified in the first-named industry are mechanical devices for performing such operations as adding, calculating, counting, change-making, card sorting and tabulating, check writing and canceling, addressing and mailing, and duplicating or manifolding. Prior to 1935, addressing and mailing machines, check-writing and -canceling machines, and duplicating or manifolding machines were classified in the former "Foundry and Machine-Shop Products" industry, and numbering machines were treated as products of the "Hand Stamps and Stencils and Brands" industry. These classes of machines have been transferred to "Cash Registers, Adding and Calculating Machines, and Other Business Machines Except Typewriters"; and taxicab meters, formerly classified in this industry, have been assigned to "Instruments and Apparatus, Professional, Scientific, Commercial, and Industrial." The statistics for 1933, as given in this report, have been revised for comparison with 1935; but no similar revisions of the figures for years prior to 1933 have been made.

The Typewriters and Parts industry embraces establishments engaged primarily in the manufacture of typewriters and typewriter parts and attachments and in the rebuilding of typewriters.

TABLE 1.—GENERAL STATISTICS FOR THE INDUSTRIES AS A GROUP AND FOR EACH INDUSTRY, FOR THE UNITED STATES: 1935 AND 1933

	1935	1933 ¹	PERCENT OF INCREASE, 1933-1935
THE INDUSTRIES AS A GROUP			
Number of establishments.....	113	87	(²)
Proprietors and firm members.....	13	(³)	(³)
Salaried personnel, total ⁴	6,370	(³)	(³)
Salaried officers of corporations.....	154	(³)	(²)
Supervisory, technical, and clerical employees.....	\$ 6,216	(³)	(³)
Salaries paid, total ⁴	\$12,173,882	(³)	(³)
To salaried officers of corporations.....	\$1,352,821	(³)	(³)
To supervisory, technical, and clerical employees.....	\$10,821,061	(³)	(³)
Wage earners (average for year) ⁶	33,866	22,039	53.7
Wages.....	\$40,323,302	\$22,491,256	79.3
Cost of materials, etc., total.....	\$22,400,753	\$11,105,478	101.7
Cost of materials, supplies, and containers.....	\$21,325,670	(⁷)	(⁷)
Cost of fuel.....	\$591,104	(⁷)	(⁷)
Cost of purchased electric energy.....	\$483,979	(⁷)	(⁷)
Value of products.....	\$128,596,985	\$67,295,223	91.1
Value added by manufacture ⁸	\$106,196,232	\$56,189,745	89.0
CASH REGISTERS, ADDING AND CALCULATING MACHINES, AND OTHER BUSINESS MACHINES EXCEPT TYPEWRITERS			
Number of establishments.....	93	73	(²)
Proprietors and firm members.....	14	(³)	(³)
Salaried personnel, total ⁴	4,848	(³)	(³)
Salaried officers of corporations.....	148	(¹)	(³)
Supervisory, technical, and clerical employees.....	\$ 4,700	(³)	(³)
Salaries paid, total ⁴	\$10,010,232	(³)	(³)
To salaried officers of corporations.....	\$1,276,683	(³)	(³)
To supervisory, technical, and clerical employees.....	\$ 8,733,549	(³)	(³)
Wage earners (average for year) ⁶	18,463	12,448	43.4
Wages.....	\$23,695,902	\$14,926,174	58.8
Cost of materials, etc., total.....	\$13,770,767	\$7,849,014	75.4
Cost of materials, supplies, and containers.....	\$13,164,313	(⁷)	(⁷)
Cost of fuel.....	\$355,569	(⁷)	(⁷)
Cost of purchased electric energy.....	\$250,885	(⁷)	(⁷)
Value of products.....	\$94,738,542	\$50,830,606	86.4
Value added by manufacture ⁸	\$80,967,775	\$42,981,592	88.4
TYPEWRITERS AND PARTS			
Number of establishments.....	20	14	(³)
Proprietors and firm members.....	4	-----	-----
Salaried personnel, total ⁴	1,522	(³)	(³)
Salaried officers of corporations.....	6	(³)	(³)
Supervisory, technical, and clerical employees.....	¹⁰ 1,516	¹¹ 770	96.9
Salaries paid, total ⁴	\$2,163,650	(³)	(³)
To salaried officers of corporations.....	\$76,138	(³)	(³)
To supervisory, technical, and clerical employees.....	¹⁰ \$2,087,512	¹¹ \$963,487	116.7
Wage earners (average for year) ⁶	15,398	9,591	60.9
Wages.....	\$16,632,400	\$7,565,082	119.5

For footnotes, see end of table.

TABLE 1.—GENERAL STATISTICS FOR THE INDUSTRIES AS A GROUP AND FOR EACH INDUSTRY, FOR THE UNITED STATES: 1935 AND 1933—Continued

	1935	1933 ¹	PERCENT OF INCREASE, 1933-1935
TYPEWRITERS AND PARTS—continued			
Cost of materials, etc., total.....	\$8, 620, 986	\$3, 260, 464	165. 0
Cost of materials, supplies, and containers.....	\$8, 161, 357	(?)	(?)
Cost of fuel.....	\$235, 535	(?)	(?)
Cost of purchased electric energy.....	\$233, 094	(?)	(?)
Value of products.....	\$33, 858, 443	\$16, 464, 617	105. 6
Value added by manufacture ²	\$25, 228, 457	\$13, 208, 153	91. 0

¹ See "Descriptions of the industries," p. 1038.² Percent not computed where base is less than 100.³ Data incomplete.⁴ No data for employees of central administrative offices are included in the figures for either year. See sec. 10, p. 7.⁵ Supervisory, 1,104; salaries, \$3,676,132. Technical, 380; salaries, \$1,022,128. Clerical, 4,732; salaries, \$6,122,801.⁶ See sec. 11, p. 7.⁷ Not reported separately.⁸ Value of products less cost of materials, etc., fuel, and purchased electric energy. See sec. 18, p. 11.⁹ Supervisory, 795; salaries, \$2,840,815. Technical, 345; salaries, \$934,440. Clerical, 3,500; salaries, \$4,958,294.¹⁰ Supervisory, 309; salaries, \$835,317. Technical, 85; salaries, \$87,688. Clerical, 1,172; salaries, \$1,104,507. See sec. 10, p. 7.¹¹ Supervisory, 212; salaries, \$540,541. Clerical and other, 558; salaries, \$422,946. See sec. 10, p. 7.

TABLE 2.—SUMMARY FOR THE INDUSTRIES, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 4 and 8, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
CASH REGISTERS, ADDING AND CALCULATING MACHINES, AND OTHER BUSINESS MACHINES EXCEPT TYPEWRITERS								
United States.....	93	4, 848	18, 463	\$10,010,232	\$23,695,902	\$13,770,767	\$94,738,542	\$30,967,775
Connecticut.....	5	432	1, 728	672, 270	1, 915, 161	1, 410, 876	5, 520, 640	4, 100, 773
Illinois.....	15	427	1, 602	1, 042, 157	1, 914, 074	1, 076, 090	11, 052, 077	9, 076, 887
Missouri.....	4	15	44	17, 936	41, 978	67, 506	130, 314	81, 808
New York.....	32	919	3, 930	1, 791, 250	4, 842, 859	2, 849, 670	11, 208, 248	8, 358, 578
Ohio.....	11	1, 772	6, 238	3, 358, 998	8, 413, 255	4, 656, 205	39, 902, 574	35, 246, 369
Other States ¹	26	1, 283	4, 926	3, 127, 621	6, 568, 575	2, 811, 300	20, 914, 780	24, 103, 420
TYPEWRITERS AND PARTS								
United States.....	20	1, 522	15, 398	2, 163, 650	16, 632, 400	8, 629, 986	33, 858, 443	25, 228, 457
Connecticut.....	3	958	8, 976	1, 277, 729	9, 745, 245	4, 137, 488	20, 082, 713	15, 945, 225
Other States ²	17	564	6, 422	885, 921	6, 887, 155	4, 492, 498	13, 775, 730	9, 283, 232

¹ California, 5 establishments; Florida, 1; Indiana, 1; Massachusetts, 4; Michigan, 4; Minnesota, 1; New Jersey, 4; Pennsylvania, 2; Virginia, 1; Wisconsin, 3.² California, 1 establishment; Illinois, 2; Massachusetts, 1; New York, 12; Washington, 1.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE INDUSTRIES, BY STATES: 1935
 [See secs. 11 and 23, pp. 7 and 12]

		NUMBER REPORTED FOR—												
		January	February	March	April	May	June	July	August	September	October	November	December	
THE INDUSTRIES AS A GROUP	Average number employed during year	33,866	32,824	33,314	33,199	33,235	33,003	33,117	33,295	34,003	35,142	36,001	36,218	
	United States.....	18,468	17,999	18,268	18,443	18,228	18,120	18,137	18,226	18,511	18,919	19,305	19,498	
CASH REGISTERS, ADDING AND CALCULATING MACHINES, AND OTHER BUSINESS MACHINES EXCEPT TYPEWRITERS	California.....	549	592	603	620	604	579	561	571	590	560	561	547	
	Connecticut.....	1,606	1,675	1,709	1,704	1,732	1,715	1,666	1,672	1,731	1,800	1,847	1,875	
	Illinois.....	1,456	1,508	1,561	1,670	1,649	1,632	1,632	1,634	1,613	1,612	1,616	1,646	
	Massachusetts.....	301	284	301	309	301	298	299	298	298	302	311	331	
	Michigan.....	3,135	3,118	3,125	3,117	3,087	3,099	3,091	3,089	3,146	3,164	3,209	3,251	
	Missouri.....	44	31	34	35	47	39	40	36	48	59	62	67	
	New Jersey.....	766	686	684	719	735	746	782	798	797	841	854	862	
	New York.....	3,930	3,771	3,894	3,932	3,943	3,913	3,873	3,905	3,943	4,037	4,062	4,043	
	Ohio.....	6,238	6,197	6,210	6,183	5,985	5,955	6,056	6,078	6,199	6,390	6,627	6,702	
	Wisconsin.....	94	83	96	97	92	91	91	93	93	98	101	103	
	TYPEWRITERS AND PARTS	United States.....	15,398	14,825	15,046	14,766	15,007	14,883	14,980	15,069	15,492	16,223	16,696	16,729
		Connecticut.....	8,976	8,351	8,662	8,789	8,912	8,744	8,770	8,691	8,943	9,521	9,980	9,956
		New York.....	5,878	5,988	5,854	5,423	5,549	5,596	5,666	5,838	6,001	6,149	6,212	6,231

TABLE 4.—PRODUCTS, BY KIND, NUMBER, AND VALUE, FOR THE UNITED STATES: 1935 AND 1933

	1935	1933
1. "Cash Registers, Adding and Calculating Machines, and Other Business Machines Except Typewriters" and "Typewriters and Parts" industries, all products, total value.....	\$128,596,985	¹ \$67,295,223
2. Cash registers, etc., typewriters, and parts and attachments, value.....	\$117,195,524	\$62,313,374
3. Other products (not normally belonging to the industries), including supplies, value.....	\$10,728,707	} \$4,981,849
4. Receipts for repair work.....	\$672,754	
5. Cash registers, etc., typewriters, and parts and attachments, made as secondary products in other industries, value.....	\$664,771	\$138,308
Cash registers, etc., typewriters, and parts and attachments, aggregate value (sum of 2 and 5).....	\$117,860,295	¹ \$62,451,682
Adding machines:		
Number.....	104,224	39,842
Value.....	\$8,761,274	\$3,298,621
Listing-adding-bookkeeping machines and typewriter-bookkeeping-billing machines: ²		
Number.....	12,363	6,862
Value.....	\$10,288,555	\$3,836,718
Typewriters:		
Portable:		
Number.....	352,227	144,151
Value.....	\$8,872,990	\$2,914,690
Standard, including long-carriage:		
Number.....	459,093	264,652
Value.....	\$19,674,453	\$10,376,700
Calculating machines:		
Number.....	33,726	9,269
Value.....	\$9,092,686	\$2,143,004
Cash registers; card punching, sorting, and tabulating machines; change-making machines and coin counters; fare registers and fare boxes; ticket-counting machines; postal motors ²	\$26,526,994	} \$24,007,728
Other adding, calculating, and computing devices.....	\$2,374,034	
Addressing and mailing machines.....	\$2,365,454	\$2,203,164
Check-writing, canceling, and perforating machines.....	\$1,588,276	³ \$731,182
Duplicating machines (mimeographs, multigraphs, etc.).....	\$5,341,417	\$2,544,596
Parts and attachments for typewriters.....	\$4,152,104	\$1,859,364
Parts and attachments for other business machines.....	\$8,240,493	\$3,006,023
Rebuilt typewriters.....	\$2,214,566	\$707,434
Rebuilt machines other than typewriters, and experimental work ²	\$5,672,030	\$3,554,767
Numbering machines.....	\$699,341	(⁴)
Other business machines (not including dictating machines).....	\$2,095,578	\$467,643

¹ Not strictly comparable with 1935 figure. See footnotes 3 and 4.

² Figures combined to avoid disclosing production of individual establishments.

³ Value of check-writing machines only.

⁴ No data.

1303

ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES

[A preliminary report for this industry was issued May 21, 1937]

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of machinery, apparatus, and supplies for employment directly in the generation, storage, transmission, or utilization of electric energy. It does not cover establishments whose principal products are electric-lighting fixtures, electric signs, or motor-driven tools, mechanical refrigerators, washing machines, and other machines and appliances constructed with built-in motors or other electrical equipment (such machines and appliances being classified for census purposes in other industries), unless the electrical equipment is made by the same manufacturers and contributes at least one-half of the total value of the machines or appliances. (See table 16, p. 1060.) The number of establishments shown in this report is therefore considerably smaller than the total number of manufacturers of electrical equipment.

Statistics for prior Census years.—Manufacturers of radio apparatus, now classified in the Radio Apparatus and Phonographs industry, were classified in the Electrical Machinery, Apparatus, and Supplies industry in the Censuses for 1929 and earlier years. No comparative figures for years prior to 1931 are, therefore, available for either industry.

Detailed statistics of products (tables 4 to 15).—For those classes of products that are manufactured principally in the "Electrical Machinery, Apparatus, and Supplies" industry, the detailed statistics in tables 4 to 15 cover, in addition to the output of establishments assigned to this industry, electrical equipment made as secondary products (so far as separately reported) by establishments engaged primarily in other lines of manufacture. (See sec. 14, p. 8.) The most important example of such secondary production is insulated wire and cable, reported, for 1935, to the value of \$55,726,589, chiefly by manufacturers of plain wire.

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TABLE I.—GENERAL STATISTICS, FOR THE UNITED STATES: 1935, 1933, AND 1931

	1935	1933	1931	PERCENT OF INCREASE OR DECREASE (-)	
				1933-1935	1931-1933
Number of establishments.....	1,393	1,209	1,379	15.2	-12.3
Proprietors and firm members.....	319	321	(1)	-0.0	(1)
Salaried personnel, total ¹	43,543	(²)	(1)	(³)	(1)
Salaried officers of corporations.....	1,957	(³)	(1)	(³)	(1)
Supervisory, technical, and clerical employees.....	⁴ 41,586	⁵ 33,048	(1)	25.8	(1)
Salaries paid, total ¹	\$91,762,647	(³)	(1)	(³)	(1)
To salaried officers of corporations.....	\$13,164,101	(³)	(1)	(³)	(1)
To supervisory, technical, and clerical employees.....	⁴ \$78,598,546	⁵ \$58,124,094	(1)	35.2	(1)
Wage earners (average for year) ⁶	179,641	130,857	180,106	37.3	-27.3
Wages.....	\$198,046,269	\$115,749,609	\$204,488,041	71.1	-43.4
Cost of materials, etc., total.....	370,903,958	212,513,709	337,124,534	74.5	-37.0
Cost of materials and supplies.....	355,537,096	(1)	(1)	(1)	(1)
Cost of fuel.....	7,002,801	(1)	(1)	(1)	(1)
Cost of purchased electric energy.....	8,364,061	(1)	(1)	(1)	(1)
Value of products.....	960,430,400	553,431,450	995,010,213	73.5	-44.4
Value added by manufacture ⁷	589,526,442	340,917,741	657,885,070	72.0	-48.2

¹ No data.² No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.³ Data incomplete.⁴ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 8,273; salaries, \$24,732,976. Technical, 6,367; salaries, \$16,552,088. Clerical, 26,946; salaries, \$37,313,452. See sec. 10, p. 7.⁵ Supervisory, 8,592; salaries, \$24,105,414. Clerical and other, 24,456; salaries, \$34,018,080. See sec. 10, p. 7.⁶ See sec. 11, p. 7.⁷ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

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TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 2 and 7, table 1]

	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, etc., fuel, and purchased energy	Value of products	Value added by manufacture
United States...	1,393	43,543	179,641	\$91,762,647	\$198,046,269	\$370,903,958	\$960,430,400	\$589,526,442
Alabama.....	4	18	81	41,541	61,486	209,154	406,244	197,090
California.....	106	673	2,609	1,360,591	2,845,591	8,445,362	18,065,423	9,620,661
Colorado.....	5	14	44	24,206	43,143	133,042	270,157	137,115
Connecticut.....	51	2,445	12,716	4,728,171	12,225,184	26,745,027	59,467,597	32,722,570
District of Columbia.....	3	5	17	13,492	19,908	66,625	115,271	48,646
Florida.....	7	5	32	4,782	24,261	58,290	115,032	56,742
Georgia.....	4	21	50	42,177	56,491	164,029	401,426	237,397
Illinois.....	201	6,324	19,754	14,445,465	22,716,317	31,589,053	101,376,021	69,786,968
Indiana.....	32	2,518	14,415	4,820,313	16,513,353	31,234,891	73,431,194	42,196,303
Iowa.....	10	153	364	264,033	363,135	839,036	2,176,027	1,336,991
Kansas.....	3	4	29	8,528	24,051	78,003	140,399	62,396
Kentucky.....	11	161	424	252,013	383,149	1,013,161	2,596,104	1,582,943
Louisiana.....	3	3	11	2,700	14,952	25,750	54,554	28,804
Massachusetts.....	74	4,587	16,342	9,097,263	18,887,535	28,087,054	83,188,097	55,101,043
Michigan.....	57	721	3,674	1,600,298	3,715,382	8,078,826	18,538,841	10,460,015
Minnesota.....	23	202	976	407,055	1,043,096	2,601,880	6,483,159	3,881,279
Missouri.....	45	1,446	6,376	2,624,271	5,940,119	13,434,757	34,792,164	21,357,407
New Hampshire.....	5	20	205	47,475	163,733	233,783	533,317	299,534
New Jersey.....	110	4,533	16,085	10,155,735	17,380,270	32,518,982	91,709,000	59,190,018
New York.....	217	6,159	23,002	13,043,771	24,996,117	44,095,584	111,405,935	67,310,351
North Carolina.....	4	11	39	24,132	35,068	108,580	130,352	21,772
Ohio.....	161	5,294	28,436	11,357,393	32,366,333	64,221,139	161,267,421	97,046,282
Oregon.....	8	20	63	37,643	61,883	146,963	287,982	141,019
Pennsylvania.....	121	5,612	23,480	12,243,327	27,151,093	51,515,015	134,416,923	82,960,908
Rhode Island.....	14	189	1,611	417,412	1,507,330	5,284,240	9,544,847	4,260,607
Tennessee.....	6	23	153	35,377	136,024	549,864	1,478,651	928,787
Texas.....	20	60	185	108,302	144,417	556,054	1,078,668	522,614
Washington.....	10	25	95	43,370	100,745	330,629	631,099	300,470
West Virginia.....	7	22	263	46,845	286,719	1,621,855	2,312,543	690,688
Wisconsin.....	45	1,839	6,810	3,363,410	7,449,055	11,883,979	32,022,050	20,138,071
Other States ¹	26	436	1,300	1,071,506	1,390,627	5,033,351	11,994,902	6,961,551

¹ Arkansas, 2 establishments; Maryland, 12; Mississippi, 1; Nebraska, 2; North Dakota, 1; Oklahoma, 3; Utah, 1; Vermont, 1; Virginia, 3. See sec. 23, p. 12.

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year ¹	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	Septem-ber	October	Novem-ber	Decem-ber
<i>United States</i>	179,682	163,218	167,166	171,221	174,182	176,963	174,775	174,685	179,873	189,754	198,085	196,852	190,405
1933.....	130,857	(*)	(*)	105,184	(*)	(*)	120,325	(*)	(*)	106,373	(*)	(*)	133,227
<i>States, 1935</i>													
Alabama.....	81	70	73	75	84	96	79	83	83	87	93	80	85
California.....	2,008	2,303	2,321	2,377	2,486	2,604	2,732	2,779	2,865	2,885	2,824	2,891	2,864
Colorado.....	44	39	34	37	42	42	41	45	47	50	54	58	45
Connecticut.....	12,716	10,615	11,292	11,707	11,955	12,554	12,895	13,993	14,377	14,377	14,724	14,607	14,357
District of Columbia.....	17	17	17	17	17	17	16	16	16	16	17	17	17
Florida.....	32	32	32	32	31	31	31	31	31	31	32	33	33
Georgia.....	50	49	51	51	45	43	46	48	48	44	51	56	54
Illinois.....	19,797	17,886	18,444	18,863	19,414	19,224	19,601	20,248	21,200	22,464	22,464	21,958	20,509
Indiana.....	14,415	13,768	13,951	14,288	14,288	13,785	13,340	13,900	15,182	15,048	15,048	15,020	13,069
Iowa.....	364	296	284	264	351	355	400	418	445	421	439	439	453
Kansas.....	29	27	28	28	30	30	27	30	31	35	35	28	29
Kentucky.....	424	398	377	417	438	445	484	404	460	463	446	446	433
Louisiana.....	11	9	11	11	18	19	18	16	5	9	5	5	4
Maryland.....	950	969	964	978	1,001	1,002	1,028	1,028	1,044	1,023	1,017	1,017	1,013
Massachusetts.....	16,842	13,814	14,321	14,722	15,226	15,706	16,076	16,984	18,322	19,014	18,752	17,659	17,659
Michigan.....	3,674	3,330	3,400	3,484	3,484	3,609	3,750	3,983	3,916	4,179	4,242	4,242	4,004
Minnesota.....	869	814	762	755	814	888	932	1,086	1,174	1,253	1,191	1,191	1,107
Missouri.....	6,376	5,808	6,412	6,533	6,629	6,552	6,446	6,302	6,424	6,623	6,576	6,576	6,580
New Hampshire.....	205	181	189	193	195	199	202	202	215	202	238	238	241
New Jersey.....	16,084	14,912	15,083	15,245	15,606	15,622	15,646	15,958	17,265	18,086	17,275	17,275	16,980
New York.....	23,021	20,296	20,728	21,517	21,989	22,125	22,351	22,966	24,795	26,432	26,946	26,946	24,227
North Carolina.....	39	34	35	36	36	36	40	43	43	44	44	44	45
Ohio.....	28,428	27,706	28,619	29,019	29,393	29,842	29,142	26,834	28,061	29,374	30,160	30,160	30,332
Oklahoma.....	69	67	56	58	60	67	68	69	73	79	80	80	78
Oregon.....	63	54	55	61	64	69	68	65	62	67	69	69	68

Pennsylvania.....	23,480	22,870	22,994	23,171	23,711	23,931	23,477	23,187	23,252	23,492	24,156	24,012	23,501
Rhode Island.....	1,598	1,479	1,579	1,557	1,533	1,564	1,586	1,589	1,600	1,646	1,702	1,731	1,605
Tennessee.....	153	120	141	136	123	125	136	157	185	198	184	169	165
Texas.....	185	184	167	157	149	158	166	178	196	199	236	223	211
Virginia.....	36	39	38	37	33	34	34	34	36	38	85	36	36
Washington.....	95	90	89	86	85	85	87	87	98	101	106	120	109
West Virginia.....	263	243	246	243	240	256	266	262	274	271	271	291	296
Wisconsin.....	6,810	5,925	6,316	6,644	6,438	6,269	6,201	6,585	6,931	7,488	7,887	7,731	7,308

* Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

† As the 1935 averages given in this table are derived from the figures for the 12 months in the calendar year, some of them differ slightly from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

TABLE 4.—PRODUCTS, BY CLASS AND VALUE: 1935 AND 1933

	1935	1933
1. Electrical Machinery, Apparatus, and Supplies industry, all products, total value.....	\$900,430,400	\$553,431,450
2. Electrical machinery, apparatus, and supplies.....	825,332,012	¹ 488,128,433
3. Other products (not normally belonging to the industry).....	135,098,388	¹ 65,303,012
4. Electrical machinery, apparatus, and supplies made as secondary products in other industries.....	92,883,917	¹ 41,307,934
Electrical machinery, apparatus, and supplies, aggregate value (sum of 2 and 4).....	918,215,929	¹ 529,436,377
Batteries and battery parts and supplies (table 6).....	85,717,908	67,444,181
Conduits and fittings (table 9).....	23,095,116	¹ 14,691,543
Control apparatus (table 10).....	28,229,582	15,164,691
Fans (table 10).....	6,605,004	2,437,347
Fuses and fuse blocks (table 9).....	5,013,287	4,825,478
Generators and motor-generator sets (table 5).....	46,837,578	¹ 16,329,650
Household apparatus and appliances (table 13).....	72,704,100	36,767,481
Industrial and commercial apparatus and appliances (table 12).....	22,192,259	¹ 8,600,354
Insulated wire and cable and armored conductor (table 9).....	122,225,861	¹ 65,637,308
Lamps, incandescent-flament (not including sockets and other fittings), X-ray tubes, and other completely sealed glass lighting units (table 11).....	67,551,323	¹ 50,141,611
Measuring instruments, meters, relays, and instrument and meter transformers (table 8).....	23,486,182	9,328,374
Motors (including automotive starter-motors but not including motor-control apparatus) and motor parts and supplies (table 10).....	97,908,087	¹ 64,637,921
Switchboards, circuit breakers, and switches (table 7).....	36,188,369	16,243,280
Transformers, induction voltage regulators, and current-limiting reactors (table 6).....	34,356,604	13,093,590
Wiring devices (table 14).....	24,683,234	17,796,209
Wiring supplies (table 14).....	12,344,755	4,704,831
Miscellaneous electrical machinery, apparatus, and supplies, total (table 15).....	209,026,620	¹ 131,658,413
Electrotherapeutic and electromedical apparatus.....	9,243,223	4,388,544
Ignition apparatus for internal-combustion engines.....	40,527,691	23,432,291
Telephone and telegraph apparatus.....	43,684,201	21,180,030
Other.....	116,671,505	¹ 82,654,548

¹ Revised.

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TABLE 5.—GENERATORS AND MOTOR-GENERATOR SETS—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933

	1935	1933
Total value.....	\$46, 837, 578	¹ \$16, 329, 650
Generator sets, steam-turbine driven:		
Land installation, under 7,500 kw:		
10 kw or over, but under 500 kw:		
Number.....	27	
Value.....	\$110, 312	
500 kw or over, but under 7,500 kw:		
Number reported:		
Number.....	60	
Value.....	\$2, 199, 315	
Number not reported, value.....	\$508, 224	
All other steam-turbine-driven generator sets: ²		
Number reported:		
Number.....	123	
Value.....	\$4, 718, 930	
Number not reported, value.....	\$286, 959	
Generators, other than steam-turbine-driven:		
Alternating-current:		
Under 2,000 kv-a:		
Number reported:		
Number.....	1, 645	2, 061
Value.....	\$1, 085, 957	\$3, 818, 684
Number not reported, value.....	\$253, 775	
2,000 kv-a and over:		
Number reported:		
Number.....	25	
Value.....	\$3, 775, 634	
Number not reported, value.....	\$480, 823	
Direct-current:		
5 kw and over, but under 200 kw:		
Number.....	651	
Value.....	\$339, 082	
200 kw and over:		
Number reported:		
Number.....	96	
Value.....	\$522, 909	
Number not reported, value.....	\$559, 947	
Generators for railway-car lighting (axle-driven), for locomotive headlights (steam-turbine driven), and for electroplating, value.....	\$1, 459, 584	\$55, 826
Self-contained power and lighting outfits (such as farm lighting outfits), comprising engine, generator, and control, excluding storage battery:		
Number reported:		
Number.....	14, 674	5, 772
Value.....	\$2, 397, 257	\$945, 181
Number not reported, value.....	\$433, 340	
Automotive generators for battery charging, synchronous condensers, and frequency and phase converters, value.....	\$15, 410, 919	\$7, 973, 964
Parts and supplies for generators, value.....	\$6, 383, 073	\$1, 334, 909
Motor-generator sets and dynamotors (not including arc welding sets):		
Under 200 kw:		
Number.....	18, 385	
Value.....	\$2, 530, 303	
200 kw and over:		
Number reported:		
Number.....	116	5, 736
Value.....	\$2, 802, 063	\$2, 201, 086
Number not reported.....	\$529, 192	

¹ Revised.

² Figures for all marine installations and for land installations 7,500 kw and over combined to avoid disclosing approximations of data for individual establishments.

TABLE 6.—TRANSFORMERS, CURRENT-LIMITING REACTORS, INDUCTION VOLTAGE REGULATORS, AND BATTERIES—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933

	1935	1933
Aggregate value.....	\$120,074,572	\$80,537,871
Transformers, current-limiting reactors, and induction-voltage regulators (except measuring-instrument transformers), total value.....	\$34,350,604	\$13,093,690
Transformers employing oil or other insulating liquid, and air-blast transformers:		
Distribution transformers, ½ to 500 kilovolt-amperes:		
Number.....	107,765	51,581
Value.....	\$15,528,600	\$7,358,490
Power transformers, 501 kilovolt-amperes and over:		
Number reported:		
Number.....	857	441
Value.....	\$5,805,971	\$2,626,730
Number not reported, value.....	\$507,740	
All other transformers, current-limiting reactors, and induction and step-feeder voltage regulators, value.....	\$1,695,743	
Natural-draft air-cooled transformers:		
Radio transformers:		
For receiving sets:		
Number reported:		
Number.....	6,705,346	
Value.....	\$3,610,126	
Number not reported, value.....	\$1,267,982	
For transmitting sets:		
Number.....	200,028	
Value.....	\$507,908	
Ignition and luminous-tube transformers:		
Number reported:		
Number.....	434,946	
Value.....	\$2,045,212	
Number not reported, value.....	\$896,094	\$3,078,470
Signaling, doorbell, and toy transformers:		
Number.....	409,251	
Value.....	\$331,937	
Street-lighting transformers—individual-lamp and constant-current and regulating:		
Number reported:		
Number.....	10,004	
Value.....	\$400,896	
Number not reported, value.....	\$71,339	
All other:		
Number reported:		
Number.....	300,964	
Value.....	\$1,239,278	
Number not reported, value.....	\$238,068	
Batteries, total value.....	\$85,717,968	\$67,444,181
Storage batteries, complete units:		
Motor-vehicle:		
Number reported:		
Number.....	14,509,541	9,030,254
Value.....	\$52,375,518	\$39,519,185
Number not reported, value.....	\$1,306,839	\$5,431,252
Radio, 3- to 13-plate size:		
Number.....	148,060	
Value.....	\$423,775	
Other types:		
Number reported:		
Number.....	585,320	\$6,200,776
Value.....	\$9,512,989	
Number not reported, value.....	\$1,131,272	
Parts and supplies, value.....	\$1,150,899	\$912,140
Dry batteries:		
Six-inch, 1.5-volt:		
Number.....	19,125,638	
Value.....	\$2,793,617	
All other:		
Number.....	442,507,376	\$12,920,001
Value.....	\$12,513,537	
Not reported by kind, and parts and supplies, value.....	\$1,800,746	
Wet primary batteries, including parts and supplies, value.....	\$2,708,776	\$2,385,827

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TABLE 7.—SWITCHBOARD APPARATUS (CIRCUIT BREAKERS, PANELBOARDS, SWITCHBOARDS, AND SWITCHES)—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935

[No comparable figures available for 1933, except for total value, \$16,243,280]

	1935		1935
Total value.....	\$36,188,369	Switchboard apparatus—Continued.	
Switchboard apparatus (circuit breakers, panelboards, switchboards, and switches):		Circuit breakers, attachments, and parts—Continued.	
Panelboards and distribution boards:		Outdoor oil circuit breakers, over 34,500 volts:	
Panelboards, including enclosing cabinets (fuse-only type panelboards; combination switch and fuse panelboards, all types; circuit-breaker panelboards, all types):		Number.....	244
Number reported:		Value.....	\$2,264,713
Number.....	83,948	Air circuit breakers, 1,200 volts and under, enclosed in housings of insulating material:	
Value.....	\$1,325,505	Number reported:	
Number not reported, value.....	\$1,642,634	Number.....	91,037
Enclosed branch-circuit cut-outs, not including load centers, value.....	\$339,238	Value.....	\$1,726,214
Distribution switchboards, value.....	\$1,204,076	Number not reported, value.....	\$56,145
Theatre switchboards, value.....	\$210,983	All other, including air circuit breakers over 1,200 volts, value.....	\$877,020
Other, and those not reported separately, value.....	\$1,458,444	Power switchboards and parts:	
Knife switches (600 volts and under), open and enclosed, value.....	\$4,255,001	Automatic panels, value.....	\$1,096,413
Time switches:		Metal-enclosed switch gear using oil circuit breakers, value.....	\$2,917,827
Number reported:		Metal-enclosed switch gear using air circuit breakers, value.....	\$439,656
Number.....	272,368	Metal-enclosed bus-bar structures made for sale separately, value.....	\$476,818
Value.....	\$1,017,261	Manual panels:	
Number not reported, value.....	\$109,395	Number reported:	
Circuit breakers, attachments, and parts:		Number.....	2,553
Indoor oil circuit breakers:		Value.....	\$2,061,122
Number reported:		Number not reported, value.....	\$154,094
Number.....	3,363	Relays, regulators, and miscellaneous switchboard devices, value.....	\$1,861,848
Value.....	\$1,858,847	Miscellaneous panelboard and switchboard equipment not reported separately, value.....	\$1,715,171
Number not reported, value.....	\$298,851	Power switching equipment, not including power connectors and fuse cut-outs:	
Outdoor oil circuit breakers, 34,500 volts and below:		Outdoor, value.....	\$2,014,063
Number reported:		Indoor, value.....	\$860,214
Number.....	738	Power connectors, value.....	\$299,610
Value.....	\$837,168	Fuse cut-outs and fuse links, 2,300 to 15,000 volts, a.c. service, value.....	\$2,710,342
Number not reported, value.....	\$90,696		

TABLE 8.—MEASURING INSTRUMENTS, METERS, RELAYS, AND INSTRUMENT AND METER TRANSFORMERS—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933

	1935	1933
Aggregate value.....	\$23,486,182	\$9,328,374
Measuring instruments and meters, total value.....	\$20,732,038	\$8,270,848
Demand meters:		
Number.....	55,221	33,296
Value.....	\$1,546,638	\$381,801
Watt-hour meters, alternating-current:		
Number.....	1,107,895	316,254
Value.....	\$11,832,835	\$3,540,114
Watt-hour meters, direct-current, and ampere-hour meters:		
Number.....	2,430	12,395
Value.....	\$86,925	\$70,807
Indicating instruments:		
Switchboard:		
Number.....	49,344	15,274
Value.....	\$955,335	\$411,978

For footnotes, see end of table.

TABLE 8.—MEASURING INSTRUMENTS, METERS, RELAYS, AND INSTRUMENT AND METER TRANSFORMERS—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933—Continued

	1935	1933
Measuring instruments and meters—Continued.		
Indicating instruments—Continued.		
Graphic recording meters:		
Number.....	5, 169	1, 101
Value.....	\$522, 533	\$152, 182
Miniature meters, 3½ inches and under (not including meters for motor vehicles):		
Number.....	769, 821	712, 699
Value.....	\$1, 750, 933	\$1, 032, 519
Portable meters (not including pocket meters for battery and radio testing):		
Number.....	37, 722	
Value.....	\$932, 843	\$1, 725, 038
Laboratory testing instruments, value.....	\$1, 936, 233	
Other indicating instruments:		
Number reported:		
Number.....	472, 250	
Value.....	\$1, 052, 281	(¹)
Number not reported, value.....	\$116, 432	
Miscellaneous meters, not separately reported, value.....		\$456, 609
Relays (excluding industrial motor-control and telephone):		
Number reported:		
Number.....	14, 770	6, 659
Value.....	\$392, 363	\$166, 333
Number not reported, value.....	\$272, 123	
Instrument and meter transformers:		
Number.....	59, 162	34, 791
Value.....	\$2, 089, 658	\$891, 193

¹ Revised.

² Not reported separately.

TABLE 9.—INSULATED WIRE AND CABLE, CONDUITS AND FITTINGS, AND FUSES AND FUSE BLOCKS—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933

	1935	1933
Aggregate value.....	\$150, 334, 264	\$85, 154, 329
Insulated wire and cable and armored conductor, total value.....	122, 225, 861	65, 637, 308
Rubber-insulated:		
Lighting and power circuit:		
Braided.....		
Leaded.....	25, 477, 664	12, 787, 678
Telephone.....	4, 601, 298	3, 088, 049
Flexible cords (rubber-insulated; cotton, silk, and rayon covered).....	4, 611, 445	3, 262, 066
Cotton-insulated:		
Weatherproof.....	11, 491, 130	6, 050, 289
Slow-burning.....		
Asbestos-insulated.....	11, 224, 127	5, 614, 306
Paper insulated, total.....	1, 120, 291	
	3, 040, 808	1, 634, 079
	8, 128, 718	6, 631, 530
Lighting and power circuit.....	4, 011, 254	(¹)
Telephone and telegraph cable (including submarine).....	4, 117, 464	(²)
Varnished-cambrie-insulated.....	4, 120, 541	1, 978, 831
Magnet:		
Cotton, silk, and rayon covered.....	8, 429, 711	5, 155, 879
Enameled.....	8, 469, 254	4, 984, 631
Armored cable or conductor.....	6, 845, 128	4, 410, 823
Other insulated wire and cable and that not reported by kind of insulation.....	24, 605, 746	10, 038, 547
Conduits and fittings, total value.....	23, 095, 116	14, 601, 543
Interior:		
Flexible steel conduit.....		
Rigid steel conduit.....	248, 815	
Conduit fittings, including elbows and couplings.....	12, 685, 672	9, 575, 408
Cast-metal outlet conduit fittings—vaporproof, watertight, and marine fittings; industrial plugs and receptacles; hazardous-location fittings; etc.....	3, 158, 857	
Outlets and switch boxes.....	2, 219, 185	(¹)
Other (not including armored conductor).....	2, 365, 922	2, 940, 727
Underground conduits.....	2, 416, 665	2, 175, 408

For footnotes, see end of table.

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TABLE 9.—INSULATED WIRE AND CABLE, CONDUITS AND FITTINGS, AND FUSES AND FUSE BLOCKS—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933—Continued

	1935	1933
Fuses and fuse blocks (except high-voltage and power types, 2,300 volts and over), ² total value.....	\$5, 013, 287	\$4, 825, 478
Fuses (except high-voltage and power types), total value.....	\$4, 656, 802	\$4, 555, 561
Enclosed fuses for voltage under 125:		
Number.....	27, 279, 339	23, 516, 229
Value.....	\$281, 529	\$207, 734
Nonrenewable plug fuses, 125 volts:		
Number.....	66, 246, 558	65, 851, 845
Value.....	\$1, 428, 022	\$1, 356, 889
Enclosed renewable fuses, 250 and 600 volts:		
Number.....	5, 369, 738	
Value.....	\$1, 710, 444	
Renewals for fuses, 250 and 600 volts, value.....	\$400, 546	\$1, 321, 833
Enclosed nonrenewable fuses, 250 and 600 volts:		
Number.....	11, 135, 289	8, 469, 305
Value.....	\$563, 115	\$512, 501
Other fuses, including enclosed fuses for voltages higher than 600, and open-fuse material, value.....	\$272, 546	
Fuses not distributed by kind, value.....		\$1, 156, 604
Fuse blocks, total value.....	\$356, 485	\$269, 917
Fuse blocks, clips, and bases, for ferrule-contact and knife-blade fuses, 250 and 600 volts.....	\$174, 587	\$149, 419
All other fuse blocks, clips, and bases, and fuse blocks, clips, and bases not separately reported.....	\$181, 898	\$120, 498

¹No data.

²For fuse cut-outs and fuse links for 2,300 to 15,000 volts a. c. service, see table 7.

TABLE 10.—MOTORS (EXCEPT RAILWAY¹), FANS, AND CONTROL APPARATUS (EXCEPT RAILWAY AND VEHICLE¹), AND PARTS AND SUPPLIES—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933

	1935	1933
Aggregate value.....	\$132, 892, 673	\$72, 239, 959
Motors and parts and supplies, total value.....	\$97, 968, 087	\$54, 637, 921
Stationary motors, total value.....	\$72, 667, 819	\$41, 172, 712
Fractional hp.:		
Under ½ hp. (toy and other motors not rated in accordance with A. I. E. E. standards):		
Number.....	3, 279, 512	1, 009, 170
Value.....	\$4, 894, 553	\$1, 792, 722
½ hp. and over, but under 1 hp. (motors built on frames smaller than those of open-type motors having a continuous rating of 1 hp. at 1700-1750 r. p. m.):		
Split-phase:		
Number.....	2, 565, 627	1, 578, 989
Value.....	\$15, 819, 451	\$9, 093, 074
Repulsion-induction:		
Number.....	542, 682	773, 737
Value.....	\$7, 148, 032	\$8, 382, 870
Universal:		
Number.....	516, 777	
Value.....	\$2, 854, 795	
Direct-current:		
Number.....	109, 643	
Value.....	\$1, 445, 464	
Other, and those not reported separately:		
Number reported:		456, 267
Number.....	762, 639	
Value.....	\$4, 817, 987	\$4, 507, 775
Number not reported, value.....	\$622, 240	
Fractional-hp. motors built on frames as large as, or larger than, those for 1 hp. open-type motors:		
Number.....	4, 634	
Total rated capacity.....	3, 222	
Value.....	\$203, 081	
1 hp. and over:		
Direct-current, total value.....	\$8, 489, 245	\$3, 622, 423
1 to 200 hp., inclusive:		
Number.....	30, 413	
Total rated capacity.....	278, 636	
Value.....	\$6, 306, 132	16, 628
Over 200 hp.:		
Number.....	158	\$3, 622, 423
Total rated capacity.....	176, 120	
Value.....	\$2, 183, 113	

For footnotes, see end of table.

TABLE 10.—MOTORS (EXCEPT RAILWAY¹), FANS, AND CONTROL APPARATUS (EXCEPT RAILWAY AND VEHICLE¹), AND PARTS AND SUPPLIES—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933—Continued

	1935	1933
Motors and parts and supplies—Continued.		
Stationary motors—Continued.		
1 hp. and over—Continued.		
Alternating-current, total value.....	\$26, 372, 971	\$13, 574, 183
Repulsion-induction:		
Number.....	68, 153	
Total rated capacity.....	148, 378	
Value.....	\$2, 579, 585	
Polyphase-induction:		
1 to 200 hp., inclusive:		
Number.....	224, 321	
Total rated capacity.....	1, 592, 954	
Value.....	\$20, 202, 777	
Over 200 hp.:		
Number and capacity reported:		
Number.....	281	
Total rated capacity.....	128, 509	172, 391
Value.....	\$1, 327, 982	\$13, 574, 183
Number and capacity not reported, value.....	\$111, 996	
Synchronous motors (except fractional-hp.):		
Number and capacity reported:		
Number.....	978	
Total rated capacity.....	263, 206	
Value.....	\$1, 693, 565	
Number and capacity not reported, value.....	\$167, 064	
Other (except automotive and railway):		
Number.....	2, 515	
Value.....	\$300, 022	
Stationary motors not reported by kind, number, or capacity, value.....		\$229, 660
Automotive starter-motors, value.....	\$25, 300, 268	\$9, 032, 063
Parts and supplies for all motors, value.....		\$4, 433, 140
Fans (direct motor-driven), total value.....	\$6, 695, 004	\$2, 437, 347
Ceiling and column fans:		
Number.....	40, 054	14, 683
Value.....	\$874, 673	\$302, 430
Desk fans:		
Number reported:		
Number.....	1, 211, 228	810, 279
Value.....	\$5, 171, 344	\$2, 134, 917
Number not reported, value.....	\$648, 087	
Control apparatus, total value.....	\$23, 229, 582	\$15, 164, 691
Industrial magnetic control for a. c. motors:		
Number reported:		
Number.....	337, 285	(⁴)
Value.....	\$5, 740, 218	\$4, 534, 212
Number not reported, value.....	\$1, 979, 685	
Industrial magnetic control for d. c. motors:		
Number reported:		
Number.....	38, 061	(⁴)
Value.....	\$2, 932, 015	\$2, 163, 231
Number not reported, value.....	\$213, 898	
Industrial manual control for a. c. motors:		
Number reported:		
Number.....	142, 053	
Value.....	\$1, 577, 635	
Number not reported, value.....	\$513, 969	
Industrial manual control for d. c. motors:		
Number reported:		
Number.....	77, 217	(⁴)
Value.....	\$607, 443	\$2, 345, 310
Number not reported, value.....	\$43, 211	
Other control apparatus, value.....	\$12, 774, 155	\$5, 765, 333
Control for a. c. and d. c. motors, not reported separately, value.....	\$1, 343, 532	\$306, 555
Control apparatus not reported separately, value.....	\$503, 521	

¹Figures for railway motors and for railway and vehicle control apparatus included in those for "Other miscellaneous electrical machinery and apparatus," etc., in table 15, to avoid disclosing, exactly or approximately, production reported by individual establishments.

²Revised.

³Figures for automotive starter motors combined with those for parts and supplies for all motors in order to avoid disclosing approximations of production reported by individual establishments.

⁴Data for number incomplete.

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TABLE 11.—LAMPS (NOT INCLUDING SOCKETS AND OTHER FITTINGS) AND VACUUM TUBES—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933

	1935	1933
Total value.....	\$37,551,323	\$50,141,611
Incandescent-filament lamps:		
Large tungsten:		
Number.....	387,914,279	305,820,440
Value.....	\$51,046,338	\$41,811,340
Miniature tungsten:		
Motor-vehicle:		
Number.....	132,435,562	65,048,436
Value.....	\$6,780,733	\$4,005,221
Christmas-tree and flashlight:		
Number.....	109,343,810	} \$2,539,092
Value.....	\$2,964,083	
Miscellaneous, value.....	\$1,721,619	
Carbon:		
Number.....	1,030,546	} \$1,493,647
Value.....	\$189,997	
Other, including vapor, photoflash, and photoflood, value.....	\$2,071,511	
Vacuum tubes:		
X-ray.....	\$1,772,243	} \$292,311
Industrial electronic tubes:		
Number reported:		
Number.....	84,806	
Value.....	\$875,118	
Number not reported, value.....	\$129,681	

¹ Revised.

TABLE 12.—INDUSTRIAL AND COMMERCIAL APPARATUS AND APPLIANCES—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933

	1935	1933
Aggregate value.....	\$22,192,259	\$8,600,364
Industrial apparatus and appliances (not including motor-driven machine tools ²), total value.....	\$20,700,854	\$7,975,000
Furnaces:		
Arc:		
Number.....	57	} \$669,161
Value.....	\$373,086	
Induction:		
Number reported:		
Number.....	153	
Value.....	\$150,319	
Number not reported, value.....	\$25,311	
Resistance:		
Number reported:		
Number.....	277	
Value.....	\$1,737,116	
Number not reported, value.....	\$487,236	

For footnotes, see end of table.

TABLE 12.—INDUSTRIAL AND COMMERCIAL APPARATUS AND APPLIANCES—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933—Continued

	1935	1933
Industrial apparatus and appliances—Continued.		
Heating units and devices:		
Strip, space, and ring heaters:		
Number reported:		
Number.....	363,467	}
Value.....	\$733,036	
Number not reported, value.....	\$100,202	
Cartridge and tubular heaters:		
Number.....	49,431	}
Value.....	\$229,707	
Water and oil immersion heaters:		
Number.....	14,288	}
Value.....	\$197,861	
Melting pots and metal-immersion heaters:		
Number.....	1,114	\$1,411,313
Value.....	\$86,025	
Glue and compound pots, value.....	\$100,701	
Air and oven heaters not included above:		
Number reported:		
Number.....	3,507	}
Value.....	\$61,172	
Number not reported, value.....	\$19,463	
Other heating units and devices, including ovens for annealing, enameling, etc., value.....		
	\$1,010,330	
Welding apparatus, welding wire, and electrodes:		
Alternating-current transformer arc welders:		
Number reported:		
Number.....	2,265	}
Value.....	\$1,002,626	
Number not reported, value.....	\$200,038	
Welding wire and resistance and carbon electrodes, value.....		
		\$37,454
Direct-current welding apparatus:		
Gasoline-engine driven:		
Number.....	833	}
Value.....	\$1,145,255	
Motor-driven:		
Number.....	5,748	2,648
Value.....	\$3,307,715	
Other drives:		
Number.....	424	\$2,058,697
Value.....	\$185,560	
Resistance welding apparatus, butt, spot, and line:		
Number reported:		
Number.....	2,195	377
Value.....	\$2,013,017	
Number not reported, value.....	\$341,506	
Welding apparatus not reported by kind, value.....		
		\$538,042
Arc welding electrodes, value.....		
	\$5,378,882	\$2,288,175
Commercial cooking apparatus, total value.....		
	\$1,491,405	\$623,364
Griddles, grills, toasters, and waffle bakers:		
Number reported:		
Number.....	19,454	}
Value.....	\$582,744	
Number not reported, value.....	\$103,000	
Urns and miscellaneous counter appliances:		
Number.....	3,821	(1)
Value.....	\$131,843	
Ranges and broilers:		
Number.....	826	}
Value.....	\$107,313	
Ovens (bread-baking and other):		
Number reported:		
Number.....	16,244	}
Value.....	\$323,422	
Number not reported, value.....	\$183,083	

¹ Revised.

² Motor-driven machine tools are classified in the Machine Tools industry.

³ Not reported separately.

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TABLE 13.—HOUSEHOLD APPARATUS AND APPLIANCES—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933

	1935	1933
Cooking, heating, and other household devices, total value.....	\$72,704,100	\$36,707,481
Curling irons, value.....	\$276,752	(1)
Flatirons:		
Automatic:		
Number.....	1,371,477	2,636,177
Value.....	\$4,278,064	
Nonautomatic:		
Number.....	1,975,244	\$4,638,747
Value.....	\$2,276,139	
Grills:		
Number.....	851,654	265,256
Value.....	\$1,035,528	\$383,839
Heaters, air:		
Convactor type:		
Number.....	85,119	187,090
Value.....	\$115,490	
Radiant type:		
Number reported:		
Number.....	196,108	\$361,631
Value.....	\$398,957	
Number not reported, value.....	\$62,954	
Heaters, immersion:		
Number.....	104,272	(1)
Value.....	\$165,550	(1)
Heaters, water, for permanent installation:		
Tank type:		
Number.....	58,869	\$432,224
Value.....	\$2,862,277	
Other types, value.....	\$668,200	
Heaters, air and water, not reported separately, value.....		\$235,309
Hair driers, value.....	\$247,131	(1)
Heating pads, value.....	\$896,855	(1)
Mixers and whippers:		
Number reported:		
Number.....	908,763	(1)
Value.....	\$5,191,126	(1)
Number not reported, value.....	\$4,545,834	
Percolators:		
Number.....	397,948	269,669
Value.....	\$1,873,717	\$1,000,105
Ranges, disk stoves, and hot plates, under 2½ kw.:		
Number.....	833,046	264,934
Value.....	\$575,448	\$291,227
Ranges, 2½ kw. and over:		
Number.....	194,555	50,631
Value.....	\$13,620,329	\$3,897,621
Toasters:		
Automatic:		
Number.....	326,170	1,444,419
Value.....	\$2,271,024	
Nonautomatic:		
Number.....	1,305,536	\$2,637,327
Value.....	\$1,573,597	
Vacuum cleaners:		
Floor cleaners:		
Number.....	871,934	554,935
Value.....	\$22,635,103	
Hand dusters:		
Number.....	239,809	\$14,410,594
Value.....	\$1,555,883	
Waffle irons:		
Number.....	843,952	495,834
Value.....	\$2,168,577	\$1,289,524
Miscellaneous devices not included above, value.....	\$3,409,515	\$7,129,333

¹ Not reported separately.

TABLE 14.—WIRING DEVICES AND SUPPLIES—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933

	1935	1933
Aggregate value.....	\$36,927,089	\$22,498,040
Wiring devices, total value.....	\$24,583,234	\$17,706,209
Attachment plugs and caps:		
Number reported:		
Number.....	33,060,932	(¹)
Value.....	\$1,025,737	\$1,586,021
Number not reported, value.....	\$582,225	
Convenience outlets:		
Number reported:		
Number.....	8,034,320	8,856,116
Value.....	\$743,463	\$849,740
Number not reported, value.....	\$291,087	
Brass shell sockets (standard-base):		
Number reported:		
Number.....	12,399,333	
Value.....	\$1,228,183	
Number not reported, value.....	\$314,463	
All other lamp sockets and receptacles (all bases):		
Number reported:		
Number.....	20,042,304	58,227,570
Value.....	\$2,106,258	\$4,984,411
Number not reported, value.....	\$272,118	
Snap switches, all types:		
10 amperes or less:		
Number reported:		
Number.....	20,425,030	23,859,946
Value.....	\$4,168,916	
Number not reported, value.....	\$458,324	
Over 10 amperes:		
Number reported:		
Number.....	1,701,655	\$4,293,001
Value.....	\$1,320,471	
Number not reported, value.....	\$83,208	
Face plates, metal and composition:		
Number reported:		
Number.....	8,203,462	\$6,083,036
Value.....	\$478,438	
Number not reported, value.....	\$181,293	
Miscellaneous wiring devices not elsewhere specified, value.....	\$10,728,410	
Wiring supplies, total value.....	\$12,344,755	\$4,701,831
All overhead trolley-line materials, including brackets, for electric, industrial, and mine railways, etc.....	\$1,483,376	\$1,213,041
Pole-line hardware.....	\$8,306,863	\$3,488,790
Conductor connectors:		
Solderless service connectors.....	\$908,452	(¹)
Industrial solderless connectors.....	\$413,185	
Splicing sleeves.....	\$515,878	
Rail bonds and soldering lugs.....	\$717,001	

¹ Data incomplete.² No data.

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TABLE 15.—MISCELLANEOUS ELECTRICAL MACHINERY AND APPARATUS (INCLUDING IGNITION, TELEPHONE AND TELEGRAPH, AND ELECTROTHERAPEUTIC AND ELECTROMEDICAL APPARATUS)—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1935 AND 1933

	1935	1933
Aggregate value.....	\$209,026,620	\$131,655,413
Carbons, total value.....	\$12,470,006	\$8,997,287
Brushes for electrical apparatus: Number of pieces reported: Number.....	169,871,851	(1)
Value.....	\$2,943,808	\$2,282,347
Number not reported, value.....	\$1,206,492	
Other, including carbon specialties and carbons for electric lighting, electrodes for electric furnaces, and chemical anodes, value.....	\$8,319,706	\$6,714,940
Electrotherapeutic and electromedical (including dental) apparatus, and X-ray apparatus (exclusive of X-ray tubes), total value.....	\$9,243,223	\$4,388,544
“Health” lamps, professional.....	\$477,016	\$950,932
“Health” lamps, household.....	\$355,460	
Other electromedical, including high-frequency apparatus.....	\$3,472,597	
Motor-driven devices, including vibrators and dental apparatus (except X-ray).....	\$375,256	
X-ray apparatus (exclusive of X-ray tubes): For general medical use.....	\$3,315,283	\$3,428,612
For dental use.....	\$399,350	
For commercial use.....	\$167,956	
Not reported separately.....	\$650,305	
Flashlight cases, value.....	\$3,570,746	\$1,876,039
Ignition apparatus for internal-combustion engines, total value.....	\$40,527,691	\$23,432,291
Coils: Number reported: Number.....	3,253,479	\$10,536,683
Value.....	\$2,693,042	
Number not reported, value.....	\$2,107,162	
Distributors and other ignition parts and equipment not reported separately, value.....	\$13,263,649	
Magneto-generators: Number.....	3,869	
Value.....	\$23,748	
Magnets: Number.....	396,494	
Value.....	\$5,264,430	
Spark plugs: Number.....	87,051,408	\$60,534,605
Value.....	\$17,175,610	\$12,895,608
Lightning arresters and choke coils, except radio and telephone: Number.....	1,141,931	(1)
Value.....	\$2,871,066	\$1,592,196
Radio parts (coils, condensers, etc.), value.....	\$26,406,237	(1)
Rectifying apparatus: Power mercury arc reflectors, value.....	\$1,231,583	\$1,723,392
Electronic-tube power apparatus, value.....	\$900,953	
Other, value.....	\$1,513,703	
Signaling apparatus, electric: Bells, buzzers, etc., value.....	\$2,221,959	\$1,072,948
Street-traffic signals, value.....	\$680,738	\$202,598
Fire-alarm apparatus and railway signals and attachments, value.....	\$6,645,901	\$5,156,224
Signaling devices not specified above, value.....	\$2,597,502	
Telephone and telegraph apparatus, value.....	\$43,584,201	\$21,180,030
Other miscellaneous electrical machinery and apparatus, and such machinery and apparatus not specifically reported as belonging to any of the classes covered by the preceding tables, value ²	\$55,161,106	\$62,033,864

¹ No data.

² Figures include data for small but indeterminate quantities of products belonging to the classes covered by the preceding tables, but reported in combination or without any specific indication of their character and therefore not assignable to any of the other groups.

TABLE 16.—ELECTRICAL EQUIPMENT MADE BY ESTABLISHMENTS CLASSIFIED IN OTHER INDUSTRIES—PRODUCTION, BY KIND, NUMBER, AND VALUE: 1929 TO 1935

[This table presents statistics for the production, so far as separately reported, of certain classes of electrically driven equipment made principally by establishments classified in the following industries: Machine Tools; Washing Machines, Wringers, Driers, and Ironing Machines, for Household Use; Signs and Advertising Novelties; Lighting Equipment; Refrigerators and Refrigerating and Ice-Making Apparatus]

	1935	1933	1931	1929
Portable electric tools:				
Drills, value.....	\$2, 556, 080	\$869, 526	\$2, 809, 728	\$4, 580, 469
Grinders, value.....	\$1, 019, 194	\$260, 566	\$600, 224	\$2, 395, 279
Hammers, value.....	\$115, 932	\$60, 821	\$119, 442	\$648, 671
Washing machines:				
Number reported:				
Number.....	1, 181, 042	1, 003, 322	1 810, 338	956, 062
Value.....	\$42, 647, 500	\$37, 044, 353	\$39, 365, 147	\$59, 930, 902
Number not reported, value.....	\$400, 875	\$495, 670		
Electric signs:				
Neon, value.....	\$17, 469, 619	\$12, 198, 766	(\$10, 783, 098	\$11, 373, 028
Other, value.....	\$1, 904, 797				$7, 208, 596	$23, 633, 905
Electric-lighting equipment, value.....	\$81, 521, 442	\$36, 527, 488	\$65, 688, 063	\$129, 325, 883
Domestic electric refrigerators:				
Units complete with cabinets:				
Number reported:				
Number.....	1, 422, 484	956, 356	705, 894	597, 520
Value.....	\$119, 892, 519	\$75, 459, 555	\$90, 447, 442	\$102, 255, 794
Number not reported, value.....				\$829, 448
Units complete without cabinets:				
Number.....	242, 240	37, 748	117, 106	67, 008
Value.....	\$11, 046, 989	\$1, 658, 519	\$9, 240, 854	\$8, 589, 473

¹ Includes data for a small but indeterminate number of apartment-size washing machines powered by water motors.

1304

ENGINES, TURBINES, WATER WHEELS, AND WIND- MILLS

[A preliminary report for this industry was issued Feb. 20, 1937]

Description of the industry.—This industry, as constituted for Census purposes, embraces establishments engaged primarily in the production of steam engines and turbines, internal-combustion engines, water turbines and water wheels, and windmills. It does not include the production of locomotives (classified in the Locomotives industry); of steam turbo-generators (classified in the Electrical Machinery, Apparatus, and Supplies industry); of steam turbines made for installation as parts of blowers, pumps, etc., made in the same plants; or of engines made for installation in ships and boats, motor vehicles, or tractors built by the same establishments.

Complete tractors, formerly classified in this industry, are now assigned to the Agricultural Implements industry, but production figures in detail are given only in the annual report entitled "Manufacture and Sale of Farm Equipment and Related Products." The 1933 and 1931 figures in tables 1 and 4 and the 1933 figures in table 3 have been revised to exclude data for tractor manufactures, but no corresponding revisions of the statistics for earlier years have been made.

The turbine ends of steam turbo-generators were formerly treated as products of the Engines and Turbines industry but are now classified in the Electrical Machinery, Apparatus, and Supplies industry. This change does not affect the comparableness of the figures for the several Census years as given in tables 1 and 3, since it has not resulted in the transfer of any *establishment* from one industry to the other. (Manufacturers of complete turbo-generators have always been classified in the Electrical Machinery, Apparatus, and Supplies industry; but in former censuses the turbine ends made by such manufacturers were accounted for in the tables corresponding to table 4 of this report, as having been "made as secondary products in other industries." See item 5, table 4.)

The value of steam boilers made for sale as separate units by establishments manufacturing engines or turbines as their products of chief value is included in that of "Other products (not normally belonging to the industry), value, and receipts for repair work" (table 4). The total production of steam boilers is accounted for in the report for Boiler Shops.

TABLE 1.—GENERAL STATISTICS, FOR THE UNITED STATES: 1935, 1933, AND 1931

	1935	1933 ¹	1931 ¹	PERCENT OF INCREASE OR DECREASE (-)	
				1933-1935	1931-1933
Number of establishments.....	149	153	173	-2.6	-11.6
Proprietors and firm members.....	12	15	(²)	(²)	(²)
Salaried personnel, total ³	5,748	(⁴)	(²)	(⁴)	(²)
Salaried officers of corporations.....	260	(⁴)	(²)	(⁴)	(²)
Supervisory, technical, and clerical employees.....	⁵ 5,488	⁶ 4,447	(²)	23.4	(²)
Salaries paid, total ³	\$11,818,884	(⁴)	(²)	(⁴)	(²)
To salaried officers of corporations.....	\$1,564,345	(⁴)	(²)	(⁴)	(²)
To supervisory, technical, and clerical employees.....	⁶ \$10,254,539	⁶ \$7,414,170	(²)	38.3	(²)
Wage earners (average for year) ⁷	22,062	15,411	22,414	43.2	-31.2
Wages.....	\$26,844,519	\$14,852,501	\$26,075,283	80.7	-43.0
Cost of materials, etc., total.....	\$42,071,167	\$23,436,053	\$44,976,976	79.5	-47.9
Cost of materials and supplies.....	40,084,610	(²)	(²)	(²)	(²)
Cost of fuel.....	1,361,812	(²)	(²)	(²)	(²)
Cost of purchased electric energy.....	624,745	(²)	(²)	(²)	(²)
Value of products.....	99,996,336	56,618,692	109,932,685	76.6	-48.5
Value added by manufacture ⁸	87,925,169	33,182,639	64,955,707	74.6	-48.9

* Percent not computed where base is less than 100.

¹ Revised to exclude data for tractor manufacturers. See second paragraph, "Description of the industry," p. 1061.

² No data.

³ No data for employees of central administrative offices are included in the figures for any year. See sec. 10, p. 7.

⁴ Data incomplete.

⁵ Supervisory, technical, and clerical employees reported separately for 1935 only, as follows: Supervisory, 983; salaries, \$2,933,651. Technical, 601; salaries, \$1,874,477. Clerical, 3,814; salaries, \$5,441,411. See sec. 10, p. 7.

⁶ Supervisory, 696; salaries, \$2,271,342. Clerical and other, 3,751; salaries, \$5,142,828. See sec. 10, p. 7.

⁷ See sec. 11, p. 7.

⁸ Value of products less cost of materials, supplies, fuel, and purchased electric energy. See sec. 18, p. 11.

TABLE 2.—SUMMARY, BY STATES: 1935

[See secs. 11 and 23, pp. 7 and 12. See also footnotes 3 and 8, table 1]

	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	Salaries	Wages	Cost of materials, fuel, and purchased energy	Value of products	Value added by manufacture
United States.....	149	5,748	22,062	\$11,818,884	\$26,844,519	\$42,071,167	\$99,996,336	\$57,925,169
California.....	13	163	532	354,293	636,908	1,347,111	3,312,856	1,965,745
Illinois.....	13	371	2,254	745,806	2,298,061	3,167,682	8,264,329	5,096,647
Indiana.....	7	109	532	238,218	579,015	997,494	1,960,507	963,013
Iowa.....	3	61	238	113,377	246,551	385,077	833,159	448,082
Massachusetts.....	5	31	81	63,792	107,340	117,868	360,253	242,385
Michigan.....	14	361	1,724	772,470	1,997,370	2,997,227	6,388,216	3,390,959
Missouri.....	6	109	422	225,874	425,117	386,379	1,295,520	909,141
New York.....	13	585	1,811	1,053,811	2,179,024	2,912,782	6,902,880	3,990,098
Ohio.....	15	628	2,403	1,376,383	3,056,154	7,040,817	13,367,466	4,326,649
Pennsylvania.....	18	1,224	4,305	2,581,375	5,382,956	5,292,269	17,018,527	11,726,258
Wisconsin.....	14	837	3,622	1,527,500	4,291,844	7,346,910	17,074,626	9,727,616
Other States.....	28	1,269	4,138	2,765,985	5,644,049	10,079,551	23,218,097	13,138,546

¹ Connecticut, 7 establishments; Kansas, 1; Kentucky, 1; Maine, 1; Maryland, 1; Minnesota, 3; Nebraska, 3; New Jersey, 7; Texas, 2; Washington, 2. See sec. 23, p. 12.

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TABLE 3.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1935 AND 1933, AND FOR STATES, 1935

[See secs. 11 and 23, pp. 7 and 12]

	Average number employed during year ¹	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
<i>United States</i>													
1935.....	22,240	20,238	21,012	21,089	22,347	22,999	22,887	22,898	22,950	22,671	22,220	22,423	22,241
1933 ²	15,411	(*)	(*)	13,402	(*)	(*)	14,829	(*)	(*)	17,033	(*)	(*)	17,820
<i>States, 1935</i>													
California.....	532	460	526	529	536	577	577	555	527	532	529	518	515
Connecticut.....	1,553	1,210	1,180	1,240	1,303	1,426	1,677	1,806	1,859	1,770	1,807	1,826	1,826
Illinois.....	2,346	2,184	2,222	2,492	2,567	2,547	2,464	2,458	2,340	2,133	2,300	2,261	2,181
Indiana.....	532	452	451	471	481	476	501	583	585	591	588	604	606
Iowa.....	237	188	185	215	237	253	248	255	271	244	272	273	199
Massachusetts.....	81	78	80	81	72	76	78	80	77	80	87	89	93
Michigan.....	1,780	1,742	2,015	2,135	1,962	1,825	1,552	1,500	1,614	1,629	1,682	1,815	1,894
Minnesota.....	157	137	139	143	151	163	169	168	167	165	169	161	157
Missouri.....	436	370	374	375	372	397	404	440	473	509	509	504	506
Nebraska.....	340	317	325	324	329	350	356	362	353	352	340	333	334
New Jersey.....	1,999	1,912	1,867	1,937	2,018	1,992	2,015	2,027	2,037	2,148	2,026	2,014	1,992
New York.....	3,812	1,802	1,756	1,763	1,746	1,746	1,759	1,769	1,877	1,883	1,818	1,898	1,925
Ohio.....	2,409	2,196	2,272	2,304	2,319	2,544	2,566	2,465	2,627	2,519	2,384	2,346	2,368
Pennsylvania.....	4,304	4,009	4,221	4,468	4,502	4,567	4,507	4,439	4,409	4,289	4,114	4,036	4,091
Wisconsin.....	3,630	3,090	3,306	3,418	3,659	3,960	4,065	4,027	3,703	3,646	3,543	3,679	3,464

¹ Data incomplete. See last sentence, second paragraph, sec. 11, p. 7.

² As the averages for 1935 given in this table are derived from the figures for the 12 months in the calendar year, some of them differ from the corresponding averages in table 2, which are derived in part from figures for months in fiscal years differing from the calendar year. See sec. 11, p. 7.

³ Revised.

TABLE 4.—PRODUCTS, BY KIND, NUMBER, RATED HORSEPOWER CAPACITY, AND VALUE: 1935, 1933, AND 1931

	1935	1933	1931
1. "Engines (Except Tractors), Turbines, Water Wheels, and Windmills" industry, all products, total value.....	\$99,996,336	\$56,618,692	\$109,932,683
2. Engines, turbines, water wheels, and windmills.....	\$64,020,331	\$32,265,014	\$75,315,533
3. Parts made for sale as such.....	\$19,009,002	\$14,299,784	\$20,958,815
4. Other products (not normally belonging to the industry), value, and receipts for repair work.....	\$16,967,003	\$10,053,894	\$13,658,335
5. Engines, turbines, etc., and parts, made as secondary products in other industries.....	\$10,280,237	\$7,874,982	\$15,960,109
Engines, turbines, water wheels, and windmills, and parts, aggregate value (sum of 2, 3, and 5).....	\$102,309,570	\$54,439,780	\$112,234,457
Steam engines and turbines, total value.....	\$11,180,102	\$8,442,807	\$14,893,425
Steam engines (reciprocating), total:			
Reported by number and by horsepower:			
Number.....	384	70	534
Horsepower.....	69,115	11,546	79,723
Value.....	\$1,197,047	\$300,432	\$1,775,134
Not reported by number or by horsepower.....	\$185,540	\$295,805	\$352,392
Marine (reciprocating): ²			
Number.....	8	9	22
Horsepower.....	9,550	5,775	17,050
Value.....	\$243,871	\$100,855	\$493,495
Other reciprocating steam engines:			
Reported by number and by horsepower:			
Number.....	376	70	512
Horsepower.....	59,565	5,771	62,673
Value.....	\$953,176	\$139,577	\$1,231,659
Not reported by number or by horsepower.....	\$185,540	\$295,805	\$352,392

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, NUMBER, RATED HORSEPOWER CAPACITY, AND VALUE: 1935, 1933, AND 1931—Continued

	1935	1933	1931
Engines, turbines, water wheels, and windmills, and parts—Continued.			
Steam engines and turbines.—Continued.			
Steam turbines (marine and other), total: ³			
Reported by number and by horsepower:			
Number.....	1,802	942	1,653
Horsepower.....	640,546	855,829	1,586,893
Value.....	\$9,797,515	\$6,938,882	\$12,670,206
Not reported by number or by horsepower.....		\$235,999	\$89,093
Marine: ²			
Number.....		46	100
Horsepower.....		186,329	657,488
Value.....		\$1,504,784	\$4,339,691
Other than marine:			
Reported by number and by horsepower:	(4)		
Number.....		902	1,553
Horsepower.....		669,500	629,405
Value.....		\$5,434,038	\$8,337,115
Not reported by number or by horsepower.....		\$235,999	\$89,093
Steam engines and steam turbines not reported by kind, value.....		\$671,680	.....
Internal-combustion engines (except complete tractors), total value.....	\$65,428,719	\$29,023,708	\$68,278,962
Injection type—Diesel (compression-ignition) and semi-Diesel (surface-ignition), total:			
Reported by number and by horsepower:			
Number.....	6,703	1,144	1,473
Horsepower.....	920,261	139,331	204,037
Value.....	\$16,812,239	\$4,662,062	\$11,811,975
Not reported by number or by horsepower.....	\$191,948	\$491,672	\$41,945
Compression-ignition (Diesel):			
Marine: ²			
For direct connection to propeller shaft:			
Number.....	868	147	569
Horsepower.....	85,036	27,516	104,813
Value.....	\$3,277,338	\$1,225,327	\$4,875,771
For electric drive and auxiliary use:			
Number.....	255	61	
Horsepower.....	31,163	13,680	
Value.....	\$1,859,245	\$602,437	
Other Diesel:			
Reported by number and by horsepower:			
Number.....	3,731	628	718
Horsepower.....	686,193	81,633	143,665
Value.....	\$10,333,865	\$2,514,345	\$6,405,692
Not reported by number or by horsepower.....		\$77,328	\$41,945
Stationary:			
Reported by number and by horsepower:			
Number.....	2,478	567	
Horsepower.....	509,489	66,605	
Value.....	\$7,282,913	\$2,227,637	
Not reported by number or by horsepower.....		\$77,323	
Other (tractor, aircraft, railway Diesel-electric):			(4)
Number.....	1,253	61	
Horsepower.....	176,704	15,128	
Value.....	\$3,050,952	\$286,708	
Surface-ignition (hot-spot, hot-bulb, etc.), all types: ⁴			
Number.....	1,849	308	166
Horsepower.....	117,809	16,603	15,659
Value.....	\$1,341,791	\$319,953	\$530,692
Injection engines not reported in detail, value.....	\$191,948	\$414,344	
Carburetor engines, total value.....	\$47,519,810	\$24,470,034	\$66,425,042
Aircraft: ²			
Reported by number and by horsepower:			
Number.....	2,866	1,822	3,794
Horsepower.....	1,269,751	928,626	1,342,535
Value.....	\$12,610,285	\$8,651,247	\$18,779,791
Not reported by number or by horsepower.....		\$67,875

For footnotes, see end of table.

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TABLE 4.—PRODUCTS, BY KIND, NUMBER, RATED HORSEPOWER CAPACITY, AND VALUE: 1935, 1933, AND 1931—Continued

	1935	1933	1931
Engines, turbines, water wheels, and windmills, and parts—Continued.			
Internal-combustion engines (except complete tractors)—Continued.			
Carburetor engines—Continued.			
Marine: ²			
Inboard:			
Reported by number and by horsepower:			
Number.....	5,521	2,602	8,485
Horsepower.....	342,667	131,441	535,051
Value.....	\$2,237,156	\$948,985	\$5,524,395
Not reported by number or by horsepower.....			\$3,432
Outboard:			
Reported by number and by horsepower:			
Number.....	36,711	17,941	22,161
Horsepower.....	151,922	102,756	203,051
Value.....	\$2,384,967	\$1,249,064	\$2,152,430
Not reported by number or by horsepower.....			\$199,562
Motor-vehicle, total: ³			
Reported by number and by horsepower:			
Number.....	69,468	25,302	115,512
Horsepower.....	2,719,360	1,324,845	6,081,793
Value.....	\$6,582,540	\$3,208,618	\$15,424,164
Not reported by number or by horsepower.....		\$938,750	
Automobile (including taxicab) and light truck and bus:			
Reported by number and by horsepower:			
Number.....		21,923	105,027
Horsepower.....		1,056,046	5,331,491
Value.....		\$2,272,695	\$12,705,857
Not reported by number or by horsepower.....	(7)	\$938,750	
Heavy truck and bus:			
Number.....		3,379	10,485
Horsepower.....		268,799	750,302
Value.....		\$935,923	\$2,718,307
Industrial and farm:			
Portable:			
Number.....	156,532	47,370	56,743
Horsepower.....	902,876	162,835	412,645
Value.....	\$7,385,200	\$2,033,020	\$4,613,305
Stationary:			
Number.....	28,905	6,670	18,420
Horsepower.....	328,221	111,819	240,177
Value.....	\$6,106,815	\$1,996,902	\$5,730,754
Portable and stationary not reported separately:			
Reported by number and by horsepower:			
Number.....			17,026
Horsepower.....			110,765
Value.....			\$1,611,042
Not reported by number or by horsepower.....			\$333,881
Tractor engines made for sale separately:			
Number.....	24,517	6,613	
Horsepower.....	989,782	198,528	
Value.....	\$4,674,524	\$896,357	
Other and unspecified types of carburetor engines, including railway-car:			
Reported by number and by horsepower:			
Number.....	54,058	17,941	31,870
Horsepower.....	1,710,640	1,058,476	962,279
Value.....	\$5,538,233	\$2,837,598	\$7,052,286
Not reported by number or by horsepower.....		\$1,641,638	
Mixing-valve engines:			
Number.....	966		
Horsepower.....	27,101	(8)	(8)
Value.....	\$904,722		
Water wheels and water turbines:			
Reported by number and by horsepower:			
Number.....	211	92	222
Horsepower.....	769,506	37,898	952,312
Value.....	\$3,263,388	\$397,933	\$6,839,351
Not reported by number or by horsepower.....		\$65,085	

For footnotes, see end of table.

TABLE 4.—PRODUCTS, BY KIND, NUMBER, RATED HORSEPOWER CAPACITY, AND VALUE: 1935, 1933, AND 1931—Continued

	1935	1933	1931
Engines, turbines, water wheels, and windmills, and parts— Continued.			
Engines and turbines not reported by class, by type, or by horsepower, value.....	\$376, 095	\$100, 514	-----
Windmills:			
Number reported:			
Number.....	14, 375	5, 769	35, 917
Value.....	\$479, 282	\$215, 114	\$1, 213, 994
Number not reported.....	\$1, 333, 465	\$1, 184, 775	-----
Parts and attachments.....	\$19, 743, 519	\$14, 290, 784	\$20, 053, 815

¹ Revised. See second paragraph, "Description of the industry," p. 1061.

² Not including engines made for installation in ships and boats built or in aircraft or motor vehicles manufactured by the same establishments.

³ The figures for 1933 and 1931 include data for the turbine ends of steam turbo-generators and therefore are not comparable with those for 1935, in which no data for such turbines are included. (See "Description of the industry," third paragraph.) No data for small steam turbines made for installation in machines built by the same establishments are included in the figures for any year.

⁴ Withheld to avoid disclosing approximations of production reported by individual manufacturers of marine turbines. See totals for "Steam turbines (marine and other)," above.

⁵ Not reported separately.

⁶ Separate data were collected for portable and stationary industrial engines and for other types of surface-ignition engines, but it was necessary to combine them to avoid disclosing approximations of the production reported by individual establishment.

⁷ Withheld to avoid disclosing approximations of production reported by individual manufacturers of automobile engines. See totals for "Motor-vehicle" engines, above.

⁸ Not reported separately; data included in figures for "Other and unspecified types of carburetor engines, including railway-car," above.

TABLE 5.—ENGINES, TURBINES, AND WATER WHEELS—PRODUCTION, BY KIND, NUMBER, RATED CAPACITY IN DETAIL, AND VALUE: 1935
 [This table covers all engines, turbines, and water wheels for which rated capacity was reported in detail. For value of engines, etc., for which number and horsepower were not reported, see table 4]

	TOTAL			NUMBER, BY HORSEPOWER CAPACITY (RATED OR NORMAL, NOT OVERLOAD)									
	Number	Rated horsepower capacity	Value	Less than 5	5 or more but under 10	10 or more but under 20	20 or more but under 50	50 or more but under 100	100 or more but under 200	200 or more but under 400	400 or more but under 1,000	1,000 and over	
Steam engines and turbines:	8	9,550	\$243,871	4	16	39	124	36	23	107	1	7	
Marine, reciprocating 1	376	59,565	953,176		170	448	330	229	192	122	24	3	
Other reciprocating steam engines	1,892	640,546	9,797,515	263							76	2 62	
Turbines (marine and other)													
Internal-combustion engines (except complete tractors):													
Injection engines:													
Compression-ignition (Diesel):													
Marine for direct connection to propeller shaft 1	868	85,036	3,277,338		2	5	363	164	189	116	27	2	
Marine for electric drive and auxiliary use 1	255	31,163	1,859,245		4	65	110	23	16	15	9	13	
Stationary	2,478	509,489	7,282,913		68	139	387	1,131	550	130	61	12	
Other Diesel (tractor; aircraft; railway Diesel-electric)	1,253	176,704	3,050,952										
Surface-ignition, all types	1,849	117,869	1,341,791		4	21	667	843	1,061	31	35	2	
Carburetor engines:													
Aircraft 1	2,866	1,269,751	12,610,285								1,748		
Marine, inboard 1	5,521	342,667	2,237,156	74	113	431	1,789	2,598	395	118	3		
Marine, outboard 1	36,711	151,922	2,384,967	29,517	5,566	984	638	6					
Motor-vehicle 1	69,468	2,719,360	6,582,540				54,192	10,844	4,410	22			
Tractor engines made for sale separately	24,517	980,782	4,674,524	353		110	19,081						
Industrial and farm:													
Portable	156,532	902,876	7,385,290	134,129	5,408	2,201	9,127	4,822	831	14			
Stationary	28,905	328,221	6,106,815	20,578	1,873	929	4,433	714	258	114	3	3	
Other and unspecified types of carburetor engines, including railway-car	54,058	1,710,640	5,538,233	15,162	6,935	1,866	15,325	12,819	961	20		6	
Mixing-valve engines		27,101	904,722	726	6	1	162	27	20	18			
Water wheels and water turbines	211	769,506	3,263,388	24	21	20	28	19	30	11	16	3 83	

1 Not including engines made for installation in ships and boats built or in aircraft or motor vehicles manufactured by the same establishments.
 2 Includes 24 turbines of 5,000 horsepower or more.
 3 Includes 19 water turbines of 5,000 horsepower or over.