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Volume Title: The Output of Manufacturing Industries, 1899-1937

Volume Author/Editor: Solomon Fabricant, assisted by Julius Shiskin

Volume Publisher: NBER

Volume ISBN: 0-87014-038-8

Volume URL: <http://www.nber.org/books/fabr40-1>

Publication Date: 1940

Chapter Title: Appendix C: Value Added by Manufacturing Industries

Chapter Author: Solomon Fabricant

Chapter URL: <http://www.nber.org/chapters/c6433>

Chapter pages in book: (p. 603 - 639)

## Appendix C

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## Appendix C

### Value Added by Manufacturing Industries, Census Years, 1899-1937

#### EXPLANATORY NOTE

This appendix consists of three tables. The first is a detailed tabulation showing the value added by each manufacturing industry in each Census year from 1899 to 1937 inclusive. The industries are arranged in groups which proceed in the order previously established for major groups of manufacturing industries. Within the groups, the order of the individual industries is not alphabetical, as it was in Appendix B, but is designed to bring closely related industries together for convenience in presentation. A second table assembles the group totals and shows the grand total for all manufacturing industries combined, and a third table reconciles the grand total arrived at in the present study with the grand total given in each Census volume.<sup>1</sup> As stated in Appendix A, the composition of total manufacturing in this study differs somewhat from that of the Census, as do also the composition and order of our major groups.

The basic source of information on value added is the Census of Manufactures prepared by the United States Bureau of the Census. In order to obtain accurate and comparable data, we have had to take figures from many different Census volumes. Furthermore, we have sometimes combined series in a manner slightly different from that followed in the Census, and for this reason the reader may occasionally find it difficult to locate in the Census volumes certain figures presented by us. The industry titles used here are short titles; complete Census titles will be found in the index at the end of this volume.

Footnotes explain pertinent changes in classification and coverage. Breaks or discontinuities in series have been indicated by footnote symbols at the point in the series where the discontinuity occurs; and symbols are repeated in a series if breaks occur at more than one point in that series. When possible, the continuity of a

<sup>1</sup> The 1899 and 1904 Census totals were taken from the 1909 Census report.

series has been preserved, at least in part, by the provision of two figures for the year in which a change in composition took place, one figure comparable with earlier years and the other comparable with later years. The footnotes that give details concerning the various changes in the definition of an industry are necessarily condensed. For example, footnote i, p. 609, reads: "Between 1909 and 1914 powdered milk and sugar of milk were transferred from *chemicals, n.e.c.*, to *milk, canned.*" In more precise terms, the statement means that up to and including 1909 establishments whose chief product was powdered milk or sugar of milk were classified under *chemicals, n.e.c.*, whereas in 1914 and later years they were classified under *milk, canned.*

We use *n.e.c.* as the abbreviation for *not elsewhere classified*, *n.e.m.* for *not elsewhere made*, and *n.e.d.* for *not elsewhere done*. Italicized figures represent duplications (such as totals) of other figures in the same column, though not necessarily on the same page. Group totals are not italicized. Census titles of industries are italicized in footnotes.



## Value Added by Manufacturing Industries (Unit: \$1,000,000)

FOODS	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
<i>Industry</i>															
Meat packing <sup>a</sup>	102.8	108.6	164.8	210.3	463.4	463.4	332.7	409.8	425.1	393.5	460.5	341.6	287.5	332.4	402.2
Sausage, n.e.m.	1.4	2.6	3.6	5.2	12.7	12.6	15.6	18.5	20.9	21.3	26.9	25.1	23.7	26.7	32.4
Oleomargarine, n.e.m.	4.9	1.2	1.7	4.8	13.8	13.8	11.1	10.2	11.5	12.1	15.6	7.5	4.5	9.1	13.6
Shortenings			b	9.2	10.4	10.4	2.4	6.4	11.3 <sup>a</sup>	11.4	15.5	15.5	17.7	34.8	35.2
Flour	73.3	93.1	116.0	125.4	253.3	252.4	185.9	162.6	172.6 <sup>d</sup>	176.0	191.4	137.0	134.3	137.0	133.6
Cereals			b	23.2	41.4	41.3	43.5	48.3	57.5	63.8	73.8	72.2	56.0	64.2	69.6
Feeds	15.0	23.5 <sup>e</sup>	{ 4.8	7.9	21.2	21.2	13.9	19.9	29.4 <sup>d</sup>	55.1	74.8	47.2	39.3	58.1	76.7
Food, n.e.c.			{ 36.6	57.2 <sup>b</sup>	19.9	51.8	41.5	53.5	65.8	68.7 <sup>f</sup>	75.5	57.4	52.1	64.2	77.9
Rice	1.1	3.0	2.9	2.4	13.4	13.4	7.0	6.9	7.7	7.6	10.4	8.5	8.0	9.9	8.0
Macaroni			b	4.9	11.9	11.8	11.0	12.9	16.0	17.9	19.7	15.9	15.5	15.8	17.5
Biscuits and crackers	80.3	113.6	158.8	{ 45.8	100.9	100.1	104.5	122.4	137.3	141.1	167.4	141.2	93.0	93.3	110.5
Bread and cake			{ 171.8	337.8	335.2	386.9	426.0	462.9	560.4	621.6	543.4	399.3	472.1	588.7	588.7
Fish, canned	7.0	7.7	10.8	12.7	26.3	26.2	14.1	19.5	21.9	22.2	27.6	13.9	14.3	21.4	29.7
Fruits and vegetables, canned	28.6 <sup>g</sup>	39.6 <sup>g</sup>	44.4	71.1	189.4	188.5	128.0	216.3	230.5	217.2	288.3	191.0	171.6	240.5	290.4
Vinegar and cider	2.8	3.4	3.5	3.4	9.2	8.8	8.4	5.1	5.4	4.9	4.4	3.3	2.7	3.8	2.7
Butter		{ 17.2	25.4	30.8	68.8	68.8	72.2	90.9	80.2	101.7	110.5	70.2	68.7	78.2	79.8
Cheese		{ 3.9	5.2	5.0	14.0	14.0	12.8	20.7	15.1	17.7	17.9	14.0	10.5 <sup>h</sup>	14.8	17.2
Milk, canned		{ 4.2	8.4 <sup>i</sup>	13.4	56.9	56.9	44.3	33.1	31.2	40.4	45.3	39.2	34.4	40.5	44.1
Ice cream		{ 2.5	9.9	20.9	73.1	72.7	92.1	114.7	145.3	151.0	172.4	158.0	92.1	108.5	138.5
Beet sugar <sup>k</sup>		{ 2.5	9.9	20.9	73.1	62.1	17.2	47.5	45.3	25.9	37.6	23.3	51.0	24.0	38.4
Cane sugar, n.e.m. <sup>k</sup>		{ 18.3	32.5 <sup>e</sup>	22.3	68.8	13.6	6.0	6.2	1.8	2.2	6.1	4.0	6.6	8.0	8.4
Cane-sugar refining		{ 25.3	68.8	25.3	68.8	68.8	40.0	44.4	56.7	45.9	69.0	59.4	55.5	41.0	62.0
Chewing gum		{ 25.3	38.3	53.6	26.0	25.8	19.0	25.4	29.9	34.8	36.9	34.5	29.1	32.8	39.8
Confectionery		{ 60.0	195.3	60.0	195.3	194.3	139.9	163.5	173.6 <sup>i</sup>	173.6	178.1	139.4	97.7 <sup>i</sup>	106.2 <sup>i</sup>	123.1

FOODS (concluded)	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Chocolate	2.8	4.7	6.9	11.2	37.5	37.5	32.5	34.7	33.1 <sup>1</sup>	32.3	40.0	37.3	26.21	26.61	28.2
Corn products	9.3	7.1	11.9	12.4	55.9	55.9	29.2	42.1	39.8	43.6	61.7	44.7	45.9	33.4	39.4
Flavorings	3.6	5.2	8.7	12.8	26.5	26.4	31.8	36.0	47.1	56.1	73.6 <sup>m</sup>	70.7 <sup>n</sup>	33.8	38.7	71.6
Baking powder	7.4	10.1	11.4	11.4	19.6	19.6	28.2	30.0	30.0	31.1	29.7	26.3	18.9	17.9	16.9
Ice	10.5	17.8	31.6	42.6	94.1	93.4	107.7	118.0	142.2	144.0	171.1	156.9	112.3	100.4	109.1
TOTAL	418.8	547.2	763.5	979.6	1,002.8	2,369.3	1,979.4	2,345.5	2,547.1	2,673.5	3,123.3	2,498.6	2,002.2	2,254.3	2,705.2

<sup>a</sup> For 1899-1919 *meat packing* includes *lard*, *not made in meat packing establishments*. After 1919 *lard* was not treated as a separate industry.

<sup>b</sup> Prior to 1914 *cereals*, *macaroni*, and *shortenings* were combined with *food*, *n.e.c.*

<sup>c</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oil*, *n.e.c.*, and other classifications to *shortenings*.

<sup>d</sup> Between 1925 and 1927 grain ground for prepared feeds was transferred from *flour to feeds*. The comparability of the figures for the latter industry appears to have been seriously affected by this shift.

<sup>e</sup> Between 1904 and 1909 some establishments compounding sirups were transferred from *cane-sugar refining to food*, *n.e.c.*

<sup>f</sup> Between 1927 and 1929 canned poultry products were transferred from *food*, *n.e.c.*, to *poultry products*. The latter we do not consider to be a manufacturing industry.

<sup>g</sup> Packing and shipping houses that handled dried fruits completely processed on fruit farms were included in *canned fruits and vegetables* in 1904 only.

<sup>h</sup> The 1933 Census of this industry is considered by the Bureau of the Census to be somewhat incomplete.

<sup>i</sup> Between 1909 and 1914 powdered milk and sugar of milk were transferred from *cheesebreads*, *n.e.c. to milk, canned*.

<sup>j</sup> Prior to 1914 *ice cream* was not considered a manufacturing industry and was not canvassed.

<sup>k</sup> Figures for 1931-37 for *beet sugar* and *cane sugar, n.e.m.*, were requested by the U.S. Bureau of the Census for the seasons beginning in the respective Census years, and for earlier Census years for the seasons ending in those years. Thus the figure given for 1931 applies to the season 1931-32, whereas the figure for 1921 refers to the season 1920-21. In 1925, 1927 and 1929, however, most of the establishments in *cane sugar, n.e.m.*, and a few of the establishments in *beet sugar* reported for the seasons 1925-26, 1927-28 and 1929-30, instead of 1924-25, 1926-27 and 1928-29.

<sup>l</sup> Chocolate departments operated by confectionery manufacturers are classified under *chocolate*. In 1935 and prior to 1927 some confectionery manufacturers failed to make separate returns for their chocolate departments, which were consequently included in the statistics on *confectionery*. Only 5 establishments failed to make separate reports in 1935.

<sup>m</sup> Between 1929 and 1931 *dairymen's supplies* was abandoned as a separate classification, and the products were divided among *flavorings* and other classifications.

<sup>n</sup> Between 1931 and 1933 malt extracts and sirups were transferred from *flavorings to liquors, malt*.



## Value Added by Manufacturing Industries (Unit: \$1,000,000)

BEVERAGES	Establishments with Products Valued at \$500 or More							Establishments with Products Valued at \$5,000 or More							
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
<i>Industry</i>															
Beverages, nonalcoholic	14.7	20.2	27.0	31.6	66.8	64.4	54.5	129.2	139.3	147.3	167.3	136.5	69.4	97.2	164.6
Excl. near beer															
Incl. near beer															
Liquors, malt	185.3	223.4	278.1	312.4	285.1	285.1	67.0						266.8	280.2	335.4
Excl. near beer													753.8 <sup>b</sup>	7.3 <sup>b</sup>	18.7
Excl. near beer and tax														14.8 <sup>c</sup>	21.1
Malt	4.6	6.7	7.8	8.9	7.7	7.7	3.5	3.3	4.1	3.1	4.7	5.3	7.3 <sup>b</sup>	18.7	18.5
Liquors, vinous	2.9	5.4	6.5	7.1	9.3	9.1	3.1	2.9	1.7	1.5	1.8	0.6 <sup>c</sup>	14.8 <sup>c</sup>	21.1	19.2
Liquors, distilled <sup>d</sup>	81.6	105.6 <sup>e</sup>	168.7	165.8	12.2	12.2	6.5	15.2	19.1	14.7	19.2	8.6	36.9 <sup>f</sup>	76.4	39.9
Excl. tax													19.7		
TOTAL	289.1	361.3	488.1	525.8	381.1	378.5	134.6	150.6	164.2	166.6	193.0	151.0	395.2	493.6	577.6

<sup>d</sup> The 1933 Census of this industry is considered by the Bureau of the Census to be somewhat incomplete.

<sup>e</sup> Beginning with 1909 the internal revenue tax was included in the value of products of liquors, distilled, whether such tax was paid by the manufacturer at the time the report was made, or whether the liquors were still held in bond pending the payment of the tax; in 1899 and 1904 this tax was included only when it was actually paid and reported by the manufacturer.

<sup>f</sup> Between 1933 and 1935 ethyl alcohol was transferred from liquors, distilled, to chemicals, n.e.c.

<sup>a</sup> The figures for 1899-1931 and the higher figure for 1933 for liquors, malt, and liquors, distilled, include internal revenue taxes in value added, whereas the 1935-37 figures and the lower figure for 1933 do not include these taxes.

Between 1931 and 1933 malt extracts and sirups were transferred from flavorings to liquors, malt.

<sup>b</sup> Between 1933 and 1935 maltheuses were transferred from liquors, malt, to malt.

<sup>c</sup> Prior to 1933 internal revenue taxes were included in the value added by liquors, vinous. In 1933 internal revenue taxes were excluded in part and in 1935 and 1937 they were excluded entirely.

TOBACCO PRODUCTS <sup>a</sup>	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More								
	1899	1904	1909	1914	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Cigarettes <sup>b</sup>	102.1	133.2	25.7	48.8	208.2	176.6	269.3	543.5	{ 439.2	536.8	566.6	490.4	594.5	709.2
Cigars <sup>b</sup>			{ 131.7	135.6	212.2	177.9	182.4		191.0	173.3	123.6	92.5 <sup>c</sup>	84.6	94.9
Tobacco products, other	68.7	71.8	82.1	98.7	108.8	85.3	76.6	121.8	112.9	106.8	102.3	85.0	83.2	83.3
TOTAL	170.8	205.0	239.5	283.1	529.4	439.8	528.3	665.3	743.1	816.9	792.5	667.9	762.3	887.4

<sup>a</sup> Prior to 1933 internal revenue taxes were included in the value added figures published by the Census for the tobacco products industries; in 1933-37 they were excluded. We have included them throughout.

<sup>b</sup> For the years 1909, 1914 and 1919 the Census gives figures for a small industry, cigars and cigarettes. The value added by this industry was distributed between the industries cigars and cigarettes in proportion to the value added by the two industries. The value added by the cigars and cigarettes industry in 1921 and 1923 was combined by the Census with the value added by cigarettes to avoid disclosure of the figures for individual establishments.

<sup>c</sup> In 1933 the coverage of cigars was incomplete. On the basis of U. S. Bureau of Internal Revenue data the coverage may be estimated as about 81.5 percent; the value added figure for this year has been raised accordingly.

TEXTILE PRODUCTS <sup>a</sup>	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More								
	1899	1904	1909	1914	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Cotton goods <sup>b</sup>	157.8	159.9	251.2 <sup>c</sup>	243.5	843.8	843.8 <sup>d</sup>	566.5	742.2	629.5	617.7	393.3	377.2 <sup>e,f</sup>	370.5 <sup>g</sup>	546.7
Cotton small wares	3.3	3.8	6.2 <sup>c</sup>	5.3	16.9	13.2 <sup>b</sup>	16.9	34.6	32.9	32.6	31.5	22.3	21.3 <sup>h,i</sup>	21.9
Lace goods			7.5	16.3	16.3	14.7	21.2	17.5	15.9	15.9	19.1	13.0	11.1	17.9
Woolen goods	47.4	54.4	41.5	40.1	146.9	146.9	110.7	162.7	141.9	128.6	125.1	74.3	71.2 <sup>h,i</sup>	119.2 <sup>i</sup>
Worsted goods	43.2	56.1	104.8	92.9	252.9	252.9	244.9	277.1	195.5	187.3	199.4	143.3	127.2 <sup>i</sup>	147.7
Haircloth			0.6	0.7	1.1	1.1	1.1	1.2	0.8	0.9	1.3	1.0	1.1	1.4
Wool pulling	0.5	0.8	1.1	1.6	4.6	4.6	1.6	3.9	1.6	2.2	2.0	3.1	3.4	4.0
Wool scouring	0.7	0.8 <sup>c</sup>	1.2	1.4	6.5	6.5	3.5	3.7	3.3	3.7	3.2	3.5	3.2	3.9
Silk and rayon goods <sup>b</sup>	36.2	50.6	77.1 <sup>c</sup>	95.0	256.9	256.8	215.2	252.0	283.3	266.4	282.2	177.2	129.4 <sup>c</sup>	156.4 <sup>h</sup>
Dyeing and finishing	27.0	31.2	48.3	52.6	149.2	149.2	135.6	167.5	187.8	195.4	230.1	161.1	136.1 <sup>o</sup>	150.9 <sup>r</sup>

For footnotes see pp. 614-15.

## Value Added by Manufacturing Industries (Unit: \$1,000,000)

Industry	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More								
	1899	1904	1909	1914	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Hostery, knit <sup>b</sup>							156.3	183.4	221.3	269.8	175.2	143.3 <sup>a</sup>	168.6 <sup>b</sup>	201.7
Underwear, knit <sup>b</sup>							74.9	76.0	81.2	69.8	44.9	47.3	42.1	54.3
Outerwear, knit <sup>b</sup>	43.5	59.6	87.7 <sup>a</sup>	109.0	277.5	264.5	91.5	62.8	59.1	68.9	52.5	41.9	59.9	50.8
Cloth, knit <sup>b</sup>							20.8	18.1	19.7	20.5	16.4	16.5	20.6	23.7
Carpets and rugs, rag <sup>a</sup>	1.1	1.4	1.9	2.1	3.6	3.2	4.0	3.8	4.3	3.9	2.3	1.2	2.51 <sup>c</sup>	0.7
Carpets and rugs, wool	21.0	23.6	31.6 <sup>d</sup>	26.8	56.1	53.8	102.0	83.6	81.3	90.3	49.3	41.4	59.21 <sup>e</sup>	79.5
Mats and matting	0.6	0.7	1.4	1.1	2.8	1.3	2.4	2.0	0.9	1.0	0.6	0.4	1.3	1.9
Asphalted-felt-base floor covering						6.4	16.1	17.6	17.9	17.6	10.8	13.2	15.8	16.0
Linoleum						16.6	25.2	25.0	23.2	29.8	15.1	12.3	12.7	20.4
Cordage and twine	11.2	11.9	12.6	16.2	43.7	28.9	34.6	33.6	33.1	36.9	23.2	20.4	23.2	28.5
Jute goods	2.4	4.0	4.5 <sup>d</sup>	3.9	16.7	8.6	13.1	13.0	11.4	9.9	7.0	7.7	8.9	12.4
Linen goods	1.8	2.1	2.4	2.7	2.8	3.7	5.3	4.8	5.0	4.5	2.7	2.2	2.2	2.6
Clothing, men's, work <sup>b</sup>							59.7	53.8	60.8 <sup>a</sup>	53.0	35.6 <sup>c</sup>	50.5	62.8 <sup>d</sup>	71.5
Clothing, men's, n.e.c.	104.4	135.6	192.4	190.4	449.1	390.7	423.8	381.1	390.5	380.6	230.6 <sup>c</sup>	182.4		
Clothing, men's, buttonholes <sup>a</sup>	0.6	0.6	0.7	0.5	1.0	0.6	0.7	0.6	0.8	0.5	0.3	0.2	257.7 <sup>c</sup>	284.4
Cloth sponging and refinishing	0.5	1.0	1.5	1.4	3.5	3.8	4.4	3.7	3.3	3.3	2.4	2.8		
Furnishings, men's, n.e.c.						43.1	43.0	51.0 <sup>a</sup>	62.6	67.3	44.7 <sup>c</sup>	24.2	34.4	33.4 <sup>b</sup>
Gloves, textile, n.e.m.	10.9	14.6 <sup>a</sup>	15.9	20.9		12.1	12.1	9.8 <sup>a</sup>	11.6	12.8	10.6	7.3	8.6	13.9

Industry	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Shirts <sup>b</sup>	24.2	25.3													
Incl. contract work	22.3	32.2	39.2	67.2	67.2	67.0	66.7	84.6	80.2	95.8	93.3	68.2 <sup>a</sup>	51.3	64.9	80.2
Excl. contract work	9.8	7.9	11.2	12.0	28.1	28.1	17.2	24.3	15.8	7.4	5.1	3.9	1.6	0.9	
Collars, men's															
Clothing, women's, n.e.c. <sup>b</sup>	69.4	110.0	165.8	205.7	475.7	474.8	393.4	453.4	440.9	537.0 <sup>add</sup>	622.1	459.1	301.1 <sup>ee</sup>	439.6	488.7 <sup>bb</sup>
Corsets	8.1	8.7	17.6	21.0	36.7	36.7	36.7	39.6	39.3	41.8	40.8	40.2	29.1	35.7 <sup>b</sup>	38.9
Embroideries										24.5	18.7	15.7	8.9	12.5	13.6
Millinery										106.0	97.6	72.8	42.7 <sup>ee</sup>	49.2	47.6 <sup>bb</sup>
Trimings, n.e.m.	13.8	24.5 <sup>a</sup>	40.9	56.5	122.8	121.9	137.5	147.6	156.5 <sup>aa, ff</sup>	31.1 <sup>add</sup>	24.4	16.5	11.2	14.3 <sup>j</sup>	18.3
Handkerchiefs									aa	13.4	13.2	8.5	6.9	8.9	7.8
Elastic woven goods, n.e.m.			11.4	9.2	24.4	24.4	17.7 <sup>b</sup>	10.4	11.0	10.7	12.6	7.2	4.8	6.2 <sup>j</sup>	6.4
Hats, fur-felt	14.3	20.7	25.8	20.4	42.6	42.6	26.4	40.8	39.9	48.1	46.7	30.1	21.3	28.4	32.4
Hats, cloth		6.6	7.0	9.3	20.4	20.2	18.5	20.6	21.1	20.5	19.0	8.7	6.5	7.5	6.0 <sup>bb</sup>
Hats, straw, men's	10.5	4.8	10.0	11.4	15.3	15.3	14.1	16.2	13.0 <sup>ff</sup>	9.9	10.0	6.6	4.7	5.5	6.9
Hats, wool-felt	1.5	1.1	1.9	1.0	3.0	3.0	2.5	4.2	3.8	4.3	4.4	3.1	2.5	5.8	7.0
Hat and cap materials	1.1	2.2	2.9	1.9	9.9	9.8	4.8	6.6	6.8	7.7	7.7	4.5	3.5	4.8	5.4
Fur goods	11.6	15.9	24.2	19.8	67.5	67.1	54.8	71.9	95.0	104.3 <sup>u</sup>	101.5	62.1	30.5	55.2	50.4 <sup>bb</sup>
Furs, dressed	0.9	1.6	1.6	2.0	14.0	14.0	13.1	18.2	18.1	20.6	21.6	21.7	15.4	14.8	15.4
Artificial leather	1.6	2.2	2.0 <sup>ee</sup>												
Awnings	3.9	4.6	6.1	8.0	18.7	18.4	15.7	20.0	21.1	23.5	23.9	16.6	10.8 <sup>bb</sup>	10.3 <sup>bb</sup>	13.0
Bags, textile, n.e.m.	3.2	6.6	8.5	12.0	38.0	38.0	16.0	23.5	25.0	26.2	25.9	25.8	22.6	23.7	26.4
Beltng, woven, n.e.m.	0.3	1.1	1.9	1.6	7.5	7.5	3.0 <sup>b</sup>	1.6	1.5	1.7	1.5	0.6	0.5		
Housefurnishings, n.e.c.	5.1	5.4 <sup>j</sup>	6.1 <sup>h</sup>	9.1	20.4	20.3	19.4	24.7	27.6	35.0	51.0	34.8	29.0 <sup>ee</sup>	36.4 <sup>ff</sup>	51.7
Horse blankets	0.5	0.8	1.4	1.6	2.6	2.6	1.2	2.4	1.4	1.5	1.4	0.5	0.7		
Felt goods	2.7	3.2	4.9	5.4	16.4	16.4	12.9	18.1	17.4	18.6	19.2	15.3	15.3 <sup>k</sup>	10.2	11.0

For footnotes see pp. 614-15.

## Value Added by Manufacturing Industries (Unit: \$1,000,000)

Industry	Establishments with Products Valued at \$500 or More										Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937					
Flags and banners	0.5	0.4	0.9	1.9	2.1	1.8	1.8	2.3	2.3	2.1	1.4	1.1	4.3 <sup>r</sup>	4.2						
Regalia	1.5	2.7	3.4	2.8	5.1	5.9	6.3	5.7	4.7	4.7	3.6	1.8	3.8	3.5						
Oilcloth	0.9	1.1	2.1	1.5	4.3	4.4	5.6	4.3	5.8	8.2	5.7	5.8	0.9	1.2						
Nets and seines	0.6	0.6	0.5	0.8	1.5	1.1	1.5	1.7	2.1	2.4	1.4	0.8								
Upholstering materials, n.e.c.	2.6	2.5	3.6 <sup>m</sup>																	
			3.0		2.6	3.9	3.1	2.9	3.1	4.2	2.5	1.4 <sup>r</sup>	9.8	13.0						
Wool shoddy	1.9	2.4	2.4 <sup>l</sup>																	
			2.3		2.4	7.2	6.1	6.1	4.6	5.2	2.6	4.2	14.0 <sup>n</sup>	11.8						
Waste	1.0	1.6	2.6 <sup>h</sup>																	
			2.7		2.5	8.0	8.5	9.2	10.3	10.4	6.1	5.9								
TOTAL	710.6	880.8	1,288.6		3,695.7	3,021.4	3,828.9	3,596.9	3,844.2	3,960.0	2,662.1	2,143.4	2,628.6	3,065.1						
		877.8	1,287.7		1,385.6	3,700.8														

<sup>a</sup> In 1935 the industrial classification used in the major group, *Textile products*, was changed considerably. We use the old classification consistently.

<sup>b</sup> Prior to 1935, the Bureau of the Census calculated value added by deducting cost of materials from value of products. In 1935 the Bureau of the Census calculated value added by deducting the sum of cost of materials and cost of contract work from value of products for all industries in which cost of contract work was equal to 10 percent or more of cost of materials. In 1937 the Bureau of the Census calculated value added for all industries by the second method. For the sake of consistency, we have modified the figures somewhat. Whenever the figures for cost of contract work were available for an entire series or for a good part of it, and cost of contract work was important, we followed the second method of calculation for all years. In this group the industries affected are: *cotton goods* (except for 1909); *clothing, men's, n.e.c.*; *clothing, men's, work*; *clothing, women's, n.e.c.*; *shirts* (except for 1899); the four knit goods industries; and *silk and rayon goods*. The value added in all other industries includes the cost of contract work. This statement applies also to the figures for 1935 and 1937 presented here: the value added as calculated by the Census was increased by the cost of contract work deducted by the Census.

<sup>c</sup> Prior to 1914 *lace goods* was included in *cotton small wares* and *cotton goods*. For 1899 and 1904, however, separate figures for *lace goods* can be obtained from a

and *rayon goods*, in *corsets*, and in *hosiery, knit*. In the last industry commission knitting also was excluded after 1935.

<sup>e</sup> Between 1933 and 1935 dyeing and finishing of hosiery knitted by others were transferred from *dyeing and finishing to hosiery, knit*.

<sup>f</sup> Between 1935 and 1937 some establishments in *dyeing and finishing* were transferred to *fabricated textile products, n.e.c.* (combination of *hauls/furnishings, n.e.c.*, *belting, woven, n.e.m.*, and *horse blankets*).

<sup>g</sup> Because *carpets and rugs, rag*, contains a large proportion of small establishments, the degree to which it is covered in the Census probably varies from year to year.

<sup>h</sup> Between 1909 and 1914, 8 establishments manufacturing jute carpets were transferred from *carpets and rugs, wool*, to *jute goods*.

<sup>i</sup> Between 1927 and 1929 sheep-lined clothing was transferred from *fur goods to clothing, men's, work*.

<sup>j</sup> Between 1931 and 1933 children's play suits, windbreakers, lumberjacks and oiled waterproof outer garments were transferred from *clothing, men's, n.e.c.*, to *clothing, men's, work*; sheep-lined and blanket-lined coats were transferred from *clothing, men's, work*, to *clothing, men's, n.e.c.*; workshirts (including flannel shirts) were transferred from *shirts to clothing, men's, work*; and men's nightwear was transferred from *furnishings, men's, n.e.c.*, to *shirts*.

\* For 1935 and 1937 the statistics for *clothing, men's, work*, are not comparable because of a change in the constitution of the industry.

† Because *clothing, men's, bathing*, contains a large proportion of small establishments, the degree to which it is covered in the Census probably varies from year to year.

‡ Between 1935 and 1937 uniforms were transferred from *flags and banners to clothing, men's, n.e.c.* In 1935, moreover, some establishments in *flags and banners* reported their merchandising activities with their manufacturing activities.

§ Prior to 1909 suspenders, garters and elastic woven goods were classified with  *furnishings, men's, n.e.c., rubber goods, other, and millinery*. In 1909 they were grouped under a new classification, *elastic women goods, n.e.m.*

|| After 1925 *millinery and lace goods, n.e.c.*, was abandoned as a separate classification and divided among *embroideries, millinery, and trimmings, n.e.m.* Ladies' handkerchiefs (formerly part of *millinery and lace goods, n.e.c.*) were classified with men's handkerchiefs (formerly in *furnishings, men's, n.e.c.*) under the title *handkerchiefs*.

be incomplete.

¶ Between 1923 and 1925 certain establishments manufacturing gloves and mittens of cloth and leather combined were transferred from *gloves, leather, to gloves, textile, n.e.m.*

§§ Between 1927 and 1929 women's scarfs and other neckwear were transferred from *trimmings, n.e.m., to clothing, women's, n.e.c.*

||| The 1933 Census of this industry is considered by the Bureau of the Census to be somewhat incomplete.

¶¶ Between 1925 and 1927 women's and children's straw hats, other than hat-vest hats, were transferred from *hats, straw, men's, to millinery*.

¶¶¶ Prior to 1909 *exterior* was combined with *artificial leather*. Overlapping figures for 1909 are available for *artificial leather*.

¶¶¶¶ Between 1933 and 1935 more than 300 establishments whose values of products were reported as between \$5,000 and \$20,000 were eliminated from *awnings*; by the Census of Manufactures. More than 100 such establishments were not eliminated in 1933-35, however, because, in some previous Censuses they had reported values of products above \$20,000. In 1937 these establishments also were eliminated.

¶¶¶¶¶ After 1935 establishments reporting wiping rags as their primary product, formerly classified under *waste*, were not canvassed by the Bureau of the Census. ¶¶¶¶¶¶ Between 1904 and 1909 establishments manufacturing signs and advertising novelties were transferred from *housefurnishings, n.e.c.*, and other classifications to a new classification, *signs*.

¶¶¶¶¶¶¶ Prior to 1914 *aluminum manufactures* was included in *housefurnishings, n.e.c.*, and other industries.

¶¶¶¶¶¶¶¶ Between 1909 and 1914 a few establishments making cotton or mattress shoddy and a few small establishments engaged in the cutting of floocks were transferred from *wool shoddy to waste*.

¶¶¶¶¶¶¶¶¶ *Oleum* was combined with *all other industries* in 1921 and with *waste* in other Census years.

special Census report: value added was 2.0 million dollars in 1899 and 4.1 million dollars in 1904. Since there is no indication of the proportion of *lace goods* in each of the other industries in these two years, we cannot determine the value added in *cotton small wares* and in *cotton goods* excluding *lace goods*.

† Between 1919 and 1921 establishments engaged primarily in the manufacture of aircraft parts, other than engines and tires, were transferred from *cotton goods* and other industries to *aircraft*.

‡ Between 1933 and 1935 dyeing and finishing departments of textile mills making cotton, rayon, and silk goods were transferred to *dyeing and finishing*; and cotton-and-silk-mixed fabrics and cotton-and-rayon-mixed fabrics having a cotton warp, even though the material of chief value was silk or rayon, were transferred from *silk and rayon goods to cotton goods* and to *cotton small wares*. The Bureau of the Census states that the combined figures for the latter two industries for 1935 are "roughly, but not exactly" comparable with the figures for 1933 and prior years and that the 1935 figures for *silk and rayon goods* are not comparable with the figures for earlier years.

§ Between 1933 and 1935 cotton batting, wadding, and mattress felts were transferred from *cotton goods to upholstering materials, n.e.c.*; and batts, padding, and card rolls were transferred from *woolen goods and worsted goods to upholstering materials, n.e.c.* The comparability of the figures for *upholstering materials, n.e.c.*, appears to have been seriously affected by these shifts.

|| In 1935 the amount of processing tax was not included in value added in *cotton goods*, but in 1937 the tax was included.

¶ Between 1921 and 1923 belting manufactured in textile mills and elastic webbing manufactured in textile mills were transferred to *cotton small wares*, the former from *belting, woven, n.e.m.*, and the latter from *elastic women goods, n.e.m.* The comparability of the figures for *cotton small wares* appears to have been seriously affected by the shift.

¶¶ Between 1933 and 1935 *cotton small wares* was expanded to include some mixed fabrics with a cotton warp. According to the Bureau of the Census, the figures are still comparable.

¶¶¶ Between 1935 and 1937 some establishments were transferred from *cotton small wares* to each of the following industries: *acetates products, fabricated textile products, n.e.c.* (combination of *housefurnishings, n.e.c., belting, woven, n.e.m.*, and *horse blankets*), *silk and rayon goods, elastic women goods, n.e.m.*, and *trimmings, n.e.m.*

¶¶¶¶ Between 1933 and 1935, woven felts were transferred from *felt goods to woolen goods*.

¶¶¶¶¶ Between 1935 and 1937 some establishments in *carpets and rugs, rag*, were transferred to *carpets and rugs, wool*, and some establishments in the latter industry were transferred to *woolen goods*.

¶¶¶¶¶¶ Prior to 1909 contract work alone was included in *wool scouring*, whereas some of the establishments included in later Censuses reported also work done on purchased skins and wool.

¶¶¶¶¶¶¶ Between 1909 and 1914 some knitting mills using silk as the sole material were transferred from *silk and rayon goods to knit goods*.

¶¶¶¶¶¶¶¶ After 1935 transfer charges were excluded from contract work in part of *silk*

## Value Added by Manufacturing Industries (Unit: \$1,000,000)

LEATHER PRODUCTS	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More								
	1899	1904	1909	1914	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Leather	49.0	61.4	79.6	83.0	282.1	282.0	167.1	155.2	162.3	143.7	98.4	99.0	110.4	115.8
Shoes, leather	90.3	122.7	165.2	191.4	439.8	439.7	472.6	443.8	450.2	450.9	316.3	267.1	310.6	352.7
Shoe cut stock, n.e.m.	5.4	6.1	7.7	8.5	27.3	27.3	15.8	20.7	23.1	25.9	15.6	12.7	35.5	36.8
Shoe findings, n.e.m.	2.8	3.6	7.2	8.0	22.4	22.3	16.2	20.4	22.8	26.7	19.2	18.8	35.5	36.8
Belting, leather	3.1	4.9	8.1	7.6	12.3	12.3	6.1	13.2	12.9	11.1	7.2	7.9	10.0	12.4
Gloves, leather	7.4 <sup>a</sup>	7.7	10.4	9.4	20.7	20.6	11.0	17.9 <sup>b</sup>	15.5	17.4	18.9	14.9	12.1	14.7
Leather goods, n.e.c.	5.6	8.0 <sup>c</sup>	8.5	8.7	22.9	22.8	24.0	20.5	20.0	21.8	17.9	14.0	9.2	13.1
Pocketbooks	1.2	1.8	1.7	1.6	7.0	6.9	6.9	16.5	20.7	27.7	33.3	20.5	13.0	20.7
Luggage	6.5	9.5	13.4	12.8	30.7	30.5	22.7	30.2	29.8	30.8	32.3	13.5	8.0	13.3
Saddlery and harness	13.9	18.3	21.0	20.5	31.3	30.1	12.5	17.7	11.3	10.8	9.5	4.1	4.2	5.6
Whips <sup>d</sup>	1.5	1.9	2.4	1.8	1.9	1.9	0.6	0.4	0.2	0.1	0.1	4.1	4.2	5.6
TOTAL	186.7	245.9	325.2	353.3	898.4	896.4	610.4	797.2	750.9	780.9	774.2	523.7	452.0	533.9

<sup>a</sup> In 1899 a few establishments making gloves and mittens from materials other than leather were included with *gloves, leather*.

<sup>b</sup> Between 1923 and 1925 some establishments manufacturing gloves and mittens of cloth and leather combined were transferred from *gloves, leather*, to *gloves, textile, n.e.m.*

<sup>c</sup> Between 1904 and 1909 establishments manufacturing signs and advertising novelties were transferred from *leather goods, n.e.c.*, and other classifications to a new classification, *signs*.

<sup>d</sup> Because this industry contains a large proportion of small establishments, the degree to which it is covered in the Census probably varies from year to year.

RUBBER PRODUCTS	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More								
	1899	1904	1909	1914	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Shoes, rubber	18.4 <sup>a</sup>	38.1 <sup>a</sup>	20.1	29.9	66.6	61.9	86.5	75.4	81.2	68.1	35.6	27.9	32.4	37.2
Tires and tubes	21.2	29.9 <sup>b</sup>	54.5 <sup>c</sup>	108.1	477.3	{ 204.6	279.0	365.1	370.5	340.6	232.7	159.9	180.6	209.0
Rubber goods, other	39.6	68.0	74.6	138.0	543.9	{ 60.5	91.9	96.1 <sup>d</sup>	98.6	113.0	130.1	93.1	73.5	96.1
TOTAL	39.6	68.0	74.6	138.0	543.9	327.0	457.4	536.6	564.7	538.8	361.4	261.3	309.1	369.3

<sup>a</sup> In 1904 some establishments in *shoes, rubber*, reported list price values of products, rather than sales or production values.  
<sup>b</sup> Prior to 1909 *rubber goods, other*, included some suspenders, garters and elastic woven goods. Between 1904 and 1909 these three products were brought together in a new classification in the textile group, *elastic woven goods, n.e.c.m.*  
<sup>c</sup> Between 1909 and 1914 rubber combs and hairpins were transferred from *combs, n.e.c.*, to *rubber goods, other*.

<sup>d</sup> Between 1925 and 1927 rubber cement was transferred from *miscellaneous to rubber goods, other*. Overlapping figures for 1925 are provided by the Bureau of the Census.  
<sup>e</sup> Between 1925 and 1927 rubber toy balloons were transferred from *toys and games to rubber goods, other*. Overlapping figures for 1925 are provided by the Bureau of the Census.

Industry	Establishments with Products Valued at \$500 or More							Establishments with Products Valued at \$5,000 or More						
	1899	1904	1909	1914	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Paper	56.8	77.5	102.2	119.0	320.6	221.4	333.6 <sup>a</sup>	366.0	347.1	392.6	300.6	249.2	282.7	390.7
Pulp					320.6				66.9	90.2	55.9	52.8	71.0	93.5
Bags, paper, n.e.m.	2.3	3.5	5.3	5.4	13.9	11.4	12.9	16.0	16.8	21.4	20.9	20.1 <sup>b</sup>	23.8	29.1
Boxes, paper, n.e.c.	15.6	20.2	28.7	38.4	105.3	86.0	120.1	130.2	138.1	134.4	104.6	96.7	130.1	171.6
Cardboard, n.e.m.	0.6	0.6	1.1	1.4	4.2	3.7	4.0	3.8	2.7	3.0	1.9	1.4	1.7	2.5
Card cutting and designing	0.3	0.6	0.7	0.6	3.0	2.5	3.5	3.8	9.3	10.4	9.3	6.1	9.5	11.8
Envelopes	2.6	4.2	5.9	8.2	17.7	19.9	23.2	23.8	27.0	31.4	24.5	18.0	22.9	26.4
Labels and tags	0.7	1.5	2.8	3.7	13.0	10.7	13.9	15.0	18.1	17.5	<sup>c</sup>			
Paper goods, n.e.c.	7.0	9.4	16.9	20.8	42.0	34.3	49.2	53.5	62.2	82.3	70.9	64.9	85.9	114.1
Stationery goods, n.e.c.	2.9	4.9 <sup>a</sup>	8.9	11.1	30.2	35.0	43.0 <sup>f</sup>	36.7	30.0	41.9	25.1	7.4	<sup>b</sup>	
Wall paper	4.6	6.0	6.8	7.4	9.9	12.8	17.8	15.1	15.4	16.5	11.0	8.9	9.8	14.9
TOTAL	93.4	128.4	179.3	216.0	559.8	437.7	621.2	663.9	733.6	841.6	624.7	525.5	637.4	854.6

<sup>a</sup> Between 1923 and 1925 some establishments were transferred from *roofing to paper and pulp*.  
<sup>b</sup> Between 1933 and 1935 *stationery goods, n.e.c.*, was abandoned as a classification and the products were divided among *bags, paper, n.e.m.*, and other classifications.  
<sup>c</sup> Between 1929 and 1931 *labels and tags* was abandoned as a classification and the products were divided among *printing and publishing, book and job, lithographing, engraving, other*, and *miscellaneous articles*.

<sup>d</sup> Between 1931 and 1933 *paperettes* were transferred from *stationery goods, n.e.c.*, to other industries, principally *paper goods, n.e.c.*. Overlapping figures for 1931 are provided by the Bureau of the Census.  
<sup>e</sup> Between 1904 and 1909 establishments manufacturing signs and advertising novelties were transferred from *stationery goods, n.e.c.* and other classifications to a new industry, *signs*.  
<sup>f</sup> Between 1923 and 1925 *manifolding machinery* was transferred from *stationery goods, n.e.c.*, to *foundry and machine-shop products, n.e.c.*



## Value Added by Manufacturing Industries (Unit: \$1,000,000)

Industry	Establishments with Products Valued at \$500 or More						Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1929	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Printing and publishing, book and jobs <sup>a</sup>	78.6	120.7	162.9	195.6	355.5	348.6	444.5	487.0	538.6	604.5	678.0 <sup>b</sup>	533.1				
Printing and publishing, music <sup>a</sup>	1.5	2.8	3.7	4.7	9.8	9.7	8.9	9.3	10.5	11.4	11.0	8.0	344.9 <sup>c</sup>	464.8	526.2	
Printing and publishing, periodicals <sup>a</sup>	161.7	222.7	286.2	345.8	573.0	557.5	687.3	829.2	982.5	1,067.6	1,241.3	1,023.3	757.7	889.9	1,003.0	
Bookbinding and blank-book making	13.1	16.1	20.1	24.8	42.8	42.3	44.0	53.9	57.5	61.5	72.0	58.4	40.3	52.2	66.3	
Engravers' materials	0.1	0.1	0.3	0.2	0.8	0.8	0.8	0.9	0.8	0.9	1.3	1.2	0.8			
Engraving, steel and copper	3.9	4.4	7.2	9.9	17.2	17.0	21.2	24.6	24.5	28.8	35.3	21.0	12.6	15.5	21.7	
Engraving, wood	0.6	0.6	0.6	0.6	0.9	0.8	0.5	0.5	0.5	0.6	0.7					
Engraving, other <sup>d</sup>	1.3	2.0	1.9	2.5	5.4	4.8	3.5	6.3	6.4	5.9	8.4 <sup>b</sup>	4.2	2.5	5.0	6.2	
Lithographing	14.4	16.9	22.2	25.1	45.4	45.3	49.0	60.7	66.6	64.3	82.0 <sup>b</sup>	60.8	46.7	62.0	92.2	
Photo-engraving, n.e.c. <sup>d</sup>	3.5	6.0	9.5	12.6	24.4	24.3	30.3	37.1	50.2	58.4	66.4	48.6	32.0	45.5	64.5	
Printing materials, n.e.c.	0.7	0.8	1.2	1.3	3.3	3.3	3.6	3.6	4.7	5.0	6.4	4.3	4.2			
Type founding	2.0	2.0	1.7	1.4	1.1	1.1	1.4	1.8	1.7	1.9	2.0	1.0				
Stereotyping, n.e.d.	3.0	4.0	4.6	5.9	11.7	11.7	13.6	16.8	18.1	20.9	29.1	21.0	17.4	23.1	26.4	
TOTAL	284.4	399.1	522.1	630.4	1,091.3	1,067.2	1,308.6	1,531.7	1,762.6	1,931.7	2,233.9	1,784.9	1,259.1	1,254.1	1,558.0	1,806.5

<sup>a</sup> Value added in all years excludes payments for contract work. See footnote b, p. 614.

<sup>b</sup> Between 1929 and 1931 labels and tags was abandoned as a separate classification and its products were divided among printing and publishing, book and job; lithographing; engraving, other; and miscellaneous articles.

<sup>c</sup> Between 1933 and 1935 stationery goods, n.e.c., was abandoned as a separate classification and the products were divided among printing and publishing, book and job; printing and publishing, music; and other classification.

<sup>d</sup> Because this industry contains a large proportion of small establishments, the degree to which it is covered in the Census probably varies from year to year.

<sup>e</sup> After 1933 printing materials, n.e.c.; type founding; and engravers' materials were transferred to foundry and machine-shop products, n.e.c.

CHEMICAL PRODUCTS	Establishments with Products Valued at \$50 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Chemicals, n.e.c. <sup>a</sup>	25.6	37.3	58.1 <sup>b</sup>	77.1 <sup>c</sup>	312.7	312.7 <sup>d</sup>	212.0	279.7 <sup>e</sup>	287.6 <sup>f</sup>	375.4	374.5 <sup>g</sup>	287.1	255.0 <sup>h</sup>	339.3	478.2
Gases, compressed	11.9	18.4	26.1	25.1	59.5	59.3	47.1	45.8	59.4	84.1	116.2	96.5	23.4	30.8	42.2
Rayon	41.0	53.2	56.9	66.5	123.3	122.1	106.3	148.7	162.8	193.6	224.1	186.1	112.9	120.7	174.1
Druggists' preparations	4.0	6.4	8.6	9.4	33.5	33.3	44.5	62.6	82.6	108.5	135.1	111.6 <sup>i</sup>	203.1	237.4	284.8
Patent medicines	1.0	2.1	2.6	2.9	5.4	5.3	3.3	4.0	3.5	3.5	4.0	3.7	3.0	2.5	3.2
Toilet preparations	13.6	16.4	28.0	31.2	86.1	86.1	22.4	28.9	51.4	56.3	49.4	34.2	26.0	27.3	46.3
Drug grinding	2.8	4.4	5.7	5.3	20.1	20.1	12.6	10.5	18.8	13.8	18.5	12.6	6.6	11.5	16.0
Cottonseed products <sup>l</sup>	0.2	0.4	0.5	0.7	1.8	1.7	0.9	0.9	1.5	1.2	2.8	0.8	0.9	0.9	1.0
Linseed products	5.6	9.3	10.6	14.6	49.9	49.9	16.3	23.8	18.9	24.7	24.0	17.4	17.4	20.0	25.6
Oils, essential	1.2	1.2	1.4	1.1	2.5	2.5	2.8	3.1	3.6	3.3	4.1	2.3	1.5	2.3	1.5
Ammunition	2.3	2.8	4.2	4.8	11.2	11.2	9.1	15.6	15.3	13.4	16.3	13.4	12.1	9.5	11.2
Fireworks	0.3	0.4	0.6	0.7	1.2	1.2	0.9	0.8	1.1	1.1	0.9	0.8	0.7	0.6	0.8
Blackings	0.3	0.4	0.6	0.8	3.3	3.3	4.4	9.3	8.9	7.7	11.1	4.5	4.5	9.5	11.6
Bluing	20.1	1.0	1.0	0.6	1.2	1.2	1.7	2.7	2.3	3.4	3.4	2.9	2.3	2.3	2.7
Carbon black	2.5	3.0	3.9	3.4	12.5	12.5	2.5	9.9	4.9	6.6	8.5	2.8	2.2	3.0	3.8
Candles	2.5	3.0	3.9	3.4	12.5	12.5	0.3	2.3	4.2	5.4	6.1	2.1	3.7	5.0	11.0
Soap	0.7	0.6	0.4	0.2	0.3	0.3	0.2	0.2	0.4	0.2	0.2	0.1	0.1	0.1	0.1
Hardwood distillation products	1.2	1.4	3.6	5.3	13.8	13.6	12.2	21.8	21.3	26.0	31.4	31.0	26.3	25.1	34.3
Softwood distillation products	6.8	12.4	17.3	15.8	46.6	46.6	28.5	35.5	31.8	35.6	40.8	26.7	22.4	23.7	34.0
Cleaning preparations	15.7	17.3	34.4	45.2	96.1	96.1	35.4	55.1	69.0	52.2	72.7	47.9	25.9	47.0	65.7
Explosives															
Fertilizers															

For footnotes see next page.

## Value Added by Manufacturing Industries (Unit: \$1,000,000)

CHEMICAL PRODUCTS (concluded)	Establishments with Products Valued at \$500 or More							Establishments with Products Valued at \$5,000 or More							
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Glue and gelatin	1.6	3.8	6.2	4.4	12.9	12.9	7.9	9.8	10.4	12.0	13.5	12.1	8.8	13.1	17.3
Grease and tallow	3.2	6.4	7.9	7.8	19.5	19.3	9.4	17.4	17.7	18.0	21.5	11.7	12.1	17.6	19.4
Ink, printing	1.5	3.2	4.7	7.0	11.6	11.6	10.2	14.6	18.5	21.7	23.5	17.7	13.6	15.9	22.2
Ink, writing	0.7	1.0	1.4	1.5	3.1	3.1	2.9	3.5	3.7	3.1	2.6	2.1	1.3	2.0	2.0
Mucilage	0.9	1.3	1.6	2.4	4.1	4.1	4.9	4.6	5.4	4.3 <sup>1</sup>	3.0	1.7	1.2	1.9	2.0
Paints and varnishes	24.8	31.5	45.9	57.1	123.2	123.2	102.9	155.2	176.8	211.3	234.8	157.0	136.4	185.0	226.5
Salt	4.6	5.3	6.1	7.8	21.5	21.4	16.8	20.4	20.4	19.7	23.7	20.6	19.9	18.8	21.6
Tanning and dye materials	2.6	4.1	6.3	7.4 <sup>o</sup>	19.2	19.2	8.2	11.9	12.0	12.6	14.5	10.9	9.8	13.9	13.1
TOTAL	196.7	269.6	383.8	445.2	1,174.3	1,172.0	816.4	1,148.5	1,277.2	1,441.5	1,729.7	1,363.1	1,123.6	1,359.1	1,765.5

<sup>a</sup> Blast-furnace products and chemicals, n.e.c., each include part of ferro-alloys, which was listed as a separate industry in 1919.

<sup>b</sup> Between 1909 and 1914 powdered milk and sugar of milk were transferred from chemicals, n.e.c., to milk, canned.

<sup>c</sup> Between 1914 and 1919 artificial dyestuffs and mineral colors and dyes were transferred from tanning and dye materials to chemicals, n.e.c.

<sup>d</sup> Between 1919 and 1921 some establishments were transferred from secondary metals, nonferrous, to chemicals, n.e.c.

<sup>e</sup> Between 1923 and 1925 rayon and allied products were transferred from chemicals, n.e.c., to a new classification, rayon. The rayon data for 1923 were secured from a special tabulation made by the Bureau of the Census for the Bureau of Foreign and Domestic Commerce from the original returns for 1923; see the

Commerce Year Book, 1932, vol. I, p. 423. To obtain the 1923 figure for chemicals, n.e.c., we subtracted the figure for rayon from the figure given for 1923.

<sup>f</sup> Between 1925 and 1927 compressed and liquefied gases were transferred from chemicals, n.e.c., and Pintsch gas plants from gas, manufactured, to a new classification, gases, compressed.

<sup>g</sup> Between 1929 and 1931 molded plastics were transferred from chemicals, n.e.c., and other industries to pulp goods.

<sup>h</sup> Between 1933 and 1935 ethyl alcohol was transferred from liquors, distilled, to chemicals, n.e.c.

<sup>i</sup> Between 1931 and 1933 druggists' preparations and patent medicines were combined into a single industry, drugs and medicines. At the same time some establishments were shifted from the latter industry to toilet preparations and vice versa.

<sup>j</sup> Data on cottonseed products for 1925 and prior years relate to the 12-month period ending July 31 following the year specified, although in the early Census returns some firms may have reported for the calendar year. The figures for 1927-37 relate to the 12-month period ending July 31 of the year indicated, but may also include a few reports prepared on a calendar-year basis.

<sup>k</sup> Because this industry contains a large proportion of small establishments, the degree to which it is covered in the Census probably varies from year to year.

<sup>l</sup> Between 1925 and 1927 rubber cement was transferred from mucilage to rubber goods, other. Overlapping figures are provided for 1925 by the Bureau of the Census.

Industry	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Petroleum refining	21.1	35.6	37.7	71.1	384.6	384.6	345.3	368.6	487.0	389.7	608.3	313.8	314.2	360.4	489.4
Lubricants, n.e.m.	0.4	0.5	0.7	2.2	4.1	4.1	3.6	5.3	6.4	5.3 <sup>a</sup>	30.0	18.9	11.9	15.3	18.7
Oils, n.e.c.	7.7	8.6	9.7	11.6	37.2	37.2	18.7	34.0	32.6 <sup>b</sup>	30.7 <sup>a</sup>	8.3	6.0	6.6	10.8	13.4
Coke-oven products	15.9	21.8	31.7	30.1	92.2	92.2	52.5	162.9	100.9	95.3	134.8	63.7	42.5	58.1	84.6
Fuel briquettes	°	°	0.2	0.3	0.6	0.6	0.9	1.7	2.1	2.3	3.6	1.5	1.1	1.5	2.1
TOTAL	45.1	66.5	79.8	80.0	518.7	518.7	421.0	572.5	629.0	523.3	785.0	403.9	376.3	446.1	608.2

<sup>a</sup> Between 1927 and 1929 lubricating oils were transferred from *oils, n.e.c.*, to *lubricants, n.e.m.*. The comparability of the figures for both industries appears to have been seriously affected by this change.

<sup>b</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oils, n.e.c.*, and other industries to *shortenings*.

<sup>c</sup> In 1904 no establishments were reported as engaged primarily in the manufacture of products classified under *fuel briquettes*; in 1899 this industry was included with *all other industries*.

Industry	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Asbestos products	°	1.5	11.0	11.0	6.9	16.8	17.0	22.6	30.8	21.3	14.5	21.0 <sup>b</sup>	34.3		
Steam and other packing	1.9	5.1	5.5 <sup>a</sup>	6.0	17.8	17.8	13.1	17.1	23.5	23.3	14.1	11.1 <sup>c</sup>	11.1 <sup>c</sup>		
Roofing	6.8	9.0 <sup>d</sup>	6.7 <sup>a</sup>	10.4	33.3	33.3	31.2	28.8 <sup>e</sup>	45.0	55.9	42.1	26.3	20.9	31.8	39.9
Cement	17.7	33.9	49.8	95.8	101.3	163.3	186.7	173.6	172.3	92.7	60.0	77.5	113.2		
Lime	17.6	9.3	11.2	10.8	19.7	19.5	16.8	27.5	30.7	24.3	21.9	13.3	9.7	14.4	21.8
Wall plaster and board	5.4	6.8	8.6	15.1	15.0	16.2 <sup>f</sup>	40.7	51.4	51.9	42.4	33.9	17.7 <sup>g</sup>	28.2	32.3	51.3
Concrete products	42.1	2.7	11.6	13.0	19.8	18.0	18.3	33.1	47.4	59.3	58.9	30.8	11.2	24.9	41.0
Marble and granite	58.3 <sup>h</sup>	75.7	69.3	79.6	78.1	84.2	124.7	126.1	134.9	134.5	85.0	37.3	38.2	52.7	
Emery wheels	0.9	1.4	4.1	18.7	18.7	6.4	14.6	14.6	13.3	19.7	19.9	18.8	33.1	48.6	
Hones	0.1	0.2	0.2	0.2	0.5	0.2	0.4	0.4	0.5 <sup>i</sup>	0.5 <sup>j</sup>	0.5 <sup>k</sup>	0.5 <sup>l</sup>	0.5 <sup>l</sup>		
Sandpaper	0.5	0.4	2.0	1.6	4.2	2.9	6.9	8.3	6.8	8.8	8.8	8.8			

<sup>a</sup> Between 1927 and 1929 lubricating oils were transferred from *oils, n.e.c.*, to *lubricants, n.e.m.*. The comparability of the figures for both industries appears to have been seriously affected by this change.

<sup>b</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oils, n.e.c.*, and other industries to *shortenings*.

<sup>c</sup> In 1904 no establishments were reported as engaged primarily in the manufacture of products classified under *fuel briquettes*; in 1899 this industry was included with *all other industries*.

<sup>d</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oils, n.e.c.*, and other industries to *shortenings*.

<sup>e</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oils, n.e.c.*, and other industries to *shortenings*.

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<sup>g</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oils, n.e.c.*, and other industries to *shortenings*.

<sup>h</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oils, n.e.c.*, and other industries to *shortenings*.

<sup>i</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oils, n.e.c.*, and other industries to *shortenings*.

<sup>j</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oils, n.e.c.*, and other industries to *shortenings*.

<sup>k</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oils, n.e.c.*, and other industries to *shortenings*.

<sup>l</sup> Between 1925 and 1927 vegetable cooking oils were transferred from *oils, n.e.c.*, and other industries to *shortenings*.

For footnotes see next page.

## Value Added by Manufacturing Industries (Unit: \$1,000,000)

Industry	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Pulp goods	0.6	0.7	0.8	2.3	12.2	12.2	15.0 <sup>f</sup>	9.2	10.0	12.6	15.2	8.1 <sup>1</sup>	15.7	29.1	45.8
Sand-lime brick				0.6	1.1	1.1	0.7	1.5	2.5	2.5	2.0	0.8	0.1	0.4	1.1
China firing and decorating, n.c.d. <sup>g</sup>	0.3	0.2	0.5	0.4	0.6	0.6	0.7	0.9	0.9	1.0	0.9	0.6	0.4	0.6	0.9
Pottery	32.3	47.6	54.21	24.9	54.1	54.0	59.0	80.8	77.2	77.0	83.6	49.5	31.5	48.8	69.3
Clay products, n.e.c.	40.3	54.8	69.0 <sup>h</sup>	93.2	142.9	142.3	126.1	230.1 <sup>m</sup>	233.7	220.0	213.2	90.4	44.6	73.2	128.4
Crucibles	0.9	0.6	0.8	0.6	1.1	1.1	1.1	2.2 <sup>m</sup>	1.3	1.2	1.9				
Graphite	0.2	0.2	0.7	1.0	1.1	1.1	0.8	1.1	1.2	1.6	2.3	1.0	0.7	1.2 <sup>n</sup>	0.3
Minerals and earths	2.1	2.6	2.6	5.7	29.8	29.7	14.7	22.0	25.2	23.6 <sup>o</sup>	8.5	3.5	5.3	12.9	15.8
Statuary and art goods	<sup>p</sup> 2.0	2.0	2.8	3.1	3.6	3.5	5.0	5.7	7.3	7.8	8.0	4.4	1.9	2.2	2.3
Glass	39.8	53.5	60.0	77.1	171.1	171.1	127.4	196.2	182.3	172.5	200.5	142.7	128.5	173.9	247.3
Glass products, n.e.m.	5.2	8.5	9.9	9.3	14.1	13.9	11.4	13.2	14.6	13.5	17.0				
Mirrors	3.0	3.0	3.7	4.2	8.3	8.3	6.7	13.4	15.2	15.2	16.2	19.1	14.3	39.6	47.4
TOTAL	194.6	281.2	362.7	397.7	755.5	750.8	666.1	1,050.2	1,122.5	1,114.9	1,125.0	657.4	444.2	667.6	979.0
		283.2										665.7			

<sup>a</sup> Prior to 1914 asbestos products was included with steam and other packing and roofing.

<sup>b</sup> Between 1935 and 1937 some establishments were transferred from cotton small wares to asbestos products and other classifications.

<sup>c</sup> Between 1933 and 1935 mineral wool was transferred from steam and other packing to wall plaster and board. Overlapping figures for 1933 are provided by the Bureau of the Census.

<sup>d</sup> Between 1904 and 1909 roofing slate was transferred from roofing to marble and granite.

<sup>e</sup> Between 1923 and 1925 some establishments were transferred from roofing to paper and pulp.

<sup>f</sup> Between 1921 and 1923 wall board, other than gypsum wall board, was transferred from pulp goods to wall plaster and board.

<sup>g</sup> Because this industry contains a large proportion of small establishments, the degree to which it is covered in the Census probably varies from year to year.

<sup>h</sup> After 1927 hones was limited to establishments which did not quarry the stone but purchased it in the rough and prepared it for the market.

<sup>i</sup> Between 1929 and 1931 there was a change in the classification of an importer-manufacturer of abrasives. The Bureau of the Census believes that this change renders the statistics for the 3 abrasives industries for that year incomparable with those for prior years.

<sup>j</sup> Between 1929 and 1931 molded plastics were transferred principally from electrical machinery, but also from miscellaneous articles, chemicals, n.e.c., machine-tool accessories, n.e.c., and phonographs, to pulp goods. Overlapping figures for 1931 are given for pulp goods.

<sup>k</sup> Prior to 1914 sand-lime brick was included with clay products, n.e.c.

<sup>l</sup> Between 1909 and 1914 terra cotta and fire clay products were transferred from pottery to clay products, n.e.c. The comparability of the figures for both industries appears to have been seriously affected by this change.

<sup>m</sup> Between 1923 and 1925 clay crucibles were transferred from crucibles to clay products, n.e.c.

<sup>n</sup> Between 1935 and 1937 some establishments were transferred from graphite to other industries. The comparability of the figures for graphite appears to have been seriously affected by the shift.

<sup>o</sup> After 1927 establishments performing manufacturing operations alone were included in minerals and earths; in prior years mining establishments were also included. The change appears to have had a serious effect upon the comparability of the figures.

<sup>p</sup> Between 1899 and 1904 establishments engaged in manufacturing statuary and art goods were transferred from plastering and stuccowork (a classification abandoned by the Bureau of the Census in 1904) and miscellaneous articles to a new classification, statuary and art goods.

FOREST PRODUCTS	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
<i>Industry</i>															
Lumber-mill products, n.e.c. <sup>a, b</sup>															
Incl. contract work	312.4	396.1			879.0	493.6	880.2	810.4	810.4	692.2	830.9	273.0	218.7	329.2	502.7
Excl. contract work		367.7													
Planing-mill products, n.e.m.	68.2	104.3	131.3	123.4	201.2	190.6	291.6	307.6	307.6	260.2	257.6 <sup>d</sup>	109.9 <sup>e</sup>	56.4	87.6	138.5
Window and door screens				4.9	6.0	5.9	11.7	12.9	12.9	13.3	13.9	7.8	3.4	4.6	7.4
Wood turned and shaped, n.e.c.	10.6	16.2	18.3	15.1	29.9	26.1	32.5 <sup>f</sup>	31.1	31.1	34.5	41.2 <sup>h, g</sup>	31.8	23.8	33.7	37.6
Baskets	2.3	3.4	3.4	3.6	6.9	6.7	8.6	9.9	9.9	12.5	14.0	10.0	7.5	8.8	9.7
Boxes, wooden, cigar	2.8	4.0	4.2	4.1	6.8	6.8	8.5	7.5	7.5	7.3	7.2	5.4	3.7	3.9	4.5
Boxes, wooden, other	15.4	23.6	28.9	33.7	74.9	74.7	68.8	65.9	65.9	58.2	60.9	35.0	25.9	31.2	41.0
Cooperage	16.3	18.3	17.5	17.1	29.7	29.4	24.8	23.6	23.6	23.1	23.3	14.8	12.7	16.6	17.7
Furniture	72.0	100.4	129.6	147.5	314.2	313.5	296.7	434.4	483.8	490.3 <sup>h</sup>	493.7	264.4	155.1 <sup>i</sup>	226.5	352.2
Billiard tables	0.9	1.3	2.5	2.4	9.6	9.6	4.0	4.0	3.8	4.7	5.6	.2	0.6	2.1	3.7
Mirror and picture frames	6.1	8.3	8.0	6.5	11.2	11.0	9.8	12.5	12.3	12.4	12.7	7.4	4.3	5.7	7.6
Caskets and coffins	7.0	10.8	12.6	13.1	32.8	32.7	27.8	34.0	37.6 <sup>f</sup>	41.6	48.9	41.3	33.1	36.2	38.2
Cork products	2.0	2.0	2.5	3.1	7.1	7.1	6.2	7.5	8.8	8.0	10.4	8.3	6.3	7.0	8.3
Excelsior															
Leats	1.4	1.8	2.8	3.2	8.5	8.5	8.0	6.7	6.3	5.0	5.4	4.1	3.7	4.1	3.8
Matches	2.6	2.4	6.8	7.4	11.6	11.6	17.0	12.2	10.8	13.0	7.8	7.6	14.7	11.4	10.7
Turpentine and rosin, <sup>h, m, n</sup>	14.2	20.2	20.4	15.5	39.1	38.9	17.1	26.2	30.5	27.7	26.0	10.7	11.9	13.7	15.8
Wood preserving	0.6	0.9	4.8	5.0	10.0	10.0	13.0	20.9	24.5	43.0	43.2	21.4	12.9	20.6	32.1
TOTAL	534.8	714.0	850.3	808.3	1,680.9	1,659.4	1,196.1	1,887.7	1,889.6	1,749.3	1,933.3	856.9	595.9	844.3	1,233.2
	679.0		851.2							1,752.1					

For footnotes see next page.

## Value Added by Manufacturing Industries (Unit: \$1,000,000)

## FOREST PRODUCTS (concluded)

<sup>a</sup> Sawmills are unaffected by the restriction, prevailing since 1919, of the Bureau of the Census inquiries to establishments reporting products valued at \$5,000 or more. For Census purposes a mill which saws less than 200,000 feet of lumber or 1,000,000 lath or 2,000,000 shingles is treated as an establishment with products valued at less than \$5,000.

<sup>b</sup> Value added excludes payments for contract work except for years noted. See footnote b, p. 614.

<sup>c</sup> Between 1919 and 1921 establishments engaged primarily in the manufacture of aircraft parts, other than engines and tires, were transferred from *lumber-mill products, n.e.c.*, *planing-mill products, n.e.m.*, *wood turned and shaped, n.e.c.*, and *cotton goods to aircraft*.

<sup>d</sup> Between 1929 and 1931 *dairymen's supplies* was abandoned as a separate classification, and the products were divided among *planing-mill products, n.e.m.*, *wood turned and shaped, n.e.c.*, and other classifications.

<sup>e</sup> Between 1931 and 1935 horsedrawn lunch wagons were transferred from *carriages, wagons and sleighs to planing-mill products, n.e.m.*

<sup>f</sup> Between 1923 and 1925 *rulers* was abandoned as a separate industry, and the products were divided among *wood turned and shaped, n.e.c.*, and other industries.

<sup>g</sup> Between 1929 and 1931 *carriage and wagon materials* was abandoned as a separate classification, and turned wood products, such as hubs, felloes, and spokes, were transferred to *wood turned and shaped, n.e.c.*

<sup>h</sup> Between 1927 and 1929 sewing machine cases, cabinets, and tables were transferred from *sewing machines to furniture*. Overlapping figures for 1927 are provided by the Census.

<sup>i</sup> Between 1933 and 1935 the composition of *dental goods and equipment* was changed to include, among other items, dental chairs and cabinets formerly classed with *furniture*.

<sup>j</sup> Between 1925 and 1927 metal burial vaults were transferred from *safes and vaults to caskets and coffins*.

<sup>k</sup> Prior to 1909 *excelsior* was combined with *artificial leather*.

<sup>l</sup> In 1937 the salaries and wages of those employees in *turpentine and rosin* who were engaged in the production and gathering of crude gum were added by the Bureau of the Census to cost of materials and deducted from value added, and only the employees at the still were considered as engaged in manufacturing. We have restored these data to value added in order to preserve as much comparability with 1935 as possible. The percentage of coverage of total production fell below 100 after 1929. The percentage of coverage is not given for 1931; in 1933 it was 85, and in 1935 it was 87. The value added figures for these two years have been raised accordingly. In 1937 estimates were made by the Bureau of the Census for producers who failed to report.

<sup>m</sup> For the period 1921-31, the statistics for *turpentine and rosin* relate to the crop year ending March 31. Thus the data for 1921 refer to the crop year 1921-22. In preceding years, however, and again in 1933, 1935, and 1937, the canvasses were made to cover the calendar year, in order to bring the statistics into line with those for other industries. The statistics for the calendar year differ only slightly from those for the crop year.

<sup>n</sup> The Census states that for the period 1925-33 the cost of turpentine rights (i.e., for the rental of pine forests) may not have been included in all cases in the cost of materials. If these costs were not included in cost of materials, the value added reported for these years was higher than it otherwise would have been. Whether value added in other years may have been similarly affected is not stated in the Census.

Industry	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More								
	1899	1904	1909	1914	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Blast-furnace products*	75.3	52.9	70.8	53.1	180.4	180.4	180.0	147.9	129.3	161.1	52.2	29.7	74.0	127.6
Steel-mill products	206.3	232.8	328.2	327.8	1,148.3	1,148.3	476.5	1,109.9	1,090.2	1,461.7	571.0	451.8	820.9	1,499.7
Bolts and nuts, n.e.m.	5.9	6.9	11.7	10.5	45.5	45.5	17.2	42.6	37.4	58.2	22.6	17.5	28.4	54.4
Forgings, n.e.m.	5.5	6.9	10.8	15.5	93.5	93.5	39.8	87.2	67.3	52.9	84.6	25.0	31.6	60.5
Galvanizing, n.e.d.	0.8	1.7	1.6	2.2	3.9	3.9	1.9	3.0	3.0	3.2	3.7	2.4	1.5	3.2
Nails and spikes, n.e.m.	6.2	4.2	4.2	3.6	8.7	8.7	5.3	6.3	6.7	6.6	6.9	3.8	4.3	6.3
Springs, steel, n.e.m.	2.7	3.0	4.3	5.5	23.5	23.5	15.7	27.6	20.9 <sup>b</sup>	19.2	21.3	7.6	5.3	6.3
Structural metal work, n.e.m.	28.9	43.5	56.6	71.8	126.2	125.9	99.1	180.6	183.3	196.9	232.3	106.4	44.4	68.2
Wire, n.e.m.	2.4	7.9	23.9	25.4	59.3	59.3	37.2	62.5	57.2	62.6 <sup>d</sup>	87.8	38.2	35.9	58.9
Wirework, n.e.c.	9.0	15.2	17.5	17.7	39.8	39.6	29.3	48.0	55.8	65.4	78.7	46.4	39.3	61.9
Wrought pipe, n.e.m.	5.8	4.7	7.9	11.4	30.7	30.7	19.6	32.9	35.6	42.4	54.5	32.7	14.1	31.8
Cast-iron pipe	e	10.3	9.7	24.8	24.8	20.4	43.9	52.1	46.9	46.0	27.0	11.9	23.1	35.7
Doors, metal	0.2	0.9	1.7	3.2	6.3	6.3	8.2	9.8	28.5	39.7	42.0	21.0	7.4	12.8
Heating apparatus	11.9	14.5	31.5	37.0	88.3	88.3	77.2	138.7	151.6	148.3	155.6	72.8	49.2	30.5
Stoves and ranges	2.1	3.9 <sup>f</sup>	39.9	49.5	55.4	122.2	82.1	165.7	168.4	165.2	171.0 <sup>g</sup>	71.5	109.7	263.2
Plumbers' supplies, n.e.c.	7.5	11.6	22.8	24.7	32.2	32.2	43.4 <sup>h</sup>	81.2	104.3	89.6	80.6	44.9	29.3	43.8
Screw-machine products	2.9	3.2	5.8	8.1	34.9	34.9	15.7	31.4	34.5	34.1	66.5	27.6	20.0	36.4
Cutlery, n.e.c.	9.7	12.6	15.7	17.4	47.2	47.1	34.4	55.3	59.7	58.5	63.9	43.4	30.1	38.6
Files	2.2	3.1	4.1	4.0	13.4	13.4	5.3	9.7	10.0	9.8	11.1	6.1	5.8	6.9
Saws	3.8	5.8	6.6	7.8	19.7	19.6	11.7	21.0	16.5	15.0	15.7	7.5	6.9	8.4
Tools, other	8.7	13.2	19.3	21.7	98.4	98.0	45.0	80.0 <sup>i</sup>	82.2	80.4 <sup>i</sup>	48.5	28.7	33.8	49.7
Firearms	4.1	6.5	6.5	7.9	22.6	22.6	10.2	14.0	12.0	14.4	17.9	8.1	7.0	9.6
Hardware, n.e.c.	23.7	32.1	42.6	46.5	105.8	105.7	79.0	135.4	147.5	136.4	153.0	77.6	55.0	90.3
Safes and vaults	2.2	4.6	5.0	4.6	8.7	8.7	12.3	12.0	14.8 <sup>k</sup>	11.2	13.0	7.5	2.0	3.2
Tin cans and tinware, n.e.c.	1	15.6	19.5	28.1	68.8	68.7	59.6	80.0	84.6	84.1 <sup>m</sup>	101.9 <sup>s</sup>	74.5	70.9	86.4 <sup>m</sup>
TOTAL	427.8	491.7	768.1	768.1	2,453.1	2,451.8	1,304.8	2,658.7	2,715.9	2,639.9	1,462.3	1,049.7	1,767.6	2,948.2
	543.3	778.4	820.6	2,453.1	2,451.8	1,304.8	2,658.7	2,715.9	2,639.9	2,608.0	3,256.4	1,460.9	1,049.7	1,767.6

For footnotes see next page.





NONFERROUS-METAL PRODUCTS (concluded)	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More								
	1899	1904	1909	1914	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Industry														
Nonferrous-metal products, n.e.c.	30.5	40.9	56.5	52.2 <sup>d</sup>	191.7	191.5	91.0	191.1	192.2	203.4 <sup>b</sup>	309.4	136.1	110.8	279.2
Plated ware	6.7	6.7	10.3	10.2	23.9	23.9	21.5	34.1	34.3	36.5	38.7	34.0	21.9	34.2
Silverware	7.7	11.7	13.6	11.5	16.1	16.1	15.4	16.3	19.4	19.5	20.3			
Sheet-metal work, n.e.c.	28.5 <sup>i</sup>	44.5	28.9	44.7	79.4	77.2	72.9	95.4 <sup>i</sup>	91.0	92.7 <sup>i</sup>	109.8 <sup>k</sup>	60.1	33.3	74.0
Stamped and enameled ware	11.9	20.4	27.1 <sup>e</sup>	34.2	80.4	80.4	53.8 <sup>l</sup>	90.0	81.3	82.0 <sup>m</sup>	116.7	69.1	62.7	107.5 <sup>n</sup>
Clocks	4.1	5.8	8.5	7.0	16.2	16.2	11.2	20.4	20.5	28.1	31.5			
Watch and clock materials	0.2	0.3	0.5	0.7	0.8	0.8	0.7	0.9	1.0	1.0	0.7	32.7	22.2	38.7
Watches	5.5	9.6	9.6	11.6	25.7	25.7	19.2	21.8	30.1	26.4	23.9			
Watchcases	3.4	4.2	5.5	3.8	11.4	11.4	8.2	10.3	8.7	8.4	8.9	2.9	1.9	4.2
Jewelry	23.9	29.0	43.7	41.9	93.5	92.7	69.2	90.1	86.9	87.9	97.6	46.4	25.9	40.7
Jewelers' findings												4.9	3.7	6.2
TOTAL	221.9	270.0	328.9	365.5	781.9	778.3	521.8	850.6	891.2	893.7	1,131.4	587.1	427.5	686.8

<sup>a</sup> In 1909 the copper and lead departments of an important copper and lead smelting and refining establishment were reported together under *copper*, whereas in 1904 the lead department was included with *lead*.

<sup>b</sup> Between 1919 and 1921 certain establishments were transferred from *secondary metals, nonprecious, to chemicals, n.e.c.*

<sup>c</sup> Prior to 1914 *aluminum manufactures* was included among *miscellaneous articles, housefurnishings, n.e.c., and stamped and enameled ware*.

<sup>d</sup> Between 1914 and 1919 aluminum castings were transferred from *nonferrous metal products, n.e.c., to aluminum manufactures*. The comparability of the figures for the latter industry appears to have been considerably affected by this change.

<sup>e</sup> Between 1935 and 1937 several establishments were transferred from *tin and other foils* to other industries.

<sup>f</sup> Because this industry contains a large proportion of small establishments, the degree to which it is covered in the Census probably varies from year to year.

<sup>g</sup> Between 1909 and 1914 metal hairpins were transferred from *combs, n.e.c., to needles and pins*.

<sup>h</sup> Between 1927 and 1929 certain large establishments engaged primarily in transferring back to *tin cans and tinware, n.e.c.*

<sup>i</sup> In 1899 *tin cans and tinware, n.e.c.*, was combined with *sheet-metal work, n.e.c.*

<sup>j</sup> Sheet-metal shops in which some manufacturing was carried on in connection with building construction or repair contracts were not canvassed for 1925 and 1927, unless the value of the manufactured products exceeded \$20,000. Previously such shops were canvassed if the value of their manufactured products amounted to \$5,000 or more. After 1927 all sheet-metal shops were covered with respect to work done in the shop; outside work was not included.

<sup>k</sup> After 1929 *dairymen's supplies* was abandoned as a separate classification, and the products were divided among *sheet-metal work, n.e.c.*, and other classifications.

<sup>l</sup> Between 1921 and 1923 enameled bathtubs, sinks, etc. were transferred from *stamped and enameled ware to plumbers' supplies*.

<sup>m</sup> Between 1927 and 1929 stamped tinware was transferred from *tin cans and tinware, n.e.c.*, to stamped and enameled ware. Between 1935 and 1937 it was transferred back to *tin cans and tinware, n.e.c.*

## Value Added by Manufacturing Industries (Unit: \$1,000,000)

MACHINERY	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More																	
	1899	1904	1909	1914	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937									
<i>Industry</i>																							
Foundry and machine-shop products, n.e.c. <sup>a</sup>	345.6	444.7 <sup>b</sup>	526.9 <sup>c</sup>	567.4 <sup>d</sup>	516.6	509.5	1,589.6 <sup>e</sup>	1,345.3	1,342.1	913.7	1,404.8 <sup>f</sup>	1,371.5 <sup>g</sup>	1,408.8	1,390.8 <sup>h</sup>	1,756.2 <sup>i</sup>	814.1	806.4 <sup>j</sup>	506.3	507.8 <sup>k,l,m</sup>	879.6	870.3 <sup>n</sup>	1,462.6	
Agricultural implements	57.3	63.7	86.0	90.6	160.4	160.3	76.5	87.8	95.6	117.1	163.9	52.0	18.6 <sup>o</sup>	36.0	36.2	43.0 <sup>oo</sup>	36.2	36.0	18.6 <sup>o</sup>	36.0	151.8	280.4	
Business machines	4.8	8.4	20.2	26.5	72.6	72.6	44.1	82.6	87.2	95.7	99.2 <sup>p</sup>	51.2	36.2	36.2	36.2	43.0 <sup>oo</sup>	36.2	36.0	18.6 <sup>o</sup>	36.0	151.8	280.4	
Typewriters	5.5	8.8	15.6	19.0	36.6	36.6	31.0	38.5	47.9	45.4	54.6 <sup>o</sup>	18.3	13.2	13.2	13.2	25.2	13.2	13.2	13.2	13.2	25.2	31.6	
Carbon paper										7.8	9.3	7.4	6.1	6.1	6.1	7.2	6.1	6.1	6.1	6.1	7.2	8.7	
Electrical machinery	43.0	74.0 <sup>r</sup>	112.7	180.4	572.9	572.7	489.9	744.4	903.3 <sup>s</sup>	991.5	1,329.9	755.9	657.9 <sup>t</sup>	340.9 <sup>u,v</sup>	597.0	990.7	340.9 <sup>u,v</sup>	597.0	340.9 <sup>u,v</sup>	597.0	990.7	990.7	
Phonographs	1.4	6.1	8.6	20.1	98.8	98.8	57.2	62.1	36.2	57.8	59.5 <sup>w</sup>	6.7 <sup>x</sup>	104.7 <sup>y</sup>	63.3	97.5	124.2	63.3	63.3	63.3	97.5	124.2		
Radios and phonographs																							
Engines and tractors	2.2	2.5	3.3	2.9	5.0	5.0	3.1	3.7	4.6	4.3	5.1	111.4	50.6 <sup>z</sup>	50.6 <sup>z</sup>	50.6 <sup>z</sup>	50.6 <sup>z</sup>	50.6 <sup>z</sup>	50.6 <sup>z</sup>	50.6 <sup>z</sup>	50.6 <sup>z</sup>	50.6 <sup>z</sup>	50.6 <sup>z</sup>	
Windmills																							
Engines and windmills, excl. tractors																							
Steel barrels					9.8	9.8	5.3	8.4	7.2	9.4	15.9	8.7	12.4	13.6	18.0	18.0	12.4	12.4	12.4	13.6	18.0	18.0	
Machine tools					753.4	153.3	43.8	96.2	100.4	113.4	702.7 <sup>ba</sup>	180.3	59.4	30.6	85.5	183.4	30.6	30.6	30.6	85.5	183.4	183.4	
Machine-tool accessories, n.e.c.																							
Pumps	0.7	1.7	3.1	3.6 <sup>d</sup>	49.3	49.3	43.2	58.5	69.8	77.8	97.2	50.6	28.7	51.7	67.0 <sup>bb</sup>	118.1	28.7	28.7	51.7	67.0 <sup>bb</sup>	118.1	118.1	
Textile machinery					76.5	76.4	84.0	91.0	82.6	80.7	85.9	47.6	41.9	45.7	72.1	72.1	41.9	41.9	45.7	72.1	72.1	72.1	

MACHINERY (continued)	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
<i>Industry</i>															
Gas machines and meters	2.4	3.0	8.3	9.1	15.6	15.6	13.0	19.9	21.3	21.1	25.4	15.8	8.8 <sup>1</sup>		
Refrigerators and ice-making machinery															
Refrigerators, nonmechanical	2.8	4.1	5.8	7.7	14.1	14.1	16.7	28.4	32.9	33.1	34.0	20.7	j	170.9	71.2
Refrigerators, mechanical															107.8
Scales and balances	3.7	4.4	6.1	6.6	13.6	13.6	11.2	17.6	19.9	17.2	22.9	10.9	6.2	9.6	12.1
Sewing machines	11.7	15.4	16.8	17.0	33.5	33.5	20.7	28.2	27.7	28.4 <sup>k</sup>	25.7	28.6	14.1	10.1	16.6
Washing and ironing machines	1.6	1.6	3.0	3.5	17.4	17.4	13.6	24.6	36.8	35.7	41.6	26.4	20.2	25.4	28.7
TOTAL	482.7	637.8	816.4	806.1	948.4	2,926.6	2,922.0	2,918.3	1,954.8	2,939.2	3,112.7	3,401.8	1,298.8	1,298.8	3,868.5

<sup>a</sup> Foundry and machine-shop products, n.e.c., includes iron and steel, processed (shown separately by the Census, 1919-29) and nail, sidewalk, and floor lights, coal covers, and ventilating equipment (shown separately by the Census from 1899 to 1923).

<sup>b</sup> After 1899 stoves and hot-air furnaces were transferred from foundry and machine-shop products, n.e.c., to stoves and ranges. Overlapping figures are provided for 1904.

<sup>c</sup> Prior to 1909 cast-iron pipe was combined with foundry and machine-shop products, n.e.c. Overlapping figures are provided for 1909.

<sup>d</sup> Prior to 1914 the industry engines and tractors, and establishments engaged in the production of power pumps were included in foundry and machine-shop products. Overlapping figures are provided for 1914. Automobile repairing was first treated as a manufacturing industry in 1914. Prior to that year no special effort was made to canvass this industry but some reports were received in 1909 and were included with foundry and machine-shop products, n.e.c.

<sup>e</sup> Prior to 1919 steel barrels, textile machinery, iron and steel, welded, and machine tools were included in foundry and machine-shop products, n.e.c. Overlapping figures are provided for 1919.

<sup>f</sup> Between 1923 and 1925 manufacturing machinery was transferred from stationery goods, n.e.c., to foundry and machine-shop products, n.e.c.

<sup>g</sup> Between 1925 and 1927 a new classification, refrigerators, mechanical, was set up. Establishments there classified were formerly in electrical machinery and foundry and machine-shop products, n.e.c.

<sup>h</sup> Between 1927 and 1929 a new classification, machine-tool accessories, n.e.c., was set up. Establishments there classified were formerly in machine tools, foundry and machine-shop products, n.e.c., and tools, other. Overlapping figures are provided for 1927. We obtained the 1927 figures for machine tool accessories, n.e.c., by subtracting the revised figures published in the 1929 Census of Manufactures for foundry and machine-shop products, n.e.c., tools, other, and machine tools from the respective unrevised figures, published in the 1927 volume, and then totaling the differences.

<sup>i</sup> Between 1929 and 1931 dairyman's supplies was abandoned as a separate classification, and the products were divided among foundry and machine-shop products, n.e.c. and other classifications.

<sup>j</sup> Between 1931 and 1933 refrigerators, mechanical, refrigerators, nonmechanical, and ice-making apparatus, which was previously in foundry and machine-shop products, n.e.c., were combined under refrigerators and ice-making machinery. Overlapping figures are provided for 1931.

<sup>k</sup> Between 1933 and 1935 printing materials, n.e.c., type founding, and engravers materials were combined with foundry and machine-shop products, n.e.c.

<sup>l</sup> Between 1933 and 1935 gas machines and meters was abandoned as a separate classification. Gas and water meters were transferred to instruments, professional, and gas generators to machine shops, part of foundry and machine-shop products, n.e.c. Overlapping figures are provided for 1933.

Footnotes continued on next page.

## Value Added by Manufacturing Industries (Unit: \$1,000,000)

## MACHINERY (concluded)

<sup>m</sup> Between 1933 and 1935 addressing and mailing machines, check-writing and canceling machines and duplicating or manifold machines were transferred from *foundry and machine-shop products, n.e.c.*, to *business machines*, and numbering machines from *hand stamps and stencils* to *business machines*. Overlapping figures for 1933 are provided by the Bureau of the Census.

<sup>n</sup> Between 1935 and 1937 air compressors and dry vacuum pumps were transferred from *foundry and machine-shop products, n.e.c.*, to *pumps*. Overlapping figures are provided for 1935.

<sup>o</sup> Between 1933 and 1935 tractors were transferred from *engines to agricultural implements*. Overlapping figures are provided for 1933.

<sup>p</sup> Between 1929 and 1931 certain establishments manufacturing typewriter-bookkeeping-billing machines were transferred from *typewriters to business machines*.

<sup>q</sup> Between 1927 and 1929 sewing machine cases, cabinets and tables were transferred from *sewing machines to furniture*. Overlapping figures for 1927 are provided by the Census.

<sup>r</sup> Between 1904 and 1909 establishments manufacturing signs and advertising novelties were transferred from *electrical machinery* and other classifications to a new one, *signs*.

<sup>s</sup> Between 1929 and 1931 molded plastics were transferred principally from *electrical machinery*, but also from *phonographs, machine-tool accessories, n.e.c.*, and other classifications, to *plastic goods*.

<sup>t</sup> In 1931 a new classification, *radios and phonographs*, was set up. Establishments there classified were formerly in *electrical machinery and phonographs*. Overlapping figures for 1931 are provided for *electrical machinery* by the Bureau of the Census.

<sup>u</sup> *Electrical machinery* includes *beauty shop equipment*, listed separately by the Bureau of the Census after 1933. Most of the establishments in the latter industry were formerly classified in *electrical machinery* or in *miscellaneous articles*.

<sup>v</sup> Between 1933 and 1935 the composition of *dental goods and equipment* was changed to include certain electrical devices formerly in *electrical machinery*.

Industry	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Aircraft <sup>a</sup>				0.7	7.2		4.2	9.1	9.7	13.6	43.8	27.2	18.5	31.3	70.1
Motorcycles and bicycles		2.5 <sup>b</sup>	5.6	11.3	27.1	27.1	12.8	14.3	12.1	11.3	12.6	8.2	5.9	10.3	16.4
Automobile bodies and parts		1.9	31.5	66.0	330.1	329.4	194.1	449.0	660.6 <sup>c</sup>	510.1	687.3 <sup>d</sup>	428.5	318.8	547.8	807.8
Automobiles		2.9	15.0	86.1	809.3	809.2	564.3	1,015.9	1,089.9	959.0	1,315.0 <sup>e</sup>	523.1	329.2	577.0	702.7
Carriage and wagon materials		12.0	14.2	16.5	11.3	12.0	4.7	3.3	2.5	1.5	1.3	<sup>g</sup>			
Carriages and sleds, children's		2.3	3.5	4.7	6.1	12.8	12.2	18.2	16.6	14.8	15.3	9.7	5.3	8.1	9.8

TRANSPORTATION EQUIPMENT (concluded)	Establishments with Products Valued at \$500 or More							Establishments with Products Valued at \$5,000 or More						
	1899	1904	1909	1914	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
	Industry													
Carriages, wagons and sleighs	59.8	64.8	62.4	55.0 <sup>a</sup> 52.7	37.8	36.3	11.9	18.7	12.1	8.8	8.0 <sup>a</sup> 2.7	3.31 2.4	3.2	4.5
Cars, railroad, n.e.m.	32.1	41.0	48.5	66.7	188.5	188.5	128.6	190.7	124.7	103.4	104.3	39.9	18.8	38.8
Locomotives, n.e.m.	15.0	31.8	16.5	19.8	83.9	83.9	46.6	91.1	23.7	31.0	31.1	7.2	2.7	7.9
Ships and boats <sup>1</sup>	41.1	45.3	42.1	50.1	911.8	911.4	231.5	128.7	110.9	132.5	145.5	114.7	61.5	94.4
TOTAL	180.3	220.0	313.9	497.6	2,420.5	2,417.8	1,210.9	1,939.0	2,062.8	1,786.0	2,364.2	1,161.8	763.1	1,318.8

<sup>a</sup> Some degree of incomparability may have been introduced by the following changes in the questionnaire for *aircraft*: For 1937, aircraft were reported as "began and completed in 1937"; for 1935, as "began and completed in 1935"; for 1933, as "built in 1933"; for 1931, as "built in 1931"; for 1929, as "completed in 1929."

<sup>b</sup> Between 1904 and 1909 children's tricycles and velocipedes were transferred from *motorcycles and bicycles to toys and games, n.e.c.*

<sup>c</sup> Between 1919 and 1921 establishments engaged primarily in the manufacture of aircraft parts, other than engines and tires, were transferred from *cotton goods, lumber-mill products, n.e.c., planing-mill products, n.e.m., and wood turned and shaped, n.e.c., to aircraft*.

<sup>d</sup> In 1899 no establishments reported that they were engaged chiefly in the manufacture of automobile bodies and parts. The Bureau of the Census doubts that there were any such establishments at that time.

<sup>e</sup> Between 1925 and 1927 motor vehicle spring bumpers were transferred from *springs, steel, n.e.m., to automobile bodies and parts*.

<sup>f</sup> Between 1929 and 1931 trailers were transferred from *automobiles to automobile bodies and parts*. The resulting discontinuity is slight.

<sup>g</sup> In 1931 *carriage and wagon materials* was abandoned as a separate classification. Turned products, such as hubs, felloes, and spokes were transferred to *wood turned and shaped, n.e.c.*, and other materials and parts were transferred to *carriages, wagons and sleighs*.

<sup>h</sup> Prior to 1914 establishments engaged in repair work were included with *carriages, wagons and sleighs*. Overlapping figures are available for 1914.

<sup>i</sup> Between 1931 and 1933 horsedrawn lunch wagons were transferred from *carriages, wagons and sleighs to planing-mill products, n.e.m.* A 1933 figure comparable with earlier years is provided for *carriages, wagons and sleighs*.

<sup>j</sup> Does not include government shipyards.



MISCELLANEOUS PRODUCTS

Industry	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
Jewelry and instrument cases	0.7	1.4	1.9	2.2	4.6	4.6	4.3	6.1	6.3	5.5	5.5	3.0	2.0	4.0	7.3
Lapidary work	1.1	1.4	2.6	1.4	10.7	10.6	1.5	3.2	2.8	3.2	3.7	1.1	0.3	0.8	1.1
Mattresses and bed springs, n.e.c.	7.7	12.4	15.3	16.3	34.7	34.4	32.6	46.1	48.2 <sup>u</sup>	46.7	61.8	40.0	27.2	35.9	50.0
Models and patterns, n.e.c. <sup>o</sup>	3.0	3.6	6.0	6.6	18.9	18.5	11.7	19.0	17.6	18.8	25.3	13.4	7.1	12.1	18.1
Paving materials	2.4	2.4	2.8	21.5	29.7	29.3	36.7	46.6	57.2	65.2 <sup>v</sup>	10.7 <sup>v</sup>	7.4	4.7	7.9	10.7
Pens and points	1.3	2.0	3.0 <sup>w</sup>	6.0	12.3	12.3	8.6	14.4	18.0	15.3	22.8	16.6	7.5	12.1	14.6
Photographic supplies	4.4	8.9	15.9	26.3 <sup>x</sup>	27.5	54.5	47.8	52.6	52.9	61.8	72.4	58.6	41.9	47.8	79.5
Pipes, tobacco	1.4	1.5	2.9	1.9	8.1	8.0	4.3	5.9	4.6	4.6	3.8	3.7	2.3	4.2	5.2
Signs	b	8.8	15.7	27.3	26.8	34.5	44.6	63.8	67.6	82.3	53.4	31.8	40.1	49.1	49.1
Soda-water apparatus	2.0	2.7	4.1	4.9	8.6	8.5	8.9	11.5	13.4	13.5	14.0	9.4	3.4	4.1	6.8
Sporting goods, n.e.c.	1.8	4.1	5.5	6.3	11.9	11.8	16.4	23.3	24.8	25.5	33.8	29.2	14.7	18.3	22.9
Surgical equipment	3.3	4.4	7.0	9.0	23.8	23.5	19.9	23.3	31.5	29.9	35.6	28.1	22.6	25.7	32.1
Theatrical equipment	y	0.2	0.6	0.7	1.0	0.6	0.7	1.0	2.1	3.4	3.4	1.8	1.4	1.2	1.5
Toys and games, n.e.c.	2.3	3.3 <sup>z</sup>	4.7	8.0	25.8	25.6	20.9	32.2	34.9	38.2	44.8	32.1	20.1 <sup>bb</sup>	28.5	35.5
Umbrellas and canes	5.3	5.0	5.8	5.2	9.7	9.6	9.1	10.4	10.7	9.1	7.1	4.0	3.3	3.9	5.3
Window shades	2.5	3.0	5.9	5.6	10.9	10.8	11.8	18.1	16.6	16.0	17.2	9.4	7.1	8.1	10.3
TOTAL	102.2	147.0	230.5	285.9	626.3	621.5	528.3	723.6	773.6	779.9	773.3	498.8	332.9	463.3	604.4
				287.3	626.3	621.5	528.3	723.6	773.6	779.9	773.3	498.8	332.9	463.3	604.4

For footnotes see next page.



## Value added by Manufacturing Industries (Unit: \$1,000,000)

## MISCELLANEOUS PRODUCTS (concluded)

- <sup>a</sup> Between 1933 and 1935 crayons were transferred from *artists' materials to pencils*. Overlapping figures for 1933 are provided by the Bureau of the Census.
- <sup>b</sup> In 1899 *dairymen's supplies* was combined with other industries.
- <sup>c</sup> In 1931 *dairymen's supplies* was abandoned as a separate classification, and the products were divided among *flourings, planing-mill products, n.e.c.m., sheet-metal work, n.e.c., tin cans and tins, n.e.c., wood turned and shaped, n.e.c., foundry and machine-shop products, n.e.c., and stoves and ranges*.
- <sup>d</sup> After 1927 dental laboratories operating on a custom basis, previously included in *dental goods and equipment*, were not canvassed. Overlapping figures for 1927 are provided by the Bureau of the Census.
- <sup>e</sup> Between 1933 and 1935 the composition of *dental goods and equipment* was changed to include certain electrical devices formerly in *electrical machinery*, and dental chairs and cabinets formerly in *furniture*.
- <sup>f</sup> Between 1935 and 1937 establishments manufacturing dental instruments as their major product were transferred from *instruments, professional to dental goods and equipment*.
- <sup>g</sup> Between 1899 and 1904 establishments engaged in manufacturing statuary and art goods were transferred from *miscellaneous articles and plastering and stucco work* (an industry abandoned by the Bureau of the Census in 1904) to a new classification, *statuary and art goods*.
- <sup>h</sup> Between 1904 and 1909 establishments manufacturing signs and advertising novelties were transferred from *housefurnishings, n.e.c., leather goods, n.e.c., stationary goods, n.e.c., electrical machinery and miscellaneous articles to signs*.
- <sup>i</sup> Prior to 1914 aluminum manufactures were included among *miscellaneous articles and other classifications*.
- <sup>j</sup> Between 1929 and 1931 molded plastics were transferred principally from *electrical machinery*, but also from *miscellaneous articles and other classifications to pulp goods*.
- <sup>k</sup> Between 1929 and 1931 *labels and tags* was abandoned as a separate classification and the products were divided among *miscellaneous articles and other classifications*.
- <sup>l</sup> Between 1933 and 1935 *stationery goods, n.e.c.*, was abandoned as a classification and the products were divided among *miscellaneous articles and other classifications*. At the same time, some establishments making beauty shop equipment were transferred from *miscellaneous articles to a new classification, beauty shop equipment*, treated by us as part of *electrical machinery*.
- <sup>m</sup> Between 1904 and 1909 many important establishments making horn, celluloid and other combs were transferred from *ivory work to combs, n.e.c.* Hairpins also were transferred from *ivory work and other industries to combs, n.e.c.*
- <sup>n</sup> Between 1909 and 1914 rubber combs and hairpins were transferred from *combs, n.e.c., to rubber goods, other; metal hairpins were transferred from combs, n.e.c., to needles and pins*.
- <sup>o</sup> Because this industry contains a large proportion of small establishments, the degree to which it is covered in the Census probably varies from year to year.
- <sup>p</sup> Between 1933 and 1935 numbering machines were transferred from *hand stamps and stenists to business machines*.
- <sup>q</sup> Between 1925 and 1927 surveyors' nautical instruments and similar instruments were transferred from *optical goods to instruments, professional*.
- <sup>r</sup> Between 1933 and 1935 *gas machines and meters* was abandoned as a separate classification and gas and water meters were transferred to *instruments, professional*. Overlapping figures are provided for 1933.
- <sup>s</sup> After 1923 establishments grinding lenses for spectacles and eyeglasses from prescriptions, classified under *optical goods*, were not canvassed by the Bureau of the Census. The comparability of the data for the industry appears to have been seriously affected by this omission.
- <sup>t</sup> Because of changes in the classification of certain establishments between 1935 and 1937, the 1937 statistics for *jewelry and instrument cases* are not comparable with those for previous years. Comparable figures for 1935 are provided by the Bureau of the Census.
- <sup>u</sup> After 1925 establishments engaged in renovating mattresses, classified under *mattresses and bedsprings, n.e.c.*, were not canvassed by the Census of Manufactures.
- <sup>v</sup> Establishments formerly in *padding materials* and engaged primarily in quarrying and crushing stone were not canvassed after 1927. The data on the industry appear to have been seriously affected by this change. Crushed slag was not canvassed after 1929. The 1929 figure for *padding materials* has been revised to make it comparable with that for 1931.
- <sup>w</sup> Between 1909 and 1914 there was a change in the classification of certain establishments, listed under *pens and pointers*, which manufactured gold pens and other products.
- <sup>x</sup> In 1914 motion picture machines were included in *photographic supplies*, whereas in previous years they were included in *motion pictures*. Overlapping figures for 1914 are provided for *photographic supplies*.
- <sup>y</sup> Canvassed for the first time in 1914.
- <sup>z</sup> Between 1904 and 1909 children's tricycles and velocipedes were transferred from *motorcycles and bicycles to toys and games, n.e.c.*
- <sup>aa</sup> Between 1925 and 1927 rubber toy balloons were transferred from *toys and games, n.e.c., to rubber goods, other*. Overlapping figures for 1925 are provided by the Bureau of the Census.
- <sup>ab</sup> The 1933 Census of this industry is considered by the Bureau of the Census as somewhat incomplete.

MISCELLANEOUS—GROUPS AND TOTAL

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Group	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More												
	1899	1904	1909	1914	1919	1927	1933	1938	1943	1948								
	1953	1958	1963	1968	1973	1978	1983	1988	1993	1998								
Foods	418.8	547.2	763.5	979.6	1,002.8	2,369.3	2,360.7	1,979.4	2,345.5	2,547.1	2,673.5	3,123.3	2,498.6	2,002.2	2,254.3	2,705.2		
Beverages	289.1	361.3	488.1	525.8	381.1	378.5	134.6	150.6	164.2	166.6	193.0	151.0	395.2	265.0	493.6	577.6		
Tobacco products	170.8	205.0	239.5	283.1	529.4	522.4	439.8	528.3	665.3	743.1	816.9	792.5	667.9	762.3	887.4			
Textile products	710.6	880.8	877.8	1,288.6	1,287.7	1,385.6	3,700.8	3,695.7	3,021.4	3,828.9	3,596.9	3,844.2	3,960.0	2,662.1	2,143.4	2,628.6		
Leather products	186.7	245.9	325.2	353.3	898.4	896.4	610.4	797.2	750.9	780.9	774.2	523.7	452.0	533.9	596.9			
Rubber products	39.6	68.0	74.6	138.0	543.9	543.9	327.0	457.4	536.6	539.1	564.7	538.8	361.4	261.3	309.1	369.3		
Paper products	93.4	128.4	179.3	216.0	559.8	559.6	437.7	621.2	663.9	733.6	841.6	624.7	525.5	637.4	854.6			
Printing and publishing	284.4	399.1	522.1	630.4	1,091.3	1,067.2	1,308.6	1,531.7	1,762.6	1,931.7	2,233.9	1,784.9	1,259.1	1,254.1	1,558.0	1,806.5		
Chemical products	196.7	269.6	383.8	445.2	1,174.3	1,172.0	816.4	1,148.5	1,277.2	1,276.1	1,441.5	1,729.7	1,363.1	1,123.6	1,359.1	1,765.5		
Petroleum and coal products	45.1	66.5	79.8	80.0	115.3	518.7	518.7	421.0	572.5	629.0	523.3	785.0	403.9	376.3	446.1	608.2		
Stone, clay and glass products	194.6	281.2	283.2	362.7	397.7	755.5	750.8	666.1	1,050.2	1,122.5	1,114.9	1,125.0	657.4	665.7	444.2	667.6		
Forest products	534.8	714.0	850.3	851.2	808.3	1,680.9	1,659.4	1,196.1	1,887.7	1,889.6	1,749.3	1,752.1	1,933.3	856.9	844.3	1,233.2		
Iron and steel products	427.8	491.7	543.3	768.1	778.4	820.6	2,453.1	2,451.8	1,304.8	2,658.7	2,715.9	2,639.9	2,608.0	3,256.4	1,462.3	1,462.3		
															1,460.9	1,049.7	1,767.6	2,948.2

## Value Added by Manufacturing Industries (Unit: \$1,000,000)

Group	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More														
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937					
MAJOR GROUPS AND TOTAL MANUFACTURING (concluded)																				
Nonferrous-metal products	221.9	270.0	254.4	328.9	365.5	781.9	778.3	521.8	850.6	891.2	893.7	1,131.4	587.1	427.5	686.8	1,012.7				
Machinery	482.7	637.8	601.8	816.4	948.4	2,926.6	2,922.0	2,918.3	1,954.8	2,939.2	3,112.7	3,401.8	3,431.0	4,470.4	2,206.4	1,298.8	1,298.3	2,323.0	3,868.5	
Transportation equipment	180.3	220.0	313.9	497.6	495.3	2,420.5	2,417.8	1,210.9	1,939.0	2,062.8	1,786.0	2,364.2	1,161.8	1,161.2	763.1	1,318.8	1,903.0			
Miscellaneous products	102.2	147.0	230.5	285.9	287.3	626.3	621.5	528.3	723.6	773.6	772.2	779.9	773.3	779.8	498.8	332.9	340.2	463.3	463.9	604.4
TOTAL MANUFACTURING	4,579.5	5,933.5	5,897.5	8,015.3	8,015.5	23,411.8	23,407.2	16,879.1	24,030.8	25,162.0	25,762.1	30,062.5	30,056.9	18,596.6	18,596.6	14,118.6	13,990.2	19,053.8	19,054.4	25,785.3

GROUPS AND TOTAL—RECONCILIATION

RECONCILIATION WITH CENSUS TOTAL	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More									
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937
CENSUS TOTAL	4,831.1	6,293.7	8,529.3	9,878.3	25,041.7	24,935.0	18,316.7	25,850.3	26,778.1	27,585.2	31,885.3	19,866.8	14,538.0	19,136.4	25,173.5
<i>Add or Deduct:</i>															
Revisions by Census							+15.6	-35.2	-24.3	-37.2		-5.0	-4.0	-4.9	
REVISED CENSUS TOTAL	4,831.1	6,293.7	8,529.3	9,878.3	25,041.7	24,935.0	18,332.3	25,815.1	26,753.8	27,548.0	31,885.3	19,861.8	14,534.0	19,131.5	25,173.5
<i>Deduct:</i>															
Contract work deducted by NBER <sup>a</sup>	0.8	1.0	0.8	0.8	0.2	0.2 <sup>b</sup>									
Textile products	41.6	52.5	70.4	78.9	226.8	226.8	216.1	334.1	304.3	318.0	312.5	257.2	184.7	15.4	
Printing and publishing	18.8	28.4	35.7	40.2	85.8	85.8	107.0	118.0	139.7	173.2	169.9	134.7	96.4		
Forest products		35.0	31.1	31.8	37.5	37.5	31.0	41.2	31.3	28.5	23.0	10.1	8.3	14.3	
Value added by industries excluded by NBER															
Butter reworking															
Coffee and spices															
Peanuts															
Poultry															
Recified spirits															
Flax and hemp															
Wood carpet															
Gas, illuminating															
Grindstones															
Grindstones and millstones															
Pulpwood															
Pulp, other than wood															
Iron and steel, welded															
Tinplate and ternaplate															
Automobile repairing															
Carriage and wagon repairing															

*For footnotes see p. 639.*

## Value Added by Manufacturing Industries (Unit: \$1,000,000)

	Establishments with Products Valued at \$500 or More					Establishments with Products Valued at \$5,000 or More											
	1899	1904	1909	1914	1919	1919	1921	1923	1925	1927	1929	1931	1933	1935	1937		
<i>Deduct (concluded)</i>																	
Railroad repair-shop products	113.7	166.7	223.0	291.2	806.6	806.5	760.8	888.7	769.0	744.2	721.6	441.9	314.1	232.6	d		
Dental laboratory work			2.0 <sup>e</sup>	<sup>m</sup>	17.1	17.1	46.2	55.8	60.4	99.5	145.7				d		
Motion pictures	1.4	0.4	<sup>g</sup>	<sup>g</sup>	42.9	42.9 <sup>l</sup>	6.0	<sup>l</sup>									
Ordnance	0.1	0.2	0.1	0.5	0.3	0.3	0.4	0.5 <sup>o</sup>									
Rules	0.02	0.1	<sup>g</sup>														
Straw goods	0.2	0.2	0.3	0.7	0.2	0.2	0.4	1.9 <sup>i</sup>									
All other industries																	
<i>Add:</i>																	
Contract work included by NBER <sup>a</sup>															11.8	131.2	
Internal revenue taxes included by NBER (Tobacco products) <sup>o</sup>															400.8	477.9	561.7
Correction of value added in:																	
Turpentine and rosin <sup>p</sup>															1.8	1.8	9.3
Cigars															17.1		
ADJUSTED CENSUS TOTAL	4,578.2	5,897.1	8,015.4	9,217.7	23,407.5	23,312.5	16,878.5	24,030.0	25,161.5	25,761.8	30,062.7	18,595.6	14,119.6	19,053.9	25,785.2		
NBER TOTAL	4,579.5	5,897.5	8,015.5	9,218.6	23,407.2	23,313.0	16,879.1	24,030.8	25,162.0	25,762.1	30,062.5	18,596.6	14,118.6	19,053.8	25,785.3		
Unexplained difference	+1.3	+0.4	+0.1	+0.9	-0.3	+0.5	+0.6	+0.8	+0.5	+0.3	-0.2	+1.0	-1.0	-0.1	+0.1		

- <sup>m</sup> In 1914 motion-picture machines were included in *photographic supplies*, whereas in 1909 they were included with *motion pictures*.
- <sup>n</sup> Between 1923 and 1925 *rules* was abandoned as a separate industry, and the products were divided among *tools, other; wood turned and shaped, n.e.c.*; and other industries, according to the character of the products.
- <sup>o</sup> Prior to 1933 internal-revenue taxes were included in the figures on value added published by the Census for the tobacco products industries; in 1933-37 they were excluded. We have included them throughout.
- <sup>p</sup> In 1937 the salaries and wages of those employees in *turpentine and resin* who were engaged in the production and gathering of crude gum were added by the Bureau of the Census to cost of materials and deducted from value added, and only the employees at the mill were considered as engaged in manufacturing. We have restored these data to value added in order to preserve as much comparability with 1935 as possible. The percentage of coverage of total production fell below 100 after 1929. The percentage of coverage is not given for 1931; in 1933 it was 85, and in 1935 it was 87. The value added figures for these two years have been raised accordingly.
- <sup>q</sup> In 1933 the coverage of *cigars* was incomplete. On the basis of Bureau of Internal Revenue data the coverage may be estimated at about 81.5 percent; the value added figure for this year has been raised accordingly.
- <sup>r</sup> Between 1927 and 1929 canned poultry products were transferred from *food, n.e.c.*, to *poultry products*.

- <sup>a</sup> See footnote b p. 614.
- <sup>b</sup> Between 1919 and 1921 *butler reworking* was combined with all other industries, and was not listed thereafter.
- <sup>c</sup> Not canvassed.
- <sup>d</sup> No longer canvassed.
- <sup>e</sup> Canvassed for the first time.
- <sup>f</sup> In 1919 *wood carpet and pulpwood*, in 1923 *ordnance*, and in 1925 all other industries were abandoned as separate classifications.
- <sup>g</sup> Included in all other industries.
- <sup>h</sup> Prior to 1919 *iron and steel, welded*, was included in *foundry and machine-shop products, n.e.c.*
- <sup>i</sup> In 1921 *tinplate and ternalplate* was combined with *ordnance* and in 1923 with all other industries. Since 1923 all the products of this industry have been made by the *steel-mill products* and the *tin cans and tinware, n.e.c.*, industries as secondary products.
- <sup>j</sup> Automobile repairing was first treated as a manufacturing industry in 1914. Prior to that year no special effort was made to canvass this industry but some reports were received in 1909 and were included with *foundry and machine-shop products, n.e.c.*
- <sup>k</sup> Prior to 1914 carriage repair work was included in *carriages, wagons, and sleighs*.
- <sup>l</sup> After 1927 dental laboratories operating on a custom basis, and previously included in *dental goods and equipment*, were not canvassed.