

CHAPTER III.

URBAN MANUFACTURES.

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I.

PROPORTION OF MANUFACTURES IN CITIES.

1. *Number of Cities Treated at the Different Censuses.*—The importance of the manufactures in urban districts was first recognized in the census reports of 1880, when the statistics for 100 cities were published separately. This practice has been followed at each subsequent census by a more extended presentation of the statistics for urban industries.

There were 165 cities similarly treated in 1890 and 1,340 cities and towns in 1900. The statistics for the 100 cities in 1880, the 165 in 1890, and 209 of the 1,340 cities and towns in 1900 were published in detail by specified industries. In 1900 the totals for all industries in each of the remaining 1,131 cities and towns are shown in the Report on Manufactures, Part II.

The importance of the statistics of manufactures in cities and towns is further emphasized by the increasing care taken at recent censuses in the canvass of such places, the work being assigned to special agents and withdrawn from the enumerators of the population. The development of this method since 1880 and the basis upon which the localities to be canvassed in this

manner in 1900 were selected is fully discussed in the section on "Field Work," pages xxi to xxv of Chapter I of this introduction.¹

The concentration of manufacturing industries in urban districts has been one of the leading features of the industrial development of the United States. The proportion of manufactures in the principal cities has increased during each decade to and including 1890, but during the last ten years there has apparently been a decided tendency toward a wider distribution. The extent of this concentration during the last three decades may be determined with some definiteness by comparing the increase in the 100 principal cities, for which statistics were separately shown in 1880, with the increase in the districts outside of these cities and also by noting the proportion which the manufactures of these 100 cities have formed of the totals for the entire country at each of the last three censuses. The percentages of increase and the proportion shown in the following tables should be considered in connection with the remarks concerning comparisons with previous censuses, page lxi, of this introduction.

2. *100 Principal Cities.*—The increase in population and manufactures of the 100 principal cities, as compared with the increase in the United States and in the country outside the cities, is indicated by table i.

¹ The following statement shows the number of cities (or cities and towns) for which statistics were presented separately, the number for which detailed statistics were published, and the number of cities and towns canvassed by special agents in 1880, 1890, and 1900.

	1900	1890	1880
Cities and towns canvassed by special agents.....	1,340	1,042	279
Cities for which general statistics are shown.....	1,340	165	100
Cities with a population exceeding 20,000, for which statistics are shown in detail by industries.....	290	165	100

The above figures for 1900 do not include Honolulu, H. I., the statistics of which were collected by special agents and are published in detail by industries. For the purposes of comparison the 165 cities for 1890 are reduced to 164 by the omission of Lincoln, R. I. See page ccxx.

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URBAN MANUFACTURES.

TABLE I.—100 PRINCIPAL CITIES, COMPARED WITH THE UNITED STATES AND THE UNITED STATES, EXCLUSIVE OF THESE CITIES: 1880, 1890, AND 1900.

ITEMS.	1900	1890	1880	INCREASE.		PER CENT OF INCREASE.	
				1890 to 1900.	1880 to 1890.	1890 to 1900.	1880 to 1890.
<i>United States.</i>							
Number of establishments.....	1 612, 191	2 355, 405	258, 852	156, 786	101, 553	44.1	40.0
Capital.....	\$9, 818, 834, 390	\$6, 525, 050, 759	\$2, 790, 272, 606	\$3, 288, 783, 631	\$3, 734, 778, 153	50.4	133.9
Wage-earners, average number.....	5, 306, 143	4, 251, 535	2, 732, 595	1, 054, 608	1, 518, 940	24.8	55.6
Total wages.....	\$2, 320, 938, 168	\$1, 891, 209, 696	\$947, 953, 795	\$429, 728, 472	\$943, 255, 901	22.7	99.5
Cost of materials used.....	\$7, 348, 627, 875	\$5, 162, 013, 878	\$3, 396, 823, 549	\$2, 181, 613, 997	\$1, 765, 190, 329	42.3	52.0
Value of products.....	\$18, 000, 149, 159	\$9, 372, 378, 843	\$5, 369, 579, 191	\$3, 627, 770, 316	\$4, 002, 799, 652	38.7	74.5
Population.....	875, 568, 686	62, 622, 250	50, 155, 783	12, 946, 436	12, 466, 467	20.7	24.9
<i>100 principal cities.</i>							
Number of establishments.....	4 186, 160	167, 844	78, 033	18, 316	89, 811	10.9	115.1
Capital.....	\$5, 001, 154, 556	\$3, 524, 334, 525	\$1, 384, 379, 147	\$1, 476, 820, 031	\$2, 139, 455, 378	41.9	154.5
Wage-earners, average number.....	2, 638, 831	2, 310, 290	1, 431, 076	328, 544	879, 214	14.2	61.4
Total wages.....	\$1, 231, 745, 031	\$1, 140, 049, 117	\$555, 748, 345	\$91, 695, 914	\$584, 300, 272	8.0	105.1
Cost of materials used.....	\$3, 701, 237, 634	\$2, 992, 724, 848	\$1, 910, 811, 178	\$708, 512, 786	\$1, 081, 913, 670	23.7	56.6
Value of products.....	\$6, 844, 170, 314	\$5, 621, 258, 583	\$3, 018, 413, 756	\$1, 222, 911, 731	\$2, 602, 844, 827	21.8	86.2
Population.....	17, 233, 345	13, 133, 732	9, 131, 085	4, 094, 613	4, 007, 647	31.2	43.9
<i>United States exclusive of 100 principal cities.</i>							
Number of establishments.....	326, 031	187, 561	175, 819	133, 470	11, 742	73.8	6.7
Capital.....	\$4, 812, 679, 834	\$3, 000, 716, 234	\$1, 405, 393, 459	\$1, 811, 963, 600	\$1, 595, 322, 775	50.4	113.5
Wage-earners, average number.....	2, 667, 309	1, 941, 245	1, 301, 519	720, 064	639, 726	37.4	49.2
Total wages.....	\$1, 089, 193, 137	\$751, 160, 579	\$392, 204, 950	\$338, 032, 558	\$358, 355, 829	45.0	91.5
Cost of materials used.....	\$3, 642, 390, 241	\$2, 169, 289, 030	\$1, 486, 012, 371	\$1, 473, 101, 211	\$983, 276, 659	67.9	46.0
Value of products.....	\$6, 155, 978, 845	\$3, 751, 120, 260	\$2, 351, 105, 435	\$2, 404, 853, 585	\$1, 399, 954, 825	64.1	59.5
Population.....	58, 336, 341	49, 483, 518	41, 024, 698	8, 851, 828	8, 468, 820	17.9	20.6

¹ Exclusive of 395 establishments in Hawaii, 63 in Alaska, and 85 governmental in District of Columbia.

² Exclusive of 10 establishments in Alaska.

³ Exclusive of 63,592 persons in Alaska, 154,001 in Hawaii, 392,060 in Indian Territory, and 125,048 on Indian reservations, which classes were not included at previous censuses.

⁴ Exclusive of 119 establishments in Honolulu, H. I., and 85 governmental in District of Columbia.

The percentage of increase in the population of the 100 cities in each of the census periods, as shown in this table, has been somewhat in excess of the percentage of increase for the United States, or for the districts outside of the cities. The percentages of increase for the manufactures in the cities during the decade ending with 1890, were also in excess of the percentages for the United States or for the districts outside of the cities, but during the decade ending with 1900 the manufactures of the cities do not appear to have increased with the same degree of rapidity as in the country at large, or in the districts outside of the cities. Indeed, the percentage of increase for each item except population in the cities was somewhat less than the increase for the corresponding item in the United States or in the country outside of the cities.

The percentages of increase during the ten years ending with 1890 in the number of establishments in the United States, in the 100 cities, and in the country outside of these cities were 40, 115.1, and 6.7, respectively. During the decade ending with 1900 the number of establishments in the United States increased 44.1 per cent, in the cities 10.9 per cent, and in the districts outside of the cities 73.8 per cent. The percentages of increase shown for the remaining items given in the table indicate a greater uniformity in the increase for cities and the districts outside of cities.

The percentages of increase shown in the above table should be considered in connection with the proportion which the manufactures and population of the 100 cities

have formed of the total for the United States at the last three censuses, as given in table II.

TABLE II.—100 principal cities: per cent of the United States, 1880, 1890, and 1900.

ITEMS.	DATE OF CENSUS.		
	1900	1890	1880
Number of establishments.....	36.3	47.2	30.7
Capital.....	51.0	54.0	49.6
Wage-earners, average number.....	49.7	54.3	52.4
Total wages.....	53.1	60.3	53.6
Cost of materials used.....	60.4	58.0	56.3
Value of products.....	52.6	60.0	56.2
Population.....	22.8	21.0	18.2

The large percentage of increase shown in table I for the manufactures of the 100 cities during the decade ending with 1890 was accompanied by an increase in the proportion of the manufactures in these cities, while the smaller percentage of increase for the ten years ending with 1900 was accompanied by a decrease in this proportion. For instance, in 1880 the establishments in the 100 cities formed 30.7 per cent of the total for the United States, this percentage increasing to 47.2 per cent in 1890 and decreasing to 36.3 per cent in 1900. A similar increase followed by a decrease is shown for each of the items given for manufactures, the proportion of products increasing from 56.2 per cent in 1880 to 60 per cent in 1890, and decreasing to 52.6 per cent in 1900. The proportion of the population in the cities, however, has increased steadily, from 18.2 per cent in 1880 to 22.8 per cent in 1900.

3. *164 Principal Cities.*¹—The tendency toward a more rapid increase in the manufactures of the country outside the principal cities, and toward a resulting decrease in the proportion of manufactures in these cities is also indicated by tables III and IV. Table III shows the manufacturing and population statistics in 1890 and 1900 for the United States as a whole, for the 164 cities with a population of 20,000 or over, which were separately reported at the census of 1890, and for the districts outside of these 164 cities. It also shows in separate columns the absolute and relative increase in all items during the census period.

TABLE III.—*164 principal cities, compared with the United States and the United States exclusive of these cities: 1890 and 1900.*

ITEMS.	1900	1890	INCREASE 1890 TO 1900.	
			Amount.	Per cent.
<i>United States.</i>				
Number of establishments.....	1,512,181	2,355,405	156,786	44.1
Capital.....	\$9,813,834,390	\$6,525,050,759	\$3,288,783,631	50.4
Wage-earners, average number.....	5,306,148	4,251,585	1,054,608	24.8
Total wages.....	\$2,320,988,168	\$1,891,209,696	\$429,728,472	22.7
Cost of materials used.....	\$7,343,627,875	\$5,162,018,878	\$2,181,613,997	42.3
Value of products.....	\$13,000,149,169	\$9,372,878,843	\$3,627,770,316	38.7
Population.....	75,508,686	62,622,250	12,946,436	17.1
<i>164 principal cities.</i>				
Number of establishments.....	4211,107	185,908	25,109	13.5
Capital.....	\$5,695,669,874	\$3,989,027,870	\$1,646,642,004	41.3
Wage-earners, average number.....	3,011,864	2,605,908	405,956	15.6
Total wages.....	\$1,403,665,393	\$1,280,705,675	\$122,959,718	9.6
Cost of materials used.....	\$4,209,796,369	\$3,360,196,050	\$809,600,319	27.1
Value of products.....	\$7,795,512,700	\$6,272,438,336	\$1,628,074,424	24.3
Population.....	19,677,685	14,879,612	4,798,073	24.4
<i>United States exclusive of 164 principal cities.</i>				
Number of establishments.....	301,084	169,407	181,677	77.7
Capital.....	\$4,178,164,516	\$2,526,022,889	\$1,642,141,627	64.8
Wage-earners, average number.....	2,294,279	1,645,627	648,652	39.4
Total wages.....	\$917,272,775	\$610,504,021	\$306,768,754	50.2
Cost of materials used.....	\$3,078,881,506	\$1,801,817,828	\$1,272,013,678	70.6
Value of products.....	\$5,204,636,399	\$3,099,940,507	\$2,104,695,892	67.9
Population.....	55,891,001	47,742,638	8,148,363	14.6

¹Exclusive of 395 establishments in Hawaii, 63 in Alaska, and 85 Governmental in District of Columbia.
²Exclusive of 10 establishments in Alaska.
³Exclusive of 63,592 persons in Alaska, 154,001 in Hawaii, 392,060 in Indian Territory, and 125,048 on Indian reservations, which classes were not included at previous censuses.
⁴Exclusive of 119 establishments in Honolulu, H. I., and 85 governmental in District of Columbia.

With the exception of the percentage of population, the increase for every item in the total for the United States and for the country exclusive of the cities has

¹The 165 cities reported separately in 1890 had decreased to 162 cities in 1900, by the consolidation of Brooklyn, Long Island City, and New York on January 1, 1898, and the subdivision of the town of Lincoln, R. I., by the formation of the city of Central Falls, neither of the subdivisions having a population of 20,000 in 1900.

been in excess of the increase for the corresponding item in the totals for the 164 cities. This confirms the statistics of tables I and II, in showing a more rapid increase in the smaller cities and rural districts than in the large urban centers.

The proportion that the manufactures and population of the same cities have formed of the totals for the United States at the censuses of 1890 and 1900 are shown in table IV.

TABLE IV.—*164 principal cities: Per cent of the United States, 1890 and 1900.*

ITEMS.	DATE OF CENSUS.	
	1900	1890
Number of establishments.....	41.2	52.3
Capital.....	57.4	61.1
Wage-earners, average number.....	56.8	61.8
Total wages.....	60.5	67.7
Cost of materials used.....	58.1	65.1
Value of products.....	60.0	66.9
Population.....	26.0	23.8

While the percentage of population in the 164 cities increased from 23.8 per cent in 1890 to 26 per cent in 1900, the percentage of the various items of manufactures uniformly decreased, the number of establishments decreasing from 52.3 to 41.2 per cent; the capital from 61.1 to 57.4 per cent; the number of wage-earners from 61.8 to 56.8 per cent; the amount of wages from 67.7 to 60.5 per cent; the cost of materials from 65.1 to 58.1 per cent; and the value of products from 66.9 to 60 per cent. The percentages given in table IV are in harmony with those in table II, in that they indicate a decrease during the last decade in the proportion of manufactures in the large cities.

The percentage of increase in the manufactures of the principal cities, and also the proportion which the industries in these cities form of the totals for the United States, is considered further in connection with the statistics for the manufactures of the 100 counties in which the principal cities are located (see page cclvi).

4. *1,340 Principal Cities and Towns.*—In 1900, 1,340 principal cities and towns were withdrawn from the enumerators and canvassed by special agents, and the reports from these places constitute the statistics for urban manufactures for the Twelfth Census.

The territory included in a number of these places, especially in the New England states, is in some respects rural rather than urban, and therefore the statistics can not be accepted as pertaining entirely to establishments located in urban districts.

During the decade from 1890 to 1900 the following 47 cities have increased their population above the

20,000 limit, and their statistics are shown in detail by industries for the first time in the Twelfth Census:

San Jose, Cal.	East Orange, N. J.
New Britain, Conn.	New Brunswick, N. J.
Jacksonville, Fla.	Orange, N. J.
Aurora, Ill.	Passaic, N. J.
Decatur, Ill.	West Hoboken, N. J.
East St. Louis, Ill.	Amsterdam, N. Y.
Elgin, Ill.	Jamestown, N. Y.
Anderson, Ind.	Schenectady, N. Y.
Muncie, Ind.	Watertown, N. Y.
Cedar Rapids, Iowa.	Hamilton, Ohio.
Clinton, Iowa.	Lima, Ohio.
Leavenworth, Kans.	Easton, Pa.
Bangor, Me.	Newcastle, Pa.
Everett, Mass.	Norristown, Pa.
North Adams, Mass.	Shenandoah, Pa.
Pittsfield, Mass.	Warwick, R. I.
Quincy, Mass.	Columbia, S. C.
Waltham, Mass.	Austin, Tex.
Kalamazoo, Mich.	Waco, Tex.
Joplin, Mo.	Roanoke, Va.
Butte, Mont.	Spokane, Wash.
South Omaha, Nebr.	Sheboygan, Wis.
Nashua, N. H.	Superior, Wis.
Bayonne, N. J.	

There were 4 cities, Colorado Springs, Colo., Atlantic City, N. J., Mt. Vernon, N. Y., and Newport, R. I., having a population of 20,000 or over at the census of 1900, which were used largely for residential purposes or as summer resorts. The manufacturing industries in these cities were comparatively insignificant, and are not shown by industries.

In 1890 the town of Lincoln, R. I., had a population of more than 20,000, and its statistics were presented by industries. In 1895 the city of Central Falls was

formed from the town of Lincoln. Neither of the subdivisions of the territory contained a population of 20,000 in 1900.

For purposes of comparison, table v is presented, showing the general manufacturing and population statistics of the 209 cities with a population of 20,000 or over in 1900 (Honolulu, H. I., being omitted).

TABLE V.—Totals for 209 principal cities, and for the country exclusive of these cities: 1900.

ITEMS.	United States.	209 CITIES.		EXCLUSIVE OF 209 CITIES.	
		Total.	Per cent of United States.	Total.	Per cent of United States.
Number of establishments.....	1512,191	221,632	48.3	290,659	56.7
Capital.....	\$9,813,834,390	\$5,905,011,612	60.8	\$3,848,822,778	39.2
Wage-earners, average number.....	5,306,143	3,188,979	60.1	2,117,164	39.9
Total wages.....	\$2,320,938,168	\$1,463,101,048	63.9	\$837,837,120	36.1
Cost of materials used.....	\$7,343,627,875	\$4,566,056,017	62.2	\$2,777,571,858	37.8
Value of products.....	\$13,000,149,159	\$8,259,821,644	63.5	\$4,740,327,515	36.5

¹ Exclusive of 395 establishments in Hawaii, 63 in Alaska, and 85 Governmental in District of Columbia.

Table vi shows the totals for the 1,340 cities, for the United States as a whole, and for the United States outside of these urban districts, together with the per cent of the various statistical items in the two great divisions to the same items for the whole country.

TABLE VI.—1,340 CITIES AND TOWNS COMPARED WITH THE UNITED STATES, AND THE UNITED STATES, EXCLUSIVE OF THESE CITIES AND TOWNS: 1900.

ITEMS.	United States.	1,340 CITIES.		UNITED STATES EXCLUSIVE OF 1,340 CITIES.	
		Total.	Per cent of United States.	Total.	Per cent of United States.
Number of establishments.....	1512,191	2307,314	60.0	204,877	40.0
Capital:					
Total.....	\$9,813,834,390	\$7,768,261,655	79.2	\$2,045,572,735	20.8
Land.....	\$1,027,368,280	\$711,108,985	69.2	\$316,259,295	30.8
Buildings.....	\$1,449,403,732	\$1,110,220,754	76.6	\$339,183,028	23.4
Machinery, tools, and implements.....	\$2,541,046,039	\$1,951,128,008	76.8	\$589,918,031	23.2
Cash and sundries.....	\$4,796,015,689	\$3,995,803,908	83.3	\$800,211,781	16.7
Proprietors and firm members.....	572,569	337,997	59.0	234,572	41.0
Salaried officials, clerks, etc.:					
Total number.....	396,677	339,134	85.5	57,493	14.5
Total salaries.....	\$403,593,758	\$353,640,111	87.6	\$49,953,642	12.4
Wage-earners, average number and total wages:					
Total average number.....	5,306,143	4,248,597	80.1	1,057,546	19.9
Total wages.....	\$2,320,938,168	\$1,929,473,919	83.1	\$391,464,249	18.9
Men, 16 years and over—					
Average number.....	4,108,265	3,208,725	78.1	899,540	21.9
Wages.....	\$2,015,232,485	\$1,654,665,349	82.1	\$360,617,136	17.9
Women, 16 years and over—					
Average number.....	1,029,295	914,916	88.9	114,379	11.1
Wages.....	\$279,993,991	\$254,632,434	90.9	\$25,361,557	9.1
Children, under 16 years—					
Average number.....	168,583	124,956	74.1	43,627	25.9
Wages.....	\$25,661,692	\$20,176,036	78.6	\$5,485,656	21.4
Miscellaneous expenses:					
Total.....	\$1,027,535,444	\$920,001,310	89.5	\$107,534,134	10.5
Rent of works.....	\$95,708,226	\$87,964,906	92.0	\$7,743,320	8.0
Taxes, not including internal revenue.....	\$47,165,924	\$37,303,492	79.1	\$9,862,432	20.9
Rent of offices, interest, etc.....	\$713,800,328	\$629,346,321	88.2	\$84,454,007	11.8
Contract work.....	\$170,910,966	\$165,386,591	96.8	\$5,524,375	3.2
Cost of materials used:					
Total.....	\$7,343,627,875	\$5,853,954,272	79.7	\$1,489,673,603	20.3
Principal materials, including mill supplies and freight.....	\$7,127,362,900	\$5,699,129,874	80.0	\$1,428,233,026	20.0
Fuel, and rent of power and heat.....	\$216,264,975	\$154,824,398	71.6	\$61,440,577	28.4
Value of products, including custom work and repairing.....	\$13,000,149,159	\$10,537,154,489	81.1	\$2,462,994,670	18.9
Population.....	875,477,467	28,439,285	37.7	47,038,232	62.3

¹ Exclusive of 395 establishments in Hawaii, 63 in Alaska, 85 governmental in District of Columbia.

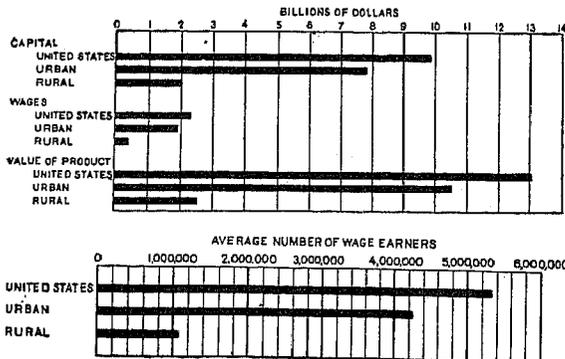
² Exclusive of 119 establishments in Honolulu, H. I., and 85 governmental in District of Columbia.

³ Exclusive of 63,592 persons in Alaska, 154,001 in Hawaii, 392,060 on Indian reservations, and 91,219 in the military and naval service (including civilian employees, etc.) stationed abroad.

As was shown in table iv, the manufacturing establishments in the 164 principal cities represented more than half of the manufacturing of the entire country, but they can not be accepted as representing the total of the urban manufactures. The addition of 1,176 cities to these 164, making the total 1,340, as in table vi, permits the presentation of statistics really representative of the urban interests, for this total includes practically all places that can be considered in any sense urban, and that have manufactures of any comparative importance. The addition of the 1,176 cities does not of course result in an increase in any of the items of the table at all proportionate to the increase in the number of cities shown, but it increases the per cent of the population in the urban districts to the total population by 11.7, of the number of the establishments by 18.8, of the number of wage-earners by 23.3, of wages by 22.6, and of the value of products by 21.1 per cent. The fact that the increase is so small shows that only a comparatively small proportion of manufactures was in the smaller cities and towns.

Accepting the 1,340 cities and towns as representing the urban manufactures, it appears that not only are a large proportion of the establishments located in the urban districts, but these districts contain a much larger proportion of the capital, wage-earners, wages, and products of the manufactures. For each dollar of capital invested in manufactures in the rural districts, \$3.80 were invested in the urban districts; for each wage-earner employed in the rural districts, 4.02 were employed in the urban districts; for each dollar paid in wages in rural manufactures, \$4.93 were paid in the cities; and for each dollar of product manufactured in rural districts, \$4.28 were produced in the cities.

The same conditions are represented graphically in the following diagrams, the first of which shows the importance of urban and rural manufactures relatively to each other, and relatively to the totals for the United States at the census of 1900, as shown by the statistics of capital, wages, and value of products; while the second similarly shows the relative numbers of wage-earners in the cities, the rural districts, and the country as a whole.



The capital shown in the table represents the amount of capital owned by the establishments reporting. In a large number of cases, land, buildings, and machinery were rented by the manufacturers, and in such instances their value was not included. It appears that while the capital in the urban districts represented 79.2 per cent of the total for the country, the value of land in urban manufactures formed only 69.2 per cent of the total value of land for the manufactures of the United States, and the buildings 76.6 per cent of the total value of buildings.

5. *Size of Average Establishment.*—The establishments in the cities were as a rule much larger than those in the rural districts. This is illustrated by table vii, which shows the average capital, etc., for each establishment in the United States and in the urban and rural districts, respectively.

The fact that the proportion shown for capital, wage-earners, wages, materials, and value of products, for the industries of the cities, was greater than the proportion for the number of establishments, indicates that the establishments in the urban districts were larger than those in the rural districts.

TABLE VII.—Average size of establishments in the United States and urban and rural districts: 1900.

ITEMS.	United States.	1,340 cities.	United States, exclusive of 1,340 cities.
Capital.....	\$19,160	\$25,278	\$9,984
Salaried officials, clerks, etc.....	1	1	(1)
Salaries.....	\$788	\$1,151	\$244
Average number of wage-earners.....	10	14	6
Total wages.....	\$4,531	\$6,279	\$1,911
Miscellaneous expenses.....	\$2,006	\$2,994	\$525
Cost of materials used.....	\$14,338	\$19,049	\$7,271
Value of products.....	\$25,381	\$34,288	\$12,022

¹ Less than 1.

The averages shown in this table are obtained by dividing the total amounts reported for the United States and for the urban and rural districts, respectively, by the number of establishments reported in each case. The size of the average establishment in the cities was, as estimated from the value of products, almost three times as large as the average establishment in the rural districts. But these calculations include the number and amounts reported for all small shops engaged in the neighborhood industries and hand trades. In order to show the size of the average manufacturing establishment it is necessary to eliminate the small shops. This is done in table viii, which shows the size of the average establishment as computed for the 73 principal industries of the 209 cities with a population of 20,000 or over, and for the same industries in the districts outside of these cities.

TABLE VIII.—Average size of establishments for 73 selected industries, 209 cities, the United States, and the United States exclusive of these cities.

ITEMS.	United States.	209 cities.	United States exclusive of 209 cities.
Capital.....	\$38,319	\$59,198	\$23,599
Salaried officials, clerks, etc.....	2	3	1
Salaries.....	\$1,784	\$3,120	\$757
Average number of wage-earners.....	21	33	13
Total wages.....	\$9,316	\$15,060	\$5,267
Miscellaneous expenss.....	\$4,629	\$8,658	\$1,808
Cost of materials used.....	\$29,119	\$45,996	\$17,220
Value of products.....	\$51,273	\$82,884	\$28,986

The 73 industries were selected because they were the principal industries of the cities reporting. The averages shown in the table are greatly in excess of those in table VII, where all classes of establishments are considered. The size of the average establishment

in the 73 selected industries for the 209 cities is twice as large as that of the average establishment in all industries as shown in table VII. It also appears that the size of the average establishment engaged in these industries in the cities is almost three times the size of the average establishment engaged in the same industries in the country outside of these cities, taking, as before, the value of products as the basis of the comparison.

6. *Geographic Divisions.*—To aid in determining the region of greatest concentration in urban districts table IX is presented, showing the totals for each geographic division, for all cities in each division, and for the districts in the division which are outside the cities, together with the per cent which each item in the subdivisions bears to the corresponding item for the divisions.

TABLE IX.—1,340 CITIES AND TOWNS COMPARED WITH THE UNITED STATES, AND THE UNITED STATES EXCLUSIVE OF THESE CITIES AND TOWNS, BY GEOGRAPHIC DIVISIONS: 1900.

ITEMS.	Number of establishments.	Capital.	WAGE-EARNERS.		Miscellaneous expenses.	Cost of materials used.	Value of products.	Population.
			Average number.	Total wages.				
United States—total.....	1512,191	\$9,818,834,390	5,306,143	\$2,320,938,168	\$1,027,585,444	\$7,343,627,875	\$13,000,149,159	275,477,467
1,340 cities.....	3307,314	7,768,261,655	4,248,597	1,929,473,919	920,001,810	5,853,954,272	10,537,154,489	428,439,235
Per cent of total.....	60.0	79.2	80.1	83.1	89.5	79.7	81.1	37.7
Exclusive of 1,340 cities.....	204,877	2,045,572,735	1,057,546	391,464,249	107,584,134	1,489,673,603	2,462,994,670	47,038,232
Per cent of total.....	40.0	20.8	19.9	16.9	10.5	20.3	18.9	62.3
New England states—total.....	57,941	1,594,142,061	947,645	420,508,031	126,110,899	990,822,661	1,875,792,081	5,592,017
296 cities.....	46,800	1,414,448,532	847,887	380,505,562	116,653,094	894,062,403	1,683,612,868	4,203,024
Per cent of total.....	80.8	88.7	89.5	90.5	92.6	89.4	89.8	75.2
Exclusive of 296 cities.....	11,141	179,693,529	99,758	40,002,469	9,457,805	105,760,258	192,179,213	1,388,993
Per cent of total.....	19.2	11.3	10.5	9.5	7.5	10.6	10.2	24.8
Middle states—total.....	160,289	3,934,262,648	1,971,297	907,311,476	422,404,006	2,734,860,966	4,947,987,580	17,100,310
293 cities.....	117,622	3,209,596,688	1,660,250	776,733,924	381,436,518	2,245,196,451	4,144,449,402	10,536,758
Per cent of total.....	73.4	81.6	84.2	85.6	90.3	82.1	83.8	61.0
Exclusive of 293 cities.....	42,667	724,665,960	311,047	130,577,552	40,967,488	489,664,515	803,538,178	6,563,552
Per cent of total.....	26.6	18.4	15.8	14.4	9.7	17.9	16.2	38.4
Southern states—total.....	84,256	953,850,192	656,169	197,382,610	83,234,868	671,349,335	1,134,398,684	22,403,880
183 cities.....	22,362	478,725,848	317,561	111,164,458	60,371,675	363,439,173	648,454,727	2,823,358
Per cent of total.....	26.5	50.2	48.4	56.3	72.5	54.1	54.7	12.6
Exclusive of 183 cities.....	61,894	475,124,344	338,608	86,218,152	22,863,193	307,910,162	535,943,957	19,580,522
Per cent of total.....	73.5	49.8	51.6	43.7	27.5	45.9	45.3	87.4
Central states—total.....	166,464	2,750,223,234	1,472,128	657,325,006	352,746,781	2,300,547,763	4,000,817,937	23,059,574
459 cities.....	99,492	2,299,744,618	1,248,127	566,475,962	327,486,871	1,904,939,997	3,370,978,631	8,938,856
Per cent of total.....	59.8	83.6	84.3	86.2	82.8	82.8	84.3	33.8
Exclusive of 459 cities.....	66,962	450,478,616	224,001	90,849,044	25,259,910	395,607,766	629,844,356	14,120,718
Per cent of total.....	40.2	16.4	15.2	13.8	7.2	17.2	15.7	61.2
Western states—total.....	23,950	289,889,077	116,315	63,544,792	20,745,358	873,714,053	555,482,428	4,857,957
78 cities.....	9,746	197,278,556	79,825	43,665,923	16,431,900	286,087,647	410,090,210	934,693
Per cent of total.....	40.7	68.1	68.3	68.7	79.2	70.5	73.8	20.3
Exclusive of 78 cities.....	14,204	92,610,521	36,990	19,878,869	4,313,398	87,676,406	145,392,218	3,873,264
Per cent of total.....	59.3	31.9	31.7	31.3	20.8	23.5	26.2	79.7
Pacific states—total.....	10,301	291,467,178	142,089	74,866,253	22,298,532	263,333,097	435,670,899	2,403,729
31 cities.....	11,292	168,467,413	94,947	50,928,090	17,621,192	180,278,601	279,573,651	952,546
Per cent of total.....	53.5	57.8	66.8	68.0	79.0	60.9	64.2	39.6
Exclusive of 31 cities.....	8,009	122,999,765	47,142	23,938,163	4,672,340	103,054,496	156,096,748	1,451,183
Per cent of total.....	41.5	42.2	33.2	32.0	21.0	39.1	35.8	60.4

¹ Exclusive of 395 establishments in Hawaii, 63 in Alaska, and 85 governmental in the District of Columbia.
² Exclusive of 63,592 persons in Alaska 154,001 in Hawaii, 392,060 in Indian Territory, 125,048 on Indian reservations, and 91,219 in the military and naval service (including civilian employees, etc.) stationed abroad.
³ Exclusive of 119 establishments in Honolulu and 85 governmental in District of Columbia.
⁴ Exclusive of Mount Holly, N. J., and Gretna, La., for which the population was not shown separately.

Attention is at once attracted to the close connection between the concentration of industry and the concentration of population as they appear in the New England states. In those states the 296 cities for which statistics

are shown contained 75.2 per cent of the population. The manufacturing establishments in the cities represented 80.8, their wages 90.5, and the value of their products 89.8 per cent of the totals for the geographic

division. The growth of the cities in these states, has been constant and dependent largely upon the development of their manufactures.

The territory included in the urban districts should also be considered in connection with the percentages shown in the above table. In the New England states a much larger proportion of the total area is included in the urban districts than in any of the other subdivisions. In many cases towns and villages have been included in the list of cities which contain areas that are rural rather than urban in character. Thus the large proportion of the territory in Massachusetts, Rhode Island, and Connecticut which is included by the census in the urban districts, explains in part the relatively large percentage of population and manufactures for those districts. In Maine, New Hampshire, and Vermont the conditions are somewhat reversed; the urban districts contain a comparatively small percentage of the population and a relatively larger proportion of the establishments and products. The entire territory of the District of Columbia is treated as urban, after the manner of many of the Massachusetts towns.

Different conditions surround the development of manufactures in the Southern and Western states. These conditions have tended to a wider distribution of the population, and to a development of those industries in which the products of agriculture form the chief materials, and which therefore do not depend so largely as do those of other states upon the amount of labor expended on products. The concentration of manufac-

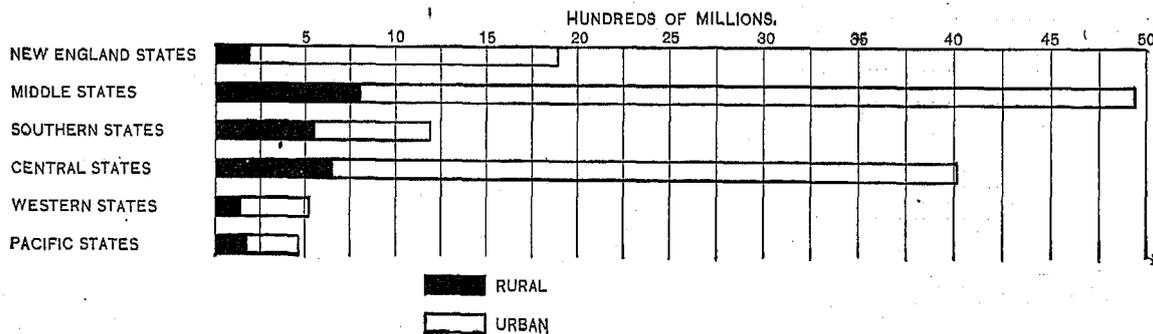
tures, therefore, is not attended by so marked a concentration in the population. The greatest difference between the concentration of population and manufactures in the urban districts is shown for the Western states, where the proportion of population in the urban districts was 20.3 per cent, while the average number of wage-earners formed 68.3 per cent of the total number, and the value of products was 73.8 per cent of the total value.

One of the principal features disclosed by the above table is the uniformity with which the concentration of products has exceeded the concentration in number of establishments. This is due to the fact that the average establishment in the urban districts is much larger than the average establishment in the rural districts. Reference to the statistics of manufacture by states will show that this rule holds everywhere except in Maryland, Nevada, Rhode Island, and Utah.

The statistics for the states, as given in the Report on Manufactures, Part II, disclose the further fact that in 9 states of the Union the urban population exceeded the rural population, while there are 22 states in which the number of establishments in the urban districts exceeded the number of establishments in the rural districts, and 34 in which the value of the urban products exceeded the value of the rural.

The relative importance of the urban and rural manufactures in each geographical division is graphically illustrated by the following diagram:

VALUE OF PRODUCTS OF URBAN AND RURAL MANUFACTURES: BY STATE GROUPS, 1900.



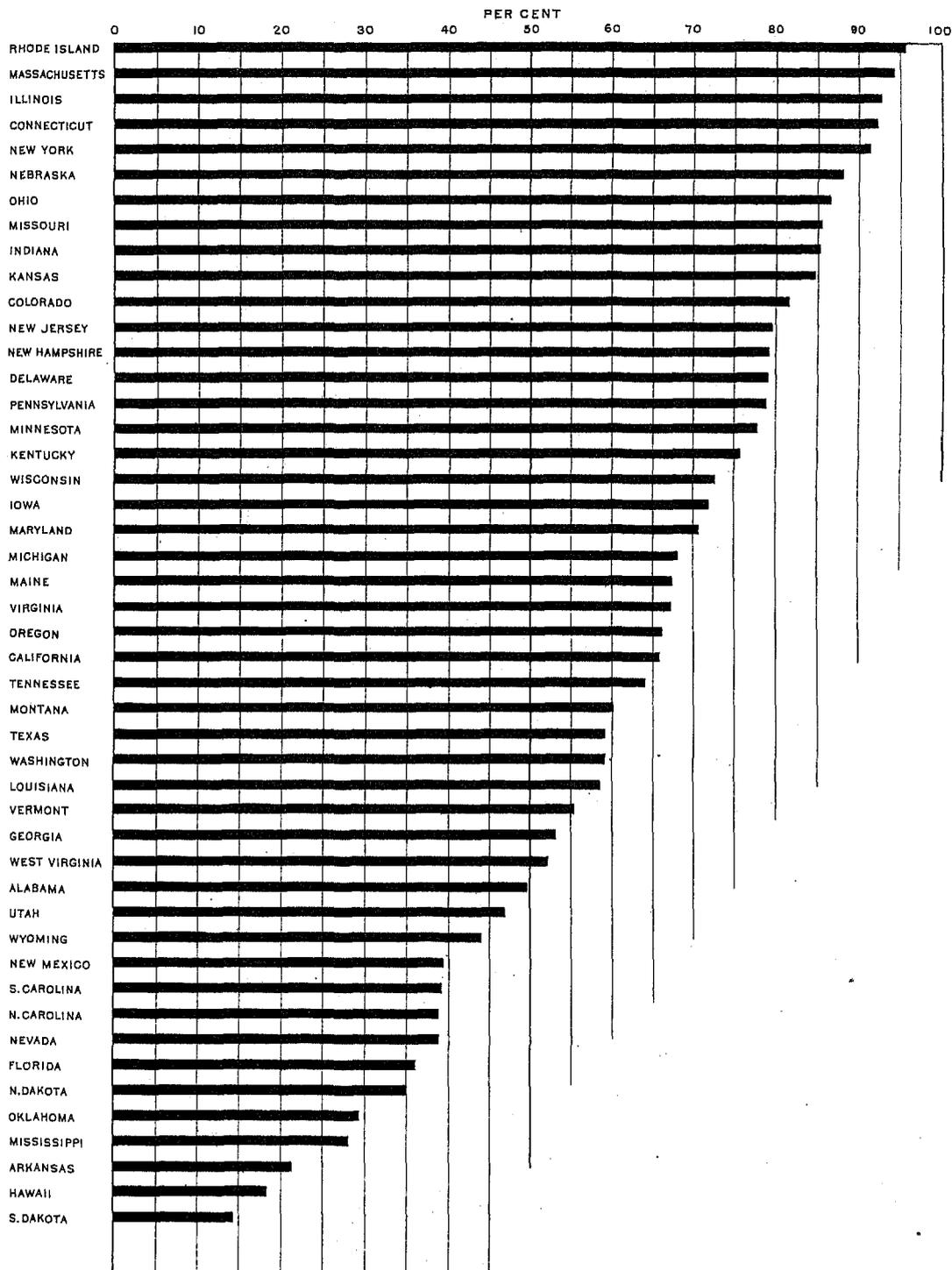
The proportion of manufactures in the urban and rural districts of each state is indicated by the accompanying diagram, which shows the proportion of urban to total products by states and territories.

7. *Wage-Earners.*—One of the characteristic features of the establishments in the urban districts is the relatively larger proportion of women reported as wage-earners. This fact is illustrated by table x, which shows the per cent which the men, women, and children, and their wages, respectively, constitute of the total for the 1,340 cities, and the country exclusive of these cities.

TABLE X.—Percentage of the average number of men, women, and children, and their wages, to total in urban and rural districts: 1900.

	PER CENT OF TOTAL.			
	Urban.		Rural.	
	Average number of wage-earners.	Wages.	Average number of wage-earners.	Wages.
Men	75.5	85.8	85.1	92.1
Women	21.5	18.2	10.8	6.6
Children	3.0	1.0	4.1	1.4

PROPORTION OF URBAN TO TOTAL PRODUCTS OF MANUFACTURES: 1900



The percentage of men to the total average number of wage-earners employed by the establishments in the rural districts was 9.6 greater than the corresponding percentage in the establishments in the cities. In the case of women wage-earners, these percentages are reversed, the percentage of women in the establishments in the cities being 10.7 greater than the corresponding percentage in the rural districts, showing clearly the greater predominance in the cities of industries in which female labor can be employed with advantage. While the proportion of the total wages paid men in the rural districts is in excess of the proportion for the cities, and the proportion paid women in the cities is in excess of that paid in the rural districts, the excesses are not so pronounced as in the case of the number of employees, being only 6.3 and 6.7 respectively.

The proportion of children in the urban and rural districts is about the same—3 and 4.1 per cent, respectively. In the predominance of men, women, or children employed in different localities depending largely on the character of the principal industries, a decided variation naturally appears in the totals for the different geographic divisions, as is shown by table XI, which gives the percentage that men, women, and children, respectively, form of the total wage-earners reported for each geographic division, for the urban districts in each division, and for the country outside of these districts.

TABLE XI.—Percentage of population in urban and rural districts compared with per cent of average number of wage-earners: United States by geographic divisions, 1900.

	Popu- lation.	PER CENT OF TOTAL.					
		Men, 16 years and over.		Women, 16 years and over.		Children, under 16 years.	
		Aver- age num- ber.	Wages.	Aver- age num- ber.	Wages.	Aver- age num- ber.	Wages.
New England states.....	100.0	69.9	79.9	27.5	19.0	2.6	1.1
Urban.....	75.2	69.0	79.4	28.3	19.5	2.7	1.1
Rural.....	24.8	77.2	84.5	20.1	14.4	2.7	1.1
Middle states.....	100.0	74.4	85.2	22.5	18.7	3.1	1.1
Urban.....	61.6	78.0	84.4	24.0	14.6	3.0	1.0
Rural.....	38.4	82.0	90.1	14.6	8.7	3.4	1.2
Southern states...	100.0	80.7	89.9	12.7	7.8	6.6	2.3
Urban.....	12.6	76.5	88.4	17.3	9.6	6.2	2.0
Rural.....	87.4	84.7	91.8	8.4	5.5	6.9	2.7
Central states.....	100.0	88.2	91.0	14.5	8.1	2.3	0.9
Urban.....	38.8	81.9	90.8	15.8	8.8	2.3	0.9
Rural.....	61.2	90.7	95.5	7.1	3.7	2.2	0.8

TABLE XI.—Percentage of population in urban and rural districts compared with per cent of average number of wage-earners: United States by geographic divisions, 1900—Continued.

	Popu- lation.	PER CENT OF TOTAL.					
		Men, 16 years and over.		Women, 16 years and over.		Children, under 16 years.	
		Aver- age num- ber.	Wages.	Aver- age num- ber.	Wages.	Aver- age num- ber.	Wages.
Western states....	100.0	89.8	95.2	8.1	4.1	2.1	0.7
Urban.....	20.3	88.5	94.5	9.5	4.8	2.0	0.7
Rural.....	79.7	92.6	96.9	5.0	2.4	2.4	0.7
Pacific states.....	100.0	88.8	91.8	14.3	7.5	1.9	0.7
Urban.....	89.6	80.8	90.0	17.3	9.3	1.9	0.7
Rural.....	60.4	89.9	95.6	8.2	3.9	1.9	0.5

In the Western group of states the urban population forms only 20.3 per cent of the total population, while the average number of men employed in the urban manufactures of those states forms 88.5 per cent of the total wage-earners. In the New England states, on the other hand, where the urban population forms 75.2 per cent of the total population, the average number of men employed in the urban manufactures forms only 69 per cent of the total employees. The percentage of the urban population in the New England states is 54.9 higher and the percentage of men employed in the urban manufactures is 19.5 lower than in the Western states. These ratios are almost exactly reversed in the case of women wage-earners in the urban districts.

8. *Selected Industries.*—The preceding tables and discussion have indicated the extent of the concentration of industries in general in the urban districts. Some industries are almost necessarily rural at the present day because of the character of their raw material, and because of the conditions affecting the costs of transportation. If it costs more to haul the raw material from the country to the city, and back again to the country consumers, than can be saved through the superior efficiency of urban manufacturing organization, the industry, so far as it supplies rural demands, will tend to hold its own in the country districts. If the industry is of such a character that greater economy can be achieved by transporting the finished product rather than the raw material from the source of supply in the country to the market outside, it will tend to remain a rural manufacture. Instances of these conditions are to be seen in the case of lumber, turpentine, and rosin. The majority of manufactures, however, predominate in cities, because they can there

STATISTICS OF MANUFACTURES.

enjoy the advantages of convenient access to markets and to central distributing points; of a large ready supply of capital, labor, and power; and because they can there avail themselves of many other economies of production. This concentration is more marked in indus-

tries which are peculiar to cities, as is indicated by table XII, showing the per cent which the totals for the 73 selected industries in the 209 cities form of the totals for these industries in the United States at the census of 1900.

TABLE XII.—PER CENT OF 73 SELECTED INDUSTRIES IN 209 CITIES: 1900.

73 SELECTED INDUSTRIES.	Number of establishments.	Capital.	SALARIED OFFICIALS, CLERKS, ETC.		AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES.					Miscellaneous expenses.	Cost of materials used.	Value of products.
			Number.	Salaries.	Total.		Average number.					
					Average number.	Wages.	Men, 16 years and over.	Women, 16 years and over.	Children, under 16 years.			
Total	41.4	63.9	73.0	74.4	63.7	66.8	62.3	70.4	51.2	77.2	65.3	66.8
Agricultural implements.....	24.9	57.7	70.6	67.0	56.7	58.4	56.6	84.1	62.9	64.9	58.8	58.4
Awnings, tents, and sails.....	76.7	91.9	96.2	97.6	90.8	91.7	88.3	94.5	80.0	94.1	94.1	98.4
Bags, other than paper.....	91.0	97.8	98.2	98.7	87.5	95.0	98.2	81.7	98.7	96.9	98.9	98.5
Baskets, and rattan and willow ware.....	43.6	45.6	45.4	52.8	37.9	43.0	38.6	33.7	43.2	54.2	53.3	50.0
Bicycles and tricycles.....	73.4	70.4	78.4	75.3	69.3	69.3	69.3	62.3	82.5	75.7	69.3	70.0
Bookbinding and blank book making.....	85.2	83.2	89.1	85.8	91.2	92.4	91.3	90.8	97.0	88.1	84.2	87.4
Boots and shoes, factory product.....	62.0	56.3	61.0	62.2	59.4	60.1	58.0	61.7	61.4	63.2	56.2	58.2
Boxes, fancy and paper.....	77.1	81.2	87.8	88.6	84.2	83.6	82.1	84.8	88.1	80.7	81.5	84.7
Brass castings and brass finishing.....	88.9	90.6	91.7	94.5	93.8	94.0	93.5	99.3	94.4	93.9	93.9	93.9
Brick and tile.....	10.4	31.6	24.7	28.7	23.2	26.2	23.3	6.6	18.3	20.8	25.2	25.5
Brooms and brushes.....	48.0	73.2	69.2	73.4	69.4	71.3	66.2	78.5	73.9	74.6	73.7	72.2
Carpets and rugs, other than rag.....	82.0	79.2	78.9	78.1	85.0	87.0	83.6	86.8	83.5	81.4	87.4	87.2
Carriages and wagons.....	31.8	60.7	61.5	64.9	57.2	60.4	57.4	50.6	43.3	63.4	55.7	50.7
Cars and general shop construction and repairs by steam railroad companies.....	29.8	55.2	48.6	49.0	52.7	53.2	52.6	89.6	73.4	75.4	54.0	54.1
Cars and general shop construction and repairs by street railroad companies.....	81.5	97.8	92.0	92.0	94.8	95.3	94.8	100.0	.....	92.6	96.7	95.6
Cars, steam railroad, not including operations of railroad companies.....	56.9	63.8	60.4	67.4	66.4	69.8	66.2	100.0	90.0	58.7	64.9	66.4
Cars, street railroad, not including operations of railroad companies.....	70.0	83.6	84.0	90.6	87.1	87.4	87.0	100.0	.....	89.7	91.7	89.8
Chemicals.....	46.4	50.1	59.4	60.3	40.2	43.5	38.5	73.9	83.3	51.0	62.5	57.9
Clothing, men's, factory product.....	93.4	94.8	93.0	94.4	90.8	94.1	95.3	87.9	87.8	98.7	95.3	95.5
Clothing, men's, factory product, buttonholes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Clothing, women's, factory product.....	95.3	95.4	96.5	96.5	92.7	95.2	96.8	90.7	94.4	98.2	95.6	95.9
Coffee and spice, roasting and grinding.....	92.1	97.0	96.1	96.7	91.0	96.4	96.2	84.7	87.0	98.0	94.9	95.3
Cooperage.....	40.9	70.6	64.1	74.8	61.6	65.3	61.6	50.0	61.4	75.5	69.5	67.5
Cordage and twine.....	55.2	70.9	67.0	71.4	61.8	65.6	58.4	68.8	52.7	70.8	71.0	70.2
Cotton goods.....	37.5	51.4	43.1	49.9	48.1	55.9	47.7	53.8	92.1	58.2	49.8	52.0
Cutlery and edge tools.....	46.3	37.3	51.7	53.5	38.8	39.3	37.5	53.2	54.8	45.7	43.6	43.8
Dyeing and finishing textiles.....	73.2	61.5	67.6	64.3	59.9	61.3	61.8	48.8	61.4	62.7	63.4	63.3
Electrical apparatus and supplies.....	82.2	75.8	82.6	79.8	73.5	72.2	73.9	70.2	86.8	84.0	70.2	72.3
Flouring and grist mill products.....	3.0	29.6	31.0	43.4	25.2	29.4	24.6	69.2	14.6	36.4	32.1	30.3
Food preparations.....	73.3	81.2	74.5	80.0	77.8	79.8	78.5	76.5	75.0	70.3	85.1	81.5
Foundry and machine shop products.....	57.3	69.8	72.2	73.3	70.1	71.8	70.0	80.1	71.8	76.1	70.9	70.8
Furnishing goods, men's.....	88.9	86.1	89.6	83.9	83.7	84.1	87.5	83.9	52.7	91.2	90.0	88.5
Furniture, factory product.....	62.5	64.7	69.1	72.6	64.6	69.5	65.4	43.1	59.1	75.5	68.1	68.8
Hardware.....	68.8	71.9	68.7	70.9	74.3	73.8	74.1	76.1	75.7	76.3	76.3	75.0
Hats and caps, not including fur hats and wool hats.....	94.6	79.5	92.4	89.1	79.7	79.2	84.7	74.4	92.5	83.2	78.1	80.8
Hosiery and knit goods.....	52.1	57.1	53.9	55.7	57.4	57.9	50.4	60.1	57.8	62.2	56.0	57.2
Ice, manufactured.....	36.3	66.5	59.4	65.4	58.9	63.8	59.2	62.5	2.9	72.1	62.9	63.5
Iron and steel.....	39.4	50.4	48.4	50.1	51.8	53.2	51.7	80.8	45.0	54.5	50.8	51.4
Ironwork, architectural and ornamental.....	90.5	83.9	83.7	84.2	86.8	83.3	87.0	87.1	51.2	86.2	86.2	87.1
Jewelry.....	84.4	83.8	81.4	81.2	74.5	75.7	76.3	69.4	95.0	88.2	81.6	79.2
Leather goods.....	82.1	86.2	93.7	95.5	90.1	91.7	90.5	80.2	92.7	92.3	92.3	92.3
Leather, tanned, curried, and finished.....	30.2	42.6	57.1	56.7	52.3	54.8	51.2	92.1	81.8	44.8	46.9	48.1
Liquors, distilled.....	5.7	39.3	36.9	39.1	28.6	34.8	23.7	23.5	33.0	71.3	48.5	65.6
Liquors, malt.....	52.4	87.5	82.7	95.3	83.4	85.2	83.1	95.0	93.3	83.6	84.7	86.7
Liquors, vinous.....	16.2	13.9	13.7	16.8	12.6	16.2	13.0	3.3	66.7	18.7	8.0	10.2
Lithographing and engraving.....	97.3	98.0	93.7	95.8	95.6	97.1	96.5	89.7	100.0	99.6	95.0	96.6
Lumber, planing mill products, including sash, doors, and blinds.....	32.4	55.6	58.1	63.5	55.7	60.1	55.6	51.7	58.7	65.8	53.7	55.3
Mattresses and spring beds.....	70.0	79.3	89.5	88.7	79.7	81.5	77.9	85.9	82.8	88.7	85.5	85.3
Musical instruments and materials, not specified.....	84.3	70.3	70.9	78.0	68.5	66.0	67.4	75.2	97.1	69.9	64.0	65.7
Musical instruments, organs and materials.....	60.2	57.4	64.0	64.3	60.3	61.9	59.5	69.6	83.3	64.9	62.3	62.7
Musical instruments, pianos and materials.....	75.5	78.8	79.7	81.5	77.8	78.9	77.5	74.9	91.8	85.0	76.6	78.0
Patent medicines and compounds.....	78.2	77.7	74.1	73.5	79.9	80.6	77.6	82.0	78.6	81.9	79.1	83.3
Pottery, terra cotta, and fire-clay products.....	27.1	40.6	40.5	42.2	40.0	42.3	33.5	56.5	26.5	49.5	48.3	42.0
Printing and publishing, book and job.....	79.0	98.5	95.6	96.5	93.0	94.4	93.4	92.1	83.6	97.0	93.6	94.1
Printing and publishing, newspapers and periodicals.....	24.1	71.3	85.7	88.9	56.9	69.7	62.1	45.8	22.1	87.9	77.7	75.9
Rubber and elastic goods.....	73.3	67.8	78.7	71.1	65.8	66.3	63.6	62.9	86.6	75.2	66.9	68.7
Saddlery and harness.....	23.0	43.4	74.0	78.2	54.0	56.9	58.7	60.9	53.2	52.1	51.5	50.5

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TABLE XII.—PER CENT OF 73 SELECTED INDUSTRIES IN 209 CITIES: 1900—Continued

73 SELECTED INDUSTRIES.	Number of establishments.	Capital.	SALARIED OFFICIALS, CLERKS, ETC.		AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES.					Miscellaneous expenses.	Cost of materials used.	Value of products.
			Number.	Salaries.	Total.		Average number.					
					Average number.	Wages.	Men, 16 years and over.	Women, 16 years and over.	Children, under 16 years.			
Ship and boat building, wooden.....	39.4	58.9	61.3	62.0	52.5	54.9	52.3	70.6	98.1	65.3	48.2	51.4
Shipbuilding, iron and steel.....	79.5	67.4	80.4	75.7	73.2	74.6	73.5	29.4	63.1	80.0	77.4	78.5
Shirts.....	77.5	80.0	81.0	84.1	69.4	76.9	81.1	67.4	50.6	89.5	82.1	81.2
Silk and silk goods.....	62.7	56.3	61.2	62.7	60.9	66.0	62.4	61.1	53.8	66.6	64.1	61.9
Slaughtering and meat packing, wholesale.....	71.6	88.3	92.3	92.4	89.2	90.8	89.0	95.4	80.3	94.6	88.5	88.5
Slaughtering, wholesale, not including meat packing.....	71.0	94.1	91.4	92.7	87.8	89.7	88.1	60.0	47.5	93.4	89.8	89.7
Soap and candles.....	70.8	79.3	89.2	88.0	86.6	85.7	85.8	86.4	93.8	78.9	86.6	85.7
Steam fittings and heating apparatus.....	81.1	89.2	87.3	86.6	87.3	88.9	87.3	84.4	97.4	88.7	86.0	87.7
Tobacco, chewing, smoking, and snuff.....	49.9	69.3	68.7	69.0	62.3	74.1	60.9	72.3	34.2	76.5	77.0	75.9
Tobacco, cigars and cigarettes.....	58.3	68.5	73.3	78.7	69.4	70.7	64.8	77.8	60.4	75.2	70.1	71.6
Trunks and valises.....	93.1	90.9	92.7	91.9	91.6	92.3	91.4	89.4	97.8	91.4	91.5	91.4
Umbrellas and canes.....	94.3	93.9	94.4	93.8	94.4	95.1	92.0	95.8	99.6	98.3	97.5	97.1
Wirework, including wire rope and cable.....	64.0	57.7	59.3	62.1	64.8	64.1	63.1	67.6	87.9	62.6	58.4	60.2
Wood, turned and carved.....	47.8	43.6	41.5	44.0	48.1	48.0	48.7	16.2	51.3	55.5	46.0	46.5
Woolen goods.....	19.5	32.6	34.6	37.3	35.7	35.8	32.6	39.6	43.9	36.0	37.9	37.2
Worsted goods.....	55.4	74.9	71.6	73.9	74.0	72.7	70.9	77.2	73.6	75.3	71.3	72.2

The table shows that the establishments engaged in the 73 industries located in the 209 cities form 41.4 per cent, their wage-earners 63.7 per cent, and the value of their products 66.8 per cent of the totals for all establishments engaged in these same industries. Computations from tables in the Report on Manufactures, Part II, show that the 73 selected industries have 28.1 per cent of the total number of establishments for all industries, 64.4 per cent of the total wage-earners, and produce 62.4 per cent of the total value of products for these cities. These industries in the country as a whole represent a very large proportion of the total for all industries, and the urban establishments engaged in them represent a large proportion of the totals for the same industries. They are, therefore, representative of urban concentration, and the statistics of these industries are of peculiar importance.

In the case of one of the industries, "clothing, men's, factory product, buttonholes," all the establishments are located in the 209 cities. With this exception, the largest proportion of city establishments is reported for "lithographing and engraving," in which the city establishments represent 97.3 per cent of the total number in the United States. The next largest concentration, 95.3 per cent of the whole, is shown for "clothing, women's, factory product," and the next, 94.6 per cent, for "hats and caps, not including fur hats and wool hats."

With the exception noted above, the greatest concentration in the average number of wage-earners is for "lithographing and engraving," which has 95.5 per cent of its employees in city establishments; the next, 94.8 per cent, for "cars, and general shop construction and repairs by street railroad companies;" and the next, 94.4 per cent, for "umbrellas and canes."

"Bags, other than paper," shows the second greatest

concentration in the value of products, the 209 cities representing 98.5 per cent of the products for all establishments in the industry. The next greatest concentration in value of products, 97.1 per cent, is for "umbrellas and canes;" and the next, 96.6 per cent, for "lithographing and engraving."

The smallest degree of concentration in number of establishments is shown for "flouring and grist mills," in which the establishments in the 209 cities form but 3 per cent of the total number. The next smallest percentage, 5.7, appears in the case of "liquors, distilled;" and the next, 10.4, in "brick and tile." The least concentration in wage-earners and value of products is shown for "liquors, vinous," which reports only 12.6 per cent of its wage-earners and 10.2 per cent of its products in urban establishments. The next smallest degree of concentration in the number of wage-earners, 23.2 per cent, and also in value of products, 25.5 per cent, is shown for "brick and tile;" and the next, 25.2 per cent, in number of wage-earners and 30.8 per cent in value of products, for "flouring and grist mill products."

There are striking variations in the proportions which various items bear to the totals for the respective industries. It appears, however, that in the majority of instances larger percentages are reported for capital, wages, etc., than for the number of establishments, indicating a probability that the establishments in the cities are relatively larger than those in the rural districts.

A division of the industries into 15 groups, as explained in Chapter II of this introduction, according to the character of the raw material or the use of the products, leads to interesting results. Table XIII shows the percentages which the totals for each group of industries in the 209 cities constituted of the totals in the United States for the same group.

TABLE XIII.—Per cent of 15 groups of industries in 209 cities: 1900.

Group No.	15 INDUSTRY GROUPS.	Number of establishments.	Cap-ital.	WAGE-EARNERS.		Cost of materials used.	Value of products.
				Average number.	Total wages.		
	Total.....	43.2	60.8	60.1	63.9	62.2	63.5
1	Food and kindred products.....	28.2	63.6	62.9	65.9	66.9	66.4
2	Textiles.....	47.5	61.8	64.4	69.7	70.8	71.2
3	Iron and steel and their products.....	60.6	62.8	65.0	66.1	59.9	62.1
4	Lumber and its remanufactures.....	15.0	28.5	33.7	38.1	33.9	34.9
5	Leather and its finished products.....	31.2	49.8	53.8	60.1	55.2	56.6
6	Paper and printing.....	47.1	62.0	63.2	73.6	63.5	73.6
7	Liquors and beverages.....	43.6	81.5	75.6	79.9	75.2	78.6
8	Chemicals and allied products.....	61.6	60.8	58.0	59.2	68.0	67.6
9	Clay, glass, and stone products.....	26.5	34.5	33.3	36.9	46.1	40.7
10	Metals and metal products other than iron and steel.....	53.1	64.2	70.7	69.9	50.8	55.2
11	Tobacco.....	57.3	65.4	65.5	69.8	65.4	70.1
12	Vehicles for land transportation.....	34.2	61.5	57.0	58.4	59.0	59.1
13	Shipbuilding.....	40.9	65.4	66.2	67.7	67.3	69.7
14	Miscellaneous industries.....	56.3	75.7	62.5	67.5	70.2	70.5
15	Hand trades.....	60.0	64.7	70.6	74.1	70.2	71.7

The greatest concentration in respect to number of establishments appears in the group "chemicals and allied products," in which the establishments in the cities formed 61.6 per cent of the total. The greatest concentration as to value of products, 78.6 per cent, is shown for "liquors and beverages." "Lumber and its remanufactures" shows the least concentration in number of establishments, those in the 209 cities forming only 15 per cent of the total number reported; but the value of products reported for this comparatively small number of establishments formed 34.9 per cent of the total.

The decrease of the concentration in the principal industries during the last decade can be observed by comparing the principal industries shown for the 165 cities for which the statistics were published separately at the census of 1890, with the totals for the same industries in the same cities at the census of 1900. A comparison of this kind is made in table XIV, which shows the proportion the items of manufacture in each of 49 selected industries in the 165 cities at the censuses of 1890 and 1900, respectively, bore to the totals for the whole country in the same years.

TABLE XIV.—49 SELECTED INDUSTRIES IN 165 PRINCIPAL CITIES,¹ PER CENT OF THE UNITED STATES: 1890 AND 1900.

49 SELECTED INDUSTRIES.	Year.	Number of establishments.	Capital.	WAGE-EARNERS.		Miscellaneous expenses.	Cost of materials used.	Value of products.
				Average number.	Total wages.			
United States.....	1900	43.7	61.7	62.5	66.6	74.5	61.2	63.1
	1890	50.3	65.2	66.9	70.9	74.6	65.6	68.5
Agricultural implements.....	1900	22.7	56.7	56.0	57.7	64.1	53.1	57.7
	1890	21.4	57.7	51.3	51.0	55.9	55.1	54.5
Awnings, tents, and sails.....	1900	78.1	90.3	88.9	90.0	92.8	92.9	91.9
	1890	85.7	98.0	93.1	94.8	96.0	94.6	94.6
Bags, other than paper.....	1900	37.2	94.7	82.6	91.6	94.8	96.5	96.1
	1890	37.5	94.6	94.4	95.9	92.0	94.2	94.2
Baskets, and rattan and willow ware.....	1900	43.1	45.5	37.9	43.0	54.0	53.2	49.9
	1890	73.0	30.8	39.8	49.6	32.4	43.0	47.3
Bookbinding and blank book making.....	1900	82.7	82.7	90.8	92.0	87.8	83.9	85.9
	1890	84.5	95.0	95.8	97.0	96.3	96.2	96.2
Boots and shoes, factory product.....	1900	63.3	53.0	56.2	57.0	60.3	52.6	54.8
	1890	61.0	55.5	56.7	57.9	63.5	55.0	57.3
Boxes, fancy and paper.....	1900	74.2	79.0	81.7	80.6	88.2	80.1	81.5
	1890	74.8	86.6	85.6	86.2	90.9	86.1	86.5
Brass castings and brass finishing.....	1900	85.3	89.3	92.0	92.4	92.8	92.9	92.7
	1890	90.1	86.3	87.2	89.2	89.2	79.7	85.0
Brooms and brushes.....	1900	45.7	67.1	65.1	66.1	70.8	68.6	67.5
	1890	55.4	73.5	70.9	73.2	71.3	72.5	73.1
Chemicals.....	1900	42.9	46.6	35.8	38.5	44.1	57.5	52.5
	1890	63.2	70.5	70.8	70.4	80.7	81.4	79.3
Clothing, men's, factory product.....	1900	93.0	94.0	90.0	93.5	93.4	94.7	73.3
	1890	95.1	96.8	92.4	96.3	97.3	96.6	96.7
Clothing, women's, factory product.....	1900	94.4	94.6	91.7	94.7	97.8	95.0	95.3
	1890	98.0	98.6	97.3	98.0	98.7	98.3	98.4
Cooperage.....	1900	39.7	67.6	58.4	62.1	72.4	66.2	64.4
	1890	42.4	71.7	64.1	70.9	75.7	69.0	69.3
Cotton goods.....	1900	34.6	45.9	43.8	51.0	59.7	45.8	47.6
	1890	41.4	52.5	51.4	54.8	55.6	53.1	54.0
Cutlery and edge tools.....	1900	43.7	27.1	27.4	27.1	34.9	28.6	30.1
	1890	63.3	35.1	37.8	37.4	34.0	36.9	40.4
Dyeing and finishing textiles.....	1900	69.8	44.5	47.6	48.2	45.7	51.4	49.8
	1890	77.0	51.6	54.4	55.7	48.1	55.1	55.9
Flouring and grist mill products.....	1900	2.2	27.1	23.2	27.2	38.4	29.8	28.6
	1890	3.8	27.0	19.9	23.3	33.2	32.6	31.8

¹ Lincoln, R. I., included in 1890, is omitted in 1900.

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TABLE XIV.—49 SELECTED INDUSTRIES IN 165 PRINCIPAL CITIES, PER CENT OF THE UNITED STATES: 1890 AND 1900—
Continued.

49 SELECTED INDUSTRIES.	Year.	Number of establishments.	Capital.	WAGE-EARNERS.		Miscellaneous expenses.	Cost of materials used.	Value of products.
				Average number.	Total wages.			
Foundry and machine shop products	1900	54.4	66.1	66.0	67.6	73.2	66.8	66.9
	1890	59.4	73.9	73.6	75.3	77.1	75.9	76.1
Furnishing goods, men's.....	1900	38.5	86.0	83.7	84.1	91.1	89.9	88.5
	1890	93.6	92.1	93.6	93.3	96.2	93.7	94.0
Furniture, factory product	1900	58.8	58.9	51.8	64.5	68.8	63.0	63.8
	1890	62.4	69.5	68.9	74.7	68.7	75.6	74.6
Hardware.....	1900	64.6	53.7	57.1	56.2	58.2	56.8	56.9
	1890	67.4	50.9	58.3	57.9	73.0	57.9	61.0
Hats and caps, not including fur hats and wool hats	1900	93.6	79.3	79.6	79.1	83.1	78.0	80.2
	1890	85.5	63.5	65.3	55.1	64.9	60.8	60.3
Hosiery and knit goods	1900	47.7	46.7	50.0	49.9	54.0	47.4	49.1
	1890	56.3	44.1	52.6	52.1	48.7	52.4	52.8
Ironwork, architectural and ornamental.....	1900	88.5	79.9	83.5	85.0	81.4	83.0	83.8
	1890	88.3	78.0	81.4	84.0	86.6	77.5	80.4
Jewelry	1900	84.0	83.8	74.5	75.6	88.2	81.5	79.2
	1890	85.1	81.5	76.2	78.7	72.9	89.7	85.1
Leather, tanned, curried, and finished ²	1900	29.3	41.6	51.4	53.9	44.4	45.7	46.9
	1890	24.2	42.1	39.6	43.6	38.0	43.1	42.1
Liquors, malt	1900	49.4	85.7	80.8	82.7	87.0	82.4	84.7
	1890	58.3	83.2	84.9	86.9	88.2	88.2	88.1
Lithographing and engraving.....	1900	97.3	98.0	95.5	97.1	99.6	95.0	96.6
	1890	99.1	98.0	98.1	93.6	99.3	98.2	98.7
Lumber, planing mill products, including sash, doors, and blinds.....	1900	30.5	63.2	53.1	57.5	63.1	51.2	52.7
	1890	39.1	61.2	64.8	70.2	63.0	63.3	65.7
Mattresses and spring beds	1900	65.1	76.1	75.8	73.1	86.3	82.7	82.3
	1890	71.1	83.9	84.2	87.3	85.7	88.6	87.9
Musical instruments and materials, not specified	1900	82.5	66.0	64.4	63.3	62.7	59.3	63.2
	1890	92.5	83.7	80.6	82.6	83.4	80.8	86.1
Musical instruments, organs, and materials.....	1900	56.6	55.3	58.8	60.3	64.2	61.1	61.3
	1890	69.7	70.8	70.7	73.3	74.8	72.3	73.5
Musical instruments, pianos, and materials	1900	73.2	78.5	77.1	73.3	84.6	75.9	77.5
	1890	85.2	85.5	85.0	87.8	85.5	85.8	87.9
Patent medicines and compounds.....	1900	70.7	75.8	78.4	78.6	79.9	77.6	78.6
	1890	76.8	80.6	78.3	73.5	88.1	84.2	83.6
Printing and publishing, book and job.....	1900	76.2	92.2	91.7	94.3	96.2	92.4	93.0
	1890	85.2	95.4	95.4	96.7	97.3	96.1	96.3
Rubber and elastic goods.....	1900	71.4	66.2	63.5	64.3	73.8	64.6	66.7
	1890	67.6	56.2	52.5	54.2	62.4	58.9	58.6
Saddlery and harness.....	1900	21.4	41.6	51.8	54.7	48.6	49.1	48.2
	1890	38.5	58.3	60.6	65.2	63.1	63.8	63.1
Shirts	1900	75.3	73.3	67.1	74.6	89.1	80.5	79.6
	1890	90.1	85.6	81.2	84.0	90.6	81.7	84.5
Silk and silk goods	1900	60.7	50.3	55.2	60.0	59.2	54.1	55.7
	1890	76.7	61.2	66.2	70.1	66.6	61.1	65.1
Slaughtering and meat packing, wholesale.....	1900	67.0	75.8	75.0	76.3	85.8	72.9	73.4
	1890	79.9	89.0	87.9	89.2	91.4	88.8	89.0
Soap and candles	1900	68.5	73.6	85.4	84.5	77.0	85.3	84.1
	1890	79.9	94.3	91.1	92.7	92.8	94.7	93.9
Steam fittings and heating apparatus.....	1900	79.7	83.8	80.7	88.3	88.6	85.3	87.1
	1890	81.1	91.3	92.3	92.9	91.4	93.2	92.6
Tobacco, chewing, smoking, and snuff.....	1900	49.2	69.2	62.2	74.0	76.4	76.8	75.8
	1890	44.3	66.5	55.6	68.0	71.9	73.7	72.6
Tobacco, cigars, and cigarettes	1900	56.0	66.3	67.1	68.4	70.5	68.0	69.6
	1890	68.1	76.8	71.8	73.7	74.6	76.3	75.1
Trunks and valises.....	1900	90.5	83.2	89.4	90.1	90.2	89.5	89.4
	1890	90.6	92.2	95.3	95.9	92.7	92.8	94.5
Umbrellas and canes.....	1900	94.3	93.9	94.4	95.1	98.2	97.5	97.1
	1890	96.6	97.2	94.7	95.1	98.9	97.5	97.0
Wirework, including wire rope and cable.....	1900	61.6	55.9	62.2	62.4	61.1	56.2	58.1
	1890	63.6	70.7	76.1	79.1	64.3	71.5	74.4
Wood, turned and carved	1900	46.6	52.5	41.9	46.6	54.4	44.9	45.4
	1890	64.2	64.5	58.6	65.0	69.3	58.3	61.3
Woolen goods.....	1900	17.7	29.2	32.2	32.2	33.2	35.0	34.1
	1890	16.8	29.4	32.3	32.2	29.1	32.3	32.6

²Inclusive in 1900 of "leather, morocco," and "leather, patent and enameled," which were separately reported in 1890.

The percentages for 1890 are based on totals which include Lincoln, R. I., as it was found impossible to segregate the figures for all the industries in the city. The omission of this city from the totals for 1900 has had a slight effect on the percentages for some of the industries. The inclusion, in 1900, of "leather, morocco," and "leather, patent and enameled," under the head of "leather, tanned, curried, and finished," should also be taken into account.

The 49 industries shown in table xiv, are important factors in the industrial development of the country. In 1900 the establishments reported for these industries constituted 22.0 per cent, their wage-earners, 42.9 per cent, and their products 41.7 per cent of the total for all industries in the United States. The increase or decrease in their concentration in the cities is therefore especially significant.

Comparing the percentages in the country at large for the two censuses, it appears that there has been a marked decrease in the proportion which each item bears to the corresponding total, with the exception of miscellaneous expenses, and in this item there was no change. As to the industries in general, therefore, it appears that concentration has decreased during the decade. The same can not be said, however, of every one of the industries. The proportion of the total number of establishments located in the cities has increased in 7 of the 49 industries and has decreased in 41 of them. Eleven of the industries show an increase in the proportion of the products in the cities, while 38 show a decrease.

The greatest increase in concentration appears for "hats and caps, not including fur hats and wool hats." Although there were already 85.5 per cent of the establishments in this industry in the 165 principal cities at the census of 1890, the percentage increased still further to 93.6 in 1900. The value of the products of the city establishments in this industry in 1890 formed 60.3

per cent of the total value of products for the industry, and in 1900, 80.2 per cent. The 4 industries which show the next largest increase in the proportion of establishments in the cities are, in their order, "leather, tanned, curried, and finished;" "tobacco, chewing, smoking, and snuff;" "rubber and elastic goods," and "boots and shoes, factory product." All these industries except "boots and shoes," also show increased concentration as measured by value of products. The 5 industries which show the largest decrease in the proportion of establishments in the cities are, in their order, "baskets, rattan and willow ware;" "chemicals;" "cutlery and edge tools;" "wood, turned and carved," and "silk and silk goods."

It therefore appears that in the majority of the industries the tendency has been toward a wider diffusion of the establishments, although the decrease in the proportion of the number of establishments in cities may be due to some extent to combinations of one or more establishments under a single management, or a growth in the size of independent establishments without such consolidation. That the decrease in the proportion of city establishments is partly due to such consolidation or growth is indicated by the fact that while 41 industries show a relative decrease in the number of city establishments, only 38 show a relative decrease in the value of the products of such establishments.

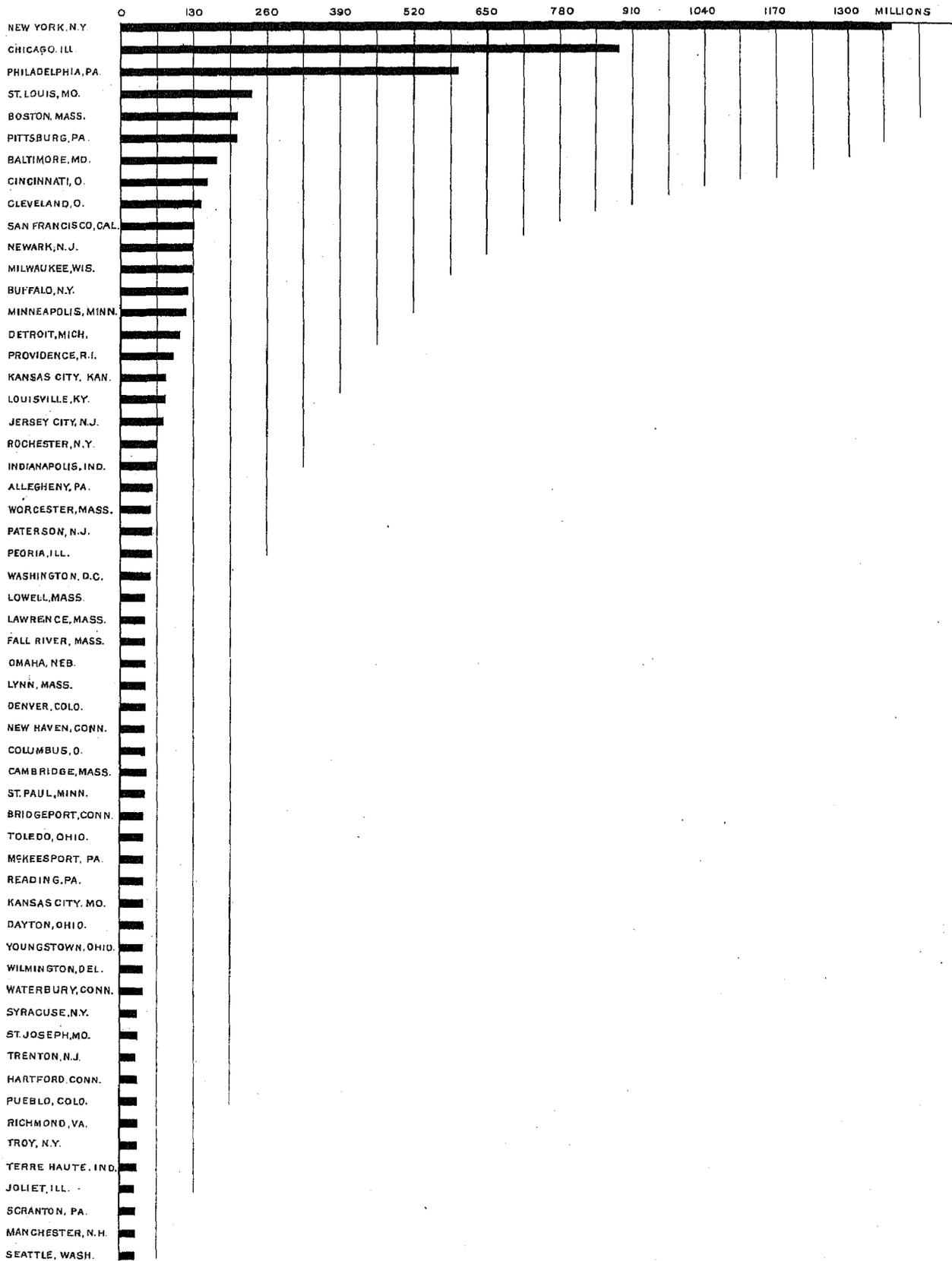
9. *Rank of Cities.*—The relative importance of the principal cities as manufacturing centers is shown by the accompanying diagram, in which the leading cities are arranged according to the value of their products of manufactures.

Table xv shows the relative rank of the 100 principal cities in number of establishments, amount of capital, average number of wage-earners, total wages and value of products, as reported at each census from 1880 to 1900, inclusive, together with the figures for these items in the case of each city.

TABLE XV.—100 PRINCIPAL CITIES, ARRANGED ACCORDING TO GROSS VALUE OF PRODUCTS, SHOWING RANK BY ESTABLISHMENTS, CAPITAL, WAGE-EARNERS, AND PRODUCTS: 1880, 1890, AND 1900.

CITIES.	Year.	NUMBER OF ESTABLISHMENTS.		CAPITAL.		WAGE-EARNERS.				GROSS VALUE OF PRODUCTS.	
		Rank.	Number.	Rank.	Amount.	Average number.		Total wages.		Rank.	Amount.
						Rank.	Number.	Rank.	Amount.		
New York, N. Y. (Manhattan and Bronx)	1900	1	27,168	1	\$608,661,810	1	844,054	1	\$184,602,095	1	\$975,168,202
	1890	1	25,403	1	426,118,272	1	309,144	1	178,409,209	1	777,222,721
	1880	1	11,278	1	179,606,506	1	228,073	1	96,832,742	1	468,443,248
Chicago, Ill.	1900	2	19,203	2	584,000,689	2	262,621	2	181,065,337	2	888,945,311
	1890	4	9,977	3	869,739,598	3	190,621	3	104,069,922	2	664,587,928
	1880	6	3,518	3	68,881,885	3	79,391	3	34,646,812	3	248,995,848
Philadelphia, Pa.	1900	3	15,887	3	476,529,407	3	246,445	3	111,847,076	3	608,466,526
	1890	2	18,166	2	876,249,715	2	234,647	2	118,306,173	3	577,234,446
	1880	2	8,481	2	178,765,206	2	174,952	2	61,152,952	2	309,424,156
Brooklyn, N. Y. (Kings county)	1900	4	10,713	4	271,875,801	4	100,831	4	51,107,604	4	342,127,124
	1890	3	10,588	4	161,730,500	4	94,204	4	51,017,860	4	269,244,147
	1880	3	5,195	4	61,423,249	7	47,406	5	22,425,467	4	177,022,398
St. Louis, Mo.	1900	6	6,732	6	162,179,331	5	82,672	6	38,191,076	5	238,629,733
	1890	7	6,143	5	141,872,386	6	82,911	6	41,794,734	5	229,157,343
	1880	9	2,924	6	50,832,385	8	41,825	7	17,743,532	6	114,338,376

VALUE OF PRODUCTS IN THE LEADING MANUFACTURING CITIES. 1900



URBAN MANUFACTURES.

CCXXXI

TABLE XV.—100 PRINCIPAL CITIES, ARRANGED ACCORDING TO GROSS VALUE OF PRODUCTS, SHOWING RANK BY ESTABLISHMENTS, CAPITAL, WAGE-EARNERS, AND PRODUCTS: 1880, 1890, AND 1900—Continued.

CITIES.	Year.	NUMBER OF ESTABLISHMENTS.		CAPITAL.		WAGE-EARNERS.				GROSS VALUE OF PRODUCTS.	
		Rank.	Number.	Rank.	Amount.	Average number.		Total wages.		Rank.	Amount.
						Rank.	Number.	Rank.	Amount.		
Boston, Mass.....	1900	5	7,247	7	\$143,311,376	7	72,142	5	\$39,184,191	6	\$206,081,767
	1890	5	7,942	6	118,198,539	7	78,476	5	43,908,437	6	210,936,616
	1880	5	3,604	8	47,298,384	4	59,090	4	24,886,499	5	130,366,993
Pittsburg, Pa.....	1900	19	1,938	5	193,162,900	8	60,977	7	36,684,563	7	203,261,251
	1890	23	1,420	7	108,368,838	9	52,963	9	29,889,486	10	126,851,657
	1880	13	1,112	5	62,645,010	9	36,930	8	17,168,989	10	76,916,033
Baltimore, Md.....	1900	7	6,359	8	117,062,459	6	78,738	8	29,220,460	8	161,249,240
	1890	8	5,265	9	92,723,677	8	76,489	8	29,895,600	8	141,723,599
	1880	4	3,680	9	38,581,873	5	56,316	9	15,113,459	8	78,397,064
Cincinnati, Ohio.....	1900	8	5,127	10	109,582,742	9	63,240	10	27,189,069	9	157,806,884
	1890	6	7,832	8	104,483,032	8	84,167	7	36,728,511	7	196,063,983
	1880	7	3,275	7	60,531,900	6	64,513	6	19,553,029	7	105,255,165
Cleveland, Ohio.....	1900	13	2,927	13	98,303,682	10	58,810	9	27,892,639	10	139,840,806
	1890	14	2,307	12	69,782,761	10	46,915	11	23,507,940	11	113,240,115
	1880	15	1,055	17	19,430,989	14	21,724	13	8,602,935	13	48,604,050
San Francisco, Cal.....	1900	9	4,002	16	80,103,367	16	41,678	12	22,037,527	11	133,069,416
	1890	9	4,059	10	74,834,301	13	41,764	10	24,691,116	9	135,625,754
	1880	8	2,969	10	85,358,639	11	28,407	10	14,918,834	9	77,801,949
Newark, N. J.....	1900	12	3,339	12	103,191,408	11	49,550	11	28,999,442	12	126,954,049
	1890	13	2,490	14	62,552,752	12	42,719	12	22,137,534	14	98,476,652
	1880	10	1,318	13	25,575,315	10	29,907	11	13,116,949	11	69,051,076
Milwaukee, Wis.....	1900	11	3,342	9	110,363,854	12	48,828	13	20,240,656	13	123,786,449
	1890	11	2,879	13	69,145,814	15	38,550	15	16,737,261	13	97,503,951
	1880	19	844	18	18,766,914	15	20,886	15	6,946,105	14	43,473,812
Buffalo, N. Y.....	1900	10	3,902	11	103,939,655	15	43,422	15	19,915,817	14	122,230,061
	1890	10	3,565	11	70,707,146	11	45,911	13	20,567,769	12	100,052,208
	1880	12	1,183	12	26,847,937	18	18,021	14	7,442,109	15	42,937,701
Minneapolis, Minn.....	1900	17	2,368	19	57,708,204	22	26,608	20	12,708,623	15	110,943,043
	1890	12	2,723	18	42,643,764	21	23,703	19	11,674,553	15	82,922,974
	1880	35	401	34	9,002,650	51	6,344	43	2,582,253	20	29,973,476
Detroit, Mich.....	1900	14	2,847	17	71,751,193	13	45,707	16	18,718,081	16	100,892,838
	1890	19	1,746	17	45,041,167	16	34,535	16	15,490,171	17	77,951,545
	1880	17	919	20	15,594,479	22	16,110	19	6,306,460	19	30,181,416
Providence, R. I.....	1900	20	1,933	14	83,513,679	14	44,978	14	19,998,362	17	88,168,897
	1890	17	1,934	15	61,133,598	14	38,987	14	17,685,890	16	77,407,283
	1880	11	1,205	11	27,177,006	12	22,891	12	9,464,110	16	42,597,512
Louisville, Ky.....	1900	18	2,307	22	49,334,701	21	29,926	23	10,945,720	18	78,746,390
	1890	20	1,700	21	36,086,985	19	24,159	24	9,844,468	20	54,515,226
	1880	14	1,105	15	21,357,013	19	17,103	23	6,784,683	17	34,768,874
Jersey City, N. J.....	1900	34	965	15	80,327,678	29	19,499	27	9,126,042	19	77,225,116
	1890	41	726	40	18,165,094	47	11,412	33	6,243,882	28	37,376,322
	1880	28	584	25	11,899,915	29	11,138	27	4,622,655	12	60,473,905
Rochester, N. Y.....	1900	16	2,616	23	49,086,212	17	33,408	17	13,832,122	20	69,129,820
	1890	18	1,892	16	46,301,053	17	28,962	17	13,144,957	18	65,091,156
	1880	21	734	24	18,141,870	24	14,556	24	6,207,713	26	26,418,266
Indianapolis, Ind.....	1900	21	1,910	28	36,828,114	24	25,511	24	10,882,914	21	68,607,679
	1890	29	1,189	43	15,266,685	30	16,027	31	7,060,056	29	36,426,974
	1880	23	683	29	10,049,500	32	10,000	30	3,917,114	21	27,453,089
New Orleans, La.....	1900	25	1,524	25	46,008,604	30	19,435	37	7,645,167	22	63,514,505
	1890	16	1,961	25	26,319,277	24	22,842	27	8,275,112	21	48,295,449
	1880	18	916	36	8,565,303	33	9,504	31	3,717,557	33	18,808,096
Allegheny, Pa.....	1900	36	893	20	50,122,503	27	20,804	25	10,352,502	23	64,136,967
	1890	44	676	32	22,253,243	45	11,857	41	5,910,525	39	28,873,979
	1880	33	424	37	8,451,059	45	6,471	42	2,652,774	37	13,731,792
Worcester, Mass.....	1900	30	1,071	27	42,966,743	23	25,598	18	12,894,784	24	58,348,783
	1890	32	996	26	25,230,620	27	20,244	22	10,120,414	26	39,533,899
	1880	24	683	27	11,247,104	21	16,248	16	6,792,332	23	26,712,093
Paterson, N. J.....	1900	32	995	26	43,510,481	20	30,190	19	12,812,538	25	52,237,976
	1890	48	599	24	27,003,649	22	23,198	21	10,439,725	25	42,263,531
	1880	40	340	26	11,613,442	17	18,765	17	6,670,487	27	25,399,300
Peoria, Ill.....	1900	38	871	40	27,971,613	62	8,022	57	3,901,186	26	48,871,596
	1890	55	556	50	15,085,862	60	6,316	56	3,535,216	19	55,635,023
	1880	50	296	60	4,160,707	61	4,067	61	1,697,668	35	14,228,134
Lowell, Mass.....	1900	33	981	24	46,578,193	19	31,377	21	11,821,633	27	44,774,525
	1890	37	858	19	41,911,708	18	27,778	23	10,044,403	23	42,450,509
	1880	51	283	16	20,465,192	16	20,039	20	6,996,591	18	33,935,777
Lawrence, Mass.....	1900	62	546	21	49,914,085	25	22,358	29	8,972,310	28	44,703,273
	1890	51	533	22	29,626,806	33	15,563	40	6,092,064	40	26,650,725
	1880	61	228	19	16,093,977	25	14,372	25	4,754,756	30	21,046,857
Omaha, Nebr.....	1900	40	888	29	34,478,014	63	7,537	59	3,804,076	29	43,168,876
	1890	44	675	39	18,319,594	56	3,223	47	4,863,542	24	42,399,321
	1880	79	154	32	1,835,800	36	1,638	32	726,913	34	4,280,366

STATISTICS OF MANUFACTURES.

TABLE XV.—100 PRINCIPAL CITIES, ARRANGED ACCORDING TO GROSS VALUE OF PRODUCTS, SHOWING RANK BY ESTABLISHMENTS, CAPITAL, WAGE-EARNERS, AND PRODUCTS: 1880, 1890, AND 1900—Continued.

CITIES.	Year.	NUMBER OF ESTABLISHMENTS.		CAPITAL.		WAGE-EARNERS.				GROSS VALUE OF PRODUCTS.	
		Rank.	Number.	Rank.	Amount.	Average number.		Total wages.		Rank.	Amount.
						Rank.	Number.	Rank.	Amount.		
Fall River, Mass.....	1900	45	785	18	\$58,549,934	18	32,780	22	\$11,789,129	30	\$48,071,580
	1890	70	397	20	37,198,470	23	22,987	28	8,213,045	33	32,619,281
	1880	57	258	14	25,076,518	20	17,085	26	4,659,077	32	18,913,584
Lynn, Mass.....	1900	47	776	57	17,011,761	35	17,492	30	8,576,042	31	41,693,845
	1890	24	1,869	41	17,919,025	26	20,818	20	11,083,166	22	44,223,846
	1880	39	343	47	5,894,575	27	12,420	21	5,833,849	22	26,823,023
Denver, Colo.....	1900	26	1,474	32	30,853,046	52	10,925	43	6,824,003	32	41,368,698
	1890	39	762	43	16,311,868	51	9,283	35	6,653,585	37	29,240,747
	1880	56	259	79	2,301,850	72	2,944	58	1,574,438	53	9,307,749
New Haven, Conn.....	1900	28	1,236	34	30,463,066	28	20,536	26	10,016,571	33	40,762,015
	1890	30	1,129	37	19,592,384	31	15,906	29	8,185,876	31	33,396,311
	1880	27	587	31	9,703,737	23	15,150	22	5,761,374	28	24,040,225
Columbus, Ohio.....	1900	35	914	46	25,392,136	36	17,066	35	7,718,824	34	39,666,848
	1890	42	708	43	16,173,703	43	12,053	43	5,658,096	46	22,887,586
	1880	46	316	50	5,379,401	50	5,490	51	1,961,304	52	9,046,679
Cambridge, Mass.....	1900	46	782	42	26,662,751	49	12,986	45	6,785,070	35	39,164,013
	1890	28	1,232	34	20,331,585	39	12,581	36	6,497,963	30	35,076,089
	1880	36	379	44	6,480,799	37	7,543	32	3,416,470	24	26,605,688
St. Paul, Minn.....	1900	23	1,591	37	28,208,389	34	17,593	36	7,669,805	36	38,541,030
	1890	22	1,442	30	22,501,211	29	16,279	25	8,394,550	32	38,035,073
	1880	26	593	67	3,738,791	52	5,230	46	2,254,340	48	10,236,363
Bridgeport, Conn.....	1900	41	832	30	33,066,890	31	19,301	28	9,123,790	37	37,883,721
	1890	54	559	36	19,736,572	42	12,116	37	6,381,103	48	22,274,035
	1880	73	169	30	9,736,785	38	7,473	34	3,325,935	47	10,418,212
Washington, D. C.....	1900	15	2,669	47	24,329,135	40	16,297	32	8,286,337	38	37,780,267
	1890	15	2,295	23	28,865,089	25	20,406	18	12,264,142	18	39,331,437
	1880	16	971	48	5,552,526	40	7,146	29	3,924,612	44	11,882,316
Toledo, Ohio.....	1900	31	1,050	45	25,591,916	42	15,383	42	6,845,687	39	37,372,855
	1890	40	734	59	12,700,372	52	9,247	54	4,333,322	49	21,651,574
	1880	31	440	49	5,534,285	42	6,738	45	2,260,456	46	10,600,074
Reading, Pa.....	1900	39	843	39	27,975,623	32	19,165	39	7,544,950	40	36,002,511
	1890	64	435	55	14,033,374	41	12,211	50	4,780,479	51	20,855,165
	1880	42	329	40	7,488,256	44	6,635	47	2,219,290	40	13,108,595
Kansas City, Mo.....	1900	22	1,797	43	26,437,307	43	15,331	34	7,733,652	41	36,527,392
	1890	21	1,478	54	14,104,620	38	12,611	30	7,445,825	34	31,936,366
	1880	63	224	80	2,147,305	76	2,548	62	1,420,713	69	6,332,651
Dayton, Ohio.....	1900	29	1,096	38	23,027,518	37	16,869	33	7,959,792	42	35,697,695
	1890	34	937	56	13,469,964	49	10,614	52	4,737,333	47	22,446,572
	1880	30	495	45	6,063,334	47	6,025	44	2,293,630	43	11,935,433
Wilmington, Del.....	1900	49	759	36	23,372,043	41	16,055	40	7,439,210	43	34,053,324
	1890	50	590	33	20,535,646	36	13,376	34	6,707,867	44	24,563,125
	1880	57	258	23	10,744,389	36	7,852	35	3,174,821	39	13,205,370
Syracuse, N. Y.....	1900	27	1,333	31	31,353,055	44	14,917	46	6,735,177	44	31,943,055
	1890	27	1,246	29	22,853,424	32	15,570	33	6,733,010	35	29,297,241
	1880	22	724	38	8,136,818	30	10,966	37	3,042,135	34	14,635,674
St. Joseph, Mo.....	1900	69	440	68	11,063,325	64	7,429	64	3,109,047	45	31,690,736
	1890	87	276	37	5,230,697	78	4,579	77	1,970,231	66	11,916,141
	1880	60	238	91	1,423,650	79	2,253	75	806,762	77	5,143,535
Trenton, N. J.....	1900	61	570	44	26,174,895	45	14,457	44	6,791,026	46	31,045,695
	1890	35	835	33	19,273,041	35	13,763	32	6,334,404	42	25,623,223
	1880	34	404	42	6,966,330	34	8,902	36	3,150,119	42	12,712,762
Hartford, Conn.....	1900	37	833	33	30,500,047	48	13,363	38	7,603,809	47	31,145,715
	1890	57	513	53	14,126,282	55	8,311	49	4,329,423	54	17,164,313
	1880	53	268	32	9,679,126	46	6,300	40	2,348,041	45	11,437,200
Richmond, Va.....	1900	48	763	52	20,843,620	38	16,692	53	5,131,659	48	28,000,616
	1890	33	966	44	16,735,242	28	16,391	42	5,753,363	38	27,792,672
	1880	25	598	43	6,334,336	26	14,047	38	3,006,456	31	20,790,103
Troy, N. Y.....	1900	55	662	43	23,531,622	26	21,564	31	8,571,923	49	23,209,259
	1890	33	840	28	24,030,753	20	23,901	26	8,291,530	36	20,243,750
	1880	29	513	23	13,413,353	13	22,431	17	6,744,144	25	26,492,363
Terre Haute, Ind.....	1900	73	429	76	8,933,107	78	5,427	76	2,293,535	50	27,734,619
	1890	76	367	89	4,965,134	76	4,720	81	1,739,442	60	13,720,529
	1880	63	224	73	2,566,750	69	3,376	63	1,406,352	55	9,135,246
Scranton, Pa.....	1900	53	710	54	19,954,525	50	12,669	52	5,131,522	51	27,646,413
	1890	99	177	45	16,237,271	54	8,325	55	3,923,334	45	24,341,745
	1880	65	216	56	4,470,631	68	3,549	67	1,313,287	58	8,561,350
Manchester, N. H.....	1900	60	577	50	22,426,125	33	19,032	41	7,030,966	52	23,607,600
	1890	72	336	31	22,424,963	34	14,833	44	5,505,375	52	20,137,295
	1880	36	121	21	15,149,153	31	10,333	33	3,370,404	36	14,136,305
Holyoke, Mass.....	1900	71	433	41	26,760,031	47	13,454	51	5,730,393	53	26,233,964
	1890	59	493	27	24,411,339	40	12,305	45	5,324,935	41	26,060,315
	1880	35	122	35	8,763,903	35	8,794	41	2,693,142	33	13,236,047
New Bedford, Mass.....	1900	59	613	35	29,073,410	39	16,409	47	6,730,733	54	25,631,671
	1890	67	413	35	20,122,633	48	10,312	53	4,373,105	53	17,025,779
	1880	41	330	39	7,631,032	48	5,312	50	2,053,751	50	9,335,355

URBAN MANUFACTURES.

CCXXXIII

TABLE XV.—100 PRINCIPAL CITIES, ARRANGED ACCORDING TO GROSS VALUE OF PRODUCTS, SHOWING RANK BY ESTABLISHMENTS, CAPITAL, WAGE-EARNERS, AND PRODUCTS: 1880, 1890, AND 1900—Continued.

CITIES.	Year.	NUMBER OF ESTABLISHMENTS.		CAPITAL.		WAGE-EARNERS.				GROSS VALUE OF PRODUCTS.	
		Rank.	Number.	Rank.	Amount.	Average number.		Total wages.		Rank.	Amount.
						Rank.	Number.	Rank.	Amount.		
Albany, N. Y.	1900	24	1,566	51	\$21,328,764	51	12,389	48	\$6,111,059	55	\$24,992,021
	1890	26	1,305	42	17,270,705	37	13,011	39	6,191,299	43	25,531,486
	1880	20	804	22	14,684,130	28	11,785	28	4,566,424	29	21,751,009
Grand Rapids, Mich.	1900	42	824	49	23,433,760	46	14,301	50	5,904,670	56	24,824,042
	1890	36	869	47	15,945,947	44	11,890	46	5,279,617	53	19,851,181
	1880	37	355	53	4,864,298	53	5,172	53	1,895,072	67	7,405,007
Somerville, Mass.	1900	83	378	72	10,131,596	86	4,342	78	2,199,491	57	21,776,511
	1890	69	404	93	3,833,859	94	2,739	92	1,357,037	80	7,307,522
	1880	93	100	88	1,682,795	91	1,296	90	564,508	72	5,352,535
Springfield, Mass.	1900	43	817	56	17,105,947	55	10,123	54	5,176,299	58	21,207,039
	1890	43	692	57	13,199,233	53	9,159	48	4,843,036	55	17,040,692
	1880	32	434	33	9,177,250	39	7,360	39	2,906,130	41	12,891,826
Elizabeth, N. J.	1900	75	419	60	15,665,545	54	10,497	49	6,024,497	59	20,546,468
	1890	97	190	69	7,785,553	64	6,203	58	3,351,348	71	10,489,364
	1880	81	149	76	2,453,180	63	3,849	54	1,740,456	68	6,823,027
Camden, N. J.	1900	43	817	58	16,430,611	59	8,941	58	3,824,434	60	20,451,874
	1890	47	658	49	15,244,506	50	9,444	51	4,759,182	50	21,145,637
	1880	43	320	51	5,023,835	57	4,312	57	1,615,506	66	7,618,705
Utica, N. Y.	1900	52	733	55	19,289,502	53	10,759	56	4,148,415	61	19,550,850
	1890	53	565	52	14,332,510	46	11,027	57	3,418,614	58	15,615,715
	1880	45	317	46	5,965,635	43	6,710	52	1,917,657	56	8,373,306
Erie, Pa.	1900	57	644	53	20,418,016	58	9,399	55	4,574,625	62	19,053,202
	1890	95	236	58	12,812,594	62	6,463	59	3,248,366	65	12,765,768
	1880	74	167	54	4,730,503	64	3,767	60	1,518,085	63	7,683,356
Nashville, Tenn.	1900	64	489	63	13,173,422	60	8,447	71	2,889,241	63	18,469,823
	1890	65	420	61	9,904,295	59	7,275	61	3,052,444	59	14,590,323
	1880	53	268	65	3,892,380	55	4,791	68	1,312,765	57	8,597,278
Memphis, Tenn.	1900	56	659	67	11,189,249	61	8,433	60	3,641,435	64	17,923,059
	1890	78	345	64	9,957,821	72	5,422	69	2,542,264	61	13,244,538
	1880	84	138	78	2,313,975	78	2,268	77	845,672	82	4,413,422
Wheeling, W. Va.	1900	77	406	62	13,224,577	63	7,219	66	3,096,730	65	16,747,544
	1890	66	418	67	8,494,630	67	6,107	70	2,471,102	63	13,022,689
	1880	62	227	52	4,863,288	49	5,512	48	2,192,255	54	9,259,844
Atlanta, Ga.	1900	81	390	59	16,045,156	56	9,356	65	3,103,939	66	16,707,027
	1890	68	410	68	9,508,962	57	7,957	60	3,206,285	62	13,074,037
	1880	66	196	75	2,468,456	65	3,680	76	889,282	78	4,861,727
Lancaster, Pa.	1900	51	738	69	10,803,464	57	9,349	62	3,323,748	67	16,370,231
	1890	48	599	71	7,691,314	58	7,330	74	2,219,917	68	11,861,535
	1880	47	313	66	3,792,740	58	4,252	71	1,177,249	75	5,404,937
Harrisburg, Pa.	1900	66	446	77	8,749,516	65	7,362	69	2,949,544	68	16,064,597
	1890	61	475	79	6,716,074	63	6,314	63	2,947,291	70	10,533,444
	1880	52	274	63	4,026,457	66	3,660	70	1,236,522	64	7,663,416
Evansville, Ind.	1900	54	705	73	10,059,375	66	7,279	72	2,833,975	69	14,133,320
	1890	60	482	65	9,166,859	61	6,815	65	2,644,797	64	12,809,334
	1880	48	312	55	4,673,815	67	3,609	65	1,366,006	61	7,941,914
Springfield, Ohio.	1900	92	805	61	14,091,175	71	6,638	63	3,100,119	70	12,777,173
	1890	75	372	51	14,567,931	68	6,101	66	2,602,672	69	10,760,965
	1880	71	170	41	7,255,953	62	3,970	56	1,637,212	59	8,462,443
Taunton, Mass.	1900	94	234	66	11,737,399	69	7,102	61	3,331,680	71	12,594,314
	1890	82	316	68	7,891,332	65	6,143	64	2,837,194	75	9,936,829
	1880	82	148	61	4,036,134	54	5,154	49	2,033,185	65	7,013,953
Fort Wayne, Ind.	1900	80	397	74	9,203,613	67	7,255	70	2,923,969	72	12,525,222
	1890	96	235	75	6,999,600	71	5,644	72	2,331,554	78	9,301,946
	1880	91	114	77	2,352,101	74	2,735	73	1,020,793	78	5,816,924
Salem, Mass.	1900	66	446	82	7,450,935	74	6,424	73	2,342,673	73	12,257,440
	1890	57	513	83	6,250,164	74	5,127	76	1,973,966	84	8,522,751
	1880	59	241	64	3,978,850	60	4,181	64	1,401,592	49	9,026,564
Hoboken, N. J.	1900	79	399	78	8,331,015	73	6,443	67	3,076,235	74	12,092,372
	1890	86	239	91	3,943,732	90	2,932	78	1,899,623	91	7,151,391
	1880	87	120	99	484,020	96	714	97	281,444	99	1,046,136
Davenport, Iowa.	1900	76	416	70	10,774,707	85	4,343	84	1,892,737	75	11,573,670
	1890	61	475	66	8,732,122	80	4,461	86	1,640,495	74	10,357,232
	1880	68	188	71	2,806,222	84	1,705	84	685,469	81	4,468,978
Portland, Me.	1900	53	639	86	6,991,251	76	5,699	75	2,612,817	76	11,440,201
	1890	46	662	73	6,837,557	73	5,333	71	2,413,393	67	11,371,437
	1880	49	302	58	4,243,225	41	7,129	59	1,541,997	51	9,332,931
Sacramento, Cal.	1900	95	275	83	7,369,013	84	4,365	68	2,977,704	77	11,141,396
	1890	85	302	84	5,654,732	84	4,136	67	2,652,809	72	10,424,532
	1880	76	160	89	1,672,400	94	924	91	547,692	87	4,093,934
Dubuque, Iowa.	1900	65	460	80	8,117,353	77	5,503	80	2,012,153	78	10,952,204
	1890	90	262	74	7,016,302	83	4,193	83	1,715,876	76	9,394,360
	1880	38	346	69	3,446,366	71	3,003	66	1,339,730	70	6,323,359
Wilkesbarre, Pa.	1900	70	438	71	10,501,537	75	5,977	77	2,236,676	79	10,753,343
	1890	89	270	85	5,593,139	85	4,141	80	1,803,226	87	7,746,371
	1880	96	39	93	1,146,500	99	645	99	223,399	98	1,133,344

STATISTICS OF MANUFACTURES.

TABLE XV.—100 PRINCIPAL CITIES, ARRANGED ACCORDING TO GROSS VALUE OF PRODUCTS, SHOWING RANK BY ESTABLISHMENTS, CAPITAL, WAGE-EARNERS, AND PRODUCTS: 1880, 1890, AND 1900—Continued.

CITIES.	Year.	NUMBER OF ESTABLISHMENTS		CAPITAL.		WAGE-EARNERS.				GROSS VALUE OF PRODUCTS.	
		Rank.	Number.	Rank.	Amount.	Average number.		Total wages.		Rank.	Amount.
						Rank.	Number.	Rank.	Amount.		
Auburn, N. Y.	1900	89	316	64	\$12,810,363	72	6,580	74	\$2,706,948	80	\$10,591,109
	1890	92	258	60	11,123,238	69	5,721	78	2,220,674	77	9,634,785
	1880	79	154	57	4,423,950	56	4,518	55	1,658,826	62	7,719,409
Des Moines, Iowa	1900	63	494	81	7,911,764	82	4,557	82	1,942,509	81	10,488,189
	1890	81	330	94	3,877,140	88	3,420	87	1,631,107	86	7,931,272
	1880	77	155	90	1,463,250	90	1,878	86	667,699	85	4,220,709
Chelsea, Mass.	1900	91	308	79	8,211,682	93	3,332	88	1,025,875	82	10,333,549
	1890	77	347	73	7,028,356	91	2,977	91	1,384,945	85	8,158,207
	1880	77	165	83	1,822,250	88	1,647	85	677,737	89	3,846,250
Augusta, Ga.	1900	82	383	75	8,990,989	70	7,092	85	1,806,654	83	10,041,900
	1890	63	440	70	7,770,688	70	5,714	85	1,689,941	79	9,244,850
	1880	100	60	81	2,069,275	87	1,680	93	448,825	92	3,130,029
Charleston, S. C.	1900	86	364	65	12,473,187	79	5,027	94	1,489,966	84	9,562,387
	1890	52	566	72	7,345,459	77	4,684	82	1,779,789	82	9,005,421
	1880	67	194	85	1,718,300	85	2,146	88	639,030	93	2,732,590
Norfolk, Va.	1900	68	445	88	6,425,099	87	4,334	91	1,571,229	85	9,397,355
	1890	73	374	97	3,417,454	97	2,391	98	1,016,390	98	6,100,403
	1880	92	105	97	570,276	95	752	96	317,528	96	1,455,987
Quincy, Ill.	1900	74	421	87	6,879,846	83	4,509	88	1,918,452	86	9,234,988
	1890	71	394	81	6,554,810	79	4,577	75	1,986,408	78	10,395,102
	1880	44	318	62	4,078,200	70	3,326	69	1,271,995	60	8,103,277
Oakland, Cal.	1900	50	752	89	6,364,651	88	4,012	79	2,129,598	87	9,174,257
	1890	79	342	80	6,623,468	86	3,918	68	2,568,934	80	9,112,778
	1880	98	72	92	1,371,457	89	1,387	80	759,917	91	3,181,066
Elmira, N. Y.	1900	87	362	84	7,365,534	80	4,914	81	1,965,056	88	8,558,786
	1890	56	539	77	6,895,180	81	4,332	79	1,874,325	83	8,844,936
	1880	55	262	72	2,653,762	75	2,673	74	1,020,196	79	4,857,783
Oswego, N. Y.	1900	99	207	85	7,323,907	91	3,845	93	1,543,905	89	8,137,950
	1890	93	249	82	6,254,200	92	2,967	96	1,102,352	88	7,482,378
	1880	70	178	74	2,511,238	82	2,007	81	728,418	76	5,237,966
Bay City, Mich.	1900	85	376	93	5,645,525	94	3,307	95	1,466,328	90	7,087,624
	1890	80	331	62	9,654,415	82	4,203	88	1,576,659	81	9,069,342
	1880	97	80	69	4,235,500	80	2,238	78	802,488	74	5,633,621
Poughkeepsie, N. Y.	1900	84	377	92	5,688,058	92	3,432	90	1,583,268	91	6,826,769
	1890	84	303	90	4,850,650	89	3,328	89	1,495,796	95	6,251,132
	1880	83	140	68	3,728,700	77	2,482	79	761,711	83	4,392,900
San Antonio, Tex.	1900	90	312	96	4,252,197	95	3,073	86	1,755,008	92	6,821,797
	1890	83	309	99	3,004,425	98	2,022	93	1,216,936	97	5,623,612
	1880	99	71	100	310,050	100	861	100	137,781	100	642,412
Covington, Ky.	1900	78	404	95	4,754,786	89	3,972	92	1,555,089	93	6,803,032
	1890	25	1,308	76	6,897,380	66	6,111	62	2,956,263	57	16,999,575
	1880	69	181	70	3,182,141	73	2,925	72	1,033,463	71	5,864,630
Springfield, Ill.	1900	88	320	94	5,030,438	90	3,871	87	1,730,891	94	6,612,286
	1890	73	374	95	3,641,415	93	2,853	90	1,390,307	96	6,562,470
	1880	89	116	86	1,709,775	85	1,698	87	656,253	86	4,123,883
Petersburg, Va.	1900	97	225	98	3,960,987	81	4,730	95	1,043,550	95	6,464,464
	1890	88	271	92	3,911,240	75	5,108	95	1,123,551	90	7,167,004
	1880	90	115	84	1,755,415	59	4,196	89	602,749	80	4,643,015
Savannah, Ga.	1900	100	155	91	5,716,491	97	2,870	96	1,176,150	96	6,461,816
	1890	94	244	86	5,379,774	97	2,419	97	1,059,574	94	6,319,066
	1880	87	130	94	1,102,970	92	1,130	94	447,640	90	3,396,297
Salt Lake City, Utah.	1900	72	432	97	4,048,906	96	2,977	89	1,601,253	97	6,109,409
	1890	100	175	98	3,354,035	99	1,986	94	1,205,454	99	4,624,419
	1880	75	166	96	860,415	93	923	95	425,537	95	1,610,133
Galveston, Tex.	1900	93	235	90	6,073,345	100	2,058	100	981,827	98	5,016,360
	1890	97	190	88	5,122,612	100	1,679	99	962,038	96	5,724,545
	1880	71	170	95	871,350	98	684	92	499,785	94	2,375,965
Newport, Ky.	1900	96	272	100	2,848,435	99	2,561	97	1,155,361	99	4,888,169
	1890	31	1,002	96	3,471,383	87	3,776	84	1,692,177	92	6,637,387
	1880	94	94	87	1,700,715	83	1,748	83	711,019	88	3,996,995
Mobile, Ala.	1900	98	222	99	3,294,238	98	2,827	98	1,139,605	100	4,451,062
	1890	91	261	100	2,236,313	95	2,719	100	950,270	100	3,326,399
	1880	95	91	98	525,708	97	704	98	261,643	97	1,335,679

The arrangement of the cities in the table is based on their rank in gross value of products as reported at the census of 1900. The rank of a city in number of establishments is controlled largely by the number of reports secured from the hand trades or neighborhood industries of the city. A large number of reports from the small

shops engaged in these industries tends to raise the rank of the city in number of establishments, but does not have a corresponding effect on its rank in respect to capital, wage-earners, wages, etc. For instance, the city of Grand Rapids, Mich., ranked forty-second in number of establishments and only fifty-sixth in value

of products. The relatively high rank in number of establishments is explained by the fact that of the 824 establishments reported, 347 were small shops.¹

The gross value of products is not a true indication of the relative importance of the manufacturing industries of a city. In a number of cases the controlling industries are of a character in which materials form a large proportion of the value of the products, and in which, therefore, there is a comparatively small expenditure for labor, machinery, power, etc. The gross value of products, therefore, does not indicate the extent of the manufacturing forces expended upon its production. As previously explained, it is impracticable to compute the net value of the products of manufacture for the different cities by deducting the cost of materials purchased in the raw state. But if the total cost of materials were deducted from the gross value of the products, the remainder would be generally a truer indication of the amount added to the cost of materials. When the products for the different cities are treated in this manner, there is a considerable change in the ranking. For instance, in 1900 San Francisco ranked eleventh in gross value of products, but if the table were made in the manner suggested the rank of the city would be reduced to thirteenth. Minneapolis, Minn., would be reduced from fifteenth to twentieth place; Lawrence, Mass., from twenty-eighth to thirty-seventh; Lynn, Mass., from thirty-first to forty-fourth; Denver, Colo., from thirty-second to forty-third; Cambridge, Mass., from thirty-fifth to forty-seventh; Somerville, Mass., from fifty-seventh to eighty-third. One of the most notable changes in this respect appears in the case of St. Joseph, Mo., the rank of which would be reduced from forty-fifth to sixty-ninth. In a number of cities, conversely, this deduction of cost of materials from gross value of products would result in advancing their rank. For instance, Newark, N. J., would advance from twelfth to eleventh place; Terre Haute, Ind., from fiftieth to thirty-second; Washington, D. C., from thirty-eighth to twenty-ninth; and Dayton, Ohio, from forty-second to thirty-fifth. It is therefore evident that for closely determining the rank of cities, the character of their predominating industries should be considered.

The rank of the cities according to the average number of wage-earners is a more accurate indication of their relative importance as manufacturing centers than is the rank in gross value of products.

10. *Cities and States Compared.*—Table xv indicates the relative importance of the different cities as compared with each other. The importance of the manufactures in the large cities is shown from another point of view by table xvi, which gives the population

¹ The subject of hand and building trades is treated on page ccxi et seq.

and the gross value of the manufactures in the 38 principal cities in population, and shows in each case the number of states for which the value of products is less than that reported for each city. The cities in this table are ranked, relative to each other, according to the value of products.

TABLE XVI.—Principal cities and number of states outranked by each in value of products: 1900.

CITIES.	VALUE OF PRODUCTS.			Population.
	Total.	Rank.	Number of states outranked in value of products.	
New York, N. Y.	\$1,371,358,468	1	49	3,437,202
Chicago, Ill.	888,945,811	2	47	1,698,575
Philadelphia, Pa.	603,466,520	3	45	1,298,697
St. Louis, Mo.	283,629,783	4	37	575,238
Boston, Mass.	206,081,767	5	37	560,892
Pittsburg, Pa.	203,261,251	6	37	321,616
Baltimore, Md.	161,249,240	7	34	608,957
Cincinnati, Ohio.	157,806,834	8	31	825,902
Cleveland, Ohio.	139,849,806	9	32	381,768
San Francisco, Cal.	133,069,416	10	32	342,782
Newark, N. J.	126,054,049	11	30	245,070
Milwaukee, Wis.	123,786,449	12	30	285,315
Buffalo, N. Y.	122,230,061	13	30	352,387
Minneapolis, Minn.	110,943,043	14	27	292,718
Detroit, Mich.	100,592,838	15	24	285,704
Providence, R. I.	88,168,397	16	23	175,597
Louisville, Ky.	78,746,390	17	21	204,731
Jersey City, N. J.	77,225,116	18	21	206,483
Rochester, N. Y.	69,129,820	19	20	162,608
Indianapolis, Ind.	68,607,579	20	20	169,164
New Orleans, La.	63,514,566	21	20	287,104
Allegheny, Pa.	54,336,967	22	17	129,896
Worcester, Mass.	53,348,783	23	17	118,421
Paterson, N. J.	52,287,975	24	17	105,171
Omaha, Nebr.	43,458,876	25	14	102,555
Fall River, Mass.	43,071,530	26	14	104,863
Denver, Colo.	41,368,658	27	14	133,859
New Haven, Conn.	40,762,015	28	13	108,027
Columbus, Ohio.	39,666,848	29	13	125,560
St. Paul, Minn.	38,541,030	30	13	163,065
Washington, D. C.	37,780,267	31	13	278,718
Toledo, Ohio.	37,372,355	32	12	181,822
Kansas City, Mo.	36,527,392	33	11	163,762
Syracuse, N. Y.	31,948,055	34	11	108,374
St. Joseph, Mo.	31,690,736	35	11	102,070
Seranton, Pa.	27,646,418	36	11	102,026
Los Angeles, Cal.	21,297,537	37	10	102,479
Memphis, Tenn.	17,923,059	38	9	102,320

The products of manufactures of the city of New York amounted to \$1,371,358,468. This value was in excess of that reported for each of the 51 states and territories except New York and Pennsylvania. The products of the city of Boston were valued at \$206,081,767, being in excess of the products reported for each of 37 states. A similar comparison for each of the cities is shown in the above table, which indicates for each its relative importance as a manufacturing community in the United States as compared with the total value of products for the different states and territories.

11. *Leading Industries in Principal Cities.*—Tables xvii and xviii show the statistics for the 6 leading or characteristic industries in each of 25 selected cities, and the statistics of the 6 leading cities in each of 15 selected industries, the industries reporting the greatest value of product being regarded as the characteristic industries of a city. These tables are comparative, the industries and cities being shown for the censuses of 1890 and 1900.

STATISTICS OF MANUFACTURES.

TABLE XVII.—RANK OF 6 PRINCIPAL INDUSTRIES

	CITIES.	Year.	INDUSTRIES, RANK.	
			First.	Second.
1	New York, N. Y. (boroughs of Manhattan and Bronx).....	1900	Clothing, women's, factory product	Clothing, men's, factory product
		1890	Clothing, men's, factory product	Clothing, women's, factory product
2	Chicago, Ill	1900	Slaughtering and meat packing, wholesale ..	Foundry and machine shop products
		1890	Slaughtering and meat packing, wholesale ..	Clothing, men's, factory product
3	Philadelphia, Pa	1900	Foundry and machine shop products	Sugar and molasses, refining
		1890	Sugar and molasses, refining	Foundry and machine shop products
4	Brooklyn, N. Y. (borough of Brooklyn)	1900	Sugar and molasses, refining	Foundry and machine shop products
		1890	Sugar and molasses, refining	Foundry and machine shop products
5	St. Louis, Mo.....	1900	Tobacco, chewing, smoking, and snuff	Slaughtering and meat packing, wholesale ..
		1890	Liquors, malt.....	Tobacco, chewing, smoking, and snuff
6	Boston, Mass.....	1900	Sugar and molasses, refining.....	Printing and publishing, newspapers and periodicals.
		1890	Clothing, men's, factory product.....	Sugar and molasses, refining.....
7	Pittsburg, Pa.....	1900	Iron and steel	Foundry and machine shop products
		1890	Iron and steel	Foundry and machine shop products
8	Baltimore, Md	1900	Clothing, men's, factory product.....	Fruits and vegetables, canning and preserv- ing.
		1890	Clothing, men's, factory product.....	Masonry, brick and stone
9	Cincinnati, Ohio	1900	Clothing, men's, factory product.....	Foundry and machine shop products
		1890	Clothing, men's, factory product.....	Liquors, distilled
10	Cleveland, Ohio.....	1900	Iron and steel	Foundry and machine shop products
		1890	Iron and steel	Foundry and machine shop products
11	San Francisco, Cal	1900	Sugar and molasses, refining	Foundry and machine shop products
		1890	Sugar and molasses, refining	Foundry and machine shop products
12	Newark, N. J	1900	Leather, tanned, curried, and finished.....	Liquors, malt.....
		1890	Liquors, malt.....	Leather, patent and enameled
13	Milwaukee, Wis.....	1900	Foundry and machine shop products	Liquors, malt.....
		1890	Liquors, malt.....	Leather, tanned, curried, and finished.....
14	Buffalo, N. Y	1900	Slaughtering and meat packing, wholesale ..	Foundry and machine shop products
		1890	Slaughtering and meat packing, wholesale ..	Foundry and machine shop products
15	Minneapolis, Minn.....	1900	Flouring and grist mill products.....	Lumber and timber products
		1890	Flouring and grist mill products.....	Lumber and timber products
16	Detroit, Mich	1900	Foundry and machine shop products.....	Druggists' preparations, not including pre- scriptions.
		1890	Cars, steam railroad, not including opera- tions of railroad companies.	Foundry and machine shop products
17	Providence, R. I.....	1900	Worsted goods.....	Jewelry
		1890	Worsted goods.....	Foundry and machine shop products
18	Louisville, Ky	1900	Tobacco, chewing, smoking, and snuff.....	Oil, cottouseed and cake
		1890	Tobacco, chewing, smoking, and snuff.....	Foundry and machine shop products
19	Jersey City, N. J	1900	Tobacco, chewing, smoking, and snuff.....	Slaughtering, wholesale, not including meat packing.
		1890	Slaughtering, wholesale, not including meat packing.	Foundry and machine shop products
20	Rochester, N. Y.....	1900	Clothing, men's, factory product.....	Boots and shoes, factory product.....
		1890	Clothing, men's, factory product.....	Boots and shoes, factory product.....
21	Indianapolis, Ind.....	1900	Slaughtering and meat packing, wholesale..	Foundry and machine shop products
		1890	Slaughtering and meat packing, wholesale..	Flouring and grist mill products.....

URBAN MANUFACTURES.

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IN EACH OF 25 SELECTED CITIES: 1890, 1900.

INDUSTRIES, RANK—continued.				
Third.	Fourth.	Fifth.	Sixth.	
Printing and publishing, newspapers and periodicals.	Masonry, brick and stone	Tobacco, cigars and cigarettes	Slaughtering, wholesale, not including meat packing.	1
Printing and publishing, newspapers and periodicals.	Tobacco, cigars and cigarettes	Slaughtering, wholesale, not including meat packing.	Liquors, malt	
Clothing, men's, factory product	Iron and steel	Agricultural implements	Cars, steam railroad, not including operations of railroad companies.	2
Foundry and machine shop products	Iron and steel	Lumber, planing mill products, including sash, doors, and blinds.	Cars, steam railroad, not including operations of railroad companies.	
Carpets and rugs, other than rag	Carpentering	Clothing, men's, factory product	Woolen goods	3
Clothing, men's, factory product	Masonry, brick and stone	Carpets and rugs, other than rag	Woolen goods	
Coffee and spice, roasting and grinding.	Liquors, malt	Bread and other bakery products	Carpentering	4
Petroleum, refining	Coffee and spice, roasting and grinding.	Liquors, malt	Bread and other bakery products	
Liquors, malt	Foundry and machine shop products	Carpentering	Boots and shoes, factory product	5
Flouring and grist mill products	Foundry and machine shop products	Carpentering	Masonry, brick and stone	
Foundry and machine shop products	Clothing, men's, factory product	Printing and publishing, book and job.	Liquors, malt	6
Masonry, brick and stone	Carpentering	Foundry and machine shop products	Printing and publishing, newspapers and periodicals.	
Electrical apparatus and supplies	Ironwork, architectural and ornamental.	Carpentering	Liquors, malt	7
Glass	Iron and steel, pipe, wrought	Coffee and spices, roasting and grinding.	Iron and steel, nails and spikes, cut and wrought, including wire nails.	
Tobacco, chewing, smoking, and snuff.	Foundry and machine shop products	Tinsmithing, coppersmithing, and sheet-iron working.	Slaughtering and meat packing, wholesale.	8
Fruits and vegetables, canning and preserving.	Tinsmithing, coppersmithing, and sheet-iron working.	Foundry and machine shop products	Cars and general shop construction and repairs by steam railroad companies.	
Slaughtering and meat packing, wholesale.	Liquors, distilled	Boots and shoes, factory product	Liquors, malt	9
Foundry and machine shop products	Carriages and wagons, including custom work and repairing.	Liquors, malt	Slaughtering and meat packing, wholesale.	
Slaughtering and meat packing, wholesale.	Clothing, women's, factory product	Liquors, malt	Clothing, men's, factory product	10
Petroleum, refining	Slaughtering and meat packing, wholesale.	Carpentering	Liquors, malt	
Slaughtering and meat packing, wholesale.	Slaughtering, wholesale, not including meat packing.	Tinsmithing, coppersmithing, and sheet-iron working.	Bottling	11
Slaughtering, wholesale, not including meat packing.	Printing and publishing, newspapers and periodicals.	Clothing, men's, custom work and repairing.	Flouring and grist mill products	
Jewelry	Foundry and machine shop products	Carpentering	Fur hats	12
Jewelry	Carpentering	Hats and caps, not including wool hats.	Foundry and machine shop products	
Leather, tanned, curried, and finished	Iron and steel	Flouring and grist mill products	Slaughtering and meat packing, wholesale.	13
Slaughtering and meat packing, wholesale.	Foundry and machine shop products	Iron and steel	Flouring and grist mill products	
Oil, linseed	Cars and general shop construction and repairs by steam railroad companies.	Liquors, malt	Soap and candles	14
Carpentering	Lumber, planing mill products, including sash, doors, and blinds.	Masonry, brick and stone	Flouring and grist mill products	
Carpentering	Foundry and machine shop products	Lumber, planing mill products, including sash, doors, and blinds.	Masonry, brick and stone	15
Carpentering	Masonry, brick and stone	Lumber, planing mill products, including sash, doors, and blinds.	Clothing, women's, dressmaking	
Tobacco, chewing, smoking, and snuff.	Iron and steel	Slaughtering and meat packing, wholesale.	Tobacco, cigars and cigarettes	16
Tobacco, chewing, smoking, and snuff.	Chemicals	Slaughtering and meat packing, wholesale.	Iron and steel	
Foundry and machine shop products	Silverware	Gold and silver, reducing and refining, not from the ore.	Masonry, brick and stone	17
Jewelry	Boots and shoes, rubber	Cotton goods	Silverware	
Slaughtering and meat packing, wholesale.	Foundry and machine shop products	Leather, tanned, curried, and finished.	Liquors, distilled	18
Leather, tanned, curried, and finished.	Slaughtering and meat packing, wholesale.	Liquors, distilled	Liquors, malt	
Cars and general shop construction and repairs by steam railroad companies.	Chemicals	Soap and candles	Foundry and machine shop products	19
Chemicals	Soap and candles	Cars and general shop construction and repairs by steam railroad companies.	Silk and silk goods	
Foundry and machine shop products	Tobacco, cigars and cigarettes	Flouring and grist mill products	Liquors, malt	20
Flouring and grist mill products	Carpentering	Masonry, brick and stone	Liquors, malt	
Flouring and grist mill products	Carpentering	Carriages and wagons	Liquors, malt	21
Foundry and machine shop products	Cars and general shop construction and repairs by steam railroad companies.	Furniture, factory product	Carpentering	

STATISTICS OF MANUFACTURES.

TABLE XVII.—RANK OF 6 PRINCIPAL INDUSTRIES

	CITIES.	Year.	INDUSTRIES, RANK.	
			First.	Second.
22	New Orleans, La.....	1900	Sugar and molasses, refining.....	Bags, other than paper.....
		1890	Sugar and molasses, refining.....	Rice, cleaning and polishing.....
23	Allegheny, Pa.....	1900	Iron and steel.....	Foundry and machine shop products.....
		1890	Iron and steel.....	Leather, tanned, curried, and finished.....
24	Worcester, Mass.....	1900	Foundry and machine shop products.....	Boots and shoes, factory product.....
		1890	Foundry and machine shop products.....	Boots and shoes, factory product.....
25	Paterson, N. J.....	1900	Silk and silk goods.....	Foundry and machine shop products.....
		1890	Silk and silk goods.....	Foundry and machine shop products.....

TABLE XVIII.—RANK OF 6 PRINCIPAL CITIES IN EACH

	INDUSTRIES.	Year.	CITIES, RANK.	
			First.	Second.
1	Slaughtering and meat packing, wholesale.....	1900	Chicago, Ill.....	Kansas City, Kans.....
		1890	Chicago, Ill.....	Kansas City, Kans.....
2	Foundry and machine shop products.....	1900	Chicago, Ill.....	New York, N. Y.....
		1890	Chicago, Ill.....	Philadelphia, Pa.....
3	Flouring and grist mill products.....	1900	Minneapolis, Minn.....	New York, N. Y.....
		1890	Minneapolis, Minn.....	St. Louis, Mo.....
4	Cotton goods.....	1900	Fall River, Mass.....	Lowell, Mass.....
		1890	Fall River, Mass.....	Lowell, Mass.....
5	Clothing, men's, factory product.....	1900	New York, N. Y.....	Chicago, Ill.....
		1890	New York, N. Y.....	Chicago, Ill.....
6	Boots and shoes, factory product.....	1900	Brockton, Mass.....	Lynn, Mass.....
		1890	Lynn, Mass.....	Brockton, Mass.....
7	Liquors, malt.....	1900	New York, N. Y.....	Chicago, Ill.....
		1890	New York, N. Y.....	St. Louis, Mo.....
8	Printing and publishing, newspapers and periodicals.....	1900	New York, N. Y.....	Chicago, Ill.....
		1890	New York, N. Y.....	Philadelphia, Pa.....
9	Leather, tanned, curried, and finished.....	1900	Philadelphia, Pa.....	Newark, N. J.....
		1890	Milwaukee, Wis.....	Chicago, Ill.....
10	Lumber, planing mill product, including sash, doors, and blinds.....	1900	New York, N. Y.....	Chicago, Ill.....
		1890	Chicago, Ill.....	New York, N. Y.....
11	Tobacco, cigars and cigarettes.....	1900	New York, N. Y.....	Philadelphia, Pa.....
		1890	New York, N. Y.....	Philadelphia, Pa.....
12	Clothing, women's, factory product.....	1900	New York, N. Y.....	Philadelphia, Pa.....
		1890	New York, N. Y.....	Chicago, Ill.....
13	Furniture, factory product.....	1900	New York, N. Y.....	Chicago, Ill.....
		1890	Chicago, Ill.....	New York, N. Y.....
14	Printing and publishing, book and job.....	1900	New York, N. Y.....	Chicago, Ill.....
		1890	New York, N. Y.....	Chicago, Ill.....
15	Silk and silk goods.....	1900	Paterson, N. J.....	New York, N. Y.....
		1890	Paterson, N. J.....	New York, N. Y.....

URBAN MANUFACTURES.

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IN EACH OF 25 SELECTED CITIES: 1890, 1900—Continued.

INDUSTRIES, RANK—continued.			
Third.	Fourth.	Fifth.	Sixth.
Rice, cleaning and polishing.....	Foundry and machine shop products..	Bread and other bakery products.....	Clothing, men's, factory product.....
Clothing, men's factory product.....	Bread and other bakery products.....	Foundry and machine shop products..	Liquors, malt.....
Pickles, preserves, and sauces.....	Slaughtering and meat packing, whole-	Carpentering.....	Leather, tanned, curried, and fin-
Foundry and machine shop products..	sale.....	Carpentering.....	ished.....
Carpentering.....	Paints.....	Wirework, including wire rope and	Liquors, malt.....
Carpentering.....	Woolen goods.....	cable.....	Masonry, brick and stone.....
Dyeing and finishing textiles.....	Woolen goods.....	Masonry, brick and stone.....	Envelopes.....
Dyeing and finishing textiles.....	Liquors, malt.....	Carpentering.....	Slaughtering and meat packing,
	Liquors, malt.....	Carpentering.....	wholesale.....
			Cotton goods.....

OF 15 SELECTED INDUSTRIES: 1890 AND 1900.

CITIES, RANK—continued.			
Third.	Fourth.	Fifth.	Sixth.
South Omaha, Nebr.....	St. Joseph, Mo.....	Indianapolis, Ind.....	St. Louis, Mo.....
New York, N. Y.....	Philadelphia, Pa.....	St. Louis, Mo.....	Sioux City, Iowa.....
Philadelphia, Pa.....	Pittsburg, Pa.....	Cleveland, Ohio.....	Milwaukee, Wis.....
New York, N. Y.....	Brooklyn, N. Y.....	St. Louis, Mo.....	Cleveland, Ohio.....
Milwaukee, Wis.....	Chicago, Ill.....	Toledo, Ohio.....	St. Louis, Mo.....
New York, N. Y.....	Chicago, Ill.....	Rochester, N. Y.....	Milwaukee, Wis.....
New Bedford, Mass.....	Philadelphia, Pa.....	Manchester, N. H.....	Lawrence, Mass.....
Philadelphia, Pa.....	Manchester, N. H.....	New Bedford, Mass.....	Lawrence, Mass.....
Philadelphia, Pa.....	Baltimore, Md.....	Cincinnati, Ohio.....	Rochester, N. Y.....
Philadelphia, Pa.....	Boston, Mass.....	Cincinnati, Ohio.....	Baltimore, Md.....
Haverhill, Mass.....	New York, N. Y.....	Cincinnati, Ohio.....	St. Louis, Mo.....
Haverhill, Mass.....	Chicago, Ill.....	Philadelphia, Pa.....	Rochester, N. Y.....
Milwaukee, Wis.....	Philadelphia, Pa.....	St. Louis, Mo.....	Newark, N. J.....
Brooklyn, N. Y.....	Milwaukee, Wis.....	Philadelphia, Pa.....	Chicago, Ill.....
Philadelphia, Pa.....	Boston, Mass.....	St. Louis, Mo.....	Cincinnati, Ohio.....
Chicago, Ill.....	Boston, Mass.....	St. Louis, Mo.....	San Francisco, Cal.....
Milwaukee, Wis.....	Wilmington, Del.....	Chicago, Ill.....	Cincinnati, Ohio.....
Cincinnati, Ohio.....	Allegheny, Pa.....	Louisville, Ky.....	San Francisco, Cal.....
Philadelphia, Pa.....	Buffalo, N. Y.....	St. Louis, Mo.....	Minneapolis, Minn.....
Brooklyn, N. Y.....	Philadelphia, Pa.....	Denver, Colo.....	Buffalo, N. Y.....
Chicago, Ill.....	Cincinnati, Ohio.....	Richmond, Va.....	Boston, Mass.....
Chicago, Ill.....	Richmond, Va.....	Cincinnati, Ohio.....	San Francisco, Cal.....
Chicago, Ill.....	Cleveland, Ohio.....	Boston, Mass.....	St. Louis, Mo.....
Philadelphia, Pa.....	Cincinnati, Ohio.....	Cleveland, Ohio.....	San Francisco, Cal.....
Grand Rapids, Mich.....	Philadelphia, Pa.....	Cincinnati, Ohio.....	St. Louis, Mo.....
Grand Rapids, Mich.....	Philadelphia, Pa.....	Cincinnati, Ohio.....	Boston, Mass.....
Philadelphia, Pa.....	Boston, Mass.....	Washington, D. C.....	St. Louis, Mo.....
Philadelphia, Pa.....	Boston, Mass.....	Cincinnati, Ohio.....	Washington, D. C.....
Philadelphia, Pa.....	West Hoboken, N. J.....	Seranton, Pa.....	Allentown, Pa.....
Philadelphia, Pa.....	Seranton, Pa.....	Allentown, Pa.....	Yonkers, N. Y.....

Table xvii shows the characteristic industries for the principal cities and the changes which have taken place in these industries during the last decade. As a rule the same industries appear as the leading industries for both censuses, but in some of the cities a number of changes have occurred. For instance, in Philadelphia, "sugar and molasses refining" was the leading industry in 1890, while "foundry and machine shop products" takes the first place in 1900. In St. Louis the manufacture of "liquors, malt" was the principal industry in 1890, while "tobacco, chewing, smoking and snuff" occupies the first place in 1900 with "liquors, malt" in the third place. "Foundry and machine shop products" occupies a very important position in each of the 25 selected cities. It stands first in 4 cities, second in 10, third in 3, and fourth in 6. "Iron and steel," the class which includes the products of blast furnaces and rolling mills, ranks second in value of products in the industries of the United States, but occupies first place in only 3 cities, and does not appear higher than the fourth place in any other city.

Comparing the leading industries of 1900 with the same industries for 1890, it appears that "slaughtering and meat packing, wholesale," occupies the first position in 3 cities, "sugar and molasses refining," the first place in 3 cities, and "iron and steel" the first place in 3 cities for both decades. "Foundry and machine shop products" shows the greatest advance in this regard, being first in 4 cities in 1900, as compared with first in 1 city in 1890. "Clothing, men's, factory product," first in 5 of the cities in 1890, was superseded in New York city in 1900 by "clothing, women's, factory product," which industry was second in 1890, and in Boston, Mass., by "sugar and molasses refining," which industry was also second in the previous decade.

The most radical changes in rank occur in Boston, Mass., where "clothing, men's, factory product," ranked first in 1890, dropped to fourth place in 1900; in Milwaukee, Wis., where "foundry and machine shop products" changed from fourth place in 1890 to first in 1900; in Detroit, Mich., where "cars, steam railroad, not including operations of railroad companies," first in 1890, has fallen below sixth place.

Table xviii shows the 6 cities reporting the largest value of products for each of the 15 selected industries at the censuses of 1890 and 1900, and indicates the principal producing centers for each industry. For instance, Chicago, Ill., Kansas City, Kans., and South Omaha,

Nebr., are the 3 principal producing centers for "slaughtering and meat packing, wholesale," while Fall River, Lowell, and New Bedford, Mass., are the principal producing centers for "cotton goods." In this table the largest cities as a rule occupy the first position, New York taking first rank in 6 of the 15 industries in 1890 and in 8 in 1900. Chicago occupied first place in 4 industries in 1890 and in 2 in 1900. The exceptions to this rule appear in cases where industries are largely localized in certain cities. For instance, Brockton, Lynn, and Haverhill, Mass., comparatively small cities in population, occupy the first 3 positions in the manufacture of "boots and shoes, factory product," and Paterson, N. J., occupies first position in the manufacture of "silk and silk goods."

II.

HAND AND BUILDING TRADES.

1. *Hand trades.*—The industries included in the group of "hand trades" were conducted principally in small shops engaged in general repair work or in producing goods on a small scale for the benefit of the community in which they were located. The group also includes the operations of building contractors and others engaged in building operations. The value of the products therefore represents the amount received for work done. The operations are not in a strict sense manufacturing, and the industries have been included in the census reports to comply with the law, which specifies that the statistics to be taken are those that relate to "manufacturing and mechanical industries."

The hand and building trades are, in great measure, peculiar to cities. Of the 215,814 establishments reported for these industries in the United States, 107,970 or 50 per cent, were in the 209 cities with a population of 20,000 or more. A large proportion of the remaining 50 per cent are contained in the reports for the other cities and towns, 1,131 in number; but for these the statistics are not given by industries, and the total for the hand trades can not therefore be shown. The extent to which the inclusion of the statistics for these trades has affected the totals for manufactures is shown by table xix, which gives the totals, as reported at the censuses of 1890 and 1900 for the United States; for the 164 principal cities; and for the United States outside of these cities, the total for each being subdivided so as to show the statistics for the manufactures and the hand trades respectively.

URBAN MANUFACTURES.

TABLE XIX.—MANUFACTURES AND HAND TRADES IN 164 CITIES COMPARED WITH THE UNITED STATES, AND THE UNITED STATES, EXCLUSIVE OF THESE CITIES: 1890 AND 1900.

ITEMS.	1900					1890				
	Total.	Manufactures.	Hand trades.	Per cent of total.		Total.	Manufactures.	Hand trades.	Per cent of total.	
				Manu- fac- tures.	Hand trades.				Manu- fac- tures.	Hand trades.
<i>United States.</i>										
Number of establishments.....	1512,191	296,877	215,814	57.9	42.1	2,355,405	216,271	139,134	60.9	39.1
Capital.....	\$9,813,834,390	\$9,421,392,135	\$392,442,255	96.0	4.0	\$6,525,050,759	\$6,179,551,180	\$345,499,579	94.7	5.1
Wage-earners, average number.....	5,306,143	4,747,013	559,130	89.5	10.5	4,251,535	3,735,523	516,012	87.9	12.3
Total wages.....	\$2,320,938,168	\$2,032,819,747	\$288,118,421	87.6	12.4	\$1,891,209,696	\$1,605,043,719	\$286,165,977	84.9	15.1
Cost of materials used.....	\$7,843,627,875	\$6,860,890,884	\$482,736,991	93.4	6.6	\$5,162,013,878	\$4,735,319,027	\$426,694,851	91.7	8.3
Value of products.....	\$13,000,149,159	\$11,816,533,681	\$1,183,615,478	90.9	9.1	\$9,372,378,843	\$8,378,679,056	\$993,699,787	89.4	10.6
<i>164 principal cities.</i>										
Number of establishments.....	211,107	108,627	102,480	51.5	48.5	185,998	99,476	86,522	53.5	46.5
Capital.....	\$5,635,689,874	\$5,392,759,318	\$242,910,556	95.7	4.3	\$3,989,027,870	\$3,727,097,590	\$261,930,280	93.4	6.6
Wage-earners, average number.....	3,011,864	2,685,347	376,517	87.5	12.5	2,605,908	2,201,318	404,590	84.5	15.5
Total wages.....	\$1,403,665,398	\$1,199,591,537	\$204,073,856	85.5	14.5	\$1,280,705,675	\$1,048,414,700	\$232,290,975	81.9	18.1
Cost of materials used.....	\$4,269,796,359	\$3,947,143,797	\$322,652,572	92.4	7.6	\$3,360,196,050	\$3,021,018,423	\$339,182,627	89.9	10.1
Value of products.....	\$7,795,512,760	\$6,932,563,079	\$862,949,681	89.6	10.4	\$6,272,438,336	\$5,433,033,162	\$839,405,174	87.4	12.6
<i>United States exclusive of 164 principal cities.</i>										
Number of establishments.....	301,084	187,750	113,334	62.4	37.6	160,407	116,795	52,612	68.9	31.1
Capital.....	\$4,178,164,516	\$4,028,632,817	\$149,531,699	96.4	3.6	\$2,536,022,889	\$2,452,463,590	\$83,559,299	96.7	3.3
Wage-earners, average number.....	2,294,279	2,111,666	182,613	92.0	8.0	1,645,627	1,534,205	111,422	93.2	6.8
Total wages.....	\$917,272,775	\$833,228,210	\$84,044,565	90.8	9.2	\$610,504,021	\$556,629,019	\$53,875,002	91.2	8.8
Cost of materials used.....	\$3,073,831,506	\$2,918,747,087	\$155,084,419	94.8	5.2	\$1,801,817,828	\$1,714,305,604	\$87,512,224	95.1	4.9
Value of products.....	\$5,204,636,399	\$4,833,970,662	\$370,665,737	92.9	7.1	\$3,099,940,507	\$2,895,595,894	\$204,344,613	93.4	6.6

¹ Exclusive of 395 establishments in Hawaii, 63 in Alaska, and 85 Governmental in District of Columbia.

² Exclusive of 10 establishments in Alaska.

³ Exclusive of 119 establishments in Honolulu, H. I.

As explained on page ccxx, the 164 principal cities were the only cities for which statistics were shown by industries at the census of 1890, and therefore are the only ones for which the totals for the hand trades can be presented in comparison with the totals for similar trades at the census of 1900.

At the census of 1890 some of the industries shown as hand trades were, in a few cities, included in the group of "all other industries." It is now impossible to segregate the data for these industries. Their omission, however, from the above table will not materially affect the percentages or conclusions.

Of the 512,191 establishments in the country as a whole, 215,814, or 42.1 per cent, were reported for the hand trades at the census of 1900. At the census of 1890 the hand trades numbered 139,134, or 39.1 per cent of the total. The proportions of the hand trades to the total, both in the United States and in the 164 cities, at the census of 1890 were considerably in excess of the proportions for 1900, with the single exception that the proportion of the number of establishments reported for the hand trades in 1900 was in excess of that for 1890. For the districts outside of the 164 cities these percentages are reversed, the larger proportion appearing for the hand trades in 1900. Moreover, reports were secured in 1890 for some lines of industry that were omitted in 1900.

It is also to be noted that a larger number of cities were canvassed by special agents in 1900, and therefore a larger percentage of reports were secured for these trades in the districts outside of the 164 cities, thus increasing the proportion for those districts. In each of the 3 divisions shown in the table, the proportion which the number of establishments reported for the hand trades bears to the total is very much in excess of the proportion which the capital, wage-earners, wages, materials, and products for these trades bear to the totals for these items. Therefore, with the exception of number of establishments, the omission of statistics for hand trades would have but slight effect on the statistics of the manufacturing industries of the United States or of any of its subdivisions. For instance, their omission from the total for the United States for 1900 would reduce the average number of wage-earners by 10.5 per cent, and the value of products by 9.1 per cent, while their omission from the 164 cities would reduce the corresponding items by only 12.5 and 10.4 per cent, respectively, and in the districts outside the cities by 8 and 7.1 per cent, respectively.

The effect of the inclusion of statistics for hand trades in the totals for the 209 cities with a population of 20,000 or over at the census of 1900 is shown by table xx, in which the totals for these cities are divided between manufactures and hand trades.

STATISTICS OF MANUFACTURES.

TABLE XX.—MANUFACTURES AND HAND TRADES IN 209 CITIES, WITH PERCENTAGES WHICH EACH FORM OF THE TOTAL: 1900.

ITEMS.	Total.	Manufactures.	Hand trades.	PER CENT OF TOTAL.	
				Manu- factures.	Hand trades.
Number of establishments.....	221,532	113,562	107,970	51.3	48.7
Capital.....	\$5,965,011,612	\$5,711,019,020	\$253,992,592	95.7	4.3
Average number of wage-earners.....	3,188,979	2,794,159	394,820	87.6	12.4
Total wages.....	\$1,483,100,988	\$1,209,603,553	\$273,497,435	85.6	14.4
Cost of materials used.....	\$4,566,056,017	\$4,227,405,418	\$338,650,599	92.6	7.4
Value of products.....	\$8,259,821,644	\$7,410,949,801	\$848,871,843	89.7	10.3

Of the 221,532 establishments reported for the 209 cities, 107,970, or 48.7 per cent, were for the hand trades. Yet this large percentage of establishments represents only 4.3 per cent of the capital, 12.4 per cent of the wage-earners, 14.4 per cent of the wages, and 10.3 per cent of the products.

As the hand trades represent nearly half the establishments reported for these cities, their omission from the canvass would reduce its cost by almost one-half; it would also greatly reduce the expense of office work in compiling statistics. The results would be in all respects of equal value in showing the actual condition of the manufactures of cities.

Because of the impracticability of conducting the canvass for the collection of the reports from hand trades on uniform lines, their inclusion impairs the comparability of different censuses in this regard. In a

number of instances the increase or decrease in number of establishments from census to census is entirely due to this lack of uniformity. The agents in a given city at the census of 1890 may have been very careful to secure reports for all small shops, and if the agents in 1900 did not exercise equal care, a decrease in number of establishments would appear, although there may have been a great increase in all other particulars.

The impracticability of making a thorough canvass for hand trades in the entire country on uniform lines also prevents an accurate showing of the relative standing of the different cities, counties, and states at the same census. This is illustrated in table XXI, which gives the total number of reports received for the different hand trades in each of the 209 cities with a population of 20,000 or more at the census of 1900, the cities being arranged in the order of their population.

TABLE XXI.—NUMBER OF ESTABLISHMENTS REPORTED FOR HAND TRADES IN 209 CITIES WITH A POPULATION OF 20,000 AND OVER: 1900.

209 CITIES (ARRANGED IN ORDER OF POPULATION).	Popu- lation.	Total number of es- tab- lish- ments, all in- dustries.	HAND TRADES—NUMBER OF ESTABLISHMENTS.											
			Total.	Black- smithing and wheel- wright- ing.	Boots and shoes, custom work and repair- ing.	Car- pen- ter- ing.	Clothing, men's custom work and repair- ing.	Clothing, women's dress- making.	Masonry, brick and stone.	Paint- ing, house, sign, etc.	Paper hang- ing.	Plumb- ing and gas and steam fitting.	Watch, clock, and jewelry repair- ing.	All other hand trades.
Total.....	20,817,147	221,532	107,970	9,408	14,967	12,123	14,764	10,598	3,986	9,931	1,366	8,172	5,662	16,993
New York, N. Y.....	3,437,202	39,776	17,651	1,008	3,341	1,491	3,284	1,418	883	1,688	21	1,608	889	2,525
Chicago, Ill.....	1,698,576	19,203	10,310	881	1,079	1,089	1,604	1,746	298	1,054	57	777	805	1,410
Philadelphia, Pa.....	1,293,697	15,887	6,676	414	1,018	781	750	482	264	594	302	685	354	1,082
St. Louis, Mo.....	575,298	6,782	3,362	306	418	565	407	142	192	336	109	243	142	502
Boston, Mass.....	560,892	7,247	3,671	260	425	425	786	271	104	333	26	310	201	580
Baltimore, Md.....	508,957	6,859	3,317	206	612	319	350	570	96	272	104	218	130	440
Cleveland, Ohio.....	381,768	2,927	1,234	152	236	76	277	42	8	64	36	95	71	237
Buffalo, N. Y.....	352,387	3,902	2,073	167	227	179	452	303	89	140	34	115	87	290
San Francisco, Cal.....	342,782	4,002	1,791	139	274	171	321	152	8	152	8	183	124	259
Cincinnati, Ohio.....	325,902	5,127	2,257	166	292	304	270	229	117	261	78	140	170	230
Pittsburg, Pa.....	321,616	1,938	819	83	126	68	142	55	32	47	2	107	68	89
New Orleans, La.....	287,104	1,524	696	97	100	48	57	20	14	31	4	27	57	141
Detroit, Mich.....	285,704	2,847	1,320	130	149	143	186	99	51	123	17	97	62	263
Milwaukee, Wis.....	285,315	3,342	1,653	111	105	287	226	81	89	182	15	109	60	288
Washington, D. C.....	278,718	2,669	1,683	156	203	106	172	125	71	132	55	186	96	341
Newark, N. J.....	245,070	3,339	1,494	101	209	175	177	207	64	155	5	145	54	202
Jersey City, N. J.....	206,433	965	329	33	56	37	34	31	10	31	2	40	14	41
Louisville, Ky.....	204,731	2,807	1,144	90	121	139	117	170	49	121	40	78	45	174
Minneapolis, Minn.....	202,718	2,368	1,281	132	113	176	139	204	53	104	22	66	51	221
Providence, R. I.....	175,597	1,933	848	82	104	91	106	78	32	74	2	70	50	164
Indianapolis, Ind.....	169,104	1,910	896	98	105	164	98	47	54	77	22	68	49	219
Kansas City, Mo.....	163,752	1,797	1,019	127	123	174	110	48	90	72	14	46	47	163
St. Paul, Minn.....	163,065	1,591	905	71	101	106	108	172	50	80	4	50	41	122
Rochester, N. Y.....	162,608	2,616	1,182	73	128	132	184	219	51	126	4	55	43	162
Denver, Colo.....	133,859	1,474	729	85	100	59	100	36	15	57	7	59	46	165
Toledo, Ohio.....	131,822	1,050	488	55	57	51	68	16	9	42	8	38	23	121
Allegheny, Pa.....	129,896	893	447	42	63	52	50	46	24	48	3	48	20	51
Columbus, Ohio.....	125,560	914	398	69	57	10	61	17	22	16	.....	30	30	86
Worcester, Mass.....	118,421	1,071	503	54	71	50	57	56	41	35	3	38	25	73
Syracuse, N. Y.....	108,374	1,383	593	54	69	39	91	44	34	33	1	43	33	102

URBAN MANUFACTURES.

TABLE XXI.—NUMBER OF ESTABLISHMENTS REPORTED FOR HAND TRADES IN 209 CITIES WITH A POPULATION OF 20,000 AND OVER: 1900—Continued.

209 CITIES (ARRANGED IN ORDER OF POPULATION).	Population.	Total number of establishments, all industries.	HAND TRADES—NUMBER OF ESTABLISHMENTS.											
			Total.	Blacksmithing and wheelwrighting.	Boots and shoes, custom work and repairing.	Car-pentering.	Clothing, men's custom work and repairing.	Clothing, women's dress-making.	Masonry, brick and stone.	Painting, house, sign, etc.	Paper hanging.	Plumbing and gas and steam fitting.	Watch, clock, and jewelry repairing.	All other hand trades.
New Haven, Conn.	108,027	1,236	620	55	105	62	85	62	17	33	8	52	39	102
Paterson, N. J.	105,171	995	420	40	76	40	52	19	15	45	1	45	27	61
Fall River, Mass.	104,863	785	453	61	84	41	37	45	19	51	.....	28	19	68
St. Joseph, Mo.	102,979	440	185	32	15	25	23	6	16	17	.....	10	11	30
Omaha, Nebr.	102,555	338	409	53	44	42	49	31	23	36	11	32	24	64
Los Angeles, Cal.	102,479	1,415	737	77	82	100	98	64	15	45	10	48	56	142
Memphis, Tenn.	102,320	659	866	60	59	33	43	8	21	2	.....	22	28	75
Scranton, Pa.	102,026	710	609	48	71	18	56	18	13	64	10	40	23	48
Lowell, Mass.	94,969	961	409	43	79	66	38	155	26	47	6	34	24	61
Albany, N. Y.	94,151	1,566	916	59	120	79	128	243	29	53	8	60	32	105
Cambridge, Mass.	91,866	782	470	38	66	83	46	15	25	60	18	43	13	68
Portland, Ore.	90,426	1,064	544	46	55	76	71	34	13	58	4	34	34	100
Atlanta, Ga.	89,872	890	164	25	48	10	11	5	2	6	4	14	9	84
Grand Rapids, Mich.	87,565	824	347	49	54	88	44	14	14	31	2	20	20	62
Dayton, Ohio	85,333	1,096	552	56	63	62	63	80	25	61	8	21	21	92
Richmond, Va.	85,050	763	410	49	66	56	39	26	2	26	9	33	27	77
Nashville, Tenn.	80,865	489	204	49	29	23	30	1	3	10	3	13	11	32
Seattle, Wash.	80,671	953	522	12	51	137	62	35	33	60	.....	26	38	68
Hartford, Conn.	79,850	888	476	38	63	69	78	33	19	41	2	42	30	61
Reading, Pa.	78,961	843	327	27	52	47	41	11	14	42	3	25	22	43
Wilmington, Del.	76,508	750	385	29	74	41	48	28	14	18	21	25	22	65
Camden, N. J.	75,935	617	399	21	52	45	26	69	16	38	24	32	12	64
Trenton, N. J.	73,307	570	252	32	61	14	22	19	6	25	14	11	19	29
Bridgeport, Conn.	70,996	832	472	37	77	56	48	70	21	39	4	35	20	64
Lynn, Mass.	68,518	776	307	32	51	86	36	11	11	32	1	30	17	50
Oakland, Cal.	66,960	752	461	42	90	49	40	37	4	46	6	39	31	77
Lawrence, Mass.	62,559	546	322	19	47	87	31	44	14	32	1	17	19	61
New Bedford, Mass.	62,442	618	378	39	71	33	27	45	14	37	1	26	21	64
Des Moines, Iowa	62,139	494	211	42	25	15	35	5	5	13	1	15	18	37
Springfield, Mass.	62,059	817	463	45	47	66	36	36	25	55	2	42	28	81
Somerville, Mass.	61,643	378	263	25	31	50	22	16	15	40	4	20	5	35
Troy, N. Y.	60,651	662	330	30	50	41	45	19	12	28	.....	25	18	62
Hoboken, N. J.	59,864	399	156	14	29	9	25	6	5	12	.....	14	14	23
Evansville, Ind.	59,007	705	350	45	35	50	27	29	21	40	11	10	19	63
Manchester, N. H.	56,987	577	344	29	52	25	32	63	12	24	2	29	18	58
Utica, N. Y.	56,333	733	332	26	40	33	54	34	16	23	10	17	22	57
Peoria, Ill.	56,100	371	494	42	38	79	56	94	26	61	4	12	18	64
Charleston, S. C.	55,807	364	205	25	47	11	18	28	1	9	.....	7	14	45
Savannah, Ga.	54,244	155	57	18	3	1	3	.....	.....	1	.....	10	11	10
Salt Lake City, Utah	53,531	432	228	33	25	9	36	.....	22	1	19	20	21	41
San Antonio, Tex.	53,321	312	153	50	22	3	25	2	1	6	.....	5	13	31
Duluth, Minn.	52,969	433	246	22	26	34	27	9	9	23	3	18	10	38
Erie, Pa.	52,733	644	315	25	65	21	54	13	3	34	.....	15	24	61
Elizabeth, N. J.	52,130	419	232	22	46	26	23	13	14	17	1	22	11	37
Wilkesbarre, Pa.	51,721	438	253	26	30	30	40	17	9	28	1	22	16	35
Kansas City, Kans.	51,418	492	317	33	29	72	17	27	38	35	7	11	14	34
Harrisburg, Pa.	50,167	446	204	13	29	17	32	5	4	19	3	32	13	32
Portland, Me.	50,145	639	328	43	38	55	28	22	12	32	.....	20	22	56
Yonkers, N. Y.	47,931	387	226	26	46	24	27	11	8	14	.....	25	11	34
Norfolk, Va.	46,624	445	252	19	55	22	32	31	5	15	3	18	16	36
Waterbury, Conn.	45,859	404	221	18	42	12	28	18	15	20	5	18	12	33
Holyoke, Mass.	45,712	433	227	17	45	19	18	30	7	21	.....	15	12	43
Fort Wayne, Ind.	45,115	397	173	18	29	2	36	7	1	9	2	14	10	45
Youngstown, Ohio.	44,885	260	115	20	12	2	21	3	2	10	.....	5	11	29
Houston, Tex.	44,633	509	307	30	19	92	25	10	27	32	.....	8	14	50
Covington, Ky.	42,938	404	163	19	27	28	15	6	6	17	1	13	7	24
Akron, Ohio	42,723	202	31	31	30	16	27	9	12	19	.....	10	14	34
Dallas, Tex.	42,638	373	168	40	20	15	17	4	8	10	.....	11	19	24
Saginaw, Mich.	42,345	480	209	30	7	24	21	26	13	21	2	11	15	39
Lancaster, Pa.	41,459	738	368	27	30	41	23	99	16	35	5	16	17	59
Lincoln, Nebr.	40,169	250	116	24	10	10	12	7	4	8	.....	10	7	24
Brockton, Mass.	40,063	428	213	20	15	29	20	17	14	31	.....	14	9	44
Binghamton, N. Y.	39,647	594	319	24	32	40	47	66	12	21	.....	17	14	46
Augusta, Ga.	39,441	383	263	25	16	36	18	67	17	24	.....	8	14	38
Pawtucket, R. I.	39,231	534	303	26	37	34	20	70	14	37	2	18	11	34
Altoona, Pa.	38,973	230	130	12	23	6	24	.....	.....	15	3	19	11	17
Wheeling, W. Va.	38,878	406	191	17	24	15	28	21	14	18	1	13	13	27
Mobile, Ala.	38,469	222	92	10	13	8	10	.....	5	2	.....	16	12	21
Birmingham, Ala.	38,415	283	133	18	31	13	12	7	1	2	1	9	18	26
Little Rock, Ark.	38,307	171	84	18	18	2	14	.....	.....	6	.....	4	5	17
Springfield, Ohio.	38,253	305	110	27	15	5	16	5	.....	3	2	5	9	23
Galveston, Tex.	37,739	295	148	15	14	31	23	2	6	12	.....	10	10	25
Tacoma, Wash.	37,714	381	175	18	21	30	19	12	2	9	.....	9	11	44
Haverhill, Mass.	37,175	685	257	24	25	30	19	48	7	29	.....	18	16	46
Spokane, Wash.	36,348	213	106	20	4	7	17	7	.....	5	.....	12	11	23
Terre Haute, Ind.	36,673	429	232	28	16	52	16	10	14	21	10	3	12	51
Dubuque, Iowa	36,297	460	246	12	26	46	29	20	27	30	.....	13	9	34
Quincy, Ill.	36,252	421	192	25	22	27	13	25	11	21	.....	8	8	36
South Bend, Ind.	35,999	302	123	13	14	10	15	1	7	13	.....	8	8	39
Salem, Mass.	35,956	446	243	22	23	43	22	15	16	39	.....	12	10	40

STATISTICS OF MANUFACTURES.

TABLE XXI.—NUMBER OF ESTABLISHMENTS REPORTED FOR HAND TRADES IN 209 CITIES WITH A POPULATION OF 20,000 AND OVER: 1900—Continued.

209 CITIES (ARRANGED IN ORDER OF POPULATION).	Population.	Total number of establishments, all industries.	HAND TRADES—NUMBER OF ESTABLISHMENTS.											
			Total.	Blacksmithing and wheelwrighting.	Boots and shoes, custom work and repairing.	Carpen-tering.	Clothing, men's custom work and repairing.	Clothing, women's dress-making.	Masonry, brick and stone.	Painting, house, sign, etc.	Paper hang-ing.	Plumb-ing and gas and steam fitting.	Watch, clock, and jewelry repair-ing.	All other hand trades.
Johnstown, Pa.	35,936	248	141	9	17	24	14	5	11	17	2	10	11	21
Elmira, N. Y.	35,672	362	176	22	24	12	19	12	9	16	1	9	13	45
Allentown, Pa.	35,416	491	224	14	26	16	18	30	13	17	7	14	8	48
Davenport, Iowa.	35,254	416	195	24	17	34	19	13	10	37	6	10	11	32
McKeesport, Pa.	34,227	180	80	11	11	17	17	6	8	19	9	9	8	15
Springfield, Ill.	34,159	320	172	24	17	37	18	6	11	20	1	11	8	24
Chelsea, Mass.	34,072	308	162	19	19	27	12	11	19	8	3	17	3	27
Chester, Pa.	33,888	316	138	17	22	10	13	6	5	11	3	12	9	26
York, Pa.	33,708	464	169	16	41	3	22	4	4	12	1	19	13	84
Malden, Mass.	33,664	242	174	21	19	39	10	17	6	18	2	12	4	26
Topeka, Kans.	33,608	399	195	26	22	23	25	8	4	22	3	9	17	86
Newton, Mass.	33,587	297	128	18	23	43	13	15	23	31	2	23	10	25
Sioux City, Iowa.	33,111	329	155	20	14	15	20	6	6	13	5	8	12	22
Bayonne, N. J.	32,722	225	142	9	40	19	10	7	5	17	1	16	5	14
Knoxville, Tenn.	32,637	218	94	7	14	5	12	6	1	6	1	4	12	26
Schenectady, N. Y.	31,632	388	259	16	28	39	31	38	20	40	2	9	8	28
Fitchburg, Mass.	31,531	308	154	21	20	14	11	25	4	17	2	12	10	20
Superior, Wis.	31,091	185	90	10	18	4	16	7	2	5	1	4	10	13
Rockford, Ill.	31,051	450	222	22	20	26	19	27	15	28	2	13	16	86
Taunton, Mass.	31,036	284	139	25	18	17	11	2	6	17	1	10	10	23
Canton, Ohio.	30,607	502	269	21	29	28	28	52	22	30	1	7	8	44
Butte, Mont.	30,470	212	121	18	14	10	25	12	4	8	1	6	7	21
Montgomery, Ala.	30,346	168	83	9	12	6	9	4	3	3	1	7	10	20
Auburn, N. Y.	30,345	316	147	20	14	17	11	24	6	8	8	7	9	31
Chattanooga, Tenn.	30,154	332	146	12	23	15	20	12	3	9	4	9	14	25
East St. Louis, Ill.	29,655	183	104	9	14	25	11	1	2	15	3	5	8	11
Joliet, Ill.	29,353	455	273	30	18	61	23	25	17	27	3	13	9	44
Sacramento, Cal.	29,232	276	133	20	8	15	12	12	3	17	1	12	8	25
Racine, Wis.	29,102	252	83	14	10	6	15	3	8	5	1	7	7	16
La Crosse, Wis.	28,895	255	87	14	8	2	12	3	1	3	1	7	12	24
Williamsport, Pa.	28,757	396	190	15	18	18	27	23	3	21	2	12	14	37
Jacksonville, Fla.	28,429	195	103	16	15	5	15	2	2	2	1	9	13	26
Newcastle, Pa.	28,339	216	116	18	9	10	16	8	2	12	1	9	11	21
Newport, Ky.	28,301	272	105	9	11	19	6	5	7	12	5	13	5	13
Oshkosh, Wis.	28,284	285	121	15	8	14	17	11	2	14	1	8	7	25
Woonsocket, R. I.	28,204	242	115	11	22	10	16	2	5	11	1	10	4	23
Pueblo, Colo.	28,167	126	63	13	15	17	15	1	8	4	1	8	12	32
Passaic, N. J.	27,777	185	95	9	19	5	18	2	5	9	1	10	5	15
Bay City, Mich.	27,628	376	192	23	25	31	26	9	3	23	1	7	9	86
Fort Worth, Tex.	26,688	209	117	24	13	11	8	5	5	6	1	8	10	26
Lexington, Ky.	26,369	272	149	22	10	12	12	26	6	9	1	7	11	33
Gloucester, Mass.	26,121	892	207	27	18	41	14	21	22	26	1	7	9	22
Joplin, Mo.	26,023	123	63	15	7	1	10	2	2	2	1	4	7	15
South Omaha, Nebr.	26,001	139	83	18	5	22	5	2	8	9	1	2	5	12
New Britain, Conn.	25,998	226	119	11	21	19	14	3	6	8	1	11	6	21
Council Bluffs, Iowa.	25,802	193	94	18	14	11	11	2	2	9	1	4	5	17
Cedar Rapids, Iowa.	25,656	103	58	14	8	23	8	3	4	5	1	6	9	23
Easton, Pa.	25,238	285	132	11	11	13	17	3	5	11	8	15	12	26
Jackson, Mich.	25,130	291	135	23	14	14	14	7	3	18	1	7	8	32
Newburg, N. Y.	24,943	253	128	16	21	8	16	1	4	10	1	13	11	23
Wichita, Kans.	24,671	328	163	27	20	17	18	6	6	17	1	6	14	32
Kingston, N. Y.	24,535	344	183	16	19	20	24	32	13	16	1	10	3	30
Kalamazoo, Mich.	24,404	263	104	21	17	10	6	10	4	13	1	5	5	13
Everett, Mass.	24,336	108	58	13	11	26	6	7	5	15	5	9	11	18
Meriden, Conn.	24,296	260	133	14	25	14	16	17	7	8	1	6	8	18
North Adams, Mass.	24,200	231	136	8	8	17	12	21	8	19	1	6	8	29
Aurora, Ill.	24,147	229	99	13	8	12	11	5	1	13	1	9	10	17
Orange, N. J.	24,141	234	174	11	21	33	11	19	16	19	1	24	3	16
Poughkeepsie, N. Y.	24,029	377	214	17	24	19	26	22	9	14	4	13	15	51
Hamilton, Ohio.	23,914	222	93	15	12	10	13	1	4	9	1	7	4	19
Cohoes, N. Y.	23,910	316	176	13	22	18	6	43	14	15	1	14	3	23
Quincy, Mass.	23,899	339	136	17	11	39	6	8	11	14	1	9	3	18
Nashua, N. H.	23,898	251	143	12	19	11	9	20	12	19	1	9	5	31
Lewiston, Me.	23,761	282	158	10	16	10	12	28	11	16	1	8	11	36
Zanesville, Ohio.	23,538	293	133	15	15	16	13	12	7	14	1	6	6	29
Waltham, Mass.	23,431	275	174	16	22	23	10	20	17	22	2	13	6	23
Bloomington, Ill.	23,286	185	86	15	10	11	11	10	1	6	1	6	13	14
Macon, Ga.	23,272	182	90	12	13	3	11	7	1	8	1	6	3	25
Springfield, Mo.	23,267	245	128	19	9	18	13	11	3	15	1	4	10	21
Burlington, Iowa.	23,201	340	175	12	16	33	18	18	13	23	4	5	10	23
West Hoboken, N. J.	23,094	177	97	4	19	18	8	1	6	18	1	9	2	11
Sheboygan, Wis.	22,962	206	98	7	11	20	14	1	7	7	1	6	9	17
Jamesstown, N. Y.	22,892	178	44	9	1	7	1	1	6	7	1	11	10	10
Clinton, Iowa.	22,698	224	103	13	16	1	12	6	5	6	1	7	8	18
Elgin, Ill.	22,433	209	102	16	9	15	14	4	5	7	1	8	7	17
Morristown, Pa.	22,265	210	103	11	20	8	9	11	3	6	2	8	7	13
Austin, Tex.	22,258	279	167	37	15	34	15	11	9	11	1	7	9	30
Oswego, N. Y.	22,199	207	98	12	11	13	9	3	7	14	1	6	6	17
Bangor, Me.	21,850	315	174	26	13	21	17	26	9	15	1	6	6	25
Petersburg, Va.	21,810	225	120	11	10	34	7	7	8	11	1	5	6	26

URBAN MANUFACTURES.

TABLE XXI.—NUMBER OF ESTABLISHMENTS REPORTED FOR HAND TRADES IN 209 CITIES WITH A POPULATION OF 20,000 AND OVER: 1900—Continued.

209 CITIES (ARRANGED IN ORDER OF POPULATION).	Popula-tion.	Total number of es-tablish-ments, all in-dustries.	HAND TRADES—NUMBER OF ESTABLISHMENTS.											
			Total.	Black-smithing and wheel-wright-ing.	Boots and shoes, custom work and repair-ing.	Car-pen-tering.	Clothing, men's custom work and repair-ing.	Clothing, women's dress-mak-ing.	Masonry, brick and stone.	Paint-ing, house, sign, etc.	Paper hang-ing.	Plumb-ing and gas and steam fitting.	Watch, clock, and jewelry repair-ing.	All other hand trades.
Pittsfield, Mass.....	21,766	261	161	22	16	24	12	18	10	2	1	7	8	19
Lima, Ohio.....	21,723	195	92	15	13	8	18	2	1	2	2	7	9	22
Watertown, N. Y.....	21,696	289	161	22	11	13	20	22	4	15	.....	16	7	31
East Orange, N. J.....	21,566	167	132	7	23	20	13	20	5	9	.....	11	9	19
San Jose, Cal.....	21,500	349	176	33	23	18	18	6	8	10	.....	9	15	37
Roanoke, Va.....	21,495	120	67	8	7	9	7	2	.....	6	.....	4	6	18
Warwick, R. I.....	21,316	104	64	22	6	1	3	6	.....	4	.....	3	3	16
Columbia, S. C.....	21,108	92	43	10	.....	6	7	.....	.....	2	.....	3	7	8
Wilmington, N. C.....	20,976	181	60	9	8	7	10	2	3	3	.....	2	8	13
Muncie, Ind.....	20,942	347	209	15	9	60	11	15	13	20	.....	12	9	36
Amsterdam, N. Y.....	20,920	213	90	18	7	18	13	6	4	6	.....	6	7	10
Muskegon, Mich.....	20,818	200	109	16	11	12	10	12	4	16	.....	4	7	17
Decatur, Ill.....	20,754	289	103	13	15	6	13	7	2	8	1	6	9	23
Leavenworth, Kans.....	20,735	220	98	16	9	17	10	9	4	6	.....	3	8	16
Waco, Tex.....	20,688	166	70	15	10	2	15	.....	.....	2	.....	4	8	14
New Albany, Ind.....	20,628	208	88	7	9	11	9	7	4	10	.....	3	5	28
Shenandoah, Pa.....	20,321	78	46	5	7	2	13	.....	.....	8	.....	1	5	9
Anderson, Ind.....	20,178	311	180	17	13	33	14	17	19	11	1	7	8	35
New Brunswick, N. J.....	20,006	193	102	14	15	6	15	7	1	9	.....	10	6	19

The number of establishments reported is the number returned at the census of 1900 as having a product valued at \$500 or more during the census year. In all cities with approximately the same population, located in the same section of the country and with similar industries predominating, the number of reports secured for the hand trades should be about the same, yet it is apparent from the table that this is not the case. The lack of uniformity in this respect is due in the majority of cases to the fact that the agents in the different cities did not give the same construction to their instructions, or neglected to make a thorough canvass of industries of this character, considering them of comparatively slight importance.

In the city of Chicago, with a population of 1,698,575, reports were received from 19,203 establishments. Of this number, 10,310, or 53.7 per cent, were for the hand trades. In the city of Philadelphia, with a population of 1,293,697, reports were received for 15,887 establishments, and of this number 6,676, or 42 per cent, were for the hand trades. The disproportion in the population of the two cities will not account for the disproportion in the number of reports received for the hand trades. The excess in the number of shops reported for Chicago appears in each of the hand trades specified, with the exception of paper hanging. For this industry, only 21 returns were received for New York and 57 for Chicago, as against 302 for Philadelphia. Paper hanging is often carried on in connection with house and sign painting, and the lesser number of reports for paper hanging in New York and Chicago may be thus accounted for.

The city of Cleveland, Ohio, with a population of 381,768, reported 1,294 establishments for the hand trades, or 44.2 per cent of the total; while for Buffalo,

which has a population of 352,387, there were reported 2,073, or 53.1 per cent of the total. The excess in population of Cleveland over Buffalo was 29,381; nevertheless, 779 more hand trades establishments were reported for Buffalo. The disproportion in number of returns for these 2 cities is even greater in some of the individual trades. Only 42 returns were secured for "clothing, women's dressmaking," in Cleveland, against 303 in Buffalo; only 8 were secured for "masonry, brick and stone" in Cleveland, against 89 in Buffalo.

Striking as are the disproportions in the total number of reports for all hand trades, the disproportion in the number of returns for particular hand trades in different cities is even more noticeable. For instance, 117 reports were received for "masonry, brick and stone" in Cincinnati, Ohio, which has a smaller population than Cleveland, Ohio, where, notwithstanding, only 8 reports were secured. Eight reports were also secured for this industry in the city of San Francisco, Cal., as against 15 for Los Angeles, Cal., yet the latter city has a population less than one-half that of San Francisco. In the case of "blacksmithing and wheelwrighting," 83 reports were received for Pittsburg, Pa., which has a population of 321,616; while 130 were reported for Detroit, Mich., 111 for Milwaukee, Wis., 156 for Washington, D. C., and 101 for Newark, N. J., each of which has a smaller population than Pittsburg.

Such comparison of the statistics of all trades in any two of the cities, or of those of any one trade in different cities, leads to the conclusion that there has been no uniformity in the canvass, and that the figures are worthless for comparative purposes. They do not show actual conditions in these trades in any city or state.

The establishments in the group of "hand trades"

may be further divided into those engaged in the building trades, such as "carpentering," "masonry, brick and stone," "painting, house and sign," etc.; "paper hanging," "plastering and stucco work," and "plumbing and gas and steam fitting," and those engaged in general repair work and manufacturing on a small scale to meet the demands of the immediate neighborhood.

The instructions to the special agents and enumerators required them to secure reports from all contractors engaged in carpentering, masonry, and other building operations, but not from journeymen working for hire in these trades. If the instructions had been strictly complied with, the number of the reports secured would indicate, in a measure, the extent of the building operations of the different cities. The value of the products included in these reports, however, is no indication of the value of the building operations. From the nature of the reports, the combined products of the different schedules would be in excess of such operations, provided returns had been secured from all contractors and subcontractors, because of the duplication in the value of products. For instance, a report is secured from a contractor who is engaged in extensive building operations during the census year. This report represents, or should represent, the entire amount of the year's work. During the year, however, the contractor has given a number of subcontracts to carpenters, plasterers, painters, etc.; each one of these subcontractors is also required to make a report, representing the value of his operations during the year. The combination of these several reports results in a duplication not only of products, but possibly of wage-earners, wages, and materials. Under these conditions, therefore, the returns can not be accepted as any indication of the actual operations involved.

2. *Building Trades.*—Of the 215,814 establishments reported for hand trades in the United States, 58,463, or 27.1 per cent, were for the building trades. Table xxii shows the statistics for building trades as reported for the United States, for the 209 cities, and for the United States exclusive of these cities.

TABLE XXII.—*Building trades in 209 cities compared with the United States, and the United States exclusive of these cities.*

ITEMS.	United States.	209 CITIES.		UNITED STATES, EXCLUSIVE OF 209 CITIES.	
		Total.	Per cent of United States.	Total.	Per cent of United States.
Number of establishments	58,463	36,875	63.0	21,588	37.0
Capital	\$193,725,036	\$147,538,692	76.1	\$46,156,944	23.9
Wage-earners	390,060	238,917	72.3	91,743	27.7
Wages	\$190,898,680	\$142,992,620	75.0	\$47,906,060	25.0
Miscellaneous expenses	\$88,565,905	\$77,792,683	87.8	\$10,773,222	12.2
Cost of materials used	\$321,339,847	\$232,298,478	72.3	\$89,041,369	27.7
Value of products	\$739,944,811	\$556,014,400	75.0	\$184,980,411	25.0

While the establishments reported for building trades formed only 27.1 per cent of the 215,814 hand-trade establishments in the United States, the amount of capital constituted 49.4 per cent, and the number of wage-earners 59.1 per cent, their wages 66.3 per cent, and the value of products 62.5 per cent. Except in number of establishments and amount of capital, therefore, the building trades represented the larger proportion of all the items reported in the general group.

It appears from the table that 63 per cent of the establishments reported for the building trades were located in the 209 cities. These establishments controlled 72.3 per cent of the wage-earners, 75 per cent of the wages, and 75 per cent of the total value of products reported for these trades in the United States. It is evident, therefore, that the building trades so far as they were returned to the Census Office were restricted in the main to the urban districts. Practically all the remaining establishments are undoubtedly included in the reports for the 1,131 cities and towns, for which statistics are not shown by specified industries.

Realizing the fact that the reports for the building trades did not show the actual condition of the building operations of the respective cities during the census year, the Census Office endeavored to secure reports from the officials of each city, showing the estimated cost of the buildings erected during the year ending May 31, 1900. Letters requesting such information met with favorable response from 109 cities. Table xxiii shows the reported estimated cost of the buildings erected in these cities during the census year, in comparison with the value of the products for the building trades in each as reported in the regular census.

TABLE XXIII.—*Estimated cost of buildings erected during the census year compared with the value of products reported for the building trades.*

CITIES.	Buildings erected (estimated cost).	Value of products for building trades.
Total	\$324,699,388	\$405,140,851
Allegheny, Pa.	1,302,950	4,104,755
Atlanta, Ga.	1,287,997	871,467
Augusta, Ga.	559,187	958,300
Austin, Tex.	194,287	578,410
Baltimore, Md.	6,500,900	12,354,329
Bangor, Me.	289,700	1,180,995
Bayonne, N. J.	393,018	514,985
Birmingham, Ala.	741,180	457,725
Boston, Mass.	14,316,915	19,412,482
Bridgeport, Conn.	1,846,586	2,828,276
Brockton, Mass.	440,500	969,426
Buffalo, N. Y.	3,413,464	7,681,903
Burlington, Iowa.	151,180	513,113
Butte, Mont.	1,012,000	792,545
Cambridge, Mass.	1,759,895	2,827,721
Charleston, S. C.	158,865	251,304
Chattanooga, Tenn.	320,232	488,524
Chelsea, Mass.	230,000	442,848
Chester, Pa.	485,000	837,800
Cincinnati, Ohio.	2,650,880	3,245,930
Cleveland, Ohio.	3,983,019	5,001,439
Columbus, Ohio.	1,185,183	1,365,059
Dallas, Tex.	502,156	1,077,500
Denver, Colo.	4,011,946	3,127,283
Detroit, Mich.	3,457,480	5,145,243

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TABLE XXIII.—Estimated cost of buildings erected during the census year compared with the value of products reported for the building trades—Continued.

CITIES.	Buildings erected (estimated cost).	Value of products for building trades.	CITIES.	Buildings erected (estimated cost).	Value of products for building trades.
Duluth, Minn.....	\$1,168,674	\$1,893,048	Somerville, Mass.....	\$1,000,435	\$1,106,345
East Orange, N. J.....	782,327	1,007,861	South Omaha, Nebr.....	288,253	416,472
East St. Louis, Ill.....	872,561	758,479	Springfield, Ill.....	800,000	1,120,448
Elizabeth, N. J.....	743,333	1,190,321	Springfield, Ohio.....	143,005	243,423
Erie, Pa.....	602,868	990,297	Syracuse, N. Y.....	1,089,086	2,576,344
Evansville, Ind.....	280,000	986,047	Tacoma, Wash.....	417,845	748,647
Everett, Mass.....	350,000	584,751	Topeka, Kans.....	430,518	906,035
Fall River, Mass.....	1,040,270	2,445,725	West Hoboken, N. J.....	493,000	695,778
Fitchburg, Mass.....	294,600	741,273	Wilkesbarre, Pa.....	641,968	1,334,764
Gloucester, Mass.....	400,000	823,581	Williamsport, Pa.....	227,823	379,052
Hartford, Conn.....	2,551,700	4,783,991	Wilmington, Del.....	636,212	1,909,301
Haverhill, Mass.....	374,000	861,272	Wilmington, N. C.....	102,850	247,835
Hoboken, N. J.....	660,308	771,975	Worcester, Mass.....	1,124,804	3,741,537
Holyoke, Mass.....	370,000	1,477,368	Youngstown, Ohio.....	354,540	223,499
Houston, Tex.....	422,100	1,892,741			
Indianapolis, Ind.....	1,663,265	4,867,825			
Jacksonville, Fla.....	232,910	198,935			
Jamestown, N. Y.....	237,358	145,919			
Jersey City, N. J.....	1,768,511	2,873,455			
Kansas City, Kans.....	206,310	1,631,681			
Kansas City, Mo.....	4,097,240	6,674,632			
Kingston, N. Y.....	168,000	647,165			
Leavenworth, Kans.....	65,150	470,096			
Lexington, Ky.....	245,541	531,141			
Los Angeles, Cal.....	2,269,534	2,595,541			
Louisville, Ky.....	1,470,195	4,224,528			
Macon, Ga.....	153,658	270,952			
Malden, Mass.....	556,000	981,679			
Manchester, N. H.....	252,300	1,009,911			
Memphis, Tenn.....	1,304,813	1,351,664			
Meriden, Conn.....	109,840	913,781			
Milwaukee, Wis.....	3,056,223	7,457,803			
Minneapolis, Minn.....	3,652,747	10,084,778			
Mobile, Ala.....	762,487	489,638			
Montgomery, Ala.....	434,180	655,459			
Muskegon, Mich.....	150,205	328,612			
Nashville, Tenn.....	1,237,855	1,123,540			
New Albany, Ind.....	65,170	234,271			
New Bedford, Mass.....	708,245	1,199,626			
Newburg, N. Y.....	100,000	442,379			
New Haven, Conn.....	1,059,464	2,574,795			
New Orleans, La.....	1,879,585	2,494,765			
Newton, Mass.....	1,141,000	2,360,494			
New York, N. Y.....	167,618,664	106,401,915			
Norfolk, Va.....	609,724	1,547,301			
Oakland, Cal.....	1,210,000	1,559,981			
Omaha, Nebr.....	1,005,634	2,195,194			
Oswego, N. Y.....	240,550	338,039			
Passaic, N. J.....	1,193,471	731,206			
Peoria, Ill.....	1,043,544	2,674,964			
Petersburg, Va.....	175,000	330,070			
Philadelphia, Pa.....	20,825,390	47,312,666			
Pittsburg, Pa.....	9,158,300	8,829,543			
Portland, Me.....	800,000	1,941,197			
Providence, R. I.....	3,584,375	6,089,894			
Quincy, Mass.....	342,300	637,311			
Reading, Pa.....	903,725	1,598,670			
Richmond, Va.....	1,020,000	1,567,356			
Roanoke, Va.....	98,145	114,261			
Rochester, N. Y.....	1,577,732	4,642,770			
Saginaw, Mich.....	105,515	576,193			
St. Joseph, Mo.....	603,533	1,150,404			
St. Louis, Mo.....	7,802,033	21,533,292			
St. Paul, Minn.....	1,671,721	4,689,022			
Salem, Mass.....	230,323	943,550			
Salt Lake City, Utah.....	1,069,413	632,456			
San Antonio, Tex.....	335,297	317,567			
Savannah, Ga.....	892,000	190,114			
Scranton, Pa.....	1,023,339	1,805,449			
Seattle, Wash.....	2,096,460	7,123,779			

In all but 16 of the cities shown in this table the value of products reported for the building trades was in excess of the estimated cost of the buildings erected during the census year. In the majority of the 16 cities for which the estimated cost of the buildings is in excess of the value of the products of the building trades, it appears that the canvass for the collection of reports for the hand trades was exceptionally defective. For instance, in the city of Birmingham, Ala., for which the estimated cost of buildings erected amounted to \$741,130, and the reported value of products in the building trades to \$457,725, it appears that reports were secured from only 1 establishment engaged in "masonry, brick and stone," 13 in "carpentering," 2 in "painting," 1 in "paper hanging," and 9 in "plumbing and gas and steam fitting." In Jacksonville, Fla., where the estimated cost of the buildings erected was \$232,910, and the value of the products for the building trades was \$198,935, no reports were received for "masonry, brick and stone," nor for "paper hanging," and only 2 returns for "painting, house, sign, etc.," 5 for "carpentering," and 9 for "plumbing and gas and steam fitting."

At all prior censuses the statistics for hand and building trades have been included indiscriminately with those for manufacturing industries, but at the census of 1900 an effort has been made to segregate them, and wherever practicable the totals for these trades have been grouped under the head of "hand trades" and shown separately. To assist in preserving this distinction in the principal cities, table xxiv is presented, which gives separate totals for the manufactures and hand trades, respectively, for each of the 209 cities with a population of 20,000 or more at the census of 1900.

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TABLE XXIV.—MANUFACTURES AND HAND TRADES FOR PRINCIPAL CITIES: 1890 AND 1900.

CITIES.	1900 (209 CITIES).						1890 (164 CITIES).					
	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).
			Average number.	Total wages (dollars).					Average number.	Total wages (dollars).		
Burlington, Iowa:												
All industries	340	5,225,024	2,598	1,013,998	2,809,536	5,334,196	223	3,963,986	2,935	1,157,414	3,099,200	5,413,138
Manufactures	165	5,054,811	2,128	817,733	2,493,618	4,590,396	135	3,777,055	2,604	998,486	2,845,608	4,833,024
Hand trades	175	180,813	470	196,265	315,918	743,800	88	186,931	331	163,928	253,592	580,114
Butte, Mont.:												
All industries	212	5,683,083	1,379	1,355,286	3,966,492	8,958,782						
Manufactures	91	4,781,109	896	929,716	3,454,055	7,661,220						
Hand trades	121	901,924	483	425,570	512,437	1,297,562						
Cambridge, Mass.:												
All industries	782	26,602,751	12,986	6,785,070	23,986,638	39,164,013	1,232	20,331,585	12,581	6,497,963	20,268,534	35,975,089
Manufactures	312	25,722,669	11,350	5,750,209	22,724,246	35,639,251	420	19,175,240	10,478	5,305,043	18,616,608	31,926,187
Hand trades	470	940,082	1,636	1,034,861	1,262,392	3,524,762	812	1,156,345	2,103	1,192,697	1,651,926	4,048,902
Camden, N. J.:												
All industries	817	16,430,611	8,941	3,824,434	11,499,151	20,451,874	658	15,244,506	9,444	4,759,182	11,816,151	21,145,637
Manufactures	418	15,885,880	8,059	3,347,992	10,722,697	18,553,836	338	14,210,960	7,683	3,559,043	9,856,426	17,214,951
Hand trades	399	544,731	882	476,442	776,454	1,898,038	320	1,033,546	1,761	1,200,139	1,959,725	3,930,686
Canton, Ohio:												
All industries	502	10,094,813	6,455	2,970,245	5,604,399	12,258,427	420	11,387,406	6,360	3,208,641	4,948,608	11,881,810
Manufactures	233	9,658,066	5,637	2,550,096	4,890,811	10,569,180	197	11,059,581	5,602	2,781,309	4,238,668	10,224,115
Hand trades	269	441,747	818	420,149	713,588	1,689,247	223	327,825	5,858	427,332	709,840	1,597,695
Cedar Rapids, Iowa:												
All industries	241	6,256,801	3,105	1,813,821	8,969,992	12,715,897						
Manufactures	138	5,932,390	2,527	1,063,029	8,312,331	11,490,577						
Hand trades	103	324,411	578	260,792	657,661	1,225,320						
Charleston, S. C.:												
All industries	364	12,478,187	5,027	1,489,966	5,633,573	9,562,387	566	7,345,459	4,684	1,779,789	4,753,396	9,005,421
Manufactures	159	12,209,280	4,423	1,278,413	5,350,857	8,822,828	224	6,541,990	3,626	1,331,888	3,678,419	6,939,674
Hand trades	205	263,907	604	211,553	282,721	739,559	342	803,469	1,058	447,901	1,074,977	2,065,747
Chattanooga, Tenn.:												
All industries	332	8,103,870	5,472	1,889,795	7,322,503	12,033,780	294	7,405,646	5,200	2,246,523	4,937,902	10,216,109
Manufactures	186	7,950,499	4,972	1,700,863	6,940,393	11,214,844	131	6,804,810	4,080	1,630,264	3,942,603	7,850,041
Hand trades	146	168,871	500	188,932	382,105	818,936	163	600,836	1,120	566,259	995,899	2,366,068
Chelsea, Mass.:												
All industries	308	8,211,682	3,332	1,625,875	5,764,409	10,333,549	347	7,028,356	2,977	1,334,045	4,681,291	8,158,207
Manufactures	146	8,032,469	3,024	1,449,624	5,515,434	9,671,750	152	6,891,432	2,576	1,168,584	4,449,924	7,411,013
Hand trades	162	179,213	308	176,251	248,975	661,799	195	186,924	401	165,461	231,267	747,194
Chester, Pa.:												
All industries	315	18,977,710	7,682	3,462,196	9,261,886	16,421,725	201	9,397,033	6,559	2,807,341	6,844,825	11,864,899
Manufactures	177	17,923,405	7,136	3,203,485	8,768,642	15,322,500	119	9,055,419	6,157	2,575,774	6,373,732	10,929,100
Hand trades	138	1,054,305	546	258,711	493,244	1,099,225	82	341,614	402	231,567	471,093	935,799
Chicago, Ill.:												
All industries	19,203	534,000,689	262,621	131,065,337	538,401,562	888,945,311	9,977	359,739,598	190,621	104,069,922	409,493,027	664,567,923
Manufactures	8,893	516,296,041	227,894	111,800,245	508,340,426	811,578,248	5,378	341,698,639	162,749	86,768,611	331,530,475	604,142,806
Hand trades	10,810	17,704,648	34,727	19,265,092	30,061,142	77,367,063	4,604	18,040,959	27,872	17,311,311	27,962,552	60,425,118
Cincinnati, Ohio:												
All industries	5,127	109,582,142	63,240	27,189,069	77,539,292	157,806,834	7,332	104,483,032	84,167	36,728,511	92,545,231	196,063,983
Manufactures	2,870	106,021,225	56,528	23,784,948	72,983,489	144,745,636	3,766	96,504,966	70,425	29,554,889	81,347,833	167,671,435
Hand trades	2,257	3,560,917	6,712	3,404,121	4,555,803	13,061,198	4,066	7,978,066	13,742	7,163,622	11,197,398	28,392,548
Cleveland, Ohio:												
All industries	2,927	98,303,682	58,810	27,892,689	71,597,595	139,849,806	2,807	69,732,761	45,915	23,507,940	65,645,649	113,240,115
Manufactures	1,638	95,973,757	54,739	25,788,910	68,067,905	130,728,127	1,315	66,798,758	40,231	20,069,792	61,022,374	102,743,180
Hand trades	1,294	2,329,925	4,071	2,103,779	3,529,690	9,121,679	992	2,934,003	5,684	3,438,148	4,623,275	10,496,935
Clinton, Iowa:												
All industries	224	4,587,200	3,080	1,137,019	4,247,057	6,939,473						
Manufactures	121	4,388,927	2,722	1,011,965	4,009,650	6,441,680						
Hand trades	103	148,273	358	125,054	237,407	497,793						
Cohoes, N. Y.:												
All industries	316	11,816,482	8,673	3,140,668	6,120,342	11,636,130	212	11,275,137	8,641	2,881,923	5,739,987	10,386,260
Manufactures	140	11,185,275	8,330	2,995,814	5,958,363	11,142,573	125	11,101,119	8,336	2,726,918	5,561,639	10,333,156
Hand trades	176	181,207	343	144,854	161,479	493,557	87	174,018	305	155,005	1,178,348	473,104
Columbia, S. C.:												
All industries	92	5,277,306	3,250	750,200	2,474,623	4,243,030						
Manufactures	49	5,174,408	2,929	680,204	2,201,930	3,751,125						
Hand trades	43	102,908	321	78,996	272,693	491,905						
Columbus, Ohio:												
All industries	914	25,392,136	17,066	7,718,824	20,194,532	39,660,848	708	16,173,703	12,053	5,658,096	11,183,710	22,887,586
Manufactures	516	24,710,814	15,505	6,952,723	19,138,448	37,054,094	390	15,582,923	10,707	4,963,552	10,305,483	20,723,635
Hand trades	398	681,322	1,561	766,101	996,084	2,612,754	318	690,780	1,346	694,544	818,227	2,163,951
Council Bluffs, Iowa:												
All industries	198	1,176,408	1,179	609,905	1,224,814	2,590,830	128	1,292,283	1,469	701,723	1,272,946	2,527,388
Manufactures	104	1,028,838	830	438,041	940,434	1,959,099	79	1,025,803	1,163	499,783	830,302	1,721,021
Hand trades	94	147,570	299	171,864	284,380	637,731	49	266,475	301	201,940	442,644	806,367
Covington, Ky.:												
All industries	404	4,754,786	3,972	1,555,089	3,107,926	6,803,032	1,308	6,897,380	6,111	2,956,263	8,228,079	15,999,575
Manufactures	241	4,516,186	3,612	1,393,085	2,805,919	6,041,790	466	5,378,190	3,784	1,661,348	4,662,475	9,020,200
Hand trades	163	238,600	360	162,003	302,007	761,242	842	1,519,190	2,327	1,294,915	3,565,604	6,969,375
Dallas, Tex.:												
All industries	373	6,897,015	3,756	1,852,485	6,270,370	11,480,499	312	5,250,118	3,554	2,015,369	4,354,769	9,054,766
Manufactures	205	6,555,670	3,037	1,420,104	5,535,991	9,793,832	163	4,557,888	2,503	1,363,197	3,245,880	6,766,111
Hand trades	168	341,345	719	432,381	734,379	1,686,667	149	692,230	1,046	652,172	1,108,889	2,288,655
Davenport, Iowa:												
All industries	416	10,774,707	4,348	1,892,737	6,854,677	11,573,670	475	8,732,122	4,461	1,640,495	6,098,349	10,357,232
Manufactures	221	10,437,466	3,556	1,520,919	6,242,107	10,231,500	241	7,349,942	3,429	1,194,013	5,85	

STATISTICS OF MANUFACTURES.

TABLE XXIV.—MANUFACTURES AND HAND TRADES FOR PRINCIPAL CITIES: 1890 AND 1900—Continued.

CITIES.	1900 (209 CITIES).					1890 (164 CITIES).						
	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).
			Average number.	Total wages (dollars).					Average number.	Total wages (dollars).		
Des Moines, Iowa:												
All industries	494	7,911,764	4,557	1,942,509	4,975,568	10,488,189	380	3,877,140	3,420	1,631,107	4,408,877	7,931,272
Manufactures	283	7,523,255	3,600	1,521,679	4,256,239	8,659,940	232	3,572,773	2,788	1,282,952	3,816,729	6,731,891
Hand trades	211	883,509	957	420,830	719,329	1,828,249	98	304,367	632	348,155	601,648	1,199,381
Detroit, Mich.:												
All industries	2,847	71,751,193	45,707	18,718,081	52,349,347	100,892,838	1,746	45,041,167	34,535	15,490,171	41,860,058	77,351,546
Manufactures	1,527	69,374,263	40,869	16,223,626	48,931,871	92,285,633	1,104	42,395,071	29,932	13,091,106	38,205,520	69,920,922
Hand trades	1,320	2,376,930	5,838	2,494,455	3,417,476	8,607,205	642	2,646,096	4,603	2,399,065	3,154,538	7,430,624
Dubuque, Iowa:												
All industries	460	3,117,858	5,503	2,012,153	5,930,017	10,952,204	262	7,016,802	4,198	1,715,876	5,984,431	9,894,860
Manufactures	214	7,837,559	4,776	1,719,666	5,460,131	9,832,802	173	6,722,344	3,755	1,496,667	5,498,051	8,977,797
Hand trades	246	279,799	727	292,487	469,886	1,069,402	89	294,458	443	219,209	486,880	917,063
Duluth, Minn.:												
All industries	433	3,372,940	3,998	2,145,444	5,861,499	10,628,957	278	5,332,447	3,315	1,750,577	5,435,654	8,811,723
Manufactures	187	3,402,124	2,987	1,551,117	4,531,068	8,191,753	116	4,240,733	2,224	1,085,340	4,077,985	6,133,433
Hand trades	246	470,816	1,011	594,327	1,330,431	2,437,204	162	1,091,664	1,091	665,237	1,357,668	2,678,290
Easton, Pa.:												
All industries	285	4,829,379	3,912	1,516,525	3,794,496	6,746,078						
Manufactures	153	4,402,407	3,383	1,260,341	3,443,366	5,834,080						
Hand trades	132	427,472	529	256,184	351,130	911,998						
East Orange, N. J.:												
All industries	167	2,311,585	1,354	724,495	1,533,435	3,463,141						
Manufactures	85	1,930,550	746	385,753	943,142	2,174,303						
Hand trades	132	380,735	608	338,737	640,293	1,288,778						
East St. Louis, Ill.:												
All industries	133	10,466,412	5,642	2,624,749	28,800,150	33,559,611						
Manufactures	79	10,330,472	5,360	2,431,272	27,851,870	32,671,137						
Hand trades	104	135,940	282	193,477	438,280	888,474						
Elgin, Ill.:												
All industries	209	3,603,283	4,764	2,249,009	2,953,532	7,161,637						
Manufactures	107	3,492,684	4,449	2,103,822	2,711,513	6,537,246						
Hand trades	102	110,599	315	140,187	241,969	594,391						
Elizabeth, N. J.:												
All industries	419	15,665,545	10,497	6,024,497	9,882,821	20,546,468	190	7,785,553	6,268	3,351,348	4,511,626	10,489,364
Manufactures	137	15,157,822	9,690	5,533,878	9,268,610	19,019,246	116	7,451,600	5,796	3,041,295	4,162,562	9,610,054
Hand trades	232	507,723	807	490,619	614,211	1,527,222	74	333,953	472	310,053	349,064	799,310
Elmira, N. Y.:												
All industries	362	7,335,534	4,914	1,965,056	4,961,635	8,558,786	539	6,895,180	4,332	1,874,565	4,593,241	8,844,936
Manufactures	136	7,007,390	4,270	1,676,672	4,578,470	7,643,822	223	6,132,547	2,997	1,318,733	3,464,507	6,606,935
Hand trades	176	328,144	644	288,384	383,165	914,964	316	762,633	1,335	555,782	1,128,734	2,238,000
Erie, Pa.:												
All industries	644	20,418,016	9,339	4,574,625	9,107,305	19,053,202	236	12,812,594	6,463	3,248,306	6,145,680	12,765,768
Manufactures	329	19,648,852	8,484	4,104,179	8,409,753	17,269,634	152	12,472,417	6,101	3,066,401	5,928,876	12,194,890
Hand trades	315	769,164	855	470,446	697,547	1,783,568	84	340,177	862	181,905	216,804	570,908
Evansville, Ind.:												
All industries	705	10,059,375	7,279	2,883,975	7,504,660	14,193,320	482	9,166,859	6,815	2,664,797	6,875,575	12,809,334
Manufactures	355	9,660,000	6,334	2,493,376	6,733,189	12,556,464	304	8,750,032	5,935	2,284,104	6,865,940	11,604,784
Hand trades	350	399,375	895	385,599	721,471	1,636,856	178	416,827	880	380,693	509,635	1,204,550
Everett, Mass.:												
All industries	168	6,107,735	2,141	1,063,987	2,725,197	5,038,120						
Manufactures	60	5,960,707	1,859	894,411	2,420,619	4,355,880						
Hand trades	108	147,028	282	174,576	304,578	682,240						
Fall River, Mass.:												
All industries	785	58,549,934	32,780	11,739,129	19,789,859	43,071,530	397	37,199,470	22,937	8,213,045	17,685,671	32,519,231
Manufactures	332	57,670,231	30,877	10,852,645	18,313,220	39,631,995	206	36,879,888	21,938	7,629,400	16,502,467	30,319,089
Hand trades	453	879,703	1,903	886,484	1,471,639	3,439,535	191	319,582	1,049	583,645	1,183,204	2,200,242
Fitchburg, Mass.:												
All industries	308	13,033,898	6,796	3,113,073	8,062,713	14,253,522	323	7,563,522	5,079	2,390,811	6,414,105	11,225,036
Manufactures	154	12,712,482	6,307	2,844,889	7,567,696	13,183,627	169	7,236,890	4,364	1,951,764	5,733,102	9,876,446
Hand trades	154	321,416	489	268,189	495,017	1,069,895	154	326,632	715	439,047	681,003	1,349,590
Fort Wayne, Ind.:												
All industries	397	9,203,613	7,255	2,923,969	6,597,414	12,525,222	235	6,909,600	5,644	2,381,554	5,048,585	9,301,946
Manufactures	224	8,805,195	6,080	2,701,945	6,226,192	11,646,762	144	6,618,307	4,860	1,997,095	4,358,967	8,023,245
Hand trades	173	398,418	675	227,024	371,222	878,470	91	381,293	784	384,459	689,618	1,278,701
Fort Worth, Tex.:												
All industries	209	2,668,045	1,449	845,477	3,348,550	5,332,804	316	3,194,032	2,368	1,618,073	3,435,446	6,825,033
Manufactures	92	2,482,152	1,049	616,482	3,016,490	4,546,316	95	2,263,205	1,202	713,107	2,110,070	3,833,494
Hand trades	117	185,893	400	228,995	332,060	786,488	221	930,827	1,166	904,966	1,325,376	2,991,539
Galveston, Tex.:												
All industries	295	6,073,845	2,053	981,827	2,618,996	5,016,360	190	5,122,612	1,679	962,093	3,253,088	5,724,545
Manufactures	147	5,836,416	1,605	724,672	2,123,994	4,027,191	104	4,740,777	1,384	767,655	2,869,617	4,946,194
Hand trades	148	237,429	453	257,155	495,002	989,169	86	381,835	295	200,438	383,471	778,351
Gloucester, Mass.:												
All industries	392	4,687,559	3,379	1,423,896	4,862,660	7,843,783	206	2,763,284	1,563	751,531	3,220,601	4,851,405
Manufactures	185	4,113,539	2,712	1,067,533	4,375,916	6,686,026	116	2,424,013	1,185	516,092	2,873,639	4,116,347
Hand trades	207	574,020	667	356,363	486,744	1,157,757	90	339,266	378	205,489	346,962	735,058
Grand Rapids, Mich.:												
All industries	824	23,433,760	14,361	5,904,670	12,348,978	24,824,042	869	15,945,947	11,869	5,279,617	9,391,615	19,851,151
Manufactures	477	22,960,040	13,245	5,431,507	11,456,037	22,877,570	457	15,163,359	10,095	4,499,450	8,274,240	17,233,978
Hand trades	347	467,720	1,116	473,163	892,941	1,946,472	412	782,588	1,773	780,167	1,117,375	2,617,203
Hamilton, Ohio:												
All industries	222	12,575,821	5,850	2,626,084	5,535,568	12,003,316						
Manufactures	129	12,433,457	5,572	2,477,677	5,343,041	11,523,281						
Hand trades	93	137,364	278	148,407	192,527	479,035						
Harrisburg, Pa.:												
All industries	446	8,749,516	7,362	2,949,544	9,402,516	16,064,597	475	6,716,074	6,314	2,947,291	5,432,303	10,533,444

STATISTICS OF MANUFACTURES.

TABLE XXIV.—MANUFACTURES AND HAND TRADES FOR PRINCIPAL CITIES: 1890 AND 1900—Continued.

CITIES.	1900 (209 CITIES).					1890 (164 CITIES).						
	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).
			Average number.	Total wages (dollars).					Average number.	Total wages (dollars).		
Louisville, Ky.:												
All industries.....	2,307	49,384,701	29,926	10,945,720	41,016,391	78,746,390	1,700	36,086,985	24,159	9,844,468	28,033,840	54,515,226
Manufactures.....	1,163	46,542,032	25,148	9,166,155	37,247,776	70,425,074	949	34,239,332	20,718	8,347,433	25,732,772	49,034,514
Hand trades.....	1,144	2,792,669	4,778	1,779,565	3,768,613	8,321,316	751	1,847,653	3,441	1,497,035	2,301,068	5,480,712
Lowell, Mass.:												
All industries.....	981	46,578,193	31,377	11,821,633	21,727,844	44,774,525	853	41,911,708	27,778	10,044,408	22,996,138	42,450,509
Manufactures.....	372	45,732,521	29,473	10,953,442	20,455,491	41,638,206	354	41,084,692	25,866	9,112,755	21,416,263	39,142,229
Hand trades.....	609	845,672	1,904	868,191	1,272,353	3,139,319	499	827,016	1,912	931,653	1,579,875	3,308,280
Lynn, Mass.:												
All industries.....	776	17,011,761	17,492	8,576,042	25,456,798	41,633,845	1,369	17,919,025	20,818	11,033,166	23,039,987	44,223,845
Manufactures.....	469	16,231,348	16,542	8,061,380	24,633,794	39,709,061	720	16,789,054	17,736	9,298,149	21,433,009	39,628,580
Hand trades.....	307	719,913	950	514,662	823,004	1,924,784	649	1,129,971	2,582	1,735,017	1,606,978	4,595,265
McKeesport, Pa.:												
All industries.....	180	17,876,016	7,605	4,370,381	22,309,161	37,074,136	118	10,979,812	6,078	3,189,558	10,617,338	17,432,721
Manufactures.....	100	17,716,789	7,452	4,290,513	22,188,736	36,758,915	66	10,809,337	5,915	3,112,102	10,502,010	17,128,282
Hand trades.....	80	150,227	153	79,868	112,425	315,221	52	170,475	163	177,456	115,328	304,439
Macon, Ga.:												
All industries.....	182	5,076,605	3,700	1,047,437	3,741,167	6,495,767	203	3,988,900	3,157	1,057,041	2,664,498	5,171,530
Manufactures.....	92	4,960,765	3,307	944,263	3,483,009	6,006,427	112	3,902,012	2,951	960,793	2,525,579	4,847,061
Hand trades.....	90	115,300	393	103,174	258,158	489,340	91	86,888	206	96,248	138,919	324,469
Malden, Mass.:												
All industries.....	242	5,906,279	3,082	1,520,658	4,607,400	7,950,292	295	7,600,124	4,418	2,115,420	5,901,817	9,592,501
Manufactures.....	68	5,662,962	2,523	1,184,005	4,118,720	6,732,170	86	7,283,600	3,806	1,788,548	5,446,974	8,471,418
Hand trades.....	174	243,317	559	336,653	488,680	1,217,122	209	366,524	612	376,872	454,843	1,121,083
Manchester, N. H.:												
All industries.....	577	22,426,125	19,032	7,030,966	14,755,640	26,607,600	386	22,424,968	14,883	5,505,875	11,872,289	20,187,295
Manufactures.....	233	21,782,607	17,801	6,470,408	14,000,259	24,846,043	143	21,809,314	13,800	5,016,006	11,342,938	18,835,592
Hand trades.....	344	643,518	1,231	560,558	755,381	1,761,557	243	615,654	1,083	490,869	529,351	1,351,733
Memphis, Tenn.:												
All industries.....	659	11,189,249	8,433	3,611,435	9,656,969	17,923,059	345	9,357,821	5,497	2,542,264	7,090,190	13,244,538
Manufactures.....	293	10,480,891	7,206	2,971,264	8,638,890	16,460,426	210	8,809,301	4,801	2,175,476	6,455,862	11,905,412
Hand trades.....	366	788,358	1,227	670,171	1,018,079	2,462,633	135	548,520	696	366,788	634,328	1,339,126
Meriden, Conn.:												
All industries.....	260	16,699,004	7,581	3,702,240	5,861,612	13,485,640	288	13,712,146	7,301	3,763,984	4,900,594	11,962,172
Manufactures.....	127	16,249,914	7,001	3,400,985	5,354,614	12,320,126	99	13,177,402	6,487	3,314,275	4,199,278	10,529,428
Hand trades.....	133	449,090	580	301,255	506,998	1,165,514	189	534,744	814	449,709	701,316	1,432,744
Milwaukee, Wis.:												
All industries.....	3,342	110,363,854	48,328	20,240,656	65,118,719	123,786,449	2,879	69,145,814	38,850	16,737,261	55,815,485	97,503,951
Manufactures.....	1,689	106,976,424	42,260	17,534,137	60,059,756	112,743,824	1,437	64,800,263	32,332	13,582,951	49,710,050	85,258,374
Hand trades.....	1,653	3,387,430	6,068	2,706,519	5,058,963	11,042,625	1,442	4,345,551	6,518	8,204,310	6,105,435	12,245,577
Minneapolis, Minn.:												
All industries.....	2,368	57,708,204	26,608	12,708,523	78,175,735	110,943,043	2,723	42,643,764	23,703	11,674,558	54,592,210	82,922,974
Manufactures.....	1,087	54,506,791	19,477	9,182,075	71,106,863	97,053,501	940	37,619,277	14,699	7,178,914	45,099,109	63,924,996
Hand trades.....	1,281	3,201,413	7,131	3,526,448	7,068,872	13,889,542	1,783	5,024,487	9,004	4,500,639	9,493,101	18,997,978
Mobile, Ala.:												
All industries.....	222	3,294,238	2,827	1,189,605	2,046,400	4,451,062	261	2,236,318	2,719	960,270	1,814,403	3,826,399
Manufactures.....	130	2,871,473	2,445	970,563	1,735,947	3,782,202	156	2,068,238	2,236	738,015	1,595,940	3,248,758
Hand trades.....	92	422,765	382	169,042	310,453	668,860	105	168,080	483	212,255	218,523	577,616
Montgomery, Ala.:												
All industries.....	163	2,930,782	2,359	802,188	2,902,054	5,035,190	138	1,684,271	1,689	634,423	1,753,166	3,284,962
Manufactures.....	80	2,737,602	1,761	552,670	2,391,972	4,048,958	78	1,539,231	1,360	453,657	1,434,819	2,594,639
Hand trades.....	83	193,180	598	249,518	510,082	986,232	60	145,040	329	180,766	318,347	640,323
Muncie, Ind.:												
All industries.....	347	7,793,832	6,294	3,067,748	6,630,155	12,106,648						
Manufactures.....	198	7,641,567	5,756	2,781,119	6,059,712	10,824,699						
Hand trades.....	209	152,265	538	286,629	630,443	1,281,949						
Muskegon, Mich.:												
All industries.....	200	4,602,390	3,235	1,185,697	2,631,279	5,097,059	301	9,863,819	3,883	1,608,298	4,795,251	8,278,160
Manufactures.....	91	4,495,977	2,914	1,059,132	2,405,682	4,600,814	140	9,605,259	3,206	1,275,070	4,445,174	7,267,120
Hand trades.....	109	106,413	321	126,565	225,597	496,245	161	258,560	677	333,223	350,077	1,011,040
Nashua, N. H.:												
All industries.....	251	9,587,390	6,442	2,633,398	6,470,716	11,037,076						
Manufactures.....	103	9,354,854	5,865	2,368,752	6,232,620	10,324,704						
Hand trades.....	148	232,536	577	264,646	238,096	712,372						
Nashville, Tenn.:												
All industries.....	489	13,173,422	8,447	2,839,241	10,472,173	18,469,823	420	9,904,295	7,275	3,052,444	7,994,751	14,590,828
Manufactures.....	285	12,508,013	7,242	2,396,519	9,852,775	16,646,399	224	9,640,963	6,503	2,708,454	7,548,257	13,467,763
Hand trades.....	204	675,409	1,205	492,722	1,919,398	1,823,424	196	263,332	767	348,980	446,494	1,123,065
New Albany, Ind.:												
All industries.....	208	2,996,512	2,430	843,580	2,304,138	4,179,490	298	5,342,071	4,165	1,835,341	3,470,492	6,681,924
Manufactures.....	120	2,892,517	2,198	751,992	2,193,588	3,784,012	147	5,168,828	3,713	1,658,053	3,168,990	5,945,013
Hand trades.....	88	103,995	232	91,682	170,550	395,478	151	173,243	452	177,288	301,502	686,911
Newark, N. J.:												
All industries.....	8,339	103,191,403	49,550	23,999,442	67,105,944	126,954,049	2,490	62,552,752	42,719	22,137,534	46,020,536	93,476,652
Manufactures.....	1,845	98,711,070	43,810	20,827,985	61,938,327	115,194,692	1,607	58,890,865	37,189	18,396,174	41,897,143	82,820,300
Hand trades.....	1,494	4,480,333	5,740	3,171,507	5,167,617	11,759,357	883	3,661,887	5,550	3,741,360	4,123,398	10,656,352
New Bedford, Mass.:												
All industries.....	618	29,073,410	16,409	6,730,793	12,727,776	25,681,671	413	20,132,633	10,812	4,378,105	8,581,373	17,025,779
Manufactures.....	240	28,394,891	15,416	6,197,819	11,964,860	23,794,249	191	19,493,550	9,763	3,778,397	7,601,596	14,991,582
Hand trades.....	378	678,519	993	532,974	762,916	1,887,422	222	634,133	1,049	599,708	979,777	2,034,197
New Britain, Conn.:												
All industries.....	226	14,115,610	8,438	3,841,117	5,074,396	12,260,782						
Manufactures.....	107	13,822,339	8,056	3,683,012	4,665,791	11,232,455						
Hand trades.....	119	293,271	382	203,105	408,605	1,028,327						
New Brunswick, N. J.:												
All industries.....	193	6,028,086	3,726	1,256,034	2,929,832	5,812,757						
Manufactures.....	91	5,730,561	3,500	1,143,044	2,748,718	5,397,149						
Hand trades.....	102	247,525	226	112,990	181,114	415,608						
Newburg, N. Y.:												
All industries.....	253	5,214,536	3,926	1,665,177	3,123,590	6,497,083	287	5,778,354	4,096	1,741,476	3,521,078	6,964,287
Manufactures.....	125	4,861,										

URBAN MANUFACTURES.

TABLE XXIV.—MANUFACTURES AND HAND TRADES FOR PRINCIPAL CITIES: 1890 AND 1900—Continued.

CITIES.	Number of establishments.	1900 (209 CITIES).					1890 (164 CITIES).						
		Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).		
			Average number.	Total wages (dollars).				Average number.	Total wages (dollars).				
New Orleans, La.:													
All industries	1,524	46,008,804	19,435	7,646,167	49,961,525	68,514,505	1,901	26,319,277	22,342	8,275,112	28,271,445	48,295,449	
Manufactures	928	44,068,872	16,922	6,485,142	41,539,220	59,334,285	1,180	24,795,344	19,811	7,120,805	20,591,615	43,997,702	
Hand trades	596	1,939,932	2,513	1,160,025	1,822,305	4,180,220	801	1,523,933	2,531	1,154,306	1,679,830	4,297,747	
Newport, Ky.:													
All industries	272	2,848,485	2,561	1,155,861	2,017,773	4,888,169	1,002	3,471,388	3,776	1,092,177	3,072,818	6,687,987	
Manufactures	167	2,658,250	2,224	991,998	1,724,496	4,038,493	547	2,626,742	2,683	745,353	1,977,798	4,262,277	
Hand trades	105	190,185	337	163,863	293,277	849,671	455	844,646	1,093	598,824	1,094,516	2,425,710	
Newton, Mass.:													
All industries	297	5,105,196	3,094	1,581,887	3,065,921	6,322,232	193	4,938,807	2,300	1,168,910	2,175,249	4,335,764	
Manufactures	68	4,829,433	1,832	854,181	1,887,127	3,723,731	70	3,770,359	1,724	745,332	1,729,451	3,163,847	
Hand trades	229	776,763	1,266	727,706	1,178,794	2,598,501	123	623,448	606	423,578	445,798	1,181,917	
New York, N. Y.:													
All industries	39,776	921,876,081	462,768	245,021,881	709,109,412	1,371,358,468	36,811	600,672,366	407,501	231,933,976	527,678,152	1,062,667,094	
Manufactures	22,125	868,936,321	292,684	148,877,877	448,340,578	1,203,106,701	20,635	562,961,653	352,659	195,835,858	484,974,742	940,440,928	
Hand trades	17,651	52,939,760	64,123	42,337,004	60,768,834	108,251,767	16,616	37,710,703	54,932	36,100,118	42,703,410	116,226,166	
Norfolk, Va.:													
All industries	445	6,425,099	4,334	1,671,229	5,283,976	9,397,355	374	3,417,454	2,301	1,016,390	2,542,790	5,100,408	
Manufactures	193	5,978,679	3,272	1,081,819	4,353,447	7,257,635	170	2,959,257	1,794	739,804	2,114,499	4,262,072	
Hand trades	252	446,420	1,062	489,410	930,528	2,139,720	204	458,197	597	276,586	428,291	1,048,336	
Norristown, Pa.:													
All industries	210	4,069,449	3,429	1,168,942	2,467,861	4,821,745							
Manufactures	107	3,865,891	3,127	1,041,818	2,233,851	4,318,643							
Hand trades	103	203,558	802	127,124	284,010	503,102							
North Adams, Mass.:													
All industries	231	14,563,492	6,796	2,949,010	5,410,262	11,682,663							
Manufactures	95	14,238,373	6,868	2,785,975	5,126,097	10,891,673							
Hand trades	136	325,119	428	213,035	284,165	790,990							
Oakland, Cal.:													
All industries	752	6,364,651	4,012	2,129,598	4,277,647	9,174,257	342	6,629,468	3,918	2,568,934	4,087,699	9,112,778	
Manufactures	291	5,645,771	2,999	1,515,479	3,291,771	6,669,962	180	6,033,510	3,137	1,915,692	3,797,085	7,101,255	
Hand trades	461	718,880	1,013	614,119	985,876	2,504,295	162	595,958	781	653,242	890,614	2,011,523	
Omaha, Nebr.:													
All industries	338	34,478,014	7,587	8,804,076	22,211,573	43,108,876	675	18,319,594	8,223	4,863,542	29,260,102	42,339,321	
Manufactures	429	33,640,616	5,871	2,900,387	20,764,278	39,061,897	330	17,010,012	6,443	3,637,885	27,422,816	38,123,748	
Hand trades	409	837,398	1,666	903,709	1,457,295	3,506,979	345	1,309,582	1,780	1,220,207	1,837,286	4,215,578	
Orange, N. J.:													
All industries	284	1,937,457	2,712	1,428,284	2,259,135	4,094,335							
Manufactures	110	1,610,693	1,998	1,053,888	1,794,154	3,490,494							
Hand trades	174	326,764	714	374,396	464,981	1,203,841							
Oshkosh, Wis.:													
All industries	285	8,018,088	4,587	1,762,410	4,742,744	8,781,248	423	6,461,812	4,917	1,718,022	4,668,843	8,620,626	
Manufactures	164	7,850,206	4,217	1,616,046	4,454,224	8,190,739	212	6,080,390	3,920	1,312,615	4,151,975	7,368,568	
Hand trades	121	167,882	370	146,364	288,520	584,509	211	381,432	997	400,407	516,868	1,252,068	
Oswego, N. Y.:													
All industries	207	7,322,907	3,845	1,543,905	4,611,975	8,137,950	249	6,254,200	2,967	1,102,352	4,604,096	7,482,878	
Manufactures	109	7,064,451	3,505	1,400,752	4,366,978	7,600,601	138	5,917,048	2,485	959,393	4,370,041	6,858,692	
Hand trades	98	258,456	340	143,153	244,997	537,349	111	337,152	482	193,019	234,055	623,686	
Passaic, N. J.:													
All industries	185	23,279,421	7,102	2,778,278	7,971,505	14,081,251							
Manufactures	90	23,090,924	6,625	2,506,958	7,631,442	13,169,233							
Hand trades	95	188,497	477	272,320	440,053	862,021							
Paterson, N. J.:													
All industries	995	43,510,481	30,190	12,812,638	26,882,183	52,287,975	599	27,603,549	23,198	10,439,795	22,480,727	42,263,531	
Manufactures	675	42,506,533	23,703	11,904,463	25,312,120	49,033,549	393	26,568,243	21,624	9,466,488	21,281,340	39,594,300	
Hand trades	420	1,003,948	1,487	908,075	1,670,063	3,254,426	206	1,035,301	1,574	978,287	1,199,387	2,669,231	
Pawtucket, R. I.:													
All industries	534	22,399,187	12,776	5,230,268	12,933,104	24,800,328	371	16,693,984	8,919	3,552,599	9,415,651	16,303,739	
Manufactures	231	21,754,489	11,429	4,616,497	11,891,347	21,872,480	179	16,311,254	8,060	3,101,118	8,831,525	14,077,836	
Hand trades	303	644,698	1,347	614,771	1,041,757	2,207,848	192	382,730	859	461,411	584,129	1,326,343	
Peoria, Ill.:													
All industries	371	27,971,618	3,022	3,901,186	14,986,348	48,871,596	556	15,085,802	6,816	3,538,210	9,996,370	55,535,023	
Manufactures	877	26,885,409	6,539	3,016,491	13,814,539	45,246,869	295	13,819,580	5,116	2,631,706	8,738,904	52,692,079	
Hand trades	494	1,086,204	1,683	885,695	1,671,809	3,624,727	261	1,266,232	1,700	866,510	1,207,476	2,842,944	
Petersburg, Va.:													
All industries	225	3,960,987	4,730	1,043,550	3,747,654	6,464,464	271	3,911,240	5,103	1,128,551	4,384,476	7,167,004	
Manufactures	105	3,870,593	4,359	932,265	3,590,450	6,025,056	157	3,795,332	4,742	1,017,970	4,224,441	6,790,896	
Hand trades	120	90,394	371	111,285	157,172	439,408	114	115,908	365	110,581	160,021	867,109	
Philadelphia, Pa.:													
All industries	15,887	476,529,407	246,445	111,847,076	326,877,441	603,466,526	18,166	375,249,175	234,047	113,645,173	311,645,804	577,234,446	
Manufactures	9,211	455,021,029	222,631	98,729,999	305,990,932	540,531,825	10,659	343,375,303	193,198	91,156,969	281,241,558	508,166,636	
Hand trades	6,676	21,508,378	23,814	13,117,077	20,886,509	62,934,701	7,607	31,874,412	36,449	22,149,204	30,404,246	74,067,810	
Pittsburg, Pa.:													
All industries	1,938	193,162,900	69,977	36,684,563	116,893,174	203,261,251	1,420	108,368,838	52,963	29,389,486	69,892,195	126,859,657	
Manufactures	1,119	187,499,177	65,358	34,117,550	112,127,427	191,056,289	1,018	105,349,178	49,814	27,929,316	66,984,162	119,958,884	
Hand trades	819	5,663,723	4,624	2,567,013	4,765,747	12,205,012	402	3,019,660	3,149	1,960,170	2,908,039	6,906,278	
Pittsfield, Mass.:													
All industries	261	6,084,849	3,868	1,627,790	3,016,578	7,135,770							
Manufactures	100	5,621,793	3,259	1,298,883	3,130,572	5,881,086							
Hand trades	161	463,056	604	328,907	480,006	1,254,684							
Portland, Me.:													
All industries	639	6,991,251	5,699	2,612,817	5,565,225	11,440,201	662	6,887,657	5,338	2,4			

STATISTICS OF MANUFACTURES.

TABLE XXIV.—MANUFACTURES AND HAND TRADES FOR PRINCIPAL CITIES: 1890 AND 1900—Continued.

CITIES.	Number of establishments.	1900 (209 CITIES).				1890 (164 CITIES).						
		Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).
			Average number.	Total wages (dollars).					Average number.	Total wages (dollars).		
Quincy, Ill.:												
All industries	421	6,879,846	4,509	1,918,452	4,952,797	9,234,988	394	6,554,810	4,577	1,986,408	5,701,973	10,395,102
Manufactures	229	6,532,148	3,916	1,642,353	4,429,734	8,071,229	280	6,040,304	3,779	1,621,833	5,135,570	9,147,932
Hand trades	192	347,698	593	276,099	523,063	1,163,759	134	514,506	798	364,575	566,403	1,247,170
Quincy, Mass.:												
All industries	339	2,208,197	2,546	1,378,823	1,300,260	3,948,932						
Manufactures	203	1,946,247	2,193	1,167,288	962,432	3,147,295						
Hand trades	136	261,950	353	211,535	337,828	801,637						
Racine, Wis.:												
All industries	252	16,753,215	6,785	2,994,100	6,253,372	12,502,796	190	11,533,207	4,400	2,009,869	4,340,308	8,462,359
Manufactures	169	16,526,091	6,527	2,868,319	6,065,288	12,042,767	124	11,378,002	4,174	1,860,004	4,059,119	7,845,272
Hand trades	83	227,124	258	130,781	188,084	460,029	66	155,205	226	149,865	281,189	617,087
Reading, Pa.:												
All industries	843	27,975,628	19,165	7,544,950	19,089,332	36,902,511	485	14,088,374	12,211	4,780,470	12,009,832	20,855,165
Manufactures	516	27,023,309	17,744	6,930,114	18,076,415	34,491,414	385	13,705,644	11,663	4,575,490	11,795,418	20,262,954
Hand trades	327	952,319	1,421	614,836	1,012,917	2,411,097	100	377,730	548	204,980	213,914	592,211
Richmond, Va.:												
All industries	703	20,846,620	16,692	5,181,659	13,161,697	28,900,616	966	16,785,242	16,891	5,753,863	14,014,214	27,792,672
Manufactures	353	20,153,289	15,347	4,619,946	12,384,163	26,459,414	449	14,869,231	14,382	4,688,193	12,676,735	24,194,083
Hand trades	410	693,331	1,345	561,713	777,534	2,441,202	517	1,915,951	2,509	1,065,670	1,337,479	3,598,589
Roanoke, Va.:												
All industries	120	2,057,754	2,688	1,178,542	3,730,926	5,709,317						
Manufactures	53	2,000,784	2,503	1,131,060	3,634,770	5,496,797						
Hand trades	67	56,970	185	47,482	96,156	212,520						
Rochester, N. Y.:												
All industries	2,616	49,086,212	33,408	13,822,122	32,082,063	69,129,802	1,892	46,801,058	28,962	13,144,957	33,320,898	65,091,156
Manufactures	1,484	46,287,383	29,282	11,946,270	29,037,864	61,538,676	1,085	41,881,109	23,269	9,995,561	27,725,642	53,831,691
Hand trades	1,132	2,798,829	4,126	1,875,852	3,044,199	7,591,144	807	4,919,949	5,693	3,149,396	5,594,856	11,259,465
Rockford, Ill.:												
All industries	450	14,126,834	6,620	2,765,709	6,928,941	12,586,116	246	7,715,069	4,867	2,166,096	4,248,001	8,888,904
Manufactures	228	13,846,453	6,029	2,480,001	6,451,341	11,510,703	148	7,466,774	4,240	1,864,938	3,803,362	7,892,359
Hand trades	222	280,401	591	285,708	477,600	1,075,413	98	248,295	627	301,168	444,039	996,545
Sacramento, Cal.:												
All industries	275	7,369,013	4,365	2,977,764	6,057,887	11,141,896	302	5,654,782	4,186	2,652,869	6,033,817	10,424,582
Manufactures	142	6,968,733	3,769	2,567,945	5,459,923	9,074,893	156	5,279,037	3,501	2,171,877	5,321,877	8,845,139
Hand trades	133	400,280	596	409,819	598,964	1,467,003	146	375,745	685	480,986	711,440	1,579,443
Saginaw, Mich.:												
All industries	480	7,558,806	4,866	1,986,558	5,816,237	10,034,499	385	12,406,823	5,305	2,271,623	6,587,763	11,803,006
Manufactures	271	7,263,501	4,234	1,682,446	5,366,812	9,059,022	202	11,910,723	4,512	1,856,862	6,071,001	10,090,390
Hand trades	209	295,305	632	284,112	449,419	975,477	133	496,100	793	415,041	516,762	1,212,616
St. Joseph, Mo.:												
All industries	440	11,068,825	7,429	3,109,647	25,068,215	31,690,736	276	5,230,697	4,579	1,970,231	7,848,353	11,916,141
Manufactures	255	10,308,670	6,670	2,710,545	24,309,528	30,055,780	180	4,954,959	4,038	1,672,860	7,390,359	10,662,364
Hand trades	185	260,155	759	399,102	758,687	1,634,956	96	275,738	541	297,366	451,994	953,777
St. Louis, Mo.:												
All industries	6,732	162,179,331	82,672	38,191,076	117,861,443	233,629,733	6,148	141,872,386	82,911	41,794,734	122,216,570	229,157,343
Manufactures	3,870	155,368,466	69,691	31,353,580	107,182,170	203,853,902	3,212	128,271,607	67,431	32,614,408	107,407,856	196,808,305
Hand trades	3,362	6,810,865	12,981	6,837,496	10,679,273	29,775,831	2,936	18,600,779	15,480	9,180,326	14,808,715	32,349,038
St. Paul, Minn.:												
All industries	1,591	28,208,389	17,593	7,669,805	19,464,570	38,541,030	1,442	22,501,211	16,279	8,394,550	15,867,573	33,085,078
Manufactures	680	26,335,304	18,676	5,647,094	16,765,442	31,725,236	578	18,865,235	8,345	4,393,165	10,072,526	20,579,996
Hand trades	905	1,873,085	3,917	2,022,711	2,699,128	6,815,794	864	3,635,976	7,934	4,001,855	5,794,823	12,455,077
Salem, Mass.:												
All industries	446	7,450,935	6,424	2,842,678	7,159,987	12,257,449	513	6,250,164	5,127	1,973,966	4,738,643	8,522,751
Manufactures	203	7,057,321	5,704	2,435,983	6,639,908	10,890,617	261	5,809,463	4,247	1,590,065	4,160,410	7,210,355
Hand trades	243	393,614	720	406,695	520,079	1,366,832	252	440,696	880	383,901	578,233	1,312,396
Salt Lake City, Utah:												
All industries	432	4,048,906	2,977	1,601,253	2,743,674	6,109,409	175	3,354,035	1,986	1,205,454	1,966,818	4,624,419
Manufactures	204	3,550,966	2,291	1,248,437	2,171,577	4,691,316	115	3,045,781	1,625	964,194	1,653,136	3,770,318
Hand trades	228	497,910	686	352,816	572,097	1,418,093	60	308,254	361	241,260	313,682	854,101
San Antonio, Tex.:												
All industries	312	4,252,197	3,073	1,755,008	3,284,524	6,821,797	309	3,004,425	2,022	1,216,936	2,387,984	5,623,612
Manufactures	154	4,049,541	2,745	1,586,290	3,138,013	6,339,339	156	2,623,399	1,369	1,509,452	2,505,078	3,851,577
Hand trades	158	202,656	328	168,718	276,469	683,784	153	381,036	663	391,858	878,532	1,772,035
San Francisco, Cal.:												
All industries	4,002	80,103,367	41,978	22,037,527	79,492,952	133,069,416	4,059	74,834,301	41,764	24,591,116	78,656,470	135,625,754
Manufactures	2,211	76,858,870	39,116	18,754,402	74,300,360	120,078,557	2,502	70,867,594	35,347	20,139,295	72,414,543	119,793,862
Hand trades	1,791	3,244,637	5,862	3,283,125	5,192,592	12,990,859	1,557	3,966,707	6,417	4,451,821	6,241,927	15,831,892
San Jose, Cal.:												
All industries	349	3,534,136	1,802	853,048	2,447,365	4,584,072						
Manufactures	173	3,304,933	1,390	644,575	2,049,236	3,695,319						
Hand trades	176	229,203	412	208,473	398,129	888,753						
Savannah, Ga.:												
All industries	185	5,716,491	2,870	1,176,150	3,915,884	6,461,816	244	5,379,774	2,419	1,050,348	3,297,804	6,819,066
Manufactures	98	5,582,466	2,636	1,064,782	3,763,093	6,077,688	138	5,200,712	1,975	832,726	3,077,986	5,669,655
Hand trades	57	134,025	234	111,368	152,791	384,128	106	179,062	444	226,622	219,868	649,411
Schenectady, N. Y.:												
All industries	358	6,517,864	4,431	2,527,362	4,953,662	9,288,387						
Manufactures	129	6,086,339	3,523	2,001,189	4,162,371	7,504,764						
Hand trades	259	431,525	908	526,163	791,291	1,783,623						
Scranton, Pa.:												
All industries	710	19,954,325	12,669	5,191,522	18,411,022	27,646,418	177	16,287,271	8,825	3,928,834	16,922,753	24,341,745
Manufactures	301	19,048,961	11,118	4,455,366	17,490,856	25,147,439	128	15,842,857	8,445	3,733,922	16,531,168	23,640,042
Hand trades	409	910,364	1,551	736,156	920,166	2,498,979	49	394,414	380			

URBAN MANUFACTURES.

TABLE XXIV.—MANUFACTURES AND HAND TRADES FOR PRINCIPAL CITIES: 1890 AND 1900—Continued.

CITIES.	1900 (209 CITIES).					1890 (164 CITIES).						
	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).
			Average number.	Total wages (dollars).					Average number.	Total wages (dollars).		
Somerville, Mass.:												
All industries	378	10,181,596	4,842	2,199,491	17,846,772	21,776,511	404	3,883,859	2,789	1,357,037	4,420,128	7,807,522
Manufactures	115	9,707,208	3,676	1,895,759	16,820,245	20,335,998	105	3,440,478	1,649	676,886	3,411,941	5,125,628
Hand trades	263	424,388	666	303,732	626,527	1,440,513	299	443,381	1,140	680,151	1,008,187	2,181,894
South Bend, Ind.:												
All industries	802	18,156,638	8,257	3,409,637	7,510,806	14,236,331	208	11,252,887	5,750	2,504,562	4,607,716	9,812,513
Manufactures	174	17,893,186	7,769	3,177,304	7,005,806	13,250,301	133	11,023,957	5,388	2,265,042	4,373,756	9,265,678
Hand trades	128	263,452	488	232,333	505,000	986,030	75	228,930	362	218,520	233,960	546,835
South Omaha, Nebr.:												
All industries	139	16,471,329	6,606	3,268,591	61,277,486	70,080,941						
Manufactures	55	16,401,116	6,347	3,125,928	61,031,883	69,554,354						
Hand trades	83	70,213	259	142,663	245,603	626,587						
Spokane, Wash.:												
All industries	213	2,678,823	1,779	1,080,618	2,854,468	5,427,540						
Manufactures	107	2,385,749	1,294	775,634	2,281,329	4,235,639						
Hand trades	106	293,074	485	304,984	573,139	1,191,901						
Springfield, Ill.:												
All industries	320	5,030,438	3,871	1,730,891	3,290,207	6,612,286	374	3,641,415	2,853	1,390,307	3,790,754	6,562,470
Manufactures	148	4,678,355	3,127	1,361,492	2,613,927	5,118,249	138	2,988,473	1,955	908,369	3,008,104	4,907,569
Hand trades	172	352,083	744	369,399	676,280	1,494,037	236	652,942	898	481,938	782,650	1,654,901
Springfield, Mass.:												
All industries	817	17,105,947	10,123	5,176,299	9,194,841	21,207,039	692	13,199,282	9,159	4,843,636	7,817,534	17,040,692
Manufactures	154	16,768,790	8,124	3,999,984	7,809,860	16,645,353	318	12,351,550	7,538	3,836,163	6,278,114	13,800,057
Hand trades	463	1,337,157	1,999	1,176,315	1,384,981	4,561,686	374	847,733	1,621	1,007,473	1,539,420	3,234,635
Springfield, Mo.:												
All industries	245	2,111,048	2,127	1,017,845	2,274,705	4,126,871	277	1,454,613	1,296	584,353	1,657,877	3,062,095
Manufactures	117	1,984,679	1,775	876,302	2,044,017	3,556,480	100	1,175,802	690	270,656	1,093,580	1,802,584
Hand trades	128	126,369	352	141,543	230,688	570,391	177	278,811	636	313,697	564,297	1,259,511
Springfield, Ohio:												
All industries	305	14,091,175	6,638	3,160,119	5,569,261	12,777,173	372	14,567,931	6,101	2,662,672	4,752,062	10,760,965
Manufactures	195	13,906,039	6,341	3,033,627	5,338,093	12,233,791	194	14,336,466	5,626	2,464,318	4,451,152	10,067,844
Hand trades	110	185,136	297	126,492	231,168	543,382	178	231,465	475	198,364	300,910	693,121
Superior, Wis.:												
All industries	185	5,882,562	1,958	925,776	5,896,730	7,527,703						
Manufactures	95	5,705,636	1,697	766,792	5,084,014	6,861,954						
Hand trades	90	176,926	261	158,984	812,716	665,749						
Syracuse, N. Y.:												
All industries	1,833	31,858,055	14,917	6,735,177	14,771,128	31,948,055	1,246	22,853,424	15,670	6,733,010	14,104,504	29,297,241
Manufactures	790	29,921,654	12,514	6,609,830	13,141,920	27,870,961	761	21,234,841	12,691	5,272,638	12,093,813	24,611,675
Hand trades	593	1,436,401	2,403	1,125,347	1,629,208	4,077,094	485	1,618,583	2,679	1,460,372	2,010,691	4,685,566
Tacoma, Wash.:												
All industries	381	8,146,691	4,347	2,356,028	7,389,166	12,029,497	225	7,227,201	3,658	2,723,235	5,171,658	10,482,055
Manufactures	206	7,985,415	3,564	1,928,153	6,786,617	10,675,153	131	6,840,235	2,840	1,972,371	4,075,813	8,061,042
Hand trades	175	287,276	783	427,875	602,549	1,354,339	94	386,966	818	750,864	1,095,845	2,368,613
Taunton, Mass.:												
All industries	284	11,737,899	7,102	3,331,680	5,993,237	12,594,814	316	7,891,382	6,148	2,837,194	4,799,287	9,936,829
Manufactures	145	11,490,174	6,702	3,117,191	5,659,372	11,827,550	158	7,623,658	5,653	2,530,539	4,896,539	9,067,806
Hand trades	139	241,225	400	214,489	333,865	767,264	158	267,724	495	248,188	412,748	869,023
Terre Haute, Ind.:												
All industries	429	8,938,107	5,427	2,298,585	8,029,285	27,784,619	367	4,965,184	4,720	1,789,442	6,785,616	18,720,529
Manufactures	197	8,531,647	4,784	1,999,623	7,485,808	20,568,941	200	4,729,480	4,078	1,632,905	6,208,369	12,560,805
Hand trades	232	406,460	643	298,962	543,477	1,215,678	167	235,704	647	286,447	577,247	1,159,724
Toledo, Ohio:												
All industries	1,050	25,591,916	15,383	6,845,687	21,986,708	37,372,355	734	12,700,372	9,247	4,838,322	12,189,924	21,651,574
Manufactures	562	24,367,134	13,506	6,955,471	20,130,396	33,548,350	365	12,056,527	8,025	3,742,845	11,179,647	19,416,169
Hand trades	488	1,224,782	1,877	890,216	1,856,402	3,824,005	369	643,846	1,222	590,477	1,010,877	2,235,415
Topeka, Kans.:												
All industries	399	3,891,530	3,758	2,110,721	6,023,934	9,977,605	371	3,282,899	3,044	1,579,353	3,670,106	6,752,449
Manufactures	204	3,629,540	3,031	1,783,015	5,444,433	8,308,015	167	3,033,197	2,071	1,140,133	3,001,152	5,369,654
Hand trades	195	261,990	727	327,706	579,491	1,269,590	204	249,702	978	439,220	668,954	1,382,795
Trenton, N. J.:												
All industries	570	26,174,895	14,457	6,791,026	18,057,504	31,645,695	855	19,278,041	13,763	6,834,404	12,625,400	25,023,223
Manufactures	818	25,710,188	13,678	6,337,776	17,335,334	30,126,605	386	17,265,635	11,482	5,531,209	9,902,037	20,184,983
Hand trades	252	464,707	779	453,250	722,170	1,519,090	469	2,012,406	2,281	1,303,195	2,723,363	5,443,240
Troy, N. Y.:												
All industries	662	23,531,622	21,564	8,571,923	11,291,740	28,209,259	840	24,030,753	23,901	8,291,580	13,150,156	29,248,750
Manufactures	332	22,637,842	20,364	7,935,485	10,189,309	25,690,901	407	22,816,145	22,344	7,478,051	12,100,289	26,514,353
Hand trades	330	893,780	1,200	636,438	1,102,431	2,518,358	433	1,214,608	1,557	813,529	1,049,867	2,734,397
Utica, N. Y.:												
All industries	733	19,289,502	10,750	4,148,415	9,405,370	19,550,850	565	14,382,510	11,627	3,418,614	7,790,767	15,615,715
Manufactures	401	18,450,570	9,506	3,533,024	8,517,639	17,363,617	281	13,380,170	10,574	2,896,636	7,012,088	18,774,919
Hand trades	332	838,932	1,253	615,391	887,731	2,187,233	284	952,340	1,053	521,978	778,680	1,840,796
Waco, Tex.:												
All industries	166	2,096,741	1,227	469,129	1,477,642	2,693,907						
Manufactures	96	1,986,620	1,076	393,869	1,353,456	2,390,576						
Hand trades	70	110,121	151	69,260	124,186	303,331						
Waltham, Mass.:												
All industries	275	9,152,169	5,392	2,630,929	2,317,792	6,934,381						
Manufactures	101	8,852,873	4,921	2,403,447	1,926,703	6,018,580						
Hand trades	174	299,296	471	227,482	391,089	915,801						
Warwick, R. I.:												
All industries	104	8,418,333	5,544	1,858,462	2,622,789	6,197,506						
Manufactures	40	8,346,432	5,478	1,830,558	2,456,381	6,049,609						
Hand trades	64	71,901	66	27,904	66,408	147,897						
Washington, D. C.:												
All industries	2,669	24,329,135	16,297	8,286,337	16,638,467	37,780,267	2,295	28,865,089	20,406	12,264,142	17,194,667	39,331,437
Manufactures	986	20,736,288	8,714	4,195,348	9,838,930	21,749,508	1,022	24,737,299	13,532	8,151,551	11,102,311	25,963,323
Hand trades	1,683	3,592,847	7,583	4,090,989	6,804,537	16,030,759	1,273	4,127,790	6,874	4,102,591	6,091,356	13,367,609
Waterbury, Conn.:												
All industries	404	23,421,640	14,914	7,564,198	19,821,401	33,778,905	219	17,682,500	9,840	4,934,868	8,715,921	17,712,329
Manufactures	133	22,378,069	13,631	6,873,891	18,587,804	31,101,000	128	17,083,259	8,995	4,443,031	7,981,242	16,108,549
Hand trades	221											

STATISTICS OF MANUFACTURES.

TABLE XXIV.—MANUFACTURES AND HAND TRADES FOR PRINCIPAL CITIES: 1890 AND 1900—Continued.

CITIES.	1900 (209 CITIES).					1890 (164 CITIES).						
	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).	Number of establishments.	Capital (dollars).	Wage-earners.		Cost of materials used (dollars).	Value of products (dollars).
			Average number.	Total wages (dollars).					Average number.	Total wages (dollars).		
West Hoboken, N. J.:												
All industries.....	177	4,042,373	3,025	1,248,244	2,829,789	5,491,760						
Manufactures.....	80	3,768,968	2,762	1,067,876	2,554,600	4,821,749						
Hand trades.....	97	273,405	276	180,368	275,189	670,011						
Wheeling, W. Va.:												
All industries.....	406	13,224,577	7,219	3,096,730	9,076,978	16,747,544	418	8,494,630	6,107	2,471,162	7,381,040	13,022,589
Manufactures.....	215	12,370,041	6,271	2,714,903	8,472,400	15,238,969	226	8,032,487	5,474	2,226,563	6,880,998	11,851,712
Hand trades.....	191	854,536	948	381,827	604,578	1,508,575	192	462,143	633	244,599	550,042	1,170,877
Wichita, Kans.:												
All industries.....	328	2,108,524	1,505	639,271	3,060,661	4,724,068	144	3,062,696	1,445	673,994	3,380,478	5,074,913
Manufactures.....	165	1,786,322	995	441,292	2,564,772	3,703,293	105	2,987,161	1,381	618,842	3,312,592	4,879,983
Hand trades.....	163	322,202	510	197,979	495,889	1,020,775	39	75,545	114	65,162	67,886	197,930
Wilkesbarre, Pa.:												
All industries.....	488	10,501,537	5,977	2,286,676	5,167,777	10,758,348	270	5,598,189	4,141	1,808,226	4,026,579	7,746,371
Manufactures.....	185	9,849,232	4,879	1,799,635	4,477,442	8,923,739	153	5,183,877	3,241	1,344,482	3,865,969	6,173,020
Hand trades.....	253	652,305	1,098	487,041	690,335	1,834,609	117	414,263	900	463,744	600,010	1,573,351
Williamsport, Pa.:												
All industries.....	396	9,863,811	5,595	2,065,930	6,420,337	11,199,600	302	12,335,423	5,653	2,271,581	5,919,284	11,107,937
Manufactures.....	206	9,514,205	5,037	1,864,221	6,078,066	10,423,264	195	11,981,416	5,102	2,015,864	5,582,536	10,254,821
Hand trades.....	190	349,606	558	201,709	342,271	776,336	107	354,007	551	255,607	336,748	852,116
Wilmington, Del.:												
All industries.....	759	28,372,043	16,055	7,439,210	19,451,815	34,053,324	590	20,585,646	13,370	6,707,867	13,050,162	24,568,125
Manufactures.....	374	27,212,363	14,887	6,873,307	18,290,618	31,434,836	317	19,763,506	12,204	6,100,264	12,297,685	22,640,400
Hand trades.....	385	1,159,680	1,168	565,903	1,161,197	2,618,488	273	822,140	1,106	511,603	752,477	1,927,725
Wilmington, N. C.:												
All industries.....	131	2,968,199	1,850	568,250	1,734,054	2,960,028	121	1,762,667	1,358	460,608	1,014,384	1,904,147
Manufactures.....	71	2,927,414	1,640	496,362	1,650,790	2,586,781	71	1,721,894	1,249	427,312	957,787	1,768,691
Hand trades.....	60	40,785	210	71,888	183,264	373,247	50	30,773	109	33,296	50,597	140,456
Woonsocket, R. I.:												
All industries.....	242	14,279,361	8,093	3,080,280	7,563,204	15,627,539	201	10,096,619	6,190	2,141,229	5,532,286	9,613,264
Manufactures.....	127	14,003,811	7,638	2,876,299	7,226,144	14,877,697	93	9,931,111	5,691	1,895,074	5,182,920	8,877,489
Hand trades.....	115	275,550	455	203,981	337,060	749,842	108	165,508	499	246,155	349,306	735,775
Worcester, Mass.:												
All industries.....	1,071	42,966,743	25,593	12,894,784	26,666,176	53,348,783	996	25,230,020	20,244	10,120,414	21,208,904	39,563,860
Manufactures.....	563	41,622,535	23,001	11,486,631	24,382,239	48,382,825	523	23,828,495	17,611	8,548,671	18,869,419	34,051,071
Hand trades.....	503	1,344,208	2,592	1,408,153	2,283,937	5,015,958	467	1,402,125	2,633	1,571,843	2,340,485	4,882,789
Yonkers, N. Y.:												
All industries.....	387	13,097,205	8,615	3,888,892	10,555,218	19,580,824	628	10,989,789	10,448	5,073,977	10,995,699	21,819,017
Manufactures.....	161	12,438,737	7,727	3,350,872	9,693,949	17,669,759	229	8,072,828	7,737	3,203,059	8,965,117	16,250,183
Hand trades.....	226	658,468	888	538,020	861,278	1,910,565	399	2,916,961	2,708	1,810,918	2,030,582	5,062,834
York, Pa.:												
All industries.....	464	9,640,784	7,785	2,679,175	6,078,070	11,961,706	350	3,842,453	3,060	1,320,418	3,170,840	5,968,223
Manufactures.....	295	9,108,561	7,133	2,439,526	5,644,941	10,960,494	220	3,562,628	3,197	1,185,177	2,801,789	5,261,181
Hand trades.....	169	532,223	652	239,649	433,129	995,212	130	279,825	472	135,211	369,051	707,042
Youngstown, Ohio:												
All industries.....	260	23,360,097	9,150	4,951,460	23,541,769	34,801,101	245	7,542,742	5,486	3,295,052	9,890,929	14,667,260
Manufactures.....	145	22,148,409	8,795	4,785,808	23,279,771	34,188,222	111	7,310,720	5,009	3,076,159	9,109,195	13,904,654
Hand trades.....	115	211,688	355	165,652	261,998	612,879	134	232,022	477	220,793	271,734	672,706
Zanesville, Ohio:												
All industries.....	293	5,162,067	4,603	1,786,005	3,756,489	7,468,839	301	4,200,409	3,388	1,325,590	3,331,626	6,053,484
Manufactures.....	160	4,889,424	4,026	1,527,955	3,369,349	6,537,948	181	3,972,936	2,872	1,125,741	2,950,044	5,308,373
Hand trades.....	133	268,643	577	258,050	387,140	930,891	120	227,473	516	199,849	376,582	745,106

III.

DEVELOPMENT OF INDUSTRIAL CENTERS.

1. *Suburban Establishments.*—The growth of population and manufactures in the counties in which the 100 principal cities are located may be accepted as indicating the extent of the concentration in the principal centers of industry. The adoption of the limits of the county rather than the corporate limits of the city as the line of demarcation obviates, in a majority of instances, the objection to limiting the territory of the industrial unit to the boundaries of the small political unit, the city. The establishment of manufactures in the suburbs of the principal cities has tended to enlarge each of these industrial cities far beyond its corporate limits. Manufacturing plants situated just outside such limits are usually owned and operated by residents of the city, and their labor is usually drawn from the population of the city, which also furnishes a ready market or distributing point for the products. They are therefore

a factor in the industrial prosperity or depression of the city, and their statistics should be included in a discussion of urban manufactures. As a rule, the establishments situated in a county which contains a city of any magnitude are identified with the city. Moreover, the adoption of the county as the unit of measure permits the tracing of the growth of manufactures in cities from 1860 to 1900, whereas if only establishments located within the corporate limits of the cities were to be considered, comparison of the statistics would necessarily be limited to the censuses from 1880 to 1900, inclusive, since the census of 1880 was the first at which the totals for cities were published separately.

Table xxv shows the increase in the manufactures and population of the 100 counties in which the principal cities were located, the increase for the United States, and for the United States exclusive of these counties, as well as the per cent of the totals for these counties to the totals for the United States at each census from 1860 to 1900, inclusive.

URBAN MANUFACTURES.

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TABLE XXV.—100 PRINCIPAL COUNTIES: COMPARATIVE SUMMARY, 1860 TO 1900.

	Year.	United States.	100 counties.	United States exclusive of 100 counties.	PER CENT OF INCREASE.			Per cent of 100 counties to total for United States.
					United States.	100 counties.	United States exclusive of 100 counties.	
Number of establishments.....	1900	512,276	222,661	289,615	44.1	12.7	83.6	43.5
	1890	355,405	197,629	157,776	40.0	102.8	1.0	55.6
	1880	253,852	97,670	156,182	0.7	19.8	28.5	38.5
	1870	252,148	81,535	170,613	79.6	70.1	84.4	32.3
	1860	140,433	47,930	92,503				34.1
Capital.....	1900	\$9,831,486,500	\$6,057,636,400	\$3,773,850,100	50.7	43.7	63.3	61.6
	1890	\$6,525,050,759	\$4,214,105,971	\$2,310,944,788	133.9	145.7	115.0	64.6
	1880	\$2,790,272,606	\$1,716,376,039	\$1,074,896,517	31.7	48.9	11.3	61.5
	1870	\$2,118,208,769	\$1,152,069,998	\$906,138,771	109.8	108.0	111.9	54.4
	1860	\$1,009,855,715	\$553,934,255	\$465,871,460				54.9
Wage-earners, average number.....	1900	5,314,539	3,176,462	2,138,077	25.0	16.6	39.9	59.8
	1890	4,251,585	2,723,068	1,527,867	55.6	54.3	57.9	64.1
	1880	2,732,595	1,764,768	967,827	33.0	53.3	7.2	64.6
	1870	2,053,996	1,151,558	902,438	56.6	54.5	59.5	56.1
	1860	1,311,246	745,419	565,827				56.8
Total wages.....	1900	\$2,327,295,545	\$1,473,217,008	\$854,077,937	23.1	11.4	50.2	63.3
	1890	\$1,891,209,096	\$1,322,688,212	\$668,521,484	99.5	91.8	120.1	69.9
	1880	\$947,953,795	\$689,612,347	\$258,341,448	22.2	36.3	4.2	72.7
	1870	\$775,584,343	\$505,956,469	\$269,617,874	104.7	137.8	62.3	65.2
	1860	\$373,878,966	\$212,800,648	\$166,078,318				50.2
Cost of materials used.....	1900	\$7,346,358,979	\$4,522,351,727	\$2,824,610,252	42.3	30.0	67.8	61.6
	1890	\$5,162,018,378	\$3,478,335,209	\$1,683,078,669	52.0	54.5	46.9	67.4
	1880	\$3,396,823,549	\$2,250,848,292	\$1,145,975,257	36.5	47.6	18.9	66.3
	1870	\$2,488,427,242	\$1,524,917,953	\$963,509,239	141.2	152.1	125.8	61.3
	1860	\$1,031,605,092	\$604,939,134	\$426,615,958				58.6
Value of products, including custom work and repairing.....	1900	\$13,010,036,514	\$8,196,331,427	\$4,813,705,087	38.8	28.1	61.9	63.0
	1890	\$9,372,378,843	\$6,399,356,466	\$2,973,022,377	74.5	78.8	66.0	68.3
	1880	\$5,369,679,191	\$3,578,959,287	\$1,790,619,904	26.9	36.2	11.5	65.7
	1870	\$4,232,325,442	\$2,627,043,960	\$1,605,281,482	124.4	137.2	106.2	62.1
	1860	\$1,885,861,676	\$1,107,437,357	\$778,424,319				58.7
Total population.....	1900	76,045,794	22,642,604	53,403,190	20.3	28.7	17.7	29.8
	1890	62,948,714	17,598,818	45,354,901	25.5	85.6	22.0	27.9
	1880	50,155,788	12,973,663	37,182,120	30.1	33.1	29.1	25.9
	1870	38,558,371	9,749,098	28,809,273	22.6	30.6	20.2	25.3
	1860	31,443,321	7,468,473	23,974,848				23.8

¹ Exclusive of Alaska and Hawaii, but including 85 Governmental establishments in Washington, D. C.

² Decrease.

The comparisons and percentages of increase shown in the above table should be considered in connection with the remarks relative to comparisons on page lxi. Making due allowance for changes in the form of the inquiry, for the more thorough enumeration at the later censuses, and for the inclusion of industries omitted at former censuses, the table may be taken as indicating the relative importance of urban and rural manufactures, respectively, at the different censuses. The percentage of urban manufactures increased until 1890, when the number of establishments formed 55.6 per cent, the wages 69.9 per cent, and the value of products 68.3 per cent of the totals for the United States. There has apparently been a wider distribution of manufactures since 1890, for in 1900 the number of establishments in these counties had decreased to 43.5 per cent, the wages to 63.3 per cent, and the value of products to 63 per cent of the total for the country. The proportion of the population of the 100 counties to the total for the United States has increased steadily during each decade since 1860. The total increase in the proportion of manufactures since 1860 in these counties has been in excess of the increase in the proportion of their population, but has not occurred with the same uniformity. The percentage of increase in the manufactures of the 100

counties has been greater, as a rule, than that of the United States or of the country outside of the 100 counties, except during the last decade, when it was less for all totals.

Although the increase in population is not subject to the varying factors which affect manufactures, nevertheless the percentage of increase in the population for the 100 counties and for the country outside of these counties has not been uniform, and this lack of uniformity has some bearing upon a similar lack in the percentages of increase for manufactures. But the fact that the proportion of the manufactures in the 100 counties has not increased with the same regularity as the proportion of population does not indicate that the statistics afford an unreliable basis for computing the proportion which the manufactures in the 100 counties bear to the total.

The totals show that there has been an increase at each census period in all of the items for each of the 3 divisions (the United States, the 100 counties, and the United States outside of the 100 counties), with the single exception of the number of establishments and the total wages reported for 1880 for the country outside of the 100 counties. This division showed for the decade an actual decrease of 8.5 per cent in the number of

establishments and 4.2 per cent in total wages. In the 100 counties the number of establishments increased 19.8 per cent, which more than counterbalanced the decrease outside of these counties and resulted in a slight gain for the entire country. The decrease in the total wages outside of the 100 counties was also more than overcome by the increase in the same item in the 100 counties.

The percentage of increase in each of the items shown for the United States outside of the 100 counties for the decade ending with 1880 was very much less than the percentage for the 100 counties, indicating a strong probability that the canvass of the general enumerators in the rural districts at that census was not as thorough as that of the special agents in the cities. On the other hand, the more thorough canvass of the rural districts at the census of 1900 resulted in securing reports from a larger number of the smaller establishments, such as cotton gins, and lumber and grist mills. This has caused a large increase, 83.6 per cent, in the number of establishments for the United States outside of the 100 counties, unaccompanied, however, by a corresponding

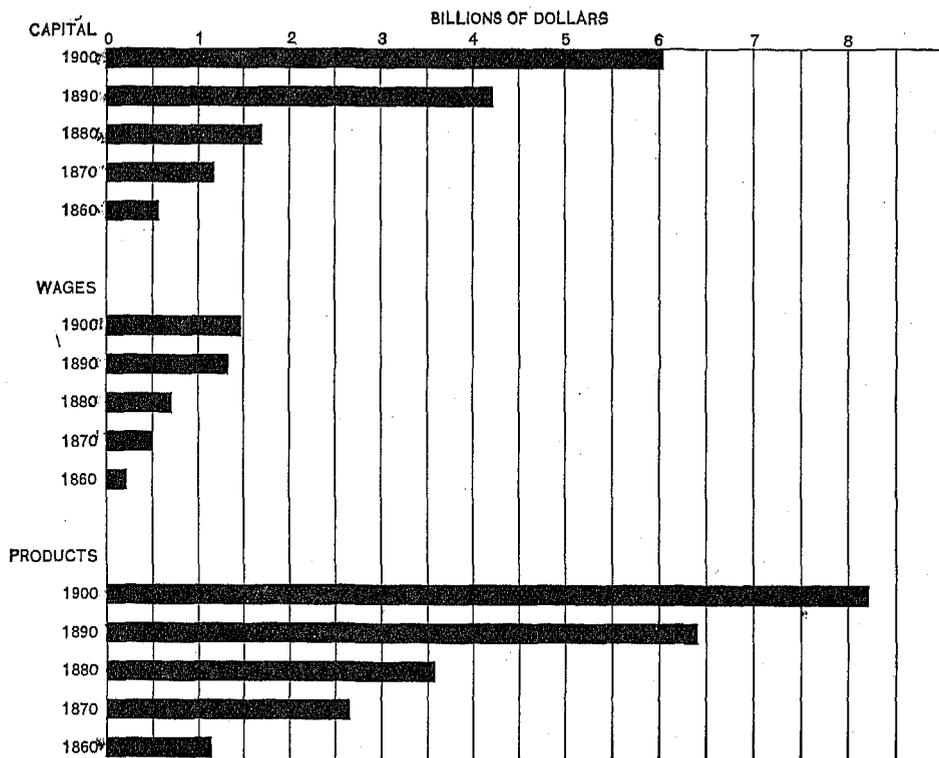
increase in the capital, wage-earners, wages, or value of products, since the manufacturing done by these additional establishments was comparatively small.

The large percentage of increase for values in 1870 is due in great part to the fact that the values reported for that census were in a currency that was at a great discount in gold. In order to make a true comparison possible, they should be reduced to a gold basis, in the manner described on page cxxxviii.

The decrease of 4.2 per cent in wages for the decade ending with 1880 in the United States outside of the 100 counties was followed by an increase of 120.1 per cent during the decade ending with 1890. While the percentages show exceptions to the general rule, the table may be accepted as indicating the general tendency toward concentration of manufactures in the principal producing centers, up to and including 1890; but since that date there has been a decrease in the proportion of manufactures in these centers.

The following diagram shows the relative growth in capital, wages, and products for the 100 counties from 1860 to 1900:

CAPITAL, WAGES AND PRODUCTS: FOR COUNTIES IN WHICH ONE HUNDRED PRINCIPAL CITIES ARE LOCATED, 1860 TO 1900.



The gross value of products reported for a large number of establishments may increase or decrease materially without affecting the average number of wage-earners on account of the varying proportions of the total costs which wages may form. It appears, however, from the above table that the decrease in the proportion of the value of the products in the 100 counties during the decade ending with 1900 has been accompanied by a decrease not only in the average number of wage-earners, but in all other particulars.

This decrease in the proportion of value of products is therefore in keeping with the tendency toward a wider distribution of manufacturing industries during the last decade.

The proportion which the number of wage-earners bears to the total population is possibly a better indication of the concentration of manufactures than is a similar comparison of the number of establishments, capital, or value of products. The number of wage-earners reported in the statistics of manufactures for

1900 is the average number continuously employed during the entire year. Although this average is not an ideal unit of comparison for determining the proportion of the employed to the total population, nevertheless the proportion does indicate to some extent the dependence of the different localities upon their manufactures. Table xxvi shows the proportion of the wage-earners to the total population in the United States as a whole, in the 100 counties, and in the United States, exclusive of the 100 counties, at each census from 1860 to 1900, inclusive.

TABLE XXVI.—100 principal counties: Percentage of wage-earners to population: 1860 to 1900.

YEAR.	PER CENT OF TOTAL POPULATION.		
	United States.	100 counties.	United States, exclusive of 100 counties.
1900	7.0	14.0	4.0
1890	6.8	15.5	3.4
1880	5.4	13.6	2.6
1870	5.3	11.8	3.1
1860	4.2	10.0	2.4

The percentage of the total population reported as wage-earners has, with two minor exceptions, increased steadily since 1860 in each of the 3 divisions shown in the above table, but the proportion in the 100 counties has been from three to five times as great as in the United States exclusive of these counties, and about twice as great as in the total for the United States.

In a country so vast as the United States, with such extensive and important rural districts, including agricultural and mining interests, the proportion which the industries of the principal centers bear to the totals for the entire country does not indicate adequately the importance of these centers compared with the different districts in which they are located. In order to make a more careful analysis of these centers it is therefore necessary to narrow the limits of the territory assigned to each.

Accepting the states east and west of the Mississippi River, respectively, as representing the different conditions to be considered, tables xxvii and xxviii show the totals for the manufactures of the 2 divisions and the ratio which the principal industrial counties in each group bore to the totals for that group from 1860 to 1900.

TABLE XXVII.—83 PRINCIPAL COUNTIES EAST OF THE MISSISSIPPI RIVER, COMPARED WITH STATES EAST OF THE MISSISSIPPI RIVER: 1860 TO 1900.

	Year.	Number of establishments.	Capital.	AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES.		Cost of materials used.	Value of products, including custom work and repairing.	Population.
				Average number.	Total wages.			
States east of the Mississippi River ...	1900	401,246	\$8,486,221,170	4,664,241	\$2,022,762,481	\$6,040,288,735	\$10,909,346,630	55,074,732
	1890	294,041	5,680,782,395	3,743,242	1,647,915,501	4,359,212,419	8,004,601,396	46,486,539
	1880	215,364	2,530,538,852	2,531,637	862,726,443	3,021,032,118	4,802,481,504	38,896,423
	1870	216,867	1,911,206,980	1,864,966	703,401,427	2,244,393,615	3,795,093,425	31,681,302
	1860	122,020	939,966,073	1,214,411	332,853,253	954,377,220	1,721,939,353	26,900,845
83 counties in these states.....	1900	197,281	5,485,556,332	2,899,897	1,340,316,755	3,967,141,014	7,283,030,400	19,819,948
	1890	175,070	3,785,856,721	2,465,168	1,189,193,112	3,046,075,972	5,651,796,704	15,237,033
	1880	87,052	1,683,028,746	1,651,248	637,587,982	2,046,280,429	3,203,589,758	11,509,305
	1870	71,951	1,046,812,015	1,074,919	463,344,156	1,392,820,372	2,893,266,348	8,079,244
	1860	44,417	531,196,760	722,346	202,167,529	664,185,006	1,040,869,216	6,334,760
Per cent which 83 counties form of states east of the Mississippi River.	1900	49.2	64.0	62.2	66.3	65.7	66.8	36.0
	1890	59.5	66.5	65.9	72.2	69.9	70.6	32.9
	1880	40.4	62.0	65.2	73.9	67.7	68.0	29.6
	1870	33.3	54.8	67.0	65.9	62.1	62.8	27.4
	1860	36.4	56.5	59.5	60.7	59.1	60.4	25.4

TABLE XXVIII.—17 PRINCIPAL COUNTIES WEST OF THE MISSISSIPPI RIVER, COMPARED WITH STATES WEST OF THE MISSISSIPPI RIVER: 1860 TO 1900.

	Year.	Number of establishments.	Capital.	AVERAGE NUMBER OF WAGE-EARNERS AND TOTAL WAGES.		Cost of materials used.	Value of products, including custom work and repairing.	Population.
				Average number.	Total wages.			
States west of the Mississippi River...	1900	111,030	\$1,945,265,330	650,289	\$304,533,064	\$1,306,673,244	\$2,100,630,884	20,971,085
	1890	61,364	835,203,364	508,293	243,294,195	802,501,650	1,867,777,447	16,402,170
	1880	38,438	259,733,754	200,968	85,227,352	375,791,431	567,097,637	11,259,399
	1870	85,751	207,001,789	189,030	72,182,916	244,033,627	437,232,017	6,877,066
	1860	13,413	69,839,642	96,335	46,025,713	77,227,372	163,922,323	4,634,472
17 counties in these states	1900	25,330	572,080,068	276,565	132,900,853	555,210,713	913,292,021	2,822,656
	1890	22,559	423,249,250	258,500	133,495,100	482,259,337	747,559,762	2,306,780
	1880	10,613	132,347,344	113,520	52,024,365	204,567,338	315,869,499	1,494,355
	1870	9,534	105,257,939	76,639	42,622,313	132,091,531	243,777,612	1,069,854
	1860	3,533	22,737,495	23,073	10,638,119	40,304,128	67,043,141	633,713
Per cent which 17 counties form of states west of the Mississippi River.	1900	22.9	42.5	42.5	43.6	42.5	43.5	13.5
	1890	36.8	51.3	50.9	54.9	53.3	54.7	14.0
	1880	27.6	51.0	50.3	61.0	54.4	55.6	13.0
	1870	26.8	50.8	40.5	59.0	54.1	55.8	15.6
	1860	19.3	32.6	23.8	23.1	52.8	40.9	14.0

STATISTICS OF MANUFACTURES.

In the preparation of these tables the cities of St. Paul and Minneapolis, Minn., were considered as lying west of the Mississippi River. Of the 100 counties in which the principal cities are located, 83 are in the states east and 17 in the states west of the Mississippi River.

Table xxvii indicates that the proportion of the population in the 83 principal counties in the Eastern states has been increasing and at each census period has been in excess of the proportion which the population of the 100 counties bore to the total population in the United States, as shown in table xxv. In the Western states, as shown by table xxviii, the proportion of the population in the 17 counties has decreased since 1870, when it was 15.6 per cent. The proportion of manufactures in the principal counties in both sections, however, increased, as a rule, in the Eastern states until 1890, when

65.9 per cent of the wage-earners, 72.2 per cent of the wages, and 70.6 per cent of the products were in the 83 counties; and in the Western states until about 1880, when 56.5 per cent of the wage-earners and 55.6 per cent of the products were in the 17 counties. During the last decade there appears to have been a tendency in both sections of the United States to a wider distribution of manufactures, which has reduced the proportion in the principal counties.

2. *100 Counties by Geographic Divisions.*—A more detailed analysis of the concentration in the 100 counties is presented in table xxix, which groups the counties according to geographic divisions and shows the number of counties considered in each division, the totals for manufactures and population, and the proportion which each item bears to the total for each geographic division, from 1860 to 1900, inclusive.

TABLE XXIX.—100 PRINCIPAL COUNTIES, BY GEOGRAPHIC DIVISIONS, WITH THEIR PER CENT TO THE TOTAL FOR EACH DIVISION: 1860 TO 1900.

GEOGRAPHIC DIVISIONS.	Year.	Number of counties.	NUMBER OF ESTABLISHMENTS.		CAPITAL.		WAGE-EARNERS, AVERAGE NUMBER.	
			Number in 100 counties.	Per cent of total in geographic division.	100 counties.	Per cent of total in geographic division.	100 counties.	Per cent of total in geographic division.
United States.....	1900	100	222,661	43.5	\$6,057,636,400	61.5	3,176,462	59.7
	1890	100	197,629	55.6	4,214,105,971	64.6	2,723,608	64.1
	1880	100	97,670	38.5	1,716,376,089	61.5	1,764,768	64.6
	1870	100	81,535	32.3	1,152,069,998	54.4	1,151,558	56.1
	1860	100	47,970	34.1	553,984,255	54.9	746,419	56.8
New England states.....	1900	20	36,077	62.3	1,153,909,879	72.4	676,602	71.4
	1890	20	32,800	67.8	850,947,274	72.1	582,768	70.9
	1880	20	17,290	54.7	421,814,988	67.6	449,055	69.4
	1870	20	15,645	48.4	331,227,638	67.6	342,496	65.0
	1860	20	8,911	43.1	167,083,004	64.9	249,405	63.7
Middle states.....	1900	31	105,810	66.0	2,915,429,142	73.8	1,444,517	73.0
	1890	31	96,277	76.9	1,958,319,207	76.7	1,256,087	76.8
	1880	31	49,887	50.6	845,911,803	72.0	865,980	76.0
	1870	31	40,475	46.2	514,475,742	56.8	547,090	67.9
	1860	31	28,170	52.9	290,516,529	66.8	382,004	70.1
Southern states.....	1900	17	10,642	12.6	245,940,010	25.8	150,681	23.0
	1890	17	11,807	25.4	185,536,658	36.3	136,332	32.9
	1880	17	5,264	14.3	70,303,721	36.4	80,537	36.1
	1870	17	5,129	13.2	44,811,425	32.2	51,001	27.4
	1860	17	2,756	11.4	27,415,181	23.6	34,328	26.0
Central states.....	1900	26	61,609	37.0	1,547,928,610	56.3	820,432	55.7
	1890	26	50,240	44.4	1,084,796,189	55.9	677,516	56.6
	1880	26	21,257	25.9	332,448,106	47.6	331,673	51.3
	1870	26	18,348	21.7	236,372,903	45.7	194,443	39.3
	1860	26	7,529	22.9	65,485,225	37.9	76,008	40.7
Western states.....	1900	3	3,032	12.7	94,001,113	32.4	30,127	25.8
	1890	3	1,701	15.0	43,745,384	33.6	22,122	28.5
	1880	3	653	10.0	6,369,440	19.3	5,329	20.8
	1870	3	413	10.8	1,764,405	3.4	2,344	13.9
	1860	3	116	17.0	374,301	9.8	375	16.6
Pacific states.....	1900	3	5,491	28.4	100,367,646	34.4	54,093	38.1
	1890	3	4,304	43.7	90,161,259	42.3	50,843	47.0
	1880	3	3,319	45.9	39,527,971	55.9	31,694	65.6
	1870	3	1,525	29.2	23,387,885	50.8	14,184	48.4
	1860	3	488	5.5	3,110,015	12.6	2,399	4.7

URBAN MANUFACTURES.

TABLE XXIX.—100 PRINCIPAL COUNTIES BY GEOGRAPHIC DIVISIONS, WITH THEIR PER CENT TO THE TOTAL FOR EACH DIVISION: 1860 TO 1900—Continued.

GEOGRAPHIC DIVISIONS.	Year.	TOTAL WAGES.		COST OF MATERIALS USED		VALUE OF PRODUCTS, INCLUDING CUSTOM WORK AND REPAIRING.		TOTAL POPULATION.	
		100 counties.	Per cent of total in geographic division.	100 counties.	Per cent of total in geographic division.	100 counties.	Per cent of total in geographic division.	100 counties.	Per cent of total in geographic division.
United States	1900	\$1,473,217,608	63.3	\$4,622,351,727	61.6	\$8,196,331,427	63.0	22,642,604	29.8
	1890	1,322,688,212	60.9	3,478,335,209	67.4	6,399,356,466	63.3	17,593,813	27.9
	1880	689,612,347	72.7	2,250,848,292	66.3	3,578,959,287	66.7	12,973,663	25.9
	1870	505,966,469	65.2	1,624,917,953	61.3	2,627,043,989	62.1	9,749,098	25.3
	1860	212,800,648	56.2	604,989,134	58.6	1,107,437,357	58.7	7,468,473	23.8
New England states	1900	307,905,945	73.2	784,321,222	73.4	1,384,044,321	73.8	3,499,591	62.6
	1890	267,394,176	74.5	588,582,889	74.3	1,120,503,256	74.8	2,764,645	58.8
	1880	164,783,119	72.7	469,797,284	71.2	784,970,336	71.0	2,174,185	54.2
	1870	149,005,744	70.7	418,851,046	69.2	698,553,431	69.2	1,740,998	49.9
	1860	67,646,439	64.9	158,464,226	64.5	306,297,538	65.4	1,394,729	44.5
Middle states	1900	687,059,080	75.2	2,065,944,099	75.5	3,787,714,341	76.4	10,248,121	59.9
	1890	629,194,879	81.5	1,545,076,610	78.6	2,872,944,256	78.8	7,990,742	56.5
	1880	350,322,772	86.3	1,089,115,044	78.1	1,725,863,005	77.7	6,201,522	52.7
	1870	238,863,159	74.3	731,249,646	70.4	1,273,420,878	72.0	4,623,374	46.9
	1860	107,902,556	70.8	316,130,695	71.2	576,659,758	71.9	3,865,685	40.4
Southern states	1900	54,003,798	27.4	186,717,155	27.8	333,990,058	28.2	1,762,167	7.7
	1890	52,679,962	30.0	146,251,196	33.1	275,930,193	33.1	1,422,008	7.7
	1880	24,250,707	45.7	77,983,583	36.6	139,160,639	41.1	1,182,674	7.8
	1870	19,604,238	43.7	48,967,675	30.6	91,835,422	33.1	981,808	8.1
	1860	11,031,043	31.8	32,593,988	29.9	60,347,238	31.2	784,006	7.6
Central states	1900	378,707,143	57.6	1,319,336,370	57.3	2,354,334,132	58.8	6,242,499	27.1
	1890	328,922,351	62.9	1,038,363,709	62.0	1,868,806,214	63.5	4,634,718	23.9
	1880	180,856,018	57.3	549,319,060	55.0	826,042,217	55.0	2,975,691	18.9
	1870	88,384,097	50.4	301,397,759	48.7	516,345,939	48.9	2,157,230	17.3
	1860	23,627,419	41.8	81,233,581	40.3	141,038,251	41.3	1,318,559	14.7
Western states	1900	16,491,868	26.0	120,056,975	32.1	172,776,523	31.1	371,332	7.5
	1890	14,108,857	34.4	69,418,555	37.8	102,963,083	37.0	348,600	8.4
	1880	2,809,385	26.3	9,681,262	20.4	16,055,642	22.1	108,266	4.8
	1870	1,475,945	17.8	1,896,067	7.4	4,348,881	9.7	45,148	5.5
	1860	211,481	13.6	396,265	15.9	800,250	11.2	15,623	4.9
Pacific states	1900	29,049,774	38.8	95,975,906	36.4	163,422,052	37.5	518,394	21.5
	1890	30,387,987	49.2	90,647,250	56.0	158,209,201	53.3	433,200	23.1
	1880	16,560,346	71.2	54,497,059	66.8	87,367,448	67.0	331,325	29.7
	1870	8,633,256	58.2	22,555,760	56.1	42,539,359	55.7	200,540	29.7
	1860	2,381,710	8.1	16,165,429	55.8	22,234,267	30.6	89,371	20.2

The greatest concentration of population in the principal counties is shown for the New England states, while the greatest concentration of manufactures within the principal counties occurred in the Middle states, New England ranking second in this regard. The Central states in 1900 ranked third in concentration of manufactures; the Pacific states, fourth; the Western states, fifth (except in total wages, in which the Southern states led the Western states); and the Southern states, sixth. The greatest increase in the proportion of manufactures in the principal counties to the total for the division is shown for the Central and Western states.

During the forty years the proportion of population in the 100 principal counties increased from 23.8 per cent to 29.8 per cent. The greatest increase is shown for the New England states, where the proportion was 44.5 per cent in 1860 and 62.6 per cent in 1900. The smallest increase is shown for the Southern states, where the proportion was 7.6 per cent in 1860 and 7.7 in 1900. The increase in the proportion of the Central, Middle, and New England states has been constant, conforming to the increase for the United States. In all the other geographic divisions there has been an increase followed by a decrease. This increase and decrease is especially noticeable in the Pacific states,

where the proportion increased from 20.2 per cent in 1860 to 29.7 per cent in 1880, and decreased to 21.5 per cent in 1900.

The concentration of population has been somewhat in excess of the concentration of the value of products of manufactures. The proportion of the products in the 100 counties increased from 58.7 per cent in 1860 to 63 per cent in 1900, as compared with an increase from 23.8 per cent to 29.8 per cent in the proportion of population. In the New England states, where the greatest increase is shown in the concentration of population, the proportion of the value of products of manufactures increased from 65.4 per cent to 73.8. In the Southern states, where the proportion of population has remained practically stationary, the proportion of the value of products decreased from 31.2 per cent to 28.2 per cent. In the Western states, where the proportion of the population increased from 4.9 per cent to 7.5 per cent, the proportion of the value of products increased from 11.2 per cent to 31.1 per cent.

The relation of the average number of wage-earners to population is possibly more direct than that between value of products and population. In the total for the United States the proportion of the average number of wage-earners engaged in the manufactures of the 100

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counties increased from 56.8 to 59.7, as compared with an increase from 23.8 per cent to 29.8 per cent in the proportion of population. In the New England states, the proportion of the average number of wage-earners increased from 63.7 per cent to 71.4 per cent as compared with an increase in population from 44.5 per cent to 62.6 per cent. In the Middle states, it increased from 70.1 per cent to 73 per cent and the population from 46.4 per cent to 59.9 per cent. In the Southern states, where the proportion of the population remained practically stationary, the proportion of wage-earners decreased from 26 per cent to 23 per cent, which is in conformity with the similar decrease of the proportion of the value of products. The greatest increase in the proportion of wage-earners in the 100 principal counties is shown for the Pacific states, where the percentage increased from 4.7 per cent to 38.1 per cent. This net increase in the proportion in the Pacific states

has been in spite of a decrease since 1880, when the proportion stood at 65.6 per cent. The totals for the United States show a great uniformity of increase and decrease. The absence of a similar uniformity in some of the geographic divisions may be accounted for by local conditions and does not necessarily prove that the statistics are unreliable. The table as a whole indicates that there has been an increasing concentration of population in the 100 principal counties since 1860, and that this has been accompanied by a like concentration of industries according to value of products except during the last decade. This concentration in industry appears to have reached its limit in 1890.

3. *States Showing Greatest Concentration.*—Table xxx presents the statistics for the 5 states in which the concentration of manufactures in the selected counties is carried to the highest point, excepting Delaware and Rhode Island.

TABLE XXX.—FIVE STATES SHOWING GREATEST CONCENTRATION OF MANUFACTURES IN THE PRINCIPAL COUNTIES: 1860 TO 1900.

	Year.	NUMBER OF ESTABLISHMENTS.			CAPITAL.			WAGE-EARNERS, AVERAGE NUMBER.		
		State.	Principal counties.		State.	Principal counties.		State.	Principal counties.	
			Number.	Per cent of state.		Amount.	Per cent of state.		Number.	Per cent of state.
MASSACHUSETTS.										
Six counties.....	1900	29,180	24,185	82.9	\$823,264,287	\$713,138,535	86.6	497,448	428,917	85.2
	1890	26,923	23,428	87.0	630,032,341	641,876,918	86.0	447,270	381,503	85.3
	1880	14,362	11,722	81.7	303,806,185	255,489,176	84.1	352,255	296,863	84.3
	1870	13,212	10,377	78.5	231,677,862	194,825,668	83.9	279,380	227,881	81.6
	1860	8,176	5,686	69.5	132,792,827	108,955,331	82.0	217,421	170,648	78.5
NEW YORK.										
Fifteen counties.....	1900	78,658	56,824	72.2	1,651,210,220	1,293,555,789	78.3	849,056	666,130	78.5
	1890	65,840	51,374	78.0	1,130,161,195	913,974,496	80.9	752,066	613,334	81.6
	1880	42,739	26,474	61.9	614,246,575	395,553,136	76.9	531,533	419,118	78.9
	1870	36,206	17,978	49.7	366,994,820	148,104,915	40.4	351,800	245,318	69.7
	1860	22,624	11,247	49.7	172,895,652	123,453,234	71.4	230,112	169,425	73.6
CONNECTICUT.										
Three counties.....	1900	9,123	6,513	71.4	314,696,736	231,670,333	73.6	176,694	131,902	74.6
	1890	6,822	4,647	68.1	227,004,496	155,866,100	68.7	140,514	99,337	70.9
	1880	4,488	2,799	62.4	120,480,275	75,668,770	62.8	112,915	75,063	66.5
	1870	5,123	2,725	53.1	95,281,278	62,850,566	66.0	89,523	56,256	62.8
	1860	3,019	1,482	49.1	45,590,430	27,196,115	59.7	64,469	39,188	60.8
ILLINOIS.										
Four counties.....	1900	33,360	22,004	57.4	776,329,598	539,066,352	75.8	395,110	287,165	72.7
	1890	20,482	11,644	56.8	502,004,512	339,427,340	77.6	280,218	208,156	74.3
	1880	14,549	4,840	33.3	140,652,066	83,879,356	59.6	144,727	92,268	63.8
	1870	12,597	2,370	18.8	94,368,057	46,537,816	49.3	82,979	37,694	45.4
	1860	4,268	857	20.1	27,543,563	10,937,375	39.9	22,968	3,485	36.9
PENNSYLVANIA.										
Eight counties.....	1900	52,185	23,181	54.0	1,551,543,712	1,021,721,252	65.9	733,334	472,941	64.4
	1890	39,339	25,437	64.7	991,243,115	673,008,530	67.9	570,393	395,369	69.3
	1880	31,232	14,363	47.6	474,510,993	306,359,533	64.6	387,072	271,724	70.2
	1870	37,200	15,459	41.6	406,321,345	270,662,698	66.5	319,487	206,642	64.7
	1860	22,363	9,941	44.5	190,055,904	117,608,598	61.9	222,132	141,741	63.8

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TABLE XXX.—FIVE STATES SHOWING GREATEST CONCENTRATION OF MANUFACTURES IN THE PRINCIPAL COUNTIES: 1860 TO 1900—Continued.

	Year.	TOTAL WAGES.			COST OF MATERIALS USED.			VALUE OF PRODUCTS, INCLUDING CUSTOM WORK AND REPAIRING.			TOTAL POPULATION.		
		State.	Principal coun- ties.		State.	Principal coun- ties.		State.	Principal counties.		State.	Principal coun- ties.	
			Amount.	Per cent of state.		Amount.	Per cent of state.		Amount.	Per cent of state.		Total.	Per cent of state.
MASSACHUSETTS.													
Six counties.....	1900	\$228,240,442	\$193,700,729	84.9	\$552,717,955	\$473,270,061	85.6	\$1,035,193,989	\$888,827,352	85.9	2,805,346	2,808,733	82.3
	1890	205,844,337	175,823,057	85.4	478,199,434	406,380,312	85.9	888,160,403	765,490,687	86.2	2,238,948	1,818,907	81.2
	1880	128,315,362	108,680,712	84.7	386,972,655	332,054,530	85.8	631,135,284	540,142,616	85.6	1,783,085	1,420,371	79.7
	1870	118,051,886	98,800,635	83.7	334,418,982	283,061,945	84.6	553,912,568	467,828,698	84.5	1,457,351	1,120,009	76.9
	1860	56,960,913	44,819,891	78.7	135,053,721	105,726,749	78.3	255,545,922	202,662,469	79.3	1,231,066	885,484	71.9
NEW YORK.													
Fifteen counties.....	1900	408,855,652	331,519,119	81.1	1,143,791,778	930,048,193	81.3	2,175,726,900	1,792,153,802	82.4	7,263,110	5,005,841	68.9
	1890	370,380,559	316,175,016	85.4	871,264,085	727,267,576	83.5	1,711,577,671	1,387,738,288	81.1	5,997,858	3,867,781	64.5
	1880	198,634,029	166,655,135	83.9	679,612,545	562,783,566	82.8	1,080,696,696	891,692,889	82.5	5,082,871	3,068,978	60.4
	1870	142,466,758	109,555,238	76.9	452,065,452	331,864,296	73.4	785,194,651	588,571,179	75.0	4,382,759	2,459,217	56.1
	1860	65,446,759	48,051,063	74.8	214,813,061	163,339,985	76.1	378,370,939	289,351,133	76.4	3,880,785	2,038,009	52.5
CONNECTICUT.													
Three counties.....	1900	82,767,725	64,471,635	77.9	185,641,219	142,485,018	76.8	352,824,106	273,573,751	77.5	908,420	648,846	71.4
	1890	66,465,317	50,458,546	75.9	123,183,080	85,841,814	69.7	248,336,364	180,718,036	72.8	746,258	506,319	67.8
	1880	43,501,518	31,158,205	71.6	102,183,341	66,449,905	65.0	185,697,211	122,572,296	66.0	622,700	393,947	63.3
	1870	38,937,137	27,447,104	70.4	86,419,579	61,449,275	60.3	101,065,474	108,694,509	64.4	537,454	325,540	60.6
	1860	19,026,196	12,167,974	64.0	40,909,090	26,152,574	63.9	81,924,555	51,737,225	63.2	460,147	264,733	57.5
ILLINOIS.													
Four counties.....	1900	191,510,962	142,678,580	74.5	739,754,414	571,126,898	77.2	1,259,730,168	972,393,602	77.2	4,821,550	2,065,994	42.8
	1890	142,873,265	112,445,825	78.7	529,019,089	431,485,279	81.6	908,640,280	742,347,556	81.7	3,826,351	1,885,333	36.2
	1880	57,429,085	39,479,585	68.7	289,843,907	201,748,570	69.6	414,864,678	288,391,293	69.3	3,077,871	774,908	25.2
	1870	31,100,244	15,813,619	50.8	127,600,077	70,370,590	55.1	205,620,672	108,987,812	53.0	2,580,891	500,220	19.7
	1860	7,637,921	2,945,817	38.6	35,558,782	14,336,291	40.3	57,580,886	22,908,217	39.8	1,711,951	255,152	14.9
PENNSYLVANIA.													
Eight counties.....	1900	332,072,670	219,421,011	66.1	1,042,434,599	694,147,301	66.6	1,834,790,860	1,235,848,858	67.3	6,302,034	3,051,479	48.4
	1890	263,875,215	191,607,941	72.8	773,734,637	540,947,008	69.9	1,331,794,901	957,513,049	71.9	5,258,014	2,411,637	45.9
	1880	134,055,904	93,125,549	73.2	465,020,563	311,422,305	67.0	744,818,446	505,707,443	67.9	4,282,891	1,838,253	42.9
	1870	127,976,594	89,860,477	70.2	421,197,673	276,642,794	65.7	711,894,314	481,777,170	67.7	3,521,951	1,451,795	41.2
	1860	60,369,165	39,521,012	65.5	153,477,698	97,656,414	63.6	290,121,188	180,499,610	65.3	2,906,215	1,140,924	39.3

The two states which show the greatest concentration—Delaware and Rhode Island—are not included in the above table, as their urban manufactures are peculiar. The city of Wilmington includes practically all the manufactures of Delaware, and the town and city formation of government in Rhode Island has resulted in including practically the entire area of that state within the districts which were, for census purposes, considered as urban.

The greatest concentration in the population appears for Massachusetts, where the population of the 6 counties in which the principal cities were located contained 82.3 per cent of the population of the state in 1900. The greatest increase in concentration of the population during the 40 years is shown for Illinois, where the 4 counties in which the principal cities are located contained 14.9 per cent of the population in 1860 and 42.8 per cent in 1900. Notwithstanding this large increase the 4 counties contained a smaller percentage of the population of the state in 1900 than did the selected counties of any of the other states shown. There has been a considerable increase in the percentage of the population in the principal counties of each of the 5 states.

The greatest concentration in manufactures appears in the case of Massachusetts, where the establishments in the 6 principal counties formed 82.9 per cent, their wages 84.9 per cent, and the value of their products 85.9 per cent of the total for the state in 1900. The greatest increase in concentration is shown for Illinois, where the percentage of establishments in the principal counties increased from 20.1 per cent in 1860 to 57.4 per cent in 1900; the proportion of wages from 38.6 to 74.5 per cent, and the value of products from 39.8 to 77.2 per cent.

The statistics shown in this table indicate, first, that the concentration of industries in the principal counties during the past forty years has been in states where manufactures have become well developed, such as Massachusetts, New York, and Connecticut; second, that the greatest increase in concentration has been in the Central states, of which Illinois is a representative, where the increase in population has been greatest; third, that the concentration of population in the industrial centers has been constantly increasing in a somewhat greater ratio than the concentration of manufactures; fourth, that the concentration of manufactures has decreased during the last decade.

IV.

DEVELOPMENT OF LARGE CITIES.

In a number of instances large cities have extended their corporate limits during the period between the censuses, in such a way as to embrace additional territory including adjoining cities and towns. In such cases, the statistics for the censuses preceding and following such extension, comprehend different areas and are not comparable. The selection of a given district including all territory immediately surrounding such large cities—not only that which has already been added but that which may be included in the corporate limits at subsequent censuses—enables comparisons to be made showing the actual development of the district irrespective of the city limits. The cities of New York, N. Y.; Philadelphia, Pa.; Chicago, Ill.; and

Boston, Mass., have been selected as representative of these conditions.

1. *New York City.*—A notable instance of the extension of the corporate limits of a city, and also of the close proximity of other cities and towns in which the industrial interests are closely connected, is shown for New York.

The inclusion of the totals for the counties of Kings, New York, Queens, and Richmond, in New York state, and of Bergen, Essex, Hudson, Passaic, and Union counties, in New Jersey, as a district immediately surrounding New York, makes it possible to give the actual increase in the manufactures, irrespective of the extension of the corporate limits of the city, and results in showing the importance of the industrial center. This is done in table xxxi, which gives the statistics for the New York district at each census from 1860 to 1900, inclusive, with the percentages of increase.

TABLE XXXI.—NEW YORK AND ADJOINING COUNTIES: COMPARATIVE SUMMARY, 1860 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE.

	DATE OF CENSUS.					PER CENT OF INCREASE.			
	1900	1890	1880	1870	1860	1890 to 1900.	1880 to 1890.	1870 to 1880.	1860 to 1870.
Number of establishments.....	48,983	42,404	20,344	11,881	7,099	15.5	108.5	78.8	60.3
Capital.....	\$1,286,664,417	\$794,350,833	\$818,522,965	\$197,787,275	\$99,527,877	62.0	149.4	61.0	98.7
Wage-earners, average number.....	626,086	528,715	363,280	193,256	140,774	18.4	45.6	88.0	37.3
Total wages.....	\$322,323,957	\$293,681,827	\$154,528,319	\$95,152,658	\$48,552,257	9.8	90.1	62.4	118.5
Cost of materials used.....	\$959,782,066	\$675,635,685	\$651,051,571	\$290,628,653	\$137,284,875	42.1	22.6	89.6	111.7
Value of products, including custom work and repairing.....	\$1,798,020,115	\$1,339,001,356	\$852,451,380	\$511,151,711	\$246,385,929	34.3	57.1	66.8	107.5
Total population.....	4,515,299	3,289,563	2,474,449	1,860,348	1,415,679	37.3	32.9	33.0	31.4

The largest actual increase and the highest percentage of increase in the population of the district occurred during the decade ending with 1900. Measured by value of products, the largest actual increase in manufactures was during the decade ending with 1890. The largest percentage of increase is found in the decade ending with 1870, but the values reported for 1870 were in a currency that was at a great discount in gold.

New York city was founded as a commercial venture by a trading company, and from the very start has been a business community, the greater part of its development having been due to its unrivaled advantages for exchange.¹ But it appears, according to the statistics of population, that of 4,106,370 persons in the total population of the 6 large cities in the district, 681,036, or 16.6 per cent, were engaged in manufacture or mechanical pursuits, while only 549,207, or 15.8 per cent, were engaged in trade and transportation, and that therefore manufactures rather than commerce must be accepted as the important factor in the development of the district.

The statistics of wage-earners; however, in these two groups do not afford a basis for an accurate estimate of the relative importance of manufactures and commerce in the life of a city. A city's commerce is itself, in considerable measure, the direct consequence of its manufactures. The employment of many of the persons reported for transportation depends upon the manufactures of the city.

2. *Philadelphia.*—Philadelphia city is co-extensive with the county, and was so considered in presenting the statistics for the 100 principal counties. While there has been no extension of the corporate limits of the city during recent years, nevertheless the industrial development of the adjoining territory and cities has been to some extent identified with that of Philadelphia. Considering Delaware, Montgomery, and Philadelphia counties, Pennsylvania, and Camden and Mercer counties, New Jersey, as representing an industrial district, table xxxii gives the statistics of manufactures for the district at each census from 1860 to 1900, inclusive, with the percentages of increase.

¹ Historic towns, New York, by Theodore Roosevelt.

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TABLE XXXII.—PHILADELPHIA AND ADJOINING COUNTIES: COMPARATIVE SUMMARY, 1860 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE.

	DATE OF CENSUS.					PER CENT OF INCREASE.			
	1900	1890	1880	1870	1860	1890 to 1900.	1880 to 1890.	1870 to 1880.	1860 to 1870.
Number of establishments.....	19,448	20,706	10,785	10,391	7,572	16.1	92.0	3.8	37.2
Capital.....	\$586,925,192	\$460,597,934	\$230,876,343	\$197,524,921	\$86,222,349	27.4	99.5	16.9	129.1
Wage-earners, average number.....	304,944	394,052	225,118	161,355	114,725	122.6	75.0	89.5	0.6
Total wages.....	\$137,428,524	\$137,461,531	\$77,569,734	\$67,402,998	\$31,260,402	(2)	77.2	15.1	115.6
Cost of materials used.....	\$899,831,740	\$370,972,105	\$238,574,934	\$208,729,499	\$81,263,293	7.8	55.5	14.3	156.9
Value of products, including custom work and repairing.....	\$732,137,957	\$681,441,633	\$390,228,477	\$367,190,961	\$156,251,084	7.4	74.6	6.3	135.0
Total population.....	1,730,462	1,412,602	1,120,768	887,616	738,493	22.5	26.0	26.3	20.2

¹ Decrease.

² Less than one-tenth of 1 per cent.

The greatest absolute increase in the population of the district occurred during the decade ending with 1900, while the largest percentage of increase was for that ending with 1880. The largest absolute increase in gross value of products was during the ten years ending in 1890, and the highest percentage of increase in the decade ending in 1870. From the table it appears that there has been a constant increase in manufactures. This increase, however, has been at a varying ratio. During the decade ending with 1870 the gross value of the products was represented as increasing 135 per cent; during that ending with 1880 it increased only 6.3 per cent; this relatively slight increase was followed by a large percentage of increase, 74.6, during the next decade; and this again by a comparatively small increase, only 7.4 per cent, for the decade ending with 1900. The percentage of increase in the population also de-

creased from 26.3 per cent during the decade ending with 1880, to 26 in the decade ending with 1890, and still further to 22.5 per cent for the last decade.

Of the total population (1,476,927) of the 4 large cities included in the district, Philadelphia and Chester, Pa., and Camden and Trenton, N. J., 296,828, or 20.1 per cent, were reported at the census of 1900 as engaged in manufactures, while only 170,196, or 11.5 per cent, were engaged in trade and transportation.

3. *Chicago*.—The rapid growth of Chicago has resulted in the extension of the corporate limits of the city, and as the adjoining counties have been identified with its development, table xxxiii, which includes the totals of Cook, Dupage, Kane, and Will counties, Illinois, and Lake county, Indiana, may be accepted as showing the growth of the manufacturing industries of the district.

TABLE XXXIII.—CHICAGO AND ADJOINING COUNTIES: COMPARATIVE SUMMARY, 1860 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE.

	DATE OF CENSUS.					PER CENT OF INCREASE.			
	1900	1890	1880	1870	1860	1890 to 1900.	1880 to 1890.	1870 to 1880.	1860 to 1870.
Number of establishments.....	21,658	11,021	4,510	1,900	706	96.5	144.4	126.6	181.9
Capital.....	\$607,465,282	\$392,162,993	\$80,680,590	\$45,608,633	\$6,739,593	54.9	386.1	76.9	576.7
Wage-earners, average number.....	295,272	206,615	88,475	36,177	6,921	42.9	133.5	144.6	448.4
Total wages.....	\$147,556,093	\$112,428,278	\$38,366,706	\$14,991,693	\$2,325,989	81.2	193.0	155.9	544.6
Cost of materials used.....	\$608,894,681	\$453,774,480	\$198,022,563	\$64,760,982	\$9,099,376	33.1	129.2	205.8	611.6
Value of products, including custom work and repairing.....	\$1,004,414,962	\$732,647,701	\$277,298,074	\$100,748,921	\$15,463,505	37.1	164.2	175.2	551.5
Total population.....	2,058,879	1,865,427	740,137	461,094	228,183	50.7	84.5	60.5	102.1

The substantial and rapid growth of the manufactures in this district is apparent from these statistics. Computations based upon the general statistics, not given in this table, show that the percentages of increase during the decade from 1860 to 1870 were in excess of those for any other district in the United States. While the increase during the subsequent decades has not been so rapid, it has nevertheless been in advance of the increase for the same totals in the Central states. During the last decade the population of the Central states increased 19.1 per cent, the number of manufacturing

establishments 47.2 per cent, and the value of products, 35.8 per cent; while the corresponding items in the Chicago district show increases of 50.7, 96.5, and 37.1 per cent, respectively.

The situation of Chicago enables it to command one of the most important stretches of inland water navigation in the world, and commerce was therefore naturally the leading feature of its early development. Its largest commercial transactions are in grain and other agricultural products.

Manufactures have also been an important element

in the development of the district. This is indicated by the fact that of the total population, 1,727,928, of the cities of the district, Chicago and Joliet in 1900, 255,293, or 14.8 per cent, were persons engaged in manufacturing and mechanical pursuits as compared with 231,074, or 13.5 per cent, engaged in trade and transportation.

4. *Boston*.—The industrial development of the coun-

ties of Essex, Middlesex, and Suffolk has been closely identified with that of Boston, and these counties may be accepted as representing an industrial district. Table xxxiv is a comparative summary showing the statistics of manufactures for this district, as reported at each census from 1860 to 1900, inclusive, with the percentages of increase.

TABLE XXXIV.—BOSTON AND ADJOINING COUNTIES: COMPARATIVE SUMMARY, 1860 TO 1900, WITH PER CENT OF INCREASE FOR EACH DECADE.

	DATE OF CENSUS.					PER CENT OF INCREASE.			
	1900	1890	1880	1870	1860	1890 to 1900.	1880 to 1890.	1870 to 1880.	1860 to 1870.
Number of establishments.....	16,900	17,497	7,876	7,245	3,147	18.4	122.1	8.7	180.2
Capital.....	\$417,499,418	\$327,871,475	\$144,112,411	\$120,617,532	\$62,359,987	27.8	127.5	19.5	98.4
Wage-earners, average number.....	244,739	238,189	181,989	141,690	102,292	2.7	90.9	28.6	88.4
Total wages.....	\$116,585,341	\$115,037,288	\$69,195,584	\$64,876,748	\$27,712,608	1.3	66.2	6.7	134.1
Cost of materials used.....	\$317,165,905	\$269,398,698	\$230,875,063	\$195,576,513	\$64,845,204	17.7	16.7	18.0	201.6
Value of products, including custom work and repairing.....	\$576,705,204	\$522,586,472	\$365,758,914	\$321,518,978	\$123,195,334	10.4	42.9	18.8	161.0
Total population.....	1,534,143	1,215,942	952,292	745,998	574,065	26.2	27.7	27.7	29.8

¹ Decrease

The greatest percentage of increase for the district, except for the item of capital in 1890, occurred during the decade ending with 1870, when the population and the value of products of manufactures increased 29.8 and 161 per cent, respectively. Since 1860 the rate of increase has been constantly diminishing, the only exception being for the decade ending with 1890. The smallest percentage of increase is shown for the last decade. Indeed, the statistics for the manufactures of the city of Boston, given in the report on the manufactures of Massachusetts, in Part II, show that there was an actual decrease in the industries of the city itself during the period from 1890 to 1900. The percentage of decrease in number of establishments was 8.8; in number of wage-earners, 8.1; and in value of products, 2.3. From the above table it appears that the manufactures of the Boston district, including the territory which is closely identified with the industrial development of the city, have increased during the decade in all particulars except number of establishments, which decreased 3.4 per cent; but, as previously explained, the decrease in number of establishments does not indicate an actual decrease in the manufacturing industries of a community.

Commerce was the chief factor in the early development of the district, but the present comparative importance of manufactures and trade and transportation is roughly indicated by the fact that of the total population—852,962—of the large cities of the district, 137,367 persons, or 16.1 per cent, were engaged in manufactures, while 122,755, or 14.4 per cent, were engaged in trade and transportation.

V.

URBAN MANUFACTURES, BY STATES.

1. *Increases and Decreases in Cities*.—While the totals for the manufactures of the cities show large increases, the increase has not been uniform, and in a number of instances has given place to an actual decrease. In some cities, too, while the total for all industries shows a net increase, a number of the individual industries have decreased.

In some cases the decrease is due to an actual falling off caused by business depression, previous overproduction, or some one of the various other conditions which affect all industries wherever situated. In others it is due to the removal of manufacturing plants to the suburbs, outside the corporate limits of the city, or to sections of the United States where raw material is more readily obtained and the products can be more advantageously disposed of; where labor is more plentiful and power and land are cheaper; where subsidies are given or immunity from taxation offered; or where advantage can be taken of other economies of production.

In some cases the decrease is only apparent, being due to a faulty canvass at prior censuses. A striking instance of such an error appears in the statistics for the city of Mobile, Alabama. There were 17 sawmills reported for this city at the census of 1890, with a capital of \$1,018,540, with 1,158 wage-earners, \$345,210 paid in wages, and \$1,589,499 in value of products; while in 1900 only 4 establishments appeared, with a capital of \$342,650, with 321 wage-earners, \$113,400

paid in wages, and \$566,800 in value of products. A close study of the case has disclosed the fact that 7 of the mills which were credited to the city in 1890, with a capital of \$430,285, wage-earners numbering 293, and paying \$102,847 in wages, and with products valued at \$402,023, were located outside the corporate limits, although their post-office address was Mobile, most of them, if not all, having offices in the city. It is often difficult to determine, without a special investigation, the exact location of plants situated near the boundary line of cities. The inclination is to give the municipality credit for such plants, on the theory that they form a part of the industrial city.

Mistakes of this kind were due largely to the fact that the schedule in 1890 called only for the name, street and number, and post-office address of the establishment. The schedule for the census of 1900 required that not only the post-office address should be given, but also the exact location of the factory or shop. This has enabled the office to make a more exact division of the reports according to the geographical location of the plants, and has resulted in a more accurate presentation of the statistics for the establishments which are located within the corporate limits of the respective cities. At the census of 1890 it was found impossible to locate exactly the operations of establishments engaged in the manufacture of timber products classified as "timber products not manufactured at mill," and the industry was therefore "credited to the place where the office of the establishment was located." The fact that a different practice was adopted in 1900 has had some effect on the totals for the different cities as presented at the two censuses.

The shifting of establishments from one section of the country to another in the endeavor to find the locality in which the manufacture can be carried on to the best advantage is becoming more prevalent with the increased competition following the rapid extension of manufactures. The consolidation of a number of independent plants under one management and the consequent abandonment of the plants that can not be worked to advantage is another phase of this general readjustment. This has not affected the industrial growth of the United States as a whole, but has perceptibly advanced or retarded the industries of localities. In addition to these economic causes, the increase or decrease in certain cities may be due to changes in the kinds of industries enumerated at different censuses and to the more thorough canvass in some cities than in others, while the apparent growth or decline of certain industries may be caused by changes in the methods of classifying the reports.

Under these conditions the increase in the grand total for cities should not be accepted as a true indication of the conditions prevailing in each city; a more extended

analysis is necessary in order to select the cities which have contributed to or retarded the general advance.

The importance of the manufactures of urban districts is now universally acknowledged, and the general information possessed by the citizens of the different cities in regard to their industries is so complete that statistics which are apparently contrary to such general knowledge should be carefully presented and fully explained. With this end in view the statistics for each city where the totals for all industries show a decrease during the past decade in any of the principal particulars will be analyzed.

The statistics of the 165 cities for which separate totals were given at the census of 1890 must form the basis for all comparisons designed to show the increase or decrease in urban manufactures, in so far as such manufactures are represented by the establishments included within the corporate limits of the cities considered. The statistics for 100 of these cities were shown separately at the census of 1880. The statistics for each city are shown in detail in Part II of this report, and reference should be made to that volume for information concerning the different industries.

Of the 165 cities for which the statistics were published separately at the census of 1890, there are 90 in which there was a decrease during the last decade in one or more of the items shown. A decrease appears in the number of establishments in 49 cities, in the capital invested in 23, in the average number of wage-earners employed during the year in 35, in the total wages paid in 49, in the miscellaneous expenses in 30, in the cost of materials in 35, and in the total value of products in 31 cities.

The increase or decrease in the total for all industries in any city is the net result of the increases and decreases in its different industries. In a few cases the entire decrease in all the items shown for a city can be traced to the changes that have occurred in a single industry. On the other hand, an important industry or a number of industries may show a decrease, and yet these decreases may be more than counterbalanced by increases in other industries, with the result that the total for all industries will indicate a general advance. In some cities, where one or two establishments represent a large proportion of the total for the city, the removal of one of these large plants, combined with the changes shown for other industries, has resulted in a large decrease, even though a number of the industries of the city have increased. In order to ascertain the actual conditions it would therefore be necessary to compare and analyze the figures for each industry; but as an analysis of that character would be more extended than the importance of the subject seems to warrant, this discussion is confined primarily to the city totals, only incidental reference being made to the industries.

2. *Establishments.*—The fact that a city shows a greater or less number of establishments than at a prior census is no indication of the increase or decrease in its manufactures. The term establishment may include one or a number of manufacturing plants controlled by the same individual, company, or corporation, and it is applied indiscriminately to large factories and small shops. Therefore in a city showing an increase in the number of establishments there may be a decrease in the capital invested, in number of wage-earners, and in value of products on account of the removal of one or two large establishments during the decade and a more perfect enumeration of the small shops at the later census.

For instance, the totals for the city of Minneapolis, Minn., for the census of 1890, show 2,723 establishments, with products valued at \$82,922,974; and in 1900, 2,368 establishments, with products valued at \$110,943,043, an apparent decrease of 355 in number of establishments and an increase of \$28,020,069 in value of products. Eliminating the hand trades reported for both censuses, there remain 940 establishments with products of \$63,924,996 for 1890, as compared with 1,087 establishments, with products of \$97,053,501 for 1900, an increase of 147 in number of establishments and of \$33,128,505 in value of products.

In the city of Fort Worth, Tex., there were 316 establishments reported for 1890, with products of \$6,826,083, as compared with 209 establishments, with products of \$5,332,804, in 1900, a decrease of 107 in the number of establishments and of \$1,493,279 in value of products. Deducting the hand trades from the totals for both censuses, however, there remain 95 establishments for 1890, with products of \$3,883,494, and 92 establishments in 1900, with products of \$4,546,316, a decrease of 3 in the number of establishments, but an actual increase of \$662,822 in value of products.

To repeat, then, it is clear that the number of establishments reported for a city is no indication of the condition of its manufactures, and the same is true of the items "miscellaneous expenses" and "cost of materials used." The cost of materials is, to some extent, governed by conditions distinct from those causing an increase or decrease in the value of products. The controlling industries in a city in 1890 may have been of a character in which the material was purchased in a partially manufactured form, while in 1900 it was purchased raw. Such a manufacture is that of paper, in which in 1890 certain establishments purchased the wood pulp they used, while in 1900 they purchased the material in the raw state of "logs" and the ground pulp. Under these conditions there would be a larger expenditure for materials in 1890 than in 1900, a decrease being shown for the decade which would be accompanied by a corresponding increase in total wages; the cost having been shifted from the materials to the labor account.

Since an increase in other items may be accompanied by a decrease in miscellaneous expenses and also in cost of materials, the prosperity or depression in manufactures is more accurately determined by capital invested, number of wage-earners, amount paid in wages, and value of products. There are 60 cities in which there appears to have been a decrease in one or more of these particulars. The detailed statistics for each city as reported at the census of 1900 are given in the tables for each state in the Report on Manufactures, Part II, which also contains comparative tables showing the totals for each city as reported at the censuses of 1890 and 1900. Reference should therefore be made to that volume for detailed statistics for each city.

3. *Items Presented.*—In the following discussion of the statistics of urban manufactures for each state, summary tables are presented showing the percentage of increase in the totals for all industries in the state; in the totals for the cities in the state which were published separately at the censuses of 1880, 1890, and 1900; the percentages which the totals for the cities at each census formed of the totals for the respective states; and also the percentages which the districts, exclusive of the cities, formed of the totals for the state in 1900. The percentages of increase for the state are presented in connection with those for the cities in order to show the relative increase in urban and rural manufactures.

Special attention is given to cities in which a decrease is shown in capital, wage-earners, wages, or value of products, and the statistics for the industries reporting large decreases are presented separately. In preparing these tables the statistics for such industries as "dentistry, mechanical;" "coffins, burial cases, trimming and finishing;" "hay and straw baling," and "electric light and power," which were enumerated at the census of 1890, but which have been omitted from the reports of the present census, will be excluded from the totals for the census of 1890 so as to make possible a more perfect comparison of the totals for the two censuses. The group of hand trades is shown separately in each table, but in preparing the comparative totals for this group, it has been found necessary in some instances to omit the figures for a few establishments which were included at the census of 1890 in the group of "all other industries." The amounts thus omitted, however, are so small that the totals are not seriously affected. In some cases the total for the group of "hand trades," or "all other industries," produces a net increase for the city, owing to the fact that the increases in the separate industries included have more than offset the decreases.

The states and territories are considered in alphabetical order. In each case a table is first presented showing the percentages of increase for each, whether or not the state contains cities the statistics of which are shown separately.

URBAN MANUFACTURES.

ALABAMA.

TABLE XXXV.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		1 city.		3 cities.	1 city.			3 cities.		18 cities, towns, etc.	State, ex- clusive of 18 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments.....	48.8	88.2	186.8	114.9	12.1	4.4	8.8	4.0	22.9	11.9	21.8	78.2
Capital.....	377.1	52.6	325.4	47.3	61.2	5.4	4.8	4.7	18.4	19.4	41.5	58.5
Wage-earners, average number.....	210.8	69.9	286.2	4.0	54.9	7.0	8.7	6.3	24.6	22.4	42.9	57.1
Total wages.....	331.9	40.1	263.2	19.9	39.4	10.5	8.8	7.5	30.1	29.9	53.4	46.6
Miscellaneous expenses.....	(2)	36.8	(2)	20.3	25.9	(2)	8.1	7.1	32.6	30.0	57.7	42.3
Cost of materials used.....	232.7	55.1	118.4	12.8	55.4	9.7	6.4	4.6	24.9	24.9	49.2	50.8
Value of products.....	277.6	57.6	186.5	16.3	56.6	9.8	7.6	5.5	27.5	27.3	49.8	50.2
Population.....	19.8	20.9	6.7	23.8	35.5	2.3	2.1	2.1	5.2	5.9	10.0	90.0

¹ Decrease.

² Not reported in 1880.

4. *Alabama.*—The increase in manufactures for the entire state during the last decade in amount paid in wages has been 40.1 per cent, and in value of products 57.6 per cent, as compared with an increase in the 3 principal cities of 39.4 and 56.6 per cent, respectively. The ratio of the products of the 3 principal cities to the totals for the state has remained practically the same at the last two censuses, and the same is true of the amount paid in wages. The increase in the 3 cities has been constant, and in one of them, Birmingham, has been in excess of the increase in the state. Mobile is the only city for which the statistics of manufactures

were shown separately at the census of 1880, and percentages of increase are therefore given for its manufactures as reported at the last three censuses; but, for reasons already stated, these percentages should not be accepted as indicating the actual increase, nor should the decrease in the number of establishments shown for the city during the last decade be regarded as indicating an actual decrease in its manufactures. The great increase in the manufactures of Birmingham has been the principal factor in preserving the proportion between the totals for the 3 principal cities and those for the state.

ARKANSAS.

TABLE XXXVI.—Percentages of increase and percentages of manufactures and population in cities: 1880 to 1900.

	PER CENT OF INCREASE.			PER CENT OF TOTAL FOR THE STATE.			
	The state.		1 city.	1 city.		5 cities, towns, etc.	State, ex- clusive of 5 cities.
	1880 to 1890.	1890 to 1900.	1890 to 1900.	1890	1900	1900	1900
Number of establishments.....	72.5	131.3	37.9	6.0	3.6	11.1	88.9
Capital.....	407.0	140.2	51.6	15.1	9.6	21.4	73.6
Wage-earners, average number.....	210.4	87.4	106.4	9.4	10.4	20.0	80.0
Total wages.....	402.4	86.8	117.9	13.7	16.0	28.1	71.9
Miscellaneous expenses.....	(1)	48.2	16.1	24.6	19.9	38.8	61.7
Cost of materials used.....	182.3	93.3	42.5	11.3	8.2	17.7	82.3
Value of products.....	235.4	99.5	51.3	13.8	10.4	21.4	78.6
Population.....	40.6	16.3	48.1	2.3	2.9	5.3	94.7

¹ Not reported in 1880.

5. *Arkansas.*—The rural interests of the state predominate, as is indicated by the fact that the 5 cities and towns reported separately in 1900 contained only 5.3 per cent of the population.

Little Rock is the only city for which the statistics were published separately at the census of 1890. The percentage of increase in the number of its establishments was 37.9 per cent; in the total wages paid, 117.9 per cent; and in the value of its products, 51.3 per cent. In the state the establishments increased 131.3 per cent; the wages paid, 86.8 per cent; and the value of the products, 99.5 per cent.

The rapid increase of the lumber and timber industry, which is confined largely to the rural districts, has tended to reduce the proportion of manufactures in cities. The number of establishments shown for the rural districts was largely increased by reports for cotton ginneries (explained elsewhere), but as the value of products for this industry was comparatively small, being merely the toll received for ginning, the amount of products for the rural districts was not increased proportionately to the increase in number of establishments, the percentage of establishments in the districts outside of the cities being 88.9, as compared with 78.6 for the value of products. With the exception of the lumber industry and cotton ginning, the manufactures of the state were largely limited to its 5 principal cities.

STATISTICS OF MANUFACTURES.

CALIFORNIA.

TABLE XXXVII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 to 1900.

	PER CENT OF INCREASE					PER CENT OF TOTAL FOR THE STATE.						
	The state.		3 cities.		4 cities.	3 cities.			4 cities.		16 cities, towns, etc.	State exclusive of 16 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments.....	34.6	58.8	46.9	6.9	18.2	54.4	59.4	40.0	68.8	51.2	63.6	36.4
Capital.....	139.7	39.9	126.9	7.7	12.4	62.7	59.3	45.7	64.0	51.4	59.4	40.6
Wage-earners, average number.....	66.4	25.2	62.3	1.0	8.7	70.3	68.6	55.3	73.9	64.1	72.7	27.3
Total wages.....	95.4	15.2	83.5	18.9	13.2	64.1	72.4	57.2	78.1	65.7	73.8	26.2
Miscellaneous expenses.....	(2)	24.7	(3)	10.3	18.0	(2)	70.9	62.7	76.1	72.0	81.0	19.0
Cost of materials used.....	65.6	56.5	69.0	0.5	6.4	72.3	74.3	47.7	78.5	53.4	60.0	39.4
Value of products.....	83.6	41.9	82.4	11.1	5.8	73.2	72.7	50.6	77.3	57.7	65.4	34.6
Population.....	39.7	23.7	29.0	17.4	27.6	33.5	31.0	29.6	35.1	36.5	43.7	53.3

¹ Decrease.

² Not reported in 1880.

6. *California.*—The value of products of manufactures in the state has been uniformly in excess of that of products of agriculture. The value of manufactures in the rural districts was \$104,873,972, or 34.6 per cent of the total for the state.

The value of products of the 4 principal cities in 1890 formed 77.3 per cent of the total value of products for the state. This percentage decreased to 57.7 in 1900, owing largely to the decreases which have occurred in the cities of Oakland, San Francisco, and Sacramento:

The wages paid in the manufactures of the 16 principal cities which represent the urban districts were for 1900 \$35,006,539, or 73.8 per cent; the value of their products amounted to \$198,000,789, or 65.4 per cent of the total for the state, and their aggregate population was 647,834, or 43.7 per cent of the total.

Table xxxviii shows the principal decreases which have occurred in the industries of Oakland during the last decade.

TABLE XXXVIII.—DECREASES IN OAKLAND, CAL.

INDUSTRIES.	CAPITAL.				WAGES.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$6,864,651	\$6,557,268	.....	\$192,617	\$2,129,598	\$2,561,298	.....	\$431,700
Flouring and grist mill products.....	75,898	210,400	.....	134,502	23,360	19,930	\$3,430	.....
Lumber, planing mill products, including sash, doors, and blinds.....	560,768	510,936	\$49,832	.....	194,735	330,330	.....	135,595
Masonry, brick and stone.....	5,090	138,400	.....	133,310	2,250	183,432	.....	186,182
Sausage.....	.....	14,750	.....	14,750	.....	7,089	.....	7,089
Leather, tanned, curried, and finished.....	.....	119,118	.....	119,118	.....	20,028	.....	20,028
Hand trades, not separately shown.....	713,550	457,558	255,992	.....	609,705	464,810	144,895	.....
All other industries.....	5,009,345	5,106,106	.....	96,761	1,299,548	1,530,679	.....	231,131

¹ The totals for 1890 do not include the statistics for 5 establishments reported for "coffins and burial cases, trimming and finishing."

An increase is shown for some of the industries included in the above table, but they do not equal the decrease in others; so there is a total increase in capital of \$305,824, and a total decrease of \$498,441, making the net decrease \$192,617. There is also shown a net decrease in wages of \$431,700.

The decrease in capital is largely explained by the removal from the city or by the discontinuance of 3 establishments reported in 1890 as engaged in the tanning and currying of leather, and by the reduction in the capital reported as invested in flour mills.

The largest decrease in wages, \$186,182, is shown for "masonry, brick and stone," a building industry in

which the decrease may have been due to temporary conditions of building operations which do not necessarily affect many manufacturing industries. The planing mills, however, depend largely upon the building operations to dispose of their products, and this industry also shows a decrease in the total wages paid during the year. The decrease of \$231,131 shown for "all other industries" is scattered through a number of industries, and no satisfactory explanation can be made; but these decreases should be considered in connection with totals reported for San Francisco, with which the city is closely connected industrially.

URBAN MANUFACTURES.

cclxxi

The decreases in the totals for San Francisco are limited to wages and products. Table xxxix shows the principal decreases which have occurred in the industries of this city during the last decade.

TABLE XXXIX.—DECREASES IN SAN FRANCISCO, CAL.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$22,037,527	\$24,546,895	.....	\$2,509,368	\$133,069,416	\$135,226,536	.....	\$2,157,120
Boots and shoes, factory product.....	400,917	1,078,363	.....	677,446	1,618,514	3,315,043	.....	1,696,529
Brick and tile.....	263,445	132,486	.....	132,486	816,950	340,080	.....	340,080
Furnishing goods, men's.....	130,186	404,126	.....	273,940	657,885	2,398,362	.....	1,740,477
Furniture, factory product.....	270,011	427,902	.....	157,891	880,363	1,166,004	.....	285,641
Jewelry.....	157,543	187,881	.....	29,858	627,044	1,512,571	.....	885,527
Liquors, vinous.....	1,632	62,584	.....	60,952	27,364	837,550	.....	810,186
Lumber, planing mill products, including sash, doors, and blinds.....	391,547	591,718	.....	200,171	1,353,480	1,685,854	.....	332,374
Paving and paving materials.....	263,445	475,140	.....	211,695	816,950	1,542,460	.....	725,510
Printing and publishing, newspapers and periodicals.....	888,630	1,204,701	.....	321,071	3,503,133	3,971,990	.....	468,857
Shirts.....	215,144	390,234	.....	175,090	330,815	1,708,778	.....	777,963
Sugar and molasses, refining.....	372,081	491,853	.....	119,272	11,177,181	22,673,850	.....	11,496,669
Tobacco, cigars and cigarettes.....	850,005	892,345	.....	642,340	1,305,790	2,792,795	.....	1,427,005
Hand trades.....	3,252,765	4,451,821	.....	1,199,056	12,969,059	15,831,892	.....	2,842,833
All other industries.....	15,348,621	13,756,741	.....	\$1,591,880	97,121,898	75,449,307	.....	\$21,672,591

¹The totals for 1890 do not include the statistics for 117 establishments reported for "dentistry, mechanical."

The net decrease in wages reported for the city amounted to \$2,509,368, and in products to \$2,157,120. As shown in the above table, the decreases are well distributed among the various industries of the city, and while in some instances they may be explained by changes in classification and in methods of enumeration, especially in the hand trades, they nevertheless indicate that the industrial conditions of the city were unsettled during the decade or that there was a temporary depression during the census year 1900.

By far the largest decrease in the value of products, \$11,496,669, is shown for "sugar and molasses refining." The sugar refined in San Francisco comes principally from the Hawaiian Islands, and while not all the sugar entered at the port is necessarily refined there, the extent of importations indicates the general conditions of the industry in that city. During the year ending June 30, 1900, there were entered in the San Francisco district 262,237,315 pounds of cane sugar from Hawaii, valued at \$10,809,058, and 10,198,894 pounds of other sugar, valued at \$253,919. In 1899 the corresponding quantities were 236,491,481 pounds of Hawaiian sugar, valued at \$8,831,172, and about the same quantity of other sugar as in 1900. In 1890, 224,457,011 pounds, valued at \$11,549,828, were entered. That is, the quantity of Hawaiian sugar entered

in 1900 was 37,780,340 pounds more than ten years before, but the import value was \$740,770 less. The conclusion is warranted that the decrease in the value of products of San Francisco sugar refining was partly due to the decline in the price of sugar. Without doubt it was also due in part to the establishment of refineries at other points in California. In 1890 the 3 refineries in San Francisco were the only ones reported for the state, while in 1900, in addition to the 3 in San Francisco, there was 1 in Los Angeles, 1 in Orange county, and 1 in Contra Costa county, and the products of these outside refineries were valued at \$4,732,817.

A large decrease was also reported in both wages and products for "furnishing goods, men's." The largest establishments in this industry in 1890 were engaged in the manufacture of men's overalls, shirts, and other garments in connection with a mercantile business. In such cases it is the exception for establishments to keep separate accounts of the two branches of business, and the value of the manufactured product is, therefore, necessarily estimated, or else the total value of the year's business for the entire establishment is included in the report. The lack of uniformity in this respect should be considered in comparing the totals for this industry as reported at the two censuses.

STATISTICS OF MANUFACTURES.

COLORADO.

TABLE XL.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES; 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		1 city.		2 cities.	1 city.			2 cities.		8 cities, towns, etc.	State, exclusive of 8 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments	153.4	135.2	194.2	98.4	98.5	43.2	50.2	41.3	56.9	48.0	65.1	84.9
Capital	518.1	135.7	630.7	83.7	139.1	53.4	63.1	49.2	67.9	68.9	78.7	21.3
Wage-earners, average number	195.9	64.7	215.3	17.7	55.0	58.0	61.8	44.2	68.1	64.1	77.3	22.7
Total wages	325.6	53.4	322.6	2.6	35.5	68.0	67.4	45.1	73.8	65.2	79.5	20.5
Miscellaneous expenses	(¹)	114.0	(¹)	79.7	108.4	(¹)	68.8	57.8	73.6	71.6	84.2	15.3
Cost of materials used	136.7	220.8	148.7	72.8	209.9	64.9	68.2	36.7	73.0	70.5	81.5	18.6
Value of products	197.9	142.1	212.1	41.5	123.3	65.7	68.8	40.2	74.4	70.2	81.4	18.6
Population	112.1	30.7	199.5	25.4	23.4	18.3	25.9	24.9	31.8	30.1	40.7	59.3

¹ Not reported in 1880.

7. *Colorado.*—The products of manufactures reported at the census of 1900 were valued at \$102,830,137. The manufacturing industries depend largely upon mining for raw materials, and also upon the demand of the mining population for a market for finished products. As shown by the table, the manufactures were largely concentrated in the principal cities and towns. Of the total value of products reported for manufactures, 43.4 per cent—\$44,625,305—appears for the smelting and refining of lead and copper.

The percentage of increase for the city of Denver during the last decade has been somewhat less than the percentage of increase in the state as a whole, or in the other principal cities. Moreover, the percentage which

the manufactures of the city formed of those of the state has perceptibly decreased during the ten years from 1890 to 1900. In the former year the value of the products of Denver constituted 68.8 per cent of the products of the state, while in 1900 it was 40.2 per cent. It appears from the table that the 8 principal cities at the census of 1900 contained 65.1 per cent of Colorado's manufacturing establishments, paid 79.5 per cent of the wages, and produced 81.4 per cent of the total value of products. The table indicates, therefore, that the establishment of new manufacturing enterprises has been confined largely to the cities, and that diffusion of manufactures among the rural districts is not as yet a feature of the development of the state.

CONNECTICUT.

TABLE XLI.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES; 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		3 cities.		5 cities.	3 cities.			5 cities.		61 cities, towns, etc.	State, exclusive of 61 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments	52.0	33.8	114.9	34.3	36.2	22.8	32.3	32.4	39.0	39.7	87.4	12.6
Capital	88.4	38.6	83.7	75.7	58.0	24.2	23.6	29.9	37.4	42.6	91.9	8.1
Wage-earners, average number	24.4	25.7	25.6	46.4	41.5	25.6	25.9	30.1	38.1	42.8	91.5	8.5
Total wages	52.8	24.5	62.5	37.9	35.1	27.4	29.2	32.3	42.3	45.9	92.2	7.8
Miscellaneous expenses	(¹)	49.9	(¹)	81.5	55.3	(¹)	32.0	30.5	49.6	51.4	92.1	7.9
Cost of materials used	20.6	50.7	27.3	57.7	66.8	25.2	26.6	27.9	37.7	41.7	92.6	7.4
Value of products	33.7	42.1	58.7	50.7	53.2	24.7	29.3	31.1	41.3	44.5	92.4	7.6
Population	19.8	21.7	38.4	41.2	40.8	21.3	24.6	28.5	31.3	36.2	82.6	17.4

¹ Not reported in 1880.

8. *Connecticut.*—Table XLI shows that the increases in the state and its principal cities have been uniform during the two decades, but that the percentages of increase in the cities, as a rule, have exceeded those for the state. The proportion of the city manufactures to the total for the state has also increased. In 1880 the products reported for the 3 principal cities formed 24.7 per cent of the total products of the state, and 31.1 per cent in 1900. The 5 principal cities shown separately in 1890 reported 41.3 per cent of the total value of products in

that year, and 44.5 in 1900. The 61 principal cities and towns shown separately in 1900 paid 92.2 per cent of the wages and produced 92.4 per cent of the total value of products of the state. All the cities show substantial increases, with the exception of Meriden, for which there is a net decrease of \$61,744 in wages. This decrease is apparently due to temporary local conditions, being confined largely to the hand and building trades, and does not signify a decrease in the manufactures of the city.

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DELAWARE.

TABLE XLII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.				PER CENT OF TOTAL FOR THE STATE.				
	The state.		1 city.		1 city.			2 cities, towns, etc.	State, exclusive of 2 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1880	1890	1900	1900	1900
Number of establishments.....	34.5	41.3	128.7	28.6	34.6	58.8	53.6	55.8	44.2
Capital.....	115.2	22.3	91.6	37.8	68.6	61.1	68.9	72.4	27.6
Wage-earners, average number.....	62.0	8.4	70.3	20.1	62.1	65.3	72.3	75.0	25.0
Total wages.....	102.2	7.3	111.3	10.9	74.4	77.7	80.3	83.0	17.0
Miscellaneous expenses.....	(¹)	16.4	(¹)	46.6	(¹)	61.1	76.9	79.3	20.7
Cost of materials used.....	65.0	25.9	65.5	49.1	61.5	61.7	73.0	78.4	21.6
Value of products.....	83.1	20.8	86.0	38.6	64.4	65.4	75.0	79.1	20.9
Population.....	14.9	9.6	44.6	24.5	29.0	36.5	41.4	43.2	56.8

¹ Not reported in 1880.

9. *Delaware.*—Table XLII indicates that there was a large increase in the manufactures of the state, and also that it was largely confined to the city of Wilmington. The increase in the city of Wilmington has been in excess of the increase in the state exclusive of the city, indicating a constant tendency to concentration at that

point. The percentages in the two cities, Wilmington and Newcastle, which were reported separately in 1900, were largely in excess of those for the state exclusive of the two cities, although their population formed only 43.2 per cent of the population of the state.

FLORIDA.

TABLE XLIII.—Percentages of increase and percentages of manufactures and population in cities: 1880 to 1900.

	PER CENT OF INCREASE.		PER CENT OF TOTAL FOR THE STATE.	
	The state.		3 cities, towns, etc.	State, exclusive of 3 cities.
	1880 to 1890	1890 to 1900	1900	1900
Number of establishments.....	89.0	155.4	20.2	79.8
Capital.....	246.0	198.0	23.7	76.8
Wage-earners, average number.....	138.4	160.9	22.1	77.6
Total wages.....	365.7	80.5	85.8	64.2
Miscellaneous expenses.....	(¹)	109.0	54.1	45.9
Cost of materials used.....	163.9	94.9	38.0	62.0
Value of products.....	228.6	102.0	35.9	64.1
Population.....	46.2	35.0	11.6	38.4

¹ Not reported in 1880.

10. *Florida.*—Table XLIII indicates that the percentages of increase during the last decade have, as a rule, been considerably less than during the decade ending with 1890, the percentages of increase for wages and products for the decade ending with 1900 being 80.5 and 102, respectively, as compared with 365.7 and 228.6 for the decade ending with 1890. The increase has been confined largely to the industries in the rural districts, such as “lumber and timber products,” and “tar and turpentine,” and this has tended to reduce the proportion of urban to total manufactures. It appears, however, that the wages and products of manufactures of the 3 principal cities of the state in 1900 amounted to 35.8 and 35.9 per cent, respectively, of the totals for the state.

GEORGIA.

TABLE XLIV.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		3 cities.		4 cities.	3 cities.			4 cities.		17 cities, towns, etc.	State, exclusive of 17 cities.
	1880 to 1890.	1890* to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments.....	19.3	76.1	191.0	115.2	114.4	10.5	25.5	12.4	80.8	14.8	22.9	77.1
Capital.....	175.4	57.7	301.7	35.7	34.4	27.3	39.8	84.2	46.8	39.9	55.7	44.3
Wage-earners, average number.....	110.2	60.8	147.9	20.1	19.6	26.1	30.8	23.0	80.8	27.5	42.8	57.7
Total wages.....	177.7	38.7	238.5	2.2	1.7	33.9	40.7	80.0	48.0	35.2	50.5	49.5
Miscellaneous expenses.....	(²)	32.4	(²)	22.1	30.0	(²)	49.7	45.8	55.2	54.2	69.9	30.1
Cost of materials used.....	48.2	62.8	86.2	27.8	29.7	32.6	40.9	32.1	48.4	38.6	55.2	44.3
Value of products.....	89.1	54.8	151.3	16.0	17.4	31.3	41.6	31.1	49.1	37.2	53.1	46.9
Population.....	19.1	20.6	57.8	29.2	25.5	5.8	7.7	8.3	9.0	9.3	13.2	38.3

* Decrease.

² Not reported in 1880.

11. *Georgia*.—During the decade ending in 1900 the percentages of increase in the wages and products of manufactures for the entire state were somewhat in excess of those for the principal cities. The population of the cities, however, has increased at a greater ratio than that of the state. Although in the 3 cities there have been steady increases in the products, the percentage of increase for the last decade has been considerably less than that for the earlier decades.

The wages and value of products of the 3 principal cities, published separately at the census of 1880, formed respectively 33.9 per cent, 40.7 per cent, and 30 per cent of the wages, and 31.3 per cent, 41.6 per cent, and 31.1 per cent of the products of the entire state at the different census periods of 1880, 1890, and 1900. The 4 cities published separately in 1890 show substantial increases.

There are slight decreases in number of establishments, explained by the inclusion or omission of the hand trades. Atlanta and Macon also show decreases of \$102,296 and \$9,604, respectively, in the amount of wages paid, which appear to have been due in part to the omission of the hand trades and also to local conditions and to lack of uniformity in securing the schedules at the two censuses. They do not indicate a decrease in the manufacturing industries of the cities.

Table XLIV indicates that the manufactures of the state are quite evenly divided between urban and rural districts. The 17 cities published separately in 1900 controlled 50.5 per cent of the wages and 53.1 per cent of the value of the products, as compared with 49.5 and 46.9 per cent for the two items, respectively, in the state exclusive of the cities.

ILLINOIS.

TABLE XLV.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.							
	The state.		4 cities.		7 cities.	4 cities.			7 cities.		70 cities, towns, etc.	State, exclusive of 70 cities.	
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1880	1890	1900	1880	1900
Number of establishments	40.8	87.3	166.0	84.2	82.5	29.2	55.2	54.3	58.6	57.1	72.7	27.3	
Capital	256.9	54.7	888.7	49.1	49.6	56.0	76.7	73.9	80.7	78.0	92.6	7.4	
Wage-earners, average number	93.6	41.0	181.5	36.2	37.0	61.1	73.1	70.6	76.7	74.5	91.8	8.7	
Total wages	148.8	34.0	191.4	24.9	26.3	66.3	77.7	72.4	81.1	76.4	92.8	7.2	
Miscellaneous expenses	(1)	64.6	(1)	55.8	56.7	(1)	86.4	81.7	88.0	83.8	97.4	2.6	
Cost of materials used	82.5	39.8	117.8	30.9	32.5	68.0	81.1	75.9	84.0	79.5	92.7	7.5	
Value of products	119.0	38.6	167.6	28.4	30.8	66.4	81.1	75.7	84.1	79.2	92.9	7.7	
Population	24.3	26.0	106.6	52.4	50.9	18.3	31.3	37.9	33.1	39.6	51.0	49.0	

¹ Not reported in 1880.

12. *Illinois*.—Of the total population, 2,459,638, or 51 per cent, resided in the 70 principal cities and towns. The wages paid in these places were \$177,811,025, or 92.8 per cent of the total wages of the state. The products of the manufactures of the state, exclusive of the cities, amounted to \$89,848,125. The rapid increase in the industries of the rural districts and in the smaller towns has resulted in decreasing the percentage of the manufactures in the 7 principal cities. In 1890 the wages in these cities formed 81.1 per cent and the products 84.1 per cent of the total. These percentages were reduced in 1900 to 76.4 for wages and 79.2 for value of products. During the last decade 4 of these cities showed an actual decrease in one or more items. In Bloomington, a decrease is shown for capital, wage-earners, wages, and products; in Peoria, the decrease

was confined to value of products; in Quincy, it occurred in wage-earners, wages, and products; and in Springfield it was in the number of establishments and cost of materials.

The total for all items for the state as a whole showed a satisfactory increase during the last decade. There has, however, been a decrease in the industries that are dependent on the rural districts for their materials. "Flouring and grist mill products" is the one in which the decrease is most noticeable. The decrease in this industry extends back at least as far as 1880, for during the decade from 1880 to 1890 there was a decrease of \$9,496,673 in the value of products.

Table XLVI shows the principal decreases which have occurred in the industries of Bloomington during the last decade.

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TABLE XLVI.—DECREASES IN BLOOMINGTON, ILL.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$2,465,300	\$2,841,408		\$376,108	2,030	2,196		166
Brick and tile	79,665	65,500	\$14,155		103	179		76
Carriages and wagons	53,300	43,250	10,050		16	36		20
Flouring and grist mill products	108,500	135,552		27,052	17	31		14
Foundry and machine shop products	285,095	491,087		205,992	168	166	2	
Printing and publishing, newspapers and periodicals	92,200	126,214		34,014	68	97		29
Hand trades	251,866	181,925	69,941		305	295	10	
All other industries	1,594,684	1,797,880		203,196	1,358	1,392		39

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$974,786	\$1,005,955		\$31,219	\$3,845,768	\$4,054,221		\$208,453
Brick and tile	44,100	58,945		9,845	122,400	97,250	\$25,150	
Carriages and wagons	8,850	15,180		6,330	18,040	49,198		31,158
Flouring and grist mill products	10,907	17,956		7,049	216,894	437,064		220,070
Foundry and machine shop products	77,890	87,864		10,474	261,780	329,525		67,745
Printing and publishing, newspapers and periodicals	28,972	47,223		18,256	109,676	194,800		85,224
Hand trades	149,708	127,499	\$22,209		670,259	502,001	168,258	
All other industries	656,309	656,283		974	2,446,719	2,444,888	2,836	

¹The totals for 1890 do not include the statistics for 4 establishments reported for "coffins and burial cases, trimming and finishing;" nor those for 6 establishments reported for "dentistry, mechanical."

It appears from the table that the net decrease in capital amounted to \$376,108; in the number of wage-earners to 166; in total wages to \$31,219; and in value of products to \$208,453.

A disastrous fire occurred in the city in June, 1900, just prior to the canvass of its manufactures, and the agents reported that a number of establishments had been destroyed, that some had not resumed business, and that it was difficult to locate those which had again started, their names not yet being in the city directory. Under these conditions it is possible that some establishments were omitted from the canvass and also that the fire may in a measure account for the decrease.

TABLE XLVII.—Decreases in Peoria, Ill.

INDUSTRIES.	PRODUCTS.			
	1900	1890	Increase.	Decrease.
All industries ¹	\$48,871,596	\$55,483,223		\$6,611,627
Flouring and grist mill products	496,802	621,453		124,656
Lumber, planing mill products, including sash, doors, and blinds	158,000	412,902		254,902
Hand trades	8,528,427	2,842,344	\$686,083	
All other industries	44,688,367	51,606,519		6,918,152

¹The totals for 1890 do not include the statistics for 3 establishments reported for "coffins and burial cases, trimming and finishing;" but include those for 2 establishments reported for "dentistry, mechanical."

Table XLVII shows the principal decreases which have occurred in the industries of Peoria during the last decade.

The net decrease in the value of products in the city amounted to \$6,611,627. The total decrease in the group of "all other industries," \$6,918,152, includes the decrease reported for distilled liquors. At the census of 1880 there were 14 establishments reported for this industry, with products valued at \$8,196,000. In 1890 they had been consolidated under one ownership, and were reported as one establishment, being included in the group of "all other industries." In 1900 there were 11 establishments reported, with products valued at \$26,792,354. The practice of the Census Office in reporting internal-revenue tax, when it was actually paid by the manufacturers, is to include it in the value of the products, and as the inclusion or exclusion of this amount greatly affects the gross value of the products, it is probable that the lack of uniformity in paying this tax at the several censuses has resulted in the apparent decrease in the value of the products for this industry.

Table XLVIII shows the principal decreases which have occurred in the industries of Quincy during the last decade.

STATISTICS OF MANUFACTURES.

TABLE XLVIII.—DECREASES IN QUINCY, ILL.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries.....	4,509	4,577	.....	68	\$1,918,452	\$1,986,408	.....	\$67,956	\$9,234,988	\$10,395,102	.....	\$1,160,114
Brick and tile	41	195	.....	154	14,569	43,786	.....	29,217	32,550	101,100	.....	68,550
Carriages and wagons.....	184	357	.....	173	79,436	168,901	.....	89,465	250,456	600,762	.....	350,306
Flouring and grist mill products.....	86	92	.....	56	18,605	61,238	.....	32,633	868,218	1,768,501	.....	1,400,283
Agricultural implements.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lime and cement.....	147	467	.....	320	59,325	162,000	.....	102,675	281,288	1,081,176	.....	749,938
Tobacco, chewing and snuff.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades.....	598	798	.....	205	276,099	364,575	.....	88,476	1,163,759	1,247,170	.....	88,411
All other industries.....	3,508	2,668	.....	840	1,470,418	1,195,908	.....	\$274,510	7,188,767	5,646,898	.....	\$1,492,874

The large decrease in the value of products reported for flour and grist mills confirms the statement previously made that there was a general decline in the industry for the entire state. The manufacture of tobacco, especially "chewing, smoking, and snuff," appears to have almost disappeared from the city. In

1880 there were 4 establishments reported for this industry, with products valued at \$1,776,070; in 1890 there were 3 establishments, with products of \$578,500; while in 1900 there were only 2 establishments, and the value of their products had decreased fully 90 per cent.

INDIANA.

TABLE XLIX.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		4 cities.		6 cities.	4 cities.			6 cities.		81 cities towns, etc.	State, exclusive of 81 cities.
	1880 to 1890	1890 to 1900	1880 to 1890	1890 to 1900	1890 to 1900	1880	1890	1900	1890	1900	1900	1900
Number of establishments.....	10.3	45.8	69.9	51.4	42.2	11.9	18.4	19.1	22.5	21.9	55.7	44.8
Capital.....	100.2	78.2	85.3	78.7	62.6	29.9	27.7	27.7	40.3	36.8	84.8	15.2
Wage-earners, average number.....	59.1	41.0	68.4	36.9	30.2	28.4	30.0	29.2	39.0	36.0	82.2	17.8
Total wages.....	93.9	67.0	80.5	36.7	27.5	35.1	32.6	28.4	42.8	34.8	83.8	16.2
Miscellaneous expenses.....	(¹)	100.3	(¹)	216.5	186.8	(¹)	43.0	68.0	50.0	71.5	94.2	5.8
Cost of materials used.....	29.8	65.2	14.7	60.6	54.2	34.8	30.7	29.9	36.9	34.5	85.9	14.1
Value of products.....	53.3	66.7	43.4	70.4	59.6	34.1	31.9	32.6	39.1	37.4	85.2	14.8
Population.....	10.8	14.8	41.0	89.7	88.5	7.9	10.1	12.3	12.1	14.6	83.9	68.1

¹ Not reported in 1880.

13. *Indiana.*—Table XLIX shows that the increase in value of products of the manufactures of the state as a whole has been somewhat in excess of that of the 6 principal cities.

In 1880 the wages and products of the 4 principal cities formed 35.1 and 34.1 per cent of the total for the state, and in 1900, 28.4 and 32.6 per cent, respectively. In 1890 the wages and products of the 6 cities formed 42.8 and 39.1 per cent of the total, and in 1900, 34.8 and 37.4 per cent, respectively. Notwithstanding this

decrease for the twenty-year period in the extent of concentration of manufactures in the larger cities, the 81 principal cities and towns of the state in 1900 contained 55.7 per cent of all the establishments, paid 83.8 per cent of the total wages, and their products formed 85.2 per cent of the total products of the state.

New Albany is the only city in the state in which the totals for all industries show a decrease. Table L shows the principal decreases which have occurred in the industries of the city during the last decade.

TABLE L.—DECREASES IN NEW ALBANY, IND.

INDUSTRIES.	CAPITAL.			WAGE-EARNERS.			WAGES.			PRODUCTS.		
	1900	1890	Decrease.	1900	1890	Decrease.	1900	1890	Decrease.	1900	1890	Decrease.
All industries ¹	\$2,996,512	\$5,342,071	\$2,345,559	2,430	4,165	1,735	\$848,680	\$1,835,341	\$991,661	\$4,179,490	\$6,681,924	\$2,452,434
Glass.....	.....	1,645,000	1,645,000	.....	848	848	.....	519,738	519,738	.....	1,117,000	1,117,000
Leather, tanned, curried, and finished.....	188,000	225,558	37,558	104	109	5	44,100	53,800	9,200	382,930	586,940	204,010
Flouring and grist mill products.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iron and steel.....	836,968	1,324,597	487,631	408	800	397	168,968	374,256	205,288	1,082,089	1,813,171	731,082
Lumber and timber products.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades.....	108,995	173,243	69,248	232	452	220	91,688	177,288	85,600	395,478	686,911	291,433
All other industries.....	1,867,551	1,978,673	106,122	1,691	1,956	265	538,924	710,769	171,835	2,318,993	2,427,902	108,909

¹The totals for 1890 include the statistics for 2 establishments reported for "coffins and burial cases, trimming and finishing," and those for 1 establishment reported for "dentistry, mechanical."

The increased use of natural gas as a fuel during the decade from 1890 to 1900 appears to have been in many respects disastrous to the industries of New Albany, as many of its largest establishments removed to the gas regions, where they could have the benefit of this advantageous fuel. As shown by the table, the largest decreases occurred in the manufacture of glass, for

which 3 establishments were reported in 1890, while the industry had apparently disappeared from the city in 1900. Large decreases also occurred in iron and steel and its allied industries. The statistics given in the above table, and in the detailed tables in Part II, show the condition of the industries during the census year.

IOWA.

TABLE LI.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		3 cities.		6 cities.	3 cities.			6 cities.		39 cities, towns, etc.	State, exclusive of 39 cities.
	1880 to 1890	1890 to 1900	1880 to 1890	1890 to 1900	1890 to 1900	1880	1890	1900	1880	1900	1900	1900
Number of establishments	7.5	99.2	54.9	28.4	38.6	10.0	14.3	9.2	21.7	15.1	36.5	63.5
Capital	128.1	32.5	154.3	86.6	29.2	22.7	25.3	26.1	38.8	37.9	75.0	25.0
Wage-earners, average number	79.9	14.7	98.5	19.3	11.4	21.5	23.7	24.6	37.4	36.4	76.0	24.0
Total wages	110.1	17.1	85.2	17.2	7.0	27.7	24.4	24.4	41.0	37.4	77.0	23.0
Miscellaneous expenses	(¹)	39.4	(¹)	55.5	52.6	(¹)	31.2	34.8	45.9	50.3	82.0	18.0
Cost of materials used	62.8	27.6	71.6	7.7	4.2	19.7	20.8	17.6	39.3	32.1	71.0	29.0
Value of products	76.0	31.6	87.7	17.1	12.3	21.1	22.5	20.1	40.2	34.3	72.0	28.0
Population	17.7	16.7	61.3	24.6	14.1	4.1	5.6	6.0	9.9	9.7	21.1	78.9

¹ Not reported in 1880.

14. *Iowa.*—Iowa is preeminently an agricultural state. It ranked first in 1900 in the gross value of agricultural products and seventeenth in the value of products of manufactures.

There has not been so rapid an increase in the manufactures during the last decade as during former ones, and the proportion of manufactures in the principal cities has decreased. While from 1880 to 1890 the per cent of increase in products of manufactures in the state was 76, and in the 3 principal cities 87.7, in the decade from 1890 to 1900 the state showed an increase of 31.6, and the 3 cities but 17.1 per cent. In 1880 the value of products of the 3 cities amounted to 21.1 per cent of the value of products of the state, in 1890 to 22.5 per cent, and in 1900 to 20.1 per cent. The number of establishments in the state increased 7.5 per cent from 1880 to 1890, and 99.2 per cent from 1890 to 1900; yet the 3 cities, which in 1880 represented 10 per cent of the number of establishments in the state, represented only 9.2 per cent in 1900. The total amount of wages paid in the state increased 110.1 per cent from 1880 to 1890, and only 17.1 per cent in the following decade; yet of all wages paid in 1880, 27.7 per cent was in the 3 cities, while in 1900 this had decreased to 24.4 per cent.

These results are due largely to the fact that the manufacture of butter and cheese, which is essentially a rural manufacture, has made rapid strides during the last decade, having increased 50.3 per cent in value of products.

Only 21.1 per cent of Iowa's population live in the 39 cities and towns which were withdrawn from the enumerators. The value of products of these cities and towns in 1900 amounted to 72 per cent of the gross value of products of manufactures of the entire state. The agricultural resources of the state have been developed to meet the demands of the markets of Chicago, St. Louis, Omaha, and other points which are in immediate communication with all parts of the state by a perfect system of railroads. Manufactures have, therefore, been to some extent neglected and the growth of the cities retarded. Nevertheless, the increase in manufactures during the last decade has been in keeping with the increase in the majority of the states.

Of the 6 cities in the state for which comparative figures are available, all but the largest, Des Moines, show decreases in one or more of the items.

Table LII shows the principal decreases which have occurred in the industries of Burlington during the last decade.

STATISTICS OF MANUFACTURES.

TABLE LII.—DECREASES IN BURLINGTON, IOWA.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries.....	2,598	2,935	.....	337	\$1,018,998	\$1,157,414	.....	\$143,416	\$5,334,196	\$5,413,138	.....	\$78,942
Carriages and wagons.....	186	185	1	.....	73,615	84,135	.....	10,520	429,204	340,920	\$88,284	.....
Furniture, factory product.....	237	256	.....	19	75,887	93,655	.....	17,768	332,935	323,975	8,960	.....
Lumber and timber products.....	220	327	.....	107	83,418	93,265	.....	14,847	377,485	669,159	203,326	.....
Printing and publishing, newspapers and periodicals.....	56	140	.....	84	35,801	53,675	.....	17,874	150,088	139,760	10,328	.....
Saddlery and harness.....	73	48	.....	30	24,532	33,041	.....	8,509	160,958	179,288	.....	18,330
Hand trades.....	470	331	.....	139	196,265	183,928	\$32,337	.....	743,800	580,114	163,686	.....
All other industries.....	1,351	1,648	.....	297	524,480	630,715	.....	106,235	2,639,726	3,179,922	.....	540,196

¹The totals for 1890 include the statistics for 2 establishments reported for "hay and straw baling."

The commercial and industrial growth of Burlington formerly depended largely upon the river traffic, and when the railroads diverted this traffic the growth of the city was retarded. It does not have the advantage of being a competitive point for eastern business, and cities enjoying that advantage have therefore surpassed Burlington. In the table, 4 of the industries in which there has been a decrease in the amount of wages show increases in value of products. Three of these industries also show a decrease in the average number of wage-earners employed during the year. The decrease in the two items may be due in a measure to the change in the methods of computing the average number of wage-earners, and also to a change in the charac-

ter of the materials consumed during 1900. "Lumber and timber products," in which there is shown a decrease of 107 in number of wage-earners and \$14,847 in wages, has also declined generally throughout the state; therefore the decrease in this industry in the city of Burlington is in harmony with the decrease in the state.

Davenport is located on the Mississippi River, and Council Bluffs and Sioux City are on the Missouri River. All, therefore, are to some extent under the influence of conditions which are affected by the river traffic. Tables LIII, LIV, and LV show the principal decreases which have occurred in the industries of these 3 cities during the last decade.

TABLE LIII.—DECREASES IN COUNCIL BLUFFS, IOWA.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.				WAGES.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries.....	\$1,176,408	\$1,292,283	.....	\$115,875	1,179	1,469	.....	290	\$609,905	\$701,683	.....	\$91,778
Brick and tile.....	70,650	83,925	.....	13,275	42	141	.....	99	21,500	47,812	.....	26,312
Carpentering.....	25,800	121,600	.....	95,800	75	106	.....	31	38,975	77,900	.....	38,925
Carriages and wagons.....	109,682	131,000	.....	21,418	54	79	.....	25	31,896	40,912	.....	9,016
Printing and publishing, newspapers and periodicals.....	76,250	92,256	.....	16,006	51	99	.....	48	22,660	61,486	.....	38,826
Flouring and grist mill products.....	90,800	154,740	.....	63,940	59	57	.....	2	37,500	30,225	7,275	.....
Foundry and machine shop products.....	121,770	144,875	.....	23,105	224	195	.....	29	132,889	124,040	8,849	.....
Hand trades, not separately shown.....	681,566	563,887	\$117,669	.....	674	792	.....	118	324,485	319,308	5,177	.....

TABLE LIV.—DECREASES IN DAVENPORT, IOWA.

INDUSTRIES.	WAGE-EARNERS.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	4,348	4,458	.....	110	\$11,573,670	\$10,332,820	\$1,240,850	.....
Carpentering.....	190	291	.....	101	433,229	779,793	.....	\$346,564
Confectionery.....	7	51	.....	44	19,100	163,560	.....	144,460
Cooperage.....	32	106	.....	74	36,902	194,492	.....	157,590
Flouring and grist mill products.....	24	42	.....	18	327,766	827,800	.....	499,534
Slaughtering and meat packing, wholesale.....	63	94	.....	31	675,810	409,478	266,337	.....
Lumber and timber products.....	196	609	.....	413	981,040	1,883,399	.....	902,359
Malt.....	602	743	.....	141	908,941	962,833	.....	53,892
Hand trades not separately shown.....	3,234	2,522	.....	712	8,190,882	5,111,970	3,078,912	.....

¹The totals for 1890 do not include the statistics for 8 establishments reported for "dentistry, mechanical."

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TABLE LV.—DECREASES IN SIOUX CITY, IOWA.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$1,485,006	\$1,516,550	.....	\$31,484	\$15,469,702	\$14,110,948	\$1,358,759	.....
Carpentering	46,847	157,384	.....	110,537	186,342	1,253,963	.....	\$1,067,621
Clothing, men's, custom work and repairing	43,891	63,368	.....	19,477	132,689	156,435	.....	23,746
Masonry, brick and stone	24,364	210,758	.....	186,394	75,304	660,250	.....	584,946
Printing and publishing, newspapers and periodicals	109,834	174,412	.....	64,578	302,197	420,079	.....	117,882
Cars and general shop construction and repairs by steam railroad companies ²	549,770	283,155	\$266,615	.....	1,046,623	7,689,223	.....	6,542,605
Slaughtering and meat packing, wholesale .....	.....	.....	.....	.....	.....	.....	.....	.....
Slaughtering, wholesale, not including meat packing ² .....	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades, not separately shown	128,615	120,544	8,071	.....	541,497	635,420	.....	93,923
All other industries	581,745	506,929	74,816	.....	13,185,050	8,305,568	9,789,482	.....

¹ The totals for 1890 do not include the statistics for 5 establishments reported for "dentistry, mechanical," but include those for 2 establishments reported for "coffins and burial cases, trimming and finishing."
² None in 1890.

KANSAS.

TABLE LVI.—Percentages of increase and percentages of manufactures and population in cities: 1880 to 1900.

	PER CENT OF INCREASE.			PER CENT OF TOTAL FOR STATE.			
	The state.		3 cities.	3 cities.		36 cities, towns, etc.	State, exclusive of 36 cities.
	1880 to 1890	1890 to 1900	1890 to 1900	1890	1900	1900	1900
Number of establishments..	59.5	75.1	62.8	16.8	15.6	45.2	54.8
Capital	292.5	52.1	37.0	40.9	36.9	75.1	24.9
Wage-earners, average number	134.1	24.6	39.3	40.2	44.9	79.7	20.3
Total wages	232.6	22.8	29.0	44.6	46.8	81.1	18.9
Miscellaneous expenses.....	(2)	110.5	115.4	65.3	61.7	86.2	13.8
Cost of materials used.....	267.5	64.2	92.5	52.4	61.4	86.6	13.4
Value of products	257.3	56.2	74.3	50.7	55.6	84.8	15.2
Population	43.3	2.9	17.7	6.5	7.5	21.3	78.7

¹ Decrease.

² Not reported in 1880.

15. *Kansas.*—The percentages of increase in wages and value of products of manufactures in the state during the last decade have been exceeded by those of the 3 principal cities, there having been an increase of 22.8 per cent in wages and 56.2 per cent in products for the state, as compared with 29 per cent and 74.3 per cent, respectively, for the cities. The percentage of the total products which was reported from these cities has also increased. At the census of 1900, 81.1 per cent of the total wages was reported for the 36 principal cities and towns.

With the exception of Wichita, each of the 3 principal cities shows substantial increases. Table LVII shows the principal decreases which have occurred in the industries of Wichita during the last decade.

TABLE LVII.—DECREASES IN WICHITA, KANS.

INDUSTRIES.	CAPITAL.				WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$2,108,524	\$3,062,696	.....	\$954,172	\$639,271	\$673,994	.....	\$34,723	\$4,724,068	\$5,074,013	.....	\$350,845
Carriages and wagons	11,159	35,625	.....	24,466	8,420	19,332	.....	10,912	18,655	57,758	.....	39,103
Flouring and grist mill products	145,746	214,305	.....	68,559	17,302	19,642	.....	1,740	457,275	420,319	\$36,926	.....
Lumber, planing mill products, including sash, doors, and blinds	44,600	93,524	.....	48,924	18,200	19,842	.....	1,642	79,000	147,000	.....	68,000
Printing and publishing, newspapers and periodicals	100,800	183,350	.....	82,550	69,110	75,758	.....	6,648	168,301	205,700	.....	37,399
Hand trades	322,202	75,545	\$246,657	.....	197,979	55,152	\$142,827	.....	1,020,775	197,980	\$822,845	.....
All other industries	1,484,017	2,460,347	.....	976,330	327,660	484,268	.....	156,608	2,980,062	4,046,176	.....	1,066,114

¹ The totals for 1890 include the statistics for 2 establishments reported for "dentistry, mechanical."

In Wichita there was a decrease in the amount of capital invested, wages paid, and value of products. The decreases appear to have been generally distributed through the industries of the city and were evidently

the result of business depression. The group of "hand trades" shows a net increase, although there were decreases in a number of the individual industries included.

STATISTICS OF MANUFACTURES.

KENTUCKY.

TABLE LVIII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		3 cities.		4 cities.	3 cities.			4 cities.		18 cities, towns, etc.	State, exclusive of 18 cities
	1880 to 1890	1890 to 1900	1880 to 1890	1890 to 1900	1890 to 1900	1880	1890	1900	1890	1900	1900	1900
Number of establishments	45.4	23.4	190.6	125.6	122.4	25.9	51.8	31.2	54.1	84.0	45.8	64.2
Capital	74.2	80.4	77.0	22.6	22.0	57.3	58.2	54.7	60.2	56.4	78.5	26.5
Wage-earners, average number	51.3	11.3	56.3	7.1	7.4	58.2	60.2	57.9	62.5	60.2	77.6	22.4
Total wages	82.9	5.2	93.8	15.8	15.5	64.2	68.0	60.9	70.5	63.4	80.1	19.9
Miscellaneous expenses	(2)	23.3	(2)	95.1	95.3	(2)	47.9	75.8	48.7	77.2	84.0	16.0
Cost of materials used	34.2	30.1	44.5	17.3	17.4	57.4	61.8	55.7	63.7	57.5	73.7	28.3
Value of products	67.9	21.7	73.0	17.1	17.0	59.1	60.9	58.7	63.1	60.6	75.6	24.4
Population	12.7	15.5	28.5	23.5	23.4	10.5	12.0	12.9	13.2	14.1	19.2	80.8

¹ Decrease.

² Not reported in 1880.

16. *Kentucky.*—The increase in the value of products of manufactures of the state during the decade from 1890 to 1900 has been somewhat in excess of the increase for the principal cities, and the total wages have increased for the state while they decreased for the cities. The population of the cities, however, has increased at a greater ratio than that of the state. The small percentage of increase in the manufactures of the cities in this decade has resulted in a decrease in the percentage which the manufactures of the cities formed of the total. In 1880 the 3 principal cities had 64.2 per cent of the total wages of the state and 59.1 per cent of the total products. These percentages increased to 68 and 60.9 per cent in 1890, and decreased to 60.9 and 58.7 per cent,

respectively, in 1900. In 1890 the wages of the 4 principal cities formed 70.5 per cent, and the products 63.1 per cent of the total; in 1900 they had decreased to 63.4 per cent for wages and 60.6 per cent for products. Notwithstanding the decrease in the percentage of the manufactures in the principal cities, the industries in 1900 were still largely restricted to urban districts.

The statistics of Covington and Newport indicate that the manufactures of these cities have decreased, and these decreases have affected the totals for the state. Tables LIX and LX show the principal decreases which have occurred in the industries of these two cities during the last decade.

TABLE LIX.—DECREASES IN COVINGTON, KY.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$4,754,786	\$6,864,650	.....	\$2,109,864	3,972	6,078	.....	2,106
Bread and other bakery products	15,990	99,940	.....	83,950	31	64	.....	33
Carpentering	40,135	641,620	.....	601,485	83	1,045	.....	962
Masonry, brick and stone	37,800	103,020	.....	66,820	49	242	.....	193
Painting, house, sign, etc., and paper hanging	19,120	188,335	.....	169,215	56	202	.....	236
Paving and paving materials	.....	80,210	.....	80,210	.....	90	.....	90
Roofing and roofing materials	13,929	70,985	.....	56,966	17	84	.....	67
Tobacco, chewing, smoking, and snuff	172,340	629,300	.....	456,960	128	395	.....	267
Cooperage	.....	.....	.....	.....	.....	.....	.....	.....
Slaughtering, wholesale, not including meat packing	44,625	519,045	.....	474,420	35	473	.....	438
Tobacco, stemming and rehandling	.....	.....	.....	.....	.....	.....	.....	.....
Wirework, including wire rope and cable	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades, not separately shown	142,045	585,615	.....	443,570	172	748	.....	576
All other industries	4,269,302	8,996,070	\$273,232	.....	3,401	2,045	756	.....

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$1,555,089	\$2,946,743	.....	\$1,390,654	\$6,803,032	\$15,904,495	.....	\$9,101,463
Bread and other bakery products	12,425	29,210	.....	16,785	86,200	254,070	.....	167,870
Carpentering	47,498	624,870	.....	577,374	276,748	3,927,740	.....	3,650,992
Masonry, brick and stone	26,500	143,982	.....	117,482	75,065	629,480	.....	554,365
Painting, house, sign, etc., and paper hanging	22,238	187,985	.....	165,698	61,737	643,580	.....	581,833
Paving and paving materials	.....	41,630	.....	41,630	.....	215,850	.....	215,850
Roofing and roofing materials	8,260	43,830	.....	35,570	37,106	224,880	.....	187,775
Tobacco, chewing, smoking, and snuff	36,155	129,350	.....	93,195	541,158	986,750	.....	445,592
Cooperage	.....	.....	.....	.....	.....	.....	.....	.....
Slaughtering, wholesale, not including meat packing	12,769	175,380	.....	162,611	355,980	1,268,395	.....	912,415
Tobacco, stemming and rehandling	.....	.....	.....	.....	.....	.....	.....	.....
Wirework, including wire rope and cable	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades, not separately shown	65,719	338,177	.....	272,458	347,692	1,768,615	.....	1,420,923
All other industries	1,323,477	1,281,373	\$42,099	.....	5,021,347	5,985,175	.....	963,828

¹ The totals for 1890 do not include the statistics for 10 establishments reported for "coffins and burial cases, trimming and finishing."

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TABLE LX.—DECREASES IN NEWPORT, KY.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$2,848,485	\$3,455,623	.....	\$607,088	2,561	3,772	.....	1,211
Carriages and wagons	15,105	82,820	.....	17,715	9	54	.....	45
Clothing, men's, factory product	52,970	135,472	.....	82,502	554	819	.....	265
Clothing, women's, dressmaking	1,000	26,483	.....	25,483	14	163	.....	149
Foundry and machine shop products	246,111	581,106	.....	334,995	197	394	.....	197
Lumber, planing mill products, including sash, doors, and blinds	79,000	98,521	.....	19,521	56	61	.....	5
Painting, house, sign, etc., and paper hanging	25,901	54,890	.....	28,989	47	102	.....	55
Brick and tile	}	}	}	}	}	}	}	}
Marble and stone work	16,150	87,510	.....	71,360	25	161	.....	126
Roofing and roofing materials	}	}	}	}	}	}	}	}
Hand trades, not separately shown	168,284	754,718	.....	591,484	276	818	.....	542
All other industries	2,248,914	1,684,003	.....	\$564,911	1,883	1,210	.....	173

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$1,155,361	\$1,689,643	.....	\$534,282	\$4,888,109	\$6,658,787	.....	\$1,770,618
Carriages and wagons	5,120	88,658	.....	83,538	24,195	140,500	.....	116,305
Clothing, men's, factory product	124,971	212,221	.....	87,250	201,540	440,800	.....	239,260
Clothing, women's, dressmaking	3,478	37,857	.....	34,379	8,408	245,765	.....	237,377
Foundry and machine shop products	122,124	164,428	.....	42,304	414,962	922,014	.....	507,052
Lumber, planing mill products, including sash, doors, and blinds	18,765	37,511	.....	18,746	104,293	204,500	.....	100,262
Painting, house, sign, etc., and paper hanging	22,544	50,043	.....	27,499	71,241	232,150	.....	160,909
Brick and tile	}	}	}	}	}	}	}	}
Marble and stone work	10,174	60,529	.....	50,355	23,400	185,765	.....	162,365
Roofing and roofing materials	}	}	}	}	}	}	}	}
Hand trades, not separately shown	197,341	504,052	.....	306,711	770,022	1,935,520	.....	1,165,498
All other industries	710,854	584,314	.....	\$126,540	3,270,223	2,351,753	.....	\$918,470

¹The totals for 1890 do not include the statistics for 4 establishments reported for "coffins and burial cases, trimming and finishing."

The commercial and industrial interests of Newport and Covington are closely allied with the interests of Cincinnati, Ohio, and the statistics for that city show a decided decrease in manufactures. It is probable that quite a number of the manufacturing establishments have removed from all these cities to localities where

advantage could be taken of better economic conditions. In the case of a number of the industries, however, there is reason to believe that the decrease was also due in part to business depression. In this connection, reference should be made to the explanation concerning the decreases shown for the city of Cincinnati.

LOUISIANA.

TABLE LXI.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.				PER CENT OF TOTAL FOR THE STATE.				
	The state.		1 city.		1 city.			5 cities, towns, etc.	State, exclusive of 5 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1880	1890	1900	1900	1900
Number of establishments	68.3	66.5	114.3	122.3	58.9	75.0	35.0	39.2	60.8
Capital	203.2	225.4	207.3	74.8	74.7	75.7	40.7	46.2	53.8
Wage-earners, average number	133.2	48.7	135.1	113.0	78.1	78.7	46.0	52.1	47.9
Total wages	132.1	62.0	122.6	17.6	85.3	81.7	49.7	55.6	44.4
Miscellaneous expenses	(2)	112.7	(2)	44.5	(2)	87.6	59.5	63.7	35.3
Cost of materials used	180.4	147.3	162.5	53.4	74.6	84.9	52.7	59.3	40.7
Value of products	138.8	109.6	156.8	31.5	77.7	83.5	52.4	58.6	41.4
Population	19.0	23.5	12.0	18.6	23.0	21.6	20.8	28.3	76.7

¹Decrease.

²Not reported in 1880.

17. Louisiana.—Table LXI shows that the manufactures of the state are largely confined to the city of New Orleans. The percentages of increase shown for both the state and city during the decade from 1880 to 1890 were exceptionally large and were due in a measure to the more thorough canvass of the city at the latter census. The increase in the city during the decade from 1890 to 1900 was considerably less than the percentage of increase in the state for the same period, and the percentage which the manufactures of the city formed of the total for the state in 1900 was

smaller than at any prior census. The reports for the 5 cities and towns, the statistics of which were shown separately in 1900, indicate an even distribution of manufactures between the urban and rural districts, the establishments of the 5 cities having paid, in 1900, 55.6 per cent of the total wages, and put out 58.6 per cent of the total value of products of the state.

Table LXII shows the principal decreases which have occurred in the industries of New Orleans during the last decade.

STATISTICS OF MANUFACTURES.

TABLE LXII.—DECREASES IN NEW ORLEANS, LA.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	19,435	22,328	.....	2,893	\$7,645,167	\$8,269,520	.....	\$624,353	\$63,514,505	\$48,284,924	\$15,279,581	.....
Boots and shoes, factory product.	397	786	.....	389	145,004	328,900	.....	183,896	660,987	968,017	.....	\$307,030
Clothing, men's, factory product.	2,045	3,533	.....	1,538	336,809	507,235	.....	170,426	2,036,069	2,174,747	.....	138,678
Cooperage	317	593	.....	281	120,830	252,919	.....	132,089	515,835	810,611	.....	294,776
Cotton, cleaning and rehandling.	.....	120	.....	120	.....	23,850	.....	23,850	.....	51,500	.....	51,500
Cotton, compressing .....	.....	1,029	.....	1,029	.....	586,735	.....	586,735	.....	981,552	.....	981,552
Lumber, planing mill products, including sash, doors, and blinds.	321	511	.....	190	127,157	295,626	.....	168,469	552,251	1,093,451	.....	541,200
Rice, cleaning and polishing.	153	313	.....	160	78,346	116,816	.....	37,970	2,924,564	3,577,885	.....	653,321
Shirts	130	523	.....	393	24,896	48,000	.....	23,104	140,050	233,000	.....	92,950
Tobacco, cigars and cigarettes.	1,176	1,843	.....	667	402,934	678,963	.....	276,029	1,988,305	1,569,145	.....	180,840
Furnishing goods, men's	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hosiery and knit goods	167	684	.....	517	26,290	135,693	.....	109,403	128,500	619,175	.....	490,675
Lithographing and engraving.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades	2,513	2,531	.....	18	1,161,025	1,154,306	.....	\$6,719	4,180,220	4,297,747	.....	117,527
All other industries	12,216	9,807	2,409	.....	5,172,876	4,140,977	1,031,899	.....	50,987,724	31,853,094	19,129,630	.....

¹The totals for 1890 do not include the statistics for 7 establishments reported for "coffins and burial cases, trimming and finishing;" nor those for 7 establishments reported for "dentistry, mechanical."

From the table it appears that there was a net decrease of 2,893 in the average number of wage-earners, and of \$624,353 in wages. There was, however, a net increase of \$15,279,581 in the value of products. Cotton compressing, which has been an important industry in New Orleans, was not included in the statistics of manufactures for that city at the census of 1900. In 1890 this industry gave employment to 1,029 wage-earners and paid \$586,735 in wages. The omission of the corresponding statistics for 1900 accounts, in a large measure, for the decreases.

Immediately upon the completion of the canvass in

New Orleans, the work of the special agents was carefully revised, and advantage was taken of every opportunity to check the schedules and secure returns from all establishments in existence during the census year. The city board of trade assisted in the revision of the canvass, and a recanvass was made of some industries in which decreases appeared. The work, however, confirmed the accuracy of the original canvass. The figures, therefore, may be accepted with confidence as showing the actual conditions of the industries of the city during the census year 1900.

MAINE.

TABLE LXIII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.							
	The state.		1 city.		2 cities.	1 city.			2 cities.		43 cities, towns, etc.	State, exclusive of 43 cities.	
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1880	1900	1900	1900	
Number of establishments	11.8	33.8	119.2	13.5	5.1	6.7	13.2	9.5	17.5	13.7	53.6	46.4	
Capital	60.9	52.8	62.3	1.5	18.2	8.5	8.6	5.7	18.9	14.6	63.7	36.3	
Wage-earners, average number	32.9	6.8	125.1	6.8	3.6	13.5	7.6	7.6	17.6	17.2	69.5	30.5	
Total wages	63.6	24.2	56.5	8.2	6.0	11.8	10.5	9.2	21.0	18.0	70.7	29.3	
Miscellaneous expenses	(²)	44.1	(²)	29.9	11.1	(²)	10.8	9.8	22.6	17.5	74.8	25.2	
Cost of materials used	0.8	33.7	17.7	111.5	13.0	13.3	12.2	8.1	21.6	14.0	66.2	33.8	
Value of products	19.9	33.1	15.6	0.6	12.1	12.3	11.9	9.0	21.4	15.7	67.1	32.9	
Population	1.9	5.0	7.7	37.7	27.1	5.2	5.5	7.2	8.8	10.6	41.8	58.2	

¹ Decrease.

² Not reported in 1880.

18. *Maine.*—The statistics of manufactures were published separately for the city of Portland at the census of 1880. The percentage of increase in this city was considerably less during the decade from 1890 to 1900 than

during that from 1880 to 1890. The percentage of the value of products in the city has decreased from 12.3 per cent in 1880 to 9 per cent in 1900. The percentage of products of the two principal cities, Portland

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and Lewiston, has also decreased from 21.4 per cent in 1890 to 15.7 per cent in 1900. Notwithstanding this apparent decrease in the percentage of the total manufactures in the principal cities, the 43 cities and towns of the state which were reported separately in 1900 show a major percentage, in all particulars, of the manufactures of the state.

In the city of Lewiston there was an actual decrease of \$485,402, or 5.4 per cent, in the value of products. Table LXIV shows the principal decreases which have occurred in the industries of this city during the last decade.

TABLE LXIV.—Decreases in Lewiston, Me.

INDUSTRIES.	PRODUCTS.			
	1900	1890	Increase.	Decrease.
All industries ¹	\$8,581,354	\$9,066,756	.....	\$485,402
Cotton goods.....	4,638,115	5,013,377	.....	375,262
Foundry and machine shop products.....	88,893	235,521	.....	146,628
Hand trades.....	669,397	725,610	.....	56,213
All other industries.....	3,184,949	3,092,248	.....	\$92,701

¹ The totals for 1890 do not include the statistics for 4 establishments reported for "dentistry, mechanical."

MARYLAND.

TABLE LXV.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.				PER CENT OF TOTAL FOR THE STATE.				
	The state.		1 city.		1 city.			7 cities, towns, etc.	State, exclusive of 7 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1880	1890	1900	1900	1900
Number of establishments.....	10.3	32.0	43.0	20.8	54.3	70.3	64.4	71.2	28.8
Capital.....	103.7	36.3	140.3	26.2	65.7	77.5	71.8	76.0	24.0
Wage-earners, average number.....	30.5	10.8	35.8	2.9	75.2	78.2	72.7	78.4	21.5
Total wages.....	82.2	12.5	97.8	12.3	80.0	86.8	75.4	80.7	19.3
Miscellaneous expenses.....	(2)	62.1	(2)	65.4	(2)	82.6	84.3	86.8	13.2
Cost of materials used.....	37.5	56.9	53.8	13.2	71.7	80.1	60.4	64.5	35.5
Value of products.....	60.9	41.1	30.7	13.8	73.4	82.5	66.5	70.6	29.4
Population.....	11.5	14.0	32.2	15.8	35.5	42.2	42.8	47.5	52.4

¹ Decrease.

² Not reported in 1880.

19. *Maryland.*—The manufactures of Maryland are largely concentrated in the city of Baltimore, the principal city of the state. In the table the percentage of increase for Baltimore during the decade from 1880 to 1890 is shown to have been considerably in excess of that for the state, while during the last decade the percentage of increase in value of products was considerably less than that shown for the state. During both

decades the percentage of increase in the population of the city has exceeded that of the state. In 1890 the value of products of the establishments in the city represented 82.5 per cent of the total for the state; in 1900 it had decreased to 66.5 per cent. Table LXVI shows the principal decreases which have occurred in the industries of Baltimore during the last decade.

TABLE LXVI.—DECREASES IN BALTIMORE, MD.

INDUSTRIES	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$29,220,460	\$29,357,777	.....	\$637,317	\$161,249,240	\$141,238,766	\$20,015,474	.....
Boots and shoes, factory product.....	289,959	455,004	.....	185,045	1,005,507	1,519,261	.....	\$483,754
Brass castings and brass finishing.....	27,844	594,723	.....	566,884	203,393	1,908,850	.....	1,700,517
Clothing, men's, factory product.....	3,174,172	3,765,070	.....	592,498	17,290,325	15,032,924	2,257,901	.....
Fruits and vegetables, canning and preserving.....	905,397	1,165,083	.....	259,686	8,477,178	5,722,552	2,754,626	.....
Glass.....	139,384	588,965	.....	449,581	230,295	1,009,047	.....	788,752
Lumber, planing mill products, including sash, doors, and blinds.....	840,206	589,458	.....	249,252	1,809,008	2,902,788	.....	1,093,720
Masonry, brick and stone.....	782,509	2,993,215	.....	2,210,706	4,025,838	10,190,072	.....	6,164,234
Musical instruments, pianos, and materials.....	222,743	454,580	.....	232,132	827,371	1,291,165	.....	463,794
Hand trades, not separately shown.....	3,873,935	3,068,592	.....	\$810,403	15,986,117	11,519,195	4,466,922	.....
All other industries.....	19,484,246	16,240,182	.....	3,238,064	111,843,703	90,142,912	21,200,790	.....

¹ The totals for 1890 do not include the statistics for 67 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 42 establishments reported for "dentistry, mechanical;" but include those for 1 establishment reported for "hay and straw baling."

The decreases shown in the table for a number of the principal industries of the city may be accounted for in some instances by the removal or discontinuance of establishments. In 1890 there were reported 9 glass factories, employing 1,171 wage-earners, and paying \$588,965 in wages, with products valued at \$1,009,047, as compared with 3 establishments in 1900, employing 266 wage-earners, and paying \$139,384 in wages, with products valued at \$220,295.

The decrease in "fruits and vegetables, canning and preserving," is due to some extent to the method of classifying reports. Establishments engaged in this industry during a portion of the year may be engaged in the canning of fish and oysters during the winter season. If for the census year 1900 they were thus engaged, and the value of products of the latter branch exceeded that of the former, they were included in classes other than "fruits and vegetables, canning and preserving."

MASSACHUSETTS.

TABLE LXVII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		14 cities.		20 cities.	14 cities.			20 cities.		118 cities, towns, etc.	State, exclusive of 118 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments	87.6	8.4	126.0	16.5	15.4	51.0	61.5	58.0	70.0	61.1	90.8	9.2
Capital	107.4	30.7	119.9	32.8	31.6	55.9	59.2	60.2	65.3	65.7	93.5	6.5
Wage-earners, average number	27.0	11.2	36.6	11.6	10.1	51.4	55.3	55.5	63.8	63.1	93.7	6.3
Total wages	60.4	10.9	71.7	8.1	7.5	53.6	57.3	55.9	66.2	64.2	94.1	5.9
Miscellaneous expenses	(²)	16.1	(²)	22.6	20.9	(²)	66.0	69.7	73.2	76.2	95.9	4.1
Cost of materials used	22.3	16.8	28.2	14.8	15.9	55.3	58.0	57.0	67.0	66.5	93.5	6.5
Value of products	40.7	16.6	51.1	14.6	14.6	55.2	59.3	58.2	67.9	66.7	93.8	6.5
Population	25.6	25.3	31.4	30.4	31.0	47.0	49.2	51.2	55.8	58.4	86.2	13.8

¹ Decrease.

² Not reported in 1880.

20. *Massachusetts.*—In 1840 and 1850 Massachusetts ranked second in the value of its manufactured products; in 1860, 1870, and 1880 it was third; and in 1890 and 1900, fourth. The value of its manufactures has increased at a rate that compares favorably with the increase in other states which possess greater natural advantages. There were 14 cities in the state for which the statistics were published separately at the census of 1880, and 20 at the census of 1890. The table shows that the percentages of increase in these cities for wages and products from 1880 to 1890 were some-

what in excess of the percentages of increase in the state at large; from 1890 to 1900 they were slightly smaller. The statistics for 118 principal cities and towns shown separately for 1900 indicate that over 90 per cent of the manufactures of the state were concentrated in these urban districts. The statistics for the state, contained in the report on Manufactures, Part II, show that decreases occurred in a number of cities. Table LXVIII shows the principal decreases which have occurred in the industries of Boston during the last decade.

TABLE LXVIII.—DECREASES IN BOSTON, MASS.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	In-crease.	De-crease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	72,142	78,363	.....	6,221	\$30,184,191	\$43,847,014	.....	\$4,662,823	\$209,081,767	\$210,482,149	.....	\$4,400,382
Boot and shoe findings	97	359	.....	262	36,154	110,515	.....	74,361	236,516	816,864	.....	580,348
Brass casting and brass finishing	214	546	.....	332	129,410	329,905	.....	200,495	478,794	977,893	.....	499,099
Carpentering	3,014	4,006	.....	992	1,937,900	2,942,681	.....	1,004,781	6,879,632	8,787,674	.....	1,908,042
Chemicals	22	139	.....	117	15,186	70,782	.....	55,596	209,623	787,627	.....	578,004
Clothing, men's, factory product	2,622	5,622	.....	3,000	1,174,826	2,478,811	.....	1,303,985	8,601,431	19,640,779	.....	11,039,348
Dyestuffs and extracts	23	155	.....	132	14,206	86,707	.....	72,501	1,089,325	1,703,686	.....	614,361
Furniture, factory product	1,082	2,057	.....	1,025	614,174	1,211,510	.....	597,336	2,849,784	4,856,251	.....	1,506,517
Gas, illuminating and heating	513	522	.....	9	308,591	396,104	.....	87,513	2,729,210	3,230,506	.....	501,296
Lithographing and engraving	113	814	.....	701	66,269	470,418	.....	404,149	209,896	1,291,101	.....	1,081,205
Masonry, brick and stone	1,535	4,062	.....	2,527	963,723	3,040,101	.....	2,076,378	4,976,230	8,824,101	.....	3,847,871
Musical instruments, organs and materials	112	244	.....	132	86,621	165,959	.....	79,338	197,928	697,070	.....	499,742
Musical instruments, pianos and materials	1,219	1,885	.....	666	816,539	1,336,998	.....	520,459	2,641,523	3,947,948	.....	1,306,425
Shirts	204	522	.....	318	71,180	190,685	.....	119,505	459,602	775,910	.....	316,308
Slaughtering, wholesale, not including meat packing	21	199	.....	178	16,270	140,466	.....	124,196	988,010	2,782,823	.....	1,794,813
Cordage and twine	436	2,280	.....	1,794	169,078	869,352	.....	700,274	1,653,901	6,093,268	.....	4,439,367
Sewing machines and attachments .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades, not separately shown	11,432	10,729	.....	703	6,202,884	5,993,988	.....	\$298,896	22,584,351	19,324,934	.....	\$3,259,417
All other industries	49,533	44,272	.....	5,261	26,471,180	24,012,032	.....	2,459,148	149,296,061	126,443,114	.....	22,852,947

¹ The totals for 1890 do not include the statistics for 11 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 165 establishments reported for "dentistry, mechanical."

The decreases were confined to the average number of wage-earners, wages, and value of products. The largest decreases, except in the matter of wages, appear in "clothing, men's, factory product." The conditions under which this industry is carried on render it impracticable to obtain statistics concerning wage-earners, wages, and products that are exactly comparable with those of prior censuses. The schedule adopted at the census of 1900 required a separate return of the amount paid for contract work. In 1890, however, no provision was made in the schedule for this separation. It is possible, therefore, that the wage-earners working for contractors were in some instances included in the reports of the original manufacturer and also in the reports of the subcontractors, thus duplicating the number of wage-earners and their wages in 1890. This may result in vitiating to some extent comparison with the present census. In any event the form of the inquiry should be taken

into consideration in accepting the totals for the two censuses as indicating the exact condition of the industry.

Only 1 establishment was reported for the manufacture of cordage and twine in 1900, as compared with 8 at the census of 1890. The statistics for this industry in the table are grouped with "sewing machines and attachments," in order to avoid disclosing the operations of the single establishment.

The number of furniture factories in the city has also declined from 96 in 1890 to 50 at the census of 1900, the decrease reported being the third in extent exclusive of those in the hand trades. The canvass was thoroughly checked and the reports appear to be a true representation of the actual conditions existing at the time of taking the census.

Tables LXIX, LXX, and LXXI show the principal decreases which have occurred in the industries of Haverhill, Lynn, and Malden during the last decade.

TABLE LXIX.—DECREASES IN HAVERHILL, MASS.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$6,801,565	\$8,046,072	.....	\$1,244,507	10,600	14,131	.....	3,531
Boot and shoe cut stock.....	641,927	1,098,165	.....	456,238	784	644	.....	140
Boot and shoe findings.....	262,586	127,851	\$185,235	.....	103	410	.....	247
Boot and shoe uppers.....	.....	82,100	.....	82,100	.....	28	.....	28
Boots and shoes, factory product.....	3,325,717	4,784,760	.....	1,459,033	7,376	10,374	.....	2,998
Boxes, fancy and paper.....	108,315	161,284	.....	57,919	158	261	.....	98
Foundry and machine shop products.....	40,900	128,607	.....	87,767	29	81	.....	52
Hand trades.....	868,830	567,649	.....	298,719	764	1,121	.....	357
All other industries.....	2,068,290	1,146,256	\$1,917,034	.....	1,321	1,212	.....	109

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$5,035,882	\$6,098,911	.....	\$1,068,029	\$24,937,078	\$25,354,260	.....	\$417,187
Boot and shoe cut stock.....	346,778	299,811	\$46,967	.....	3,495,433	3,722,843	.....	227,410
Boot and shoe findings.....	67,955	49,798	17,557	.....	811,615	847,588	\$163,927	.....
Boot and shoe uppers.....	.....	8,770	.....	8,770	.....	131,200	.....	131,200
Boots and shoes, factory product.....	3,462,001	4,398,990	.....	936,989	16,231,440	16,137,362	.....	905,912
Boxes, fancy and paper.....	67,786	117,338	.....	49,602	246,125	374,508	.....	128,478
Foundry and machine shop products.....	20,575	52,900	.....	32,325	61,813	100,500	.....	98,687
Hand trades.....	459,508	591,999	.....	132,496	1,359,227	1,007,390	.....	548,193
All other industries.....	611,934	574,805	37,629	.....	3,731,520	2,572,739	1,158,781	.....

¹The totals for 1890 do not include the statistics for 4 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 8 establishments reported for "dentistry, mechanical."

TABLE LXX.—DECREASES IN LYNN, MASS.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$17,011,761	\$17,897,718	.....	\$885,957	17,492	20,311	.....	2,819
Boots and shoes, factory product.....	5,570,928	6,148,466	.....	577,538	8,652	11,551	.....	2,899
Carpentering.....	276,113	427,461	.....	151,348	232	695	.....	463
Carriages and wagons.....	100,798	117,747	.....	16,949	72	95	.....	23
Leather, tanned, curried, and finished.....	1,031,025	1,339,056	.....	308,031	688	1,318	.....	630
Masonry, brick and stone.....	66,475	207,334	.....	140,859	121	609	.....	488
Boxes, wooden packing.....	.....	.....	.....	.....	.....	.....	.....	.....
Lumber, planing mill products, including sash, doors, and blinds.....	29,302	191,785	.....	162,483	58	187	.....	139
Roofing and roofing materials.....	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades, not separately shown.....	388,600	495,156	106,556	612	1,278	666
All other industries.....	9,548,520	8,470,713	\$1,077,807	7,112	4,578	2,534

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TABLE LXX.—DECREASES IN LYNN, MASS.—Continued.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$8,576,042	\$11,030,948	.....	\$2,454,906	\$41,638,845	\$44,155,012	.....	\$2,521,167
Boots and shoes, factory product.....	4,203,719	5,953,939	.....	1,750,220	16,830,733	20,190,695	.....	3,359,962
Carpentering.....	154,043	538,876	.....	384,833	637,337	1,686,224	.....	993,887
Carriages and wagons.....	48,274	59,634	.....	11,360	91,299	213,829	.....	122,530
Leather, tanned, curried, and finished.....	282,318	775,847	.....	493,529	2,451,423	3,982,766	.....	1,531,343
Masonry, brick and stone.....	48,632	490,564	.....	441,932	162,902	1,008,379	.....	845,477
Boxes, wooden packing.....	.....	.....	.....	.....	.....	.....	.....	.....
Lumber, planing mill products, including sash, doors, and blinds.....	23,600	131,757	.....	108,157	73,500	457,677	.....	384,177
Roofing and roofing materials.....	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades not separately shown.....	316,437	705,577	.....	389,090	1,158,741	1,950,662	.....	791,921
All other industries.....	3,498,969	2,374,764	\$1,124,215	.....	20,227,910	14,714,780	\$5,513,130	.....

¹ The totals for 1890 do not include the statistics for 6 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 17 establishments reported for "dentistry, mechanical."

TABLE LXXI.—DECREASES IN MALDEN, MASS.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$5,906,279	\$7,599,224	.....	\$1,692,945	3,082	4,418	.....	1,336
Carpentering.....	137,095	231,121	.....	94,026	249	282	.....	33
Druggists' preparations, not including prescriptions.....	.....	8,629	.....	8,629	.....	9	.....	9
Lumber, planing mill products, including sash, doors, and blinds.....	32,850	25,400	\$7,450	.....	41	51	.....	10
Masonry, brick and stone.....	10,323	32,394	.....	22,066	80	67	13	.....
Painting, house, sign, etc., and paper hanging.....	17,220	32,422	.....	15,202	44	92	.....	48
Hand trades, not separately shown.....	78,674	70,587	8,087	.....	186	171	15	.....
All other industries.....	5,630,112	7,198,671	.....	1,568,559	2,482	3,746	.....	1,264

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$1,520,658	\$2,115,420	.....	\$594,762	\$7,959,292	\$9,589,321	.....	\$1,630,029
Carpentering.....	165,447	203,537	.....	38,090	701,855	655,930	\$45,925	.....
Druggists' preparations, not including prescriptions.....	.....	2,342	.....	2,342	.....	20,728	.....	20,728
Lumber, planing mill products, including sash, doors, and blinds.....	22,474	35,422	.....	12,948	74,500	95,000	.....	20,500
Masonry, brick and stone.....	36,545	37,554	.....	1,009	78,100	86,549	.....	8,449
Painting, house, sign, etc., and paper hanging.....	29,855	57,362	.....	27,507	71,414	126,748	.....	55,334
Hand trades, not separately shown.....	104,798	78,419	\$26,379	.....	367,753	251,856	115,897	.....
All other industries.....	1,161,539	1,700,784	.....	539,245	6,665,670	8,352,510	.....	1,686,840

¹ The totals for 1890 do not include the statistics for 3 establishments reported for "dentistry, mechanical."

The decreases in Haverhill and Lynn are due largely to the decline in the manufacture of boots and shoes and its allied industry, the tanning, currying, and finishing of leather. The former industry was made the

subject of a special investigation at the census of 1900. The reports have been carefully revised, and it is believed that the results are a true presentation of the present condition of the industry.

MICHIGAN.

TABLE LXXII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		3 cities.		6 cities.	3 cities.			6 cities.		63 cities, towns, etc.	State, exclusive of 63 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments.....	86.7	88.6	117.6	37.4	32.0	15.3	24.3	24.1	31.4	29.9	57.6	42.4
Capital.....	132.4	8.8	186.1	42.7	20.1	26.6	26.9	35.5	37.3	41.4	66.5	33.5
Wage-earners, average number.....	91.6	9.2	115.2	25.2	20.0	30.3	34.0	39.0	42.4	46.6	72.4	27.6
Total wages.....	117.2	20.9	143.2	16.7	12.9	35.6	40.6	39.3	49.8	46.5	72.7	27.3
Miscellaneous expenses.....	(¹)	39.0	(¹)	70.0	58.5	(¹)	42.3	51.7	50.4	57.4	82.6	17.4
Cost of materials used.....	66.3	29.1	114.9	22.8	16.1	27.9	36.1	34.3	45.3	40.7	63.9	36.1
Value of products.....	84.4	28.4	146.4	25.0	18.5	28.6	38.2	37.2	47.2	43.6	68.2	31.9
Population.....	27.9	15.6	78.9	36.4	27.5	10.3	14.0	16.6	18.3	20.2	36.5	63.5

¹ Not reported in 1880.

21. *Michigan*.—The manufacturing of the state depends largely upon the natural resources of lumber and minerals. The table shows a greater percentage of increase in the state during the decade ending with 1890 than during the last decade in all particulars except number of establishments. Wages increased 20.9 per cent and value of products 28.4 per cent during the last decade, as compared with 117.2 and 84.4 per cent during the decade ending in 1890.

From the table it appears that during the decade from 1890 to 1900 the number of establishments, the amount of wages paid, and the value of products of the principal cities of the state have not increased as rapidly as in the state at large. From 1880 to 1890, however, the percentage of increase for the 3 principal

cities was far in excess of the increase for the state; and during the decade ending with 1900 the percentage which the value of their products formed of the total increased from 28.6 to 37.2 per cent, in spite of a decrease in the last decade.

At the census of 1900 the urban districts comprised 63 cities, towns, and villages. The value of their products represented 68.2 per cent of the products of the state, but their population was only 36.5 per cent of the total population.

A decrease is shown for the manufacturing industries in 4 of the leading cities, namely, Bay City, Jackson, Muskegon, and Saginaw. Tables LXXIII to LXXVI show the principal decreases which have occurred in the industries of each of these cities during the last decade.

TABLE LXXIII.—DECREASES IN BAY CITY, MICH.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries.....	\$5,645,525	\$9,654,415	.....	\$4,008,890	3,307	4,203	.....	896
Lumber and timber products.....	1,106,824	6,708,293	.....	5,601,469	445	1,927	.....	1,482
Salt.....	272,922	507,012	.....	234,090	69	280	.....	161
Boxes, wooden packing.....	190,440	236,711	.....	46,271	110	181	.....	71
Saws.....	246,744	225,962	\$20,782	.....	586	650	.....	64
Hand trades.....	3,828,595	1,976,437	1,852,158	.....	2,097	1,215	882	.....
All other industries.....								

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries.....	\$1,466,328	\$1,576,659	.....	\$110,331	\$7,087,624	\$9,069,342	.....	\$1,981,718
Lumber and timber products.....	194,278	608,705	.....	412,427	1,259,617	4,900,059	.....	3,640,436
Salt.....	30,495	82,584	.....	52,089	131,905	290,982	.....	159,077
Boxes, wooden packing.....	35,960	56,267	.....	20,307	232,097	379,653	.....	147,556
Saws.....	274,788	289,792	.....	15,064	915,868	971,838	.....	56,470
Hand trades.....	930,867	641,321	\$889,546	.....	4,548,637	3,126,816	\$1,421,821	.....
All other industries.....								

TABLE LXXIV.—DECREASES IN JACKSON, MICH.

INDUSTRIES.	CAPITAL.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$4,617,656	\$4,973,459	.....	\$355,803	\$7,587,526	\$5,367,247	\$2,220,279	.....
Flouring and grist mill products.....	103,594	220,189	.....	116,605	455,239	618,710	.....	\$163,471
Foundry and machine shop products.....	334,674	1,706,029	.....	1,371,355	279,008	374,286	.....	95,278
Lumber and timber products.....		24,673	.....	24,673		27,660	.....	27,660
Lumber, planing mill products, including sash, doors, and blinds.....	98,650	194,826	.....	96,176	118,280	215,963	.....	97,688
Hand trades.....	174,458	135,033	\$39,425	.....	686,770	824,509	802,267	.....
All other industries.....	3,906,280	2,692,699	1,213,581	.....	6,048,223	3,896,114	2,242,109	.....

¹The totals for 1890 do not include the statistics for 7 establishments reported for "dentistry, mechanical."

TABLE LXXV.—DECREASES IN MUSKEGON, MICH.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$4,602,390	\$9,860,559	.....	\$5,258,169	3,235	3,882	.....	647
Foundry and machine shop products.....	152,472	262,026	.....	109,554	99	92	7	.....
Lumber and timber products.....	1,716,057	7,410,565	.....	5,694,508	622	1,781	.....	1,159
Lumber, planing mill products, including sash, doors, and blinds.....	188,513	345,597	.....	157,084	132	386	.....	254
Slaughtering, wholesale, not including meat packing.....		80,400	.....	80,400		10	.....	10
Hand trades.....	106,413	258,560	152,147	321	677	356
All other industries.....	2,438,935	1,508,411	\$935,524	2,061	936	1,125

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TABLE LXXV.—DECREASES IN MUSKEGON, MICH.—Continued.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$1,185,697	\$1,608,085	.....	\$422,388	\$5,097,059	\$8,274,905	.....	\$3,177,846
Foundry and machine shop products	39,946	58,851	.....	18,905	127,441	178,462	.....	51,021
Lumber and timber products	246,591	710,905	.....	464,314	1,228,918	4,115,094	.....	2,891,176
Lumber, planing mill products, including sash, doors, and blinds	48,280	142,288	.....	94,008	184,041	602,541	.....	468,500
Slaughtering, wholesale, not including meat packing .....	.....	7,740	.....	7,740	.....	255,684	.....	255,684
Hand trades	126,565	333,223	.....	206,658	496,245	1,011,040	.....	514,795
All other industries	724,315	860,078	\$364,237	.....	3,115,414	2,112,134	\$1,003,280	.....

¹The totals for 1890 do not include the statistics for 5 establishments reported for "dentistry, mechanical," but include those for 1 establishment reported for "coffins and burial cases, trimming and finishing."

TABLE LXXVI.—DECREASES IN SAGINAW, MICH.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries	\$7,558,806	\$12,406,823	.....	\$4,848,017	4,866	5,305	.....	439
Furniture, factory product	92,077	254,675	.....	162,598	92	259	.....	167
Lumber and timber products	965,816	6,588,848	.....	5,623,032	388	1,550	.....	1,162
Salt	181,569	797,727	.....	616,158	68	320	.....	252
Hand trades	290,305	496,150	.....	205,845	632	793	.....	161
All other industries	6,029,039	4,269,423	\$1,759,616	.....	3,686	2,388	1,308	.....

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries	\$1,986,558	\$2,271,623	.....	\$385,065	\$10,034,499	\$11,303,006	.....	\$1,268,507
Furniture, factory product	36,187	92,811	.....	56,624	131,280	221,905	.....	90,625
Lumber and timber products	159,899	516,545	.....	356,646	799,228	3,794,605	.....	2,995,377
Salt	31,662	114,620	.....	82,858	146,623	455,798	.....	289,175
Hand trades	254,112	415,041	.....	160,929	975,477	1,212,616	.....	237,139
All other industries	1,454,698	1,182,706	\$321,992	.....	7,981,891	5,638,032	\$2,343,869	.....

The decrease in the manufacture of lumber and timber products during the decade from 1890 to 1900 materially affected the totals for Bay City, Muskegon, and Saginaw, and evidently accounts for the decreases shown in all industries for those three cities. The decreases

in capital, wage-earners, wages, and value of products in each may be traced almost wholly to this industry and those dependent upon it, namely, boxes, wooden packing, saws, etc.

MINNESOTA.

TABLE LXXVII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		2 cities.		3 cities.	2 cities,			3 cities.		27 cities, towns, etc.	State, exclusive of 27 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments	114.9	48.1	319.0	14.9	11.1	28.5	55.5	35.6	59.2	39.5	55.0	45.0
Capital	311.8	29.9	411.3	31.9	34.5	41.1	51.0	51.8	55.2	57.2	75.7	24.3
Wage-earners, average number	228.5	10.7	278.1	10.6	11.3	49.8	57.3	57.2	62.0	62.4	80.1	19.9
Total wages	252.6	16.8	314.9	1.5	3.2	56.2	66.1	57.4	71.8	63.5	80.3	19.7
Miscellaneous expenses	(²)	9.4	(²)	64.2	62.4	(²)	44.7	67.1	48.1	71.4	85.8	14.2
Cost of materials used	112.9	46.4	184.9	38.6	36.4	53.9	59.5	56.3	64.1	59.7	77.3	22.7
Value of products	152.5	36.8	188.0	23.9	28.3	52.9	60.4	56.9	65.0	61.0	78.1	21.9
Population	66.7	33.8	237.1	22.8	26.5	11.3	22.9	21.0	25.4	24.0	32.4	67.6

¹Decrease.

²Not reported in 1880.

22. *Minnesota.*—The table shows a material increase in Minnesota during the decade from 1880 to 1890, both in manufactures and population. During this time the manufacturing industries advanced at a more rapid rate than the population, this being especially noticeable in the increase of 228.5 per cent in wage-earners, as compared with the increase of 66.7 per cent in population. For the decade from 1890 to 1900, the increase in population was about the same as the increase in most of the items for industries, the total value of products showing an increase of 36.8 per cent, and the population an increase of 33.8 per cent. The increase in proportion of wage-earners to total population, however, did not keep pace with the increase in population from 1890 to 1900; in 1890 the wage-earners comprised 5.4 per cent of the population; in 1900 only 4.4 per cent.

The statistics for St. Paul and Minneapolis were published separately at the census of 1880. The percentage of increase for these cities from 1880 to 1890 was considerably in excess of the increase in the state. During the decade from 1890 to 1900, however, the percentages of increase for wages paid and value of products in the state were greater than in the 3 principal cities, St. Paul, Minneapolis, and Duluth. The percentage which the manufactures of these 3 principal cities formed of the state's manufactures apparently decreased from 1890 to 1900. In 1890 the number of establishments in the 2 principal cities formed 55.5 per cent of the number in the state; in 1900, 35.6 per cent. In 1890 the total wages paid in these cities formed 66.1 per cent of the total wages paid in the state; in 1900, 57.4 per cent. In 1890 the products of the 2 cities formed 60.4 per cent, and in 1900, 56.9 per cent of the

total products. The products of the 3 principal cities in 1890 formed 65 per cent, and in 1900, 61 per cent of the total products. Notwithstanding this decrease in the percentage of the total products in the principal cities, the 27 principal cities and towns of the state in 1900 produced 78.1 per cent of the total value of products.

As shown by the table, there has been a decrease in the aggregate number of establishments reported for the principal cities. This is due partly to the large decrease in the city of Minneapolis, where flouring and grist mills constituted the city's most important industry for 1900. The number of establishments in this industry has decreased from 25 to 12 in the last decade, and yet the total wages paid and the quantity and value of the products have largely increased. A decrease in establishments occurs also in the hand trades, there being 351 fewer establishments reported for carpentering, masonry, painting, paper hanging, and plastering at the census of 1900 than in 1890. The population of the 2 principal cities increased 237.1 per cent during the decade from 1880 to 1890, and this greatly stimulated the building trades. On the other hand, while the population increased at the rate of 22.8 per cent from 1890 to 1900, the increase was accompanied by an actual decrease in building operations.

In St. Paul there has been an increase in the number of establishments and the value of products, accompanied by a decrease, confined largely to the building trades, of \$724,745 in wages. The 5 hand trades mentioned for Minneapolis show in St. Paul a decrease of 90 establishments and of \$1,837,008 in wages.

MISSISSIPPI.

TABLE LXXVIII.—Percentages of increase and percentages of manufactures and population in cities: 1880 to 1900.

	PER CENT OF INCREASE.		PER CENT OF TOTAL FOR THE STATE.	
	The state.		11 cities, towns, etc.	State, exclusive of 11 cities.
	1880 to 1890.	1890 to 1900.	1900	1900
Number of establishments.....	14.8	181.0	11.2	88.8
Capital.....	215.1	140.4	22.4	77.6
Wage-earners, average number.....	148.2	82.6	24.2	75.8
Total wages.....	251.5	78.8	29.2	70.8
Miscellaneous expenses.....	(1)	78.4	37.7	62.8
Cost of materials used.....	115.7	115.5	29.5	70.5
Value of products.....	148.8	116.1	28.8	71.7
Population.....	14.0	29.3	4.8	95.2

¹ Not reported in 1880.

23. *Mississippi.*—The table indicates that from 1880 to 1890 the percentages of increase in all the particulars for manufactures, excepting number of establishments, were largely in excess of those for the decade ending in 1900, while for population the greater increase was during the last decade. There appears to be a wide distribution of manufactures in the rural districts. The 11 principal cities for which the statistics of 1900 are published separately contained only 11.2 per cent of the establishments, paid 29.2 per cent of the wages, and produced 28.3 per cent of the value of products of the state. The population of these cities formed only 4.8 per cent of the total population.

STATISTICS OF MANUFACTURES.

MISSOURI.

TABLE LXXIX.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		3 cities.		4 cities.	3 cities.			4 cities.		25 cities, towns, etc.	State, exclusive of 25 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments	63.5	33.5	133.4	13.5	12.7	39.4	56.2	47.8	58.2	49.1	58.7	41.3
Capital	161.4	31.8	196.3	23.9	24.1	75.0	85.0	79.9	85.8	80.8	80.3	13.7
Wage-earners, average number	94.1	8.7	114.7	5.4	6.1	72.9	80.6	78.1	81.6	79.7	86.8	13.2
Total wages	145.3	1.8	155.3	14.2	13.3	82.5	85.9	80.8	86.8	82.5	89.4	10.6
Miscellaneous expenses	(²)	80.9	(²)	88.6	86.9	(²)	88.0	91.7	89.2	92.1	96.2	8.8
Cost of materials used	60.3	21.1	77.9	10.1	10.4	74.3	82.5	75.0	83.4	76.0	82.5	17.5
Value of products	96.2	18.8	116.9	10.6	10.8	76.1	84.1	78.3	85.1	79.4	85.5	14.5
Population	23.6	16.0	45.1	32.2	31.4	20.2	23.8	27.1	24.6	27.9	33.2	66.8

¹ Decrease.

² Not reported in 1880.

24. *Missouri.*—The total wages and the value of the products for the 3 principal cities for which separate totals were shown in 1880 increased from 1880 to 1890 at the rate of 155.3 and 116.9 per cent, respectively, as compared with 145.3 per cent and 96.2 per cent in the state for the same decade. The percentage of increase during the last decade has been considerably less than during the decade ending with 1890. The value of products for the 3 principal cities referred to above increased only 10.6 per cent, as compared with 18.8 per cent in the total for the state.

In 1880 the value of the products reported for the 3 principal cities formed 76.1 per cent of the products of the state; in 1890, 84.1 per cent; and in 1900, 78.3 per

cent. The 25 principal cities for which separate statistics are shown in 1900 contained 58.7 per cent of the establishments, paid 89.4 per cent of the wages, and manufactured 85.5 per cent of the value of the products of the state. While the percentage of manufactures in the cities has been apparently decreasing, the percentage of the population in these cities has steadily increased. In the 3 principal cities it has grown from 20.2 per cent in 1880 to 27.1 per cent in 1900; and the 25 cities separately shown for 1900 contain 33.2 per cent of the population.

Table LXXX shows the principal decreases which have occurred in the industries of St. Louis during the last decade.

TABLE LXXX.—DECREASES IN ST. LOUIS, MO.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$88,191,076	\$41,612,362	.....	\$3,421,286	\$233,620,733	\$228,376,919	\$5,252,814	.....
Brick and tile	308,901	786,682	.....	482,781	642,961	1,731,692	.....	\$1,088,731
Clothing, men's, factory product	845,675	1,430,480	.....	584,305	5,577,442	6,554,982	.....	977,540
Flouring and grist mill products	129,719	402,713	.....	272,994	4,004,062	12,466,000	.....	8,451,938
Foundry and machine shop products	3,056,356	3,261,300	.....	204,504	11,628,140	11,945,493	.....	317,353
Furniture, factory product	995,997	1,109,662	.....	113,665	3,268,765	3,792,841	.....	524,076
Liquors, malt	1,660,252	1,727,622	.....	67,370	11,673,699	16,185,560	.....	4,511,861
Lumber and timber products	107,600	325,404	.....	217,804	563,275	1,689,831	.....	1,126,556
Lumber, planing mill products, including sash, doors, and blinds	574,116	852,800	.....	278,684	2,367,160	3,061,178	.....	694,018
Plumbers' supplies	165,910	262,798	.....	96,888	519,516	1,465,371	.....	945,855
Printing and publishing, book and job	1,129,757	1,200,930	.....	71,173	4,420,147	3,894,990	.....	525,157
Printing and publishing, newspapers and periodicals	911,099	1,451,182	.....	540,083	5,396,303	4,626,360	.....	769,943
Slaughtering, wholesale, not including meat packing	22,406	86,244	.....	63,838	675,844	3,485,684	.....	2,809,840
Agricultural implements								
Cordage and twine								
Fruits and vegetables, canning and preserving	356,011	1,109,336	.....	753,325	379,758	5,630,919	.....	4,751,161
Glass								
Refrigerators								
Carpen-tering	3,061,366	5,404,198	.....	2,342,832	10,190,751	19,487,874	.....	3,297,123
Masonry, brick and stone								
Hand trades, not separately shown	3,775,630	3,776,123	.....	498	13,585,080	12,361,164	.....	723,916
All other industries	21,094,281	13,424,323	\$2,669,458	.....	152,236,925	119,506,980	32,729,945	.....

¹ The totals for 1890 do not include the statistics for 27 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 52 establishments reported for "dentistry, mechanical," nor those for 4 establishments reported for "electric light and power."

The total for the state, exclusive of St. Louis county and St. Louis city, shows an increase of 58.1 per cent in the value of products during the last decade. The

decreases in the city of St. Louis, therefore, are responsible for the relatively low percentage of increase in the state as a whole. Numerous industries of the

city show large decreases in wages, and products, although the total for all industries shows an increase, except in the item of wages, which shows a net decrease of \$3,421,286.

The canvass was carefully checked and revised, and the figures for 1900 apparently afford a true picture of

the actual condition of the industries of the city during that year. The decreases, therefore, can only be accounted for by the fact that there has been an actual decrease, or that the canvass of 1890 was not conducted on lines uniform with that of the canvass of 1900.

MONTANA.

TABLE LXXXI.—Percentages of increase and percentages of manufactures and population in cities: 1890 and 1900.

	PER CENT OF INCREASE.		PER CENT OF TOTAL FOR THE STATE.	
	The state.		4 cities, towns, etc.	State, exclusive of 4 cities.
	1880 to 1890.	1890 to 1900.	1900	1900
Number of establishments.....	47.4	273.7	43.5	56.5
Capital.....	377.4	853.6	61.9	38.1
Wage-earners, average number.....	312.8	324.0	49.9	50.1
Total wages.....	418.4	382.3	55.2	44.8
Miscellaneous expenses.....	(¹)	462.4	52.2	47.8
Cost of materials used.....	186.0	1,275.9	56.3	43.7
Value of products.....	200.0	936.3	60.3	39.7
Population.....	237.5	75.2	28.3	71.7

¹Not reported in 1880.

25. *Montana.*—The growth of manufactures is best represented by the percentages of increase in the several particulars: 273.7 per cent in the number of establishments, 382.3 per cent in wages paid, and 936.3 per cent in value of products. This rapid increase is due very largely to the fact that the totals for 1900 include the smelting and refining of metals. At the censuses of 1880 and 1890, the statistics for these industries were included in the reports on mines and mining. In 1900, of the total value of products for manufactures, \$41,651,316, or 73 per cent, is reported for copper and lead smelting and refining.

NEBRASKA.

TABLE LXXXII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		1 city.		2 cities.	1 city.			2 cities.		10 cities, towns, etc.	State, exclusive of 10 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments.....	114.8	79.6	338.3	24.1	27.0	11.0	22.4	15.5	28.4	20.1	34.4	65.6
Capital.....	660.7	91.6	897.9	88.2	79.3	37.6	48.8	47.9	55.0	51.5	82.0	18.0
Wage-earners, average number.....	326.7	19.6	387.1	18.3	16.0	35.2	40.2	30.8	48.2	37.9	78.0	22.0
Total wages.....	489.5	12.6	569.1	121.8	120.3	41.7	47.4	32.9	56.1	39.7	79.8	20.2
Miscellaneous expenses.....	(²)	28.5	(²)	5.2	4.8	(²)	68.1	65.7	73.1	59.6	90.6	9.4
Cost of materials used.....	720.3	51.8	1,057.7	124.1	120.8	30.8	43.5	21.7	45.7	23.9	89.6	10.4
Value of products.....	636.8	54.8	889.0	2.0	2.7	33.9	45.5	80.0	49.5	32.8	87.8	12.2
Population.....	134.1	0.7	360.2	127.0	127.0	6.7	13.3	9.6	18.5	13.4	20.3	79.7

¹Decrease.

²Not reported in 1880.

26. *Nebraska.*—The percentages of increase in the manufactures of the state were exceptionally large during the decade ending with 1890, owing principally to the fact that large increases were shown for the manufactures of Omaha, the only city for which statistics were published separately at the census of 1880. The percentage of increase in the state during the decade from 1890 to 1900 has been somewhat in excess of the percentage in the cities of Omaha and Lincoln. A fair percentage of the manufactures of the state has been located in these cities, and this has decreased during the past decade. In 1890 the wages paid and the value

of products formed 56.1 and 49.5 per cent, respectively, of the totals for the state; in 1900, 39.7 and 32.8 per cent. The tendency appears to be to a wider distribution of manufactures and the development of the smaller cities. The 10 principal cities which were shown separately in 1900 contained 34.4 per cent of the establishments, paid 79.8 per cent of the wages, and manufactured 87.8 per cent of the value of products.

Tables LXXXIII and LXXXIV show the principal decreases which have occurred in the industries of Lincoln and Omaha during the last decade.

STATISTICS OF MANUFACTURES.

TABLE LXXXIII.—DECREASES IN LINCOLN, NEBR.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$789,356	\$897,048	.....	\$107,687	\$4,105,951	\$3,693,923	\$412,028	.....
Carriages and wagons.....	4,000	25,256	.....	21,256	11,650	55,655	.....	\$44,085
Printing and publishing, newspapers and periodicals.....	126,482	161,598	.....	35,116	486,078	542,555	.....	56,477
Brick and tile.....	.....	.....	.....	.....	.....	.....	.....	.....
Ironwork, architectural and ornamental.....	11,364	109,253	.....	97,889	125,600	428,600	.....	303,000
Furniture, cabinetmaking, repairing, and upholstering.....	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades, not separately shown.....	228,222	241,218	.....	12,996	918,791	920,382	.....	1,591
All other industries.....	419,288	359,718	\$59,570	.....	2,563,882	1,746,731	817,151	.....

¹The totals for 1890 do not include the statistics for 9 establishments reported for "dentistry, mechanical."

TABLE LXXXIV.—DECREASES IN OMAHA, NEBR.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	7,587	8,223	.....	686	\$3,804,076	\$4,863,642	.....	\$1,059,466	\$43,168,876	\$42,339,321	\$829,555	.....
Brick and tile.....	177	886	.....	709	64,490	262,711	.....	198,221	149,875	640,410	.....	\$490,535
Carriages and wagons.....	71	118	.....	47	42,636	72,864	.....	29,728	180,930	265,475	.....	184,545
Foundry and machine shop products.....	81	297	.....	216	42,590	216,949	.....	174,359	204,634	727,600	.....	522,966
Lumber, planing mill products, including sash, doors, and blinds.....	172	371	.....	199	76,890	259,785	.....	182,895	599,000	865,000	.....	266,000
Paving and paving materials.....	159	192	.....	33	65,645	108,700	.....	43,055	196,731	538,415	.....	341,684
Printing and publishing, newspapers and periodicals.....	244	310	.....	66	212,903	282,199	.....	69,296	916,901	929,576	.....	12,675
Jewelry.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marble and stone work.....	35	196	.....	161	25,344	181,030	.....	155,686	81,775	451,500	.....	369,725
Hand trades.....	1,659	1,780	.....	121	899,829	1,226,207	.....	326,378	8,502,769	4,215,578	.....	712,809
All other industries.....	4,939	4,073	866	.....	2,373,749	2,258,597	\$120,152	.....	37,886,201	33,705,767	3,680,434	.....

¹The totals for 1890 include the statistics for 1 establishment reported for "coffins and burial cases, trimming and finishing."

NEVADA.

TABLE LXXXV.—Percentages of increase and percentages of manufactures and population in cities: 1880 to 1900.

	PER CENT OF INCREASE.		PER CENT OF TOTAL FOR THE STATE.	
	The state.		3 cities, towns, etc.	State, exclusive of 3 cities.
	1880 to 1890.	1890 to 1900.	1900	1900
Number of establishments.....	148.4	140.0	47.8	52.2
Capital.....	18.5	21.6	42.1	57.9
Wage-earners, average number.....	13.3	7.7	35.9	64.1
Total wages.....	118.5	10.7	37.6	62.4
Miscellaneous expenses.....	(²)	27.1	57.7	42.3
Cost of materials used.....	158.2	88.2	34.1	65.9
Value of products.....	149.3	48.7	38.8	61.2
Population.....	126.5	111.1	22.9	77.1

¹Decrease.

²Not reported in 1880.

27. Nevada.—Nevada's rank in agriculture is forty-seventh, but even this place is higher than the one held by the state in manufacturing, which is forty-ninth. The agricultural products of the state in 1900 were valued at \$6,758,337, as against \$1,643,675 for the gross value of manufactured products.

The manufacturing statistics of the state show a large percentage of decrease for the decade ending in 1890, followed by a substantial increase during the decade ending with 1900. The population continued to decrease during the latter decade.

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NEW HAMPSHIRE.

TABLE LXXXVI.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.				PER CENT OF TOTAL FOR THE STATE.				
	The state.		1 city.		1 city.			29 cities, towns, etc.	State, exclusive of 29 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1880	1890	1900	1900	1900
Number of establishments	1.5	44.7	219.0	49.5	3.8	12.0	12.4	65.8	84.2
Capital	55.3	27.2	48.0	(1)	29.6	28.3	22.2	79.0	21.0
Wage-earners, average number	23.1	17.1	41.6	24.0	22.2	25.5	27.0	80.9	19.1
Total wages	48.0	26.0	76.5	18.2	22.8	27.1	25.5	81.4	18.6
Miscellaneous expenses	(2)	45.7	(2)	44.3	(2)	24.6	24.4	85.9	14.1
Cost of materials used	9.6	38.9	50.8	24.3	18.1	24.9	22.2	79.3	20.7
Value of products	15.9	38.4	42.8	31.8	19.1	23.5	22.4	79.2	20.8
Population	8.5	9.3	35.2	29.1	9.4	11.7	13.8	56.0	44.0

¹ Less than one-tenth of 1 per cent.

² Not reported in 1880.

28. *New Hampshire.*—Table LXXXVI shows a smaller percentage of increase for the state in the amount of capital for the decade ending in 1900 than for that ending in 1890, but the absolute increase remained about the same. The percentage of increase in the value of products has been considerably in excess of the increase in population. In 1880 Manchester contained only 3.8 per cent of the total establishments; these paid 22.8 per cent of the wages, and their products formed 19.1 per cent of the total products; these percentages increased to 12, 27.1, and 23.5 per cent, respectively, in

1890. The percentage of the establishments continued to increase, and reached 12.4 per cent in 1900, while the percentages of wages and products slightly decreased—the percentage of wages to 25.5 per cent, and that of products to 22.4 per cent.

The table indicates that the manufactures were largely confined to the cities and towns, which contained 65.8 per cent of the establishments, paid 81.4 per cent of the wages, and manufactured 79.2 per cent of the value of products.

NEW JERSEY.

TABLE LXXXVII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.				PER CENT OF TOTAL FOR THE STATE.				
	The state.		7 cities.		7 cities.			44 cities, towns, etc.	State, exclusive of 44 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1880	1890	1900	1900	1900
Number of establishments	29.4	67.8	80.4	28.6	45.4	63.3	48.5	71.8	28.2
Capital	136.1	100.5	141.5	90.0	60.3	61.6	58.4	81.9	18.1
Wage-earners, average number	37.9	39.0	41.5	27.1	61.6	65.2	57.8	81.5	18.5
Total wages	80.0	32.7	78.4	17.9	67.7	67.1	59.6	82.9	17.1
Miscellaneous expenses	(1)	181.1	(1)	114.5	(1)	69.2	64.3	84.6	15.4
Cost of materials used	14.6	90.6	0.6	54.1	74.7	65.6	59.0	78.5	21.5
Value of products	39.4	72.5	29.7	43.6	72.0	67.0	55.8	79.5	20.5
Population	27.7	30.4	41.3	31.9	38.8	42.9	43.4	63.5	36.5

¹ Not reported in 1880.

29. *New Jersey.*—The table shows that, except in the items of capital and wages, there was a larger percentage of increase in the manufactures of the state during the decade ending with 1900 than during that ending with 1890; also that for the past twenty years the percentages of increase for wages and products of the state have been considerably in excess of those for its principal cities. On the other hand, the percentage of increase in the population of the cities has been in excess of that

of the state. The percentage of the population in the 7 principal cities increased from 42.9 per cent in 1890 to 43.4 per cent in 1900; the percentage in number of manufacturing establishments in these cities, however, decreased from 63.3 to 48.5 per cent, and the wages and value of their products from 67.1 and 67 to 59.6 and 55.8 per cent, respectively.

Five of the principal cities are located in the northern portion of the state, and their industrial growth has

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been stimulated by proximity to the markets of New York city. In 1890 the number of establishments in these 5 cities was 4,294, and in 1900, 6,117, an increase of 42.5 per cent, as compared with the increase of 67.8 per cent in the whole state. The value of their products in 1890 was \$190,757,260, in 1900, \$289,106,480, an increase of 51.6 per cent, as compared with an increase of 72.5 per cent for the state. In 1890 the number of establishments in these cities formed 46.5 per cent of the total, and in 1900, 39.5 per cent, as compared with

53.8 per cent and 47.3 per cent, respectively, for the values of their products. The manufactures of the state were largely limited in 1900 to the 44 principal cities and towns for which statistics were published separately. These places contained 71.8 per cent of the establishments, 79.5 per cent of the value of products, and 63.5 per cent of the population.

Tables LXXXVIII and LXXXIX show the principal decreases which have occurred in the industries of Camden and Trenton during the last decade.

TABLE LXXXVIII.—DECREASES IN CAMDEN, N. J.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	In-crease.	De-crease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	8,941	9,430	.....	489	\$3,324,434	\$4,749,950	.....	\$925,516	\$20,451,874	\$21,098,927	.....	\$647,053
Boots and shoes, factory product ..	429	530	.....	101	154,961	239,343	.....	84,382	609,455	981,652	.....	372,197
Carpentering	141	572	.....	431	84,602	429,906	.....	345,304	399,779	1,493,441	.....	1,093,662
Masonry, brick and stone	140	344	.....	204	81,025	265,280	.....	184,255	457,302	852,711	.....	395,406
Roofing and roofing materials	27	125	.....	98	8,216	82,480	.....	74,264	80,616	358,402	.....	277,786
Shipbuilding	466	365	.....	101	287,218	313,298	.....	26,080	714,500	1,177,222	.....	462,722
Woolen goods .....	.....	410	.....	410	.....	150,433	.....	159,433	.....	743,369	.....	743,369
Hand trades, not separately shown ..	601	845	.....	244	310,815	504,933	.....	194,138	1,040,957	1,584,534	.....	543,577
All other industries	7,137	6,239	.....	898	2,897,597	2,755,257	.....	\$142,340	17,149,265	13,907,596	.....	\$3,241,669

¹ The totals for 1890 do not include the statistics for 6 establishments reported for "coffins and burial cases, trimming and finishing," but include those for 2 establishments reported for "dentistry, mechanical."

TABLE LXXXIX.—DECREASES IN TRENTON, N. J.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$6,791,026	\$6,822,856	.....	\$31,830	\$31,645,695	\$25,571,292	\$6,074,403	.....
Belting and hose, rubber	71,000	149,226	.....	78,226	400,000	1,162,709	.....	\$762,709
Carpentering	66,952	338,790	.....	271,838	268,614	1,541,714	.....	1,273,100
Foundry and machine shop products ..	281,732	568,268	.....	286,536	394,239	1,777,874	.....	883,635
Masonry, brick and stone	156,000	481,610	.....	325,610	400,800	1,703,243	.....	1,302,443
Paving and paving materials .....	.....	35,996	.....	35,996	.....	152,000	.....	152,000
Woolen goods	309,833	515,104	.....	205,271	1,967,390	1,342,400	624,990	.....
Hand trades, not separately shown ..	230,238	482,795	.....	252,497	849,676	2,198,283	.....	1,348,607
All other industries	5,678,211	4,251,067	.....	\$1,424,144	26,864,976	15,693,069	11,171,907	.....

¹ The totals for 1890 do not include the statistics for 6 establishments reported for "coffins and burial cases, trimming and finishing," but include those for 1 establishment reported for "dentistry, mechanical."

NEW MEXICO.

TABLE XC.—Percentages of increase and percentages of manufactures and population in cities: 1880-1900.

	PER CENT OF IN-crease.		PER CENT OF TOTAL FOR THE STATE.	
	The state.		3 cities, towns, etc.	State, exclusive of 3 cities.
	1880 to 1890.	1890 to 1900.	1900	1900
Number of establishments	111.8	230.7	38.1	61.9
Capital	108.5	179.4	36.3	63.7
Wage-earners, average number	52.4	206.2	42.3	57.7
Total wages	115.0	187.1	42.7	57.3
Miscellaneous expenses	(²)	166.6	43.6	56.4
Cost of materials used	120.6	321.5	37.5	62.5
Value of products	18.0	269.7	39.4	60.6
Population	28.5	27.2	6.8	93.2

¹ Decrease.

² Not reported in 1880.

30. *New Mexico.*—The manufactures of the territory have increased rapidly during the last decade. The number of establishments increased 230.7 per cent; the wages, 187.1 per cent; and the total value of products, 269.7 per cent. The statistics for the census of 1900, however, include reports from 2 smelting and refining establishments, 1 copper and 1 lead, which were not included in the totals for 1890. The percentages, therefore, are not a true indication of the actual increase in the manufactures.

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CCXCV

NEW YORK.

TABLE XCI.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES:
1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		12 cities.		16 cities.	12 cities.			16 cities.		106 cities, towns, etc.	State ex- clusive of 106 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1880 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments	54.1	19.5	117.9	6.9	7.7	50.3	71.1	63.6	75.9	63.4	79.6	20.4
Capital	119.8	46.1	142.1	42.6	40.3	65.4	72.1	70.4	78.6	75.5	87.7	12.3
Wage-earners, average number	41.5	12.9	52.5	7.3	7.0	69.0	74.3	70.7	80.5	76.3	89.7	10.3
Total wages	86.5	10.4	94.7	2.8	2.9	76.2	79.6	74.1	85.2	79.4	91.1	8.9
Miscellaneous expenses	(1)	81.8	(1)	88.4	80.3	(1)	82.1	85.1	87.0	89.2	95.1	4.9
Cost of materials used	28.2	31.3	30.5	26.8	26.4	75.4	76.7	74.1	82.5	79.4	89.8	10.2
Value of products	58.4	27.1	66.3	22.5	22.0	74.8	78.6	75.7	84.1	80.8	90.8	9.2
Population	18.0	21.1	32.8	34.3	33.1	45.9	51.7	57.3	66.9	62.6	71.8	28.2

(1) Not reported in 1880.

31. *New York.*—Since 1850 New York has held first rank among the states in the value of its manufactured products. The table shows a large increase in these industries during the past twenty years. The increase in the state as a whole has been accompanied by a corresponding increase in the product of establishments located in the principal cities. During the decade ending with 1890 the total wages paid in the 12 principal cities of the state increased 94.7 per cent, and the value of products 66.3 per cent, as compared with 86.5 per cent and 58.4 per cent, respectively, in the state. The relative increase in the manufactures of the principal cities during the decade ending with 1900 has been somewhat less than that of the total for the state, with the exception of the item "miscellaneous expenses." Of the 12 cities for which percentages of increase are shown in the above table, 3 are located on the Hudson River and 3 on the Erie Canal. The cities located on these water routes have shown great industrial activity during the last half of the century. Their industrial development was given a strong impetus early in the last century by these lines of traffic. In 1880 the products of the manufactures of the 12 principal cities formed 74.8 per cent of the total for the state. This

percentage increased to 78.6 in 1890, and decreased to 75.7 per cent in 1900.

The products of the 16 principal cities of the state which were shown separately in 1890 formed 84.1 per cent of the total in that year, and in 1900, 80.8 per cent. The decrease in the relative percentage of the products has been accompanied by a corresponding decrease in each of the particulars shown in the above table, with the exception of miscellaneous expenses and population. On the other hand, the percentage of the population in the cities appears to have been steadily increasing. The products of the establishments in the 106 principal cities and towns in 1900 formed 90.8 per cent of the total products, and their population 71.8 per cent of the total.

The percentages of increase for the 16 cities during the last decade indicate a general advance in their manufacturing interests. In 9 of these cities, however, there has been a decrease in one or more of the items capital, wage-earners, wages, and value of products. Tables XCII to C show the principal decreases which have occurred in the industries of these 9 cities during the last decade.

TABLE XCII.—DECREASES IN ALBANY, N. Y.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	In- crease.	De- crease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	12,389	13,007	.....	618	\$6,111,059	\$6,189,139	.....	\$78,080	\$24,992,021	\$25,608,518	.....	\$516,497
Brick and tile	80	378	.....	298	33,000	114,043	.....	81,043	63,300	252,149	.....	188,849
Foundry and machine shop products	777	993	.....	216	395,063	555,781	.....	160,718	949,248	2,059,102	.....	1,109,854
Liquors, malt	343	354	.....	11	235,995	267,053	.....	31,118	2,478,991	2,079,617	.....	\$399,374
Printing and publishing, newspapers and periodicals	392	395	.....	3	232,963	264,700	.....	31,737	592,124	698,470	.....	106,346
Tobacco, cigars and cigarettes	280	565	.....	285	151,982	199,634	.....	47,652	502,227	709,861	.....	207,634
Boots and shoes, factory product.												
Furnishing goods, men's												
Malt	278	965	.....	687	103,355	418,769	.....	310,414	434,137	2,183,647	.....	1,749,510
Musical instruments, pianos and materials												
Hand trades	2,988	2,955	.....	17	1,544,381	1,427,786	.....	\$116,595	5,539,548	4,612,159	.....	927,389
All other industries	7,301	6,402	.....	899	3,414,380	2,946,373	.....	468,007	14,432,446	12,913,513	.....	1,518,933

¹ The totals for 1890 do not include the statistics for 5 establishments reported for "coffins and burial cases, trimming and finishing," but include those for 2 establishments reported for "electric light and power."

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TABLE XCIII.—DECREASES IN BINGHAMTON, N. Y.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	In-crease.	De-crease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	6,106	9,176	.....	3,070	\$2,461,084	\$3,506,134	.....	\$1,045,050	\$12,638,547	\$15,025,382	.....	\$2,386,835
Carriage and wagon materials.....	.....	98	.....	98	.....	38,500	.....	38,500	.....	138,200	.....	138,200
Carriages and wagons.....	193	207	.....	74	89,645	128,654	.....	39,009	313,611	425,105	.....	111,594
Flouring and grist mill products.....	33	38	.....	5	15,408	17,228	.....	1,820	1,142,925	1,147,612	.....	4,687
Lumber and timber products.....	.....	203	.....	203	.....	71,427	.....	71,427	.....	346,888	.....	346,888
Paving and paving materials.....	.....	237	.....	237	.....	34,900	.....	34,900	.....	96,410	.....	96,410
Tobacco, cigars and cigarettes.....	1,446	2,546	.....	1,100	491,618	795,422	.....	303,804	1,951,842	2,738,160	.....	781,318
Boots and shoes, factory product.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brick and tile.....	120	872	.....	752	33,842	342,688	.....	308,846	143,913	1,509,036	.....	1,365,123
Boxes, cigar.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades.....	980	1,866	.....	886	523,094	861,237	.....	338,143	1,847,958	2,902,147	.....	1,054,189
All other industries.....	3,334	3,049	.....	285	1,807,477	1,216,078	.....	\$91,899	7,238,398	5,726,824	.....	\$1,511,574

¹The totals for 1890 do not include the statistics for 8 establishments reported for "dentistry, mechanical," but include those for 2 establishments reported for "electric light and power."

TABLE XCIV.—DECREASES IN BUFFALO, N. Y.

INDUSTRIES.	WAGE-EARNERS.				WAGES.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	43,422	45,799	.....	2,377	\$19,915,817	\$20,491,450	.....	\$575,633
Boots and shoes, factory product.....	725	672	.....	53	192,439	222,914	.....	30,475
Brick and tile.....	222	651	.....	429	92,859	189,116	.....	96,257
Carriages and wagons.....	456	660	.....	204	255,200	329,507	.....	74,247
Clothing, men's, factory product.....	1,485	1,932	.....	447	450,111	642,118	.....	92,007
Foundry and machine shop products.....	3,694	4,485	.....	789	1,988,906	2,193,013	.....	204,107
Furnishing goods, men's.....	.....	448	.....	448	.....	68,191	.....	68,191
Furniture, factory product.....	1,126	1,058	.....	68	453,886	585,023	.....	81,142
Iron and steel, bolts, nuts, washers, and rivets.....	.....	354	.....	354	.....	126,822	.....	126,822
Lithographing and engraving.....	472	752	.....	280	249,244	425,971	.....	176,727
Lumber, planing mill products, including sash, doors, and blinds.....	1,573	2,039	.....	466	675,478	1,006,232	.....	330,759
Malt.....	205	532	.....	327	123,116	207,245	.....	84,129
Paving and paving materials.....	450	1,391	.....	941	248,028	497,765	.....	264,757
Refrigerators.....	94	428	.....	334	45,256	187,118	.....	143,862
Shirts.....	100	833	.....	733	45,307	110,956	.....	67,628
Slaughtering, wholesale, not including meat packing.....	99	143	.....	44	52,802	65,698	.....	12,896
Tinsmithing, coppersmithing, and sheet-iron working.....	470	895	.....	425	238,758	403,406	.....	164,648
Fruits and vegetables, canning and preserving.....	.....	.....	.....	.....	.....	.....	.....	.....
Iron and steel forgings.....	.....	.....	.....	.....	.....	.....	.....	.....
Petroleum refining.....	135	1,027	.....	892	73,220	454,135	.....	380,915
Tools, not elsewhere specified.....	.....	.....	.....	.....	.....	.....	.....	.....
Carpentering.....	.....	.....	.....	.....	.....	.....	.....	.....
Masonry, brick and stone.....	2,469	4,571	.....	2,102	1,348,694	2,405,454	.....	1,121,760
Hand trades, not separately shown.....	4,721	5,498	.....	777	2,023,504	2,221,848	.....	198,344
All other industries.....	24,866	17,437	.....	7,429	11,377,894	8,248,914	.....	\$3,128,980

¹The totals for 1890 do not include the statistics for 34 establishments reported for "dentistry, mechanical," nor those for 4 establishments reported for "electric light and power," but include those for 2 establishments reported for "hay and straw baling."

TABLE XCV.—DECREASES IN NEWBURG, N. Y.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$5,214,536	\$5,754,534	.....	\$539,998	3,926	4,093	.....	167
Carpentering.....	54,790	154,515	.....	99,725	58	199	.....	141
Foundry and machine shop products.....	838,397	482,612	.....	\$355,785	310	973	.....	68
Masonry, brick and stone.....	21,275	84,743	.....	63,468	84	188	.....	154
Carriages and wagons.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing, book and job.....	11,100	65,635	.....	54,535	15	35	.....	20
Hand trades, not separately shown.....	276,922	450,177	.....	173,255	267	320	.....	53
All other industries.....	4,012,052	4,516,852	.....	504,800	3,242	2,978	.....	\$264

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$1,665,177	\$1,739,256	.....	\$74,079	\$6,497,088	\$6,930,031	.....	\$441,943
Carpentering.....	41,458	137,104	.....	95,646	112,985	479,960	.....	366,975
Foundry and machine shop products.....	180,878	219,242	.....	38,564	543,356	655,574	.....	112,218
Masonry, brick and stone.....	27,221	116,830	.....	89,609	64,300	236,000	.....	171,700
Carriages and wagons.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing, book and job.....	7,540	18,084	.....	10,544	20,337	58,080	.....	37,743
Hand trades, not separately shown.....	132,160	180,520	.....	48,360	494,902	690,041	.....	195,139
All other industries.....	1,276,120	1,067,476	.....	\$208,644	5,261,208	4,819,376	.....	\$441,832

¹The totals for 1890 do not include the statistics for 4 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 6 establishments reported for "dentistry, mechanical," but include those for 2 establishments reported for "electric light and power."

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TABLE XCVI.—DECREASES IN SYRACUSE, N. Y.

INDUSTRIES.	WAGE-EARNERS.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	14,917	15,537	.....	620	\$31,948,055	\$29,163,640	\$2,794,415	.....
Carriages and wagons.....	814	580	.....	268	520,495	1,081,548	.....	\$561,113
Hosiery and knit goods.....	284	545	.....	201	526,343	246,000	280,343	.....
Lumber, planing mill products, including sash, doors, and blinds.....	207	473	.....	206	498,803	677,353	.....	184,050
Salt.....	165	318	.....	153	208,820	286,103	.....	77,277
Shirts.....	46	254	.....	209	40,512	184,780	.....	144,268
Tobacco, cigars and cigarettes.....	395	028	.....	238	664,484	910,110	.....	245,676
Carriage and wagon materials.....	105	1,726	.....	1,621	380,813	1,993,715	.....	1,663,402
Chemicals.....	2,403	2,679	.....	276	4,077,094	4,685,566	.....	608,472
Hand trades.....	10,999	8,334	2,665	.....	25,086,795	19,088,465	6,998,330	.....
All other industries.....								

¹The totals for 1890 do not include the statistics for 5 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 26 establishments reported for "dentistry, mechanical," but include those for 1 establishment reported for "electric light and power," and 1 establishment reported for "hay and straw baling."

TABLE XCVII.—DECREASES IN TROY, N. Y.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$23,531,022	\$23,975,728	.....	\$444,106	21,504	23,888	.....	2,324	\$28,209,259	\$29,205,390	.....	\$996,181
Brick and tile.....	93,300	306,488	.....	213,188	59	172	.....	113	56,050	165,050	.....	109,000
Foundry and machine shop products.....	2,786,306	3,194,203	.....	457,897	971	1,719	.....	748	1,777,543	2,505,647	.....	728,104
Shirts.....	3,026,501	3,643,317	.....	616,816	4,697	8,629	.....	3,932	4,774,520	6,217,785	.....	1,443,265
Iron and steel.....												
Slaughtering and meat packing, wholesale.....	2,592,925	5,008,324	.....	2,410,399	1,138	3,076	.....	1,938	2,307,362	6,395,434	.....	4,088,072
Wirework, including wire rope and cable.....												
Hand trades.....	893,780	1,214,608	.....	320,828	1,200	1,557	.....	357	2,518,358	2,784,397	.....	216,039
All other industries.....	14,188,810	10,613,788	\$3,575,022	.....	13,499	8,735	4,764	.....	16,775,426	11,187,077	\$5,588,349	.....

¹The totals for 1890 do not include the statistics for 7 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 10 establishments reported for "dentistry, mechanical," but include those for 2 establishments reported for "electric light and power."

TABLE XCVIII.—DECREASES IN UTICA, N. Y.

INDUSTRIES.	WAGE-EARNERS.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	10,759	11,623	.....	864	\$19,550,850	\$15,578,080	\$3,977,770	.....
Clothing, men's, factory product.....	1,247	4,460	.....	3,213	2,585,927	2,833,308	.....	\$247,381
Bookbinding and blank book making.....	55	494	.....	489	78,150	870,100	.....	796,950
Boots and shoes, factory product.....								
Hand trades.....	1,253	1,053	.....	200	2,187,233	1,930,796	256,437	.....
All other industries.....	8,204	5,616	2,588	.....	14,704,540	9,938,876	4,765,664	.....

¹The totals for 1890 do not include the statistics for 16 establishments reported for "dentistry, mechanical," but include those for 2 establishments reported for "electric light and power."

TABLE XCIX.—DECREASES IN YONKERS, N. Y.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	8,615	10,443	.....	1,828	\$3,888,892	\$5,073,977	.....	\$1,185,085	\$19,580,324	\$21,319,017	.....	\$1,738,693
Chemicals.....		104	.....	104	.....	48,017	.....	48,017	.....	507,109	.....	507,109
Druggists' preparations, not including prescriptions.....		23	.....	23	.....	11,876	.....	11,876	.....	53,004	.....	53,004
Slaughtering and meat packing, wholesale.....		20	.....	20	.....	12,144	.....	12,144	.....	189,843	.....	189,843
Carpets and rugs, other than rag.....												
Paving and paving materials.....	3,784	4,512	.....	728	1,485,401	1,775,406	.....	290,005	7,778,387	9,729,728	.....	1,951,391
Silk and silk goods.....												
Hand trades.....	939	2,708	.....	1,767	564,020	1,810,918	.....	1,246,898	2,048,065	5,062,834	.....	3,014,769
All other industries.....	3,892	3,078	814	.....	1,839,471	1,416,616	\$423,855	.....	9,758,922	5,826,499	\$3,927,423	.....

¹The totals for 1890 include the statistics for 2 establishments reported for "dentistry, mechanical," and those for 2 establishments reported for "electric light and power."

STATISTICS OF MANUFACTURES.

TABLE C.—Decreases in Elmira, N. Y.

INDUSTRIES.	PRODUCTS.				INDUSTRIES.	PRODUCTS.			
	1900	1890	Increase.	Decrease.		1900	1890	Increase.	Decrease.
All industries ¹	\$8,558,786	\$8,832,336	.....	\$273,550	Printing and publishing, news- papers and periodicals.....	233,130	310,985	.....	77,855
Carpentering.....	140,500	494,487	.....	353,987	Boots and shoes, factory product...	466,206	922,037	.....	455,831
Foundry and machine shop prod- ucts.....	276,433	888,913	.....	112,480	Flouring and grist mill products...	646,464	1,180,610	.....	534,146
Masonry, brick and stone.....	138,000	573,203	.....	435,203	Bottling.....	6,658,053	4,962,101	\$1,695,952	.....
					Hand trades, not separately shown.				
					All other industries.....				

¹ The totals for 1890 do not include the statistics for 5 establishments reported for dentistry, mechanical, but include those for 1 establishment reported for "coffins and burial cases, trimming and finishing," and 2 establishments reported for "electric light and power."

NORTH CAROLINA.

TABLE CI.—Percentages of increase and percentages of manufactures and population in cities: 1880 to 1900.

	PER CENT OF IN- CREASE.		PER CENT OF TOTAL FOR THE STATE.	
	The state.		15 cities, towns, etc.	State, ex- clusive of 15 cities.
	1880 to 1890.	1890 to 1900.	1900	1900
Number of establishments.....	13.6	97.1	15.0	85.0
Capital.....	151.0	133.6	34.5	65.5
Wage-earners, average number.....	85.7	109.9	33.4	66.6
Total wages.....	139.1	111.7	36.6	63.4
Miscellaneous expenses.....	(²)	173.9	73.8	26.2
Cost of materials used.....	74.1	132.9	34.3	65.7
Value of products.....	100.9	135.1	38.8	61.2
Population.....	15.6	17.1	7.3	92.7

¹ Decrease. ² Not reported in 1880.

32. *North Carolina.*—It appears that the state has turned somewhat from agricultural to manufacturing pursuits during the decade, and that the leading in-

dustries of the state are now manufacturing rather than agricultural. The table shows that the number of establishments increased during the last decade 97.1 per cent; the amount of wages paid, 111.7 per cent; and the value of products, 135.1 per cent; as compared with a decrease of 3.6 per cent and increases of 139.1 per cent and 100.9 per cent, respectively, during the decade ending with 1890. The principal industries of the state in 1900 were the manufacture of "cotton goods," "lumber and timber products," and "tobacco, chewing, smoking, and snuff." The lumber and timber products are rural in character. From the table it appears that the manufacturing industries generally were in the rural districts in 1900. The 15 cities for which separate totals are given contained only 15 per cent of the establishments, paid 36.6 per cent of the total wages, and manufactured 38.8 per cent of the value of products; but they had only 7.3 per cent of the population, which is much less than the percentages shown for the items of manufacture.

NORTH DAKOTA.

TABLE CII.—Percentages of increase and percentages of manufactures and population in cities: 1880 to 1900.

	PER CENT OF IN- CREASE.		PER CENT OF TOTAL FOR THE STATE.	
	The state. ¹		2 cities, towns, etc.	State, ex- clusive of 2 cities.
	1880 to 1890.	1890 to 1900.	1900	1900
Number of establishments.....		195.8	15.0	85.0
Capital.....		86.4	35.6	64.4
Wage-earners, average number.....		60.0	42.8	57.2
Total wages.....		61.0	49.9	50.1
Miscellaneous expenses.....		27.7	46.5	53.5
Cost of materials used.....		81.9	31.2	63.8
Value of products.....		82.6	35.1	64.9
Population.....		70.9	5.5	94.5

¹ Admitted as a state, 1889.

33. *North Dakota.*—In 1890, when North Dakota was first separately reported, the state ranked twenty-sixth in value of products of agriculture and forty-fourth in manufactures. The products of agriculture for the census year were valued at \$64,252,494, and the stock on farms and ranges at \$41,951,659, a total of \$106,204,153, while the products of manufactures were valued at only \$9,183,114.

Manufacturing is limited almost entirely to the local industries and hand trades, but the table shows that during the decade there has been a large percentage of increase.

URBAN MANUFACTURES.

CCXCIX

OHIO.

TABLE CIII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES:
1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		6 cities.		10 cities.	6 cities.			10 cities.		101 cities, towns, etc.	State, ex- clusive of 101 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1880	1900	1900	1900
Number of establishments	38.5	13.0	124.1	111.4	19.2	27.8	46.0	35.2	49.5	39.8	64.8	35.2
Capital	113.2	50.4	145.4	30.2	35.1	49.9	57.4	49.7	66.7	59.9	86.6	13.4
Wage-earners, average number	59.6	18.1	70.7	5.9	9.6	53.0	57.4	51.5	64.6	59.9	87.4	12.6
Total wages	106.8	19.9	114.4	4.0	7.1	68.3	60.4	52.5	68.6	61.3	88.6	11.4
Miscellaneous expenses	(²)	54.7	(²)	52.1	52.0	(²)	67.3	66.1	73.4	72.1	91.8	8.2
Cost of materials used	58.4	31.3	69.4	7.9	16.8	54.3	58.1	47.7	65.3	58.1	84.9	15.1
Value of products	84.2	29.7	98.9	9.3	16.0	55.9	60.3	50.8	67.4	60.2	86.5	13.5
Population	14.8	13.2	42.4	32.6	32.5	18.0	22.4	26.2	25.3	29.6	46.0	54.0

¹ Decrease.

² Not reported in 1880.

34. *Ohio.*—During the decade ending with 1890 the percentage of increase in the manufactures of the state was considerably greater than the percentage for the decade ending with 1900. During the former decade the number of establishments increased 38.5 per cent; wages, 106.8 per cent; and the value of products, 84.2 per cent; as compared with 13 per cent in number of establishments, 19.9 per cent in wages, and 29.7 per cent in the value of products for the decade ending with 1900. The same is true of the percentages of increase shown for the 6 principal cities reported separately in 1880, the total wages increasing 114.4 per cent and the value of the products 98.9 per cent during the decade ending with 1890, while during the decade ending with 1900 the total wages paid increased but 4 per cent, and the value of products only 9.3 per cent.

The smaller increase in the manufactures of the principal cities indicates that the manufacturing enterprises of the state have developed more rapidly in the smaller cities and in the rural districts.

The percentage of the establishments in the 10 principal cities of the state decreased from 49.5 in 1890 to 39.8 in 1900, the percentage of wages from 68.6 to 61.3, and the value of products from 67.4 to 60.2. These decreases in the percentages of the manufactures in the cities point to the inference that the establishments have been leaving the principal cities and locating in the smaller towns and rural districts.

Despite this possible tendency to diffusion, manufactures in the state are still predominantly urban. The 101 cities and towns for which the statistics of manufactures are shown separately in 1900 contained 64.8 per cent of the establishments, paid 88.6 per cent of the total wages, and produced 86.5 per cent in value of the products shown for the state.

The statistics of manufactures for Canton, Cincinnati, and Springfield show an actual decrease. Tables civ to cvi show the principal decreases which have occurred in the industries of these cities during the last decade.

TABLE CIV.—DECREASES IN CANTON, OHIO.

INDUSTRIES.	CAPITAL.				WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$10,094,813	\$11,376,956	.....	\$1,282,143	\$2,970,245	\$3,207,729	.....	\$237,484	\$12,258,427	\$11,870,910	\$387,517	.....
Agricultural implements	2,473,868	4,721,601	.....	2,247,738	267,619	427,105	.....	159,486	1,184,949	2,002,896	.....	\$817,947
Carriages and wagons	34,800	112,787	.....	77,987	15,487	25,119	.....	9,632	60,284	89,325	.....	29,041
Flouring and grist mill products	51,000	144,725	.....	93,725	4,858	17,182	.....	12,324	165,684	388,206	.....	222,522
Roofing and roofing materials	80,800	361,717	.....	280,917	12,692	49,115	.....	36,423	158,388	580,504	.....	372,116
Lumber, planing mill products, including sash, doors, and blinds.....	93,860	222,322	.....	128,462	12,896	42,357	.....	29,461	81,065	244,004	.....	162,939
Mineral and soda waters.....												
Hand trades	441,747	327,325	\$118,922	.....	420,149	427,322	.....	7,173	1,689,247	1,597,695	91,552	.....
All other industries.....	6,918,743	5,485,979	1,432,764	.....	2,236,544	2,219,529	\$17,015	.....	8,918,810	7,018,280	1,900,530	.....

¹The totals for 1890 do not include the statistics for 8 establishments reported for "dentistry, mechanical."

STATISTICS OF MANUFACTURES.

TABLE CV.—DECREASES IN CINCINNATI, OHIO.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	In-crease.	De-crease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	63,240	84,093		20,853	\$27,189,069	\$36,684,211		\$9,495,142	\$157,806,834	\$195,665,061		\$37,858,227
Brick and tile	54	587		533	30,858	219,911		189,053	65,650	559,455		493,805
Brooms and brushes	128	779		651	49,516	140,250		90,734	491,308	518,890		27,082
Carpentering	1,160	2,124		964	730,057	1,349,247		619,190	3,418,563	6,557,222		3,138,659
Carriages and wagons	2,147	3,585		1,389	1,116,426	1,698,294		581,868	6,096,108	8,669,312		2,573,204
Clothing, men's, custom work and repairing	880	2,260		1,409	424,650	1,042,373		617,723	2,109,113	4,019,495		1,850,852
Clothing, men's, factory product	3,784	13,543		9,759	1,326,045	2,951,805		1,625,760	11,950,648	17,951,525		6,000,877
Clothing, women's, dressmaking	634	1,734		1,100	166,369	414,446		248,077	583,315	2,400,101		1,876,786
Coffee and spice, roasting and grinding	109	129		20	42,197	63,300		21,103	1,416,395	2,427,855		1,011,460
Furnishing goods, men's	178	877		699	43,904	205,803		161,899	248,680	1,000,055		751,375
Furniture, factory product	2,355	3,265		913	966,182	1,609,788		643,626	3,594,196	4,499,093		905,503
Hosiery and knit goods	231	734		503	67,403	173,636		106,233	267,244	750,875		483,631
Liquors, distilled	163	875		212	97,745	205,902		108,217	9,419,687	11,471,673		2,051,986
Liquors, malt	1,282	1,576		294	910,986	1,176,444		265,458	6,387,383	7,454,417		1,067,034
Lumber, planing mill products, including sash, doors, and blinds	503	1,195		692	274,798	761,636		486,838	887,253	2,987,596		2,100,343
Masonry, brick and stone	1,120	3,458		2,338	566,124	2,150,903		1,584,779	1,804,438	6,459,093		4,654,565
Paving and paving materials	421	1,751		1,330	199,046	711,486		512,440	655,142	2,246,623		1,591,481
Printing and publishing, book and job	1,617	1,363	254		784,122	730,608	\$58,514		2,513,458	3,934,846		1,421,388
Saddlery and harness	478	992		514	214,707	529,800		315,093	1,194,474	3,636,707		2,442,233
Safes and vaults	428	1,846		1,418	206,183	1,034,072		827,889	778,051	3,321,257		2,548,206
Slaughtering, wholesale, not including meat packing	55	181		76	31,930	67,207		35,337	838,120	2,607,885		1,769,765
Soap and candles	452	672		220	157,458	237,239		79,781	1,877,062	3,826,480		1,949,418
Wirework, including wire rope and cable	27	262		235	10,966	155,643		144,677	66,550	750,456		683,906
Cordage and twine												
Cotton goods	231	999		768	68,723	343,353		274,630	588,284	3,666,064		3,077,780
Ink, printing												
Hand trades, not separately shown	2,918	4,137		1,219	1,516,921	2,206,653		689,732	5,085,719	8,896,727		3,811,008
All other industries	41,885	35,736	6,149		17,185,713	16,504,292	681,421		95,414,993	84,991,343	\$10,423,650	

¹The totals for 1890 do not include the statistics for 27 establishments reported for "coffins and burial cases, trimming and finishing;" nor those for 64 establishments reported for "dentistry, mechanical."

TABLE CVI.—DECREASES IN SPRINGFIELD, OHIO.

INDUSTRIES.	CAPITAL.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$14,091,175	\$14,557,276		\$466,101	\$12,777,178	\$10,726,371	\$2,050,802	
Agricultural implements	8,194,543	10,095,501		1,901,048	5,272,636	5,221,008	51,628	
Carriages and wagons	6,015	47,794		41,779	29,487	93,631		\$64,144
Brick and tile								
Lime and cement								
Lumber, planing mill products, including sash, doors, and blinds	89,503	258,138		168,635	83,940	225,640		141,700
Hand trades	185,136	231,465		46,329	543,382	693,121		149,739
All other industries	5,615,978	3,924,288	\$1,691,690		6,847,728	4,492,971	2,354,757	

¹The totals for 1890 do not include the statistics for 6 establishments reported for "coffins and burial cases, trimming and finishing."

The largest decreases are shown for the city of Cincinnati. The prosperity or depression of the manufacturing industries of each city depends largely upon the peculiar local conditions, but it is probable that the general tendency toward a wider distribution of manufactures may account, in a measure at least, for the decreases in the 3 principal cities. The decreases in Cincinnati were distributed through a large number of industries and appeared not only in the manufactures proper, but in the hand trades. Immediately upon the completion of the canvass, attention was called to the

fact that the results indicated a decrease. The field work, therefore, was carefully revised, and a recanvass was made of all industries the statistics of which had seemed unsatisfactory. The totals for 1900 may therefore be accepted as showing the actual condition of the industries of the city during that year. The decreases may be due, in a measure, to the fact that the methods followed in securing reports at the two censuses were not identical, especially in regard to the hand trades, such as boots and shoes, custom work and repairing, etc.

OKLAHOMA.

TABLE CVII.—Percentages of increase and percentages of manufactures and population in cities: 1880 to 1900.

	PER CENT OF INCREASE.		PER CENT OF TOTAL FOR THE STATE.	
	The state. ¹		2 cities, towns, etc.	State, exclusive of 2 cities.
	1880 to 1890.	1890 to 1900.	1900	1900
Number of establishments		1, 108.3	21.4	78.6
Capital		3, 409.3	30.3	69.7
Wage-earners, average number		1, 297.3	39.1	60.9
Total wages		1, 443.8	42.6	57.4
Miscellaneous expenses		1, 020.1	29.0	71.0
Cost of materials used		7, 773.5	26.2	73.8
Value of products		3, 825.8	29.4	70.6
Population		544.2	5.0	95.0

¹Not reported separately in 1880.

35. *Oklahoma.*—The principal industries of the territory are agriculture and stock raising. The agricultural products in 1900 were valued at \$45,447,744, and the stock on farms and ranges at \$53,921,827, a total of \$99,369,571, as against \$7,083,938, the value of the products of manufactures.

The products of the principal industry, flour and grist milling, amounted to \$3,745,434, or 52.9 per cent of the total of manufactured products. This industry, depending entirely upon agriculture for its raw material, is widely distributed over the rural districts, and therefore the percentage of the total products in the two cities of the territory was comparatively small.

OREGON.

TABLE CVIII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.			PER CENT OF TOTAL FOR THE STATE.			
	The state.		1 city.	1 city.		6 cities, towns, etc.	State, exclusive of 6 cities.
	1880 to 1890.	1890 to 1900.	1890 to 1900.	1890	1900	1900	1900
Number of establishments	41.0	102.8	87.0	37.4	34.5	45.8	54.2
Capital	408.9	4.0	120.9	52.5	39.9	62.7	37.3
Wage-earners, average number	332.6	2.8	10.9	51.6	49.7	65.9	34.1
Total wages	473.5	112.8	130.1	65.1	52.2	67.6	32.4
Miscellaneous expenses	(²)	6.4	12.8	57.9	52.0	75.1	24.9
Cost of materials used	213.4	19.3	3.9	58.8	51.0	65.6	34.4
Value of products	279.0	11.0	17.8	61.4	51.0	66.0	34.0
Population	79.5	30.6	94.9	14.8	22.1	28.4	71.6

¹ Decrease.

² Not reported in 1880.

36. *Oregon.*—Measured by the value of products, manufacturing is the largest industry of the state, the products being valued at \$46,000,587 in 1900, as compared with \$38,090,969 for the products of agriculture. There has been a notable increase in manufactures during the past twenty years, the larger increase occurring in the decade ending with 1890.

A large percentage of the manufactures was in the city of Portland, for which the percentages indicate a decrease during the last decade, with the exception of the items "number of establishments" and "cost of materials used." This decrease has affected the state as a whole and reduced the percentages of increase as

compared with the decade ending with 1890. The percentages which the wages and products of the city of Portland formed of the total for the state decreased from 65.1 and 61.4 in 1890 to 52.2 and 51 per cent, respectively, in 1900.

The urban manufactures, represented by the totals for the 6 principal cities, formed 67.6 per cent of the total wages and 66 per cent of the total value of products in 1900.

Table CIX shows the principal decreases which have occurred in the industries of Portland during the last decade.

STATISTICS OF MANUFACTURES.

TABLE CIX.—DECREASES IN PORTLAND, OREG.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$18,331,500	\$16,809,043	.....	\$8,477,543	8,572	8,647	.....	75
Awnings, tents, and sails	63,950	455,623	.....	391,673	25	53	.....	28
Brick and tile	48,417	489,410	.....	440,993	63	267	.....	204
Carpentering	106,775	972,715	.....	865,940	384	972	.....	588
Confectionery	139,551	289,895	.....	150,344	131	129	.....	2
Furniture, factory product	224,945	481,362	.....	256,417	142	308	.....	166
Masonry, brick and stone	136,385	941,700	.....	805,315	805	1,407	.....	1,102
Hand trades, not separately shown	718,750	789,460	.....	70,710	1,451	1,060	.....	391
All other industries	11,892,727	12,388,878	.....	496,151	6,071	4,451	.....	1,620

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$4,347,876	\$6,215,337	.....	\$1,867,461	\$23,451,132	\$25,359,978	.....	\$1,908,846
Awnings, tents, and sails	9,156	30,580	.....	21,424	74,746	458,058	.....	383,312
Brick and tile	27,507	114,100	.....	86,593	66,600	264,400	.....	197,800
Carpentering	228,000	878,298	.....	650,298	808,330	3,273,905	.....	2,305,575
Confectionery	38,880	69,442	.....	30,562	291,806	536,700	.....	244,894
Furniture, factory product	56,719	215,788	.....	159,069	1,159,125	225,233	.....	993,832
Masonry, brick and stone	211,304	1,126,022	.....	914,718	855,600	2,980,810	.....	2,125,210
Hand trades, not separately shown	641,674	731,812	.....	90,138	2,644,848	2,868,527	.....	28,679
All other industries	3,134,630	3,049,295	.....	\$85,341	18,883,909	14,018,453	.....	\$4,305,456

¹The totals for 1890 do not include the statistics for 5 establishments reported for "coffins and burial cases, trimming and finishing."

The decreases occur largely in the building trades, and are explained, in part at least, by the fact that in 1890 the city was in the midst of a great building boom which has since subsided. The decreases in the value of products for carpentering and for masonry were each

greater than the net decrease of the entire city. The manufacturing industries have not been generally affected, therefore, so extensively as the totals for the city indicate.

PENNSYLVANIA.

TABLE CX.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1890.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		9 cities.		16 cities.	9 cities.			16 cities.		133 cities, towns, etc.	State exclusive of 133 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments	26.0	32.7	96.9	0.4	3.0	36.5	57.1	43.2	61.3	47.6	64.1	35.9
Capital	108.9	56.5	114.3	43.8	43.8	56.0	57.4	52.7	63.0	58.8	75.4	24.6
Wage-earners, average number	47.4	28.7	43.5	16.0	17.9	62.2	60.6	54.7	67.2	61.6	79.6	20.4
Total wages	96.5	26.1	89.5	9.9	12.1	66.1	69.8	55.6	70.6	62.7	80.1	19.9
Miscellaneous expenses	(¹)	79.5	(¹)	63.6	63.9	(¹)	71.1	64.8	76.3	60.7	84.4	15.6
Cost of materials used	66.4	84.7	65.5	23.8	24.5	58.0	57.7	58.0	64.3	59.4	77.1	22.9
Value of products	78.8	37.8	84.9	20.7	23.9	59.4	61.5	53.8	67.8	60.9	78.4	21.6
Population	22.8	19.9	90.9	26.7	28.4	29.9	31.8	38.7	35.0	37.5	50.8	49.2

¹ Not reported in 1880.

37. *Pennsylvania.*—The percentages of increase for the state and its principal cities during the ten years ending with 1890 were considerably in excess of those shown for the last decade, except in the number of establishments.

The percentages of increase in number of establishments, capital, and value of products for the cities in the former decade were considerably in excess of those for the state, but during the ten years ending with 1900 the development of the cities has apparently been at a

smaller ratio than that of the state as a whole. The number of establishments in the 16 principal cities of the state increased at the rate of 3 per cent, as compared with 32.7 per cent in the total for the state. The amount of wages paid in the cities increased 12.1 per cent and in the state 26.1 per cent, while the value of the products of the cities increased 23.9 per cent, and in the state 37.8 per cent.

The smaller increase in the cities has been followed by a decrease in the percentage which their manufac-

tures are of the total. This decrease in the percentage since 1880 in the 9 principal cities appears for each item shown in the above table, with the exception of number of establishments and population, and the same is true of the percentages shown for the 16 principal cities separately reported in 1890. In 1880 the 9 principal cities contained 36.5 per cent of the total number of establishments. This percentage increased to 57.1 in 1890; and decreased to 43.2 per cent in 1900. The percentage of total wages in the cities, which in 1880 formed 66.1 per cent of the total wages, decreased steadily until 1900, when it amounted to 55.6. The percentage of the total value of products of the manufactures of the 9 cities, which in 1880 formed 59.4 per cent of the total products of the state, increased to 61.5 in 1890, and then decreased to 53.8 in 1900. The percentage of the total number of establishments in the 16 principal cities of the state decreased from 61.3 in 1890 to 47.6 in 1900. This decrease has been accompanied by a decrease in the wages from 70.6 per cent to 62.7 per cent, and in the value of products from 67.8 per cent to 60.9 per cent. Notwithstanding the comparatively slower development of the cities and the decrease in the percentage which they form of the total for the state, it appears that the 133 principal cities and towns for which the statistics of 1900 are published separately contained 64.1 per cent of

the establishments, and their wages amounted to 80.1 per cent of the total wages, while the value of their products formed 78.4 per cent of the total products. The manufactures of the state, therefore, were largely restricted to the urban districts, these districts containing, however, only one-half of the population.

The statistics for Philadelphia indicate that there has been a net decrease in the amount of wages paid in the manufactures of that city during the last decade. The apparent decrease in several industries in that city may be due in part to the removal of establishments to the rural districts, where the expense of operating is less. As confirming this possibility, it appears that while Philadelphia shows a decided decrease in the manufacture of boots and shoes and silk and silk goods, the state shows a steady growth in both industries.

The statistics for Williamsport show a decided decrease in the items, capital, wage-earners, wages, and products for "furniture, factory product" and "lumber and timber products." These conditions are probably due to the practical exhaustion of the standing timber in that locality, which compels the removal of such establishments to points nearer the base of their supplies.

Tables CXI and CXII show the principal decreases which have occurred in the industries of Philadelphia and Williamsport during the last decade.

TABLE CXI.—DECREASES IN PHILADELPHIA, PA.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$111,847,076	\$113,153,551	.....	\$1,306,478	\$603,466,526	\$575,938,339	\$27,528,187	.....
Boots and shoes, factory product.....	1,574,054	2,196,807	.....	622,753	5,931,045	6,851,834	.....	\$920,789
Brick and tile	678,201	1,763,807	.....	1,085,606	1,497,304	3,586,101	.....	2,088,887
Carpentering.....	2,747,300	5,164,691	.....	2,416,891	21,751,145	17,316,892	4,434,253	.....
Masonry, brick and stone.....	2,906,682	7,055,176	.....	4,148,494	13,565,550	23,631,669	.....	10,066,119
Printing and publishing, newspapers and periodicals.....	2,111,009	2,613,126	.....	502,117	13,076,840	18,397,217	.....	320,377
Silk and silk goods.....	826,456	1,478,431	.....	651,975	4,531,794	8,059,604	.....	3,527,810
Hand trades not separately shown.....	7,502,595	9,929,387	.....	2,366,742	27,618,006	33,119,249	.....	5,501,243
All other industries.....	93,440,279	82,952,179	\$10,488,100	.....	515,494,842	460,975,683	45,519,159	.....

¹ The totals for 1890 do not include the statistics for 87 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 217 establishments reported for "dentistry, mechanical."

TABLE CXII.—DECREASES IN WILLIAMSPORT, PA.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$9,803,811	\$12,330,383	.....	\$2,466,572	5,595	5,049	.....	54
Furniture, factory product.....	555,893	705,922	.....	150,029	373	501	.....	128
Lumber and timber products.....	1,601,686	6,608,444	.....	5,006,748	874	1,542	.....	1,168
Hand trades.....	349,606	354,007	.....	4,401	555	551	.....	.....
All other industries.....	7,356,616	4,662,010	\$2,694,606	.....	4,290	3,055	1,235	.....

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$2,065,930	\$2,270,115	.....	\$204,185	\$11,199,600	\$11,094,105	\$105,495	.....
Furniture, factory product.....	123,287	201,404	.....	78,117	508,223	668,410	.....	\$160,187
Lumber and timber products.....	159,048	592,447	.....	433,399	1,429,028	3,843,731	.....	2,414,703
Hand trades.....	201,709	255,667	.....	53,958	776,336	852,216	.....	75,880
All other industries.....	1,581,886	1,220,597	\$361,289	.....	8,486,013	5,729,748	2,756,265	.....

¹ The totals for 1890 do not include the statistics for 9 establishments reported for "dentistry, mechanical."

STATISTICS OF MANUFACTURES.

RHODE ISLAND.

TABLE CXIII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES:
1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		1 city.		3 cities.	1 city.			3 cities.		24 cities, towns, etc.	State, ex- clusive of 24 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1890	1900	1900	1900
Number of establishments	53.2	24.0	60.5	10.1	8.1	54.6	57.4	46.1	74.2	64.7	96.4	3.6
Capital	67.4	45.3	88.2	36.6	36.7	35.9	48.3	49.8	69.5	65.4	93.2	6.8
Wage-earners, average number	29.0	21.8	84.0	15.4	21.7	36.6	48.1	45.6	66.7	66.6	94.9	5.1
Total wages	55.6	23.7	118.8	13.1	21.1	44.3	53.3	48.6	70.3	68.9	95.1	4.9
Miscellaneous expenses	(²)	38.2	(²)	14.4	29.4	(²)	57.6	47.7	74.0	69.2	93.2	6.8
Cost of materials used	31.2	26.4	74.5	16.5	22.1	39.2	62.2	48.1	71.8	69.4	96.0	4.0
Value of products	36.8	29.2	81.9	13.8	23.7	40.9	61.4	42.4	72.6	69.5	95.4	4.6
Population	24.9	24.0	26.0	32.9	36.7	37.9	38.2	41.0	52.3	56.7	95.4	4.6

¹ Decrease.² Not reported in 1880.

38. *Rhode Island.*—Rhode Island is preeminently a manufacturing state, its agricultural products being insignificant, in comparison.

There has been a constant increase in manufactures, both in the state as a whole and in its principal cities. The percentage of increase in the cities during the last decade has been somewhat less than the percentage of increase in the state. The percentage of the population in the principal city, Providence, increased from 37.9 per cent in 1880 to 41 per cent in 1900, while the percentage of the number of establishments decreased from 54.6 in 1880 to 46.1 in 1900. The percentage of wages increased from 44.3 per cent in 1880 to 53.3 in 1890, and during the following decade decreased to 48.6 per cent. The products of the city formed 40.9 per cent of the total in 1880, this percentage increasing to 61.4 in 1890, and decreasing to 42.4 in 1900.

In 1890 the establishments in the 3 principal cities formed 74.2 per cent of the total for the state, and in 1900, 64.7 per cent. The decrease in the percentage of the establishments has been accompanied by a decrease in wages from 70.3 per cent in 1890 to 68.9 per cent in 1900, and from 72.6 per cent in 1890 to 69.5 per cent in 1900 in the value of products, while the percentage of the population has increased from 52.3 per cent in 1890 to 56.7 per cent in 1900. The percentages in the table, therefore, indicate that the tendency has been to a wider distribution of manufactures, decreasing the percentage in the principal cities. The 24 cities and towns for which statistics in 1900 were published separately contained practically all the manufacturing plants, 96.4 per cent of the number of establishments being located

in these cities; and these paid 95.1 per cent of the total wages and turned out 95.4 per cent of the products of the state.

In 1890 the town of Lincoln contained a population of more than 20,000 and its manufacturing statistics were shown separately. In 1895 the city of Central Falls was formed from a part of the town of Lincoln. At the census of 1900 the statistics of manufactures for both Central Falls and Lincoln were collected by special agents and their statistics are shown separately in the report on the manufactures of Rhode Island, contained in the Report on Manufactures, Part II; but as neither city had a population of 20,000, the statistics are not shown for industries and no comparisons can be made with the totals for the separate industries given in the census of 1890.

Table CXIV gives the totals for Central Falls and Lincoln in 1900 compared with the totals for the town of Lincoln in 1890.

TABLE CXIV.—Comparative table for Lincoln, R. I.: 1890 and 1900.

	1900	1890	Per cent of in- crease.
	Central Falls and Lincoln.	Lincoln.	
Number of establishments	175	149	17.4
Capital	\$9,523,576	\$7,677,864	24.0
Wage-earners, average number	4,737	4,751	10.3
Total wages	\$1,791,621	\$1,816,889	11.4
Miscellaneous expenses	\$326,921	\$388,222	15.8
Cost of materials used	\$3,936,311	\$2,980,984	32.0
Value of products	\$7,493,658	\$5,900,140	27.0

¹ Decrease.

*

URBAN MANUFACTURES.

CCCX

SOUTH CAROLINA.

TABLE CXV.—PERCENTAGES OF INCREASE AND PERCENTAGE OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.				PER CENT OF TOTAL FOR THE STATE.				
	The state.		1 city.		1 city.			12 cities, towns, etc.	State, exclusive of 12 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1880 to 1900.	1880	1890	1900	1900	1900
Number of establishments	14.6	57.9	191.8	185.7	9.3	23.8	9.7	22.2	77.8
Capital	161.3	130.1	327.5	69.8	15.3	25.1	13.5	41.2	58.8
Wage-earners, average number	43.7	111.6	118.3	7.3	13.6	20.6	10.4	88.7	66.3
Total wages	98.0	72.7	178.5	116.3	22.5	32.5	15.8	89.8	60.2
Miscellaneous expenses	(¹)	78.6	(²)	71.6	(²)	25.9	25.6	51.2	48.8
Cost of materials used	90.9	80.3	223.7	18.5	14.0	25.2	16.6	39.7	60.3
Value of products	90.7	84.0	229.6	6.2	16.3	28.2	16.3	39.2	60.8
Population	15.6	16.4	9.9	1.6	5.0	4.8	4.2	10.2	89.8

¹ Decrease.

² Not reported in 1880.

39. *South Carolina.*—There has been a marked development of the manufacturing industries during the past twenty years. The state ranked thirty-sixth in value of manufactured products in 1890 and thirty-second in 1900.

The statistics for the principal city, Charleston, which were published separately at the census of 1880, show that during the following decade the increase in the manufactures of the city was greatly in excess of the increase in the total for the state. The percentage of increase during the period between 1890 and 1900, on the other hand, was considerably less than the increase in the state, the wages and products for the state increasing 72.7 and 84 per cent, respectively, as compared with a decrease of 16.3 per cent in wages and an increase of 6.2 per cent in products for the city. The percentage of increase in the population of the city was only 1.6 per cent, and of the state 16.4 per cent.

In 1880 the wages and the value of products of the city formed 22.5 and 16.3 per cent, respectively, of the total for the state, these percentages increasing to 32.5 and 28.2 in 1890 and decreasing to 15.8 and 16.3, respectively, in 1900. The percentage which the population of the city forms of the total population of the state has decreased during the twenty years from 5 to 4.2.

The principal manufactures of the state depend largely upon agriculture for their raw material, and are therefore well distributed throughout the rural districts. The 12 principal cities and towns in 1900 contained 22.2 per cent of the establishments, paying 39.8 per cent of the total wages, and turning out 39.2 per cent of the total products of the state, while their population was 10.2 per cent.

The statistics for Charleston show a net decrease of \$288,193 in wages, and table CXVI shows the principal decreases which have occurred in the industries of the city during the last decade.

TABLE CXVI.—DECREASES IN CHARLESTON, S. C.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$1,489,966	\$1,778,159	.....	\$288,193	\$9,562,337	\$8,988,621	\$573,766	.....
Cooperage	25,150	117,804	.....	92,654	135,024	425,125	.....	\$290,101
Foundry and machine shop products	83,400	121,708	.....	38,308	223,062	865,200	.....	142,138
Printing and publishing, newspapers and periodicals	49,769	82,978	.....	33,209	128,081	200,100	.....	78,019
Carpentering	78,050	294,794	.....	216,744	197,600	1,406,669	.....	1,209,069
Masonry, brick and stone	133,503	153,107	.....	19,604	541,959	659,078	.....	117,119
Hand trades, not separately shown	1,115,094	1,007,768	\$107,326	.....	8,330,061	5,926,449	2,410,212	.....

¹ The totals for 1890 do not include the statistics for 3 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 3 establishments reported for "dentistry, mechanical."

STATISTICS OF MANUFACTURES.

SOUTH DAKOTA.

TABLE CXVII.—Percentages of increase and percentages of manufactures and population in cities: 1880-1900.

	PER CENT OF INCREASE.		PER CENT OF TOTAL FOR THE STATE.	
	The state. ¹		2 cities, towns, etc.	State, exclusive of 2 cities.
	1880 to 1890.	1890 to 1900.	1900	1900
Number of establishments		228.5	13.2	86.8
Capital		136.3	16.7	83.3
Wage-earners, average number		55.2	23.2	76.8
Total wages		85.5	22.8	77.2
Miscellaneous expenses		75.8	41.0	59.0
Cost of materials used		122.1	9.3	90.7
Value of products		115.2	14.4	85.6
Population		16.8	3.7	96.3

¹ Admitted as state in 1889.

40. *South Dakota*.—As South Dakota was a part of the territory of Dakota up to November 2, 1889, the census of 1890 was the first at which the statistics for the state were published separately.

The principal industry of South Dakota is agriculture. The manufacturing interests are principally confined to such industries as are of a local character, and to those in which products of agriculture form the principal materials. The table shows that there has been a large growth in manufactures during the decade, the number of establishments increasing 228.5 per cent; the wages paid, 85.5 per cent; and the value of products, 115.2 per cent. While during the last decade the value of the manufactured products increased 115.2 per cent, the value of the agricultural products increased 199.7 per cent, and the population 16.8 per cent.

TENNESSEE.

TABLE CXVIII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		2 cities.		4 cities.	2 cities.			4 cities.		18 cities, towns, etc.	State, exclusive of 18 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1880	1900	1900.	1900.
Number of establishments	5.4	75.8	88.4	50.1	34.3	9.4	16.8	14.3	27.7	21.2	30.1	69.9
Capital	156.2	39.5	210.4	26.5	26.6	30.9	37.4	33.9	57.7	52.4	65.5	34.5
Wage-earners, average number	67.0	34.7	80.9	32.2	30.6	31.5	34.1	33.4	55.3	53.6	67.5	32.5
Total wages	158.0	22.8	159.2	16.7	7.6	41.1	41.3	39.2	67.8	59.4	71.9	28.1
Miscellaneous expenses	(¹)	51.1	(¹)	68.4	35.2	(¹)	36.2	40.4	64.6	57.8	70.3	29.7
Cost of materials used	69.8	57.8	95.1	33.4	39.3	32.4	37.3	31.5	55.6	49.1	62.3	37.7
Value of products	95.2	49.5	113.9	30.7	28.6	35.1	38.5	33.7	59.5	51.2	64.2	35.8
Population	14.6	14.3	82.8	30.2	27.9	5.0	8.0	9.1	10.9	12.2	15.4	84.6

¹ Not reported in 1880.

41. *Tennessee*.—The percentages of increase in the manufactures of the state during the decade ending with 1890 were considerably in excess of those of the decade ending with 1900, except in the number of establishments. There has been a correspondingly smaller percentage of increase in the principal cities. The table also shows that the percentage of value of products of manufactures in the principal cities has decreased. In 1880 the products of manufactures in the 2 principal cities formed 35.1 per cent of the total for the state, and in 1900, 33.7 per cent. The 4 principal cities for which the statistics were shown separately in 1890 turned out 59.5 per cent of value of products; this decreased to 51.2 per cent in 1900.

The percentages indicate that there is a decided tendency toward a wider distribution of manufactures. While the percentage of the value of manufactured products in the 4 principal cities has decreased from 59.5 in 1890 to 51.2 in 1900, still the 18 cities and towns reported separately in 1900 represent 64.2 per cent of the total. The urban districts show a majority percentage of the totals for the state in all particulars, except number of establishments, but they represent only 15.4 per cent of the population of the state.

Tables cxix and cxx show the principal decreases which have occurred in the industries of Chattanooga and Nashville during the last decade.

URBAN MANUFACTURES.

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TABLE CXIX.—DECREASES IN CHATTANOOGA, TENN.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$1, 889, 795	\$2, 246, 523	.....	\$356, 728	\$12, 033, 780	\$10, 212, 109	\$1, 821, 671	.....
Carpentering	31, 844	134, 836	.....	102, 992	274, 893	835, 782	.....	\$560, 889
Iron and steel	70, 718	231, 218	.....	160, 500	685, 984	1, 241, 262	.....	555, 278
Lumber and timber products	40, 076	144, 488	.....	104, 412	309, 650	817, 603	.....	507, 953
Lumber, planing mill products, including sash, doors, and blinds	56, 578	156, 437	.....	99, 859	319, 744	821, 862	.....	502, 118
Masonry, brick and stone	19, 850	218, 257	.....	198, 407	60, 500	797, 278	.....	736, 778
Hand trades, not separately shown	137, 238	213, 166	.....	75, 928	484, 143	733, 008	.....	248, 856
All other industries	1, 533, 491	1, 148, 121	.....	\$385, 370	9, 898, 866	4, 965, 314	4, 933, 552	.....

¹The totals for 1890 do not include the statistics for 4 establishments reported for "dentistry, mechanical."

TABLE CXX.—DECREASES IN NASHVILLE, TENN.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$2, 889, 241	\$3, 052, 444	.....	\$163, 203	\$18, 469, 823	\$14, 532, 278	\$3, 837, 545	.....
Foundry and machine shop products	68, 850	173, 213	.....	109, 363	222, 429	761, 320	.....	\$538, 891
Lumber and timber products	239, 167	400, 310	.....	161, 143	1, 043, 525	1, 595, 120	.....	551, 595
Printing and publishing, newspapers and periodicals	184, 541	245, 145	.....	60, 604	1, 014, 374	713, 273	301, 101	.....
Furniture, factory product	8, 761	216, 804	.....	208, 043	31, 210	635, 876	.....	604, 666
Marble and stone work	492, 722	343, 960	\$148, 762	.....	1, 823, 424	1, 123, 065	700, 359	.....
Hand trades	1, 895, 200	1, 668, 012	227, 188	.....	14, 334, 861	9, 753, 624	4, 581, 237	.....
All other industries								

¹The totals for 1890 do not include the statistics for 2 establishments reported for "coffins and burial cases, trimming and finishing," but include those for 8 establishments reported for "dentistry, mechanical."

TEXAS.

TABLE CXXI.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		1 city.		5 cities.	1 city.			5 cities.		30 cities, towns, etc.	State, exclusive of 30 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1880	1890	1900	1900	1900
Number of establishments	75.8	133.3	11.8	55.3	27.0	5.7	3.6	2.4	25.4	13.8	28.1	71.9
Capital	406.4	93.2	437.9	18.6	33.7	9.4	10.9	6.7	42.9	29.7	54.8	45.2
Wage-earners, average number	186.2	38.4	145.5	22.6	21.0	5.6	4.8	4.3	35.4	31.0	55.9	44.1
Total wages	355.1	95.7	92.5	2.1	9.5	14.9	6.4	4.8	47.3	38.2	65.1	34.9
Miscellaneous expenses	(1)	70.9	(1)	17.8	36.2	(1)	11.3	7.8	58.3	46.4	72.6	27.4
Cost of materials used	179.0	85.6	153.5	219.5	24.9	9.9	9.0	3.9	47.2	31.8	60.2	39.8
Value of products	239.9	69.5	140.9	212.4	15.4	11.5	8.1	4.2	48.4	32.9	59.3	40.7
Population	40.4	36.4	30.7	29.9	31.9	1.4	1.3	1.2	7.0	6.7	12.3	37.2

¹Not reported in 1880.

²Decrease.

42. *Texas*.—There has been a satisfactory increase in the manufacturing industries during the past twenty years. The percentage of increase during the decade ending with 1890 was considerably in excess of the increase for the period between 1890 and 1900, except in the number of establishments.

Galveston is the only city for which the statistics of manufactures were published separately at the census of 1880. The table shows that the percentage of increase in the city has been considerably less than in the state, except in capital; also that during the last decade there has been a decrease in the cost of materials and value of products. The percentage of increase in the

manufactures of the 5 principal cities for which the statistics were published separately in 1890 has also been considerably less than the increase for the state, resulting in a decrease in the percentage which the cities formed of the totals for the state. In 1880 the total wages and value of products for Galveston formed 14.9 per cent and 11.5 per cent, respectively, of the totals for the state. These percentages have decreased to 4.8 and 4.2, respectively, in 1900. In 1890 the manufactures in the 5 principal cities formed 47.3 per cent of the wages and 48.4 per cent of the value of products for the state; and in 1900, 38.2 per cent of the wages and 32.9 per cent of the value of products. The

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percentage of the total population in the cities has also been steadily decreasing. In 1900 the total wages and the value of products reported for the 30 principal cities and towns constituted 65.1 per cent of the wages and 59.3 per cent of the products of the state. The principal industries of Texas depend largely upon agricultural products for their raw

materials, and are, therefore, found principally in the rural districts and smaller towns. The development of these industries has tended to a wider distribution of manufactures.

Tables CXXII to CXXIV show the principal decreases which have occurred in the industries of these 3 cities during the last decade.

TABLE CXXII.—DECREASES IN DALLAS, TEX.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	\$1,852,485	\$2,015,869	.....	\$162,884	\$11,480,499	\$9,054,766	\$2,425,733	.....
Carpentering	93,638	149,275	.....	55,637	477,900	485,714	.....	\$7,814
Masonry, brick and stone	99,524	199,720	.....	100,196	330,000	816,119	.....	486,119
Printing and publishing, newspapers and periodicals	119,526	143,188	.....	23,662	681,136	485,499	195,637	.....
Brick and tile	54,978	112,643	.....	57,665	930,242	1,313,874	.....	383,432
Flouring and grist mill products	239,219	303,177	.....	63,958	873,787	996,822	.....	123,035
Hand trades not separately shown	1,245,600	1,107,366	\$138,234	.....	8,187,454	4,956,938	3,230,516	.....
All other industries								

¹The totals for 1890 include the statistics for 2 establishments reported for "coffins and burial cases, trimming and finishing."

TABLE CXXIII.—DECREASES IN FORT WORTH, TEX.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries	\$2,668,045	\$3,194,032	.....	\$525,987	1,449	2,368	.....	919
Brick and tile		54,430	.....	54,430		51	.....	51
Carpentering	42,810	365,816	.....	323,006	95	406	.....	311
Masonry, brick and stone	20,850	858,320	.....	837,470	88	455	.....	367
Printing and publishing, book and job	60,793	132,436	.....	71,643	60	60	.....	10
Printing and publishing, newspapers and periodicals	37,625	111,949	.....	74,324	45	124	.....	79
Lumber, planing mill products, including sash, doors, and blinds	16,775	110,610	.....	93,835	26	66	.....	40
Roofing and roofing materials .....			.....				.....
Hand trades, not separately shown	122,733	206,691	.....	83,958	222	305	.....	83
All other industries	2,367,059	1,853,680	\$513,479	.....	923	901	22	.....

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries	\$345,477	\$1,618,073	.....	\$772,596	\$5,332,304	\$6,826,083	.....	\$1,493,279
Brick and tile		16,434	.....	16,434		37,150	.....	37,150
Carpentering	61,606	317,404	.....	255,798	224,125	1,257,044	.....	1,032,919
Masonry, brick and stone	50,200	405,761	.....	355,561	133,068	1,024,652	.....	891,584
Printing and publishing, book and job	23,938	30,114	.....	6,176	85,224	120,666	.....	35,442
Printing and publishing, newspapers and periodicals	33,334	96,533	.....	63,199	82,104	235,023	.....	152,919
Lumber, planing mill products, including sash, doors, and blinds	14,400	45,088	.....	30,688	50,700	143,072	.....	92,372
Roofing and roofing materials .....			.....				.....
Hand trades, not separately shown	117,189	181,801	.....	64,612	429,295	660,893	.....	231,598
All other industries	544,705	624,938	\$19,767	.....	4,823,288	3,347,633	\$980,705	.....

TABLE CXXIV.—Decreases in Galveston, Tex.

INDUSTRIES.	PRODUCTS.			
	1900	1890	Increase.	Decrease.
All industries ¹	\$5,016,360	\$5,724,545	.....	\$708,185
Clothing, men's, factory product	49,170	174,336	.....	125,166
Confectionery	61,365	145,225	.....	83,860
Lumber, planing mill products, including sash, doors, and blinds	138,205	402,785	.....	264,580
Printing and publishing, book and job	44,225	321,965	.....	277,740
Printing and publishing, newspapers	211,318	313,016	.....	101,698
Hand trades	989,169	773,351	\$215,818	.....
All other industries	3,522,408	3,587,967	.....	65,559

¹The totals for 1890 include the statistics for 1 establishment reported for "coffins and burial cases, trimming and finishing," and those for 1 establishment reported for "dentistry, mechanical."

The decreases shown for Dallas and Fort Worth are confined almost entirely to the local industries and the

hand trades, and may in a measure be accounted for by changes in the character of the reports secured at the two censuses, as previously explained. There does not appear to have been a general depression in the manufacturing industries of either city.

The decreases in the totals for the city of Galveston are confined to the cost of materials and value of products, the net decrease in the value of products amounting to \$708,185. The canvass of the city was completed August 27, 1900. The work of checking the schedules with the list of manufacturers was in progress when the storm of September 8, 1900, visited the city, and the work therefore was discontinued. The statistics, however, may be accepted as a general indication of the condition of the manufactures during the census year.

UTAH.

TABLE CXXV.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.				PER CENT OF TOTAL FOR THE STATE.				
	The state.		1 city.		1 city.			8 cities, towns, etc.	State, exclusive of 8 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1880	1890	1900	1900	1900
Number of establishments	117.0	163.7	5.4	146.9	25.9	38.0	30.9	56.9	43.1
Capital	147.8	122.6	289.8	20.7	32.4	50.9	27.6	51.6	48.4
Wage-earners, average number	74.3	52.1	114.0	49.9	37.2	45.7	45.0	67.7	32.3
Total wages	155.1	54.6	183.3	32.3	49.5	55.0	47.3	70.6	29.4
Miscellaneous expenses	(²)	108.8	(²)	64.7	(²)	63.9	51.6	73.4	26.6
Cost of materials used	66.0	202.3	142.0	39.5	31.7	46.3	21.3	86.5	63.5
Value of products	106.0	137.4	187.2	52.1	37.2	51.9	28.9	46.2	53.8
Population	41.4	32.2	115.9	19.4	14.4	21.6	19.5	34.3	65.7

¹ Decrease.

² Not reported in 1880.

43. *Utah.*—Table cxxv shows that there has been a large growth in manufactures during the last twenty years. The percentages of increase for Salt Lake City during the decade ending with 1890, both in manufactures and in population, were largely in excess of those for the territory, but in the ten years ending with 1900 the percentage of increase in the city was considerably less than that of the state. This has been followed by a decrease in the proportion of the manufactures in the city to those of the state. In 1880 the city contained 25.9 per cent of the establishments, paid 49.5 per cent of the wages, and made 37.2 per cent of the total products reported for the territory. While the proportion of the establishments in the city increased to 30.9 per cent in 1900, the proportion of wages decreased

to 47.3 per cent, and the value of the products to 28.9 per cent. The great decrease in the proportion of the value of products in Salt Lake City to those for the state is due to some extent to the statistics of lead smelting and refining in 1900. The establishments engaged in this industry reported a very large value of products, and as they were located outside of Salt Lake City, their inclusion in the reports for 1900 has tended to increase the relative importance of the districts outside. The 8 principal cities for which the statistics of 1900 are published separately contained 56.9 per cent of the establishments, which paid 70.6 per cent of the total wages, and turned out 46.2 per cent of the total products of the state.

VERMONT.

TABLE CXXVI.—Percentages of increase and percentages of manufactures and population in cities: 1880 to 1900.

	PER CENT OF INCREASE.		PER CENT OF TOTAL FOR THE STATE.	
	The state.		21 cities, towns, etc.	State, exclusive of 21 cities.
	1880 to 1890.	1890 to 1900.	1900	1900
Number of establishments	5.5	34.3	39.7	60.3
Capital	40.3	48.2	54.3	45.7
Wage-earners, average number	25.1	33.2	50.3	40.2
Total wages	63.2	45.2	62.6	37.4
Miscellaneous expenses	(¹)	59.1	72.3	27.7
Cost of materials used	11.5	46.1	40.5	50.5
Value of products	22.3	50.8	55.3	44.7
Population	(²)	3.4	30.6	69.4

¹ Not reported in 1880

² Less than one-tenth of 1 per cent.

44. *Vermont.*—During the last decade the percentage of increase in number of establishments was 34.3, in wages, 45.2, and in the value of products, 50.3, while the increase in population is shown to have been only 3.4 per cent. The table also indicates that the manufactures were well distributed. The 21 principal cities and towns reported separately in 1900 contained 39.7 per cent of the establishments, paid 62.6 per cent of the total wages, and turned out 55.3 per cent of the total products for the state.

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VIRGINIA.

TABLE CXXVII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.				PER CENT OF TOTAL FOR THE STATE.				
	The state.		3 cities.		3 cities.			23 cities, towns, etc.	State, exclusive of 23 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1880	1890	1900	1900	1900
Number of establishments	8.6	39.4	96.9	111.0	14.3	27.2	17.4	36.0	64.0
Capital	135.3	63.4	161.8	29.5	34.2	38.0	30.1	67.0	38.0
Wage-earners, average number	33.3	35.7	28.4	5.6	47.3	45.5	35.4	70.9	20.1
Total wages	113.0	41.9	101.2	11.3	52.9	49.9	34.7	73.8	26.2
Miscellaneous expenses	(²)	65.3	(²)	71.3	(²)	59.2	61.3	86.5	13.5
Cost of materials used	52.5	49.3	28.5	6.0	49.5	41.8	29.6	63.6	30.4
Value of products	70.6	49.6	49.0	11.7	51.9	45.3	33.9	66.8	33.2
Population	9.5	12.0	29.6	10.5	7.1	8.4	8.3	17.6	82.4

¹ Decrease.

² Not reported in 1880.

45. *Virginia*.—The percentages of increase in total wages and value of products in the manufactures of the cities have been considerably less than those for the state. There has also been a large decrease in the percentage of the manufactures in the principal cities. At the census of 1880, the amount of wages paid in the manufactures of the 3 principal cities formed 52.9 per cent of the total wages, and the value of the products 51.9 per cent of the total products. These percentages decreased to 49.9 and 45.3 in 1890, and to 34.7 and 33.9 in 1900, while the percentage of the population in the same cities increased from 7.1 in 1880 to 8.3 in 1900. Notwithstanding the decrease

in the percentage of the manufactures of the 3 largest cities, the 23 cities and towns for which the statistics of 1900 are published separately controlled a large proportion of the manufactures in the state.

The totals for the city of Petersburg indicate that there was a decrease in the number of wage-earners, wages, and products, while for the city of Richmond a decrease in wage-earners and wages is noted, with an increase in the value of products. Tables CXXVIII and CXXIX show the principal decreases which have occurred in the industries of these 2 cities during the last decade.

TABLE CXXVIII.—DECREASES IN PETERSBURG, VA.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	4,730	5,102	.....	372	\$1,043,550	\$1,127,272	.....	\$83,722	\$6,464,464	\$7,151,492	.....	\$686,028
Fruits and vegetables, canning and preserving	235	.....	.....	235	.....	34,634	.....	34,634	.....	718,350	.....	718,350
Lumber and timber products	175	.....	.....	175	.....	33,100	.....	33,100	.....	73,000	.....	73,000
Lumber, planing-mill products, including sash, doors, and blinds	52	73	.....	21	11,000	30,290	.....	19,290	52,325	120,278	.....	67,953
Tobacco, chewing, smoking, and snuff	1,298	2,107	.....	809	255,895	423,113	.....	167,218	1,865,153	2,422,141	.....	556,988
Brick and tile	24	107	.....	83	8,420	27,212	.....	18,792	189,244	612,958	.....	423,714
Flouring and grist mill products	371	366	.....	5	111,285	110,581	.....	\$704	439,408	367,109	.....	\$72,299
Hand trades	2,935	2,039	.....	946	656,950	468,342	.....	188,608	3,918,334	2,840,656	.....	1,077,678

The totals for 1890 do not include the statistics for 5 establishments reported for "coffins and burial cases, trimming and finishing."

TABLE CXXIX.—DECREASES IN RICHMOND, VA.

INDUSTRIES.	WAGE-EARNERS.				WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	16,692	16,866	.....	174	\$5,181,659	\$5,747,459	.....	\$565,800	\$28,900,616	\$27,748,083	.....	\$1,152,533
Carpentering	368	696	.....	328	143,847	348,976	.....	205,129	982,125	1,249,021	.....	\$266,896
Furnishing goods, men's	222	.....	.....	222	.....	47,161	.....	47,161	.....	214,660	.....	214,660
Tobacco, chewing, smoking, and snuff	2,328	3,339	.....	1,011	485,046	707,302	.....	222,256	5,223,733	4,598,269	.....	625,464
Tobacco, stemming and rehanding	662	794	.....	132	74,792	150,626	.....	84,834	924,325	1,725,771	.....	801,446
Agricultural implements	40	305	.....	265	16,158	138,587	.....	122,429	169,108	2,097,294	.....	1,928,186
Flouring and grist mill products .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marble and stone work	25	564	.....	539	24,125	250,281	.....	226,156	45,550	698,990	.....	653,440
Masonry, brick and stone .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hand trades, not separately shown	975	1,339	.....	414	416,741	532,313	.....	115,572	1,448,527	1,785,023	.....	336,496
All other industries	12,294	9,557	.....	2,737	4,020,950	3,568,213	.....	\$457,737	20,107,248	5,379,055	.....	4,728,193

¹ The totals for 1890 do not include the statistics for 9 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 20 establishments reported "for dentistry, mechanical."

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WASHINGTON.

TABLE CXXX.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES:
1880 TO 1900.

	PER CENT OF INCREASE.			PER CENT OF TOTAL FOR THE STATE.			
	The state.		2 cities.	2 cities.		9 cities, towns, etc.	State, ex- clusive of 9 cities.
	1880 to 1890.	1890 to 1900.	1900 to 1900.	1890	1900	1900	1900
Number of establishments	491.2	135.3	139.9	36.0	36.7	51.5	48.5
Capital	973.2	53.2	52.5	34.9	34.7	43.3	51.7
Wage-earners, average number	1,528.3	81.0	72.7	39.8	37.9	51.3	48.7
Total wages	1,939.0	73.5	86.6	52.7	41.5	53.8	46.2
Miscellaneous expenses	(1)	77.0	102.2	44.0	50.3	73.1	26.9
Cost of materials used	912.3	146.5	117.1	50.0	44.0	59.2	40.8
Value of product	1,185.1	107.8	86.1	49.4	44.2	59.0	41.0
Population	365.1	46.5	50.2	22.6	28.1	36.8	63.2

1 Not reported in 1880.

46. *Washington.*—Measured by the value of products, manufacturing was the principal industry of the state for both census periods, 1890 and 1900.

The percentages of increase for capital, wages, and products in the 2 principal cities, Seattle and Tacoma, for which the statistics of 1890 were published separately, have been somewhat less than in the state at large. The percentages in the item of wages and products which the manufactures of these cities formed of the total for the state have also slightly decreased. In 1890 the wages and products of the 2 cities formed 52.7 and 49.4 per cent, respectively, of the totals for the state; in 1900 these percentages had fallen to 41.5 for wages and 44.2 for products. The manufactures of the

state appear to be quite evenly divided between the urban and rural districts. The wages and products of the 9 principal cities for which statistics are published separately in 1900 formed 53.8 and 59 per cent, respectively, of the total for the state. The population of the cities was only 36.8 per cent of the population of the state.

The totals for the manufactures of Tacoma indicate that there has been a net decrease in wages during the last decade, and also a decrease in the value of products in certain industries, although there was a net increase in their total products. Table CXXXI shows the principal decreases which have occurred in the industries of the city during the last decade.

TABLE CXXXI.—DECREASES IN TACOMA, WASH.

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All Industries	\$2,856,028	\$2,723,235	.....	\$367,207	\$12,029,407	\$10,432,955	\$1,596,542	.....
Lumber and timber products	577,700	838,398	.....	260,698	2,363,065	2,794,048	.....	\$430,983
Printing and publishing, newspapers and periodicals	61,753	165,456	.....	103,703	242,928	580,115	.....	137,192
Marble and stone work	20,056	250,988	.....	230,932	73,300	747,800	.....	674,500
Masonry, brick and stone ¹	413,075	499,875	.....	86,801	1,298,839	1,621,113	.....	322,274
Hand trades, not separately shown	1,283,444	968,517	.....	\$314,927	8,051,370	4,889,879	3,161,491	.....
All other industries								

1 None in 1890.

The net decrease in wages (\$367,207) was due principally to the decreases in the manufacture of lumber and timber products and in the building trades, such as "masonry, brick, and stone." The value of products shows a net increase of \$1,596,542. There appear, however, to have been decided decreases for the value

of the products reported for some of the principal industries, including the building trades. The statistics indicate that the building operations were more extensive at the census of 1890 than during the year, 1900, and do not necessarily prove that there has been a general depression in the manufactures of the city.

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WEST VIRGINIA.

TABLE CXXXII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.				PER CENT OF TOTAL FOR THE STATE.				
	The state.		1 city.		1 city.			6 cities, towns, etc.	State, exclusive of 6 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1880	1890	1900	1900	1900
Number of establishments	(¹)	85.9	84.1	22.9	10.0	17.6	9.2	20.6	79.4
Capital	102.5	98.8	74.5	55.7	35.1	30.2	28.7	46.4	58.6
Wage-earners, average number	35.1	72.0	10.8	18.2	38.5	31.6	21.7	48.2	51.8
Total wages	60.2	87.6	12.7	25.3	50.8	35.8	23.9	52.2	47.8
Miscellaneous expenses	(²)	101.2	(²)	62.0	(³)	61.5	49.5	67.0	33.0
Cost of materials used	69.2	81.2	41.9	23.0	37.1	31.1	21.1	52.2	47.8
Value of products	69.2	93.4	40.6	28.6	40.5	33.6	22.4	52.3	47.7
Population	23.3	25.7	12.3	12.6	5.0	4.5	4.1	8.9	91.1

¹ Less than one-tenth of 1 per cent.

² Decrease.

³ Not reported in 1880.

47. *West Virginia.*—The table shows that there has been a large increase in the manufactures of the state, the percentage of increase during the last decade being considerably in excess of the percentage for the decade ending with 1890, with the exception of capital. For the decade ending with 1900, the number of establishments increased 85.9 per cent, as compared with an increase of less than one-tenth of 1 per cent for 1890. The total wages increased 87.6 per cent from 1890 to 1900, as compared with 60.2 per cent from 1880 to 1890. The value of products for the decade ending with 1900 increased 93.4 per cent, as compared with 69.2 per cent for the decade ending with 1890.

The statistics for the city of Wheeling were published separately at the censuses of 1880 and 1890. The number of establishments in the city shows a decrease of 2.9 per cent during the decade ending in 1900. This decrease is due principally to the more thorough canvass of the hand trades at the census of 1890. The number of shops reported for "boots and shoes, custom work and repairing," and for "clothing, women's, dress-making," decreased from 95 in 1890 to 45 in 1900.

The total wages reported, on the other hand, increased 25.3 per cent, and the total value of products 28.6 per cent. The relative importance of the city as a manufacturing center has decreased during the past twenty years. In 1880 the number of establishments formed 10 per cent of the total number, increasing to 17.6 per cent in 1890, and decreasing to 9.2 per cent in 1900. In 1880 the wages reported formed 50.8 per cent of the total wages, this percentage decreasing to 35.8 per cent in 1890, and to 23.9 per cent in 1900. The value of products formed 40.5 per cent of the total products for the state in 1880, 33.6 per cent in 1890, and 22.4 per cent in 1900. The decrease in the percentage of manufactures has been accompanied by a decrease in the percentage of population. In 1880 the population of the city formed 5 per cent of the total population, as compared with 4.1 per cent in 1900.

The 6 principal cities and towns in 1900 contained 20.6 per cent of the number of establishments in the state, paid 52.2 per cent of the total wages, and turned out 52.3 per cent of the total products. The population of these cities in 1900 constituted only 8.9 per cent of the population of the state.

WISCONSIN.

TABLE CXXXIII.—PERCENTAGES OF INCREASE AND PERCENTAGES OF MANUFACTURES AND POPULATION IN CITIES: 1880 TO 1900.

	PER CENT OF INCREASE.					PER CENT OF TOTAL FOR THE STATE.						
	The state.		1 city.		4 cities.	1 city.			4 cities.		53 cities, towns, etc.	State, exclusive of 53 cities.
	1880 to 1890.	1890 to 1900.	1880 to 1890.	1890 to 1900.	1890 to 1900.	1880	1890	1900	1880	1900	1900	1900
Number of establishments	35.7	55.4	241.1	16.1	12.0	11.0	27.6	20.6	35.4	25.5	51.5	48.5
Capital	233.9	34.1	268.4	59.6	46.5	25.4	28.0	33.4	39.4	43.1	75.0	24.4
Wage-earners, average number	110.1	18.4	86.0	24.4	20.4	36.6	32.4	34.0	43.4	44.1	80.3	19.7
Total wages	128.3	86.0	141.0	20.9	19.5	36.9	39.0	34.7	50.9	44.7	80.1	19.9
Miscellaneous expenses	(¹)	66.3	(¹)	101.4	88.4	(¹)	44.5	54.0	54.7	62.0	83.9	16.1
Cost of materials used	69.5	43.6	92.6	16.7	14.5	38.8	38.4	31.2	45.7	38.8	68.8	31.2
Value of products	93.8	45.2	124.3	27.0	23.9	33.9	39.2	34.3	49.8	42.5	72.8	27.2
Population	28.2	22.3	76.9	39.5	35.9	8.8	12.1	13.8	16.2	18.0	36.9	63.1

¹ Not reported in 1880.

48. *Wisconsin*.—The table shows that the percentage of increase in the state during the last decade is considerably less than during the decade ending with 1890, except in the number of establishments, the wages and products for 1900 showing an increase of 36 and 45.2 per cent, respectively, as compared with 128.3 and 93.8 per cent for 1890.

The statistics for Milwaukee were published separately at the census of 1880. The percentages of increase in the city during the last decade have also been considerably less than for the decade ending with 1890, the percentage of increase of wages diminishing from 141 to 20.9, and that of products from 124.3 to 27. The percentage of increase in the 4 principal cities for which the statistics were published separately in 1890 is considerably less than the percentage of increase in Milwaukee, and, for establishments, wages, and value of products, in the state. The percentage which the manufactures of Milwaukee form of the totals for the state has increased slightly since 1880 in most of the items. In that year the establishments of the city were 11 per cent of the total; their wages, 36.9 per cent; and the value of their products, 33.9 per cent. These percentages in 1890 showed a large increase, which was

followed in the last decade by a slight decrease in some of the items.

The development of the smaller cities is indicated more strikingly by the percentages shown for the 4 principal cities. In 1890 the establishments in these cities formed 35.4 per cent of the total for the state; their wages, 50.9 per cent; and the value of their products, 49.8 per cent. In 1900 these percentages had decreased to 25.5, 44.7, and 42.5 per cent, respectively. The wider distribution of manufactures is due principally to the development of the smaller cities and towns of the state rather than to the development of the rural districts. The 53 cities and towns for which the statistics of 1900 are shown separately, contained 51.5 per cent of all the establishments in the state, their wages formed 80.1 per cent, and the value of their products was 72.8 per cent of the totals.

Notwithstanding the large percentage of increase shown in the 4 cities in 1900, 2 cities, La Crosse and Oshkosh, show decreases. The cause of these decreases lies very largely in the gradual exhaustion of the supply of timber. Tables CXXXIV and CXXXV show the principal decreases which have occurred in the industries of these 2 cities during the last decade.

TABLE CXXXIV.—DECREASES IN LA CROSSE, WIS.

INDUSTRIES.	CAPITAL.				WAGE-EARNERS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries	\$7,230,360	\$10,030,872	.....	\$2,800,512	3,009	3,844	.....	835
Flouring and grist mill products.....	285,224	518,755	.....	233,531	48	88	.....	40
Lumber and timber products.....	2,106,220	6,208,399	.....	4,102,179	410	1,863	.....	1,453
Lumber, planing mill products, including sash, doors, and blinds.....	364,800	525,684	.....	160,884	232	160	72	.....
Hand trades.....	185,310	229,005	.....	43,695	274	251	23	.....
All other industries.....	4,288,806	2,558,029	\$1,730,777	.....	2,045	1,482	563	.....

INDUSTRIES.	WAGES.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries	\$1,105,985	\$1,887,362	.....	\$281,377	\$8,281,749	\$9,157,501	.....	\$875,752
Flouring and grist mill products.....	27,349	49,464	.....	22,115	1,208,877	2,134,785	.....	925,908
Lumber and timber products.....	191,622	641,351	.....	349,729	1,544,410	3,570,522	.....	2,026,112
Lumber, planing mill products, including sash, doors, and blinds.....	82,578	74,017	\$8,561	.....	401,962	379,587	\$22,375	.....
Hand trades.....	106,502	113,952	.....	7,450	469,118	891,275	77,843	.....
All other industries.....	697,934	608,578	89,356	.....	4,657,582	2,681,332	1,976,050	.....

TABLE CXXXV.—DECREASES IN OSHKOSH, WIS.

INDUSTRIES.	WAGE-EARNERS.				PRODUCTS.			
	1900	1890	Increase.	Decrease.	1900	1890	Increase.	Decrease.
All industries ¹	4,587	4,902	.....	315	\$8,781,248	\$8,579,792	\$201,456	.....
Carpentering.....	91	316	.....	225	200,215	398,619	.....	\$198,404
Lumber and timber products.....	1,182	1,986	.....	804	2,449,430	3,904,550	.....	1,455,120
Furniture, cabinetmaking, repairing and upholstering.....	17	220	.....	203	25,550	287,794	.....	202,244
Masonry, brick and stone.....	262	461	.....	199	358,744	565,655	.....	206,911
Hand trades, not separately shown.....	3,085	1,919	1,116	.....	5,747,309	3,428,174	2,324,135	.....

¹ The totals for 1890 do not include the statistics for 4 establishments reported for "coffins and burial cases, trimming and finishing," nor those for 5 establishments reported for "dentistry, mechanical," but include those for 2 establishments reported for "hay and straw baling."

STATISTICS OF MANUFACTURES.

WYOMING.

TABLE CXXXVI.—Percentages of increase and percentages of manufactures and population in cities: 1880 to 1900.

	PER CENT OF INCREASE.		PER CENT OF TOTAL FOR THE STATE.	
	The state.		2 cities, towns, etc.	State, exclusive of 2 cities.
	1880 to 1890.	1880 to 1890.	1900	1900
Number of establishments	233.3	75.8	29.9	70.1
Capital	287.0	70.9	40.2	59.8
Wage-earners, average number	161.4	119.3	43.7	56.3
Total wages	319.2	76.1	49.2	50.8
Miscellaneous expenses	(¹)	89.8	56.5	43.5
Cost of materials used	80.4	73.9	45.3	54.7
Value of products	163.5	81.7	44.1	55.9
Population	192.0	49.2	24.6	75.4

¹Not reported in 1880.

49. *Wyoming.*—While Wyoming is essentially a stock raising and mining region, manufacturing is also carried on to some extent. The value of the stock on farms and ranges during the census year was \$39,080,158, and the value of agricultural products \$11,907,415, making together \$50,987,573, as compared with \$4,301,240 for manufactures. Yet manufactures show a substantial increase, as indicated by the table. In 1900 the 2 principal cities, Cheyenne and Laramie, reported 24.6 per cent of the population of the state, 29.9 per cent of the establishments, 49.2 per cent of the wages, and 44.1 per cent of the total value of the products of the state.