

DEPARTMENT OF COMMERCE AND LABOR
BUREAU OF THE CENSUS

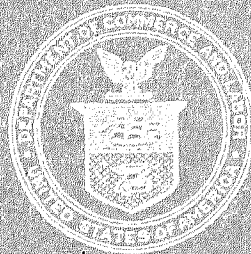
E. DANA DURAND, DIRECTOR

THIRTEENTH CENSUS OF THE UNITED STATES
TAKEN IN THE YEAR 1910

STATISTICS FOR
MICHIGAN

CONTAINING STATISTICS OF POPULATION,
AGRICULTURE, MANUFACTURES, AND
MINING FOR THE STATE, COUNTIES,
CITIES, AND OTHER DIVISIONS

REPRINT OF THE SUPPLEMENT FOR MICHIGAN PUBLISHED IN CONNECTION WITH THE
ABSTRACT OF THE CENSUS



WASHINGTON
GOVERNMENT PRINTING OFFICE

1915

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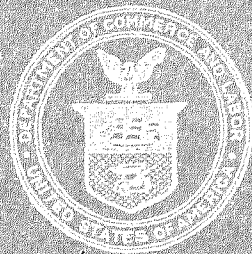
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THIRTEENTH CENSUS PUBLICATIONS.

The results of the Thirteenth Decennial Census will be published in two forms: A comprehensive report in 12 volumes, and a condensed report, the Abstract of the Thirteenth Census, which is being issued with Supplements for the different states.

The material contained in the Supplements embraces for each state all of the census results published concerning the state, its counties, cities, and other civil divisions, except as to occupations. This material is bound up in one volume with the Abstract of the Thirteenth Decennial Census. The result is a series of editions of the Abstract each with a different State Supplement, with the purpose of furnishing those who receive the Abstract with the statistics of the state in which they reside.

The material contained in the various State Supplements will also be printed by subjects in the final reports. The chapters relating to Population for all of the states will be assembled in two volumes of the final report on Population; those relating to Agriculture, in two volumes of the final report on that subject; those relating to Manufactures, in one volume of the final report on Manufactures; and those relating to Mining, in the final report on Mining.

The present pamphlet is a reprint of the State Supplement. It contains no material which is not available in the bound volume of the Abstract for the state to which it refers, or in the complete final report of the Thirteenth Census, and has been issued in a very limited edition for special purposes.

SUPPLEMENT FOR MICHIGAN



POPULATION
AGRICULTURE
MANUFACTURES
MINES AND QUARRIES

75360°—13—37

(565)

CHAPTER 1. NUMBER OF INHABITANTS.

Introduction.—This chapter gives the population of Michigan, by counties and minor civil divisions, as enumerated at the Thirteenth Census, taken as of April 15, 1910, with comparative statements of population where possible, and a statement and discussion for the state as a whole of the population living in urban and in rural territory. The statistics are given in detail in two general tables.

Table 1 (p. 574) shows the population of Michigan, distributed according to counties and minor civil divisions, at the last three Federal censuses, namely, those of 1910, 1900, and 1890. The arrangement of counties and of the primary divisions in each county is alphabetical. The figures for secondary divisions are printed in italics. The changes in boundaries, name, or form of organization that have taken place since 1900 are indicated in the footnotes to the table. For changes between 1890 and 1900 reference must be made to the census report of 1900.

It may be noticed that the county totals as given in Table 1 for 1900 and 1890 sometimes exceed the aggregate population of the minor civil divisions as shown in the table. This is due in part to the fact that some of the minor civil divisions of the respective counties had gone out of existence by 1910, their territory having been annexed to one or more other divisions or taken to form new divisions. In other cases divisions which were in one county in 1890, by 1910 had either been annexed to another county or taken to form part of a new county.

Table 2 (p. 589) shows the cities and the incorporated villages in Michigan, alphabetically arranged, with their population in 1910, 1900, and 1890.

The population of Michigan, by counties, at each of the last five Federal censuses, from 1870 to 1910, inclusive; the increase during the last two decades; the density of the total and the rural population at the census of 1910; and the distribution of the population at the last two Federal censuses according to urban and rural districts, are given in Table I of Chapter 2.

The tables and text of the present chapter contain few technical expressions whose meaning is not apparent. The census usage in regard to certain terms is, however, explained below:

Density of population.—The density of population of a state or county is obtained by dividing its total population by the number of square miles in its land area. In calculating the density of rural population, the same divisor is used as it is not practicable to ascertain and deduct the exact area covered by the urban districts, and even if this could be done with accuracy the deduction of this area from the total land area would ordinarily make no appreciable difference in the resulting quotient.

Minor civil divisions.—The counties are divided generally into smaller political units which bear different designations in the different parts of the country, such as towns, townships, election precincts, etc. Of these minor civil divisions those which rank next to the county as geographic areas are termed primary divisions. In many instances, however, these primary divisions contain political units of still smaller area, such as cities, incorporated villages, towns, or boroughs. These smaller political units are referred to as secondary divisions.

Urban and rural population defined.—The Census Bureau, for purposes of discussion, has defined urban population as that residing in cities and other incorporated places of 2,500 inhabitants or more, and rural population as that residing outside of such incorporated places.

The comparisons of the urban and rural population in 1910 with that at earlier enumerations may be made either with respect to the varying proportions of the two classes at successive enumerations

HISTORICAL NOTE.—Michigan derives its name from the lake which forms a part of its western boundary. The word is of Indian origin and probably signifies "great lake" or "great water," though some authorities claim that its meaning is "place for catching fish."

The first well authenticated exploration by white men within the region now constituting Michigan was in 1634, when Jean Nicollet, a French explorer, passed through the Straits of Mackinaw and discovered Lake Michigan. The first settlement by Europeans within the present limits of the state was made in 1668 at Sault Ste. Marie by Father Marquette and others, who founded a mission there. In 1701 Antoine de la Motte-Cadillac, under a commission from Louis XIV of France, founded Detroit.

In 1763, at the close of the French and Indian War, this territory was transferred to the English; and in 1783, at the close of the Revolution, it passed into the hands of the United States. The British did not immediately relinquish their hold, however, and it was not until the summer of 1796 that the United States took actual possession, at Detroit.

In 1787 the region bounded by Pennsylvania, the Ohio River, the Mississippi River, and the Great Lakes, was organized as the Northwest Territory, the claims of Massachusetts, Connecticut, and Virginia, based on their early charters, having been ceded to the United States between the years 1781-1786. In 1800, when the territory of Indiana was created, the western part of what is now the Lower Peninsula

of Michigan and most of the Upper Peninsula were made a part of the territory, and two years later, when Ohio was organized as a state, the remaining portions of both peninsulas were added to Indiana. In 1805 the Lower Peninsula and that part of the Upper lying east of a line drawn due north from the northern extremity of Lake Michigan were organized as the territory of Michigan. In 1809 the region between the Mississippi River and the present western line of Indiana, prolonged northward to the Canadian boundary, was organized as the territory of Illinois. The portion of the Upper Peninsula lying between Michigan and Illinois remained a part of Indiana until 1816, when Indiana was admitted to the Union. In 1818, when Illinois, with its present boundaries, became a state, the limits of Michigan were extended westward to the Mississippi River.

In 1824 the region lying north of Missouri and extending from the Mississippi to the Missouri and White Earth Rivers was added to Michigan, making it include, in addition to the area of the present state, the territory now constituting Wisconsin, Iowa, Minnesota, and parts of North and South Dakota.

In 1835 a state constitution for Michigan was adopted; in the following year Congress passed an enabling act by which the boundary between Ohio and Michigan was established; and on January 26, 1837, Michigan, with boundaries as at present, was admitted to the Union. Meanwhile, in 1836, Wisconsin had been organized as a separate territory.

or with respect to the increase between enumerations. In order to contrast the *proportion* of the total population living in urban or rural territory at the census of 1910 with the proportion urban or rural at the preceding census, it is necessary to classify the territory according to the conditions as they existed at each census. In this comparison a place having less than 2,500 inhabitants in 1900 and over 2,500 in 1910 is classed with the rural population for 1900 and with the urban for 1910. On the other hand, in order to present fairly the contrast between urban and rural communities, as regards their *rate of growth*, it is necessary to consider the changes in population for the *same* territory which have occurred from one decen-

nial census to another. For this purpose the territory which in 1910 was urban or rural, as the case may be, is taken as the basis, and the population in 1900 for the same territory (so far as separately reported at that census) is presented, even though part of the territory may, on the basis of its population at the earlier census, have then been in a different class. This avoids the disturbing effect on comparisons which would arise from the passage, for example, of communities formerly classed as rural into the urban group. These two distinct forms of comparison are made in Table I of Chapter 2 for the state as a whole and for each county separately for the last two Federal censuses.

TOTAL POPULATION, INCREASE, AND DISTRIBUTION.

Population of the state.—The population of the state of Michigan is 2,810,173. Compared with a population of 2,420,982 in 1900, this represents an increase during the last decade of 389,191, or 16.1 per cent. During the same period the total population of the United States increased 21 per cent. The relative increase in the population of the state during the last decade, while exceeding that for the preceding dec-

ade, 1890–1900, by five-tenths of 1 per cent, is smaller than that reported at any Federal census previous to 1900.

The following table shows the population of Michigan at each Federal census from 1810 to 1910, inclusive, together with the increase and per cent of increase during each decade, in comparison with the per cent of increase for the United States as a whole.

CENSUS YEAR.	Population.	INCREASE OVER PRECEDING CENSUS.		Per cent of increase for the United States.
		Number.	Per cent.	
1910.....	2, 810, 173	389, 191	16. 1	21. 0
1900.....	2, 420, 982	327, 092	15. 6	20. 7
1890.....	2, 093, 890	456, 953	27. 9	25. 5
1880.....	1, 636, 937	452, 878	38. 2	30. 1
1870.....	1, 184, 059	434, 046	58. 1	22. 6
1860.....	749, 113	351, 459	88. 4	35. 6
1850.....	397, 654	185, 387	87. 3	35. 9
1840.....	212, 267	180, 628	570. 9	32. 7
1830.....	31, 639	22, 743	255. 7	33. 5
1820.....	8, 896	4, 134	86. 8	33. 1
1810.....	4, 762	.....	.....	.....

Michigan was organized as a territory in 1805 and appears in the Federal census reports for the first time in 1810. This table shows that during the first 60 years, 1810–1870, the rate of increase of the population of the state did not fall below 50 per cent during any decade, the percentages ranging from 58.1 per cent for the decade 1860–1870 to 570.9 per cent for the decade 1830–1840. Since 1870 the percentages have ranged from 15.6 for the decade 1890–1900 to 38.2 for the decade 1870–1880. During this 40-year period the population of the state has a little more than doubled.

A comparison of the rates of increase for the state with those for the United States, as given in the preceding table, shows that from 1810 to 1890 the rate during each decade was larger for the state than for the country as a whole. During every decade from 1810 to 1870 the population of the state increased more than twice as fast as the population of the whole country, the greatest difference between the rates being for the decade 1830–1840, when the population of the state increased more than seventeen times as fast as that of the country as a whole. During the two decades from 1890 to 1910, the population of the state has increased less rapidly than has that

of the United States, the rates for the 20 years being 34.2 per cent and 46.1 per cent, respectively. Within the last 50 years, or since 1860, the population of this state has increased almost fourfold, while the population of the United States in the same period has increased about threefold.

Principal cities.—Michigan has 106 cities. Detroit, the largest, has a population of 465,766, and Grand Rapids and Saginaw, the second and third cities, have populations of 112,571 and 50,510, respectively. Each of the other cities has less than 50,000 inhabitants, 6 having from 25,000 to 50,000, 15 from 10,000 to 25,000, 22 from 5,000 to 10,000, 24 from 2,500 to 5,000, and 36 less than 2,500 inhabitants. The aggregate population of the 106 cities is 1,329,623, or 47.3 per cent of the total population of the state.

Table 2 shows the population in 1910 of all the cities of the state with comparative figures, where possible, for 1900 and 1890. The table on page 569 shows the population of the 9 cities having in 1910 over 25,000 inhabitants, as reported at each Federal census since their incorporation either as cities or villages, so far as figures are available, together with the increase during each decade.

CITY AND CENSUS YEAR.	Population.	INCREASE ¹ OVER PRECEDING CENSUS.		CITY AND CENSUS YEAR.	Population.	INCREASE ¹ OVER PRECEDING CENSUS.	
		Number.	Per cent.			Number.	Per cent.
Battle Creek:				Grand Rapids—Continued.			
1910.....	25,267	6,704	36.1	1880.....	32,016	15,509	94.0
1900.....	18,563	5,366	40.7	1870.....	16,507	8,422	104.2
1890.....	13,197	6,134	59.8	1860.....	8,085	5,399	201.0
1880.....	7,063	1,225	21.0	1850.....	2,686		
1870.....	5,838			Jackson:			
1900.....	(²)			1910.....	31,433	6,253	24.8
1850.....	1,064			1900.....	25,180	4,332	21.1
Bay City:				1890.....	20,798	4,693	29.1
1910.....	45,166	17,538	63.5	1880.....	16,105	4,658	40.7
1900.....	27,628 ¹	-211	-0.8	1870.....	11,447	6,648	138.5
1890.....	27,839	7,146	34.5	1860.....	4,799	2,436	103.1
1880.....	20,693	13,629	192.9	1850.....	2,363		
1870.....	7,064	5,481	346.2	Kalamazoo:			
1860.....	1,583			1910.....	39,437	15,033	61.6
Detroit:				1900.....	24,404	6,651	36.7
1910.....	465,766	180,062	63.0	1890.....	17,853	5,916	49.6
1900.....	285,704	79,828	38.8	1880.....	11,937	2,769	30.0
1890.....	205,876	89,536	77.0	1870.....	9,181	3,111	51.3
1880.....	116,340	36,763	46.2	1860.....	6,070	3,563	142.1
1870.....	79,577	33,958	74.4	1850.....	2,507		
1860.....	45,619	24,690	117.0	Lansing:			
1850.....	21,019	11,917	130.9	1910.....	31,229	14,744	89.4
1840.....	9,102	6,880	309.6	1900.....	16,485	3,383	25.8
1830.....	2,222	800	56.3	1890.....	13,102	4,783	57.5
1820.....	1,422			1880.....	8,319	3,078	58.7
Flint:				1870.....	5,241	2,167	70.5
1910.....	38,550	25,447	194.2	1860.....	3,074		
1900.....	13,103	3,300	33.7	Saginaw:			
1890.....	9,803	1,394	16.6	1910.....	50,510	8,165	19.3
1880.....	8,409	3,023	56.1	1900.....	42,345	-3,977	-8.6
1870.....	5,386	2,436	82.6	1890.....	46,322	35,797	340.1
1860.....	2,950			1880.....	10,525	3,065	41.1
Grand Rapids:				1870.....	7,469	5,761	339.1
1910.....	112,571	25,066	28.6	1860.....	1,699		
1900.....	87,505	27,287	45.3				
1890.....	60,278	28,262	88.3				

¹ A minus sign (-) denotes decrease.

² Not returned separately.

Of the cities included in this table, Flint shows the highest percentage of increase during the last decade, namely, 194.2 per cent, and Saginaw the lowest, 19.3 per cent.

The relative increase in the population of Detroit, which has been below 50 per cent during only two decades, 1870-1880 and 1890-1900, was considerably larger during the last decade than during the preceding one. The absolute increase between 1900 and 1910, 180,062, was more than twice that of any previous decade. Four other cities—Bay City, Flint, Kalamazoo, and Lansing—show rates of increase of over 50 per cent during the last decade.

Counties.—Michigan has 83 counties. The population of these counties ranges from 2,027 in Oscoda County to 531,591 in Wayne County.

There have been no changes in the territorial boundaries of the counties since 1900.

Fifty-seven counties have increased in population during the last decade, the percentages of increase ranging from two-tenths of 1 per cent in both Alcona and Osceola Counties to 122.4 per cent in Keweenaw County, and the absolute increases from 12 in Alcona County to 182,798 in Wayne County. Twenty-three counties show a larger percentage of increase than is shown for the state as a whole, which, as before stated, was 16.1 per cent. Two counties show the same rate of increase as the state as a whole. Twenty-six counties have decreased in population during the last decade, the percentages of decrease ranging from three-tenths of 1 per cent in Van Buren County to 9.8

per cent in Livingston County, and the absolute decreases from 18 in Lake County to 3,047 in Washtenaw County. The aggregate increase of population from 1900 to 1910 in the 57 counties that show an increase is 416,763; the aggregate decrease of population in the 26 counties that show a decrease is 27,572. The difference, 389,191, is, of course, the total increase of population in the state.

The maps on page 572 show the increase or decrease in the total and the rural population, respectively, of each county of Michigan during the last decade. In the counties shown in white the population decreased; for the other counties the different rates of increase are indicated by differences in shading.

Density of population.—The total land area of the state is 57,480 square miles. The average number of persons to the square mile in 1910 was 48.9; in 1900 and 1890 it was 42.1 and 36.4, respectively. The average number per square mile for the United States as a whole in 1910 was 30.9. In density of population Michigan ranks seventeenth among the states.

The density of population is given by counties in Table I of Chapter 2 and in the maps on page 573, both for the entire population and for that living in rural territory, excluding in the latter case the population of places of 2,500 or more, but not excluding the land area of such places.

Marquette County, with 1,870 square miles, has the largest area, and Benzie County, with 314 square miles, has the smallest area. Wayne County, containing Detroit city, has the highest density of any

county, namely, 857.4 persons per square mile, while Oscoda County, with 3.5 persons per square mile, has the lowest density.

Minor civil divisions.—The political divisions into which counties are subdivided are collectively termed "Minor civil divisions." In Michigan the counties are divided into 1,669 minor civil divisions, comprising 1,233 townships, 106 cities, and 330 incorporated villages. Besides these, there are five unorganized townships for which population has been returned at one or more of the last three Federal censuses. The townships and cities are primary divisions. The

incorporated villages are not independent minor civil divisions, but form parts of the townships in which they are located.

Urban and rural population compared.—The following table presents the population of Michigan at the Federal censuses of 1910, 1900, and 1890, respectively, distributed among cities and incorporated villages grouped according to specified limits of population, together with the percentage of the total population contained in each group at each of the censuses named. The classification is based upon the population of each place as it existed at each census.

CLASS OF PLACES.	1910		1900		1890		PER CENT OF TOTAL POPULATION.		
	Number of places.	Population.	Number of places.	Population.	Number of places.	Population.	1910	1900	1890
Total population.....		2,810,173		2,420,982		2,093,800	100.0	100.0	100.0
Urban territory.....	79	1,327,044	71	952,323	63	790,294	47.2	39.3	34.9
Cities and villages of—									
100,000 inhabitants or more.....	2	573,337	1	285,704	1	205,876	20.6	11.8	9.8
50,000 to 100,000 inhabitants.....	1	50,510	1	87,595	1	60,278	1.8	3.6	2.9
25,000 to 50,000 inhabitants.....	6	211,082	3	95,153	2	74,161	7.5	3.9	3.5
10,000 to 25,000 inhabitants.....	15	203,817	14	212,390	11	160,098	7.3	8.8	7.6
5,000 to 10,000 inhabitants.....	24	166,749	22	158,649	18	125,549	5.9	6.6	6.0
2,500 to 5,000 inhabitants.....	31	116,549	30	112,302	30	104,332	4.1	4.6	5.0
Rural territory.....		1,483,129		1,468,659		1,363,596	52.8	60.7	65.1
Cities and villages of less than 2,500 inhabitants.....	357	285,955	311	261,539	242	211,142	10.2	10.8	10.1
Other rural territory.....		1,197,174		1,207,120		1,152,454	42.6	49.9	55.0

As shown by the above table, the urban territory of the state in 1910—that is, the cities and incorporated villages of 2,500 inhabitants or more—contained 1,327,044 inhabitants, or 47.2 per cent of the total population, while 1,483,129 inhabitants, or 52.8 per cent, lived in rural territory. The urban territory as it existed in 1900—that is, the cities and incorporated villages then having 2,500 inhabitants or more—contained 952,323 inhabitants, or 39.3 per cent of the total population, while 1,468,659 inhabitants, or 60.7 per cent, lived in rural territory. There has thus been a considerable increase in the proportion of urban population. A similar but smaller increase in the proportion of urban population occurred between 1890 and 1900. For the United States as a whole the urban population constituted 46.3 per cent of the total population in 1910 and 40.5 per cent of the total population in 1900.

A comparison of the figures for 1910, 1900, and 1890, as given in this table, shows an increase in the proportion of the population in the combined groups comprising cities and villages of over 25,000 inhabitants—namely, from 16.3 per cent in 1890 to 19.3 per cent in 1900 and 29.9 per cent in 1910. There was a slight increase in the proportion of the population living in the smaller urban communities taken as a whole from 1890 to 1900, but a slight decrease in the proportion in such places from 1900 to 1910. There has been a decrease during each decade in the proportion of population in rural territory. The above table further shows that in all incorporated places, including those

of less than 2,500 inhabitants, there was in 1910 a population of 1,612,999, or 57.4 per cent of the population of the state. The population of all incorporated places, as they existed in 1900, was 1,213,872, or 50.1 per cent of the population of the state.

The urban population of the state is contained in 70 cities and 9 villages, 43.6 per cent being in the two cities having more than 100,000 inhabitants each. Of the rural population, 80.7 per cent is in unincorporated territory and 19.3 per cent in cities and incorporated villages of less than 2,500 inhabitants. The 357 places of less than 2,500 inhabitants each had an aggregate population of 285,955. These places comprised 107 having from 1,000 to 2,500 inhabitants each, with a combined population of 157,049; 122 having from 500 to 1,000 inhabitants each, with a combined population of 84,834; and 128 having less than 500 inhabitants each, with a combined population of 44,072.

Table I of Chapter 2 shows that 43 counties had a larger proportion and 12 counties a smaller proportion of urban population in 1910 than in 1900, and that 28 counties were wholly rural at both censuses.

In order to compare the *rate of growth* in urban and rural communities it is necessary in each case, as previously explained, to consider the changes in population which have occurred in the *same* territory from one decennial census to another. With this end in view places classed as urban or rural according to their population in 1910 are taken as a basis and the aggregate population in 1910 and in 1900 of the same places is then compared. Thus, as shown in

the table in the next column, the total population in 1910 of those cities and villages which at that time had 2,500 inhabitants or more was 1,327,044; in 1900 the total population of these same places (so far as separately reported) was 966,826. It may be noted that the latter figure exceeds the total population in 1900 of those cities and villages which at that time had over 2,500 inhabitants each, 952,323 (see table, p. 570), by 14,503. The difference is the net result of the passage, since 1900, of certain communities from the rural to the urban class and vice versa, and of annexations of territory during the same period.

A comparison of the total population in 1910 of cities and incorporated villages having a population of not less than 2,500 each with the total population of the same places in 1900, as given in the table in the next column, shows an increase of 37.3 per cent. During the same period the rural population, comprising that of the remainder of the state, increased 2 per cent. Urban population thus increased more than twice as rapidly as that of the state as a whole, and more than eighteen times as rapidly as that of rural territory. For the United States as a whole urban population increased 34.9 per cent in the last decade and rural population 11.2 per cent. As shown by Table I of Chapter 2, there are 35 counties in Michigan in which the population living in rural territory decreased, these being mainly in the southern half of the Lower Peninsula; in other words, in the oldest and most thickly settled section of the state. In 9 counties the urban population decreased.

In the following table the population for the state as a whole is distributed so as to show, for 1910 and 1900, the population of the city of Detroit, the combined population of the other cities having, in 1910, 25,000 inhabitants or more, the combined population of cities and villages having in 1910 from 2,500 to 25,000 inhabitants, and the population of the remainder of the state.

CLASS OF PLACES.	POPULATION.		INCREASE: 1900-1910	
	1910	1900	Number.	Per cent.
The state.....	2,810,178	2,420,982	389,191	16.1
Urban territory in 1910.....	1,327,044	966,826	360,218	37.3
City of Detroit.....	465,766	290,277	175,489	60.5
Other cities of 25,000 inhabitants or more in 1910.....	374,163	268,392	105,771	39.4
Cities and villages of 2,500 to 25,000 inhabitants in 1910.....	487,115	408,157	78,958	19.3
Remainder of the state.....	1,483,129	1,454,156	28,973	2.0

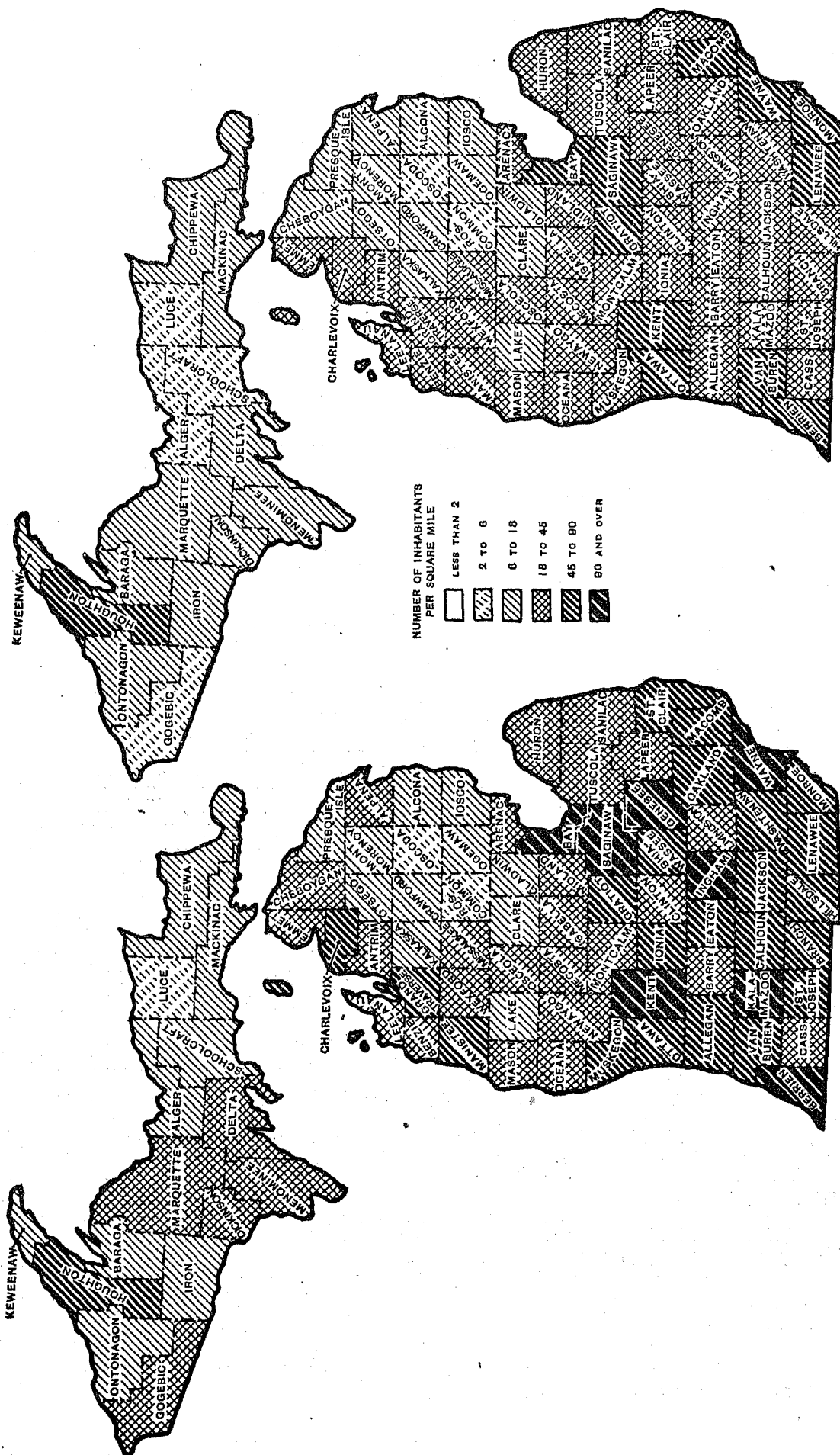
This table shows that the city of Detroit increased in population during the last decade more than three and one-half times as rapidly as the state as a whole, the group of other cities outside of Detroit having 25,000 inhabitants or more nearly two and one-half times as rapidly, while the group of cities having from 2,500 to 25,000 inhabitants increased only a little more rapidly than the state as a whole, and the population in rural territory only one-eighth as rapidly.

It also appears from the above table that of the total increase in the population of the state during the decade, namely, 389,191, nearly one-half was in the city of Detroit.

DENSITY OF POPULATION OF MICHIGAN, BY COUNTIES: 1910.

TOTAL POPULATION.

RURAL POPULATION.



Rural population is defined as that residing outside of incorporated places having 2,500 inhabitants or more.

TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Alcona County	5,708	5,691	5,409	Antrim County	15,692	16,568	10,413
Alcona township.....	330	1,039	597	Banks township.....	1,003	1,810	802
Caledonia township.....	616	386	190	Central Lake township, including Central Lake village.....	1,482	1,935	510
Curtis township.....	599	487	364	<i>Central Lake village</i>	813	1,307	
Greenbush township.....	234	245	264	Chestonia township.....	512	481	537
Gustin township, including Lincoln village.....	555	602	697	Custer township.....	591	526	411
<i>Lincoln village</i> ¹	122			Elk Rapids township, including Elk Rapids village.....	721	598	473
Harrisville city ²	444	403	987	<i>Elk Rapids village</i> ³	1,775	2,042	1,486
<i>Ward 1</i>	135			<i>Elk Rapids village</i> ³	1,073		
<i>Ward 2</i>	133			Forest Home township, including part of Bellaire village.....	967	1,181	548
<i>Ward 3</i>	176			<i>Bellaire village (part of)</i>	450	560	
Harrisville township ²	764	* 852	* 936	<i>Total for Bellaire village in Forest Home and Kearney townships</i>	1,050	1,157	
Hawes township.....	304	291		Helena township.....	702	926	537
Haynes township.....	661	791	973	Jordan township.....	496	482	440
Mikado township, including Mikado village.....	652	410	318	Kearney township, including part of Bellaire village.....	1,371	1,143	437
<i>Mikado village</i> ¹	100			<i>Bellaire village (part of)</i>	600	597	
Millen township.....	232	117		Mancelona township, including Mancelona village.....	2,500	2,729	2,323
Mitchell township.....	322	68	83	<i>Mancelona village</i>	1,600	1,228	1,205
				Milton township.....	737	928	868
Algor County	7,675	5,868	1,238	Star township.....	957	598	380
Au Train township ⁴	409	484	284	Torch Lake township.....	329	488	350
Burt township.....	1,373	1,927	177	Warner township.....	829	701	311
Grand Island township ⁴	52						
Limestone township.....	413	275		Arenac County	9,640	9,821	5,883
Mathias township.....	523	314		Adams township.....	393	378	222
Munising township, including Munising village.....	3,547	2,277	288	Arenac township ⁵	668	1,250	662
<i>Munising village</i>	2,952	2,014		Au Gres city ¹⁰	252		
Onota township.....	147	226	161	<i>Ward 1</i>	120		
Rock River township.....	1,206	365	328	<i>Ward 2</i>	132		
				Au Gres township ¹⁰	412	622	531
Allegan County	39,819	38,812	38,961	Clayton township.....	834	774	646
Allegan city ⁶	3,419	2,667	2,609	Deep River township.....	957	816	711
<i>Ward 1</i>	1,321			Lincoln township ¹¹	794	¹² 777	1,007
<i>Ward 2</i>	1,598			Mason township, including part of Twining village.....	853	977	399
Allegan township ⁶	1,141	* 1,140	* 1,314	<i>Twining village (part of)</i>	129		
Casco township.....	1,764	2,041	1,819	<i>Total for Twining village¹³ in Mason and Turner townships</i>	267		
Cheshire township.....	1,348	1,325	1,457	Moffat township.....	301	246	240
Clyde township, including part of Fennville village.....	1,124	968	850	Omer city ⁹	367		
<i>Fennville village (part of)</i>	331	267	207	<i>Ward 1</i>	100		
<i>Total for Fennville village in Clyde and Manlius townships</i>	533	454	360	<i>Ward 2</i>	100		
Dorr township.....	1,652	1,730	1,670	<i>Ward 3</i>	167		
Fillmore township.....	1,889	2,019	2,151	Standish city ¹¹	825	829	
Ganges township.....	1,492	1,751	1,477	<i>Ward 1</i>	287		
Gunplain township, including Plainwell village.....	2,474	2,263	2,525	<i>Ward 2</i>	338		
<i>Plainwell village</i>	1,493	1,518	1,414	<i>Ward 3</i>	153		
Heath township.....	1,010	808	630	Standish township.....	1,250	1,236	883
Hopkins township.....	1,845	1,763	1,821	Turner township, including part of Twining village.....	935	1,274	48
Laketown township.....	1,055	989	905	<i>Twining village (part of)</i>	128		
Lee township.....	959	951	900	Whitney township.....	630	642	334
Leighton township.....	1,153	1,187	1,102				
Manlius township, including part of Fennville village.....	1,100	1,153	1,140	Baraga County	6,127	4,320	3,036
<i>Fennville village (part of)</i>	202	187	153	Arvon township.....	300	299	200
Martin township.....	1,185	1,140	1,313	Baraga township, including Baraga village.....	2,548	2,097	1,090
Monterey township.....	1,253	1,361	1,514	<i>Baraga village</i>	1,074	1,185	
Otsego township, including Otsego village.....	3,828	3,240	2,936	Covington township.....	646	298	
<i>Otsego village</i>	2,812	2,073	1,626	L'Anse township, including L'Anse village.....	2,033	1,850	1,493
Overisel township.....	1,664	1,752	1,788	<i>L'Anse village</i>	708	620	655
Salem township.....	1,577	1,565	1,584	Spurr township.....	400	266	269
Saugatuck township, including Douglas and Saugatuck villages.....	2,040	2,123	2,233				
<i>Douglas village</i>	485	444	404	Barry County	22,638	22,514	23,783
<i>Saugatuck village</i>	621	707	799	Assyria township.....	972	1,050	1,074
Trowbridge township.....	1,203	1,255	1,311	Baltimore township.....	1,017	1,212	1,255
Valley township.....	653	493	536	Barry township.....	1,225	1,113	1,221
Watson township.....	1,042	1,117	1,193	Carlton township, including part of Freeport village.....	1,160	1,300	1,357
Wayland township, including Wayland village.....	1,949	1,895	1,783	<i>Freeport village (part of)</i>	7		
<i>Wayland village</i>	785	619	523	<i>Total for Freeport village¹ in Carlton and Irving townships</i>	460		
				Castleton township, including part of Nashville village.....	2,343	2,342	2,391
Alpena County	19,965	18,254	15,581	<i>Nashville village (part of)</i>	1,268	1,087	960
Alpena city ⁷	12,708	11,802	11,283	<i>Total for Nashville village in Castleton and Maple Grove townships</i>	1,348	1,164	1,029
<i>Ward 1</i>	1,685			Hastings city.....	4,333	3,172	2,972
<i>Ward 2</i>	1,722			<i>Ward 1</i>	802		
<i>Ward 3</i>	3,634			<i>Ward 2</i>	1,125		
<i>Ward 4</i>	1,260			<i>Ward 3</i>	855		
<i>Ward 5</i>	1,327			<i>Ward 4</i>	1,511		
<i>Ward 6</i>	2,538						
Alpena township ⁷	928	1,173	1,115				
Green township.....	758	670	436				
Long Rapids township.....	1,312	1,243	817				
Maple Ridge township.....	761	783	598				
Ossineke township.....	1,000	887	132				
Sanborn township.....	847	642	204				
Wilson township.....	1,653	1,454	900				

¹ Incorporated in 1907.

² Harrisville village, returned with Harrisville township in 1900, incorporated as a city in 1905.

³ Exclusive of population of Harrisville village.

⁴ Grand Island township organized from parts of Au Train and Munising townships in 1905.

⁵ Allegan village, returned with Allegan township in 1900, incorporated as a city in 1908.

⁶ Exclusive of population of Allegan village.

⁷ Parts of Alpena township annexed to Alpena city in 1905 and 1907.

⁸ Incorporated in 1900.

⁹ Omer city incorporated from part of Arenac township in 1903.

¹⁰ Au Gres city incorporated from part of Au Gres township in 1905.

¹¹ Standish village, returned with Lincoln township in 1900, incorporated as a city in 1903.

¹² Exclusive of population of Standish village.

¹³ Incorporated in 1903.

STATISTICS OF POPULATION.

TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Barry County—Continued.				Berrien County—Continued.			
Hastings township	954	1,025	1,187	Chickaming township	1,024	920	964
Hope township	990	1,128	1,214	Galien township, including Galien village	1,165	1,239	1,238
Irving township, including part of Freeport vil- lage	1,361	1,346	1,379	Galien village	405	440	498
Freeport village (part of)	458			Hagar township	1,072	1,105	953
Johnstown township	927	962	1,068	Lake township, including Baroda village	2,768	2,694	1,518
Maple Grove township, including part of Nash- ville village	1,085	1,198	1,375	Baroda village	248		
Nashville village (part of)	78	77	69	Lincoln township, including Stevensville village	1,733	1,877	2,112
Orangeville township	777	775	968	Stevensville village	248	260	
Prainville township	892	815	1,040	New Buffalo township, including New Buffalo village	1,119	1,240	1,192
Rutland township	827	899	1,050	New Buffalo village	628	620	553
Thornapple township, including Middleville village	1,740	1,849	1,684	Niles city	5,156	4,287	4,197
Middleville village	804	829	678	Ward 1	1,768		
Woodland township, including Woodland vil- lage	1,369	1,552	1,728	Ward 2	917		
Woodland village	304			Ward 3	1,306		
Yankee Springs township	611	676	829	Ward 4	1,167		
				Niles township	1,069	1,131	1,364
				Oronoko township, including Berrien Springs village	2,137	1,951	1,815
				Berrien Springs village	880	808	745
				Pipestone township, including part of Eau Claire village	1,397	1,386	1,446
				Eau Claire village (part of)	110	108	
Bay County	68,238	62,378	56,412	Royalton township	1,168	1,147	1,164
Bangor township	1,249	1,195	745	St. Joseph city	5,936	5,155	3,733
Bay City	45,166	27,628	27,839	Ward 1	910		
Ward 1	5,651			Ward 2	1,439		
Ward 2	3,438			Ward 3	1,828		
Ward 3	4,920			Ward 4	1,784		
Ward 4	4,711			St. Joseph township, including Hilltop village	990	1,070	574
Ward 5	6,780			Hilltop village	225		
Ward 6	5,012			Sodus township	1,269	1,165	953
Ward 7	4,453			Three Oaks township, including Three Oaks village	1,968	1,844	1,754
Ward 8	4,534			Three Oaks village	1,175	994	885
Ward 9	5,680			Watervliet township, including Coloma and Watervliet villages	3,092	3,009	2,016
Beaver township	1,787	1,539	879	Coloma village	701	687	
Frankenlust township	1,245	1,395	1,206	Watervliet village	728	717	
Fraser township	1,562	1,656	950	Weesaw township	1,507	1,349	1,178
Garfield township	901	555	147				
Gibson township	949	761	335	Branch County	25,605	27,811	26,761
Hampton township, including Essexville vil- lage	3,025	3,319	2,890	Algansee township	1,281	1,265	1,283
Essexville village	1,477	1,639	1,545	Batavia township	1,019	1,133	1,210
Kawkawlin township	1,893	1,864	1,249	Bethel township	1,246	1,328	1,591
Merritt township	1,529	1,622	1,077	Bronson township, including Bronson village	1,946	2,323	1,991
Monitor township	2,190	2,150	1,702	Bronson village	1,080	1,176	875
Mount Forest township	721	850		Butler township	1,114	1,169	1,303
Pineconning township, including Pineconning vil- lage	2,103	2,104	1,956	California township	870	922	851
Pineconning village	677	729	885	Coldwater city	5,945	6,215	5,247
Portsmouth township	1,511	1,363	1,156	Ward 1	1,583		
Williams township	2,407	1,818	1,300	Ward 2	1,874		
				Ward 3	1,309		
				Ward 4	1,112		
Benzie County	10,638	9,685	5,237	Coldwater township	1,325	1,361	1,453
Almira township, including Lake Ann village	686	790	278	Gilead township	729	813	898
Lake Ann village	171	241		Girard township	1,122	1,235	1,274
Benzonia township, including Benzonia village	1,325	1,122	506	Kinderhook township	687	623	639
Benzonia village	593	484		Matteson township	982	1,067	1,169
Blaire township	640	498	346	Noble township	502	604	629
Collax township, including part of Thompson- ville village	744	962	404	Ovid township	891	969	1,036
Thompsonville village (part of)	168	253		Quincy township, including Quincy village	2,407	2,781	2,586
Total for Thompsonville village in Collax and Weldon townships	815	893		Quincy village	1,247	1,563	1,850
Crystal Lake township, including Frankfort village	2,024	1,903	1,472	Sherwood township, including Sherwood village	1,218	1,266	1,405
Frankfort village	1,555	1,465	1,175	Sherwood village	346	368	447
Gilmore township, including South Frankfort village	969	886	755	Union township, including Union City village	2,423	2,748	2,406
South Frankfort village	681	639		Union City village	1,340	1,514	1,166
Homestead township	1,415	1,009	330				
Inland township	652	485	419	Calhoun County	56,638	49,315	43,501
Joyfield township	442	328	262	Albion city	5,833	4,519	3,733
Lake township	189	126	170	Ward 1	1,828		
Platte township	448	477	198	Ward 2	1,680		
Weldon township, including part of Thompson- ville village	1,104	1,099	97	Ward 3	653		
Thompsonville village (part of)	647	680		Ward 4	1,527		
				Albion township	734	760	799
Berrien County	53,622	49,165	41,285	Athens township, including Athens village	1,491	1,527	1,469
Balnbridge township	1,786	1,803	1,519	Athens village	681	683	
Benton township	3,051	3,234	2,377	Battle Creek city	25,287	18,563	13,197
Benton Harbor city	9,185	6,562	3,692	Ward 1	4,156		
Ward 1	1,948			Ward 2	5,202		
Ward 2	2,203			Ward 3	5,016		
Ward 3	2,812			Ward 4	5,311		
Ward 4	2,222			Ward 5	6,932		
Berrien township, including part of Eau Claire village	1,503	1,490	1,584	Battle Creek township	1,064	1,008	952
Eau Claire village (part of)	197	176		Bedford township	2,076	1,217	1,127
Total for Eau Claire village in Berrien and Pipestone townships	307	281		Burlington township, including Burlington village	1,150	1,387	1,325
Bertrand township	865	932	1,093	Burlington village	237	354	304
Buchanan township, including Buchanan vil- lage	2,662	2,575	2,849	Clarence township	801	979	1,129
Buchanan village	1,381	1,708	1,994	Clarendon township	914	1,082	1,167
				Convix township	749	876	853
				Eckford township	915	975	1,098
				Emmett township	1,033	918	911
				Fredonia township	720	825	954

¹ County totals include population (13,119 in 1900; 12,981 in 1890) of West Bay City, annexed to Bay City since 1900.
² Part of Bay City annexed in 1901.
³ Part annexed to Bangor township in 1901; West Bay City annexed in 1905.

⁴ Part of Benton township annexed to Benton Harbor city in 1910.
⁵ Incorporated in 1907.
⁶ Incorporated in 1908.

TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 6.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Calhoun County—Continued.				Cheboygan County—Continued.			
Homer township, including Homer village.....	1,803	1,948	2,032	Hebron township.....	394	370	207
<i>Homer village</i>	1,003	1,097	1,063	Inverness township.....	1,047	1,589	1,153
Lea township.....	880	1,053	1,117	Koehler township ⁹	433	.....	.....
Le Roy township.....	1,046	1,084	1,165	Mackinaw township, including part of Mackinaw City village.....	706	606	475
Marengo township.....	1,029	1,023	1,110	<i>Mackinaw City village (part of)</i>	571	468	533
Marshall city.....	4,236	4,370	3,965	<i>Total for Mackinaw City village in Mackinaw township, Cheboygan County, and Carp Lake township, Emmet County</i>	697	564	533
<i>Ward 1</i>	813	.....	.....	Mentor township.....	425	403	391
<i>Ward 2</i>	1,015	.....	.....	Munro township.....	543	418	254
<i>Ward 3</i>	1,599	.....	.....	Nunda township, including part of Wolverine village.....	1,238	967	581
<i>Ward 4</i>	934	.....	.....	<i>Wolverine village (part of)</i>	705	.....	.....
Marshall township.....	684	774	873	<i>Total for Wolverine village¹⁰ in Nunda and Wilnot townships</i>	784	.....	.....
Newton township.....	856	873	847	Tuscarora township ¹¹	950	711	380
Pennington township.....	1,124	1,040	1,047	Walker township ¹²	153	.....	.....
Sheridan township.....	826	980	1,060	Waverly township.....	321	115	53
Tekonsha township, including Tekonsha village.....	1,407	1,534	1,538	Wilnot township, including part of Wolverine village.....	260	310	.....
<i>Tekonsha village</i>	578	578	570	<i>Wolverine village (part of)</i>	29	.....	.....
Cass County	20,624	20,876	20,953	Chippewa County	24,472	21,338	12,019
Calvin township.....	1,064	1,271	1,478	Bay Mills township ¹¹	233	.....	.....
Dowagiac city.....	5,083	4,161	2,806	Bruce township.....	1,324	1,071	1,318
<i>Ward 1</i>	1,731	.....	.....	Daffer township.....	847	738	.....
<i>Ward 2</i>	1,839	.....	.....	Detour township, including Detour village.....	935	1,043	964
<i>Ward 3</i>	1,513	.....	.....	<i>Detour village</i>	781	820	.....
Howard township.....	697	755	829	Drummond township.....	624	469	496
Jefferson township.....	695	790	894	Kinross township.....	244	144	.....
La Grange township, including Cassopolis village.....	2,094	2,256	2,238	Pickford township.....	1,420	1,425	993
<i>Cassopolis village</i>	1,568	1,320	1,369	Raber township.....	1,352	644	.....
Marcellus township, including Marcellus village.....	1,803	1,883	1,849	Rudyard township.....	1,893	978	.....
<i>Marcellus village</i>	1,047	1,065	880	Sault Ste. Marie city.....	12,015	10,538	5,760
Mason township.....	557	668	775	<i>Ward 1</i>	4,085	.....	.....
Milton township.....	453	433	420	<i>Ward 2</i>	4,009	.....	.....
Newberg township.....	1,164	1,313	1,420	<i>Ward 3</i>	2,937	.....	.....
Ontwa township.....	820	848	929	<i>Ward 4</i>	1,534	.....	.....
Penn township, including Vandalia village.....	1,195	1,351	1,630	Soo township ¹⁴	837	878	669
<i>Vandalia village</i>	571	407	425	Sugar Island township.....	625	540	563
Pokagon township.....	971	1,039	1,214	Superior township ¹¹	1,321	2,274	893
Porter township.....	1,241	1,310	1,576	Trout Lake township.....	912	367	112
Silver Creek township.....	973	851	859	Whitefish township.....	300	499	251
Volinia township.....	945	1,033	1,238	Clare County	9,240	8,860	7,539
Wayne township.....	804	824	825	Arthur township.....	734	500	168
Charlevoix County	19,157	13,956	19,686	Clare city.....	1,350	1,326	1,174
Bay township.....	406	503	409	<i>Ward 1</i>	214	.....	.....
Boyer City ²	5,218	912	450	<i>Ward 2</i>	661	.....	.....
<i>Ward 1</i>	819	.....	.....	<i>Ward 3</i>	476	.....	.....
<i>Ward 2</i>	1,177	.....	.....	Franklin township.....	131	73	545
<i>Ward 3</i>	1,323	.....	.....	Freeman township ¹³	129	.....	.....
<i>Ward 4</i>	1,594	.....	.....	Frost township.....	228	194	134
Boyer Valley township, including Boyer Falls village.....	952	1,258	509	Garfield township.....	425	294	.....
<i>Boyer Falls village</i>	525	431	.....	Grant township.....	818	848	794
Chandler township.....	397	273	144	Greenwood township.....	402	484	259
Charlevoix city ²	2,420	2,079	1,490	Hamilton township.....	801	199	508
<i>Ward 1</i>	477	.....	.....	Harrison city.....	543	647	762
<i>Ward 2</i>	1,045	.....	.....	<i>Ward 1</i>	100	.....	.....
<i>Ward 3</i>	893	.....	.....	<i>Ward 2</i>	140	.....	.....
Charlevoix township ³	207	4178	422	<i>Ward 3</i>	228	.....	.....
Evangeline township ⁴	223	842	299	Hatton township.....	381	380	535
Eveline township.....	768	847	923	Hayes township.....	262	170	192
Hayes township.....	854	780	602	Lincoln township ¹³	120	.....	.....
Hudson township.....	673	255	118	Redding township.....	659	585	693
Marion township.....	630	681	441	Sheridan township.....	934	809	698
Melrose township.....	675	620	436	Summerfield township.....	228	282	147
Norwood township.....	366	652	484	Surrey township, ¹⁵ including Farwell village.....	902	1,292	1,292
Pealae township.....	370	372	.....	<i>Farwell village</i>	688	535	534
St. James township.....	665	420	.....	Winterfield township.....	433	277	365
South Arm township, including East Jordan village.....	3,426	2,839	2,103	Clinton County	23,139	25,136	26,509
<i>East Jordan village</i>	2,516	1,206	731	Bath township.....	1,021	1,065	1,224
Wilson township.....	806	945	576	Bengal township.....	980	1,045	1,154
Cheboygan County	17,872	15,516	11,986	Bingham township ¹⁴	904	1,064	1,125
Aloha township ⁵	332	.....	.....	Dallas township, including Fowler village.....	1,523	1,647	1,668
Beaugrand township.....	446	506	332	<i>Fowler village</i>	476	488	540
Benton township.....	1,011	1,063	770	De Witt township.....	1,305	1,236	1,361
Burt township.....	557	404	376	Duplain township, including Elsie village.....	1,761	1,831	1,773
Cheboygan city.....	6,859	6,489	6,235	<i>Elsie village</i>	698	676	396
<i>Ward 1</i>	232	.....	.....	Eagle township, including Eagle village.....	1,095	1,153	1,246
<i>Ward 2</i>	2,379	.....	.....	<i>Eagle village</i>	133	148	141
<i>Ward 3</i>	1,559	.....	.....	Essex township, including Maple Rapids village.....	1,355	1,482	1,511
<i>Ward 4</i>	1,934	.....	.....	<i>Maple Rapids village</i>	579	533	533
<i>Ward 5</i>	914	.....	.....	Greenbush township.....	1,180	1,400	1,453
Ellis township ⁷	341	320	159				
Forest township, including Tower village.....	1,064	622	161				
<i>Tower village</i> ⁸	545	.....	.....		
Grant township ⁹	462	542	459				

¹ County total includes population (554) of Bear Lake, Resort, and Springvale townships, annexed to Emmet County between 1890 and 1900.

² Boyer village, returned with Evangeline township in 1900, incorporated as a city in 1907.

³ Charlevoix village, returned with Charlevoix township in 1900, incorporated as a city in 1905.

⁴ Exclusive of population of Charlevoix village.

⁵ Exclusive of population of Boyer village.

⁶ Aloha township organized from part of Grant township in 1907.

⁷ Walker township organized from part of Ellis township in 1904.

⁸ Incorporated in 1906.

⁹ Koehler township organized from part of Tuscarora township in 1901.

¹⁰ Incorporated in 1903.

¹¹ Bay Mills township organized from part of Superior township in 1902.

¹² Name changed from Sault Ste. Marie in 1907.

¹³ Lincoln and Freeman townships organized from parts of Surrey township in 1902 and 1903, respectively.

¹⁴ Included St. Johns village in 1900.

¹⁵ Exclusive of population of St. Johns village.

STATISTICS OF POPULATION.

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TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Clinton County—Continued.				Eaton County—Continued.			
Lebanon township, including part of Hubbards- ton village.....	1,011	1,098	1,235	Brookfield township.....	1,113	1,243	1,344
Hubbardston village (part of).....	55	60	(1)	Carmel township.....	970	1,021	1,089
Total for Hubbardston village in Lebanon township, Clinton County, and North Plains township, Ionia County.....	460	450	.....	Charlotte city.....	4,886	4,092	3,867
Olive township.....	963	1,122	1,245	Ward 1.....	629	.....	.....
Ovid township, including Ovid village.....	2,189	2,555	2,835	Ward 2.....	1,190	.....	.....
Ovid village.....	1,078	1,293	1,423	Ward 3.....	1,463	.....	.....
Riley township.....	1,107	1,155	1,277	Ward 4.....	1,601	1,243	1,420
St. Johns city ²	3,154	3,388	3,127	Chester township.....	1,080	1,383	1,482
Ward 1.....	1,037	.....	.....	Delta township.....	1,224	959	1,084
Ward 2.....	801	.....	.....	Eaton township.....	912	2,103	1,970
Ward 3.....	1,316	.....	.....	Eaton Rapids city.....	2,094	.....	.....
Victor township.....	853	999	1,041	Ward 1.....	767	.....	.....
Watertown township.....	1,211	1,334	1,505	Ward 2.....	648	.....	.....
Westphalia township, including Westphalia village.....	1,427	1,537	1,699	Ward 3.....	679	1,172	1,256
Westphalia village.....	368	574	550	Eaton Rapids township.....	1,009	2,161	1,606
				Grand Ledge city.....	2,893	.....	.....
				Ward 1.....	1,600	.....	.....
				Ward 2.....	1,293	.....	.....
Crawford County.....	3,934	2,943	2,962	Hamlin township.....	1,944	1,085	1,224
Beaver Creek township.....	347	316	170	Kalamo township.....	1,223	1,428	1,501
Frederic township.....	770	228	260	Oneda township.....	1,136	1,187	1,324
Grayling township, including Grayling village.....	2,087	1,710	1,558	Roxand township, including Mulliken village.....	1,460	1,598	1,731
Grayling village ⁴	1,775	.....	.....	Mulliken village ⁴	312	.....	.....
Maple Forest township.....	471	484	316	Sunfield township, including Sunfield village.....	1,651	1,979	1,891
South Branch township.....	259	199	106	Sunfield village.....	385	481	.....
				Vermontville township, including Vermontville village.....	1,663	1,755	1,881
				Vermontville village.....	650	684	730
				Walton township, including Olivet village.....	1,570	1,900	1,995
				Olivet village.....	627	800	790
				Windsor township, including Dimondale village.....	1,347	1,497	1,718
				Dimondale village ¹³	341	.....	.....
Delta County.....	30,108	23,881	15,330				
Baldwin township ⁹	753	802	385	Emmet County.....	18,561	15,931	8,756
Bark River township.....	1,269	1,075	706	Bear Creek township.....	1,630	1,387	1,153
Bay de Noc township.....	550	469	478	Bilas township.....	694	704	202
Brampton township ⁷	516	.....	.....	Carp Lake township, including part of Macki- naw City village.....	847	561	236
Cornell township ⁸	444	.....	.....	Mackinaw City village (part of).....	126	98	.....
Escanaba city.....	13,194	9,549	6,808	[For total, see Mackinaw township, Cheboy- gan County.]			
Ward 1.....	734	.....	.....	Center township.....	441	636	219
Ward 2.....	1,147	.....	.....	Cross Village township.....	600	544	484
Ward 3.....	1,776	.....	.....	Friendship township.....	487	369	305
Ward 4.....	1,939	.....	.....	Littlefield township, including Alanson village.....	1,055	877	343
Ward 5.....	3,209	.....	.....	Alanson village ¹⁴	473	.....	.....
Ward 6.....	2,599	.....	.....	Little Traverse township, including Harbor Springs village.....	2,268	2,152	1,488
Ward 7.....	1,780	.....	.....	Harbor Springs village.....	1,805	1,643	1,052
Escanaba township ⁶	640	792	724	McKinley township, ¹⁵ including Pellston village.....	2,120	354	140
Fairbanks township ⁵	531	298	740	Pellston village ¹⁵	1,039	.....	.....
Ford River township.....	1,148	1,386	837	Maple River township.....	759	516	603
Garden township, including Garden village.....	1,268	1,234	1,267	Petoskey city.....	4,778	5,285	2,872
Garden village.....	497	466	458	Ward 1.....	1,203	.....	.....
Gladstone city.....	4,211	3,380	1,337	Ward 2.....	1,323	.....	.....
Ward 1.....	830	.....	.....	Ward 3.....	1,013	.....	.....
Ward 2.....	775	.....	.....	Ward 4.....	1,234	.....	.....
Ward 3.....	1,567	.....	.....	Pleasant View township.....	429	341	273
Ward 4.....	1,949	.....	.....	Readmond township.....	600	479	433
Maple Ridge township.....	753	653	241	Resort township.....	780	762	.....
Masonville township ¹⁰	2,109	2,203	924	Springvale township.....	737	630	.....
Nahma township.....	1,256	967	697	West Traverse township.....	336	344	.....
Wells township.....	1,460	828	.....			
				Genesee County.....	64,555	41,804	39,430
Dickinson County.....	20,524	17,890	.....	Argentine township.....	821	927	1,069
Breen township ¹¹	808	532	.....	Atlas township.....	1,120	1,199	1,256
Breitung township ¹²	920	1,074	.....	Burton township ¹⁷	887	1,145	1,233
Felch township ¹¹	773	400	.....	Clayton township.....	1,059	1,227	1,337
Iron Mountain city ¹³	9,216	9,242	8,599	Davison township, including Davison village.....	1,547	1,768	1,617
Ward 1.....	2,431	.....	.....	Davison village.....	673	761	466
Ward 2.....	1,668	.....	.....	Fenton township, including Fenton and Linden villages.....	3,667	3,843	3,667
Ward 3.....	1,345	.....	.....	Fenton village.....	2,531	2,408	2,182
Ward 4.....	1,867	.....	.....	Linden village.....	650	545	558
Ward 5.....	1,915	.....	.....	Flint city ¹⁸	38,530	13,103	9,803
Norway city.....	4,974	4,170	.....	Ward 1.....	13,235	.....	.....
Ward 1.....	1,547	.....	.....	Ward 2.....	6,190	.....	.....
Ward 2.....	2,065	.....	.....	Ward 3.....	4,806	.....	.....
Ward 3.....	1,372	.....	.....	Ward 4.....	2,514	.....	.....
Norway township.....	1,704	1,280	.....	Ward 5.....	7,740	.....	.....
Sagola township.....	825	627	.....	Ward 6.....	3,869	.....	.....
Waucedah township.....	922	715	.....	Flint township ¹⁹	1,051	1,172	1,330
West Branch township ¹¹	202	.....	.....	Flushing township, including Flushing village.....	2,075	2,132	2,444
				Flushing village.....	838	600	865
Eaton County.....	30,499	31,668	32,094				
Bellevue township, including Bellevue village.....	1,961	2,344	2,084				
Bellevue village.....	330	1,074	814				
Benton township, including Potterville village.....	1,363	1,517	1,537				
Potterville village.....	480	466	505				

¹ Not returned separately in 1890.
² Returned with Bingham township in 1900; incorporated as a city in 1904.
³ County total includes population (95) of Ball township, annexed to South Branch township; population (51) of Blaine township, annexed to Grayling and Maple Forest townships; population (202) of Center Plain township, annexed to Beaver Creek township; and population (204) of Grove township, annexed to Grayling and South Branch townships, between 1890 and 1900.
⁴ Incorporated in 1903.
⁵ County totals include population (185 in 1900; 186 in 1890) of Sac Bay township, annexed to Fairbanks township since 1900.
⁶ Parts taken to form parts of Brampton and Cornell townships in 1902 and 1903, respectively.
⁷ Organized from parts of Baldwin, Escanaba, and Masonville townships in 1902.
⁸ Organized from parts of Baldwin and Escanaba townships in 1903.
⁹ Sac Bay township annexed in 1900.
¹⁰ Part taken to form part of Brampton township in 1902.
¹¹ West Branch township organized from parts of Breen and Felch townships in 1903.
¹² Part of Breitung township annexed to Iron Mountain city in 1907.
¹³ Incorporated in 1906.
¹⁴ Incorporated in 1905.
¹⁵ Name changed from Egleston in 1903.
¹⁶ Incorporated in 1907.
¹⁷ Parts annexed to Flint city in 1901, 1907, and 1910.
¹⁸ Parts of Burton township annexed in 1901, 1907, and 1910 and parts of Flint, Genesee, and Mount Morris townships annexed in 1910.
¹⁹ Part annexed to Flint city in 1910.

TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Genesee County—Continued.				Gratiot County			
Forest township, including Otisville village	1,371	1,000	1,000	Alma city ⁷	2,757	2,047	1,655
<i>Otisville village</i>	312	291	277	<i>Ward 1</i>	1,050	.....	.....
Gaines township, including Gaines village	1,469	1,610	1,735	<i>Ward 2</i>	612	.....	.....
<i>Gaines village</i>	238	240	304	<i>Ward 3</i>	552	.....	.....
Genesee township, ¹ including part of Mount Morris village	1,476	1,556	1,588	<i>Ward 4</i>	552	.....	.....
<i>Mount Morris village (part of)</i>	314	251	210	Arcada township ⁷	1,087	1,442	1,288
<i>Total for Mount Morris village in Genesee and Mount Morris townships</i>	513	416	351	Bothay township.....	1,477	1,091	1,497
Grand Blanc township.....	1,184	1,370	1,430	Elba township, including Ashley village	1,703	1,895	1,756
Montrose township, including Montrose village	1,612	1,859	1,654	<i>Ashley village</i>	513	617	711
<i>Montrose village</i>	443	343	.....	Emerson township.....	1,948	1,401	1,441
Mount Morris township, including part of Mount Morris village	1,131	1,158	1,223	Fulton township, including Perrinton village	1,706	1,797	1,914
<i>Mount Morris village (part of)</i>	199	166	141	<i>Perrinton village</i>	888	850	.....
Mundy township.....	1,168	1,308	1,390	Hamilton township.....	855	904	752
Richfield township.....	1,161	1,338	1,471	Ithaca township, including Ithaca village	2,012	2,179	1,768
Theftord township.....	1,024	1,297	1,372	<i>Ithaca village</i>	1,376	2,020	1,627
Vienna township, including Clio village	2,082	2,123	2,115	Lafayette township.....	1,357	1,497	1,336
<i>Clio village</i>	810	640	677	Now Haven township.....	1,206	1,329	1,394
Gladwin County				Hillsdale County			
Beaverton city ²	418	.....	.....	Adams township, including North Adams village	1,493	1,522	1,773
<i>Ward 1</i>	74	.....	.....	<i>North Adams village</i>	440	422	604
<i>Ward 2</i>	199	.....	.....	Allen township.....	1,253	1,323	1,429
<i>Ward 3</i>	145	.....	.....	Amboy township.....	1,018	1,137	1,236
Beaverton township ²	551	756	.....	Camden township.....	1,275	1,855	1,498
Bentley township.....	443	534	.....	Camden township, including Camden and Montgomery villages	1,065	1,923	1,911
Billings township.....	270	333	253	<i>Camden village</i>	322	579	.....
Bourret township.....	247	156	.....	<i>Montgomery village</i> ¹⁰	302	.....	.....
Buckeye township ³	308	284	385	Fayette township, including Jonesville village	1,047	1,941	1,833
Butman township.....	720	359	200	<i>Jonesville village</i>	1,596	1,367	1,228
Clement township.....	170	101	124	Hillsdale city.....	5,001	4,151	3,916
Gladwin city.....	968	775	903	<i>Ward 1</i>	1,216	.....	.....
<i>Ward 1</i>	337	.....	.....	<i>Ward 2</i>	1,183	.....	.....
<i>Ward 2</i>	324	.....	.....	<i>Ward 3</i>	1,360	.....	.....
<i>Ward 3</i>	185	.....	.....	<i>Ward 4</i>	1,242	.....	.....
<i>Ward 4</i>	142	.....	.....	Hillsdale township.....	447	447	455
Gladwin township.....	1,611	732	633	Jefferson township.....	1,557	1,001	1,771
Grout township.....	372	713	857	Litchfield township, including Litchfield village	1,641	1,617	1,714
Hay township ⁴	176	.....	.....	<i>Litchfield village</i>	660	645	601
Sage township.....	300	508	547	Moscow township.....	956	1,090	1,127
Sherman township.....	543	213	.....	Pittsford township.....	1,503	1,537	1,560
Tobacco township ²	866	1,070	106	Ransom township.....	1,091	1,215	1,403
Gogebic County				Houghton County			
Bessemer city.....	4,583	3,911	2,506	Adams township, including South Range village	8,419	3,253	1,475
<i>Ward 1</i>	970	.....	.....	<i>South Range village</i> ¹⁰	1,097	.....	.....
<i>Ward 2</i>	790	.....	.....	Calumet township, including Laurium and Red Jacket villages	32,845	25,991	13,529
<i>Ward 3</i>	1,055	.....	.....	<i>Laurium village</i>	8,537	6,645	1,169
<i>Ward 4</i>	468	.....	.....	<i>Red Jacket village</i>	4,211	4,068	5,073
<i>Ward 5</i>	1,300	.....	.....	Chassell township.....	1,523	1,088	680
Bessemer township.....	1,168	817	080	Duncan township.....	865	1,316	476
Carlson township ⁴	109	.....	.....	Elm River township.....	1,073	532	.....
Erwin township ⁵	699	.....	.....	Franklin township.....	5,679	6,418	2,637
Ironwood city.....	12,821	9,705	7,745	Hancock city ¹¹	8,981	4,080	1,772
<i>Ward 1</i>	1,955	.....	.....	<i>Ward 1</i>	1,697	.....	.....
<i>Ward 2</i>	1,016	.....	.....	<i>Ward 2</i>	2,139	.....	.....
<i>Ward 3</i>	1,065	.....	.....	<i>Ward 3</i>	2,107	.....	.....
<i>Ward 4</i>	1,289	.....	.....	<i>Ward 4</i>	3,058	.....	.....
<i>Ward 5</i>	1,222	.....	.....	Hancock township ¹²	351	14,945	14,963
<i>Ward 6</i>	2,224	.....	.....	<i>Laurel township</i>	690	658	159
<i>Ward 7</i>	1,065	.....	.....	Osceola township.....	7,775	7,615	3,630
<i>Ward 8</i>	2,045	.....	.....	Portage township, including Houghton village	8,599	5,019	3,531
Ironwood township ⁵	632	459	562	<i>Houghton village</i>	5,113	3,359	2,022
Marenso township.....	493	111	225	Quincy township.....	1,507	1,667	1,268
Wakefield township, including Wakefield village	2,474	1,438	782	Houghton County			
<i>Wakefield village</i>	714	1,191	.....	Adams township, including South Range village	8,419	3,253	1,475
Watersmeet township ⁴	355	297	600	<i>South Range village</i> ¹⁰	1,097	.....	.....
Grand Traverse County				Houghton County			
Acme township.....	731	692	.....	Calumet township, including Laurium and Red Jacket villages	32,845	25,991	13,529
Blair township.....	891	797	876	<i>Laurium village</i>	8,537	6,645	1,169
East Bay township.....	663	553	1,013	<i>Red Jacket village</i>	4,211	4,068	5,073
Fife Lake township, including Fife Lake village	837	1,010	810	Chassell township.....	1,523	1,088	680
<i>Fife Lake village</i>	340	466	304	Duncan township.....	865	1,316	476
Garfield township.....	932	986	843	Elm River township.....	1,073	532	.....
Grant township.....	832	699	498	Franklin township.....	5,679	6,418	2,637
Green Lake township.....	793	787	371	Hancock city ¹¹	8,981	4,080	1,772
Long Lake township.....	745	603	492	<i>Ward 1</i>	1,697	.....	.....
Mayfield township.....	977	878	500	<i>Ward 2</i>	2,139	.....	.....
Paradise township, including Kingsley village	1,747	1,693	1,357	<i>Ward 3</i>	2,107	.....	.....
<i>Kingsley village</i>	497	419	.....	<i>Ward 4</i>	3,058	.....	.....
Peninsula township.....	1,262	1,134	957	Hancock township ¹²	351	14,945	14,963
Traverse City.....	12,115	9,407	4,353	<i>Laurel township</i>	690	658	159
<i>Ward 1</i>	1,666	.....	.....	Osceola township.....	7,775	7,615	3,630
<i>Ward 2</i>	2,301	.....	.....	Portage township, including Houghton village	8,599	5,019	3,531
<i>Ward 3</i>	4,338	.....	.....	<i>Houghton village</i>	5,113	3,359	2,022
<i>Ward 4</i>	1,406	.....	.....	Quincy township.....	1,507	1,667	1,268
<i>Ward 5</i>	2,354	.....	.....	Houghton County			
Union township.....	219	208	148	Adams township, including South Range village	8,419	3,253	1,475
Whitewater township.....	990	963	792	<i>South Range village</i> ¹⁰	1,097	.....	.....

¹ Part annexed to Flint city in 1910.
² Beaverton city incorporated from parts of Beaverton and Tobacco townships in 1903.
³ Hay township organized from part of Buckeye township in 1909.
⁴ Carlson township organized from part of Watersmeet township in 1910.
⁵ Erwin township organized from part of Ironwood township in 1907.
⁶ County total includes population (480) of that part of Traverse township outside of Traverse village in 1890.
⁷ Alma village, returned with Arcada township in 1900, incorporated as a city in 1905.
⁸ Exclusive of population of Alma village.
⁹ Incorporated in 1908.
¹⁰ Incorporated in 1905.
¹¹ Incorporated in 1905.
¹² Returned with Hancock township in 1900; incorporated as a city in 1903.
¹³ Included Hancock city in 1900. Part taken to form Stanton township in 1902.
¹⁴ Exclusive of population of Hancock village.

STATISTICS OF POPULATION.

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TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Houghton County—Continued.				Ingham County—Continued.			
Schoolcraft township, including Lake Linden village.....	4,122	4,197	3,325	Stockbridge township, including Stockbridge village.....	1,294	1,359	1,276
<i>Lake Linden village</i>	2,525	2,597	1,832	<i>Stockbridge village</i>	663	677	497
Stanton township ¹	2,351			Vevay township.....	817	923	1,131
Torch Lake township, including Hubbell vil- lages.....	3,318	3,314	2,904	Wheatfield township.....	724	882	929
<i>Hubbell village</i> ²	1,059			White Oak township.....	841	1,025	1,070
				Williamston township, including Williamston village.....	1,909	2,033	2,051
				<i>Williamston village</i>	1,042	1,115	1,159
Huron County.....	34,758	34,162	28,545	Ionia County.....	33,550	34,329	32,801
Bad Axe city ⁴	1,559	1,241	842	Belding city.....	4,119	3,282	
<i>Ward 1</i>	498			<i>Ward 1</i>	1,443		
<i>Ward 2</i>	510			<i>Ward 2</i>	1,182		
<i>Ward 3</i>	551			<i>Ward 3</i>	1,494		
Bingham township, including Ubyly vil- lage.....	1,409	1,404	1,348	Berlin township.....	1,348	1,167	1,573
<i>Ubyly village</i>	442	432		Boston township, including Saranac vil- lage.....	1,782	1,895	1,940
Bloomfield township.....	935	884	602	<i>Saranac village</i>	245	768	790
Brookfield township, including Owendale vil- lage.....	1,754	981	867	Campbell township.....	1,646	1,692	1,688
<i>Owendale village</i> ⁵	285			Danby township.....	1,030	1,181	1,284
Caseville township, ⁶ including Caseville vil- lage.....	578	1,421	1,193	Easton township.....	2,073	2,175	1,868
<i>Caseville village</i>	442	507		Ionia city.....	5,030	5,209	4,482
Chandler township.....	1,230	1,214	1,047	<i>Ward 1</i>	1,025		
Collax township ⁷	1,081	1,086	783	<i>Ward 2</i>	1,183		
Dwight township, including part of Kinde vil- lage.....	1,539	1,585	1,424	<i>Ward 3</i>	1,187		
<i>Kinde village (part of)</i>	246			<i>Ward 4</i>	1,035		
<i>Total for Kinde village² in Dwight and Lin-</i> <i>coln townships</i>	800			Ionia township, including part of Lyons vil- lage.....	1,478	1,534	1,482
Fairhaven township.....	1,082	887	769	<i>Lyons village (part of)</i>	8	18	
Gore township.....	167	244	815	<i>Total for Lyons village in Ionia and Lyons</i> <i>townships</i>	611	656	612
Grant township.....	941	1,145	1,133	Keene township.....	947	1,004	1,024
Harbor Beach city ⁸	1,556	1,149	1,046	Lyons township, including Muir and Pewamo villages and part of Lyons village.....	2,232	2,370	2,437
Hume township.....	756	808	781	<i>Lyons village (part of)</i>	603	633	612
Huron township ⁹	913	1,100	923	<i>Muir village</i>	403	366	430
Lake township.....	390	448	333	<i>Pewamo village</i>	339	446	384
Lincoln township, including part of Kinde vil- lage.....	1,055	834	532	North Plains township, including part of Hub- bardston village.....	1,292	1,410	1,477
<i>Kinde village (part of)</i>	114			<i>Hubbardston village (part of)</i>	395	390	380
McKinley township ⁶	741			[For total, see Lebanon township, Clinton County.]			
Meade township.....	1,126	1,231	922	Odessa township, including Lake Odessa vil- lage.....	2,370	2,403	2,251
Oliver township, including Elkton vil- lage.....	1,725	1,764	992	<i>Lake Odessa village</i>	1,222	1,037	636
<i>Elkton village</i>	553	471		Orange township.....	1,048	1,108	1,311
Paris township.....	1,390	1,614	1,680	Orleans township.....	1,134	1,231	1,367
Pointe Aux Barques township ¹⁰	37			Orisco township.....	1,085	1,174	3,180
Port Austin township, ¹¹ including Port Austin village.....	1,244	1,449	1,469	Portland township, including Portland vil- lage.....	2,743	2,857	2,620
<i>Port Austin village</i>	553	507	571	<i>Portland village</i>	1,832	1,874	1,678
Rubicon township, including Port Hope vil- lage.....	898	1,076	1,199	Ronald township.....	1,129	1,284	1,371
<i>Port Hope village</i>	344	519	595	Sebewa township.....	1,164	1,383	1,416
Sand Beach township ³	1,182	¹³ 1,282	¹² 1,242				
Sebewaing township, including Sebewaing vil- lage.....	2,753	2,500	1,810	Iosco County.....	9,753	10,246	¹⁴ 16,224
<i>Sebewaing village</i>	1,347	1,243	719	Alabaster township.....	533	464	372
Sheridan township.....	906	1,011	885	Au Sable city.....	643	1,116	4,323
Sherman township.....	1,447	1,719	1,318	<i>Ward 1</i>	213		
Sigel township.....	1,015	1,058	907	<i>Ward 2</i>	335		
Verona township ⁷	841	7919	7679	<i>Ward 3</i>	100		
Winsor township, including Pigeon vil- lage.....	2,503	2,109	1,279	Au Sable township.....	599	752	170
<i>Pigeon village</i> ²	637			Baldwin township.....	312	349	285
				Burleigh township ¹⁵	632	743	443
Ingham County.....	53,310	39,818	37,666	East Tawas city.....	1,452	1,736	2,200
Alaledon township.....	955	1,172	1,287	<i>Ward 1</i>	442		
Aurelius township.....	1,163	1,387	1,489	<i>Ward 2</i>	639		
Bunker Hill township.....	881	920	1,012	<i>Ward 3</i>	411		
Delhi township.....	1,412	1,467	1,504	Grant township.....	325	287	149
East Lansing city ¹³	802			Oscoda township, ¹⁶ including Oscoda vil- lage.....	1,130	1,349	3,843
Ingham township, including Dansville vil- lage.....	1,002	1,155	1,232	<i>Oscoda village</i>	864	1,109	5,583
<i>Dansville village</i>	549	574	566	Plainfield township ¹⁶	821	930	200
Lansing city.....	31,229	16,485	13,102	Reno township.....	358	364	353
<i>Ward 1</i>	2,788			Sherman township.....	436	280	163
<i>Ward 2</i>	4,246			Tawas City.....	1,061	1,228	1,544
<i>Ward 3</i>	6,515			<i>Ward 1</i>	580		
<i>Ward 4</i>	6,263			<i>Ward 2</i>	472		
<i>Ward 5</i>	7,803			<i>Ward 3</i>	259		
<i>Ward 6</i>	6,016			Tawas township.....	900	980	805
Lansing township ¹²	1,760	1,353	1,422	Whittemore city ¹⁵	218		
Leroy township, including Webberville vil- lage.....	1,297	1,441	1,672	<i>Ward 1</i>	100		
<i>Webberville village</i>	349	346	404	<i>Ward 2</i>	113		
Leslie township, including Leslie vil- lage.....	2,014	2,220	2,337	Wilber township.....	328	268	299
<i>Leslie village</i>	1,038	1,114	1,053				
Locke township.....	1,045	1,248	1,265	Iron County.....	15,164	¹⁷ 8,990	¹⁸ 4,432
Mason city.....	1,742	1,828	1,875	Bates township.....	573	402	594
<i>Ward 1</i>	972			Crystal Falls city.....	3,775	3,231	
<i>Ward 2</i>	770			<i>Ward 1</i>	703		
Meridian township ¹³	1,392	1,625	1,720	<i>Ward 2</i>	1,324		
Onondaga township.....	1,031	1,264	1,392	<i>Ward 3</i>	1,243		

¹ Organized from part of Hancock township in 1902.
² Incorporated in 1903.
³ County total includes population (335) of White Rock township, annexed to Sherman township between 1890 and 1900.
⁴ Bad Axe village, returned with Collax and Verona townships in 1900, incorporated as a city in 1905.
⁵ Incorporated in 1905.
⁶ McKinley township organized from part of Caseville township in 1905.
⁷ Exclusive of population of Bad Axe village.
⁸ Harbor Beach village, returned with Sand Beach township in 1900, incorporated as a city in 1910.
⁹ Part annexed to Port Austin township in 1907.
¹⁰ Organized from part of Port Austin township in 1903.

¹¹ Part taken to form Pointe Aux Barques township in 1903; part of Huron township annexed in 1907.
¹² Exclusive of population of Harbor Beach village.
¹³ East Lansing city incorporated from parts of Lansing and Meridian townships in 1907.
¹⁴ County total includes population (55) of Thompson township, annexed to Oscoda township between 1890 and 1900.
¹⁵ Whittemore city incorporated from part of Burleigh township in 1907.
¹⁶ Part of Oscoda township annexed to Plainfield township in 1905.
¹⁷ County total includes population (366) of Atkinson township, annexed to Iron River township since 1900.
¹⁸ County total includes population (414) of Felch township, taken to form part of Dickinson County between 1890 and 1900.

TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Iron County—Continued.				Kalamazoo County—Continued.			
Crystal Falls township.....	1,038	797	1,176	Comstock township, including part of Galesburg village.....	1,918	1,694	1,779
Hematite township.....	1,115	694		<i>Galesburg village (part of)</i>	565	560	594
Iron River township, including Iron River village.....	3,085	1,777	1,420	Cooper township.....	912	942	1,069
<i>Iron River village</i>	2,450	1,432	1,117	Kalamazoo city.....	39,437	24,404	17,853
Mansfield township.....	855	350		<i>Ward 1</i>	6,977		
Mastodon township.....	885	172	111	<i>Ward 2</i>	0,198		
Stambaugh township, including Stambaugh village.....	4,238	1,201	711	<i>Ward 3</i>	7,422		
<i>Stambaugh village</i>	1,322	695		<i>Ward 4</i>	7,552		
				<i>Ward 5</i>	8,288		
Isabella County.....				23,029	22,784	18,784	
Broomfield township.....	787	723	495	Kalamazoo township.....	3,050	1,904	2,223
Chippewa township.....	1,018	1,192	719	Oshtemo township.....	1,114	1,069	1,206
Coe township, including Shepherd village.....	2,138	2,082	1,801	Pavilion township.....	1,002	986	1,014
<i>Shepherd village</i>	835	635	469	Portage township.....	846	865	941
Coldwater township.....	1,010	907	1,084	Prairie Ronde township.....	738	830	988
Deerfield township.....	1,002	1,213	938	Richland township, including Richland village.....	954	1,023	1,135
Denver township.....	981	912	681	<i>Richland village</i>	273	312	293
Fremont township.....	1,106	1,271	1,176	Ross township, including part of Augusta village.....	1,333	1,412	1,347
Gilmore township.....	760	787	571	<i>Augusta village (part of)</i>	473	522	481
Isabella township.....	1,642	1,673	1,523	Schoolcraft township, including Schoolcraft village and part of Vicksburg village.....	2,577	2,138	2,124
Lincoln township.....	1,194	1,238	1,248	<i>Schoolcraft village</i>	816	859	538
Mount Pleasant city.....	3,972	3,662	2,701	<i>Vicksburg village (part of)</i>	1,180	632	630
<i>Ward 1</i>	1,871			Texas township.....	799	837	893
<i>Ward 2</i>	1,484			Wakoshma township.....	1,145	1,430	1,536
<i>Ward 3</i>	1,217						
Nottawa township.....	1,562	1,447	843	Kalkaska County.....			
Rolland township.....	1,217	1,023	1,061	8,097	7,133	5,160	
Sherman township.....	908	878	533	Boardman township, including Boardman village.....	1,240	857	740
Union township.....	1,302	1,247	1,270	<i>Boardman village</i>	524	298	
Vernon township.....	1,239	1,363	1,314	Clearwater township.....	875	882	542
Wise township.....	1,131	1,155	826	Cold Springs township.....	545	270	137
				Excelsior township.....	773	438	339
Jackson County.....				53,426	48,222	45,031	
Blackman township.....	1,745	1,695	1,713	Garfield township.....	278	262	181
Columbia township, including Brooklyn village.....	1,577	1,579	1,574	Kalkaska township, including Kalkaska village.....	1,820	1,727	1,542
<i>Brooklyn village</i>	602	494	598	<i>Kalkaska village</i>	1,415	1,504	1,161
Concord township, including Concord village.....	1,307	1,330	1,415	Oliver township.....	222	152	131
<i>Concord village</i>	543	534	560	Orange township.....	534	501	383
Grass Lake township, including Grass Lake village.....	1,710	1,623	1,643	Rapid River township.....	616	657	549
<i>Grass Lake village</i>	760	648	617	Springfield township.....	535	602	285
Hanover township, including Hanover village.....	1,246	1,431	1,575	Wilson township.....	310	409	148
<i>Hanover village</i>	364	373	363	<i>Township 25, range 5 1/2</i>	84	73	183
Henrietta township.....	973	1,091	1,145	<i>Township 25, range 6</i>	95	133	
Jackson city.....	31,493	25,180	20,708	<i>Township 26, range 5</i>	74	14	
<i>Ward 1</i>	1,718			<i>Township 27, range 5</i>	(⁸)	28	
<i>Ward 2</i>	3,784			<i>Township 28, range 5</i>	125	38	
<i>Ward 3</i>	2,999						
<i>Ward 4</i>	4,500			Kent County.....			
<i>Ward 5</i>	4,639			159,145	129,714	109,922	
<i>Ward 6</i>	5,160			Ada township.....	1,231	1,308	1,296
<i>Ward 7</i>	4,674			Algoma township, including part of Rockford village.....	1,968	1,982	2,077
<i>Ward 8</i>	4,064			<i>Rockford village (part of)</i>	733	645	644
Leont township.....	1,408	1,438	1,381	<i>Total for Rockford village in Algoma and Plainfield townships</i>	845	711	
Liberty township.....	839	872	974	Alpine township.....	1,430	1,471	1,382
Napoleon township.....	867	948	999	Bowne township.....	1,274	1,340	1,214
Norwell township.....	694	800	824	Byron township.....	2,043	1,944	1,745
Parma township, including part of Parma village.....	1,119	1,072	1,175	Caledonia township, including Caledonia village.....	1,009	1,593	1,785
<i>Parma village (part of)</i>	249	178	221	<i>Caledonia village</i>	422	427	438
<i>Total for Parma village in Parma and Sandstone townships</i>	509	480	490	Cannon township.....	937	1,055	1,115
Pulaski township.....	845	961	1,046	Cascade township.....	1,219	1,200	1,147
Rives township.....	1,145	1,183	1,305	Courtland township.....	1,104	1,311	1,280
Sandstone township, including part of Parma village.....	1,248	1,368	1,511	Gaines township.....	1,311	1,342	1,351
<i>Parma village (part of)</i>	260	269	269	Grand Rapids city.....	112,671	87,555	60,273
Spring Arbor township.....	923	1,032	1,182	<i>Ward 1</i>	7,022		
Springport township, including Springport village.....	1,344	1,422	1,474	<i>Ward 2</i>	4,638		
<i>Springport village</i>	534	559	407	<i>Ward 3</i>	10,830		
Summit township.....	1,175	1,047	967	<i>Ward 4</i>	10,491		
Tompkins township.....	875	1,076	1,159	<i>Ward 5</i>	12,653		
Waterloo township.....	952	1,074	1,171	<i>Ward 6</i>	15,031		
				<i>Ward 7</i>	8,016		
Kalamazoo County.....				60,427	44,310	39,273	
Alamo township.....	1,069	1,213	1,185	<i>Ward 8</i>	4,504		
Brady township, including part of Vicksburg village.....	1,269	1,258	1,410	<i>Ward 9</i>	6,426		
<i>Vicksburg village (part of)</i>	444	290	291	<i>Ward 10</i>	11,823		
<i>Total for Vicksburg village in Brady and Schoolcraft townships</i>	1,624	972	921	<i>Ward 11</i>	10,769		
Charleston township, including parts of Augusta and Galesburg villages.....	852	907	984	<i>Ward 12</i>	9,369		
<i>Augusta village (part of)</i>	21	19	17	Grand Rapids township, including East Grand Rapids village.....	4,598	2,748	8,325
<i>Total for Augusta village in Charleston and Ross townships</i>	494	541	498	<i>East Grand Rapids village</i>	800	466	
<i>Galesburg village (part of)</i>	95	129	108	Grattan township.....	1,030	1,102	1,109
<i>Total for Galesburg village in Charleston and Comstock townships</i>	656	689	702	Lowell township, including Lowell village.....	3,179	3,097	3,145
Climax township, including Climax village.....	1,412	1,368	1,470	<i>Lowell village</i>	1,761	1,736	1,829
<i>Climax village</i>	425	398		Nelson township, including Sand Lake village and part of Cedar Springs village.....	1,974	2,132	2,147
				<i>Cedar Springs village (part of)</i>	495	487	508
				<i>Total for Cedar Springs village in Nelson and Solon townships</i>	947	950	1,035
				<i>Sand Lake village</i>	370	328	356
				Oakfield township.....	838	924	1,048
				Paris township.....	2,572	2,058	3,171
				Plainfield township, including part of Rockford village.....	1,893	1,771	1,571
				<i>Rockford village (part of)</i>	105	68	(⁹)
				Solon township, including part of Cedar Springs village.....	1,556	1,631	1,769
				<i>Cedar Springs village (part of)</i>	454	463	527

¹ Atkinson township annexed in 1906.

² Returned as Glade township in 1900. Organization abolished since 1900.

⁸ No population reported.

⁹ Not returned separately in 1890.

STATISTICS OF POPULATION.

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TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Kent County—Continued.				Leelanau County.			
Sparta township, including Sparta village and part of Lisbon village.	2,609	2,898	2,639	Bingham township.	744	811	719
<i>Lisbon village (part of)</i>	73	138	138	Centerville township.	1,051	1,285	927
Total for Lisbon village in Sparta township, Kent County, and Chester township, Otsego County.	96	187	138	Cleveland township.	580	506	552
Sparta village.	1,803	1,186	904	Elmwood township.	744	824	734
Spencer township.	1,016	1,185	1,260	Empire township, including Empire village.	1,212	1,155	596
Tyrone township, including Kent City village and part of Casnovia village.	1,766	1,513	1,501	<i>Empire village</i>	578	609	.....
<i>Casnovia village (part of)</i>	125	100	108	Glen Arbor township.	550	593	353
Total for Casnovia village in Tyrone township, Kent County, and Casnovia township, Muskegon County.	308	277	275	Kasson township.	838	685	558
<i>Kent City village</i> ¹	487	.....	.....	Leelanau township, including Northport village.	1,668	1,020	1,397
Vergennes township.	889	982	1,094	<i>Northport village</i> ²	624	.....	.....
Walker township.	2,558	2,166	3,239	Leland township.	1,248	945	708
Wyoming township, including Grandville village.	5,964	3,396	3,234	Solon township.	706	888	367
<i>Grandville village</i>	680	487	.....	Suttons Bay township, including Suttons Bay village.	1,201	1,243	1,033
				<i>Suttons Bay village</i>	402	398	.....
Keweenaw County.				Lenawee County.			
Allouez township, including Ahmeek village.	7,156	3,217	2,894	Adrian city. ⁷	10,763	9,654	8,756
<i>Ahmeek village</i> ¹	5,672	1,610	1,103	Ward 1.....	1,372	.....	.....
Eagle Harbor township.	193	.....	576	Ward 2.....	1,890	.....	.....
Houghton township.	448	1,346	189	Ward 3.....	1,812	.....	.....
Grant township.	253	157	100	Ward 4.....	1,251	.....	.....
Sherman township.	585	104	868	Ward 5.....	2,003	.....	.....
				Ward 6.....	2,435	.....	.....
Lake County.				Adrian township. ⁷	1,665	1,708	1,850
Chase township.	999	1,075	1,169	Blissfield township, including Blissfield village.	2,305	2,139	2,157
Cherry Valley township.	239	211	301	<i>Blissfield village</i>	1,474	1,293	1,158
Dover township.	373	396	303	Cambridge township, including Onsted village.	1,281	1,125	1,104
Eden township.	103	21	120	<i>Onsted village</i> ²	598	.....	.....
Elk township. ³	221	245	569	Clinton township, including Clinton village.	1,475	1,483	1,400
Ellsworth township, including part of Luther village.	709	1,080	1,949	<i>Clinton village</i>	1,011	1,038	990
<i>Luther village (part of)</i>	288	367	.....	Deerfield township, including Deerfield village.	1,383	1,528	1,548
Total for Luther village in Ellsworth and Newkirk townships.	686	857	.....	<i>Deerfield village</i>	443	440	481
Lake township.	201	177	59	Dover township, including part of Clayton village.	1,270	1,307	1,361
Newkirk township, including part of Luther village.	624	811	.....	<i>Clayton village (part of)</i>	188	205	197
<i>Luther village (part of)</i>	400	470	.....	Total for Clayton village in Dover and Hudson townships.	372	370	.....
Pleasant Plains township, including Baldwin and Marlborough villages.	336	373	890	Fairfield township.	1,909	2,209	2,283
<i>Baldwin village</i>	690	416	657	Franklin township.	1,194	1,197	1,405
<i>Marlborough village</i> ⁴	503	343	429	Hudson city.	2,178	2,403	2,178
Sweet Water township. ⁵	149	.....	.....	Ward 1.....	458	.....	.....
Webber township.	205	152	162	Ward 2.....	805	.....	.....
				Ward 3.....	775	.....	.....
Lapeer County.				Hudson township, including part of Clayton village.	1,244	1,229	1,301
Almont township, including Almont village.	1,676	1,836	1,854	<i>Clayton village (part of)</i>	184	165	(1)
<i>Almont village</i>	675	718	717	Macon township.	1,013	1,117	1,195
Arcadia township.	1,233	1,179	1,193	Madison township.	1,318	1,348	1,406
Attica township.	1,128	1,301	1,527	Medina township.	1,419	1,447	1,687
Burlington township, including Clifford village.	1,154	1,292	1,518	Ogden township.	1,698	2,069	2,136
<i>Clifford village</i>	308	539	.....	Palmira township.	1,632	1,663	1,765
Burnside township.	1,504	1,781	2,055	Raisin township.	1,340	1,343	1,444
Deerfield township.	1,018	1,106	1,072	Ridgeway township, including Britton village.	1,346	1,507	1,399
Dryden township, including Dryden village.	1,230	1,226	1,378	<i>Britton village</i>	370	345	.....
<i>Dryden village</i>	371	328	322	Riga township.	1,944	2,189	2,301
Elba township.	830	984	1,089	Rollin township, including part of Addison village.	1,457	1,519	1,559
Goodland township.	893	1,093	1,126	<i>Addison village (part of)</i>	174	160	.....
Hadley township.	1,074	1,201	1,316	Total for Addison village in Rollin and Woodstock townships.	474	470	.....
Imlay township, including Imlay City village.	2,222	2,873	2,620	Rome township.	1,057	1,204	1,256
<i>Imlay City village</i>	1,174	1,122	1,261	Seneca township, including Morenci village.	2,803	2,638	2,679
Lapeer city.	3,946	3,297	2,753	<i>Morenci village</i>	1,615	1,354	1,248
Ward 1.....	638	.....	.....	Tecumseh township, including Tecumseh village.	2,763	2,948	2,784
Ward 2.....	980	.....	.....	<i>Tecumseh village</i>	2,332	2,400	2,310
Ward 3.....	1,425	.....	.....	Woodstock township, including part of Addison village.	1,531	1,432	1,424
Ward 4.....	805	.....	.....	<i>Addison village (part of)</i>	300	310	.....
Lapeer township.	787	870	957	Livingston County.			
Marathon township, including Columbiaville and Otter Lake villages.	1,554	1,686	1,846	Brighton township, including Brighton village.	1,402	1,505	1,676
<i>Columbiaville village</i>	369	457	578	<i>Brighton village</i>	767	781	741
<i>Otter Lake village</i>	273	212	243	Cohoctah township.	1,152	1,340	1,256
Mayfield township.	1,018	1,148	1,204	Conway township.	1,104	1,206	1,288
Metamora township, including Metamora village.	1,045	1,170	1,206	Deerfield township.	816	898	1,072
<i>Metamora village</i>	276	513	514	Genoa township.	762	843	916
North Branch township, including North Branch village.	1,704	1,779	1,886	Green Oak township.	691	770	817
<i>North Branch village</i>	717	654	705	Hamburg township.	701	876	918
Oregon township.	907	1,067	1,295	Handy township, including Fowlerville village.	1,849	1,969	2,103
Rich township.	1,110	1,252	1,218	<i>Fowlerville village</i>	905	845	.....
				Hartland township.	830	969	1,049
				Howell township, including wards 1, 3, and 4, and part of ward 2 of Howell village.	3,004	3,365	3,388
				<i>Howell village (part of)</i>	2,220	2,428	2,537
				Total for Howell village in Howell and Marion townships.	2,338	2,518	2,537
				Ward 1.....	526	.....	.....
				Ward 2.....	754	.....	.....
				Ward 3.....	481	.....	.....
				Ward 4.....	577	.....	.....

¹ Incorporated in 1909.

² County total includes population (53) of Copper Harbor township, annexed to Eagle Harbor and Grant townships between 1890 and 1900.

³ Not returned separately.

⁴ County total includes population (111) of Center township, annexed to Webber township; population (94) of Glencoe township, taken to form part of Newkirk township; and population (121) of Yates township, annexed to Cherry Valley township, between 1890 and 1900.

⁵ Sweet Water township organized from part of Elk township in 1908.

⁶ Incorporated in 1903.

⁷ Part of Adrian township annexed to Adrian city in 1904.

⁸ Incorporated in 1907.

TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Livingston County—Continued.				Manistee County.....			
Iosco township.....	753	908	947	Arcadia township.....	994	881	671
Marion township, including part of ward 2 of Howell village.....	1,058	1,108	1,146	Bear Lake township, including Bear Lake village.....	1,584	1,428	1,287
Howell village (part of).....	118	90	.....	Bear Lake village.....	604	448	.....
Oceola township.....	768	865	914	Brown township ²	752	799	726
Putnam township, including Pinckney village.....	1,118	1,201	1,242	Cleon township, including Copanish village.....	1,357	1,237	810
Pinckney village.....	477	500	449	Copenish village.....	460	489	.....
Tyrone township.....	829	911	1,076	Dikson township ⁶	425	.....	.....
Unadilla township.....	909	930	1,010	Filer township ⁶	1,909	2,283	2,101
Luce County.....				Manistee city ⁶	12,881	14,260	12,812
Columbus township.....	411	204	.....	Ward 1.....	1,514	.....	.....
Lakefield township.....	454	297	169	Ward 2.....	1,632	.....	.....
McMillan township, including Newberry village.....	1,811	1,857	1,949	Ward 3.....	1,470	.....	.....
Newberry village.....	1,182	1,016	1,116	Ward 4.....	1,782	.....	.....
Pentland township.....	1,323	625	347	Ward 5.....	1,718	.....	.....
Mackinac County.....				Ward 6.....	1,865	.....	.....
Bois Blanc township.....	219	226	.....	Ward 7.....	2,092	.....	.....
Brevort township.....	632	377	313	Manistee township.....	2,990	3,128	2,681
Clark township ²	876	.....	.....	Maple Grove township.....	903	508	361
Garfield township.....	1,180	601	1,090	Marilla township.....	550	404	341
Hendricks township ²	441	727	282	Manistee township, including Onekama village.....	784	920	1,082
Hudson township ²	490	.....	.....	Onekama village.....	524	274	.....
Mackinac Island city ⁴	714	665	750	Pleasanton township.....	685	659	583
Marquette township.....	490	445	310	Springdale township.....	681	558	105
Moran township.....	475	329	452	Stronach township.....	733	791	710
Newton township.....	838	1,040	762	Marquette County.....			
Portage township.....	368	173	171	Champion township ⁷	1,069	1,707	2,622
St. Ignace city.....	2,118	2,271	2,704	Choccolay township.....	852	662	1,285
Ward 1.....	303	.....	.....	Ely township.....	922	303	694
Ward 2.....	643	.....	.....	Forsyth township ⁸	2,402	695	270
Ward 3.....	689	.....	.....	Humboldt township.....	604	341	608
Ward 4.....	553	.....	.....	Ishpeming city.....	12,448	13,255	11,197
St. Ignace township.....	402	185	130	Ward 1.....	311	.....	.....
Macomb County.....				Ward 2.....	1,883	.....	.....
Armada township, including Armada village.....	1,718	1,933	1,770	Ward 3.....	1,788	.....	.....
Armada village.....	743	863	693	Ward 4.....	2,018	.....	.....
Bruce township, including part of Romeo village.....	1,837	1,789	2,021	Ward 5.....	1,330	.....	.....
Romeo village (part of).....	978	849	838	Ward 6.....	1,516	.....	.....
Total for Romeo village in Bruce and Washington townships.....	1,787	1,680	1,087	Ward 7.....	895	.....	.....
Chesterfield township, including part of New Baltimore village.....	1,881	2,093	2,121	Ward 8.....	945	.....	.....
New Baltimore village (part of).....	899	895	865	Ward 9.....	1,054	.....	.....
Total for New Baltimore village in Chesterfield township, Macomb County, and Ira township, St. Clair County.....	920	922	805	Ward 10.....	895	.....	.....
Clinton township, including part of Fraser village.....	1,856	1,825	1,819	Ishpeming township ⁷	587	360	904
Fraser village (part of).....	50	41	.....	Marquette city.....	11,603	10,058	9,093
Total for Fraser village in Clinton and Erin townships.....	890	852	.....	Ward 1.....	2,084	.....	.....
Erin township, including part of Fraser village.....	2,225	2,440	2,449	Ward 2.....	1,613	.....	.....
Fraser village (part of).....	170	311	.....	Ward 3.....	1,049	.....	.....
Harrison township.....	600	721	695	Ward 4.....	2,520	.....	.....
Lenox township, including New Haven village and part of Richmond village.....	2,251	2,351	2,385	Ward 5.....	2,037	.....	.....
New Haven village.....	478	439	606	Marquette township ⁷	155	200	288
Richmond village (part of).....	500	590	591	Michigan township ⁷	346	1,143	1,435
Total for Richmond village in Lenox and Richmond townships.....	1,277	1,133	1,074	Negaunee city.....	2,460	6,935	6,078
Macomb township.....	1,580	1,677	1,721	Ward 1.....	1,618	.....	.....
Mount Clemens city.....	7,707	6,576	4,748	Ward 2.....	1,421	.....	.....
Ward 1.....	2,435	.....	.....	Ward 3.....	1,037	.....	.....
Ward 2.....	2,866	.....	.....	Ward 4.....	2,225	.....	.....
Ward 3.....	2,809	.....	.....	Ward 5.....	2,159	.....	.....
Ray township.....	1,240	1,363	1,404	Negaunee township.....	157	94	333
Richmond township, including parts of Memphis and Richmond villages.....	2,171	2,275	2,486	Powell township ⁷	736	.....	.....
Memphis village (part of).....	537	360	371	Republic township.....	2,420	2,293	2,594
Total for Memphis village in Richmond township, Macomb County, and Kitley township, St. Clair County.....	557	586	588	Richmond township.....	911	892	1,132
Richmond village (part of).....	777	743	733	Sands township.....	150	192	.....
Shelby township, including part of Utica village.....	1,497	1,726	1,663	Skandia township.....	546	338	.....
Utica village (part of).....	342	360	324	Tilden township.....	1,150	1,448	908
Total for Utica village in Shelby and Sterling townships.....	499	502	553	Turin township.....	202	141	100
Sterling township, including part of Utica village.....	1,675	1,915	2,038	Wells township ⁹	306	.....	.....
Utica village (part of).....	154	202	179	West Branch township.....	304	282	.....
Warren township, including Warren village.....	2,445	2,587	2,423	Mason County.....			
Warren village.....	207	350	.....	Amber township ¹⁰	904	1,002	1,036
Washington township, including part of Romeo village.....	1,893	1,993	2,030	Branch township ¹²	409	614	319
Romeo village (part of).....	811	781	749	Custer township, ¹⁰ including Custer village.....	1,237	1,254	1,140

¹ County totals include population (658 in 1900; 586 in 1890) of Cedar and Sherwood townships, taken to form Clark township since 1900, and population (280 in 1890) of that part of Holmes township outside Mackinac Island city in 1890.
² Organized from Cedar and Sherwood townships in 1905.
³ Hudson township organized from part of Hendricks township in 1907.
⁴ Returned as coextensive with Holmes township in 1900.
⁵ Dikson township organized from part of Brown township in 1906.
⁶ Part of Filer township annexed to Manistee city in 1907.

⁷ Powell township organized from parts of Champion, Ishpeming, Marquette, and Michigan townships in 1904.
⁸ Wells township organized from part of Forsyth township in 1903.
⁹ County total includes population (171) of Lincoln township, annexed to Amber, Hamlin, and Pere Marquette townships between 1890 and 1900.
¹⁰ Included part of Scottville village in 1900.
¹¹ Exclusive of population of Scottville village.
¹² Logan township organized from part of Branch township in 1903.
¹³ Meade township organized from part of Freesoil township in 1909.

STATISTICS OF POPULATION.

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TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Mason County—Continued.				Missaukee County.....			
Scottville city ¹	891	554	147	Aetna township.....	631	384	169
Ward 1.....	454			Bloomfield township.....	390	284	159
Ward 2.....	437			Butterfield township.....	323	221	
Sheridan township.....	587	461	349	Caldwell township.....	687	708	406
Sherman township.....	1,259	1,026	550	Clam Union township.....	1,381	987	678
Summit township.....	668	486	508	Enterprise township ²	174		
Victory township.....	1,070	1,053	658	Forest township.....	389	285	193
				Lake township, including part of Lake City vil- lage.....	1,405	1,099	636
Mecosta County.....				Lake City village (part of) Total for Lake City village in Lake and Reeder townships.....	6	10	
Aetna township, including part of Morley vil- lage.....	902	946	1,122	McBain city ³	740	816	668
Morley village (part of).....	253	243	343	Ward 1.....	546	709	
Total for Morley village in Aetna and Deer- field townships.....	357	384	485	Ward 2.....	261		
Austin township.....	648	713	695	Ward 3.....	129		
Big Rapids city.....	4,519	4,686	5,303	Norwich township.....	168		
Ward 1.....	309			Pioneer township.....	695	789	441
Ward 2.....	675			Reeder township, including part of Lake City village.....	196	263	154
Ward 3.....	1,243			Lake City village (part of).....	1,335	1,429	832
Ward 4.....	774			Richland township ⁴	794	809	663
Ward 5.....	313			Riverside township ⁵	1,187	1,052	634
Big Rapids township.....	668	683	655	West Branch township ⁶	841	10 773	617
Chippewa township.....	808	870	969		426	315	230
Collax township.....	841	911	1,000	Monroe County.....			
Deerfield township, including part of Morley village.....	1,061	1,114	1,200	Ash township.....	1,840	1,913	1,997
Morley village (part of).....	84	91	142	Bedford township.....	2,213	2,179	1,837
Fork township, including Barryton village.....	1,216	1,435	570	Berlin township.....	1,687	1,820	1,906
Barryton village ²	411			Dundee township, including Dundee village.....	2,842	3,061	3,539
Grant township.....	564	636	493	Dundee village.....	1,070	1,118	1,166
Green township.....	1,209	1,404	1,311	Erie township.....	1,477	1,428	1,463
Hinton township.....	1,055	1,310	1,152	Exeter township, including Maybee village.....	1,550	1,696	1,716
Martiny township.....	720	745	633	Maybee village.....	810		
Mecosta township, including Stanwood village.....	887	926	851	Frenchtown township.....	1,770	1,938	2,023
Stanwood village ²	186			Ida township.....	1,653	1,809	1,410
Millbrook township.....	1,321	1,210	971	La Salle township.....	1,283	1,320	1,315
Morton township, including Mecosta village.....	905	966	967	London township.....	1,271	1,271	1,315
Mecosta village.....	352	416	472	Milan township, including part of Milan village.....	1,123	1,123	1,315
Sheridan township.....	783	804	430	Milan village (part of).....	1,943	2,111	2,079
Wheatland township.....	1,294	1,274	1,315	Total for Milan village in Milan township, Monroe County, and York township, Washtenaw County.....	618	455	847
				Monroe city.....	1,355	1,141	617
Menominee County.....				Ward 1.....	6,893	5,043	5,258
Cedarville township.....	1,157	813	536	Ward 2.....	1,147		
Harris township ⁴	1,561			Ward 3.....	2,671		
Holmes township.....	807	612	376	Ward 4.....	1,146		
Ingalston township.....	931	769	491	Monroe township.....	1,141	1,137	860
Mellen township.....	1,062	1,022		Raisinville township.....	1,693	1,811	1,830
Menominee city.....	10,507	12,818	10,630	Summerfield township, including Petersburg village.....	2,008	2,169	1,858
Ward 1.....	1,160			Petersburg village.....	490	468	408
Ward 2.....	1,422			Whiteford township.....	1,686	2,050	1,901
Ward 3.....	1,353			Montcalm County.....			
Ward 4.....	1,977			Belvidere township.....	1,297	1,201	1,027
Ward 5.....	1,391			Bloomer township, including Carson City village.....	2,040	2,254	2,152
Ward 6.....	1,861			Carson City village.....	808	908	821
Ward 7.....	1,353			Bushnell township, including part of Sheridan village.....	1,178	1,216	1,226
Menominee township.....	1,405	1,290	1,566	Sheridan village (part of) Total for Sheridan village in Bushnell, Ever- green, Fairplain, and Sidney townships.....	5	(11)	10
Meyer township.....	1,628	1,387	1,252	Cato township, including Lakeview village.....	456	437	
Nadeau township.....	1,918	2,003	1,825	Lakeview village.....	1,976	2,087	2,016
Spalding township ⁴	1,759	3,326	1,915	Cato township.....	954	955	1,084
Stephenson township, including Daggett and Stephenson villages.....	2,913	3,006	2,279	Crystal township.....	1,475	1,445	1,344
Daggett village ⁵	223			Day township, including McBride village.....	1,420	1,438	1,737
Stephenson village.....	587	395		McBride village.....	258	289	553
				Douglass township.....	1,132	1,104	968
Midland County.....				Eureka township.....	746	816	933
Coleman city ⁶	909	1,014	540	Evergreen township, including part of Sheridan village.....	1,398	1,367	1,308
Ward 1.....	352			Sheridan village (part of).....	290	300	308
Ward 2.....	255			Fairplain township, including part of Sheridan village.....	1,171	1,183	1,181
Ward 3.....	308			Sheridan village (part of).....	10	17	(12)
Edenville township.....	510	763	400	Ferris township.....	1,148	1,163	1,314
Geneva township.....	699	584	458	Greenville city.....	4,045	3,381	3,056
Greendale township.....	337	247	151	Ward 1.....	809		
Homer township.....	570	657	552	Ward 2.....	1,682		
Hope township.....	751	752	655	Ward 3.....	1,451		
Ingersoll township.....	1,218	1,804	1,130	Home township, including Edmore village.....	1,819	1,653	1,498
Jasper township.....	885	1,019	701	Edmore village.....	752	648	735
Jerome township.....	515	638	509	Maple Valley township.....	1,668	1,842	1,808
Larkin township.....	777	702	377	Montcalm township.....	1,131	1,310	1,510
Lee township.....	444	538	264	Pierson township, including Pierson village.....	1,129	1,250	1,410
Lincoln township.....	392	343	418	Pierson village.....	183	215	215
Midland city.....	2,527	2,363	2,277	Pine township.....	1,114	1,186	1,072
Ward 1.....	611			Reynolds township, including Howard City village.....	1,544	2,015	1,804
Ward 2.....	845			Howard City village.....	1,046	1,398	1,137
Ward 3.....	725						
Ward 4.....	348						
Midland township.....	1,023	1,057	1,020				
Mills township.....	297	241	444				
Mount Haley township.....	685	683	504				
Porter township.....	657	779	534				
Warren township ⁶	809	7 860	7 363				

¹ Returned with Amber and Custer townships in 1900; incorporated as a city in 1907.

² Incorporated in 1907.

³ County total includes population (12,310) of Breen and Norway townships and Iron Mountain city, taken to form part of Dickinson County, and population (789) of Breitung township, part taken to form part of Dickinson County and part added to Iron County, between 1890 and 1900.

⁴ Harris township, organized from part of Spalding township in 1902.

⁵ Incorporated in 1902.

⁶ Coleman village, returned with Warren township in 1900, incorporated as a city in 1905.

⁷ Exclusive of population of Coleman village.

⁸ Enterprise township organized from part of West Branch township in 1903.

⁹ McBain village, returned with Richland and Riverside townships in 1900, incorporated as a city in 1907.

¹⁰ Exclusive of population of McBain village.

¹¹ No population reported in 1900.

¹² Not returned separately in 1890.

TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Montcalm County—Continued.				Newaygo County—Continued.			
Richland township.....	1,200	1,136	1,140	Everett township.....	438	390	576
Sidney township, including part of Sheridan village.....	1,414	1,378	1,514	Garfield township, including part of Newaygo village.....	1,410	1,387	1,688
Sheridan village (part of).....	181	180	181	Newaygo village (part of).....	483	450	600
Stanton city.....	1,012	1,234	1,352	Goodwell township.....	405	350	339
Ward 1.....	803			Grant township.....	780	612	456
Ward 2.....	409			Home township.....	466	310	1,016
Winfield township.....	982	1,095	1,137	Lincoln township.....	454	411	695
	3,755	3,234	1,487	Monroe township.....	327	439	1,066
Montmorency County.....				Sheridan township, including part of Fremont village.....	2,360	1,861	1,548
Albert township.....	882	827	142	Fremont village (part of).....	902	610	417
Avery township ¹	182			Sherman township.....	780	734	625
Briley township.....	503	417	338	Troy township.....	217	224	643
Hillman township, ² including Hillman village.....	834	819	635	Wilcox township, including White Cloud village.....	1,093	1,000	1,307
Hillman village.....	411	253		White Cloud village.....	648	589	745
Montmorency township.....	500	445	177				
Rust township.....	470	371	203	Oakland County.....			
Vienna township.....	324	355			49,576	44,792	41,245
	40,577	37,086	40,013	Addison township, including Leonard village.....	1,043	1,110	1,139
Muskegon County.....				Leonard village.....	813	535	278
Blue Lake township.....	143	149	138	Avon township, including Rochester village.....	2,657	2,584	1,940
Casnovia township, including part of Casnovia village.....	1,086	1,940	1,734	Rochester village.....	1,510	1,536	960
Casnovia village (part of).....	183	177	169	Bloomfield township, including Birmingham village.....	2,833	2,290	2,044
[For total, see Tyrone township, Kent County.]				Birmingham village.....	1,007	1,170	899
Cedar Creek township.....	397	367	337	Brandon township, including Ortonville village.....	1,129	1,179	1,260
Dalton township.....	822	815	638	Ortonville village ³	877		
Egelston township.....	377	319	289	Commerce township.....	980	1,124	1,113
Fruitland township.....	783	844	580	Farmington township, including Farmington village.....	1,788	1,753	1,539
Fruitport township, including part of Fruitport village.....	958	927	1,446	Farmington village.....	564	550	320
Fruitport village (part of).....	314	311		Groveland township.....	772	828	917
Total for Fruitport village in Fruitport township, Muskegon County, and Spring Lake township, Ottawa County.....	550	511		Highland township.....	1,040	1,142	1,393
Holton township.....	915	846	900	Holly township, including Holly village.....	2,278	2,268	2,120
Laketon township.....	343	419	614	Holly village.....	1,537	1,419	1,896
Montague township, including Montague village.....	1,315	1,384	1,907	Independence township, including Clarkston village.....	1,144	1,191	1,297
Montague village.....	948	998	1,623	Clarkston village.....	345	360	387
Moorland township.....	711	868	738	Lyon township, including South Lyon village.....	1,427	1,569	1,660
Muskegon city.....	24,052	20,818	22,702	South Lyon village.....	615	657	707
Ward 1.....	2,487			Milford township, including Milford village.....	1,600	1,866	1,962
Ward 2.....	3,203			Milford village.....	875	1,108	1,153
Ward 3.....	2,667			Novi township.....	1,226	1,245	1,306
Ward 4.....	1,975			Oakland township.....	702	870	896
Ward 5.....	4,313			Orion township, including Orion village.....	1,393	1,507	1,207
Ward 6.....	3,996			Orion village.....	717	756	688
Ward 7.....	3,507			Oxford township, including Oxford village.....	1,934	1,990	2,080
Ward 8.....	2,014			Oxford village.....	1,191	1,178	1,188
Muskegon township ⁴	1,248	4,840	1,498	Pontiac city.....	14,532	9,769	6,200
Muskegon Heights city ⁴	1,690	1,012		Ward 1.....	1,568		
Ward 1.....	547			Ward 2.....	3,364		
Ward 2.....	709			Ward 3.....	2,971		
Ward 3.....	434			Ward 4.....	4,458		
North Muskegon city.....	582	513	1,590	Ward 5.....	1,087		
Ward 1.....	156			Pontiac township.....	953	1,016	947
Ward 2.....	159			Rose township.....	842	862	953
Ward 3.....	67			Royal Oak township, including Royal Oak village.....	2,801	2,012	1,844
Norton township ⁵	619	4,880	723	Royal Oak village.....	1,071	468	
Ravenna township.....	1,439	1,492	1,466	Southfield township.....	1,288	1,378	1,444
Sullivan township.....	418	447		Springfield township.....	821	906	1,004
Whitehall township, including Whitehall village.....	1,543	1,532	2,014	Troy township.....	1,527	1,527	1,470
Whitehall village.....	1,437	1,481	1,905	Waterford township.....	1,005	1,079	1,163
White River township.....	461	574	635	West Bloomfield township.....	1,113	999	1,229
				White Lake township.....	642	718	857
	19,220	17,673	20,476	Oceana County.....			
Newaygo County.....					18,379	16,644	15,693
Ashland township, including Grant village.....	1,570	1,523	1,489	Benona township.....	1,140	1,173	1,154
Grant village.....	428	214		Claybanks township.....	732	712	798
Barton township.....	611	743	773	Collax township.....	405	314	308
Beaver township.....	643	503	409	Crystal township.....	789	665	750
Big Prairie township.....	449	394	445	Elbridge township.....	1,487	1,414	1,180
Bridgeton township.....	516	585	584	Ferry township.....	991	972	855
Brooks township, including part of Newaygo village.....	1,038	1,009	1,016	Golden township.....	975	958	955
Newaygo village (part of).....	784	722	780	Grant township.....	924	840	718
Total for Newaygo village in Brooks and Garfield townships.....	1,207	1,172	1,390	Greenwood township.....	594	482	450
Croton township, including Croton village.....	491	509	706	Hart township, including Hart village.....	2,963	2,396	1,841
Croton village.....	55	59	125	Hart village.....	1,555	1,134	787
Dayton township, including part of Fremont village.....	2,415	1,930	1,958	Leavitt township, including Walkerville village.....	1,071	1,052	827
Fremont village (part of).....	1,047	721	680	Walkerville village ⁶	371		
Total for Fremont village in Dayton and Sheridan townships.....	2,009	1,331	1,097	Newfield township, including part of Hesperia village.....	935	874	810
Denver township, including part of Hesperia village.....	1,120	1,193	1,055	Hesperia village (part of).....	231	231	279
Hesperia village (part of).....	241	243	227	[For total, see Denver township, Newaygo County.]			
Total for Hesperia village in Denver township, Newaygo County, and Newfield township, Oceana County.....	482	474	506	Otto township.....	258	171	157
Ensley township.....	1,184	1,104	1,177	Pentwater township, including Pentwater village.....	1,237	1,138	1,605
				Pentwater village.....	1,180	1,061	1,510
				Shelby township, including Shelby village.....	2,811	2,568	2,470
				Shelby village.....	1,260	1,081	994
				Weare township.....	1,007	915	822

¹ County total includes population (92) of Wheatfield township, annexed to Vienna township between 1890 and 1900.
² Avery township organized from part of Hillman township in 1903.
³ Muskegon Heights village, returned with Muskegon and Norton townships in 1900, incorporated as a city in 1903.

⁴ Exclusive of population of Muskegon Heights village.
⁵ Incorporated in 1902.
⁶ Incorporated in 1903.

STATISTICS OF POPULATION.

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TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Ogemaw County	8,907	7,785	5,583	Otsego County—Continued.			
Churchill township.....	573	594	318	Dover township.....	598	354	158
Cumming township.....	556	673	197	Elmira township.....	604	653	561
Edwards township.....	651	591	217	Hayes township.....	296	254	165
Foster township.....	127	115	167	Livingston township, including part of Gaylord village.....	1,361	1,506	1,033
Goodard township.....	391	331	97	Gaylord village (part of).....	647	795	408
Hill township.....	408	358	47	Otsego Lake township.....	403	487	641
Horton township.....	338	287	224				
Klacking township.....	380	383	291	Ottawa County	45,301	39,667	35,358
Logan township.....	372	236	59	Allendale township.....	1,489	1,429	1,345
Richland township ¹	903	111	382	Blendon township.....	1,700	1,680	1,291
Rose City ²	542			Chester township, including part of Lisbon village.....	1,459	1,562	1,554
Ward 1.....	175			Lisbon village (part of).....	23	65	
Ward 2.....	167			[For total, see Sparta township, Kent County.]			
Ward 3.....	210			Crockery township.....	1,387	1,318	1,247
Rose township ³	960	1,000	211	Georgetown township.....	2,330	1,873	1,845
West Branch city ⁴	1,276	1,412	1,302	Grand Haven city.....	5,856	4,743	5,023
Ward 1.....	448			Ward 1.....	1,002		
Ward 2.....	456			Ward 2.....	888		
Ward 3.....	377			Ward 3.....	2,667		
West Branch township ⁴	1,324	6913	4474	Ward 4.....	1,399		
				Grand Haven township.....	843	823	857
Ontonagon County	8,650	6,197	3,756	Holland city.....	10,490	7,700	3,945
Bohemia township.....	207	268	92	Ward 1.....	2,606		
Carp Lake township.....	139	69	18	Ward 2.....	887		
Greenland township.....	1,826	1,390	272	Ward 3.....	1,883		
Haight township.....	210	289		Ward 4.....	2,312		
Interior township.....	479	274	559	Ward 5.....	2,662		
McMillan township ⁵	458	808	597	Holland township ¹⁰	3,558	3,268	3,086
Matchwood township.....	554	156		Jamestown township.....	1,994	2,015	2,078
Ontonagon township, including Ontonagon village.....	2,437	1,618	1,564	Olive township.....	2,080	2,073	1,968
Ontonagon village.....	1,964	1,867		Polk township, including Coopersville village.....	2,444	2,298	2,584
Rockland township.....	1,842	1,265	654	Coopersville village.....	814	680	790
Stannard township ⁶	498			Robinson township.....	899	729	510
				Spring Lake township, including Spring Lake village and part of Fruitport village.....	1,920	1,765	2,256
Osceola County	17,889	17,859	14,630	Fruitport village (part of).....	76	(12)	
Burdell township, including Tustin village.....	1,183	1,359	734	[For total, see Fruitport township, Muskegon County.]			
Tustin village.....	371	303		Spring Lake village.....	802	696	1,168
Cedar township.....	249	314	336	Tallmadge township.....	1,342	1,405	1,324
Ewart township, including part of Ewart village.....	1,077	1,194	1,215	Wright township.....	1,659	1,609	1,611
Ewart village (part of).....	411	426	432	Zeeland city ¹⁰	1,982	1,326	785
Total for Ewart village in Ewart and Osceola townships.....	1,588	1,560	1,589	Ward 1.....	1,544		
Hartwick township.....	652	540	417	Ward 2.....	438		
Hersey township, including Hersey village.....	1,064	1,157	908	Zeeland township ¹⁰	1,869	1,956	2,049
Hersey village.....	510	387	323				
Highland township.....	1,417	792	326	Presque Isle County	11,249	8,821	4,687
Le Roy township, including Le Roy village.....	1,033	1,312	1,087	Allis township ¹¹	546	445	223
Le Roy village.....	351	375	452	Beainger township.....	244	198	
Lincoln township.....	1,020	1,250	1,084	Balknap township.....	1,255	1,108	744
Marion township, including Marion village.....	1,562	1,253	1,042	Bismarck township.....	285	273	113
Marion village.....	767	741		Case township, ¹⁵ including Millersburg village.....	886	1,291	246
Middle Branch township.....	520	518	219	Millersburg village.....	519		
Ontonagon township.....	673	758	707	Krakow township.....	455	493	385
Osceola township, including part of Ewart village.....	1,705	1,697	1,550	Metz township.....	700	571	267
Ewart village (part of).....	975	956	837	Moltke township.....	506	511	465
Richmond township, including Reed City village.....	2,855	3,401	3,064	North Allis township ¹⁴	455		
Reed City village.....	1,690	2,051	1,776	Ocqueoc township ¹⁵	397		
Rose Lake township.....	704	659	627	Onaway city ¹⁷	2,702	1,204	
Sherman township.....	1,451	1,002	810	Ward 1.....	952		
Sylvan township.....	724	653	504	Ward 2.....	1,235		
				Ward 3.....	515		
Oscoda County	2,027	1,468	7904	Posen township, ¹⁸ including Posen village.....	1,296	1,681	1,259
Big Creek township.....	432	349	187	Posen village.....	263		
Clinton township ⁸	207			Presque Isle township.....	105	137	219
Comins township ⁹	745	681	272	Pulawski township ¹⁴	459		
Elmer township.....	396	319	122	Rogers township, including Rogers village.....	978	800	766
Mentor township.....	247	119	607	Rogers village.....	705	544	431
Otsego County	6,552	6,175	4,272	Rosecommon County	2,274	1,787	2,038
Bagley township, including part of Gaylord village.....	1,420	1,325	689	Backus township ²¹	85		
Gaylord village (part of).....	891	766	853	Denton township ²¹	76	84	75
Total for Gaylord village in Bagley and Livingston townships.....	1,538	1,561	661	Gerrish township.....	337	129	66
Charlton township.....	462	176	149	Higgins township, ²² including Rosecommon village.....	503	584	586
Chester township.....	323	325	177	Rosecommon village.....	425	455	511
Corwith township, including Vanderbilt village.....	1,085	1,090	699	Markey township.....	197	76	28
Vanderbilt village.....	523			Nester township.....	239	269	159
				Richfield township ²²	401	147	76
				Rosecommon township.....	436	396	176

¹ County totals include population (761 in 1900; 66 in 1890) of Mills township, annexed to Richland township since 1900; population (284 in 1890) of Beaver Lake township, annexed to Foster township; population (975 in 1890) of Damon township, annexed to Foster and Rose townships; and population (272 in 1890) of Ogemaw township, annexed to West Branch township, between 1890 and 1900.

² Mills township annexed in 1903.
³ Rose City incorporated from part of Rose township in 1905.
⁴ West Branch village, returned with West Branch township in 1900, incorporated as a city in 1905.

⁵ Exclusive of population of West Branch village.
⁶ Stannard township organized from part of McMillan township in 1905.
⁷ County total includes population (387) of Atherton, Harmon, and Mount Pindus townships, annexed to Big Creek township; population (131) of Greenwood township, annexed to Elmer township; and population (218) of Long Lake township, annexed to Mentor township, between 1890 and 1900.

⁸ Clinton township organized from part of Comins township in 1907.
⁹ Incorporated in 1901.

¹⁰ Zeeland village, returned with Holland and Zeeland townships in 1900, incorporated as a city in 1907.

¹¹ Exclusive of population of Zeeland village.

¹² No population reported in 1900.

¹³ Included Onaway village in 1900. Part taken to form North Allis township in 1903.

¹⁴ Exclusive of population of Onaway village.

¹⁵ Ocqueoc township organized from part of Case township in 1901.

¹⁶ Organized from part of Allis township in 1903.

¹⁷ Returned with Allis township in 1900; incorporated as a city in 1903.

¹⁸ Pulawski township organized from part of Posen township in 1903.

¹⁹ Incorporated in 1907.

²⁰ County totals include population (102 in 1900; 867 in 1890) of St. Helen township, annexed to Higgins and Richfield townships since 1900.

²¹ Backus township organized from part of Denton township in 1910.

²² Part of St. Helen township annexed in 1901.

TABLE I.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Saginaw County	89,390	81,323	82,278	St. Clair County—Continued.			
Albee township.....	1,095	913	613	Port Huron city—Continued.			
Birch Run township.....	1,422	1,430	1,553	Ward 4.....	2,780		
Blumfield township.....	1,481	1,458	1,420	Ward 5.....	2,425		
Brady township, including Oakley village.....	1,453	1,504	1,469	Ward 6.....	2,537		
Oakley village.....	237	231	299	Ward 7.....	1,531		
Brant township.....	1,162	1,286	1,190	Ward 8.....	2,950		
Bridgeport township.....	1,704	1,873	1,813	Ward 9.....	1,478		
Buena Vista township.....	3,737	3,585	2,998	Ward 10.....	2,980		
Carrollton township.....	2,123	1,952	2,075	Ward 11.....	1,295		
Chaplin township.....	757	855	681	Port Huron township ¹	1,934	1,666	1,407
Chesaning township including Chesaning village.....	2,529	2,540	2,361	Riley township, including part of Memphis village.....	1,324	1,492	1,605
Chesaning village.....	1,363	1,244	1,056	Memphis village (part of).....	280	238	217
Frankenmuth township, including Frankenmuth village.....	2,014	2,063	1,815	[For total, see Richmond township, Macomb County.]			
Frankenmuth village ¹	693			St. Clair city.....	2,633	2,543	2,353
Fremont township.....	1,149	1,141	812	Ward 1.....	281		
James township.....	607	610	655	Ward 2.....	285		
Jonesfield township, including Merrill village.....	1,337	1,316	1,105	Ward 3.....	287		
Merrill village.....	505	459	412	St. Clair township.....	1,356	1,654	1,807
Kochville township.....	840	872	863	Wales township.....	1,343	1,432	1,635
Lakefield township.....	788	710	543	Yale city.....	1,223	1,125	937
Maple Grove township.....	1,382	1,610	1,708	Ward 1.....	329		
Marion township.....	641	810	582	Ward 2.....	376		
Richland township.....	1,676	1,630	1,221	Ward 3.....	618		
Saginaw city ²	50,510	42,345	46,322				
Ward 1.....	3,280			St. Joseph County	25,499	23,889	25,256
Ward 2.....	2,169			Burr Oak township, including Burr Oak village.....	1,559	1,698	1,738
Ward 3.....	2,692			Burr Oak village.....	752	744	687
Ward 4.....	2,880			Colon township, including Colon village.....	1,712	1,842	1,515
Ward 5.....	2,407			Colon village ³	363		
Ward 6.....	2,549			Constantine township, including Constantine village.....	1,910	1,919	2,141
Ward 7.....	2,062			Constantine village.....	1,244	1,226	1,346
Ward 8.....	2,358			Fabius township.....	783	838	1,035
Ward 9.....	2,766			Fawn River township.....	521	526	602
Ward 10.....	2,643			Florence township.....	651	665	791
Ward 11.....	2,321			Flowerfield township.....	954	1,043	1,184
Ward 12.....	2,358			Leonidas township.....	1,154	1,269	1,462
Ward 13.....	2,194			Lockport township.....	680	731	741
Ward 14.....	2,734			Mendon township, including Mendon village.....	1,600	1,776	1,893
Ward 15.....	1,884			Mendon village.....	768	777	808
Ward 16.....	1,958			Mottville township.....	494	493	545
Ward 17.....	1,657			Nottawa township, including Centreville village.....	1,511	1,577	1,910
Ward 18.....	1,908			Centreville village.....	615	645	776
Ward 19.....	3,845			Park township.....	824	891	1,096
Ward 20.....	3,610			Sherman township.....	691	765	1,048
Saginaw township ²	1,454	1,244	1,340	Sturgis city.....	3,635	2,465	2,489
St. Charles township, including St. Charles village.....	3,084	2,925	1,807	Ward 1.....	1,420		
St. Charles village.....	1,461	1,317		Ward 2.....	937		
Spaulding township.....	532	535	516	Ward 3.....	1,228		
Swan Creek township.....	573	588	493	Sturgis township.....	498	488	500
Taymouth township.....	1,616	1,723	1,579	Three Rivers city.....	5,072	3,550	3,131
Thomas township ⁴	1,162	1,135	1,200	Ward 1.....	1,600		
Tittabawassee township.....	1,736	1,576	1,681	Ward 2.....	1,944		
Zilwaukee township.....	741	893	1,963	Ward 3.....	827		
				Ward 4.....	601		
St. Clair County	52,341	55,228	52,105	White Pigeon township, including White Pigeon village.....	1,250	1,343	1,546
Berlin township.....	1,214	1,267	1,237	White Pigeon village.....	667	705	891
Brockway township ⁵	953	1,200	1,300				
Burtchville township.....	455	532	572	Sanilac County	33,930	35,055	32,589
Casco township.....	1,413	1,722	1,811	Argyle township.....	1,203	1,107	767
China township.....	1,189	1,318	1,380	Austin township.....	966	1,010	1,015
Clay township, including Algonac village.....	2,182	2,462	1,681	Bridgchampton township, including part of Carsonville village.....	1,207	1,327	1,479
Algonac village.....	1,204	1,216		Carsonville village (part of).....	80	100	(⁶)
Clyde township.....	791	948	1,014	Total for Carsonville village in Bridgchampton and Washington townships.....	401	400	
Columbus township.....	964	1,054	1,158	Brown City ¹⁰	690	603	437
Cottrellville township.....	1,070	1,130	1,054	Buel township.....	1,112	985	853
East China township.....	327	257	294	Croswell city ¹¹	1,380	606	504
Emmet township, including Emmet village.....	1,005	1,155	1,251	Ward 1.....	470		
Emmet village.....	292	265		Ward 2.....	397		
Fort Gratiot township.....	597	774	774	Ward 3.....	615		
Grant township.....	810	923	1,142	Custer township ¹²	1,052	1,051	1,620
Greenwood township.....	987	1,236	1,457	Delaware township, including Forestville village.....	1,516	2,042	2,178
Ira township, including part of New Baltimore village.....	1,040	1,304	1,495	Forestville village.....	234	232	
New Baltimore village (part of).....	21	27		Elk township, including Peck village.....	1,320	1,539	1,427
[For total, see Chesterfield township, Macomb County.]				Peck village ¹⁴	274		
Kenocree township.....	1,171	1,264	1,202	Elmer township.....	833	1,002	816
Kimball township.....	1,151	1,437	1,356	Evergreen township.....	1,094	1,063	835
Lynn township.....	818	859	857	Flynn township.....	955	1,049	889
Marine City.....	3,770	3,229	3,268	Forester township.....	687	909	933
Ward 1.....	1,178			Fremont township.....	1,043	1,062	1,095
Ward 2.....	1,003			Greenleaf township.....	842	893	806
Ward 3.....	1,589			Lanotte township.....	1,043	1,036	649
Mussey township, including Capac village.....	1,743	1,617	1,683	Lexington township, ¹⁵ including Lexington village.....	1,641	2,047	2,098
Capac village.....	761	547		Lexington village.....	619	619	719
Port Huron city ⁷	18,863	19,153	13,543	Maple Valley township ¹⁶	1,019	1,143	1,155
Ward 1.....	1,268						
Ward 2.....	1,211						
Ward 3.....	1,384						

¹ Incorporated in 1905.

² Part of Saginaw township annexed to Saginaw city in 1907.

³ Returned as Thomastown in 1900.

⁴ County total includes population (2,832) of Fort Gratiot city, annexed to Port Huron city between 1890 and 1900.

⁵ Yale village, returned with Brockway township in 1900, incorporated as a city in 1905.

⁶ Exclusive of population of Yale village.

⁷ Parts of Port Huron city annexed to Port Huron township in 1903 and 1905.

⁸ Incorporated in 1904.

⁹ Not returned separately in 1890.

¹⁰ Brown City village, returned with Maple Valley township in 1900, incorporated as a city in 1907.

¹¹ Croswell village, returned with Lexington township in 1900, incorporated as a city in 1905.

¹² Included part of Sanilac Center village (now Sandusky city) in 1900.

¹³ Exclusive of population of Sanilac Center village (now Sandusky city).

¹⁴ Incorporated in 1903.

¹⁵ Exclusive of population of Croswell village.

¹⁶ Exclusive of population of Brown City village.

STATISTICS OF POPULATION.

TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Sanilac County—Continued.				Tuscola County—Continued.			
Marion township, including Deckerville village. <i>Deckerville village.</i>	1,755 688	1,838 898	1,837	Fairgrove township, including Fairgrove village. <i>Fairgrove village</i> ¹⁴	2,034 487	1,900	1,968
Marlette township, including Marlette village. <i>Marlette village.</i>	2,438 1,088	2,569 998	2,370	Fremont township, including Mayville village. <i>Mayville village.</i>	1,718 687	2,066 825	1,921 788
Minden township, including Minden City village. <i>Minden City village.</i>	1,990 532	1,068 408	1,114 594	Gifford township.	1,301	1,199	1,069
Moore township.	1,083	1,019	883	Indian Fields township, including Caro village. <i>Caro village.</i>	2,993 872	2,878 2,008	2,469 1,701
Sandusky city ¹ .	983	578	403	Junata township.	1,042	1,150	1,157
Sanilac township, including Port Sanilac village. <i>Port Sanilac village.</i>	1,385 216	1,582 514	1,889	Kingston township, including part of Kingston village.	1,285	1,385	1,110
Speaker township, including Melvin village. <i>Melvin village</i> ² .	1,229 242	1,331	1,430	<i>Kingston village (part of).</i>	288	213	
Washington township, including Applegate village and part of Carsonville village. <i>Applegate village</i> ³ .	1,508 155	1,566	1,447	<i>Total for Kingston village in Kingston and Koylton townships.</i>	302	286	
<i>Carsonville village (part of).</i>	821	300	178	Koylton township, including part of Kingston village. <i>Kingston village (part of).</i>	935 74	1,047 73	1,069
Watertown township.	985	1,106	922	Millington township, including Millington village. <i>Millington village.</i>	1,575 683	1,772 638	1,616 454
Wheatland township.	915	742	454	Novesta township.	1,021	1,073	741
Worth township.	1,036	1,182	1,284	Tuscola township.	1,178	1,328	1,324
Schoolcraft County.				Vassar township, including Vassar village. <i>Vassar village.</i>	2,560 1,659	2,884 1,888	2,500 1,888
Cusino township ⁷ .	293			Watertown township.	1,179	1,217	1,308
Doyle township ⁸ .	524	760		Wells township.	881	1,035	779
Germfask township ⁹ .	504	319	148	Wisner township.	822	709	472
Hiawatha township ⁹ .	568	10 284	10 149	Van Buren County.			
Inwood township.	374	673		Almena township.	868	1,016	983
Manistique city ¹¹ .	4,722	4,126	2,940	Antwerp township, including Lawton village. <i>Lawton village.</i>	2,320 1,042	2,164 892	1,922 788
<i>Ward 1.</i>	777			Arlington township, including part of Bangor village. <i>Bangor village (part of).</i>	1,500 141	1,440 60	1,549
<i>Ward 2.</i>	1,103			<i>Total for Bangor village in Arlington and Bangor townships.</i>	1,168	1,021	904
<i>Ward 3.</i>	1,654			Bangor township, including part of Bangor village. <i>Bangor village (part of).</i>	2,424 1,017	2,482 961	2,384 904
<i>Ward 4.</i>	1,888			Bloomington township, including Bloomingdale village and part of Gobleville village. <i>Bloomington village.</i>	2,011	1,753	1,952
Manistique township ¹² .	499	10 302	10 454	<i>Gobleville village (part of).</i>	501	379	380
Mueller township ¹³ .	318			<i>Total for Gobleville village in Bloomingdale and Pine Grove townships.</i>	300	245	
Seney township.	126	254	774	Columbia township, including Breedsville village. <i>Breedsville village.</i>	1,478 219	1,591 236	1,551 218
Thompson township ¹³ .	753	664	931	Covert township.	1,522	1,728	1,381
Shawasssee County.				Decatur township, including Decatur village. <i>Decatur village.</i>	2,106 1,288	2,098 1,366	1,789 1,109
Antrim township.	810	904	992	Geneva township.	1,426	1,559	1,428
Bennington township.	1,031	1,287	1,298	Hamilton township.	952	885	966
Burns township, including Byron village. <i>Byron village.</i>	1,332 487	1,463 438	1,467 415	Hartford township, including Hartford village. <i>Hartford village.</i>	2,597 1,268	2,403 1,077	2,430 1,044
Caledonia township.	1,404	1,383	1,387	Keeler township.	1,037	995	1,114
Corunna city.	1,384	1,510	1,382	Lawrence township, including Lawrence village. <i>Lawrence village.</i>	1,764 693	1,683 693	1,779 693
<i>Ward 1.</i>	674			Paw Paw township, including Paw Paw village. <i>Paw Paw village.</i>	2,779 1,643	2,457 1,466	2,450 1,391
<i>Ward 2.</i>	580			Pine Grove township, including part of Gobleville village. <i>Gobleville village (part of).</i>	1,522 237	1,524 260	1,784
<i>Ward 3.</i>	850			Porter township.	994	1,028	1,061
Fairfield township.	885	985	977	South Haven city ¹⁵ .	3,577 1,184	4,009	1,924
Hazelton township.	1,595	1,747	1,801	<i>Ward 1.</i>	1,184		
Middlebury township.	794	848	905	<i>Ward 2.</i>	1,678		
New Haven township.	1,411	1,599	1,752	<i>Ward 3.</i>	816		
Owosso city.	9,639	8,696	6,564	South Haven township ¹⁵ .	1,218	15 1,359	15 1,000
<i>Ward 1.</i>	1,722			Waverly township.	1,095	1,130	1,114
<i>Ward 2.</i>	2,045			Washtenaw County.			
<i>Ward 3.</i>	1,747			Ann Arbor city.	14,817	14,509	9,431
<i>Ward 4.</i>	2,155			<i>Ward 1.</i>	2,108		
<i>Ward 5.</i>	1,984			<i>Ward 2.</i>	2,588		
Owosso township.	1,230	1,175	1,191	<i>Ward 3.</i>	2,850		
Perry township, including Morrice and Perry villages. <i>Morrice village.</i>	1,977 470	1,967 476	1,900	<i>Ward 4.</i>	2,598		
<i>Perry village.</i>	780	641		<i>Ward 5.</i>	747		
Rush township.	1,131	1,238	1,362	<i>Ward 6.</i>	2,001		
Sciotia township, including Laingsburg village. <i>Laingsburg village.</i>	1,384 703	1,430 690	1,448 664	<i>Ward 7.</i>	2,785		
Shawasssee township, including Bancroft village. <i>Bancroft village.</i>	1,517 643	1,610 588	1,892 648	Ann Arbor township.	989	1,036	1,383
Venice township.	1,201	1,341	1,414	Augusta township.	1,485	1,739	1,769
Vernon township, including Durand and Vernon villages. <i>Durand village.</i>	3,772 2,815	3,878 2,154	2,291 855	Bridgewater township.	961	1,011	1,084
<i>Vernon village.</i>	455	536	585	Dexter township.	543	696	702
Woodhull township.	749	805	869	Freedom township.	924	1,013	1,134
Tuscola County.				Lima township, including part of Chelsea village. <i>Chelsea village (part of).</i>	875 88	961 72	991 26
Akron township.	2,274	2,060	1,693	<i>Total for Chelsea village in Lima and Sylvania townships.</i>	1,764	1,635	1,566
Almer township.	1,256	1,299	1,315	Ann Arbor city.			
Arbela township.	1,053	1,228	1,258	<i>Ward 1.</i>	2,108		
Columbia township, including Unionville village. <i>Unionville village.</i>	1,973 458	1,772 427	1,527 414	<i>Ward 2.</i>	2,588		
Dayton township.	1,201	1,309	1,279	<i>Ward 3.</i>	2,850		
Denmark township, including Reese village. <i>Reese village.</i>	2,091 465	1,972 416	1,820 416	<i>Ward 4.</i>	2,598		
Elkland township, including Cass City village. <i>Cass City village.</i>	2,042 1,128	2,133 1,113	1,869 813	<i>Ward 5.</i>	747		
Ellington township.	879	867	822	<i>Ward 6.</i>	2,001		
Elmwood township, including Gageton village. <i>Gageton village.</i>	1,669 358	1,598 329	1,422 237	<i>Ward 7.</i>	2,785		

¹ Name changed from Sanilac Center in 1905. Returned with Custer and Watertown townships in 1900; incorporated as a city in 1905.

² Incorporated in 1907.

³ Incorporated in 1903.

⁴ Included part of Sanilac Center village (now Sandusky city) in 1900.

⁵ Exclusive of population of Sanilac Center village (now Sandusky city).

⁶ County totals include population (517 in 1900; 422 in 1890) of Harrison township, annexed to Hiawatha and Thompson townships since 1900.

⁷ Organized from part of Hiawatha township in 1907.

⁸ Mueller township organized from parts of Doyle and Germfask townships in 1905.

⁹ Included part of Manistique village in 1900. Part taken to form Cusino township in 1907; part of Harrison township annexed in 1907.

¹⁰ Exclusive of population of Manistique village.

¹¹ Returned with Hiawatha and Manistique townships in 1900; incorporated as a city in 1901.

¹² Included part of Manistique village in 1900.

¹³ Part of Harrison township annexed in 1907.

¹⁴ Incorporated in 1901.

¹⁵ South Haven village, returned with South Haven township in 1900, incorporated as a city in 1900.

¹⁶ Exclusive of population of South Haven village.

TABLE 1.—POPULATION OF MINOR CIVIL DIVISIONS: 1910, 1900, AND 1890—Continued.

[For changes in boundaries, etc., between 1900 and 1910, see footnotes; for those between 1890 and 1900, see Reports of the Twelfth Census: 1900, Vol. I, Table 5.]

MINOR CIVIL DIVISION.	1910	1900	1890	MINOR CIVIL DIVISION.	1910	1900	1890
Washtenaw County—Continued.				Wayne County—Continued.			
Lodi township, including part of Saline village.	1,053	1,121	1,264	Grosse Pointe township, ⁷ including Grosse Pointe, Grosse Pointe Farms, and Grosse Pointe Park villages, and part of St. Clair Heights village.	3,579	2,933	3,145
Saline village ¹ (part of).	89		151	Grosse Pointe village.	850	545	898
Total for Saline village ¹ in Lodi, Pittsfield, Saline, and York townships.	816	534	708	Grosse Pointe Farms village.	862	817	
Lyndon township.	528	665	617	Grosse Pointe Park village ⁸ .	890		
Manchester township, including Manchester village.	1,848	2,146	2,178	St. Clair Heights village (part of).	899		
Manchester village.	1,047	1,209	1,191	Hamtramck township, ⁷ including Hamtramck village and part of Highland Park village.	7,122	3,078	4,025
Northfield township.	1,156	1,266	1,210	Hamtramck village ⁹ .	5,559		
Pittsfield township, including part of Saline village.	970	1,050	1,158	Highland Park village (part of).	1,486	182	
Saline village ¹ (part of).	86			Huron township.	1,090	1,978	1,960
Salem township.	1,034	1,158	1,182	Livonia township.	1,355	1,460	1,460
Saline township, including part of Saline village.	1,617	1,668	1,659	Moungaton township, including Trenton village.	3,397	2,387	1,855
Saline village (part of).	844	534	662	Trenton village.	1,224	1,167	789
Scio township, including Dexter village.	1,042	1,893	1,946	Nankin township, including Wayne village.	3,966	3,812	3,288
Dexter village.	789	900	879	Wayne village.	1,203	1,561	1,280
Sharon township.	897	984	1,014	Northville township, including Northville village.	2,274	2,371	
Superior township.	917	1,039	1,096	Northville village.	1,665	1,755	1,873
Sylvan township including part of Chelsea village.	2,409	2,496	2,258	Plymouth township, including Plymouth village.	2,248	2,098	3,950
Chelsea village (part of).	1,678	1,563	1,530	Plymouth village.	1,671	1,474	1,172
Webster township.	734	747	863	Redford township, including Redford village.	2,176	1,990	1,806
York township, including parts of Milan and Saline villages.	2,003	1,952	1,906	Redford village ¹⁰ .	523		
Milan village (part of).	887	706	870	Romulus township.	1,538	1,816	1,748
[For total, see Milan township, Monroe County.]				Springwells township ¹⁰ .	1,835	13,034	7,780
Saline village ¹ (part of).	87		13	Sumpter township.	1,228	1,495	1,523
Ypsilanti city.	6,230	7,378	6,129	Taylor township.	1,238	1,296	1,216
Ward 1.	1,565			Van Buren township, including Belleville village.	1,700	1,789	1,712
Ward 2.	1,803			Belleville village ¹¹ .	480		
Ward 3.	1,691			Wyandotte city ¹² .	8,287	5,183	3,817
Ward 4.	686			Ward 1.	1,768		
Ward 5.	1,385			Ward 2.	2,662		
Ypsilanti township.	1,082	1,233	1,236	Ward 3.	1,787		
				Ward 4.	2,190		
Wayne County.	531,691	348,793	257,114	Wexford County.	20,769	16,845	11,278
Brownstown township.	2,045	2,031	2,321	Antioch township, including part of Sherman village.	640	657	470
Canton township.	1,113	1,218	1,184	Sherman village (part of).	110	148	125
Dearborn township, including Dearborn village.	2,761	2,752	2,346	Total for Sherman village in Antioch, Hanover, Springville, and Wexford townships.	280	427	
Dearborn village.	911	844		Boon township, including part of Harrietta village.	1,153	955	764
Detroit city ² .	465,766	285,704	205,876	Harrietta village (part of).	289	357	
Ward 1.	25,016			Total for Harrietta village in Boon and Stagle townships.	588	419	
Ward 2.	17,109			Cadillac city.	8,375	5,907	4,461
Ward 3.	25,530			Ward 1.	2,533		
Ward 4.	22,080			Ward 2.	2,448		
Ward 5.	23,632			Ward 3.	2,005		
Ward 6.	21,047			Ward 4.	1,591		
Ward 7.	21,833			Cedar Creek township, including Manton village.	2,129	1,937	1,603
Ward 8.	22,043			Manton village.	1,069	895	661
Ward 9.	23,793			Cherry Grove township.	481	417	216
Ward 10.	26,153			Clam Lake township.	954	1,009	881
Ward 11.	25,045			Colfax township.	754	678	463
Ward 12.	24,693			Greenwood township.	432	375	197
Ward 13.	26,074			Hanover township, including Buckley village and part of Sherman village.	812	477	209
Ward 14.	21,608			Buckley village ¹¹ .	494		
Ward 15.	18,605			Sherman village (part of).	45	168	96
Ward 16.	28,542			Harring township.	418	322	319
Ward 17.	36,022			Henderson township.	253	208	138
Ward 18.	26,132			Liberty township.	370	423	274
Ecorse township, ³ including Ecorse, Ford City, Oakwood, and River Rouge villages.	9,398	6,675	3,567	Selma township.	823	446	242
Ecorse village ⁴ .	1,063			Slagle township, including part of Harrietta village.	486	460	
Ford City village ⁴ .	1,659			Harrietta village (part of).	67	62	
Oakwood village ⁵ .	751			South Branch township.	380	310	176
River Rouge village.	4,165	1,748		Springville township, including Mesick village and part of Sherman village.	1,390	1,244	306
Gratiot township, including part of St. Clair Heights village.	1,900	1,333		Mesick village ⁹ .	510		
St. Clair Heights village (part of).	555			Sherman village (part of).	81	68	(15)
Total for St. Clair Heights village ⁴ in Gratiot and Grosse Pointe townships.	1,252			Wexford township, including part of Sherman village.	919	930	559
Greenfield township, ⁶ including part of Highland Park village.	4,995	2,360	2,465	Sherman village (part of).	24	49	38
Highland Park village (part of).	2,654	245					
Total for Highland Park village in Greenfield and Hamtramck townships.	4,120	427					

¹ Returned in 1900 as in Saline township only.² Parts of Greenfield township annexed in 1905 and 1907, part of Springwells township (including Delray village) annexed in 1906, and parts of Grosse Pointe and Hamtramck townships annexed in 1907.³ Part of Ecorse township (including Glenwood village) annexed to Wyandotte city in 1906.⁴ Incorporated in 1903.⁵ Incorporated in 1906.⁶ Parts annexed to Detroit city in 1905 and 1907.⁷ Parts annexed to Detroit city in 1907.⁸ Incorporated in 1907.⁹ Incorporated in 1901.¹⁰ Part annexed to Detroit city in 1906.¹¹ Incorporated in 1905.¹² Not returned separately in 1890.

STATISTICS OF POPULATION.

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TABLE 2.—POPULATION OF INCORPORATED PLACES: 1910, 1900, AND 1890.

CITY OR VILLAGE.	County.	1910	1900	1890	CITY OR VILLAGE.	County.	1910	1900	1890
Addison village.	Lenawee.	474	470	.....	Copemish village.	Manistee.	490	429	.....
Adrian city.	Lenawee.	10,763	9,654	8,756	Corunna city.	Shiawassee.	1,384	1,510	1,382
Alhbeck village.	Keeweenaw.	766	.....	.....	Crosswell city.	Sanilac.	1,380	606	504
Alanson village.	Emmet.	473	.....	.....	Croton village.	Newaygo.	55	59	125
Albion city.	Calhoun.	5,833	4,519	3,763	Crystal Falls city.	Iron.	3,775	3,231	.....
Algonac village.	St. Clair.	1,204	1,216	.....	Custer village.	Mason.	277	269	.....
Allegan city.	Allegan.	3,419	2,667	2,669	Daggett village.	Monominee.	228	.....	.....
Alma city.	Gratiot.	2,757	2,047	1,655	Dansville village.	Ingham.	349	374	366
Almont village.	Lapeer.	675	718	717	Davison village.	Genesee.	673	751	456
Alpena city.	Alpena.	12,706	11,802	11,283	Dearborn village.	Wayne.	911	844	.....
Ann Arbor city.	Washtenaw.	14,817	14,509	9,431	Decatur village.	Van Buren.	1,286	1,356	1,109
Applegate village.	Sanilac.	155	.....	.....	Decker village.	Sanilac.	628	398	.....
Arnada village.	Macomb.	748	863	638	Deerfield village.	Lenawee.	443	440	421
Ashley village.	Gratiot.	513	617	711	Detour village.	Chippewa.	721	880	.....
Athens village.	Calhoun.	631	583	.....	Detroit city.	Wayne.	465,766	285,704	205,876
Au Gres city.	Arenac.	252	.....	.....	Dexter village.	Washtenaw.	726	900	879
Au Sable city.	Iosco.	648	1,116	4,328	Dimondale village.	Eaton.	341	.....	.....
Augusta village.	Kalamazoo.	494	541	498	Douglas village.	Allegan.	485	444	404
Bad Axe city.	Huron.	1,559	1,241	842	Dowagiac city.	Cass.	5,088	4,151	2,806
Baldwin village.	Lake.	502	343	429	Dryden village.	Lapeer.	371	328	322
Bancroft village.	Shiawassee.	543	528	642	Dundee village.	Monroe.	1,070	1,118	1,166
Bangor village.	Van Buren.	1,158	1,021	904	Durand village.	Shiawassee.	2,315	2,184	255
Baraga village.	Baraga.	1,071	1,185	.....	Eagle village.	Clinton.	133	142	141
Baroda village.	Berrien.	248	.....	.....	East Grand Rapids village.	Kent.	800	466	.....
Barryton village.	Mecosta.	411	.....	.....	East Jordan village.	Charlevoix.	2,516	1,205	781
Battle Creek city.	Calhoun.	25,267	18,563	13,197	East Lansing city.	Ingham.	802	.....	.....
Bay City.	Bay.	45,106	27,628	27,839	East Tawas city.	Iosco.	1,452	1,736	2,200
Bear Lake village.	Manistee.	504	448	.....	Eaton Rapids city.	Eaton.	2,094	2,103	1,970
Beaverton city.	Gladwin.	418	.....	.....	Eau Claire village.	Berrien.	807	281	.....
Belding city.	Ionia.	4,119	3,282	.....	Ecorse village.	Wayne.	1,063	.....	.....
Bellaire village.	Antrim.	1,060	1,157	.....	Edmore village.	Montcalm.	752	642	735
Belleville village.	Wayne.	486	.....	.....	Elk Rapids village.	Antrim.	1,873	.....	.....
Bellevue village.	Eaton.	930	1,074	914	Elkton village.	Huron.	553	471	.....
Benton Harbor city.	Berrien.	9,185	6,562	3,662	Elsie village.	Clinton.	592	576	396
Benzonia village.	Benzie.	563	484	.....	Emmet village.	St. Clair.	292	265	.....
Berrien Springs village.	Berrien.	880	808	745	Empire village.	Leelanau.	578	609	.....
Bessemer city.	Gogebie.	4,583	3,911	2,506	Escanaba city.	Delta.	13,194	9,549	6,808
Big Rapids city.	Mecosta.	4,519	4,686	5,303	Essexville village.	Bay.	1,477	1,639	1,545
Birmingham village.	Oakland.	1,607	1,170	899	Evart village.	Osceola.	1,386	1,360	1,269
Blissfield village.	Lenawee.	1,474	1,268	1,132	Fairgrove village.	Tuscola.	437	.....	.....
Bloomington village.	Van Buren.	501	379	380	Farmington village.	Oakland.	564	530	320
Boardman village.	Kalkaska.	524	298	.....	Farwell village.	Clare.	522	535	584
Boyer city.	Charlevoix.	5,218	912	450	Fennville village.	Allegan.	533	454	360
Bozeman village.	Charlevoix.	325	431	.....	Fenton village.	Genesee.	2,331	2,408	2,182
Breckenridge village.	Gratiot.	595	.....	.....	Fife Lake village.	Grand Traverse.	340	456	394
Breedsville village.	Van Buren.	219	236	212	Flint city.	Genesee.	38,550	13,103	9,803
Brighton village.	Livingston.	767	781	741	Flushing village.	Genesee.	938	900	965
Britton village.	Lenawee.	370	345	.....	Ford City village.	Wayne.	1,689	.....	.....
Bronson village.	Branch.	1,020	1,176	875	Forestville village.	Sanilac.	234	282	.....
Brooklyn village.	Jackson.	602	494	596	Fowler village.	Clinton.	476	426	346
Brown City.	Sanilac.	690	603	437	Fowlerville village.	Livingston.	905	946	.....
Buchanan village.	Berrien.	1,831	1,708	1,994	Frankenmuth village.	Saginaw.	693	.....	.....
Buckley village.	Wexford.	464	.....	.....	Frankfort village.	Benzie.	1,555	1,465	1,175
Burlington village.	Calhoun.	237	334	304	Fraser village.	Macomb.	220	252	.....
Burr Oak village.	St. Joseph.	752	744	687	Freeport village.	Barry.	460	.....	.....
Byron village.	Shiawassee.	427	432	413	Fremont village.	Newaygo.	2,009	1,331	1,097
Cadillac city.	Wexford.	8,375	5,997	4,461	Fruitport village.	Muskegon.	330	311	.....
Caledonia village.	Kent.	422	427	438	Gagetown village.	Ottawa.	.....	.....	.....
Camden village.	Hillsdale.	392	376	.....	Gaines village.	Tuscola.	358	329	237
Capac village.	St. Clair.	761	547	.....	Galesburg village.	Genesee.	235	240	304
Caro village.	Tuscola.	2,272	2,006	1,701	Gallen village.	Kalamazoo.	656	689	702
Carson City village.	Montcalm.	808	906	921	Garden village.	Berrien.	405	440	492
Carsonville village.	Sanilac.	401	400	.....	Gaylord village.	Delta.	497	465	458
Caseville village.	Huron.	442	507	.....	Gladstone city.	Otsego.	1,538	1,561	661
Casnovia village.	Kent.	308	277	275	Gladwin city.	Delta.	4,211	3,360	1,337
Cass City village.	Muskegon.	.....	.....	.....	Gobleville village.	Gladwin.	988	775	903
Cassopolis village.	Tuscola.	1,126	1,113	813	Grand Haven city.	Van Buren.	537	505	.....
Cedar Springs village.	Cass.	1,358	1,330	1,369	Grand Ledge city.	Ottawa.	5,856	4,743	5,023
Central Lake village.	Kent.	947	950	1,035	Grand Rapids city.	Eaton.	2,893	2,161	1,606
Centreville village.	Antrim.	813	1,307	.....	Grandville village.	Kent.	112,571	87,565	60,278
Charlevoix city.	St. Joseph.	613	645	775	Grant village.	Kent.	680	457	.....
Charlotte city.	Charlevoix.	2,420	2,079	1,496	Grass Lake village.	Newaygo.	428	214	.....
Cheboygan city.	Eaton.	4,886	4,062	3,867	Graying village.	Jackson.	760	648	617
Cheboyan city.	Cheboygan.	6,859	6,480	6,235	Greenville city.	Crawford.	1,775	.....	.....
Chelsea village.	Washtenaw.	1,764	1,635	1,356	Grosse Pointe village.	Montcalm.	4,045	3,381	3,056
Chessaning village.	Saginaw.	1,363	1,244	1,056	Grosse Pointe Farms village.	Wayne.	830	343	298
Clare city.	Clare.	1,350	1,326	1,174	Grosse Pointe Park village.	Wayne.	862	817	.....
Clarkston village.	Oakland.	345	360	387	Hantracme village.	Wayne.	290	.....	.....
Clayton village.	Lenawee.	372	370	.....	Hancock city.	Wayne.	3,559	.....	.....
Clifford village.	Lapeer.	308	339	.....	Hanover village.	Houghton.	8,961	4,050	1,772
Clintmax village.	Kalamazoo.	425	398	.....	Harbor Beach city.	Jackson.	364	378	363
Clinton village.	Lenawee.	1,011	1,038	960	Harbor Springs village.	Huron.	1,556	1,149	1,046
Clio village.	Genesee.	810	640	577	Harrietta village.	Emmet.	1,805	1,643	1,052
Coldwater city.	Branch.	5,945	6,216	5,247	Harrison city.	Wexford.	336	419	.....
Coleman city.	Midland.	909	1,014	540	Harrisville city.	Clare.	543	647	762
Coloma village.	Berrien.	701	687	.....	Hart village.	Alcona.	444	403	987
Colon village.	St. Joseph.	853	.....	.....	Hartford village.	Oceana.	1,555	1,134	757
Columbiaville village.	Lapeer.	309	457	578	Hastings city.	Van Buren.	1,268	1,077	1,044
Concord village.	Jackson.	543	534	580	Hersey village.	Barry.	4,383	3,172	2,972
Constantine village.	St. Joseph.	1,244	1,228	1,346	Hesperia village.	Osceola.	310	327	328
Coopersville village.	Ottawa.	814	660	790	.....	Newaygo.	462	474	506

TABLE 2.—POPULATION OF INCORPORATED PLACES: 1910, 1900, AND 1890—Continued.

CITY OR VILLAGE.	County.	1910	1900	1890	CITY OR VILLAGE.	County.	1910	1900	1890
Highland Park village.....	Wayne.....	4,120	427	.....	Millersburg village.....	Presque Isle.....	519	.....	.....
Hillman village.....	Montmorency.....	411	253	.....	Millington village.....	Tuscola.....	623	638	454
Hillsdale city.....	Hillsdale.....	5,001	4,151	3,915	Minden City village.....	Sanilac.....	332	408	394
Hilltop village.....	Berrien.....	225	.....	.....	Monroe city.....	Monroe.....	6,893	5,043	5,258
Holland city.....	Ottawa.....	10,490	7,790	3,945	Montague village.....	Muskegon.....	942	998	1,623
Holly village.....	Oakland.....	1,537	1,419	1,266	Montgomery village.....	Hillsdale.....	362	.....	.....
Homer village.....	Calhoun.....	1,008	1,097	1,063	Montrose village.....	Genesee.....	443	348	.....
Houghton village.....	Houghton.....	5,113	3,359	2,062	Morenci village.....	Lenawee.....	1,515	1,334	1,248
Howard City village.....	Montcalm.....	1,046	1,398	1,137	Morley village.....	Mecosta.....	337	334	485
Howell village.....	Livingston.....	2,338	2,518	2,387	Morrice village.....	Shiawassee.....	470	476	.....
Hubbardston village.....	Clinton.....	450	450	.....	Mount Clemens city.....	Macomb.....	7,707	6,576	4,748
Hubbell village.....	Ionia.....	1,059	.....	.....	Mount Morris village.....	Genesee.....	513	416	351
Hudson city.....	Houghton.....	2,178	2,403	2,178	Mount Pleasant city.....	Isabella.....	3,972	3,662	2,701
Imlay City village.....	Lenawee.....	1,174	1,122	1,251	Muir village.....	Ionia.....	463	586	490
Ionia city.....	Ionia.....	5,030	5,209	4,482	Mulliken village.....	Eaton.....	312	.....	.....
Iron Mountain city.....	Dickinson.....	9,216	9,242	8,599	Munising village.....	Alger.....	2,952	2,014	.....
Iron River village.....	Iron.....	2,450	1,482	1,117	Muskegon city.....	Muskegon.....	24,062	20,818	22,702
Ironwood city.....	Gogebic.....	12,821	9,705	7,745	Muskegon Heights city.....	Muskegon.....	1,690	1,012	.....
Ishpeming city.....	Marquette.....	12,448	13,255	11,197	Nashville village.....	Barry.....	1,346	1,184	1,029
Ithaca village.....	Grafiot.....	1,876	2,020	1,627	Negaunee city.....	Marquette.....	8,460	6,935	6,078
Jackson city.....	Jackson.....	31,433	25,180	20,798	New Baltimore village.....	Macomb.....	920	922	865
Jonesville village.....	Hillsdale.....	1,396	1,367	1,288	New Buffalo village.....	St. Clair.....	.....	.....	.....
Kalamazoo city.....	Kalamazoo.....	39,437	24,404	17,853	New Haven village.....	Berrien.....	528	629	553
Kalkaska village.....	Kalkaska.....	1,415	1,304	1,161	Newaygo village.....	Macomb.....	478	489	606
Kent City village.....	Kent.....	467	.....	.....	Newberry village.....	Newaygo.....	1,207	1,172	1,330
Kinde village.....	Huron.....	360	.....	.....	Newberry village.....	Luce.....	1,182	1,015	1,115
Kingsley village.....	Grand Traverse.....	497	419	.....	Niles city.....	Berrien.....	5,156	4,287	4,197
Kingston village.....	Tuscola.....	302	286	.....	North Adams village.....	Hillsdale.....	440	422	504
Lansburg village.....	Shiawassee.....	703	690	654	North Branch village.....	Lapeer.....	717	654	705
Lake Ann village.....	Benzie.....	171	241	.....	North Muskegon city.....	Muskegon.....	352	513	1,690
Lake City village.....	Missaukee.....	740	816	663	Northport village.....	Leelanau.....	524	.....	.....
Lake Linden village.....	Houghton.....	2,325	2,597	1,892	Northville village.....	Wayne.....	1,665	1,755	1,573
Lake Odessa village.....	Ionia.....	1,222	1,037	635	Norway city.....	Dickinson.....	4,974	4,170	.....
Lakeview village.....	Montcalm.....	954	935	1,024	Oakley village.....	Saginaw.....	237	231	299
L'Anse village.....	Baraga.....	708	620	655	Oakwood village.....	Wayne.....	781	.....	.....
Lansing city.....	Ingham.....	31,229	16,485	13,102	Olivet village.....	Eaton.....	627	800	790
Lapeer city.....	Lapeer.....	3,946	3,297	2,753	Omer city.....	Arenac.....	367	.....	.....
Laurium village.....	Houghton.....	8,537	5,643	1,159	Onaway city.....	Presque Isle.....	2,702	1,204	.....
Lawrence village.....	Van Buren.....	663	598	554	Onkarna village.....	Manistee.....	324	274	.....
Lawton village.....	Van Buren.....	1,042	942	788	Onsted village.....	Lenawee.....	398	.....	.....
Le Roy village.....	Oscoda.....	331	375	452	Ontonagon village.....	Ontonagon.....	1,964	1,267	.....
Leonard village.....	Oakland.....	313	335	276	Orion village.....	Oakland.....	717	756	522
Leslie village.....	Ingham.....	1,032	1,114	1,068	Ortonville village.....	Oakland.....	377	.....	.....
Lexington village.....	Sanilac.....	159	619	712	Oscoda village.....	Iosco.....	864	1,109	3,593
Lincoln village.....	Alcona.....	122	.....	.....	Otisville village.....	Genesee.....	312	291	277
Linden village.....	Genesee.....	550	543	552	Otsego village.....	Allegan.....	2,812	2,073	1,626
Lisbon village.....	Kent.....	96	187	136	Otter Lake village.....	Lapeer.....	273	212	243
Litchfield village.....	Ottawa.....	96	187	136	Ovid village.....	Clinton.....	1,078	1,293	1,423
Lowell village.....	Hillsdale.....	660	645	601	Owendale village.....	Huron.....	285	.....	.....
Ludington city.....	Kent.....	1,761	1,736	1,829	Owosso city.....	Shiawassee.....	9,639	8,696	6,564
Luther village.....	Mason.....	9,132	7,166	7,517	Oxford village.....	Oakland.....	1,191	1,172	1,128
Lyons village.....	Lake.....	626	837	.....	Parma village.....	Jackson.....	509	420	490
McBain city.....	Ionia.....	611	656	612	Paw Paw village.....	Van Buren.....	1,643	1,465	1,301
McBride village.....	Missaukee.....	546	709	.....	Peek village.....	Sanilac.....	274	.....	.....
Mackinac Island city.....	Montcalm.....	236	289	333	Pellston village.....	Emmet.....	1,039	.....	.....
Mackinac City village.....	Mackinac.....	714	665	760	Pentwater village.....	Oceana.....	1,129	1,061	1,510
Mackinaw City village.....	Cheboygan.....	697	564	333	Perrinton village.....	Grafiot.....	288	330	.....
Mancelona village.....	Emmet.....	1,200	1,226	1,205	Perry village.....	Shiawassee.....	720	641	.....
Manchester village.....	Antrim.....	1,047	1,209	1,191	Petersburg village.....	Monroe.....	490	468	408
Manistee city.....	Washtenaw.....	12,381	14,260	12,812	Petoskey city.....	Emmet.....	4,778	5,285	2,872
Manistique city.....	Manistee.....	4,722	4,126	2,940	Pewamo village.....	Ionia.....	289	446	384
Manton village.....	Schoolcraft.....	.....	.....	.....	Pierson village.....	Montcalm.....	183	215	215
Maple Rapids village.....	Wexford.....	1,069	895	661	Pigeon village.....	Huron.....	687	.....	.....
Marcellus village.....	Clinton.....	529	579	533	Pinckney village.....	Livingston.....	477	500	440
Marina City.....	Cass.....	1,047	1,025	830	Pinconning village.....	Bay.....	677	729	885
Marion village.....	St. Clair.....	3,770	3,829	3,288	Plainwell village.....	Allegan.....	1,493	1,318	1,414
Marlborough village.....	Oscoda.....	767	741	.....	Plymouth village.....	Wayne.....	1,671	1,474	1,172
Marlette village.....	Lake.....	57	.....	.....	Pontiac city.....	Oakland.....	14,532	9,789	6,200
Marquette city.....	Sanilac.....	1,062	996	.....	Port Austin village.....	Huron.....	533	507	571
Marshall city.....	Marquette.....	11,503	10,058	9,093	Port Hope village.....	Huron.....	344	319	393
Mason city.....	Calhoun.....	4,236	4,370	3,968	Port Huron city.....	St. Clair.....	18,863	19,158	13,543
Maybee village.....	Ingham.....	1,742	1,828	1,875	Port Sanilac village.....	Sanilac.....	216	314	.....
Mayville village.....	Monroe.....	310	.....	.....	Portland village.....	Ionia.....	1,832	1,874	1,678
Mayville village.....	Tuscola.....	687	825	728	Posen village.....	Presque Isle.....	263	.....	.....
Mecosta village.....	Mecosta.....	352	416	472	Pottersville village.....	Eaton.....	430	495	505
Melvin village.....	Sanilac.....	242	.....	.....	Quincy village.....	Branch.....	1,347	1,563	1,260
Memphis village.....	Macomb.....	557	586	588	Reading village.....	Hillsdale.....	1,102	1,096	.....
Mendon village.....	St. Clair.....	.....	.....	.....	Red Jacket village.....	Houghton.....	4,211	4,668	3,073
Mendon village.....	St. Joseph.....	768	777	808	Redford village.....	Wayne.....	328	.....	.....
Menominee city.....	Menominee.....	10,507	12,318	10,630	Reed City village.....	Oscoda.....	1,690	2,051	1,770
Merrill village.....	Saginaw.....	505	459	412	Reese village.....	Tuscola.....	465	416	.....
Messick village.....	Wexford.....	510	.....	.....	Richland village.....	Kalamazoo.....	278	312	293
Metamora village.....	Lapeer.....	276	313	314	Richmond village.....	Macomb.....	1,277	1,133	1,074
Middleville village.....	Barry.....	804	829	678	River Rouge village.....	Wayne.....	4,163	1,748	.....
Midland city.....	Midland.....	2,527	2,363	2,277	Rochester village.....	Oakland.....	1,516	1,535	900
Mikado village.....	Alcona.....	100	.....	.....	Rockford village.....	Kent.....	843	711	.....
Milan village.....	Monroe.....	1,355	1,141	917					
Milford village.....	Washtenaw.....	973	1,108	1,138					

STATISTICS OF POPULATION.

TABLE 2.—POPULATION OF INCORPORATED PLACES: 1910, 1900, AND 1890—Continued.

CITY OR VILLAGE.	County.	1910	1900	1890	CITY OR VILLAGE.	County.	1910	1900	1890
Rogers village.....	Presque Isle.....	705	544	431	Suttons Bay village.....	Leelanau.....	402	398	.....
Romeo village.....	Macomb.....	1,787	1,580	1,687	Tawas City.....	Iosco.....	1,061	1,228	1,544
Roscommon village.....	Roscommon.....	425	465	511	Tecumseh village.....	Lenawee.....	2,332	2,400	2,310
Rose City.....	Ogemaw.....	542	.....	.....	Tekonsha village.....	Calhoun.....	573	573	570
Royal Oak village.....	Oakland.....	1,071	468	.....	Thompsonville village.....	Benzie.....	815	893	.....
Saginaw city.....	Saginaw.....	50,510	42,345	46,322	Three Oaks village.....	Berrien.....	1,175	994	885
St. Charles village.....	Saginaw.....	1,451	1,317	.....	Three Rivers city.....	St. Joseph.....	5,072	3,550	3,131
St. Clair city.....	St. Clair.....	2,633	2,543	2,353	Tower village.....	Cheboygan.....	545	.....	.....
St. Clair Heights village.....	Wayne.....	1,252	.....	.....	Traverse City.....	Grand Traverse.....	12,115	9,407	4,353
St. Ignace city.....	Mackinac.....	2,118	2,271	2,704	Trenton village.....	Wayne.....	1,224	1,167	789
St. Johns city.....	Clinton.....	3,154	3,388	3,127	Tustin village.....	Osceola.....	371	303	.....
St. Joseph city.....	Berrien.....	5,936	5,155	3,733	Twining village.....	Arenac.....	267	.....	.....
St. Louis city.....	Gratiot.....	1,940	1,989	2,246	Ubyly village.....	Huron.....	442	432	.....
Saline village.....	Washtenaw.....	816	584	706	Union city village.....	Branch.....	1,940	1,514	1,156
Sand Lake village.....	Kent.....	370	326	336	Unionville village.....	Tuscola.....	456	427	414
Sandusky city.....	Sanilac.....	993	578	403	Utica village.....	Macomb.....	496	562	563
Saranac village.....	Ionia.....	845	768	790	Vandalia village.....	Cass.....	371	407	423
Saugatuck village.....	Allegan.....	621	707	799	Vanderbilt village.....	Otsego.....	523	.....	.....
Sault Ste. Marie city.....	Chippewa.....	12,615	10,538	5,760	Vassar village.....	Tuscola.....	1,659	1,832	1,632
Schoolcraft village.....	Kalamazoo.....	616	859	836	Vermontville village.....	Eaton.....	650	684	730
Scottville city.....	Mason.....	891	554	147	Vernon village.....	Shiawassee.....	435	536	585
Sebewaing village.....	Huron.....	1,347	1,243	719	Vicksburg village.....	Kalamazoo.....	1,624	972	921
Shelby village.....	Oceana.....	1,260	1,081	994	Wakefield village.....	Gogebic.....	714	1,191	.....
Shepherd village.....	Isabella.....	835	635	469	Waldron village.....	Hillsdale.....	435	.....	.....
Sheridan village.....	Montcalm.....	436	437	.....	Walkerville village.....	Oceana.....	371	.....	.....
Sherman village.....	Wexford.....	260	427	.....	Warren village.....	Macomb.....	297	350	.....
Sherwood village.....	Branch.....	346	366	447	Watervliet village.....	Berrien.....	728	717	.....
South Frankfort village.....	Benzie.....	681	639	.....	Wayland village.....	Allegan.....	725	619	523
South Haven city.....	Van Buren.....	3,577	4,009	1,924	Wayne village.....	Wayne.....	1,263	1,361	1,226
South Lyon village.....	Oakland.....	615	657	707	Webberville village.....	Ingham.....	349	346	404
South Range village.....	Houghton.....	1,097	.....	.....	West Branch city.....	Ogemaw.....	1,276	1,412	1,302
Sparta village.....	Kent.....	1,203	1,126	904	Westphalia village.....	Clinton.....	266	374	350
Spring Lake village.....	Ottawa.....	802	696	1,168	White Cloud village.....	Newaygo.....	648	585	743
Springport village.....	Jackson.....	584	559	407	White Pigeon village.....	St. Joseph.....	667	705	961
Stambaugh village.....	Iron.....	1,322	695	.....	Whitehall village.....	Muskegon.....	1,437	1,481	1,903
Standish city.....	Arenac.....	828	829	.....	Whittemore city.....	Iosco.....	218	.....	.....
Stanton city.....	Montcalm.....	1,012	1,234	1,352	Williamston village.....	Ingham.....	1,042	1,113	1,139
Stanwood village.....	Mecosta.....	185	.....	.....	Wolverine village.....	Cheboygan.....	794	.....	.....
Stephenson village.....	Menominee.....	527	395	.....	Woodland village.....	Barry.....	304	319	.....
Stevensville village.....	Berrien.....	243	250	.....	Wyandotte city.....	Wayne.....	8,287	5,183	3,817
Stockbridge village.....	Ingham.....	653	677	497	Yale city.....	St. Clair.....	1,223	1,125	937
Sturgis city.....	St. Joseph.....	3,635	2,465	2,489	Ypsilanti city.....	Washtenaw.....	6,230	7,373	6,129
Sunfield village.....	Eaton.....	385	451	.....	Zeeland city.....	Ottawa.....	1,982	1,326	785

CHAPTER 2.

COMPOSITION AND CHARACTERISTICS OF THE POPULATION.

Introduction.—The first chapter having given the number of inhabitants of Michigan by counties and minor civil divisions, the decennial increase and the density of population, and the proportions urban and rural, the present chapter deals with the composition and characteristics of the population. The two chapters cover all the principal topics of the population census except occupations and ownership of homes.

Description of the tables.—The greater part of this chapter consists of five general tables, which present statistics of color, nativity, parentage, sex, citizenship, illiteracy, school attendance, and dwellings and families, as follows: Table I for the state and counties; Table II for cities of more than 25,000 inhabitants; Table III for cities of 10,000 to 25,000; Table IV for places of 2,500 to 10,000; and Table V for wards of cities of more than 50,000.

A series of summary tables (numbered 1 to 16) reproduces from the general tables the more important state and city totals, and presents also certain additional data relative to state of birth, age, and marital condition.

On account of the wide differences in characteristics among the different classes of the population, the statistics on each subject are shown according to race, and for the whites according to nativity and parentage. Classification according to nativity and parentage is scarcely necessary for the other races, since nearly all negroes and Indians are native born of native parentage, and nearly all Chinese and Japanese either foreign born or of foreign parentage.

The white population is divided into four groups: (1) Native, native parentage—that is, having both parents born in the United States; (2) native, foreign parentage—having both parents born abroad; (3) native, mixed parentage—having one parent native and the other foreign born; (4) foreign born. As the second and third classes do not differ greatly in characteristics, they are combined in some of the tables; in a few cases all three native white classes are combined.

Since marked differences often exist between urban and rural communities with respect to the composition and characteristics of the population, the two classes are distinguished in connection with several of the subjects. Urban population, as defined by the Bureau of the Census, includes that of all incorporated places of 2,500 inhabitants or more, the remainder being classified as rural.

The census inquiry as to school attendance was merely as to whether the person enumerated had attended any kind of school at any time between September 1, 1909, and the date of enumeration, April 15, 1910. The Census Bureau classifies as illiterate any person 10 years of age or over who is unable to write, regardless of ability to read.

Color and nativity (Table 1).—Of the total population of Michigan, 1,224,841, or 43.6 per cent, are native whites of native parentage; 964,882, or 34.3 per cent, are native whites of foreign or mixed parentage; 595,524, or 21.2 per cent, are foreign-born whites; and 17,115, or 0.6 per cent, are negroes. The corresponding percentages in 1900 were 42.4, 34.4, 22.3, and 0.7, respectively, the proportion of native whites of native parentage having increased slightly during the decade. In 13 of the 83 counties the population is less than one-fifth native white of native parentage; in 6, it is more than two-fifths foreign-born white; and in 5, more than one-half native white of foreign or mixed parentage. (See also maps on page 601.)

Of the urban population, 35.5 per cent are native whites of native parentage; of the rural, 50.8 per cent. The corresponding percentages for native whites of foreign or mixed parentage are 37.4 and 31.6, respectively. The percentage of foreign-born whites is 26.2 in the urban population and 16.8 in the rural; the percentage of negroes, 0.9 in the urban and 0.3 in the rural.

Sex (Tables 2 and 13).—In the total population of the state there are 1,454,534 males and 1,355,639 females, or 107.3 males to 100 females. In 1900 the ratio was 106.6 to 100. Among native whites the ratio is 102.4 to 100 and among foreign-born whites 127.4 to 100. In the urban population there are 103.3 males to 100 females, and in the rural, 111.

State of birth (Tables 3 and 4).—Of the total native population—that is, population born in the United States—79.6 per cent were born in Michigan and 20.4 per cent outside the state; of the native white population, 20.3 per cent were born outside the state, and of the native negro, 47.1 per cent. Persons born outside the state constitute 21 per cent of the urban population and 19.9 per cent of the rural.

Foreign nationalities (Tables 5 and 15).—Of the foreign-born white population of Michigan, persons born in Canada represent 28.7 per cent (those of French parentage, 4.7, and all other, 24); Germany, 22.1; England, 7.2; Russia, 6.4; Holland, 5.6; Finland, 5.2; Austria, 5.2; Sweden, 4.4; Ireland, 3.4; Italy, 2.8; all

other countries, 9 per cent. Of the total white stock of foreign origin, which includes persons born abroad and also natives having one or both parents born abroad, Germany contributed 27.2 per cent; Canada, 26.9 (French stock, 5.3, and all other, 21.6); England, 7.7; Holland, 5.6; Ireland, 5.2; Russia, 3.8; Sweden, 3.6; Finland, 3.6; Austria, 3.2; Scotland, 1.6; Italy, 1.6 per cent.

Voting and militia ages (Table 6).—The total number of males 21 years of age and over is 870,876, representing 31 per cent of the population. Of such males, 38.8 per cent are native whites of native parentage, 25.5 per cent native whites of foreign or mixed parentage, 34.7 per cent foreign-born whites, and 0.7 per cent negroes. Of the 302,177 foreign-born white males of voting age, 167,304, or 55.4 per cent, are naturalized. Males of militia age—18 to 44—number 616,729.

Age (Tables 7, 8, and 12).—Of the total population, 10.6 per cent are under 5 years of age, 19 per cent from 5 to 14 years, inclusive, 18.9 per cent from 15 to 24, 29 per cent from 25 to 44, and 22.5 per cent 45 years of age and over. The foreign-born white population comprises comparatively few children, only 4.8 per cent of this class being under 15 years of age, while nearly five-sixths (83 per cent) are 25 years of age and over. Of the native whites of foreign or mixed parentage, 37.9 per cent are 25 and over, and of the native whites of native parentage 46.5 per cent.

The urban population shows a smaller proportion of children and of persons of advanced age than the rural, and a larger proportion of persons in the prime of life. Migration to the city explains this at least in part. Of the urban population, 32.1 per cent are from 25 to 44 years of age, inclusive, and of the rural, 26 per cent.

School attendance (Table 9).—The total number of persons of school age—that is, from 6 to 20 years, inclusive—is 796,887, of whom 539,739, or 67.7 per cent, attended school. In addition to these, 19,982 persons under 6 and 9,205 of 21 and over attended school. For boys from 6 to 20 years, inclusive, the percentage attending school was 67.3; for girls, 68.2. For children from 6 to 14 years, inclusive, the percentage attending school was 90.7. The percentage for children of this age among native whites of native parentage was 91.3; among native whites of foreign or mixed parentage, 90.6; among negroes, 89.4; and among foreign-born whites, 86.8. (See Table I.) There is little difference between urban and rural communities as regards the percentage of school attendance for children from 6 to 14, but for persons from 15 to 20 years, inclusive, the percentage is 28.4 in the urban population and 38.6 in the rural.

Illiteracy (Table 10).—There are 74,800 illiterates in the state, representing 3.3 per cent of the total population 10 years of age and over, as compared with 4.2 per cent in 1900. The percentage of illiteracy is 9.3 among foreign-born whites, 1.1 among native whites, and 5.7 among negroes.

For all classes combined, the percentage of illiterates is about the same in urban communities as in rural, 3.5 and 3.2, respectively, but for each class separately except the foreign-born whites, the rural percentage exceeds the urban.

For persons from 10 to 20 years, inclusive, whose literacy depends largely upon present school facilities and school attendance, the percentage of illiteracy is slight, only 0.8. (See Table I.)

Marital condition (Tables 11 and 14).—In the population 15 years of age and over, 36.1 per cent of the males are single and 27.1 per cent of the females. The percentage married is 58.3 for males and 62.2 for females, and the percentage widowed 4.6 and 9.8, respectively. The percentages of those reported as divorced, 0.7 and 0.8, respectively, are believed to be too small, because of the probability that many divorced persons class themselves as single or widowed.

That the percentage single is so much smaller for women than for men is due largely to the fact that women marry younger. Thus 8.7 per cent of the females from 15 to 19 years of age are married, as compared with 0.7 per cent of the males; and 48.4 per cent of the females from 20 to 24 years are married, as compared with 21.8 per cent of the males. For those from 25 to 34 years, the difference is not so great, 78 for females as against 64.4 for males, while in the age group 35 to 44 the difference practically disappears. That there is a larger proportion of widows than of widowers may indicate that men more often remarry than women, but, since husbands are generally older than their wives, the marriage relationship is more often broken by death of the husband than by death of the wife.

For the main elements of the population the percentages of married persons among those 15 years of age and over are as follows: Foreign-born whites, 67.7 for males and 72.5 for females; native whites of native parentage, 58.8 and 61.6, respectively; native whites of foreign or mixed parentage, 47.6 and 54.4; negroes, 53.5 and 57.7.

These percentages by no means indicate the relative tendency of the several classes as regards marriage. To determine that, the comparison should be made by age periods, since the proportion married in any class is determined largely by the proportion who have reached the marrying age. Similarly, the proportion widowed depends largely on the proportion past middle life. The percentage married for males is slightly higher, and for females decidedly higher, in rural than in urban communities.

Dwellings and families.—The total number of dwellings in Michigan is 618,222, and the total number of families 657,418, there being 106.3 families to each 100 dwellings. (See Table I.) The average number of persons per dwelling is 4.5 and the average number per family, 4.3.

TABLE 1.—COLOR, NATIVITY, AND PARENTAGE.

CLASS OF POPULATION.	NUMBER.			PER CENT OF TOTAL.		
	1910	1900	1890	1910	1900	1890
THE STATE.						
Total population.....	2,810,173	2,420,982	2,093,890	100.0	100.0	100.0
White.....	2,785,247	2,398,563	2,072,884	99.1	99.1	99.0
Negro.....	17,115	15,816	15,223	0.6	0.7	0.7
Indian.....	7,519	6,354	5,625	0.3	0.3	0.3
Chinese.....	241	240	120	(1)	(1)	(1)
Japanese.....	49	9	38	(1)	(1)	(1)
All other (Filipino).....	2			(1)		
Total native.....	2,212,623	1,879,329	1,550,010	78.7	77.6	74.0
Total foreign born.....	597,550	541,653	543,880	21.3	22.4	26.0
URBAN POPULATION.						
Total.....	1,327,044	952,323	730,294	100.0	100.0	100.0
White.....	1,314,186	941,626	721,162	99.0	98.9	98.7
Negro.....	12,156	10,009	8,734	0.9	1.1	1.2
Indian, Chinese, Japanese, and all other.....	702	688	398	0.1	0.1	0.1
RURAL POPULATION.						
Total.....	1,483,129	1,468,659	1,363,596	100.0	100.0	100.0
White.....	1,471,061	1,456,937	1,351,722	99.2	99.2	99.1
Negro.....	4,959	5,807	6,489	0.3	0.4	0.5
Indian, Chinese, Japanese, and all other.....	7,109	5,915	5,385	0.5	0.4	0.4

¹ Less than one-tenth of 1 per cent.

TABLE 2.—SEX, FOR THE STATE.

[See also Tables 7 and 8.]

CLASS OF POPULATION.	1910			1900		
	Male.	Female.	Males to 100 females.	Male.	Female.	Males to 100 females.
THE STATE.						
Total population.....	1,454,534	1,355,639	107.3	1,248,905	1,172,077	106.6
White.....	1,441,281	1,343,966	107.2	1,237,098	1,161,465	106.5
Negro.....	9,007	8,108	111.1	8,220	7,596	108.2
Ind., Chi., Jap., and all other.....	4,246	3,565	119.1	3,587	3,016	118.9
URBAN POPULATION.						
Total.....	1,107,624	1,082,099	102.4	941,906	916,461	102.8
White.....	625,032	599,800	104.2	522,852	503,862	103.8
Negro.....	306,580	304,739	100.6	269,952	263,595	102.4
Ind., Chi., Jap., and all other.....	176,012	177,551	99.1	149,102	149,004	100.1
RURAL POPULATION.						
Total.....	336,657	281,867	127.4	295,192	245,004	120.5
White.....	674,198	652,846	103.3	472,144	480,179	98.3
Negro.....	780,336	702,793	111.0	776,761	691,898	112.3

TABLE 3.—NATIVE POPULATION, DISTINGUISHED AS BORN IN STATE OR OUTSIDE STATE.

CLASS OF POPULATION.	1910	1900	1890	Urban: 1910	
				1910	Rural: 1910
Total native population.....					
Born in state.....	2,212,623	1,879,329	1,550,009	978,248	1,234,375
Born outside state ¹	1,761,085	1,455,615	1,123,978	772,558	958,527
Per cent outside state.....	451,538	423,714	426,031	205,690	245,848
	20.4	22.5	27.5	21.0	19.9
Native white population.....					
Born in state.....	2,189,723	1,858,367	1,531,283	967,108	1,222,615
Born outside state ¹	1,745,751	1,441,726	1,111,425	767,098	978,653
Per cent outside state.....	443,972	416,641	419,858	200,010	249,962
	20.3	22.4	27.4	20.7	20.0
Native negro population.....					
Born in state.....	15,475	14,713	(3)	10,672	4,803
Born outside state ²	3,192	7,915	(3)	5,106	3,086
Per cent outside state.....	7,283	6,798	(3)	5,586	1,717
	47.1	46.2	(3)	52.2	35.7

¹ Exclusive of 1 Indian not credited to any state of birth.

² Includes persons born in United States, state not specified; persons born in outlying possessions, or at sea under United States flag; and American citizens born abroad.

³ Comparable figures not available.

TABLE 4.—STATE OR DIVISION OF BIRTH.

PLACE OF BIRTH.	NUMBER.		PER CENT OF TOTAL.	
	1910	1900	1910	1900
Total native.....				
Michigan.....	2,212,623	1,879,329	100.0	100.0
Other states.....	1,761,085	1,455,615	79.6	77.5
New York.....	451,538	423,714	20.4	22.5
Ohio.....	116,847	150,489	5.3	8.3
Indiana.....	109,932	88,290	5.0	4.7
Illinois.....	45,597	29,871	2.1	1.6
Pennsylvania.....	33,366	18,802	1.5	1.0
Wisconsin.....	32,495	30,674	1.5	1.6
Massachusetts.....	26,081	22,256	1.2	1.2
Iowa.....	6,859	6,515	0.3	0.3
Kentucky.....	6,446	4,866	0.3	0.3
Minnesota.....	5,134	2,609	0.2	0.1
New Jersey.....	4,994	3,690	0.2	0.2
Missouri.....	4,525	5,251	0.2	0.3
Vermont.....	4,475	3,133	0.2	0.2
All other ¹	4,334	6,759	0.2	0.4
	50,820	44,299	2.3	2.4
DIVISIONS.				
New England.....	19,670	22,407	0.9	1.2
Middle Atlantic.....	153,870	192,514	7.0	10.2
East North Central.....	1,976,061	1,614,834	89.3	85.9
West North Central.....	23,752	18,020	1.1	1.0
South Atlantic.....	8,952	6,740	0.4	0.4
East South Central.....	7,851	4,374	0.4	0.2
West South Central.....	2,368	1,360	0.1	0.1
Mountain.....	2,627	1,379	0.1	0.1
Pacific.....	2,260	1,541	0.1	0.1
Other ¹	15,212	16,160	0.7	0.9

¹ Includes persons born in United States, state not specified; persons born in outlying possessions, or at sea under United States flag; and American citizens born abroad.

TABLE 5.—FOREIGN WHITE STOCK, BY NATIONALITY.

FOREIGN COUNTRY IN WHICH BORN, OR, IF NATIVE, IN WHICH PARENTS WERE BORN.	WHITE POPULATION OF FOREIGN BIRTH OR PARENTAGE: 1910						Foreign-born white population: 1900
	Total.		Foreign born.		Native.		
	Number.	Per cent.	Number.	Per cent.	Both parents foreign born.	One parent foreign born.	
All countries.....	1,580,406	100.0	595,524	100.0	611,319	353,583	540,196
Austria.....	50,522	3.2	31,034	5.2	16,889	2,599	10,272
Belgium.....	10,505	0.7	5,683	1.0	3,365	1,457	2,647
Canada—French.....	82,909	5.3	28,083	4.7	30,484	24,342	32,422
Canada—Other.....	337,059	21.6	143,074	24.0	67,249	126,736	150,798
Denmark.....	14,799	0.9	6,313	1.1	6,055	2,431	6,289
England.....	120,323	7.7	42,724	7.2	33,330	44,269	43,833
Finland.....	55,548	3.6	31,144	5.2	23,409	995	18,910
France.....	8,667	0.6	2,418	0.4	2,682	3,567	2,589
Germany.....	424,753	27.2	131,583	22.1	209,819	83,351	145,291
Greece.....	1,343	0.1	1,195	0.2	73	75	134
Holland.....	88,031	5.6	33,471	5.6	39,585	14,975	30,406
Hungary.....	14,198	0.9	11,597	1.9	2,427	174	835
Ireland.....	81,415	5.2	20,434	3.4	36,867	24,114	29,178
Italy.....	24,753	1.6	16,860	2.8	7,303	590	6,178
Norway.....	16,774	1.1	7,638	1.3	6,778	2,358	7,582
Roumania.....	669	(1)	510	0.1	138	21	11
Russia.....	60,023	3.8	37,978	6.4	19,264	2,781	8,692
Scotland.....	25,477	1.6	9,952	1.7	6,328	9,197	10,338
Sweden.....	56,937	3.6	26,374	4.4	25,624	4,939	26,956
Switzerland.....	7,191	0.5	2,780	0.5	2,142	2,209	2,616
Turkey in Asia.....	2,081	0.1	1,567	0.3	484	30	101
Turkey in Europe.....	423	(1)	342	0.1	71	10	83
Wales.....	2,359	0.2	786	0.1	547	1,026	3,210
All other.....	*73,647	4.7	1,984	0.3	*70,406	1,257	8,210

¹ Less than one-tenth of 1 per cent.

² Includes native whites whose parents were born in different foreign countries; for example, one parent in Ireland and the other in Scotland.

TABLE 6.—MALES OF VOTING AND MILITIA AGES.

CLASS OF POPULATION.	MALES OF VOTING AGE—21 AND OVER.				MALES OF MILITIA AGE—18 TO 44.	
	Number.		Per cent.		1910	1900
	1910	1900	1910	1900		
Total.....	870,878	719,478	100.0	100.0	618,729	516,802
White.....	862,222	712,245	99.0	99.0	610,617	511,594
Negro.....	6,266	5,193	0.7	0.7	4,459	3,765
Indian, Chinese, Japanese, and all other.....	2,388	2,040	0.3	0.3	1,653	1,443
Native white.....						
Born in state.....	560,045	450,830	64.3	62.7	434,678	354,491
Born outside state ¹	337,651	258,293	38.8	40.1	235,221	197,258
Per cent outside state.....	222,394	162,537	25.5	22.6	199,457	157,233
Foreign or mixed parentage.....	302,177	261,415	34.7	36.3	175,939	157,103

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TABLE 10.—ILLITERATE PERSONS 10 YEARS OF AGE AND OVER.

CLASS OF POPULATION.	BOTH SEXES.		MALE.		FEMALE.		CLASS OF POPULATION.	BOTH SEXES.		MALE.		FEMALE.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
THE STATE.							URBAN POPULATION.						
Total illiterate, 1910.....	74,800	3.3	41,617	3.6	33,183	3.1	Total illiterate, 1910.....	37,572	3.5	20,102	3.7	17,470	3.3
Native white.....	17,846	1.1	10,730	1.3	7,116	0.9	Native white.....	4,853	0.7	2,510	0.7	2,373	0.6
Native parentage.....	9,561	1.0	5,802	1.2	3,759	0.8	Native parentage.....	2,191	0.6	1,128	0.6	1,063	0.6
Foreign or mixed parentage.....	8,285	1.2	4,923	1.4	3,357	0.9	Foreign or mixed parentage.....	2,662	0.7	1,382	0.8	1,310	0.7
Foreign-born white.....	54,113	9.3	29,515	9.1	24,598	9.7	Foreign-born white.....	32,121	9.6	17,328	9.3	14,793	9.8
Negro.....	826	5.7	415	5.3	415	6.1	Negro.....	460	4.4	202	3.7	258	5.1
Total illiterate, 1900.....							RURAL POPULATION.						
Total illiterate, 1900.....	80,482	4.2	43,224	4.4	37,258	4.1	Total illiterate, 1910.....	37,228	3.2	21,515	3.5	15,713	2.9
Native white.....	22,277	1.7	13,300	1.9	8,977	1.4	Native white.....	12,963	1.4	8,220	1.7	4,743	1.1
Native parentage.....	12,154	1.5	7,276	1.8	4,878	1.3	Native parentage.....	7,370	1.3	4,674	1.6	2,696	1.0
Foreign or mixed parentage.....	10,123	1.8	6,024	2.1	4,099	1.5	Foreign or mixed parentage.....	5,593	1.6	3,546	1.9	2,047	1.2
Foreign-born white.....	54,399	10.3	27,989	9.7	26,410	11.0	Foreign-born white.....	21,992	9.0	12,187	8.7	9,805	9.5
Negro.....	1,426	10.9	768	11.1	658	10.6	Negro.....	366	9.2	209	9.3	157	9.0

TABLE 11.—MARITAL CONDITION OF PERSONS 15 YEARS OF AGE AND OVER.

CLASS OF POPULATION AND AGE PERIOD.	MALES 15 YEARS OF AGE AND OVER.						FEMALES 15 YEARS OF AGE AND OVER.							
	Total. ¹	Single.		Married.		Wid-owed.	Di-voiced.	Total. ¹	Single.		Married.		Wid-owed.	Di-voiced.
		Number.	Per cent.	Number.	Per cent.				Number.	Per cent.	Number.	Per cent.		
THE STATE.														
Total, 1910.....	1,033,089	373,079	36.1	602,102	58.2	47,409	7,479	944,683	256,062	27.1	587,253	62.2	92,424	7,504
Total, 1900.....	868,170	319,587	37.2	492,562	57.4	39,512	4,373	760,478	221,049	28.0	437,297	61.0	76,354	4,848
15 to 19 years.....	135,439	133,938	98.9	978	0.7	22	8	131,391	119,362	90.8	11,488	8.7	88	65
20 to 24 years.....	136,012	105,347	77.5	29,669	21.8	273	226	128,668	65,015	50.5	62,218	48.4	606	579
25 to 34 years.....	235,579	79,485	33.7	151,724	64.4	2,406	1,446	215,716	41,272	19.1	168,200	78.0	2,836	2,176
35 to 44 years.....	189,328	28,185	14.9	153,913	81.3	5,045	1,898	171,909	18,903	9.3	145,133	84.5	8,600	2,017
45 years and over.....	334,528	25,389	7.6	265,203	79.3	39,565	3,872	295,855	14,115	4.8	199,709	67.5	79,144	2,655
Age unknown.....	2,203	735	33.4	615	27.9	97	29	1,244	333	26.9	505	40.6	150	12
Native white:														
Native parentage.....	408,213	142,417	34.9	240,128	58.8	19,895	4,102	389,159	104,583	26.9	239,877	61.6	40,008	4,026
15 to 24 years.....	113,383	97,572	86.1	15,092	13.3	153	139	112,377	77,097	68.6	34,316	30.5	321	402
25 to 44 years.....	167,595	34,882	22.1	117,388	74.5	3,075	1,805	151,337	21,103	13.9	123,229	81.4	4,089	2,191
45 years and over.....	135,671	9,468	7.0	107,279	79.1	16,611	2,076	124,613	6,161	4.9	82,016	65.8	34,910	1,424
Foreign or mixed parentage.....	295,782	145,641	49.2	140,801	47.6	7,138	1,637	299,472	118,941	39.7	162,988	54.4	15,103	1,970
15 to 24 years.....	103,298	91.4	9.2	9,251	8.2	89	63	115,028	89,772	77.4	25,537	22.0	230	185
25 to 44 years.....	124,764	36,406	29.2	85,342	68.4	1,981	879	129,126	24,914	19.3	99,015	76.7	3,823	1,242
45 years and over.....	57,730	5,846	10.1	46,101	79.9	5,051	692	54,129	4,177	7.7	38,350	70.8	11,040	541
Foreign-born white.....														
15 to 24 years.....	319,129	81,185	25.4	215,998	67.7	19,636	1,594	247,577	30,475	12.3	179,422	72.5	36,030	1,374
25 to 44 years.....	42,681	36,417	85.3	5,997	14.1	46	26	29,436	16,084	54.6	13,102	44.5	119	46
45 years and over.....	138,148	34,928	25.3	100,222	72.5	2,237	519	103,461	10,701	10.3	85,399	85.4	3,624	672
Age unknown.....	137,921	9,708	7.0	109,624	79.5	17,331	1,045	114,478	3,657	3.2	77,835	68.0	32,228	655
Negro.....														
15 to 24 years.....	7,087	2,610	36.8	3,794	53.5	498	130	6,194	1,520	24.5	3,575	57.7	968	114
25 to 44 years.....	1,530	1,297	84.8	206	13.5	5	4	1,560	994	63.7	534	34.2	17	11
45 years and over.....	3,315	1,047	31.6	2,077	62.7	97	76	2,787	427	15.3	2,045	73.4	239	72
Age unknown.....	2,203	252	11.4	1,499	68.0	395	50	1,831	97	5.3	992	54.2	705	31
URBAN POPULATION.														
Total.....	493,315	186,550	37.8	282,660	57.3	18,797	3,345	472,641	144,891	30.7	273,513	57.9	48,643	4,685
15 to 24 years.....	135,966	118,653	87.3	16,435	12.1	149	127	136,090	98,332	72.3	36,551	26.9	402	391
25 to 44 years.....	221,926	58,073	26.2	157,698	71.1	3,776	1,815	204,455	38,121	18.6	155,184	75.9	8,138	2,838
45 years and over.....	134,038	9,336	7.0	108,179	80.7	14,829	1,392	131,298	8,190	6.2	81,483	62.1	40,020	1,447
Age unknown.....	1,385	488	35.2	343	25.1	43	11	838	248	29.6	295	35.2	83	9
Native white—Native parentage.....														
Native white—Native parentage.....	161,262	60,006	37.2	92,201	57.2	6,280	1,656	159,545	49,576	31.1	89,736	56.2	17,604	2,320
Native white—Foreign or mixed par.....	145,080	74,424	51.3	66,520	45.9	2,997	816	161,580	71,325	44.1	79,866	49.4	8,836	1,274
Foreign-born white.....	181,507	50,010	27.6	121,043	66.7	9,186	787	146,670	22,756	15.5	101,194	69.0	21,518	996
Negro.....	5,069	1,864	36.8	2,753	54.3	322	86	4,672	1,167	25.0	2,630	56.3	769	91
RURAL POPULATION.														
Total.....	539,774	186,529	34.6	319,442	59.2	28,612	4,134	472,042	111,171	23.6	313,740	66.5	43,781	2,819
15 to 24 years.....	135,485	120,632	89.0	14,212	10.5	146	107	123,999	86,045	69.4	37,155	30.0	292	253
25 to 44 years.....	202,981	49,597	24.4	147,939	72.9	3,676	1,529	183,070	19,114	10.4	158,149	86.4	4,298	1,355
45 years and over.....	200,490	16,053	8.0	157,024	78.3	24,736	2,480	164,567	5,925	3.6	118,226	71.8	39,124	1,208
Age unknown.....	818	247	30.2	267	32.6	54	18	406	87	21.4	210	51.7	67	3
Native white—Native parentage.....														
Native white—Native parentage.....	246,951	82,411	33.4	147,927	59.9	13,615	2,446	229,614	55,007	24.0	150,141	65.4	22,499	1,705
Native white—Foreign or mixed par.....	150,702	71,217	47.3	74,281	49.3	4,141	821	137,992	47,616	34.5	83,122	60.3	6,287	696
Foreign-born white.....	137,622	31,175	22.7	94,950	69.0	10,450	807	100,907	7,719	7.6	78,228	77.5	14,512	378
Negro.....	2,018	746	37.0	1,041	51.6	176	44	1,522	353	23.2	945	62.1	199	23

¹ Total includes persons whose marital condition is unknown.

² Totals include persons of unknown age.

TABLE 12.—AGE, FOR CITIES OF 25,000 OR MORE.

AGE PERIOD.	TOTAL.		NATIVE WHITE.		FOREIGN-BORN WHITE.		NEGRO.		AGE PERIOD.	TOTAL.		NATIVE WHITE.		FOREIGN-BORN WHITE.		NEGRO.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Battle Creek	12,374	12,893	10,666	11,402	1,417	1,199	283	292	Grand Rapids—								
Under 5 years	952	1,045	945	1,009	8	8	29	28	Continued.								
Under 1 year	234	241	228	232			6	8	25 to 34 years	10,154	10,340	6,510	7,540	3,552	2,729	84	71
5 to 9 years	874	900	841	858	15	26	18	16	35 to 44 years	7,671	7,691	4,559	5,034	3,052	2,609	55	48
10 to 14 years	850	882	806	829	31	32	13	21	45 to 64 years	9,378	9,118	4,983	5,187	4,311	3,867	78	64
15 to 19 years	1,006	1,154	910	1,077	73	56	23	21	65 years and over	2,510	2,723	965	1,276	1,525	1,428	19	19
20 to 24 years	1,290	1,423	1,091	1,273	166	108	28	42	Age unknown	88	60	68	48	15	9	5	3
25 to 34 years	2,418	2,460	2,029	2,161	329	240	57	59	Jackson	15,854	15,579	13,279	13,480	2,374	1,933	188	166
35 to 44 years	1,963	1,987	1,636	1,678	285	266	41	43	Under 5 years	1,255	1,286	1,234	1,269	17	9	4	8
45 to 64 years	2,411	2,267	1,944	1,898	405	320	59	49	Under 1 year	253	274	252	274			1	
65 years and over	519	743	401	588	104	143	14	12	5 to 9 years	1,218	1,221	1,179	1,179	32	30	7	12
Age unknown	65	32	63	31	1		1	1	10 to 14 years	1,069	1,116	1,026	1,066	35	36	8	14
Bay City	22,505	22,661	16,803	17,170	5,618	5,409	80	80	15 to 19 years	1,233	1,329	1,150	1,257	74	60	9	12
Under 5 years	2,608	2,412	2,566	2,371	38	29	4	12	20 to 24 years	1,674	1,579	1,434	1,416	228	136	12	27
Under 1 year	514	471	512	466	1	2	1	3	25 to 34 years	3,208	2,933	2,607	2,519	548	384	51	30
5 to 9 years	2,390	2,312	2,282	2,220	103	88	5	4	35 to 44 years	2,443	2,284	1,920	1,892	476	364	41	28
10 to 14 years	2,164	2,101	2,076	2,037	86	116	2	6	45 to 64 years	2,971	2,902	2,193	2,221	732	655	41	28
15 to 19 years	2,261	2,404	2,114	2,285	140	112	6	7	65 years and over	767	917	520	649	232	259	15	9
20 to 24 years	2,086	2,490	1,804	2,211	268	268	14	11	Age unknown	16	12	16	12				
25 to 34 years	2,822	3,060	2,686	2,716	923	933	12	11	Kalamazoo	19,197	20,240	15,216	16,666	3,610	3,247	360	325
35 to 44 years	3,622	3,712	3,225	3,571	1,141	1,132	14	9	Under 5 years	1,741	1,699	1,675	1,638	40	36	26	25
45 to 64 years	3,750	3,452	3,505	3,395	2,234	2,070	17	17	Under 1 year	377	370	367	366	3	1	7	3
65 years and over	1,029	1,021	340	358	683	660	6	3	5 to 9 years	1,460	1,433	1,335	1,298	100	111	25	24
Age unknown	7	7	5	6	2	1			10 to 14 years	1,355	1,430	1,228	1,203	101	121	26	16
Detroit	240,354	225,412	150,968	152,393	86,332	70,233	2,985	2,756	15 to 19 years	1,655	1,967	1,459	1,774	171	158	24	35
Under 5 years	24,588	24,127	23,553	23,116	858	857	176	154	20 to 24 years	1,966	2,266	1,634	1,984	302	252	28	30
Under 1 year	5,257	5,185	5,172	5,101	45	51	40	33	25 to 34 years	3,524	3,755	2,660	3,038	794	642	67	74
5 to 9 years	20,231	20,257	18,078	18,102	1,983	1,977	166	177	35 to 44 years	2,858	2,852	2,084	2,232	701	569	70	50
10 to 14 years	18,496	18,674	16,235	16,449	2,081	2,058	178	164	45 to 64 years	3,489	3,538	2,429	2,560	992	919	68	59
15 to 19 years	21,669	21,723	17,234	17,860	4,240	3,666	191	194	65 years and over	961	1,160	536	714	400	435	25	11
20 to 24 years	29,339	26,500	17,880	18,355	11,112	7,784	338	358	Age unknown	188	140	176	135	9	4	3	1
25 to 34 years	51,137	43,462	26,102	25,954	24,239	16,792	778	709	Lansing	16,801	14,428	14,317	12,578	2,304	1,669	174	180
35 to 44 years	33,972	30,287	16,146	16,017	17,220	13,798	597	466	Under 5 years	1,327	1,259	1,295	1,227	21	19	11	13
45 to 64 years	33,379	31,787	13,323	13,730	19,576	17,015	462	437	Under 1 year	282	313	278	306	1	2	3	5
65 years and over	7,017	8,289	1,984	2,670	4,947	5,625	82	92	5 to 9 years	1,041	1,108	995	1,069	24	31	22	8
Age unknown	526	306	433	240	78	61	17	5	10 to 14 years	1,361	1,001	1,295	964	49	20	17	17
Flint	21,779	16,771	17,453	14,029	4,100	2,582	217	180	15 to 19 years	1,919	1,299	1,756	1,218	152	68	11	13
Under 5 years	1,701	1,749	1,614	1,654	72	80	15	15	20 to 24 years	2,163	1,707	1,872	1,537	283	152	8	17
Under 1 year	300	402	332	390	8	9			25 to 34 years	3,421	2,889	2,744	2,472	644	381	32	36
5 to 9 years	1,288	1,384	1,213	1,247	60	93	15	14	35 to 44 years	2,356	2,086	1,889	1,740	434	324	29	22
10 to 14 years	1,063	1,144	981	1,054	66	77	16	13	45 to 64 years	2,562	2,338	1,994	1,819	531	482	36	37
15 to 19 years	1,976	1,566	1,701	1,451	195	92	20	23	65 years and over	630	736	457	527	165	192	8	17
20 to 24 years	3,646	2,293	3,218	1,990	599	280	29	23	Age unknown	21	5	20	5	1			
25 to 34 years	5,879	3,484	4,106	2,805	1,228	621	45	28	Saginaw	24,850	25,660	18,651	19,831	6,028	5,673	164	149
35 to 44 years	2,965	2,171	2,122	1,691	800	448	37	32	Under 5 years	2,392	2,314	2,337	2,266	49	41	6	7
45 to 64 years	2,922	2,384	2,016	1,686	870	671	33	27	Under 1 year	485	449	479	448	3		3	1
65 years and over	634	655	417	450	210	200	7	5	5 to 9 years	2,194	2,127	2,081	2,019	101	101	12	7
Age unknown	5	1	5	1					10 to 14 years	2,068	2,092	1,960	1,976	99	107	9	8
Grand Rapids	55,539	57,032	39,927	43,617	15,240	13,095	347	318	15 to 19 years	2,379	2,585	2,215	2,438	156	129	8	18
Under 5 years	5,571	5,709	5,449	5,562	106	129	19	17	20 to 24 years	2,451	2,928	2,129	2,595	300	317	20	15
Under 1 year	1,223	1,217	1,211	1,205	6	9	6	2	25 to 34 years	4,348	4,586	3,318	3,649	997	966	30	30
5 to 9 years	4,924	4,977	4,591	4,614	311	338	21	24	35 to 44 years	3,300	3,443	2,134	2,276	1,125	1,136	41	30
10 to 14 years	4,865	4,621	4,318	4,251	331	357	16	13	45 to 64 years	4,429	4,218	2,016	2,093	2,391	2,095	20	28
15 to 19 years	6,049	5,616	4,435	5,052	590	541	20	23	65 years and over	1,259	1,332	431	493	810	832	18	6
20 to 24 years	5,332	6,177	4,052	5,053	1,447	1,088	30	36	Age unknown	30	35	30	26				

TABLE 13.—SEX, FOR CITIES OF 25,000 OR MORE.

[See also Table 12.]

CITY.	1910			1900			CITY.	1910			1900		
	Male.	Female.	Males to 100 females.	Male.	Female.	Males to 100 females.		Male.	Female.	Males to 100 females.	Male.	Female.	Males to 100 females.
Battle Creek	12,374	12,893	96.0	8,945	9,618	93.0	Jackson	15,854	15,579	101.8	12,402	12,778	97.1
Bay City	22,505	22,661	99.3	13,546	14,082	96.2	Kalamazoo	19,197	20,240	94.8	11,671	12,733	91.7
Detroit	240,354	225,412	106.6	139,242	146,462	95.1	Lansing	16,801	14,428	116.4	8,150	8,335	97.8
Flint	21,779	16,771	129.9	6,334	6,769	93.6	Saginaw	24,850	25,660	96.8	20,468	21,857	93.7
Grand Rapids	55,539	57,032	97.4	42,470	45,065	94.2							

TABLE 15.—FOREIGN WHITE STOCK, BY NATIONALITY, FOR CITIES OF 100,000 OR MORE.

FOREIGN COUNTRY IN WHICH BORN, OR, IF NATIVE, IN WHICH PARENTS WERE BORN.	WHITE POPULATION OF FOREIGN BIRTH OR FOREIGN PARENTAGE: 1910						Foreign-born white population: 1900	FOREIGN COUNTRY IN WHICH BORN, OR, IF NATIVE, IN WHICH PARENTS WERE BORN.	WHITE POPULATION OF FOREIGN BIRTH OR FOREIGN PARENTAGE: 1910						Foreign-born white population: 1900
	Total.		Foreign born.		Native.				Total.		Foreign born.		Native.		
	Number.	Per cent.	Number.	Per cent.	Both parents foreign born.	One parent foreign born.			Number.	Per cent.	Number.	Per cent.	Both parents foreign born.	One parent foreign born.	
DETROIT.															
All countries.....	344,820	100.0	156,565	100.0	131,762	56,493	96,051	Ireland.....	19,355	5.6	5,584	3.6	8,978	4,793	6,411
Austria.....	20,823	6.0	14,160	9.0	6,023	640	2,157	Italy.....	8,092	2.3	5,724	3.7	2,149	219	905
Belgium.....	3,451	1.0	2,237	1.4	852	392	671	Norway.....	411	0.1	225	0.1	114	72	75
Canada—French.....	9,554	2.8	4,166	2.7	2,594	2,794	3,533	Romania.....	428	0.1	313	0.2	99	16	11
Canada—Other.....	64,003	18.6	37,779	24.1	9,430	16,794	24,991	Russia.....	27,072	7.9	18,644	11.9	7,573	855	3,070
Denmark.....	846	0.2	411	0.3	269	166	230	Scotland.....	6,563	1.9	3,320	2.1	1,543	1,700	2,465
England.....	18,792	5.4	9,032	5.8	4,096	5,664	6,344	Sweden.....	1,110	0.3	601	0.4	336	173	267
Finland.....	82	(1)	59	(1)	21	2	4	Switzerland.....	1,382	0.4	595	0.4	406	381	400
France.....	2,265	0.7	637	0.4	780	848	589	Turkey in Asia.....	714	0.2	561	0.4	149	4	7
Germany.....	134,228	38.9	44,674	28.5	69,292	20,262	42,730	Turkey in Europe.....	151	(1)	125	0.1	20	6	7
Greece.....	620	0.2	584	0.4	19	17	18	Wales.....	427	0.1	170	0.1	106	151	101
Holland.....	1,338	0.4	584	0.4	458	296	397	All other.....	*16,126	4.7	445	0.3	*15,487	194	464
Hungary.....	6,957	2.0	5,935	3.8	968	54	91								
GRAND RAPIDS.															
All countries.....	71,102	100.0	28,335	100.0	29,618	13,151	23,858	Ireland.....	3,687	5.2	871	3.1	1,828	988	1,137
Austria.....	1,014	1.4	549	1.9	389	76	280	Italy.....	510	0.7	319	1.1	178	13	85
Belgium.....	63	0.1	21	0.1	17	25	22	Norway.....	324	0.5	177	0.6	100	47	116
Canada—French.....	581	0.8	197	0.7	150	234	169	Romania.....	103	0.1	83	0.3	20	.....	.....
Canada—Other.....	7,529	10.6	2,997	10.6	1,222	3,310	3,290	Russia.....	5,335	7.5	3,557	12.6	1,570	208	579
Denmark.....	832	0.8	260	0.9	238	84	230	Scotland.....	679	1.0	222	0.8	178	279	241
England.....	2,896	4.1	903	3.2	663	1,330	1,026	Sweden.....	2,068	2.9	929	3.3	916	223	912
Finland.....	96	0.1	65	0.2	28	3	16	Switzerland.....	143	0.2	61	0.2	36	46	73
France.....	206	0.3	48	0.2	70	88	66	Turkey in Asia.....	397	0.6	268	0.9	127	2	19
Germany.....	13,684	19.2	4,546	16.0	6,749	2,398	4,313	Turkey in Europe.....	18	(1)	16	0.1	1	1	1
Greece.....	42	0.1	31	0.1	8	3	5	Wales.....	65	0.1	23	0.1	13	29	18
Holland.....	28,841	39.9	11,891	42.0	12,742	3,708	11,137	All other.....	*2,474	3.5	92	0.3	*2,327	55	115
Hungary.....	265	0.4	209	0.7	46	10	10								

¹ Less than one-tenth of 1 per cent.

² Includes native whites whose parents were born in different foreign countries; for example, one parent in Ireland and the other in Scotland.

TABLE 16.—INDIAN, CHINESE, AND JAPANESE POPULATION FOR PRINCIPAL COUNTIES.

COUNTY.	INDIAN.			CHINESE.			JAPANESE.			COUNTY.	INDIAN.			CHINESE.			JAPANESE.		
	1910	1900	1890	1910	1900	1890	1910	1900	1890		1910	1900	1890	1910	1900	1890	1910	1900	1890
The state.....	7,519	6,354	5,625	241	240	130	49	9	38	Lapeer.....	1	13	22	.....	.....	.....	.....	.....	.....
Alcona.....	50	33	26	.....	.....	.....	.....	.....	.....	Leelanau.....	454	515	295	.....	.....	.....	.....	.....	.....
Alger.....	28	62	78	2	2	.....	.....	.....	.....	Lenawee.....	17	.....	13	3	5	.....	.....	.....	1
Allegan.....	156	106	71	.....	1	1	.....	.....	.....	Mackinac.....	990	275	227	1	2	1	.....	.....	.....
Antrim.....	96	173	184	.....	.....	.....	.....	.....	.....	Macomb.....	16	.....	.....	3	1	.....	.....	.....	.....
Arenac.....	99	118	120	.....	1	.....	.....	.....	.....	Manistee.....	24	2	22	.....	2	2	.....	.....	.....
Baraga.....	592	488	287	.....	1	.....	.....	.....	.....	Marquette.....	37	61	56	14	23	11	1	.....	1
Bay.....	119	162	92	.....	1	3	6	.....	.....	Mason.....	308	319	335	2	2	.....	.....	.....	.....
Benzie.....	140	50	.....	.....	2	1	.....	.....	.....	Mecosta.....	39	38	44	.....	.....	.....	.....	.....	.....
Berrien.....	26	6	32	4	10	1	.....	.....	.....	Menominee.....	101	101	129	3	2	8	.....	.....	.....
Calhoun.....	68	83	71	8	10	12	1	1	2	Missaukee.....	35	50	16	.....	.....	.....	.....	.....	.....
Cass.....	132	68	35	.....	.....	.....	.....	.....	.....	Monroe.....	.....	.....	14	.....	.....	.....	.....	.....	.....
Charlevoix.....	334	321	222	.....	1	1	.....	.....	.....	Muskegon.....	1	1	32	1	1	.....	.....	.....	.....
Cheboygan.....	199	132	132	.....	2	.....	.....	.....	.....	Newaygo.....	21	.....	18	.....	.....	.....	.....	.....	.....
Chippewa.....	690	449	441	8	8	7	.....	.....	.....	Oakland.....	.....	.....	10	6	2	.....	.....	.....	.....
Clare.....	25	19	3	.....	.....	.....	.....	.....	.....	Oceana.....	281	250	271	.....	.....	.....	.....	.....	.....
Crawford.....	19	4	10	.....	.....	.....	.....	.....	.....	Ogemaw.....	42	32	4	.....	.....	.....	.....	.....	.....
Delta.....	245	247	.....	8	10	3	.....	.....	.....	Ontonagon.....	2	27	59	2	1	.....	.....	.....	.....
Dickinson.....	15	54	.....	6	7	.....	.....	.....	.....	Osceola.....	21	16	24	.....	.....	.....	.....	.....	.....
Emmet.....	890	793	914	2	3	.....	.....	.....	.....	Ottawa.....	18	5	51	.....	1	1	1	.....	.....
Genesee.....	1	8	17	9	6	4	.....	.....	.....	Presque Isle.....	4	18	13	.....	.....	.....	.....	.....	.....
Gladwin.....	9	.....	10	.....	.....	.....	.....	.....	.....	Saginaw.....	141	130	232	6	3	2	1	.....	.....
Gogebic.....	35	58	1	.....	2	3	.....	.....	.....	St. Clair.....	15	1	13	.....	.....	.....	.....	.....	.....
Grand Traverse.....	37	37	35	2	4	.....	.....	.....	.....	St. Joseph.....	.....	.....	.....	.....	.....	2	.....	.....	.....
Houghton.....	8	18	10	39	63	11	.....	.....	.....	Schoolcraft.....	35	32	42	.....	.....	.....	.....	.....	.....
Isabella.....	47	56	50	.....	.....	.....	.....	.....	.....	Tuscola.....	38	50	61	.....	.....	.....	.....	.....	.....
Jackson.....	502	665	355	.....	.....	.....	.....	.....	.....	Van Buren.....	112	67	59	2	.....	.....	.....	.....	.....
Kalamazoo.....	4	.....	.....	12	6	6	.....	.....	.....	Washtenaw.....	4	.....	4	20	15	6	1	3	14
Kalkaska.....	4	.....	.....	9	2	5	.....	.....	.....	Wayne.....	41	16	11	23	2	10	30	2	2
Kent.....	4	46	21	.....	.....	.....	.....	.....	.....	Wexford.....	34	.....	.....	1	3	1	.....	.....	.....
Lake.....	4	12	.....	21	7	10	4	.....	9	Remainder of state.....	37	10	49	17	27	7	4	3	8

¹ Includes 1 Indian specially enumerated in 1890, not credited to any county, and 56 Indians in Manistowick County, annexed to Charlevoix and Leelanau Counties in 1896.

PROPORTION OF FOREIGN-BORN WHITE AND NATIVE WHITE OF FOREIGN OR MIXED PARENTAGE OF MICHIGAN, BY COUNTIES: 1910.

PER CENT OF NATIVE WHITE OF FOREIGN OR MIXED PARENTAGE IN TOTAL POPULATION.

PER CENT OF FOREIGN-BORN WHITE IN TOTAL POPULATION.

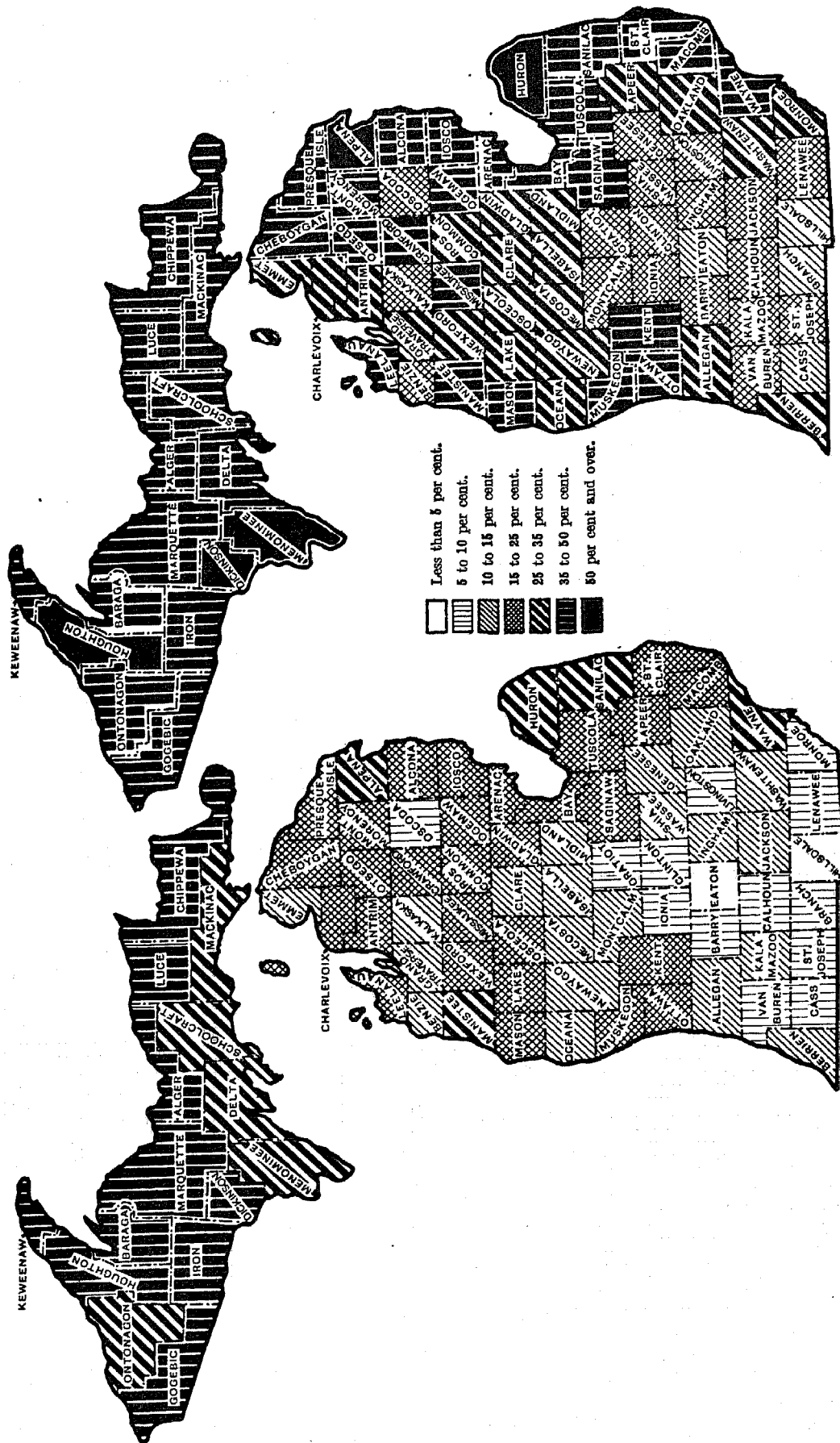


TABLE I.—COMPOSITION AND CHARACTERISTICS OF THE

SUBJECT.	Berrien.	Branch.	Calhoun.	Cass.	Charle-voix. ¹	Cheboygan.	Chippewa. ¹	Clare.	Clinton.	Crawford.	Delta.
POPULATION											
Total population, 1910	53,822	25,605	56,638	20,624	18,157	17,872	24,472	9,240	23,129	3,934	30,108
1900	49,165	27,811	49,315	20,876	13,956	15,516	21,338	8,360	25,136	2,943	23,881
1890	41,285	26,791	43,501	20,953	9,686	11,986	12,019	7,558	26,509	2,902	15,330
1880	36,785	27,941	38,452	22,009	5,115	6,524	5,248	4,187	28,100	1,159	6,812
1870	35,104	26,226	36,569	21,094	1,724	2,196	1,689	366	22,845		2,542
Increase, 1900-1910	4,457	-2,206	7,323	-252	5,201	2,356	3,134	880	-2,007	991	6,227
Per cent of increase	9.1	-7.9	14.8	-1.2	37.3	15.2	14.7	10.5	-8.0	33.7	26.1
Increase, 1890-1900	7,880	1,020	5,814	-77	4,270	3,530	9,319	802	-1,873	-19	8,551
Per cent of increase	19.1	3.8	13.4	-0.4	44.1	29.5	77.5	10.6	-5.2	-0.6	55.8
Land area (square miles)	569	497	693	493	411	725	1,573	582	571	575	1,169
Population per square mile, 1910	94.2	51.5	81.7	41.8	46.6	24.7	15.6	15.9	40.5	6.8	25.8
Rural population per square mile, 1910	58.6	39.6	30.7	31.5	27.8	15.2	7.5	15.9	35.0	6.8	10.9
URBAN AND RURAL TERRITORY.											
Urban, 1910—Places of 2,500 or more in 1910	20,277	5,945	35,336	5,088	7,734	6,859	12,615		3,154		17,405
Same places in 1900	16,004	6,216	27,452	4,151	2,117	6,459	10,538		3,388		12,929
Per cent of increase, 1900-1910	26.7	-4.4	28.7	22.6	265.3	5.7	19.7		-6.9		34.6
Rural, 1910—Remainder of county in 1910	33,545	19,660	21,302	15,536	11,423	11,013	11,857	9,240	19,975	3,934	12,703
Same territory in 1900	33,161	21,595	21,863	16,725	11,839	9,027	10,800	8,360	21,748	2,943	16,952
Per cent of increase, 1900-1910	0.6	-9.0	-2.6	-7.1	-3.5	22.0	9.8	10.5	-3.2	33.7	16.9
Urban, 1900—Places of 2,500 or more in 1900	16,004	6,216	27,452	4,151	2,117	6,459	10,538		3,388		12,929
Rural, 1900—Remainder of county in 1900	33,161	21,595	21,863	16,725	13,956	9,027	10,800	8,360	21,748	2,943	16,952
Per cent in places of 2,500 or more, 1910	37.8	23.2	62.4	24.7	40.4	38.4	51.5		13.6		57.8
Per cent in places of 2,500 or more, 1900	32.6	22.4	55.7	19.9		41.8	49.4		13.6		54.1
COLOR AND NATIVITY											
White	52,879	25,551	55,871	19,048	18,734	17,639	23,730	9,212	23,090	3,913	29,821
Number in 1900	48,602	27,745	46,529	19,240	15,569	16,303	20,841	8,340	25,101	2,935	25,655
Number in 1890	40,827	26,735	42,905	19,308	9,418	11,523	11,654	7,554	26,476	2,947	16,104
Negro	713	50	690	1,444	89	34	43	3	38	2	24
Number in 1900	617	58	695	1,598	85	29	40	1	55	4	39
Number in 1890	625	59	611	1,609	45	31	17	1	53	5	6
Black	213	34	347	333	15	11	34	2	18	2	16
Mulatto	500	16	343	1,111	74	23	9	1	20		18
Ind., Chi., Jap., and all other (see Tables 1 and 16)	30	4	77	132	334	199	699	25	1	19	253
Native white—Native parentage	30,886	20,764	40,225	15,480	9,750	5,954	3,605	5,355	16,451	1,584	5,983
Number in 1900	29,182	22,511	34,408	15,658	6,466	4,337	2,807	4,361	17,055	1,148	4,161
Native white—Foreign or mixed parentage	14,033	5,510	10,483	2,540	6,053	7,710	10,720	2,625	4,988	1,479	14,163
Number in 1900	12,229	3,898	9,494	2,634	4,694	6,615	7,905	2,480	5,779	1,068	10,668
Native white—Foreign parentage	8,854	1,665	5,395	1,150	2,998	4,302	7,508	1,252	2,438	814	10,139
Native white—Mixed parentage	5,184	1,845	5,088	1,390	3,055	3,408	3,211	1,373	2,550	665	4,024
Foreign-born white	7,955	1,277	5,163	1,028	2,931	3,975	9,396	1,232	1,651	850	9,675
Number in 1900	7,111	1,536	4,624	954	2,549	4,351	10,329	1,589	2,287	721	8,756
PER CENT OF TOTAL POPULATION.											
Native white—Native parentage	57.6	81.1	71.0	75.1	50.9	33.3	14.7	58.0	71.1	40.3	19.9
Per cent in 1900	59.3	80.2	69.8	75.0	46.0	28.0	12.2	52.2	67.8	38.9	17.4
Native white—Foreign or mixed parentage	26.2	13.7	18.5	12.3	31.6	43.1	43.8	28.4	21.6	37.6	47.0
Per cent in 1900	24.9	14.0	19.3	12.8	32.9	42.6	37.0	29.3	23.0	36.3	44.7
Foreign-born white	14.8	5.0	9.1	5.0	15.3	22.2	38.4	13.3	7.1	21.6	32.1
Per cent in 1900	14.6	5.6	9.4	4.6	18.5	28.0	42.4	18.5	9.1	24.5	36.7
Negro	1.3	0.2	1.2	7.0	0.5	0.2	0.2	(2)	0.2	0.1	0.1
Per cent in 1900	1.3	0.2	1.4	7.5	0.5	0.2	0.2	(2)	0.1	0.1	0.2
FOREIGN NATIONALITIES											
FOREIGN-BORN WHITE: Born in—											
Austria	111	12	99		176	36	242	3	25	44	465
Belgium	50		37		3	36	3		12		270
Canada—French	55	16	57	12	145	817	828	42	20	93	2,489
Canada—Other	733	108	1,436	177	1,269	1,689	5,659	733	463	181	835
Denmark	45	5	40	10	61	7	32	1	1	189	226
England	381	233	935	114	165	179	415	72	276	42	159
Finland	6		3	3	18	10	697		1	20	688
France	37	3	36	3	4	12	25	2	14	7	46
Germany	3,850	567	1,263	344	406	690	223	207	704	81	822
Greece	6	2	56		23	3	71				5
Holland	95	11	69		24	55	19	9	11	4	29
Hungary	36	11	17	39	24	1	11				8
Ireland	221	111	380	87	170	148	255	43	69	17	308
Italy	102	72	105	2			291	1	1		22
Norway	58	15	21	12	83	56	49	11		13	583
Russia	1,586	19	165	127	162	64	233	60	4	55	237
Scotland	81	26	179	23	54	57	186	11	35	4	55
Sweden	315	8	90	39	76	142	146	20	7	70	2,309
Switzerland	56	8	54	4	11	7	7			2	30
Turkey	12	4	49	3	9		84		11		12
Wales	12	1	14	3	1	3	5		1		12
Other foreign countries	107	5	61	2	16	9	15	5	3	6	75
NATIVE WHITE: Both parents born in—											
Austria	96	9	7	1	130	9	174		3	19	89
Canada—French	66	9	39	9	165	954	640	25	3	95	2,815
Canada—Other	186	48	381	46	770	1,095	3,758	454	151	180	488
Denmark	32	2	36	3	32	6	26	1		168	189
England	329	222	822	130	149	122	134	48	292	40	93
France	33	13	31	4	7	22	9	4	69		28
Germany	5,182	951	2,164	526	600	1,001	351	299	1,516	98	1,251
Holland	94	3	88	18	62	9	38	28	10		17
Hungary	15	2	6	3	12	1	13				4
Ireland	474	172	815	184	287	175	239	67	134	26	598
Italy	62	10	25	4			116				23
Norway	36	3	16	4	76	38	18	17	2	3	388
Russia	781	39	12	28	84	30	105	72	2	11	82
Scotland	50	27	104	27	39	35	55	9	18	6	62
Sweden	302	4	50	20	74	168	86	19	16	26	1,915
Switzerland	36	14	36	3	6	16	4	18	12	10	8
All others of foreign parentage	1,080	137	763	140	505	621	1,742	191	210	180	2,093

¹ For changes in boundaries, etc., see page 625.

² Less than one-tenth of 1 per cent.

TABLE I.—COMPOSITION AND CHARACTERISTICS OF THE

SUBJECT.	Dickinson. ¹	Eaton.	Emmett. ¹	Genesee.	Gladwin.	Gogebic. ¹	Grand Traverse.	Gratiot.	Hillsdale.	Houghton. ¹	Huron.
POPULATION											
Total population, 1910.....	20,524	30,499	18,561	64,555	8,413	23,333	23,784	28,820	29,673	88,098	34,758
1900.....	17,890	31,668	15,931	41,804	6,564	16,738	20,479	29,889	29,805	66,063	34,162
1890.....		32,094	8,756	39,430	4,208	13,166	13,355	23,668	30,600	35,389	28,545
1880.....		31,225	6,639	39,220	1,127		8,422	21,936	32,723	22,473	20,089
1870.....		25,171	1,211	33,900	(²)		4,443	11,810	31,684	13,879	9,049
Increase, 1900-1910.....	2,634	-1,169	2,630	22,751	1,849	6,595	3,305	-1,069	-192	22,035	596
Per cent of increase.....	14.7	-3.7	16.5	54.4	28.2	39.4	16.1	-3.6	-0.6	33.4	1.7
Increase, 1890-1900.....		-426	7,175	2,374	2,356	3,572	7,124	1,221	-795	30,674	5,617
Per cent of increase.....		-1.3	81.9	6.0	58.0	27.1	53.3	4.3	-2.6	86.7	19.7
Land area (square miles).....	776	571	485	655	519	1,133	467	579	597	1,019	864
Population per square mile, 1910.....	26.4	53.4	38.3	98.6	16.2	20.6	50.9	49.8	49.7	86.5	40.7
Rural population per square mile, 1910.....	8.2	39.8	28.4	39.7	16.2	5.2	25.0	45.0	41.3	60.1	40.7
URBAN AND RURAL TERRITORY.											
Urban, 1910—Places of 2,500 or more in 1910.....	14,190	7,779	4,778	38,550		17,404	12,115	2,757	5,001	26,842	
Same places in 1900.....	13,412	6,253	6,285	13,103		13,616	9,407	2,047	4,151	17,720	
Per cent of increase, 1900-1910.....	5.8	24.4	-9.6	194.2		27.8	28.8	34.7	20.5	51.5	
Rural, 1910—Remainder of county in 1910.....	6,334	22,720	13,783	26,005	8,413	5,929	11,669	26,063	24,672	61,256	34,758
Same territory in 1900.....	4,478	25,415	10,646	28,701	6,564	3,122	11,072	27,842	25,714	48,343	34,162
Per cent of increase, 1900-1910.....	41.4	-10.6	29.5	-9.4	28.2	89.9	5.4	-6.4	-4.1	26.7	1.7
Urban, 1900—Places of 2,500 or more in 1900.....	13,412	4,092	5,285	13,103		13,616	9,407		4,151	20,317	
Rural, 1900—Remainder of county in 1900.....	4,478	27,576	10,646	28,701	6,564	3,122	11,072	29,889	25,714	45,746	34,162
Per cent in places of 2,500 or more, 1910.....	69.1	25.5	25.7	59.7		74.6	50.7	9.6	16.9	30.5	
Per cent in places of 2,500 or more, 1900.....	75.0	12.9	33.2	31.3		81.3	45.9		13.9	30.8	
COLOR AND NATIVITY											
White.....	20,494	30,424	17,625	64,129	8,367	23,292	23,714	28,726	29,647	87,990	34,750
Number in 1900.....	17,821	31,590	16,067	41,521	6,555	16,673	20,899	23,770	29,820	65,938	34,158
Number in 1890.....		33,009	7,816	39,170	4,190	13,153	13,231	23,550	30,002	35,340	23,530
Negro.....	9	74	44	416	37	6	32	92	22	61	8
Number in 1900.....	8	75	68	277	1	5	39	119	35	44	10
Number in 1890.....		78	26	239	8	9	59	138	48	28	7
Black.....	1	52	7	367	33	4	12	28	13	48	3
Mulatto.....	8	22	37	49	4	2	20	64	9	13	5
Ind., Chi., Jap., and all other (see Tables I and 16).....	21	1	892	10	9	35	38	2	4	47	
Native white—Native parentage.....	1,964	25,193	10,373	38,744	4,182	1,595	13,576	21,671	25,248	9,446	6,861
Number in 1900.....	1,621	25,081	8,223	25,408	2,670	1,246	10,895	22,123	24,300	5,458	4,421
Native white—Foreign or mixed parentage.....	10,271	3,901	4,799	16,077	2,706	10,523	6,795	5,053	3,415	45,211	18,072
Number in 1900.....	7,777	4,287	4,055	10,755	2,375	7,187	5,889	5,333	5,711	32,393	18,049
Native white—Foreign parentage.....	8,642	1,581	2,479	7,890	1,337	9,212	3,447	2,001	1,470	35,761	11,151
Native white—Mixed parentage.....	1,629	2,320	2,320	8,187	1,369	1,311	3,348	3,052	1,945	9,450	6,921
Foreign-born white.....	8,259	1,330	2,453	9,308	1,479	11,174	3,343	1,072	986	33,333	9,817
Number in 1900.....	8,523	1,682	2,409	5,363	1,510	8,280	3,615	2,284	1,309	23,087	11,682
PER CENT OF TOTAL POPULATION.											
Native white—Native parentage.....	9.6	82.6	55.9	60.0	49.7	6.8	57.1	75.2	85.1	10.7	19.7
Per cent in 1900.....	8.5	81.0	54.1	60.8	40.7	7.4	53.2	74.0	83.0	8.8	12.9
Native white—Foreign or mixed parentage.....	50.0	12.8	25.9	24.9	32.2	45.1	28.6	17.6	11.5	51.3	52.0
Per cent in 1900.....	45.5	15.5	25.3	25.7	36.2	42.8	28.8	18.0	12.4	49.0	53.8
Foreign-born white.....	40.2	4.4	13.2	14.4	17.6	47.9	14.1	6.8	3.3	37.8	28.2
Per cent in 1900.....	47.6	5.2	15.1	12.8	25.0	49.5	17.7	7.6	4.4	42.5	34.2
Negro.....	(¹)	0.2	0.2	0.6	0.4	(²)	0.1	0.3	0.1	0.1	(³)
Per cent in 1900.....	(¹)	0.2	0.4	0.7	(²)	(³)	0.2	0.4	0.1	0.1	(³)
FOREIGN NATIONALITIES											
FOREIGN-BORN WHITE: Born in—											
Austria.....	1,089	3	170	353	26	1,452	467	112	1	3,333	79
Belgium.....	625	3	1	35		37	2	18	1	26	8
Canada—French.....	693	13	81	191	55	170	116	33	11	2,616	279
Canada—Other.....	293	468	1,071	4,532	810	1,222	985	165	1,477	4,919	2,919
Denmark.....	32	7	23	34	1	39	46	6	2	51	12
England.....	819	291	93	1,207	52	788	186	229	330	4,459	343
Finland.....	503	14	1	2		3,776	29	2		11,536	
France.....	36	5	3	43	5	13	16	14	7	148	15
Germany.....	356	220	537	795	211	555	594	277	246	1,723	2,804
Greece.....	4	1	6	34		2	6	4	7	65	
Holland.....	46	24	13	28	6	7	50	6	5	17	5
Hungary.....	16	57	24	403	57	319	11	66	2	921	221
Ireland.....	54	105	57	427	49	136	106	80	144	799	266
Italy.....	1,457	37	231	231		1,355	7	6	15	2,634	80
Norway.....	198	4	21	27	1	239	54	13	1	1,030	10
Russia.....	151	8	172	457	156	738	84	24		348	494
Scotland.....	16	20	40	207	20	12	52	37	21	353	251
Sweden.....	1,837	19	85	63	9	1,230	251	17	2	1,512	7
Switzerland.....	16	10	34	27	6	10	30	21	19	85	49
Turkey.....	15	11	9	38	2	41		4	1	73	7
Wales.....	11	4	3	21	2	6	7	3	2	56	73
Other foreign countries.....	20	6	9	53	13	43	7	15	4	73	17
NATIVE WHITE: Both parents born in—											
Austria.....	1,081		93	76	16	808	536	74		2,537	47
Canada—French.....	883	15	68	211	28	199	115	18	7	4,110	276
Canada—Other.....	187	168	509	2,042	581	137	598	403	74	730	3,555
Denmark.....	18	5	14	27	3	55	23	3	3	59	2
England.....	812	297	139	869	39	699	158	247	340	4,407	252
France.....	10	10	9	79	6	9	15	21	14	95	9
Germany.....	422	492	902	1,604	241	875	887	551	431	3,630	4,645
Holland.....	19	35	22	40	1	10	47	8	10	10	11
Hungary.....		7	3	39	10	164	18	10	1	314	26
Ireland.....	111	207	112	1,077	36	350	167	197	317	1,798	245
Italy.....	1,066	3	27	17		538	5	2	4	1,674	
Norway.....	153	3	26	27		208	42	6	5	930	24
Russia.....	71	2	109	129	115	477	72	15	2	302	143
Scotland.....	11	25	27	170	14	18	48	26	37	245	131
Sweden.....	2,166	22	60	62	4	1,413	165	10	6	1,439	2
Switzerland.....	7	14	41	23	9	3	28	21	11	84	20
All others of foreign parentage.....	1,625	276	345	1,398	234	3,249	522	389	208	13,408	1,806

¹ For changes in boundaries, etc., see page 625.² Gladwin, Marquette, Montmorency, Otsego, Roscommon, and Schoolcraft Counties reported together and credited to Marquette County in 1870.

STATISTICS OF POPULATION.

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POPULATION FOR THE STATE AND FOR COUNTIES—Continued.

SUBJECT.	Dickinson, ¹	Eaton.	Emmet. ¹	Genesee.	Gladwin.	Gogebic. ¹	Grand Traverse.	Gratiot.	Hillsdale.	Houghton. ¹	Huron.
SEX											
Total... Male.....	11,074	15,388	9,761	35,220	4,413	13,588	12,125	14,776	14,903	47,353	18,131
Female.....	9,450	15,113	8,800	29,335	4,000	9,745	11,659	14,044	14,770	40,745	16,627
White... Male.....	11,054	15,345	9,287	34,987	4,336	13,568	12,094	14,720	14,886	47,282	18,125
Female.....	9,440	15,079	8,338	29,142	3,981	9,724	11,020	14,006	14,761	40,708	16,625
Negro... Male.....	6	40	22	224	21	3	13	54	13	29	6
Female.....	3	34	22	192	16	3	19	38	9	32	2
MALES OF VOTING AGE											
Total number.....	5,830	9,967	5,676	23,418	2,294	7,810	7,841	8,669	9,511	25,481	9,328
Number in 1900.....	5,692	10,313	5,169	13,057	1,827	5,392	6,429	8,916	9,599	20,666	8,752
Native white—Native parentage.....	418	7,719	2,921	12,742	1,025	372	3,694	6,025	7,618	1,302	988
Number in 1900.....	566	7,022	2,761	7,494	703	547	3,178	6,213	7,554	1,118	818
Native white—Foreign or mixed parentage.....	1,006	1,489	1,180	5,554	503	893	1,834	1,602	1,363	6,113	3,545
Number in 1900.....	671	1,428	850	3,923	332	573	1,344	1,491	1,349	4,323	2,396
Native white—Foreign parentage.....	848	695	700	3,215	268	741	1,087	758	641	5,133	2,721
Native white—Mixed parentage.....	158	794	480	2,339	235	152	747	844	722	980	824
Foreign-born white.....	4,391	728	1,316	4,959	752	6,531	1,787	1,010	517	13,001	4,789
Number in 1900.....	4,611	934	1,253	3,558	738	4,449	1,869	1,180	669	15,131	5,538
Negro.....	5	31	16	152	12	2	11	30	9	24	6
Number in 1900.....	6	20	21	76	1	3	20	32	20	26	2
Indian, Chinese, Japanese, and all other.....	10		243	9	2	12	15	2	4	41	
PER CENT OF TOTAL.											
Native white—Native parentage.....	7.2	77.4	51.5	54.4	44.7	4.8	50.3	69.5	80.1	5.1	10.6
Native white—Foreign or mixed parentage.....	17.3	14.9	20.8	23.7	21.9	11.4	25.0	18.5	14.3	24.0	38.0
Foreign-born white.....	75.3	7.3	23.2	21.2	32.8	83.6	24.3	11.7	5.4	70.6	51.3
Negro.....	0.1	0.3	0.3	0.6	0.5	(*)	0.1	0.3	0.1	0.1	0.1
CITIZENSHIP OF FOREIGN-BORN WHITE.											
Naturalized.....	2,672	458	731	2,439	430	2,375	1,181	642	355	7,742	3,287
Having first papers.....	556	18	71	247	56	778	112	55	13	2,875	432
Alien.....	948	133	263	2,005	120	2,780	158	165	39	6,562	692
Unknown.....	217	119	251	267	146	598	336	168	110	822	378
ILLITERACY											
ILLITERATE MALES OF VOTING AGE.											
Total number illiterate.....	469	183	286	426	134	536	251	251	124	1,770	623
Per cent illiterate.....	8.0	1.8	5.0	1.8	5.8	6.9	3.4	2.9	1.3	6.9	6.7
Per cent in 1900.....	14.2	2.6	4.3	5.0	7.0	7.5	4.4	3.5	1.8	9.7	8.2
Native white, number illiterate.....	43	103	68	146	52	16	131	194	95	114	210
Per cent illiterate.....	3.0	1.1	1.7	0.8	3.4	1.3	2.4	2.5	1.1	1.5	4.6
Foreign-born white, number illiterate.....	423	79	158	273	78	512	112	55	29	1,654	413
Per cent illiterate.....	9.6	10.9	11.9	5.5	10.4	7.8	6.3	5.4	5.6	9.2	8.6
Negro, number illiterate.....		1	3	2	2		2	1		1	
Per cent illiterate.....				1.3							
PERSONS 10 YEARS OLD AND OVER.											
Total number.....	14,980	25,097	14,516	53,559	6,232	17,048	19,093	22,645	24,475	64,259	26,163
Number illiterate.....	852	287	553	714	243	950	484	408	234	3,651	1,288
Per cent illiterate.....	5.7	1.1	3.8	1.3	3.9	5.6	2.5	1.8	1.0	5.7	4.8
Native white, number.....	6,943	23,714	11,372	44,259	4,753	6,194	15,719	20,635	23,471	31,758	16,600
Number illiterate.....	81	169	117	262	94	29	235	209	186	273	402
Per cent illiterate.....	1.2	0.7	1.0	0.6	2.0	0.5	1.5	1.4	0.8	0.9	2.4
Foreign-born white, number.....	8,014	1,317	2,412	8,933	1,445	10,817	3,315	1,636	981	32,404	9,555
Number illiterate.....	765	117	269	439	142	903	228	105	47	3,369	866
Per cent illiterate.....	9.5	8.9	11.2	4.9	9.8	8.3	6.9	5.4	4.8	10.4	9.1
Negro, number.....	6	65	36	357	28	6	23	72	19	53	8
Number illiterate.....		1	3	7	3		4	3	1	2	
Per cent illiterate.....				2.0							
PERSONS 10 TO 20 YEARS, INCLUSIVE.											
Total number.....	4,901	5,347	4,000	11,813	2,039	4,977	4,919	5,801	5,416	19,276	8,525
Number illiterate.....	34	21	24	32	10	54	14	14	13	209	76
Per cent illiterate.....	0.7	0.4	0.6	0.3	0.5	1.1	0.3	0.2	0.2	1.1	0.9
SCHOOL AGE AND ATTENDANCE											
Total number 6 to 20 years, inclusive.....	6,999	7,396	5,621	15,737	2,892	7,204	6,769	8,182	7,443	27,996	11,889
Number attending school.....	5,045	5,302	4,112	9,820	2,133	4,968	4,894	6,223	5,332	19,721	8,558
Per cent attending school.....	72.1	71.7	73.2	62.4	73.8	69.0	72.3	76.1	71.5	70.4	72.0
Number 6 to 9 years.....	2,098	2,049	1,621	3,924	853	2,227	1,850	2,381	2,027	8,720	3,364
Number attending school.....	1,917	1,714	1,419	3,360	684	2,058	1,632	2,173	1,549	7,815	2,816
Number 10 to 14 years.....	2,375	2,409	1,915	4,530	1,067	2,273	2,246	2,735	2,452	9,032	4,076
Number attending school.....	2,288	2,304	1,833	4,356	1,033	2,190	2,163	2,689	2,335	8,670	3,978
Number 15 to 17 years.....	1,319	1,450	1,064	3,029	550	1,285	1,349	1,574	1,495	5,060	2,352
Number attending school.....	689	1,004	664	1,637	361	601	875	1,107	1,102	2,590	1,453
Number 18 to 20 years.....	1,207	1,488	1,021	4,254	422	1,419	1,324	1,492	1,469	5,184	2,057
Number attending school.....	151	280	196	467	55	119	224	254	336	646	281
PERSONS 6 TO 14 YEARS, INCLUSIVE.											
Total number.....	4,473	4,458	3,536	8,454	1,920	4,500	4,096	5,116	4,479	17,752	7,440
Number attending school.....	4,205	4,013	3,252	7,716	1,717	4,248	3,795	4,862	3,834	16,485	6,794
Per cent attending school.....	94.0	90.1	92.0	91.3	89.4	94.4	92.7	95.0	86.7	92.9	91.3
Native white—Native parentage, number.....	464	3,985	2,124	5,911	1,036	344	2,732	4,239	4,182	2,790	1,940
Number attending school.....	428	3,985	1,981	5,407	928	324	2,527	4,018	3,615	2,576	1,742
Per cent attending school.....	92.2	90.0	93.3	91.5	89.6	94.2	92.5	94.8	86.4	92.3	89.8
Native white—Foreign or mixed parentage, number.....	3,618	441	1,115	2,119	802	3,672	1,315	801	288	13,584	5,079
Number attending school.....	3,424	405	1,014	1,945	721	3,488	1,223	774	290	12,662	4,689
Per cent attending school.....	94.6	91.8	90.9	91.8	89.9	95.0	93.0	96.6	90.3	93.2	92.3
Foreign-born white, number.....	390	24	102	368	72	482	44	59	7	1,370	421
Number attending school.....	353	19	88	317	61	434	40	53	7	1,239	363
Per cent attending school.....	90.5		86.3	86.1	84.0	90.0				90.4	86.2
Negro, number.....	8	8	8	56	9	1	3	17	2	4	
Number attending school.....		8	8	47	6	1	3	17	2	4	
Per cent attending school.....											
DWELLINGS AND FAMILIES											
Dwellings, number.....	3,678	8,410	4,273	14,224	1,870	3,661	5,319	7,397	8,181	13,984	7,221
Families, number.....	3,865	8,596	4,343	15,435	1,879	3,999	5,467	7,483	8,377	16,261	7,305

¹ Less than one-tenth of 1 per cent.

² Native whites having both parents born in countries other than specified, and also those having both parents of foreign birth but born in different countries.

TABLE I.—COMPOSITION AND CHARACTERISTICS OF THE

SUBJECT.	Ingham.	Ionia.	Iosco.	Iron. ¹	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.	Keweenaw. ¹	Lake.
POPULATION											
Total population, 1910.....	53,810	33,550	9,753	15,164	23,029	53,426	60,427	8,097	159,145	7,156	4,939
1900.....	39,818	34,329	10,246	8,990	22,784	48,222	44,310	7,133	120,714	3,217	4,957
1890.....	37,686	32,801	15,224	4,432	18,784	45,031	39,273	5,160	109,922	2,594	6,505
1880.....	39,676	33,872	6,873	.....	12,159	42,031	34,342	2,937	73,253	4,270	3,233
1870.....	25,268	27,681	3,103	.....	4,113	36,047	32,054	424	50,403	4,205	548
Increase, 1900-1910.....	13,992	-779	-493	6,174	245	5,204	16,117	964	29,431	3,939	-18
Per cent of increase.....	33.9	-2.3	-4.8	68.7	1.1	10.8	36.4	13.5	22.7	122.4	-0.4
Increase, 1890-1900.....	2,162	1,528	-4,978	4,558	4,000	3,191	5,037	1,973	19,792	323	-1,548
Per cent of increase.....	5.7	4.7	-32.7	102.8	21.3	7.1	12.8	38.2	18.0	11.2	-23.8
Land area (square miles).....	553	579	570	1,200	572	707	562	573	860	554	579
Population per square mile, 1910.....	96.4	57.9	17.1	12.6	40.3	75.6	107.5	14.1	185.1	12.9	8.5
Rural population per square mile, 1910.....	39.9	42.1	17.1	9.5	33.3	31.1	37.3	14.1	54.2	12.9	8.5
URBAN AND RURAL TERRITORY.											
Urban, 1910—Places of 2,500 or more in 1910.....	31,229	9,149	.....	3,775	3,972	31,433	39,437	.....	112,571	.....	.....
Same places in 1900.....	16,485	8,491	.....	3,231	3,662	25,180	24,404	.....	87,565	.....	.....
Per cent of increase, 1900-1910.....	89.4	7.7	.....	16.8	8.5	24.8	61.6	.....	28.6	.....	.....
Rural, 1910—Remainder of county in 1910.....	22,081	24,401	9,753	11,389	19,057	21,993	20,990	8,097	46,574	7,156	4,939
Same territory in 1900.....	23,333	25,838	10,246	5,759	19,122	23,042	19,906	7,133	42,149	3,217	4,957
Per cent of increase, 1900-1910.....	-5.4	-5.6	-4.8	97.8	-0.3	-4.6	5.4	13.5	10.5	122.4	-0.4
Urban, 1900—Places of 2,500 or more in 1900.....	16,485	8,491	.....	3,231	3,662	25,180	24,404	.....	87,565	.....	.....
Rural, 1900—Remainder of county in 1900.....	23,333	25,838	10,246	5,759	19,122	23,042	19,906	7,133	42,149	3,217	4,957
Per cent in places of 2,500 or more, 1910.....	58.6	27.3	.....	24.9	17.2	58.8	65.3	.....	70.7	.....	.....
Per cent in places of 2,500 or more, 1900.....	41.4	24.7	.....	35.9	16.1	52.2	55.1	.....	67.5	.....	.....
COLOR AND NATIVITY											
White.....	52,899	33,456	9,701	15,152	22,392	53,013	59,624	8,000	158,387	7,153	4,930
Number in 1900.....	39,402	34,253	10,181	8,972	21,952	47,712	43,744	7,078	129,024	3,218	4,942
Number in 1890.....	37,203	32,703	15,161	4,420	18,304	44,499	38,702	5,146	109,183	2,893	6,502
Negro.....	404	90	5	8	135	399	790	23	729	3	5
Number in 1900.....	410	95	9	13	167	504	664	14	681	1	3
Number in 1890.....	452	92	13	9	155	525	645	12	720	1	3
Black.....	195	55	2	5	83	314	464	10	506	3	6
Mulatto.....	209	35	3	3	82	85	326	13	223	.....	.....
Ind., Chi., Jap., and all other (see Tables I and 16).....	7	4	47	4	502	14	13	74	29	.....	4
Native white—Native parentage.....	36,077	23,405	2,785	1,653	13,585	34,822	36,219	5,281	65,909	585	2,633
Number in 1900.....	26,040	23,577	1,940	1,312	12,383	30,350	26,340	4,416	62,544	272	2,617
Native white—Foreign or mixed parentage.....	11,382	7,116	4,529	6,628	6,116	12,227	14,569	1,769	56,874	3,772	1,420
Number in 1900.....	8,866	7,348	4,888	3,359	6,800	11,616	10,884	1,651	45,764	1,443	1,400
Native white—Foreign parentage.....	5,903	3,336	2,715	5,346	2,909	6,744	8,851	643	37,858	2,739	797
Native white—Mixed parentage.....	5,479	3,780	1,814	1,280	3,207	5,483	5,718	1,126	18,966	633	622
Foreign-born white.....	5,440	2,935	2,387	6,873	2,691	5,964	8,836	950	35,604	3,196	877
Number in 1900.....	4,184	3,308	3,358	4,295	3,369	5,748	6,580	1,007	30,716	1,496	916
PER CENT OF TOTAL POPULATION.											
Native white—Native parentage.....	67.7	69.8	28.6	10.9	59.0	65.2	59.9	65.2	41.4	8.2	53.3
Per cent in 1900.....	69.8	68.7	18.9	14.7	54.3	62.9	59.4	61.9	40.5	8.5	52.8
Native white—Foreign or mixed parentage.....	21.4	21.2	46.4	43.7	26.6	22.9	24.1	21.8	35.7	47.1	28.8
Per cent in 1900.....	22.3	21.4	47.7	37.4	27.2	24.1	24.6	23.1	35.3	45.0	28.4
Foreign-born white.....	10.2	8.7	24.5	45.3	11.7	11.2	14.6	11.7	22.4	44.7	17.8
Per cent in 1900.....	10.4	9.6	32.7	47.8	14.8	11.9	14.7	14.1	23.7	46.5	18.5
Negro.....	0.8	0.3	0.1	0.1	0.6	0.7	1.3	0.3	0.5	(²)	0.1
Per cent in 1900.....	1.0	0.3	0.1	0.1	0.7	1.0	1.3	0.2	0.5	(²)	0.1
FOREIGN NATIONALITIES											
FOREIGN-BORN WHITE: Born in—											
Austria.....	76	30	16	1,028	23	72	208	7	598	508	82
Belgium.....	80	3	1	30	6	31	21	1	52	.....	5
Canada—French.....	70	65	229	220	42	44	85	19	277	128	22
Canada—Other.....	1,822	1,071	1,181	209	1,793	1,319	893	354	4,268	42	269
Denmark.....	25	50	1	59	21	15	28	18	439	9	3
England.....	642	400	99	301	149	1,183	732	66	1,328	640	57
Finland.....	9	18	129	1,831	3	4	3	1	110	1,200	3
France.....	14	25	4	13	12	22	25	5	67	5	3
Germany.....	1,804	752	538	282	356	1,470	1,121	77	5,404	87	195
Greece.....	30	1	.....	2	3	48	20	.....	31	.....	7
Holland.....	42	.....	5	.....	.....	22	41	.....	.....	1	.....
Hungary.....	105	8	2	212	1	16	202	2	14,089	158	2
Ireland.....	216	217	47	69	149	558	431	42	1,231	22	14
Italy.....	128	25	1	813	4	68	43	125	369	144	73
Norway.....	18	11	8	114	2	29	24	12	213	120	14
Russia.....	232	23	35	556	11	707	270	69	3,631	32	37
Scotland.....	123	67	32	35	52	155	157	9	287	15	11
Sweden.....	83	67	103	999	11	49	121	91	1,384	73	64
Switzerland.....	40	40	4	11	48	26	47	7	187	3	13
Turkey.....	155	.....	1	18	.....	45	2	2	200	.....	.....
Wales.....	11	8	.....	3	.....	32	9	1	35	.....	2
Other foreign countries.....	27	12	1	58	1	49	43	1	198	9	4
NATIVE WHITE: Both parents born in—											
Austria.....	39	11	7	485	8	23	32	1	438	327	89
Canada—French.....	49	38	277	325	28	37	70	12	186	179	18
Canada—Other.....	510	453	780	141	1,201	415	254	178	1,764	25	133
Denmark.....	20	68	7	97	27	12	30	8	410	3	2
England.....	582	374	78	327	142	994	616	66	963	410	33
France.....	32	13	2	2	38	26	32	1	95	3	3
Germany.....	2,910	1,215	899	469	666	2,524	1,814	101	8,004	191	193
Holland.....	53	31	4	4	1	32	3,796	44	16,365	.....	5
Hungary.....	6	.....	.....	124	.....	2	29	.....	51	50	.....
Ireland.....	568	453	54	136	184	1,226	933	42	2,485	92	19
Italy.....	23	8	.....	145	6	24	19	.....	1,86	82	49
Norway.....	18	6	4	82	4	8	22	11	114	95	12
Russia.....	75	4	27	401	7	346	81	5	1,606	66	10
Scotland.....	115	47	11	20	33	101	140	10	245	4	9
Sweden.....	70	62	133	1,035	6	28	100	56	1,309	58	68
Switzerland.....	28	34	.....	50	16	28	4	4	164	3	7
All others of foreign parentage.....	805	518	432	1,553	508	930	855	104	3,443	1,151	147

¹ For changes in boundaries, etc., see page 625.² Less than one-tenth of 1 per cent.

POPULATION FOR THE STATE AND FOR COUNTIES—Continued.

SUBJECT.	Ingham.	Ionia.	Iosco.	Iron. ¹	Isabella.	Jackson.	Kalama-zoo.	Kalkaska.	Kent.	Kewee-naw. ¹	Lake.
SEX											
Total..Male.....	28,086	16,954	5,085	9,050	11,916	27,278	30,039	4,481	80,321	4,186	2,626
Female.....	25,224	16,596	4,668	6,114	11,113	26,148	30,388	3,616	78,824	2,970	2,313
White...Male.....	27,877	16,893	5,056	9,040	11,577	27,048	29,603	4,423	79,905	4,183	2,623
Female.....	25,022	16,553	4,645	6,112	10,815	26,965	30,021	3,577	78,482	2,970	2,307
Negro...Male.....	203	57	2	6	70	216	425	15	390	3	1
Female.....	201	33	3	2	65	183	365	8	339	.....	4
MALES OF VOTING AGE											
Total number.....	18,099	11,063	2,710	5,425	6,568	18,110	19,362	2,723	49,476	2,365	1,486
Number in 1900.....	12,307	11,004	2,751	3,583	6,266	16,751	13,917	2,569	38,037	1,084	1,561
Native white—Native parentage.....	11,617	7,058	667	387	3,534	10,993	10,993	1,522	19,514	48	730
Number in 1900.....	7,808	7,097	522	472	3,272	9,431	7,933	1,402	14,850	56	725
Native white—Foreign or mixed parentage.....	3,546	2,413	786	303	1,414	3,867	3,942	535	12,155	462	280
Number in 1900.....	2,357	2,138	692	483	1,118	3,265	2,719	470	8,693	213	285
Native white—Foreign parentage.....	1,933	1,249	542	640	793	2,353	2,529	279	8,543	404	166
Native white—Mixed parentage.....	1,613	1,184	244	163	621	1,514	1,413	256	3,612	58	114
Foreign-born white.....	2,797	1,540	1,241	4,225	1,438	3,060	4,126	633	17,479	1,852	475
Number in 1900.....	1,919	1,669	1,589	2,079	1,655	2,827	3,012	671	14,212	835	604
Negro.....	133	48	2	3	37	176	292	8	304	3	1
Number in 1900.....	190	49	2	6	45	221	201	6	255	.....	5
Indian, Chinese, Japanese, and all other.....	6	4	14	4	145	14	9	25	24	.....	2
PER CENT OF TOTAL.											
Native white—Native parentage.....	64.2	63.8	24.6	7.1	53.8	60.7	56.8	55.9	39.4	2.0	49.1
Native white—Foreign or mixed parentage.....	19.6	21.8	29.0	14.8	21.5	21.4	20.4	19.6	24.6	19.5	18.8
Foreign-born white.....	15.5	13.9	45.8	77.9	21.9	16.9	21.3	23.2	35.3	78.3	31.9
Negro.....	0.7	0.4	0.1	0.1	0.6	1.0	1.5	0.3	0.6	0.1	0.1
CITIZENSHIP OF FOREIGN-BORN WHITE.											
Naturalized.....	1,525	882	802	1,444	988	1,758	2,125	359	9,809	821	313
Having first papers.....	164	31	109	395	93	178	182	16	1,396	270	32
Alien.....	722	239	133	2,121	129	732	866	223	3,775	671	65
Unknown.....	386	398	197	265	228	392	953	30	2,499	90	65
ILLITERACY											
ILLITERATE MALES OF VOTING AGE.											
Total number illiterate.....	338	185	152	729	327	406	404	227	1,319	104	71
Per cent illiterate.....	1.9	1.7	5.6	13.4	5.0	2.2	2.1	8.3	2.7	4.4	4.8
Per cent in 1900.....	2.8	2.9	9.1	20.6	7.4	1.9	2.5	6.4	3.9	13.4	6.8
Native white, number illiterate.....	105	108	36	20	159	86	198	60	211	9	25
Per cent illiterate.....	0.7	1.1	2.5	1.7	3.2	0.6	1.3	2.9	0.7	1.8	2.5
Foreign-born white, number illiterate.....	220	73	107	708	100	298	196	147	1,083	95	45
Per cent illiterate.....	7.9	4.7	8.6	16.8	7.0	9.7	4.8	23.2	6.2	5.1	9.5
Negro, number illiterate.....	13	3	1	1	9	15	7	2	15	.....	.....
Per cent illiterate.....	9.8	.....	.....	.....	.....	8.5	2.4	4.9	.....	.....	.....
PERSONS 10 YEARS OLD AND OVER.											
Total number.....	44,788	27,950	7,450	11,125	17,775	44,581	50,271	6,364	128,857	5,084	3,826
Number illiterate.....	621	329	281	1,082	573	713	846	326	2,964	218	129
Per cent illiterate.....	1.4	1.2	3.8	9.7	3.2	1.6	1.7	5.1	2.3	4.3	3.4
Native white, number.....	39,079	24,964	5,046	4,442	14,611	38,356	41,112	5,354	93,621	1,986	2,964
Number illiterate.....	169	196	71	39	264	190	352	98	398	25	41
Per cent illiterate.....	0.4	0.8	1.4	0.9	1.8	0.4	0.9	1.8	0.4	1.3	1.4
Foreign-born white, number.....	5,335	2,897	2,363	6,671	2,681	5,854	8,481	936	34,566	3,095	853
Number illiterate.....	421	126	191	1,042	185	517	459	190	2,521	193	87
Per cent illiterate.....	7.9	4.3	8.1	15.6	5.8	8.8	5.4	20.3	7.3	6.2	10.2
Negro, number.....	347	85	5	1	106	357	655	13	644	3	5
Number illiterate.....	31	6	.....	1	15	29	31	3	35	.....	.....
Per cent illiterate.....	8.9	.....	.....	.....	14.2	8.1	4.7	5.4	.....	.....	.....
PERSONS 10 TO 20 YEARS, INCLUSIVE.											
Total number.....	10,276	6,363	2,382	2,930	5,136	9,407	11,381	1,760	31,804	1,403	1,124
Number illiterate.....	45	22	14	68	33	55	48	38	210	15	9
Per cent illiterate.....	0.4	0.3	0.6	2.3	0.6	0.6	0.4	2.2	0.7	1.1	0.8
SCHOOL AGE AND ATTENDANCE											
Total number 6 to 20 years, inclusive.....	13,425	8,518	3,301	4,315	7,136	12,844	15,155	2,440	43,194	2,096	1,567
Number attending school.....	8,835	5,556	2,389	2,810	5,240	8,931	9,987	1,723	28,389	1,385	1,083
Per cent attending school.....	65.8	65.2	72.4	65.1	73.4	69.5	65.9	70.6	65.7	65.1	69.8
Number 6 to 9 years.....	3,149	2,155	919	1,385	2,000	3,437	3,774	680	11,390	693	443
Number attending school.....	2,374	1,776	739	1,223	1,729	3,010	3,275	618	9,718	610	385
Number 10 to 14 years.....	4,157	2,607	1,130	1,220	2,378	4,073	4,677	794	13,712	636	533
Number attending school.....	3,081	2,450	1,088	1,156	2,320	3,928	4,420	765	13,123	611	506
Number 15 to 17 years.....	2,950	1,738	719	733	1,425	2,546	3,061	488	8,669	339	324
Number attending school.....	1,976	1,011	466	343	913	1,566	1,713	281	4,425	134	180
Number 18 to 20 years.....	3,169	2,018	533	977	1,333	2,788	3,613	478	9,423	428	267
Number attending school.....	504	319	96	88	278	427	579	59	1,123	10	22
PERSONS 6 TO 14 YEARS, INCLUSIVE.											
Total number.....	7,306	4,762	2,049	2,605	4,378	7,510	8,451	1,474	25,102	1,329	976
Number attending school.....	6,355	4,226	1,827	2,379	4,049	6,933	7,695	1,383	22,841	1,221	891
Per cent attending school.....	87.0	88.7	89.2	91.3	92.5	92.4	91.1	93.8	91.0	91.9	91.3
Native white—Native parentage, number.....	5,417	3,837	667	370	2,840	5,535	5,391	1,069	10,956	188	557
Number attending school.....	4,692	3,379	582	345	2,638	5,144	4,877	1,012	9,922	166	518
Per cent attending school.....	86.6	88.1	87.3	93.2	92.9	92.9	90.5	94.7	90.6	88.3	93.0
Native white—Foreign or mixed parentage, number.....	1,696	879	1,311	1,959	1,389	1,775	2,461	363	12,591	989	380
Number attending school.....	1,496	807	1,185	1,790	1,300	1,624	2,282	340	11,543	912	338
Per cent attending school.....	88.2	91.8	90.4	91.4	93.6	91.5	92.7	93.7	91.7	92.2	88.9
Foreign-born white, number.....	128	39	61	276	25	159	493	25	1,496	152	37
Number attending school.....	105	35	54	244	24	136	445	24	1,314	143	33
Per cent attending school.....	82.0	.....	.....	88.4	.....	85.5	90.3	.....	88.4	94.1	.....
Negro, number.....	65	7	.....	.....	29	41	106	3	68	.....	2
Number attending school.....	62	5	.....	.....	26	34	91	3	61	.....	2
Per cent attending school.....	.....	.....	.....	.....	.....	.....	85.8	.....	.....	.....	.....
DWELLINGS AND FAMILIES											
Dwellings, number.....	12,930	8,533	2,205	2,403	5,373	13,345	13,846	1,902	34,254	1,066	1,170
Families, number.....	13,530	8,718	2,222	2,660	5,457	13,908	14,622	1,910	37,945	1,272	1,187

¹ Native whites having both parents born in countries other than specified, and also those having both parents of foreign birth but born in different countries.

TABLE I.—COMPOSITION AND CHARACTERISTICS OF THE

SUBJECT.	Lapeer.	Leelanau. ¹	Lenawee.	Livingston.	Luce. ¹	Mackinac. ¹	Macomb.	Manistee. ¹	Marquette. ¹	Mason.	Mecosta.
POPULATION											
Total population, 1910.....	26,033	10,608	47,307	17,736	4,004	9,249	32,606	26,688	46,739	21,832	19,466
1900.....	27,641	10,550	48,406	19,664	2,983	7,703	33,244	27,856	41,230	18,885	20,603
1890.....	29,213	7,944	48,448	20,858	2,465	7,830	31,813	24,230	39,521	16,385	19,697
1880.....	30,138	6,253	45,343	22,251	.....	2,902	31,627	12,532	25,394	10,065	13,973
1870.....	21,345	4,576	45,595	19,336	.....	1,716	27,616	6,074	15,033	3,263	5,642
Increase, 1900-1910.....	-1,608	52	-499	-1,928	1,021	1,546	-638	-1,168	5,500	2,947	-1,227
Per cent of increase.....	-5.8	0.5	-1.0	-9.8	34.2	20.1	-1.9	-4.2	13.3	15.6	-5.9
Increase, 1890-1900.....	-1,572	2,612	-42	-1,194	528	-127	1,431	3,626	1,718	2,500	996
Per cent of increase.....	-5.4	32.9	-0.1	-5.7	21.5	-1.6	4.5	15.0	4.3	15.3	5.1
Land area (square miles).....	660	338	742	568	920	1,044	472	562	1,870	494	571
Population per square mile, 1910.....	39.1	31.4	64.5	31.2	4.4	8.9	69.1	47.5	25.0	44.2	34.1
Rural population per square mile, 1910.....	33.2	31.4	50.0	31.2	4.4	8.9	52.8	25.5	7.7	25.7	26.2
URBAN AND RURAL TERRITORY.											
Urban, 1910—Places of 2,500 or more in 1910.....	3,946	.....	10,763	.....	.....	.....	7,707	12,381	32,411	9,132	4,519
Same places in 1900.....	3,297	.....	9,654	.....	.....	.....	6,676	14,260	30,248	7,166	4,686
Per cent of increase, 1900-1910.....	19.7	.....	11.5	.....	.....	.....	17.2	-13.2	7.2	27.4	-3.6
Rural, 1910—Remainder of county in 1910.....	22,087	10,608	37,144	17,736	4,004	9,249	24,899	14,307	14,328	12,700	14,947
Same territory in 1900.....	24,344	10,550	38,752	19,664	2,983	7,703	26,668	13,596	10,991	11,719	16,007
Per cent of increase, 1900-1910.....	-9.3	0.5	-4.1	-9.8	34.2	20.1	-6.6	5.2	30.4	8.4	-6.6
Urban, 1900—Places of 2,500 or more in 1900.....	3,297	.....	9,654	2,618	.....	.....	6,676	14,260	30,248	7,166	4,686
Rural, 1900—Remainder of county in 1900.....	24,344	10,550	38,752	17,146	2,983	7,703	26,668	13,596	10,991	11,719	16,007
Per cent in places of 2,500 or more, 1910.....	15.2	.....	22.5	.....	.....	.....	23.6	46.4	69.3	41.8	23.2
Per cent in places of 2,500 or more, 1900.....	11.9	.....	19.9	12.8	.....	.....	19.8	51.2	73.3	37.9	22.6
COLOR AND NATIVITY											
White.....	26,004	10,132	47,642	17,700	3,994	8,247	32,485	26,644	46,604	21,516	19,190
Number in 1900.....	27,597	10,029	48,049	19,612	2,982	7,407	35,152	27,827	41,091	18,659	20,359
Number in 1890.....	29,111	7,633	48,044	20,797	2,447	7,932	31,705	24,179	39,890	16,032	19,298
Negro.....	28	22	245	35	3	11	102	20	83	6	237
Number in 1900.....	31	12	352	52	.....	19	91	25	64	6	316
Number in 1890.....	30	10	390	80	.....	20	43	29	63	18	367
Black.....	15	11	80	21	.....	7	62	5	24	.....	53
Mulatto.....	13	11	165	14	.....	4	40	15	59	.....	184
Ind., Chi., Jap., and all other (see Tables I and 16).....	1	454	20	1	7	991	19	24	52	310	39
Native white—Native parentage.....	13,167	3,810	34,503	12,107	866	2,340	15,343	7,242	5,948	8,736	11,145
Number in 1900.....	12,579	3,220	33,672	13,003	430	2,185	14,549	5,995	5,746	6,612	10,919
Native white—Foreign or mixed parentage.....	9,833	4,496	9,642	4,086	1,474	3,559	17,142	12,672	22,732	8,295	5,613
Number in 1900.....	9,857	4,567	10,175	4,839	1,121	2,806	18,591	15,137	18,752	7,341	6,257
Native white—Foreign parentage.....	4,141	2,705	5,448	2,212	1,009	2,117	7,006	9,329	17,649	5,550	2,776
Native white—Mixed parentage.....	4,782	1,791	4,194	1,874	465	1,442	4,758	3,345	5,073	2,785	2,737
Foreign-born white.....	3,914	1,826	3,497	1,870	1,654	2,348	5,380	6,728	17,934	4,485	2,632
Number in 1900.....	5,101	2,232	4,300	1,970	1,431	2,336	6,416	8,695	17,693	4,703	3,133
PER CENT OF TOTAL POPULATION.											
Native white—Native parentage.....	50.6	35.9	72.0	68.3	21.6	25.3	47.1	27.1	12.7	40.0	57.3
Per cent in 1900.....	45.6	30.6	69.4	68.1	14.4	28.1	45.2	21.6	9.1	34.5	52.8
Native white—Foreign or mixed parentage.....	34.3	42.4	20.1	23.0	36.8	38.5	36.1	47.5	48.6	38.0	28.3
Per cent in 1900.....	35.7	42.0	21.0	23.8	37.8	37.7	37.3	47.2	47.0	38.9	30.1
Foreign-born white.....	15.0	17.2	7.3	8.5	41.3	25.4	16.5	25.2	38.4	20.5	13.0
Per cent in 1900.....	18.7	21.6	8.9	10.0	48.0	30.3	19.3	31.2	42.7	24.9	16.4
Negro.....	0.1	0.2	0.5	0.2	0.1	0.1	0.3	0.1	0.2	(³)	1.2
Per cent in 1900.....	0.1	0.1	0.7	0.3	.....	0.2	0.3	0.1	0.2	(³)	1.5
FOREIGN NATIONALITIES											
FOREIGN-BORN WHITE: Born in—											
Austria.....	61	195	31	9	37	7	23	297	202	166	12
Belgium.....	10	23	60	5	1	6	226	7	160	12	2
Canada—French.....	57	103	41	20	99	288	102	215	1,525	332	70
Canada—Other.....	2,212	230	516	347	403	981	1,136	563	1,072	696	1,115
Denmark.....	26	17	14	51	11	19	8	506	205	416	110
England.....	326	51	523	314	71	71	293	154	2,554	133	117
Finland.....	1	2	1	.....	616	213	3	403	5,020	105	4
France.....	11	6	20	5	1	10	57	7	47	14	3
Germany.....	797	554	1,533	465	61	171	3,165	2,788	719	1,218	608
Greece.....	1	13	.....	.....	3	.....	.....	.....	.....	.....	.....
Holland.....	6	9	.....	.....	17	.....	15	9	8	7	2
Hungary.....	47	2	.....	.....	4	.....	1	1	52	81	29
Ireland.....	165	42	472	167	53	4	11	29	21	9	2
Italy.....	3	35	3	3	13	20	13	7	61	578	97
Norway.....	3	374	3	1	33	33	1	404	1,251	5	1
Russia.....	10	33	34	10	60	238	58	121	907	131	22
Scotland.....	141	8	42	19	39	70	34	97	87	57	31
Sweden.....	8	149	36	37	228	132	13	1,093	2,766	831	234
Switzerland.....	17	19	52	12	10	2	11	35	22	36	24
Turkey.....	3	3	19	2	.....	.....	.....	.....	.....	.....	.....
Wales.....	2	1	5	4	.....	.....	.....	.....	.....	.....	.....
Other foreign countries.....	7	5	29	11	10	12	19	11	30	2	3
NATIVE WHITE: Both parents born in—											
Austria.....	17	257	11	5	2	6	15	446	56	190	10
Canada—French.....	28	206	32	7	100	219	84	246	2,273	356	52
Canada—Other.....	1,274	100	146	125	219	700	404	333	534	434	667
Denmark.....	15	11	2	43	1	28	12	504	176	433	77
England.....	246	52	594	430	35	35	270	126	2,447	94	98
France.....	30	16	27	9	4	.....	.....	.....	.....	.....	.....
Germany.....	1,296	1,004	2,865	735	73	201	4,926	4,652	1,124	1,870	904
Holland.....	18	8	29	1	3	1	17	17	22	26	36
Hungary.....	10	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ireland.....	231	69	957	499	54	179	281	138	1,177	105	119
Italy.....	3	16	2	2	1	55	15	2	412	.....	.....
Norway.....	4	478	3	1	10	16	.....	326	741	116	44
Russia.....	12	21	22	.....	16	166	55	154	532	109	7
Scotland.....	219	15	40	27	5	28	67	22	81	21	22
Sweden.....	17	128	32	29	169	67	6	990	3,099	890	236
Switzerland.....	8	17	34	6	7	.....	.....	.....	.....	.....	.....
All others of foreign parentage.....	713	333	637	293	309	414	752	1,345	4,928	872	485

¹ For changes in boundaries, etc., see page 625.

² Gladwin, Marquette, Montmorency, Otsego, Roscommon, and Schoolcraft Counties reported together and credited to Marquette County in 1870.

STATISTICS OF POPULATION.

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POPULATION FOR THE STATE AND FOR COUNTIES—Continued.

SUBJECT.	Lapeer.	Leelanau. ¹	Lenawee.	Livingston.	Luce. ¹	Mackinac. ¹	Macomb.	Manistee. ¹	Marquette. ¹	Mason.	Mecosta.
SEX											
Total... Male.....	13,338	5,681	23,614	9,093	2,259	5,192	16,450	13,657	25,636	11,314	9,967
Female.....	12,695	4,927	24,293	8,643	1,745	4,057	16,156	13,031	21,103	10,518	9,499
White... Male.....	13,320	5,435	23,495	9,075	2,253	4,659	16,392	13,634	25,541	11,159	9,827
Female.....	12,684	4,717	24,147	8,625	1,741	3,588	16,093	13,010	21,063	10,357	9,363
Negro... Male.....	17	10	110	17	3	7	47	9	54	4	122
Female.....	11	12	135	18	.....	4	55	11	29	2	115
MALES OF VOTING AGE											
Total number.....	7,977	2,976	15,018	5,818	1,526	3,036	9,764	7,198	14,715	6,268	5,717
Number in 1900.....	8,146	2,973	14,917	6,344	1,196	2,404	9,654	7,253	12,613	4,986	5,703
Native white—Native parentage.....	3,427	788	9,980	3,540	268	666	3,525	1,695	1,255	2,218	2,941
Number in 1900.....	3,444	819	9,730	3,813	102	613	3,444	1,584	881	1,697	2,911
Native white—Foreign or mixed parentage.....	2,586	1,071	3,215	1,483	284	741	3,613	2,067	3,481	1,657	1,371
Number in 1900.....	2,163	830	2,397	1,500	196	578	3,079	1,472	2,319	944	1,055
Native white—Foreign parentage.....	1,467	785	2,044	902	203	475	2,607	1,650	2,890	1,189	773
Native white—Mixed parentage.....	1,119	286	1,171	581	81	266	1,006	417	591	468	598
Foreign-born white.....	1,952	963	1,740	780	968	1,374	2,588	3,419	9,916	2,315	1,333
Number in 1900.....	2,531	1,177	2,087	1,066	777	1,165	3,102	4,189	9,243	2,259	1,617
Negro.....	11	6	75	14	3	6	31	7	37	1	60
Number in 1900.....	6	2	100	16	.....	6	28	5	50	1	73
Indian, Chinese, Japanese, and all other.....	1	148	8	1	3	249	7	8	26	77	12
PER CENT OF TOTAL.											
Native white—Native parentage.....	43.0	26.5	66.5	60.8	17.6	21.9	36.1	23.6	8.5	35.4	51.4
Native white—Foreign or mixed parentage.....	32.4	36.0	21.4	25.5	18.6	24.4	37.0	28.7	23.7	26.4	24.0
Foreign-born white.....	24.5	32.4	11.6	13.4	63.4	45.3	26.5	47.5	67.4	36.9	23.3
Negro.....	0.1	0.2	0.5	0.2	0.2	0.2	0.3	0.1	0.3	(*)	1.0
CITIZENSHIP OF FOREIGN-BORN WHITE.											
Naturalized.....	1,416	626	1,260	583	388	794	1,922	2,583	5,176	1,634	1,004
Having first papers.....	70	104	113	24	48	97	180	240	1,016	178	57
Alien.....	264	102	168	71	267	407	220	278	3,013	246	123
Unknown.....	202	131	199	102	265	76	266	318	711	267	149
ILLITERACY											
ILLITERATE MALES OF VOTING AGE.											
Total number illiterate.....	364	207	220	83	132	331	366	383	885	380	185
Per cent illiterate.....	4.6	7.0	1.5	1.4	8.7	10.9	3.7	5.3	6.0	6.1	3.2
Per cent in 1900.....	4.1	9.4	2.1	2.4	4.7	15.5	7.1	6.0	9.7	8.5	4.3
Native white, number illiterate.....	234	57	144	55	26	69	229	73	100	42	92
Per cent illiterate.....	3.9	3.1	1.1	1.1	4.7	4.9	3.2	1.9	2.1	1.1	2.1
Foreign-born white, number illiterate.....	127	94	63	27	102	143	136	304	778	292	84
Per cent illiterate.....	6.5	9.8	3.6	3.5	10.5	10.4	5.3	8.9	7.8	12.6	6.3
Negro, number illiterate.....	3	.....	10	1	1	.....	1	.....	2	.....	8
Per cent illiterate.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
PERSONS 10 YEARS OLD AND OVER.											
Total number.....	20,377	7,940	39,589	14,570	3,226	7,115	26,156	20,476	35,857	17,124	15,377
Number illiterate.....	913	445	432	148	245	653	863	914	1,682	813	350
Per cent illiterate.....	4.4	5.6	1.1	1.0	7.6	9.2	3.3	4.5	4.7	4.7	2.3
Native white, number.....	17,088	5,747	35,885	13,050	1,586	4,086	20,738	13,781	18,216	12,484	12,652
Number illiterate.....	676	100	257	87	59	148	484	162	232	84	160
Per cent illiterate.....	4.0	1.7	0.7	0.7	3.7	3.6	2.3	1.2	1.3	0.7	1.3
Foreign-born white, number.....	3,862	1,813	3,471	1,488	1,630	2,312	5,314	6,659	17,527	4,424	2,514
Number illiterate.....	228	215	156	59	181	246	375	736	1,440	625	176
Per cent illiterate.....	5.9	11.9	4.5	4.0	11.1	10.6	7.1	11.1	8.2	14.1	7.0
Negro, number.....	26	17	215	31	3	11	87	15	68	3	178
Number illiterate.....	9	.....	16	2	1	.....	2	.....	2	.....	13
Per cent illiterate.....	.....	.....	7.4	.....	.....	.....	.....	.....	.....	.....	7.3
PERSONS 10 TO 20 YEARS, INCLUSIVE.											
Total number.....	5,330	2,516	9,051	3,249	701	2,105	6,709	6,661	10,427	5,277	4,322
Number illiterate.....	261	15	18	4	12	53	24	42	79	32	14
Per cent illiterate.....	4.9	0.6	0.2	0.1	1.7	2.5	0.4	0.6	0.8	0.6	0.3
SCHOOL AGE AND ATTENDANCE											
Total number 6 to 20 years, inclusive.....	7,330	3,526	12,219	4,469	882	2,911	9,204	9,091	14,570	7,214	5,962
Number attending school.....	5,223	2,586	9,079	3,367	739	1,929	6,449	6,351	9,953	5,045	4,471
Per cent attending school.....	71.3	73.3	74.3	75.3	75.3	66.3	70.1	69.9	68.3	69.9	75.0
Number 6 to 9 years.....	2,000	1,010	3,168	1,220	281	806	2,495	2,430	4,143	1,937	1,640
Number attending school.....	1,795	854	2,848	1,105	254	654	2,204	2,113	3,689	1,681	1,455
Number 10 to 14 years.....	2,462	1,199	3,946	1,507	342	961	3,201	3,111	4,669	2,433	2,032
Number attending school.....	2,330	1,170	3,837	1,468	325	881	3,082	3,010	4,401	2,348	1,991
Number 15 to 17 years.....	1,463	687	2,637	894	182	567	1,878	1,917	2,767	1,489	1,213
Number attending school.....	904	450	1,840	648	126	315	956	1,007	1,440	836	819
Number 18 to 20 years.....	1,405	630	2,468	848	177	577	1,630	1,633	2,991	1,355	1,077
Number attending school.....	194	112	554	146	34	79	207	221	423	180	206
PERSONS 6 TO 14 YEARS, INCLUSIVE.											
Total number.....	4,462	2,209	7,114	2,727	623	1,767	5,696	5,541	8,812	4,370	3,672
Number attending school.....	4,125	2,024	6,685	2,573	579	1,535	5,286	5,123	8,090	4,029	3,446
Per cent attending school.....	92.4	91.6	94.0	94.4	92.9	86.9	92.8	92.5	91.8	92.2	93.8
Native white—Native parentage, number.....	2,744	977	5,818	2,191	179	456	3,473	1,630	1,440	1,908	2,313
Number attending school.....	2,537	910	5,447	2,060	165	400	3,206	1,497	1,307	1,754	2,152
Per cent attending school.....	92.5	93.1	93.6	94.0	92.2	87.7	92.3	91.8	90.8	91.9	93.0
Native white—Foreign or mixed parentage, number.....	1,610	1,119	1,218	512	409	1,005	2,087	3,769	6,735	2,309	1,259
Number attending school.....	1,490	1,024	1,167	491	381	894	1,960	3,501	6,227	2,148	1,200
Per cent attending school.....	92.5	91.5	95.8	95.9	93.2	89.0	93.9	92.9	92.5	93.0	95.3
Foreign-born white, number.....	104	21	40	20	35	70	110	136	609	86	30
Number attending school.....	95	20	36	18	33	63	96	124	523	79	27
Per cent attending school.....	91.3	.....	.....	.....	.....	.....	87.3	91.2	86.7	.....	.....
Negro, number.....	4	4	37	4	.....	.....	19	1	17	.....	61
Number attending school.....	3	4	34	4	.....	.....	17	1	17	.....	59
Per cent attending school.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DWELLINGS AND FAMILIES											
Dwellings, number.....	6,430	2,228	12,797	4,732	648	1,893	8,045	5,420	7,968	4,646	4,696
Families, number.....	6,534	2,267	13,139	4,782	669	1,923	8,136	5,778	9,057	4,951	4,811

¹ Less than one-tenth of 1 per cent.

⁴ Native whites having both parents born in countries other than specified, and also those having both parents of foreign birth but born in different countries.

TABLE I.—COMPOSITION AND CHARACTERISTICS OF THE

SUBJECT.	Memom-inee. ¹	Midland.	Missau-kee.	Monroe.	Mont-cal-m.	Mont-morency.	Mus-kogon.	Newaygo.	Oakland.	Oceana.	Ogemaw.
POPULATION											
Total population, 1910	25,648	14,005	10,606	32,917	32,069	3,755	40,577	19,220	49,576	18,379	8,907
1900	27,046	14,439	9,308	32,754	32,754	3,234	37,036	17,673	44,792	16,644	7,765
1890	33,639	10,657	5,048	32,337	32,637	1,487	40,013	20,476	41,245	15,698	5,583
1880	11,987	6,893	1,553	33,624	33,148		26,586	14,683	41,537	11,699	1,914
1870	1,791	3,285	180	27,483	13,629	(*)	14,894	7,294	40,867	7,222	12
Increase, 1900-1910	-1,398	-434	1,298	163	-685	521	3,541	1,547	4,784	1,735	1,142
Per cent of increase	-5.2	-3.0	13.9	0.5	-2.1	16.1	9.6	8.8	10.7	10.4	14.7
Increase, 1890-1900	-6,563	3,782	4,260	417	117	1,747	-2,977	-2,803	3,547	946	2,182
Per cent of increase	-19.6	35.5	84.4	1.3	0.4	117.5	-7.4	-13.7	8.6	6.0	39.1
Land area (square miles)	1,056	529	582	573	724	561	504	851	886	543	580
Population per square mile, 1910	24.3	26.5	18.2	57.4	44.3	6.7	80.5	22.6	56.0	33.8	15.4
Rural population per square mile, 1910	14.3	21.7	18.2	45.4	38.7	6.7	32.8	22.6	39.6	33.8	15.4
URBAN AND RURAL TERRITORY.											
Urban, 1910—Places of 2,500 or more in 1910	10,507	2,527		6,893	4,045		24,062		14,532		
Same places in 1900	12,818	2,363		5,043	3,381		20,818		9,769		
Per cent of increase, 1900-1910	-18.0	6.9		36.7	19.6		15.6		48.8		
Rural, 1910—Remainder of county in 1910	15,141	11,478	10,606	26,024	28,024	3,755	16,515	19,220	35,044	18,379	8,907
Same territory in 1900	14,228	12,076	9,308	27,711	29,373	8,234	16,218	17,673	35,023	16,644	7,765
Per cent of increase, 1900-1910	6.4	-5.0	13.9	-6.1	-4.6	16.1	1.8	8.8	0.1	10.4	14.7
Urban, 1900—Places of 2,500 or more in 1900	12,818			5,043	3,381		20,818		9,769		
Rural, 1900—Remainder of county in 1900	14,228	14,439	9,308	27,711	29,373	3,234	16,218	17,673	35,023	16,644	7,765
Per cent in places of 2,500 or more, 1910	41.0	18.0		20.9	12.6		59.3		29.3		
Per cent in places of 2,500 or more, 1900	47.4			15.4	10.3		56.2		21.8		
COLOR AND NATIVITY											
White	25,537	13,886	10,556	32,829	31,959	3,754	40,496	19,180	49,319	18,073	8,863
Number in 1900	26,832	14,407	9,251	32,032	32,381	3,232	36,981	17,658	44,568	16,559	7,729
Number in 1890	33,453	10,611	5,032	32,247	32,517	1,484	39,876	20,412	40,980	15,391	6,876
Negro	7	119	15	88	105	1	79	19	251	25	2
Number in 1900	11	32	7	122	119	2	53	17	222	35	7
Number in 1890	49	42		76	120	1	105	48	316	36	4
Black	5	15	6	51	26	1	48	15	176	18	1
Mulatto	2	104	9	37	79		31	4	75	7	1
Ind., Chi., Jap., and all other (see Tables 1 and 16)	104		35		5		2	21	6	281	42
Native white—Native parentage	5,185	7,687	5,071	20,785	20,371	1,488	13,707	11,576	28,537	11,084	3,991
Number in 1900	4,311	6,832	3,824	19,339	19,977	878	11,746	10,298	25,841	9,709	3,191
Native white—Foreign or mixed parentage	13,520	4,138	3,787	8,883	7,823	1,505	16,798	5,259	13,742	4,822	3,223
Number in 1900	13,487	4,842	3,562	9,679	8,110	1,367	15,514	4,927	12,140	4,463	2,818
Native white—Foreign parentage	9,714	2,132	2,116	5,216	4,184	792	11,667	2,762	7,233	2,470	1,619
Native white—Mixed parentage	3,806	2,006	1,671	3,667	3,639	713	5,131	2,497	6,504	2,352	1,604
Foreign-born white	6,832	2,061	1,698	3,161	3,765	761	9,991	2,345	7,040	2,167	1,449
Number in 1900	9,164	2,633	2,065	3,614	4,543	887	9,921	2,451	6,587	2,187	1,777
PER CENT OF TOTAL POPULATION.											
Native white—Native parentage	20.2	54.9	47.8	63.1	63.5	39.6	33.8	60.2	57.6	60.3	44.8
Per cent in 1900	15.9	47.7	41.1	59.0	61.0	30.2	31.7	53.3	57.7	53.3	45.3
Native white—Foreign or mixed parentage	52.7	29.5	35.7	27.0	24.4	40.1	41.4	27.4	27.7	26.2	36.2
Per cent in 1900	49.8	33.5	39.1	24.8	24.8	42.3	41.3	27.9	27.1	26.8	36.3
Foreign-born white	26.6	14.7	16.0	9.6	11.7	20.3	24.6	12.2	14.2	11.8	18.5
Per cent in 1900	33.8	18.6	22.2	11.0	13.9	27.4	26.3	13.3	14.7	13.1	22.9
Negro	(*)	0.8	0.1	0.3	0.3	(*)	0.2	0.1	0.5	0.1	(*)
Per cent in 1900	(*)	0.2	0.1	0.4	0.4	0.1	0.1	0.1	0.5	0.2	0.1
FOREIGN NATIONALITIES											
FOREIGN-BORN WHITE: Born in—											
Austria	584	80	4	87	7	5	222	60	80	25	2
Belgium	199	4		72			15	25	19	94	5
Canada—French	1,277	107	37	124	30	79	488	74	120	61	81
Canada—Other	418	1,014	413	265	1,062	432	1,020	523	3,039	489	1,184
Denmark	302	14	24	3	1,282	6	350	122	44	93	
England	86	109	54	187	306	36	389	136	1,210	152	80
Finland	175	10	78	1		33	126	68		3	4
France	29	9	5	23	9	1	24	10		10	7
Germany	1,358	502	159	1,931	672	92	1,613	449	1,514	509	172
Greece	1	1		15	1		18	1	9	2	
Holland	22	1	707	2	35	3	2,348	448	19	351	
Hungary	37	18		106	2		309	17	7	14	
Ireland	83	81	26	90	90	26	237	51	457	43	36
Italy	190		1	95	2		43		65		5
Norway	335	3	24	4	67		619	20	4	101	1
Russia	212	37	4	32	21	21	146	9	100	8	27
Scotland	19	37	14	29	39	14	85	37	200	37	23
Sweden	1,462	19	136	5	108	7	1,871	279	30	157	12
Switzerland	24	8	8	39	13	2	25	11	45	8	8
Turkey				6	1		9		11		
Wales	5	1		3	5		7	3	10	2	2
Other foreign countries	15	6	4	37	13	4	27	2	20	8	
NATIVE WHITE: Both parents born in—											
Austria	509	61	2	48	1		78	24	26	22	
Canada—French	1,933	97	36	173	20	79	675	54	74	60	33
Canada—Other	392	633	296	68	494	363	465	239	994	272	942
Denmark	366	8	18		1,508	1	413	96	20	69	
England	75	80	44	245	255	13	257	102	1,303	81	50
France	32	12	3	43	11	1	28	7	60	9	8
Germany	2,281	690	160	3,910	987	141	2,100	550	2,390	788	211
Holland	36	4	986	1	48	5	3,292	652	29	379	1
Hungary	8	4		7			62	12	1	7	
Ireland	226	89	32	319	204	19	423	106	917	71	41
Italy	32			8			29		7		2
Norway	334		21		67	3	554	26	5	139	
Russia	159	37	1	11	18	18	57	26	59	9	4
Scotland	29	17	8	26	39	5	64	20	146	14	13
Sweden	1,655	19	171	1	68		1,841	294	19	154	7
Switzerland	10	7	3	35	15	1	21	10	36	8	6
All others of foreign parentage ¹	1,572	374	345	321	449	143	1,308	544	1,152	388	291

¹ For changes in boundaries, etc., see page 625.² Gladwin, Marquette, Montmorency, Otsego, Roscommon, and Schoolcraft Counties reported together and credited to Marquette County in 1870.

STATISTICS OF POPULATION.

POPULATION FOR THE STATE AND FOR COUNTIES—Continued.

SUBJECT.	Menominee. ¹	Midland.	Missaukee.	Monroe.	Mont-calm.	Mont-morency.	Muskegon.	Newaygo.	Oakland.	Oceana.	Ogemaw.
SEX											
Total.. Male.....	13,490	7,287	5,574	17,000	16,384	2,052	20,863	10,151	25,534	9,561	4,681
Female.....	12,158	6,718	5,032	15,917	15,685	1,703	19,714	9,069	24,042	8,818	4,228
White.. Male.....	13,434	7,224	5,550	16,956	16,315	2,052	20,820	10,123	25,406	9,377	4,657
Female.....	12,103	6,662	5,006	15,873	15,644	1,702	19,675	9,057	23,913	8,696	4,206
Negro.. Male.....	4	63	5	44	65	.....	41	12	122	16	1
Female.....	3	56	10	44	40	1	38	7	129	9	1
MALES OF VOTING AGE											
Total number.....	6,695	3,893	2,831	9,957	9,677	1,141	12,435	5,780	16,704	5,279	2,470
Number in 1900.....	7,615	3,928	2,781	9,280	9,570	1,028	10,371	5,105	14,718	4,774	2,261
Native white—Native parentage.....	809	1,918	1,253	4,942	5,603	399	3,605	3,096	8,837	2,989	952
Number in 1900.....	937	1,881	1,198	4,465	5,675	294	3,233	2,800	7,916	2,662	924
Native white—Foreign or mixed parentage.....	2,156	883	645	3,289	2,015	324	3,722	1,890	4,310	1,181	643
Number in 1900.....	1,782	781	494	2,965	1,553	247	2,342	1,008	3,437	949	455
Native white—Foreign parentage.....	1,722	516	417	2,231	1,146	189	2,831	787	2,635	681	357
Native white—Mixed parentage.....	434	367	228	1,058	869	135	891	603	1,675	500	286
Foreign-born white.....	3,698	1,055	922	1,700	2,013	418	5,079	1,263	3,471	1,124	801
Number in 1900.....	4,860	1,807	1,081	1,819	2,301	436	4,773	1,289	3,279	1,069	393
Negro.....	2	36	3	26	43	.....	27	7	80	11	1
Number in 1900.....	4	9	1	33	41	1	17	2	84	11	4
Indian, Chinese, Japanese, and all other.....	30	.....	8	.....	3	.....	2	4	6	74	13
PER CENT OF TOTAL.											
Native white—Native parentage.....	12.1	49.3	44.3	49.6	57.9	35.0	29.0	53.8	52.9	55.6	38.5
Native white—Foreign or mixed parentage.....	32.2	22.7	22.8	33.0	20.8	28.4	29.9	24.1	25.8	22.0	26.0
Foreign-born white.....	55.2	27.1	32.6	17.1	20.8	36.6	40.8	21.9	20.8	20.9	34.9
Negro.....	(*)	0.9	0.1	0.3	0.4	.....	0.2	0.1	0.5	0.2	(*)
CITIZENSHIP OF FOREIGN-BORN WHITE.											
Naturalized.....	2,119	752	665	1,043	1,393	244	3,332	884	2,098	728	516
Having first papers.....	682	86	67	89	204	45	332	66	114	92	132
Alien.....	552	114	121	263	173	62	763	73	618	110	116
Unknown.....	345	104	69	305	243	67	632	240	641	185	97
ILLITERACY											
ILLITERATE MALES OF VOTING AGE.											
Total number illiterate.....	538	208	113	674	283	89	405	129	337	182	94
Per cent illiterate.....	8.0	5.3	4.0	6.8	2.9	7.8	3.3	2.2	2.0	3.0	3.8
Per cent in 1900.....	20.2	8.2	4.4	8.7	4.6	10.8	5.4	4.2	5.2	4.2	6.0
Native white, number illiterate.....	122	107	70	457	188	37	86	59	159	69	33
Per cent illiterate.....	4.1	3.8	3.7	5.6	2.5	5.1	1.2	1.3	1.2	1.7	2.1
Foreign-born white, number illiterate.....	413	96	41	209	91	52	317	70	170	46	56
Per cent illiterate.....	11.2	9.1	4.4	12.3	4.5	12.4	6.2	5.5	4.9	4.1	6.5
Negro, number illiterate.....	.....	5	1	8	4	.....	2	.....	7	2	.....
Per cent illiterate.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
PERSONS 10 YEARS OLD AND OVER.											
Total number.....	19,007	10,594	7,816	26,219	25,542	2,829	32,928	15,073	41,311	14,366	6,631
Number illiterate.....	1,089	342	207	1,287	511	143	856	235	616	327	176
Per cent illiterate.....	5.7	3.2	2.6	4.9	2.0	5.1	2.6	1.6	1.5	2.3	2.7
Native white, number.....	12,178	8,454	6,102	23,024	21,703	2,077	23,051	12,737	34,232	11,997	4,962
Number illiterate.....	284	167	120	872	318	62	168	104	249	121	68
Per cent illiterate.....	2.3	2.0	2.0	3.8	1.5	3.0	0.7	0.8	0.7	1.0	1.4
Foreign-born white, number.....	6,744	2,046	1,680	3,127	3,746	752	9,813	2,308	6,866	2,149	1,637
Number illiterate.....	783	167	79	401	187	81	685	131	353	104	93
Per cent illiterate.....	11.6	8.2	4.7	12.8	5.0	10.8	7.0	5.7	5.1	4.8	5.7
Negro, number.....	4	94	10	68	88	.....	62	16	207	22	2
Number illiterate.....	.....	8	1	14	6	.....	3	.....	13	2	.....
Per cent illiterate.....	.....	.....	.....	.....	.....	.....	.....	.....	0.3	.....	.....
PERSONS 10 TO 20 YEARS, INCLUSIVE.											
Total number.....	6,718	3,211	2,634	7,106	6,713	890	8,962	4,356	8,843	4,123	2,090
Number illiterate.....	74	20	15	47	26	9	36	14	22	26	18
Per cent illiterate.....	1.1	0.6	0.6	0.7	0.4	1.0	0.4	0.3	0.2	0.6	0.9
SCHOOL AGE AND ATTENDANCE											
Total number 6 to 20 years, inclusive.....	9,442	4,562	3,719	9,751	9,240	1,231	11,998	5,996	12,125	5,707	2,968
Number attending school.....	6,598	3,449	2,758	6,992	6,693	861	8,020	4,229	8,563	4,252	2,126
Per cent attending school.....	69.9	75.6	74.2	70.8	74.6	69.9	66.8	70.7	70.6	74.5	71.6
Number 6 to 9 years.....	2,724	1,351	1,085	2,645	2,527	341	3,036	1,640	3,282	1,584	878
Number attending school.....	2,360	1,205	959	2,196	2,285	293	2,781	1,387	2,875	1,392	748
Number 10 to 14 years.....	3,190	1,507	1,291	3,394	3,159	429	3,812	2,024	3,963	1,967	1,017
Number attending school.....	3,077	1,515	1,258	3,248	3,076	414	3,667	1,928	3,800	1,907	979
Number 15 to 17 years.....	1,936	889	718	1,915	1,900	228	2,596	1,252	2,346	1,155	580
Number attending school.....	952	572	448	1,305	1,229	132	1,263	759	1,469	765	343
Number 18 to 20 years.....	1,592	755	625	1,857	1,654	223	2,553	1,080	2,534	1,040	493
Number attending school.....	209	157	93	253	302	22	300	165	419	188	58
PERSONS 6 TO 14 YEARS, INCLUSIVE.											
Total number.....	5,914	2,918	2,376	5,979	5,686	770	6,848	3,664	7,245	3,551	1,895
Number attending school.....	5,437	2,720	2,217	5,444	5,362	707	6,448	3,315	6,675	3,299	1,727
Per cent attending school.....	91.9	93.2	93.3	91.1	94.3	91.8	94.2	90.5	92.1	92.9	91.1
Native white—Native parentage, number.....	1,470	1,751	1,175	4,851	3,928	325	2,654	2,416	4,746	2,359	916
Number attending school.....	1,363	1,624	1,079	4,430	3,668	303	2,475	2,161	4,365	2,180	826
Per cent attending school.....	92.0	92.7	91.8	91.3	93.4	90.4	93.3	89.4	92.0	92.4	90.2
Native white—Foreign or mixed parentage, number.....	4,253	1,108	1,147	1,076	1,710	407	3,938	1,187	2,244	1,095	925
Number attending school.....	3,921	1,039	1,086	976	1,649	379	3,744	1,102	2,079	1,040	850
Per cent attending school.....	92.2	93.8	94.7	90.7	96.4	93.1	95.1	92.8	92.6	95.0	91.9
Foreign-born white, number.....	169	32	39	36	31	28	242	50	212	34	46
Number attending school.....	153	30	37	25	30	25	223	41	195	33	44
Per cent attending school.....	90.5	.....	.....	.....	.....	.....	92.1	.....	92.0	.....	.....
Negro, number.....	4	27	4	16	17	.....	14	4	43	4	.....
Number attending school.....	4	27	4	13	15	.....	6	4	36	4	.....
Per cent attending school.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DWELLINGS AND FAMILIES											
Dwellings, number.....	4,752	3,283	2,294	7,826	8,235	818	9,057	4,579	12,213	4,456	2,020
Families, number.....	4,942	3,312	2,336	7,952	8,378	831	9,671	4,679	12,463	4,529	2,061

¹ Less than one-tenth of 1 per cent.

² Native whites having both parents born in countries other than specified, and also those having both parents of foreign birth but born in different countries.

TABLE I.—COMPOSITION AND CHARACTERISTICS OF THE

SUBJECT.	Ontona- gon. ¹	Osceola.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscom- mon.	Saginaw.	St. Clair.
POPULATION									
Total population, 1910.....	8,650	17,889	2,027	6,552	45,301	11,249	2,274	89,290	52,341
1900.....	6,197	17,859	1,468	6,175	39,667	8,821	1,787	81,222	55,228
1890.....	3,756	14,630	1,904	4,272	35,358	4,687	2,033	82,273	52,105
1880.....	2,565	10,777	467	1,974	33,126	3,113	1,459	59,095	46,197
1870.....	2,845	2,093	70	(²)	26,651	355	(²)	39,097	36,661
Increase, 1900-1910.....	2,453	30	559	377	5,634	2,428	487	8,068	-2,887
Per cent of increase.....	39.6	0.2	38.1	6.1	14.2	27.5	27.3	9.9	-5.2
Increase, 1890-1900.....	2,441	3,229	-436	1,903	4,309	4,134	-246	-1,051	3,123
Per cent of increase.....	65.0	22.1	-22.9	44.5	12.2	88.2	-12.1	-1.3	6.0
Land area (square miles).....	1,333	577	576	528	565	678	538	828	710
Population per square mile, 1910.....	6.5	31.0	3.5	12.4	80.2	16.6	4.2	107.8	73.7
Rural population per square mile, 1910.....	6.5	31.0	3.5	12.4	51.2	12.0	4.2	46.8	38.1
URBAN AND RURAL TERRITORY.									
Urban, 1910—Places of 2,500 or more in 1910.....					16,346	2,702		50,510	25,266
Same places in 1900.....					12,533	1,204		42,345	25,530
Per cent of increase, 1900-1910.....					30.4	124.4		19.3	-1.0
Rural, 1910—Remainder of county in 1910.....	8,650	17,889	2,027	6,552	28,955	8,547	2,274	38,780	27,076
Same territory in 1900.....	6,197	17,859	1,468	6,175	27,134	7,017	1,787	38,877	29,698
Per cent of increase, 1900-1910.....	39.6	0.2	38.1	6.1	6.7	12.2	27.3	-0.2	-8.5
Urban, 1900—Places of 2,500 or more in 1900.....					12,533			42,345	25,530
Rural, 1900—Remainder of county in 1900.....	6,197	17,859	1,468	6,175	27,134	8,821	1,787	38,877	29,698
Per cent in places of 2,500 or more, 1910.....					36.1	24.0		56.3	48.3
Per cent in places of 2,500 or more, 1900.....					31.6			52.1	46.2
COLOR AND NATIVITY									
White.....	8,644	17,829	2,023	6,551	45,240	11,242	2,266	88,799	52,261
Number in 1900.....	6,153	17,822	1,464	6,171	39,634	8,791	1,787	80,661	55,143
Number in 1890.....	3,695	14,698	1,895	4,268	35,260	4,684	2,033	81,703	52,006
Negro.....	2	39	4	1	42	3	2	343	65
Number in 1900.....	11	21	4	4	27	12		438	79
Number in 1890.....	2	40	6	4	48	10		338	89
Black.....	2	12	4	1	31	3	2	257	42
Mulatto.....		27			11			86	23
Indian, Chinese, Japanese, and all other (see Tables 1 and 16).....	4	21			19	4	6	148	15
Native white—Native parentage.....	1,719	9,504	1,392	2,738	15,682	3,553	1,168	32,749	17,229
Number in 1900.....	1,488	8,688	767	2,485	11,809	1,515	840	25,906	14,901
Native white—Foreign or mixed parentage.....	3,990	5,575	440	2,459	19,886	5,460	708	36,630	22,263
Number in 1900.....	2,868	5,715	420	2,167	18,050	4,080	676	34,496	24,511
Native white—Foreign parentage.....	2,930	2,990	208	1,456	13,271	3,447	388	22,874	11,999
Native white—Mixed parentage.....	1,060	2,585	232	1,003	6,615	2,003	320	13,756	10,264
Foreign-born white.....	2,935	2,750	191	1,354	9,672	2,239	390	19,420	12,799
Number in 1900.....	2,068	3,421	287	1,519	8,775	2,598	371	20,159	15,906
PER CENT OF TOTAL POPULATION.									
Native white—Native parentage.....	19.9	53.1	68.7	41.8	34.6	31.6	51.4	36.7	32.9
Per cent in 1900.....	23.0	48.6	51.6	40.2	29.8	17.2	47.0	52.0	27.0
Native white—Foreign or mixed parentage.....	46.1	31.2	21.7	37.5	43.9	48.4	31.1	41.0	42.5
Per cent in 1900.....	43.0	32.0	28.6	35.1	45.6	63.1	32.2	42.5	44.1
Foreign-born white.....	33.9	15.4	9.4	20.7	21.4	19.9	17.2	21.7	24.4
Per cent in 1900.....	33.3	19.2	19.6	24.6	24.6	29.5	20.8	24.8	28.8
Negro.....	(³)	0.2	0.2	(³)	0.1	(³)	0.1	0.4	0.1
Per cent in 1900.....	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.5	0.1
FOREIGN NATIONALITIES									
FOREIGN-BORN WHITE: Born in—									
Austria.....	165	12	3	29	172	8	5	843	52
Belgium.....	7	1		39	7		4	52	99
Canada—French.....	199	43	10	40	30	186	15	678	475
Canada—Other.....	324	1,090	99	490	555	674	153	4,975	7,429
Denmark.....	24	9	2	38	57	3	17	54	13
England.....	163	160	10	36	213	62	31	1,082	829
Finland.....	1,158	6		17	6		5	6	7
France.....	8	7	1	4	10	4		204	43
Germany.....	195	537	38	417	1,227	1,164	46	8,080	2,514
Greece.....					4	1		18	5
Holland.....	4	138	5	1	6,665	7	1	22	10
Hungary.....	91	5	1	1	65	1	6	159	93
Ireland.....	33	51	4	29	132	35	15	622	597
Italy.....	58	15	2	9	34		5	298	46
Norway.....					57	4	5	45	26
Russia.....	244	6	4	149	50	53	28	1,119	36
Scotland.....	15	20	3	17	55	16	8	525	222
Sweden.....	221	600	5	34	224	12	40	85	26
Switzerland.....	12	39	4	4	43	3	3	95	42
Turkey.....	1	1		1	7			2	56
Wales.....	2	9		5	5			6	12
Other foreign countries.....	11	1		1	24	6	3	60	34
NATIVE WHITE: Both parents born in—									
Austria.....	132	9		15	110		3	416	31
Canada—French.....	217	20	10	33	21	171	8	960	345
Canada—Other.....	184	601	70	279	219	526	106	2,852	3,425
Denmark.....	17	12		32	51		22	18	7
England.....	154	100	7	58	201	40	21	847	430
France.....	10	3	2	4	9	5	1	126	59
Germany.....	335	757	54	607	1,673	2,284	59	12,440	4,078
Holland.....	5	162	3	1	9,599	1		29	7
Hungary.....	2	2		17			6	49	31
Ireland.....	211	65	12	51	294	56	21	890	1,020
Italy.....	26			9	9		1	207	33
Norway.....	38	9		1	53	13	3	33	8
Russia.....	196	2		109	29	38	43	739	21
Scotland.....	12	7	1	13	39	12	5	441	229
Sweden.....	151	711	6	16	187	18	30	42	15
Switzerland.....	7	44	4	6	30	2		72	31
All others of foreign parentage.....	1,233	484	39	231	730	281	59	2,713	2,229

¹ For changes in boundaries, etc., see page 625.² Gladwin, Marquette, Montmorency, Otsego, Roscommon, and Schoolcraft Counties reported together and credited to Marquette County in 1870.

STATISTICS OF POPULATION.

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POPULATION FOR THE STATE AND FOR COUNTIES—Continued.

SUBJECT.	Onton- gon. ¹	Osceola.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscom- mon.	Saginaw.	St. Clair.
SEX									
Total... Male.....	4,835	9,333	1,123	3,599	23,221	6,084	1,277	45,316	26,350
..... Female.....	3,815	8,556	904	2,953	22,080	5,165	897	43,974	25,991
White... Male.....	4,831	9,296	1,122	3,599	23,187	6,079	1,273	45,051	26,311
..... Female.....	3,813	8,533	901	2,952	22,053	5,163	893	43,748	25,950
Negro... Male.....	1	24	1	1	23	3	1	183	34
..... Female.....	1	15	3	1	19	1	1	160	31
MALES OF VOTING AGE									
Total number.....	2,732	5,133	802	2,015	12,923	3,155	764	26,539	15,705
Number in 1900.....	2,935	6,042	898	2,009	10,910	2,678	659	22,769	15,880
Native white—Native parentage.....	368	2,424	376	757	3,047	699	344	7,660	3,750
Number in 1900.....	389	2,437	241	813	2,511	455	222	6,329	3,319
Native white—Foreign or mixed parentage.....	746	1,234	112	498	5,075	1,717	192	6,329	6,080
Number in 1900.....	634	950	148	377	3,638	700	159	6,440	6,088
Native white—Foreign parentage.....	194	478	49	180	4,031	955	102	6,718	4,020
Native white—Mixed parentage.....	184	478	49	180	1,045	282	93	2,454	2,070
Foreign-born white.....	1,615	1,460	113	763	4,777	1,244	226	9,522	5,843
Number in 1900.....	1,209	1,745	214	818	4,719	1,419	258	9,672	7,017
Negro.....	1	8	1	1	20	3	1	139	18
Number in 1900.....	1	6	1	1	13	3	1	180	26
Indian, Chinese, Japanese, and all other.....	2	7			3	2	1	46	4
PER CENT OF TOTAL.									
Native white—Native parentage.....	13.5	47.2	62.5	37.5	23.6	22.2	45.0	28.9	23.9
Native white—Foreign or mixed parentage.....	27.3	24.0	18.6	24.7	39.3	38.6	25.1	34.6	38.8
Foreign-born white.....	59.1	28.4	18.8	37.8	37.0	39.1	29.6	35.9	37.2
Negro.....	(²)	0.2	0.2		0.2	0.1	0.1	0.5	0.1
CITIZENSHIP OF FOREIGN-BORN WHITE.									
Naturalized.....	945	1,070	55	396	3,092	947	183	6,268	4,318
Having first papers.....	122	98	11	84	337	74	12	462	288
Alien.....	418	132	13	114	580	120	14	1,318	707
Unknown.....	130	160	34	169	768	93	17	1,474	530
ILLITERACY									
ILLITERATE MALES OF VOTING AGE.									
Total number illiterate.....	111	117	17	151	294	382	52	1,158	564
Per cent illiterate.....	4.1	2.3	2.8	7.5	2.3	12.1	6.8	4.3	3.6
Per cent in 1900.....	7.5	4.4	4.0	8.1	5.1	12.9	5.5	5.1	5.3
Native white, number illiterate.....	13	67	14	50	91	134	37	316	255
Per cent illiterate.....	1.2	1.8	2.9	4.0	1.1	7.0	6.9	1.9	2.6
Foreign-born white, number illiterate.....	97	45	3	101	199	246	15	806	308
Per cent illiterate.....	6.0	3.1	2.7	13.2	4.2	19.9	6.6	8.5	5.3
Negro, number illiterate.....	1	1			4			10	
Per cent illiterate.....								7.2	
PERSONS 10 YEARS OLD AND OVER.									
Total number.....	6,268	13,788	1,512	4,997	35,193	8,151	1,787	71,108	42,053
Number illiterate.....	203	223	30	307	710	763	87	2,393	1,196
Per cent illiterate.....	3.2	1.6	2.0	6.1	2.0	9.4	4.9	3.4	2.8
Native white, number.....	3,424	11,019	1,325	3,672	25,737	5,921	1,396	51,807	29,512
Number illiterate.....	25	107	22	106	187	292	60	519	459
Per cent illiterate.....	0.7	1.0	1.7	2.9	0.7	4.9	4.3	1.0	1.6
Foreign-born white, number.....	2,838	2,732	184	1,325	9,403	2,223	384	18,882	12,469
Number illiterate.....	177	107	8	201	517	469	27	1,810	734
Per cent illiterate.....	6.2	3.9	4.3	15.2	5.5	21.1	7.0	9.6	5.9
Negro, number.....	2	22	3		40	3	2	306	53
Number illiterate.....	1	2			6			18	1
Per cent illiterate.....								5.9	
PERSONS 10 TO 20 YEARS, INCLUSIVE.									
Total number.....	1,754	4,085	484	1,494	10,199	2,636	509	19,080	10,771
Number illiterate.....	9	12	5	39	84	68	8	74	34
Per cent illiterate.....	0.5	0.3	1.0	2.6	0.3	2.6	1.6	0.4	0.3
SCHOOL AGE AND ATTENDANCE									
Total number 6 to 20 years, inclusive.....	2,628	5,894	678	2,114	14,028	3,802	694	26,000	14,822
Number attending school.....	1,926	4,267	461	1,476	9,608	2,386	456	18,886	10,540
Per cent attending school.....	73.3	74.9	68.2	69.8	68.5	62.8	65.7	64.9	71.1
Number 6 to 9 years.....	874	1,809	192	620	3,829	1,166	185	6,920	4,052
Number attending school.....	769	1,424	147	516	3,349	794	155	5,467	3,640
Number 10 to 14 years.....	872	1,968	224	702	4,664	1,235	220	8,434	4,905
Number attending school.....	828	1,930	203	662	4,432	1,169	214	8,012	4,763
Number 15 to 17 years.....	458	1,082	133	423	2,847	738	129	5,238	2,953
Number attending school.....	290	733	92	236	1,475	395	68	2,730	1,691
Number 18 to 20 years.....	424	1,035	127	369	2,688	663	151	5,408	2,913
Number attending school.....	69	180	19	62	352	38	19	677	446
PERSONS 6 TO 14 YEARS, INCLUSIVE.									
Total number.....	1,746	3,577	416	1,322	8,493	2,401	414	15,354	8,957
Number attending school.....	1,597	3,354	350	1,178	7,781	1,953	369	13,479	8,403
Per cent attending school.....	91.5	93.8	84.1	89.1	91.6	81.3	89.1	87.8	93.8
Native white—Native parentage, number.....	451	2,100	308	558	3,925	927	225	7,185	4,237
Number attending school.....	411	1,968	272	502	3,540	745	195	6,318	3,977
Per cent attending school.....	91.1	93.2	88.3	90.0	90.2	80.4	86.7	87.9	93.9
Native white—Foreign or mixed parentage, number.....	1,105	1,425	96	719	4,191	1,439	177	7,377	4,261
Number attending school.....	1,012	1,349	72	647	3,898	1,181	163	6,501	4,002
Per cent attending school.....	91.6	94.7		90.0	93.0	82.1	92.1	88.1	93.9
Foreign-born white, number.....	190	36	12	44	366	35	9	728	453
Number attending school.....	174	33	6	28	334	27	8	612	420
Per cent attending school.....	91.6				91.3			84.1	92.7
Negro, number.....	13			1	3			33	4
Number attending school.....	11			1	3			27	2
Per cent attending school.....									
DWELLINGS AND FAMILIES									
Dwellings, number.....	1,647	4,195	461	1,427	10,106	2,248	538	20,133	12,701
Families, number.....	1,685	4,240	468	1,443	10,311	2,288	557	20,594	12,918

¹ Less than one-tenth of 1 per cent.

² Native whites having both parents born in countries other than specified, and also those having both parents of foreign birth but born in different countries.

TABLE I.—COMPOSITION AND CHARACTERISTICS OF THE

SUBJECT.	St. Joseph.	Sanilac.	School-craft. ¹	Shia-wassee.	Tuscola.	Van Buren.	Wash-tenaw.	Wayne.	Wexford. ²
POPULATION									
Total population, 1910.....	25,499	33,930	8,681	33,246	34,913	33,185	44,714	531,591	20,769
1900.....	23,889	35,055	7,889	33,866	35,890	33,274	47,761	348,793	16,845
1890.....	25,356	32,589	5,818	30,952	30,508	30,541	42,210	257,114	11,278
1880.....	26,626	26,341	1,575	27,059	25,738	30,807	41,848	166,444	6,815
1870.....	26,275	14,562	(2)	20,858	13,714	23,829	41,434	119,038	650
Increase, 1900-1910.....	1,610	-1,125	792	-620	-977	-89	-3,047	182,798	3,924
Per cent of increase.....	6.7	-3.2	10.0	-1.8	-2.7	-0.3	-6.4	52.4	23.3
Increase, 1890-1900.....	-1,467	2,466	2,071	2,914	3,382	2,733	5,551	91,670	5,567
Per cent of increase.....	-5.8	7.6	35.6	9.4	10.4	8.9	13.2	35.7	49.4
Land area (square miles).....	503	976	1,207	557	827	617	704	620	577
Population per square mile, 1910.....	50.7	34.8	7.2	59.7	42.2	53.8	63.5	857.4	36.0
Rural population per square mile, 1910.....	33.4	34.8	3.3	42.4	42.2	48.0	33.6	73.7	21.5
URBAN AND RURAL TERRITORY.									
Urban, 1910—Places of 2,500 or more in 1910.....	8,707	.....	4,722	9,639	.....	3,577	21,047	485,895	8,375
Same places in 1900.....	6,015	.....	4,126	8,696	.....	4,009	21,887	298,634	5,997
Per cent of increase, 1900-1910.....	44.8	.....	14.4	10.8	.....	-10.8	-3.8	62.7	39.7
Rural, 1910—Remainder of county in 1910.....	16,792	33,930	3,959	23,607	34,913	29,608	23,667	45,696	12,394
Same territory in 1900.....	17,874	35,055	3,763	25,170	35,890	29,265	25,874	50,159	10,848
Per cent of increase, 1900-1910.....	-6.1	-3.2	5.2	-6.2	-2.7	1.2	-8.5	-8.9	14.3
Urban, 1900—Places of 2,500 or more in 1900.....	3,550	.....	4,126	8,696	.....	4,009	21,887	295,460	5,997
Rural, 1900—Remainder of county in 1900.....	20,339	35,055	3,763	25,170	35,890	25,255	25,874	53,333	10,848
Per cent in places of 2,500 or more, 1910.....	34.1	.....	54.4	29.0	.....	10.8	47.1	91.4	40.3
Per cent in places of 2,500 or more, 1900.....	14.9	.....	52.3	25.7	.....	12.0	45.8	84.7	35.6
COLOR AND NATIVITY									
White.....	25,410	33,922	8,641	33,203	34,854	32,536	43,550	525,407	20,674
Number in 1900.....	23,793	35,044	7,855	33,813	35,804	32,631	46,603	344,258	19,893
Number in 1890.....	25,207	32,572	5,770	30,924	32,427	29,827	40,965	253,276	11,902
Negro.....	88	8	5	39	21	535	1,130	6,085	60
Number in 1900.....	96	11	2	44	36	676	1,240	4,535	38
Number in 1890.....	196	16	.....	27	20	655	1,221	3,815	15
Black.....	88	4	2	26	3	133	742	3,672	16
Mulatto.....	30	4	3	13	18	402	388	2,413	44
Indian, Chinese, Japanese, and all other (see Tables I and 16).....	1	.....	35	4	38	114	25	99	35
Native white—Native parentage.....	10,127	8,221	2,135	21,403	16,261	24,304	23,572	141,725	11,901
Number in 1900.....	17,810	5,644	1,753	21,175	15,200	24,941	24,244	83,691	9,022
Native white—Foreign or mixed parentage.....	4,534	16,833	3,770	7,877	12,403	5,700	14,530	212,033	5,602
Number in 1900.....	4,516	17,935	2,080	3,304	13,371	6,311	15,574	148,787	4,807
Native white—Foreign parentage.....	2,545	9,427	2,555	3,811	6,096	2,780	8,720	146,594	3,178
Native white—Mixed parentage.....	1,989	7,378	1,205	4,065	6,307	2,920	5,810	65,439	2,424
Foreign-born white.....	1,749	8,958	2,736	3,863	6,190	2,532	5,457	171,640	3,171
Number in 1900.....	1,967	11,465	3,082	4,270	7,233	2,279	6,685	111,760	3,177
PER CENT OF TOTAL POPULATION.									
Native white—Native parentage.....	75.0	24.2	24.6	64.6	46.6	73.2	52.7	26.7	57.3
Per cent in 1900.....	72.5	16.1	22.2	62.5	42.4	75.0	50.8	24.0	43.6
Native white—Foreign or mixed parentage.....	17.8	49.5	43.4	23.7	35.5	17.2	32.5	39.9	27.0
Per cent in 1900.....	18.9	51.2	33.3	24.7	37.3	16.0	32.6	42.7	27.5
Foreign-born white.....	6.9	26.2	31.5	11.6	17.7	7.6	12.2	32.3	15.3
Per cent in 1900.....	3.2	28.7	39.1	12.6	20.2	6.8	14.0	52.0	18.9
Negro.....	0.3	(3)	0.1	0.1	0.1	1.6	2.5	1.1	0.3
Per cent in 1900.....	0.4	(3)	(1)	0.1	0.1	2.0	2.8	1.3	0.2
FOREIGN NATIONALITIES									
FOREIGN-BORN WHITE: Born in—									
Austria.....	.....	117	255	294	80	40	75	14,765	9
Belgium.....	3	20	22	14	6	2	5	2,881	.....
Canada—French.....	15	75	342	61	122	33	37	5,241	195
Canada—Other.....	172	6,155	620	1,569	3,740	544	1,090	40,579	914
Denmark.....	5	95	33	6	5	73	13	440	100
England.....	253	534	88	449	385	443	656	10,249	121
Finland.....	1	2	201	2	2	.....	12	71	100
France.....	17	17	6	68	22	14	23	765	10
Germany.....	1,029	1,086	166	829	987	669	2,878	50,018	270
Greece.....	2	.....	5	6	.....	3	11	585	.....
Holland.....	23	5	9	4	5	95	11	641	61
Hungary.....	4	132	61	78	218	34	17	6,601	30
Ireland.....	52	325	52	213	183	170	337	6,112	76
Italy.....	74	4	1	57	.....	27	46	6,125	35
Norway.....	6	8	123	6	6	47	4	240	76
Russia.....	24	49	49	53	190	50	73	19,650	51
Scotland.....	12	225	28	69	114	62	71	3,675	25
Sweden.....	9	13	621	13	18	175	15	652	1,082
Switzerland.....	27	17	5	36	28	27	37	667	8
Turkey.....	8	3	20	19	45	.....	7	694	1
Wales.....	2	4	1	3	.....	9	9	196	1
Other foreign countries.....	11	12	28	16	17	15	30	802	6
NATIVE WHITE: Both parents born in—									
Austria.....	.....	47	141	73	21	15	49	6,292	6
Canada—French.....	9	74	393	24	153	17	16	3,234	193
Canada—Other.....	45	4,862	418	720	2,449	177	305	10,310	460
Denmark.....	8	96	37	4	5	60	23	286	69
England.....	318	301	55	447	353	361	682	4,916	161
France.....	12	29	9	91	26	13	28	929	10
Germany.....	1,720	1,565	271	1,248	1,794	906	5,844	77,626	389
Holland.....	37	3	6	14	8	132	22	509	75
Hungary.....	3	24	34	9	54	6	2	1,065	4
Ireland.....	138	387	104	404	239	327	910	9,768	109
Italy.....	5	.....	31	.....	.....	19	19	2,208	2
Norway.....	3	6	126	6	3	31	12	133	42
Russia.....	19	30	18	22	83	22	33	7,961	32
Scotland.....	20	141	12	71	64	55	74	1,741	20
Sweden.....	17	8	525	10	6	161	8	358	1,066
Switzerland.....	11	12	2	23	15	20	23	450	4
All others of foreign parentage.....	171	1,842	414	524	823	433	670	18,799	596

¹ For changes in boundaries, etc., see page 625.² Gladwin, Marquette, Montmorency, Oscego, Roscommon, and Schoolcraft Counties reported together and credited to Marquette County in 1870.

STATISTICS OF POPULATION.

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POPULATION FOR THE STATE AND FOR COUNTIES—Continued.

SUBJECT.	St. Joseph.	Sanilac.	School-craft.	Shiawassee.	Tuscola.	Van Buren.	Wash-tenaw.	Wayne.	Wexford.
SEX									
Total.. Male.....	12,908	17,643	4,853	16,934	17,885	18,641	21,625	274,857	10,937
Female.....	12,591	16,287	3,828	15,312	17,028	16,544	23,089	256,734	9,832
White.. Male.....	12,855	17,637	4,831	16,908	17,854	18,283	21,047	271,592	10,889
Female.....	12,555	16,285	3,810	15,295	17,000	16,239	22,512	253,815	9,785
Negro.. Male.....	53	6	4	23	7	292	555	3,196	32
Female.....	35	2	1	16	14	243	373	2,589	28
MALES OF VOTING AGE									
Total number.....	8,448	9,629	2,852	10,682	10,423	10,302	13,698	170,149	6,337
Number in 1900.....	7,567	9,659	2,834	10,654	10,327	10,195	14,788	56,970	5,113
Native white—Native parentage.....	5,896	1,355	580	6,371	4,158	7,023	6,134	39,142	3,319
Number in 1900.....	5,243	1,132	556	6,417	4,065	7,254	6,866	27,184	2,669
Native white—Foreign or mixed parentage.....	1,643	3,735	670	2,412	3,237	1,775	4,626	45,731	1,291
Number in 1900.....	1,390	2,845	493	2,165	2,658	1,567	4,336	29,479	790
Native white—Foreign parentage.....	1,055	2,665	486	1,396	1,986	922	3,146	33,692	752
Native white—Mixed parentage.....	588	1,070	184	1,016	1,251	853	1,474	12,639	538
Foreign-born white.....	885	4,534	1,587	1,883	3,011	1,283	2,578	82,553	1,702
Number in 1900.....	985	5,578	1,776	2,660	3,578	1,148	3,124	47,600	1,637
Negro.....	34	5	2	14	5	183	344	2,367	10
Number in 1900.....	39	4	1	18	10	206	345	1,495	14
Indian, Chinese, Japanese, and all other.....			13	2	12	38	22	56	10
PER CENT OF TOTAL.									
Native white—Native parentage.....	69.7	14.1	20.3	59.6	39.9	68.2	44.8	23.0	52.4
Native white—Foreign or mixed parentage.....	19.4	38.9	23.5	22.6	31.1	17.2	33.7	26.9	20.4
Foreign-born white.....	10.5	47.1	55.6	17.6	28.9	12.5	18.8	48.7	28.9
Negro.....	0.4	0.1	0.1	0.1	(*)	1.8	2.5	1.4	0.3
CITIZENSHIP OF FOREIGN-BORN WHITE.									
Naturalized.....	602	3,187	876	1,060	1,837	947	1,573	38,748	1,033
Having first papers.....	28	269	159	41	206	49	429	7,757	110
Alien.....	99	667	462	292	468	125	287	39,549	206
Unknown.....	156	411	90	490	500	162	299	7,548	253
ILLITERACY									
ILLITERATE MALES OF VOTING AGE.									
Total number illiterate.....	134	387	315	189	438	259	197	10,827	290
Per cent illiterate.....	1.6	4.0	11.0	1.8	4.2	2.5	1.4	6.4	4.1
Per cent in 1900.....	2.5	5.4	9.0	2.3	4.6	3.6	2.1	5.0	6.1
Native white, number illiterate.....	78	165	54	80	163	164	79	646	123
Per cent illiterate.....	1.0	3.2	4.3	0.9	2.2	1.9	0.7	0.5	2.7
Foreign-born white, number illiterate.....	55	222	255	107	268	73	99	10,085	129
Per cent illiterate.....	6.2	4.9	16.1	5.7	8.9	5.7	3.8	12.2	7.6
Negro, number illiterate.....	1			1	1	17	16	89	3
Per cent illiterate.....						9.3	4.7	3.8	
PERSONS 10 YEARS OLD AND OVER.									
Total number.....	21,280	26,134	6,592	27,075	27,360	27,067	27,624	428,029	16,222
Number illiterate.....	308	717	555	335	792	568	413	20,793	466
Per cent illiterate.....	1.4	2.7	8.4	1.2	2.9	1.9	1.1	4.9	2.9
Native white, number.....	19,485	17,358	3,891	23,290	21,264	24,044	31,246	257,158	13,028
Number illiterate.....	178	282	96	146	261	288	141	1,563	228
Per cent illiterate.....	0.9	1.6	2.5	0.6	1.2	1.2	0.5	0.6	1.8
Foreign-born white, number.....	1,725	8,769	2,698	3,756	6,051	2,608	5,395	165,416	3,134
Number illiterate.....	126	435	446	187	516	172	230	19,026	256
Per cent illiterate.....	7.3	5.0	16.7	5.0	8.5	6.9	4.3	11.5	7.2
Negro, number.....	69	7	3	26	15	429	958	5,362	36
Number illiterate.....	2			1	1	33	39	203	4
Per cent illiterate.....						7.7	4.1	3.8	
PERSONS 10 TO 20 YEARS, INCLUSIVE.									
Total number.....	4,603	7,790	1,929	6,086	7,274	6,480	8,807	104,796	4,544
Number illiterate.....	17	45	23	26	59	17	21	1,494	31
Per cent illiterate.....	0.4	0.6	1.2	0.4	0.8	0.3	0.2	1.4	0.7
SCHOOL AGE AND ATTENDANCE									
Total number 6 to 20 years, inclusive.....	6,218	10,829	2,698	8,459	10,084	8,912	11,663	141,953	6,313
Number attending school.....	4,355	7,905	2,003	5,895	7,176	6,626	8,472	82,396	4,388
Per cent attending school.....	70.0	73.0	74.2	69.7	71.2	74.3	72.6	58.0	69.5
Number 6 to 9 years.....	1,615	3,039	769	2,373	2,810	2,432	2,861	37,157	1,769
Number attending school.....	1,345	2,508	702	2,046	2,298	2,102	2,481	30,083	1,436
Number 10 to 14 years.....	2,021	3,691	919	2,758	3,428	3,045	3,808	43,598	2,068
Number attending school.....	1,929	3,564	860	2,632	3,293	2,977	3,650	40,233	1,993
Number 15 to 17 years.....	1,250	2,157	528	1,612	1,680	1,785	2,437	27,503	1,269
Number attending school.....	828	1,470	332	973	1,271	1,211	1,550	9,382	786
Number 18 to 20 years.....	1,332	1,942	482	1,716	1,869	1,650	2,562	33,695	1,216
Number attending school.....	253	363	79	244	314	336	811	2,718	173
PERSONS 6 TO 14 YEARS, INCLUSIVE.									
Total number.....	3,636	6,730	1,688	5,131	6,235	5,477	6,669	80,755	3,837
Number attending school.....	3,274	6,072	1,592	4,675	5,591	5,079	6,111	70,316	3,429
Per cent attending school.....	90.0	90.2	94.3	91.2	89.7	92.7	91.6	87.1	89.4
Native white—Native parentage, number.....	3,073	2,298	470	3,741	3,435	4,398	4,330	25,667	2,380
Number attending school.....	2,760	2,043	435	3,423	3,096	4,065	3,974	23,221	2,145
Per cent attending school.....	89.8	88.9	92.6	91.5	90.1	92.4	91.8	90.5	90.1
Native white—Foreign or mixed parentage, number.....	516	4,184	1,103	1,226	2,580	923	2,063	46,317	1,368
Number attending school.....	471	3,817	1,051	1,121	2,323	876	1,910	39,737	1,210
Per cent attending school.....	91.3	91.2	95.3	91.4	90.0	94.9	91.7	85.8	88.5
Foreign-born white, number.....	31	248	108	156	210	44	77	8,093	68
Number attending school.....	27	212	99	126	165	41	67	6,766	55
Per cent attending school.....		85.5	91.7	80.8	78.6			83.6	
Negro, number.....	16		2	8	5	92	179	670	17
Number attending school.....	16		2	8	5	82	160	584	10
Per cent attending school.....							80.4	87.2	
DWELLINGS AND FAMILIES									
Dwellings, number.....	6,804	7,889	1,706	8,824	8,598	8,876	11,372	97,481	4,820
Families, number.....	7,126	7,951	1,764	8,960	8,732	9,073	11,782	115,063	4,936

* Less than one-tenth of 1 per cent.

† Native whites having both parents born in countries other than specified, and also those having both parents of foreign birth but born in different countries.

TABLE II.—COMPOSITION AND CHARACTERISTICS OF THE

[Per cent not shown where base is less than 100.]

SUBJECT.	TOTAL CITIES NAMED.	Battle Creek.	Bay City. ¹	Detroit. ¹	Flint. ¹	Grand Rapids. ¹	Jackson.	Kalamazoo.	Lansing.	Saginaw. ¹
POPULATION										
Total population, 1910.....	839,929	25,287	45,166	465,766	38,550	112,571	31,433	39,427	31,229	50,510
1900.....	540,977	18,563	27,628	285,704	13,103	87,565	25,180	24,404	16,485	42,345
1890.....	415,068	13,197	27,839	205,876	9,803	60,278	20,798	17,853	13,102	46,322
1880.....	231,407	7,063	20,693	116,340	8,409	32,016	10,105	11,937	8,319	10,525
1870.....	147,701	5,838	7,064	79,577	5,386	16,507	11,447	9,181	5,241	7,460
Increase, 1900-1910.....	298,952	6,704	17,538	180,062	25,447	25,006	6,253	15,033	14,744	8,165
Per cent of increase.....	55.3	36.1	63.5	63.0	194.2	28.6	24.8	61.6	89.4	19.3
Increase, 1890-1900.....	125,909	5,366	-211	79,823	3,300	27,287	4,382	6,551	3,383	-3,977
Per cent of increase.....	30.3	40.7	-0.8	38.8	33.7	45.3	21.1	36.7	25.8	-8.6
COLOR AND NATIVITY										
White.....	830,489	24,684	45,000	459,926	38,144	111,879	31,066	38,739	30,868	50,183
Number in 1900.....	533,660	18,026	27,485	281,575	12,840	86,952	24,701	23,931	16,156	41,094
Number in 1890.....	408,734	12,830	27,679	202,422	9,601	59,057	20,329	17,420	12,760	46,028
Negro.....	9,244	575	160	5,741	397	665	354	685	354	313
Number in 1900.....	7,257	537	143	4,111	257	604	473	471	323	348
Number in 1890.....	6,290	355	158	3,431	199	602	462	420	341	239
Black.....	5,744	305	50	3,444	350	454	297	421	175	242
Mulatto.....	3,500	270	110	2,297	41	211	57	264	179	71
Indian.....	55			41		2	1	4		7
Chinese.....	98	7		28	9	21	12	9	5	6
Japanese.....	43	1	5	30		4			2	1
Native white—Native parentage.....	283,919	17,504	12,681	115,106	21,269	40,777	18,474	21,354	19,497	17,257
Number in 1900.....	163,581	12,715	5,704	61,309	7,044	29,634	13,817	18,027	9,373	11,865
Native white—Foreign or mixed parentage.....	314,527	4,564	21,292	188,255	10,213	42,767	8,285	10,520	7,998	21,225
Number in 1900.....	215,329	5,494	13,313	124,215	3,066	33,460	7,116	7,214	4,423	16,688
Native white—Foreign parentage.....	211,837	2,237	13,836	131,762	5,319	29,616	4,806	6,688	4,121	13,452
Native white—Mixed parentage.....	102,690	2,327	7,456	56,493	4,894	13,151	3,479	3,840	3,277	7,773
Foreign-born white.....	232,043	2,616	11,027	156,565	6,662	28,335	4,307	6,857	3,973	11,701
Number in 1900.....	154,550	1,817	8,498	96,061	2,130	23,368	3,768	4,697	2,360	11,401
PER CENT OF TOTAL POPULATION.										
Native white—Native parentage.....	33.8	69.3	28.1	24.7	55.2	36.2	58.8	54.1	62.4	34.2
Per cent in 1900.....	30.2	68.5	20.6	21.5	53.8	33.8	54.9	49.3	56.9	28.3
Native white—Foreign or mixed parentage.....	37.4	18.1	47.1	40.4	26.5	38.0	26.4	26.7	23.7	42.0
Per cent in 1900.....	39.8	18.8	48.2	43.5	28.0	38.2	28.3	28.6	26.8	44.0
Foreign-born white.....	27.6	10.4	24.4	33.6	17.3	25.2	13.7	17.4	12.7	23.2
Per cent in 1900.....	28.6	8.8	30.7	33.6	16.3	27.2	15.0	19.2	14.3	26.9
Negro.....	1.1	2.3	0.4	1.2	1.0	0.6	1.1	1.7	1.1	0.6
Per cent in 1900.....	1.5	2.8	0.5	1.4	2.0	0.7	1.9	1.9	2.0	0.8
SEX										
Total.. Male.....	429,253	12,374	22,505	240,354	21,779	55,539	15,854	19,197	16,801	24,850
Female.....	410,676	18,893	22,661	225,412	16,771	57,032	15,578	20,240	14,428	25,660
White.. Male.....	424,303	12,083	22,421	237,300	21,553	55,167	15,653	18,826	16,621	24,679
Female.....	406,186	12,001	22,579	222,626	16,591	56,712	15,413	19,913	14,247	25,604
Negro.. Male.....	4,798	283	80	2,985	217	347	188	360	174	164
Female.....	4,446	292	80	2,756	180	318	166	325	180	149
FOREIGN NATIONALITIES										
FOREIGN-BORN WHITE: Born in—										
Austria.....	15,683	88	107	14,160	209	549	60	155	73	222
Belgium.....	2,442	8	24	2,237	18	21	29	13	80	12
Canada—French.....	6,761	33	1,324	4,106	154	197	30	67	51	729
Canada—Other.....	54,164	1,031	3,108	37,779	3,248	2,997	960	663	1,087	3,291
Denmark.....	890	31	10	411	25	260	12	21	15	45
England.....	14,014	415	683	9,032	742	903	652	473	377	737
France.....	942	20	34	637	22	48	21	18	7	135
Germany.....	60,441	301	2,727	44,674	549	4,546	1,004	869	1,363	4,408
Greece.....	827	50	12	584	34	31	48	20	30	18
Holland.....	16,098	42	36	584	23	11,891	19	3,457	27	14
Hungary.....	6,903	16	23	5,935	296	209	12	200	98	114
Ireland.....	8,502	169	399	5,584	227	871	421	300	127	393
Italy.....	6,685	35	22	5,724	192	319	58	43	74	218
Norway.....	538	12	34	225	22	177	14	12	13	29
Russia.....	26,203	46	1,633	18,644	420	3,557	697	244	200	762
Scotland.....	4,967	138	372	3,320	229	222	135	109	76	366
Sweden.....	2,226	59	322	601	60	929	35	95	58	67
Switzerland.....	882	27	33	595	24	61	23	33	26	60
Turkey.....	1,267	43	41	686	38	284	8	12	153	2
Wales.....	319	2	47	170	15	23	20	6	9	27
Other foreign countries.....	1,359	50	36	817	50	240	49	41	29	47
NATIVE WHITE: Both parents born in—										
Austria.....	6,770	5	36	6,023	72	389	18	16	33	173
Canada—French.....	5,573	25	1,815	2,594	185	150	29	57	35	683
Canada—Other.....	16,990	284	1,771	9,430	1,510	1,222	326	199	400	1,846
Denmark.....	616	20	4	269	25	238	8	23	14	15
England.....	7,663	316	432	4,096	412	663	504	358	311	571
France.....	1,071	13	33	780	47	70	19	26	27	56
Germany.....	94,473	567	4,794	69,232	1,151	6,749	1,740	1,393	2,110	6,677
Greece.....	43	4	1	19	1	3	3	8		
Holland.....	16,373	49	38	458	30	12,742	24	2,960	45	15
Hungary.....	1,110	6	10	968	16	46	2	28	5	29
Ireland.....	14,933	407	409	8,978	585	1,823	959	673	379	625
Italy.....	2,604	15	11	2,149	27	178	24	18	19	163
Norway.....	323	12	16	114	17	100	3	22	16	23
Russia.....	12,660	9	2,351	7,573	119	1,570	342	73	48	575
Scotland.....	2,662	63	212	1,543	98	178	85	101	71	311
Sweden.....	1,788	22	283	336	59	916	16	68	52	36
Switzerland.....	593	16	39	406	19	36	13	20	17	27
Wales.....	240	6	38	106	18	13	23	10	5	21
All others of foreign parentage.....	25,352	398	1,454	16,628	919	2,520	668	635	526	1,604

¹ For changes in boundaries, etc., see page 625.

STATISTICS OF POPULATION.

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POPULATION FOR CITIES OF 25,000 OR MORE.

A minus sign (-) denotes decrease.]

SUBJECT.	TOTAL, CITIES NAMED.	Battle Creek.	Bay City. ¹	Detroit. ¹	Flint. ¹	Grand Rapids. ¹	Jackson.	Kalamazoo.	Lansing.	Saginaw. ¹
MALES OF VOTING AGE										
Total number.....	269,962	8,429	12,654	150,017	15,107	34,295	10,768	12,588	10,757	15,347
Number in 1900.....	153,019	5,768	7,259	78,855	4,027	24,906	8,211	7,461	4,004	11,838
Native white—Native parentage.....	84,075	5,569	3,000	32,653	7,741	11,792	5,957	6,514	6,523	4,326
Number in 1900.....	46,233	3,824	1,621	15,890	2,111	3,279	4,344	3,621	2,643	3,000
Native white—Foreign or mixed parentage.....	70,177	1,396	4,376	39,761	3,582	3,527	2,461	2,662	2,109	5,303
Number in 1900.....	38,033	978	1,858	21,488	821	5,745	1,843	1,577	891	5,349
Native white—Foreign parentage.....	49,928	818	3,210	28,834	2,171	6,312	1,563	1,811	1,238	3,921
Native white—Mixed parentage.....	20,249	578	1,166	10,877	1,411	2,215	893	851	871	1,382
Foreign-born white.....	112,033	1,259	5,213	75,323	3,628	13,689	2,182	3,149	2,006	5,584
Number in 1900.....	66,674	829	3,342	40,216	923	10,683	1,804	2,067	1,002	5,278
Negro.....	3,543	197	62	2,224	147	264	155	254	113	127
Number in 1900.....	2,431	167	33	1,372	86	192	209	164	85	148
Indian, Chinese, and Japanese.....	134	8	3	56	9	23	13	9	6	7
PER CENT OF TOTAL.										
Native white—Native parentage.....	31.1	66.1	23.7	21.8	51.2	34.4	55.3	51.7	60.6	28.2
Native white—Foreign or mixed parentage.....	26.0	16.6	34.6	26.5	23.7	24.9	22.9	21.1	19.6	34.6
Foreign-born white.....	41.5	14.9	41.2	50.2	24.0	39.9	20.3	25.0	18.6	36.4
Negro.....	1.3	2.3	0.5	1.5	1.0	0.8	1.4	2.0	1.1	0.8
CITIZENSHIP OF FOREIGN-BORN WHITE.										
Naturalized.....	54,320	570	4,009	32,891	1,579	7,758	1,180	1,505	1,029	3,799
Having first papers.....	9,365	64	262	7,271	196	1,016	119	134	137	166
Alien.....	37,369	324	634	28,733	1,719	3,301	612	719	610	717
Unknown.....	10,979	301	308	6,428	134	1,614	271	791	230	902
ILLITERACY										
ILLITERATE MALES OF VOTING AGE.										
Total number illiterate.....	12,862	72	569	9,709	239	933	320	266	205	549
Per cent illiterate.....	4.8	0.9	4.5	6.5	1.6	2.7	3.0	2.1	1.9	3.6
Per cent in 1900.....	3.9	0.6	7.5	4.5	1.8	3.3	2.1	2.3	5.5	3.5
Native white, number illiterate.....	814	16	142	320	34	49	31	100	33	89
Per cent illiterate.....	0.5	0.2	1.9	0.4	0.3	0.2	0.4	1.1	0.4	0.9
Foreign-born white, number illiterate.....	11,896	44	423	9,310	200	865	298	157	167	452
Per cent illiterate.....	10.6	3.5	8.1	12.4	5.5	6.3	12.3	5.0	8.3	8.1
Negro, number illiterate.....	130	12	4	72	0	14	6	5	5	8
Per cent illiterate.....	3.7	6.1	3.2	3.2	3.4	9.0	2.4	4.4	6.3	6.3
PERSONS 10 YEARS OLD AND OVER.										
Total number.....	684,855	21,466	35,444	376,563	32,458	91,390	26,453	33,104	26,494	41,483
Number illiterate.....	25,623	138	1,269	18,731	381	2,271	568	597	403	1,267
Per cent illiterate.....	3.7	0.6	3.6	5.0	1.2	2.5	2.1	1.8	1.5	3.1
Native white, number.....	452,468	18,415	24,534	220,512	25,754	63,331	21,898	25,936	22,309	29,779
Number illiterate.....	1,979	48	307	911	70	145	64	192	64	178
Per cent illiterate.....	0.4	0.3	1.3	0.4	0.3	0.2	0.3	0.7	0.3	0.6
Foreign-born white, number.....	224,102	2,559	10,769	150,890	6,357	27,451	4,219	6,570	3,378	11,409
Number illiterate.....	23,279	68	957	17,633	303	2,088	469	372	318	1,071
Per cent illiterate.....	10.4	2.7	8.9	11.7	4.8	7.6	11.1	5.7	8.2	9.4
Negro, number.....	8,098	484	135	5,068	338	584	323	585	300	281
Number illiterate.....	326	20	5	176	3	28	23	29	21	16
Per cent illiterate.....	4.0	4.1	3.7	3.5	0.9	4.8	8.7	5.0	7.0	5.7
PERSONS 10 TO 20 YEARS, INCLUSIVE.										
Total number.....	164,028	4,447	9,958	91,302	6,840	22,324	5,354	7,289	6,310	10,204
Number illiterate.....	1,837	10	61	1,389	20	197	47	34	33	46
Per cent illiterate.....	1.1	0.2	0.6	1.5	0.3	0.9	0.9	0.5	0.5	0.5
SCHOOL AGE AND ATTENDANCE										
Total number 6 to 20 years, inclusive.....	219,961	5,841	13,669	122,979	8,871	30,138	7,249	9,580	7,988	13,619
Number attending school.....	130,924	3,955	8,866	69,808	4,739	19,141	4,697	6,067	4,877	8,771
Per cent attending school.....	59.5	67.7	64.8	56.8	53.4	63.5	64.8	63.3	61.1	64.4
Number 6 to 9 years.....	55,933	1,364	3,738	31,677	2,031	7,814	1,895	2,291	1,678	3,415
Number attending school.....	45,588	1,272	2,944	25,417	1,696	6,513	1,627	2,083	1,183	2,853
Number 10 to 14 years.....	69,212	1,732	4,325	37,170	2,207	9,286	2,185	2,785	2,362	4,160
Number attending school.....	61,920	1,661	4,196	34,158	2,098	8,872	2,085	2,643	2,243	3,964
Number 15 to 17 years.....	43,674	1,222	2,802	23,928	1,695	6,059	1,382	1,961	1,828	2,797
Number attending school.....	18,052	770	1,370	7,840	734	2,951	758	970	1,176	1,483
Number 18 to 20 years.....	54,142	1,493	2,831	30,204	2,938	6,979	1,787	2,543	2,120	3,247
Number attending school.....	5,364	252	359	2,393	211	805	227	371	275	471
PERSONS 6 TO 14 YEARS, INCLUSIVE.										
Total number.....	122,145	3,126	8,063	68,847	4,238	17,100	4,080	5,076	4,040	7,575
Number attending school.....	107,508	2,933	7,140	59,575	3,794	15,385	3,712	4,726	3,426	6,817
Per cent attending school.....	88.0	93.8	88.6	86.5	89.5	90.0	91.0	93.1	84.8	90.0
Native white—Native parentage, number.....	45,397	2,396	2,639	19,785	2,711	6,365	2,681	2,847	2,678	3,295
Number attending school.....	40,948	2,250	2,466	17,844	2,439	5,651	2,649	2,649	2,247	2,944
Per cent attending school.....	90.2	93.9	93.4	90.2	90.0	88.8	91.7	93.0	83.9	89.3
Native white—Foreign or mixed parentage, number.....	65,358	584	5,047	41,034	1,206	9,447	1,236	1,747	1,190	3,867
Number attending school.....	56,895	551	4,340	35,025	1,090	8,593	1,117	1,644	1,030	3,505
Per cent attending school.....	87.1	94.3	86.0	85.4	90.4	91.0	90.4	94.1	86.6	90.6
Foreign-born white, number.....	10,365	94	360	7,405	267	1,222	126	396	112	383
Number attending school.....	8,766	85	318	6,162	220	1,082	105	358	92	344
Per cent attending school.....	84.6	89.3	88.3	82.4	82.4	88.5	83.3	90.4	82.1	89.5
Negro, number.....	1,013	52	15	615	54	65	37	86	60	29
Number attending school.....	887	47	14	536	45	58	32	75	57	23
Per cent attending school.....	87.6	90.4	93.3	87.2	83.3	89.7	89.7	86.2	93.8	78.9
DWELLINGS AND FAMILIES										
Dwellings, number.....	163,926	6,170	9,579	83,124	7,393	23,432	7,464	8,412	6,849	11,563
Families, number.....	188,823	6,720	9,956	100,356	8,527	26,925	7,935	9,096	7,382	11,926

¹ Native whites having both parents born in countries other than specified, and also those having both parents of foreign birth but born in different countries.

STATISTICS OF POPULATION.

TABLE IV.—COMPOSITION AND CHARACTERISTICS OF THE POPULATION FOR PLACES OF 2,500 TO 10,000.

SUBJECT.	TOTAL PLACES NAMED.	Albion.	Alle-gan.	Alma.	Beld-ing.	Benton Har-bor. ¹	Besse-mer.	Big Rapids.	Boyne City.	Cadil-lac.	Char-lotte.	Che-boygan.	Cold-water.	Crystal Falls.
SEX, COLOR, AND NATIVITY														
Total population, 1910.....	283,298	5,833	3,419	2,787	4,119	9,185	4,583	4,519	5,218	8,375	4,886	6,859	5,945	3,775
1900.....	224,068	4,519	2,667	2,047	3,282	6,562	3,911	4,686	912	5,997	4,092	6,489	6,216	3,231
Male.....	142,205	2,957	1,589	1,309	1,687	4,388	2,677	2,139	2,785	4,270	2,329	3,440	2,799	2,067
Female.....	141,093	2,876	1,830	1,448	2,432	4,797	1,906	2,380	2,433	4,105	2,557	3,419	3,146	1,708
Native white—Native parentage.....	127,567	3,836	2,463	1,877	2,764	5,597	303	2,251	2,974	3,697	4,009	1,764	4,683	877
Native white—Foreign or mixed parentage.....	94,919	1,213	650	596	1,000	2,062	2,136	1,502	1,519	2,926	629	3,349	914	1,892
Foreign-born white.....	58,807	775	235	266	351	1,187	2,144	764	675	1,737	232	1,726	332	1,501
Negro.....	1,775	8	48	17	4	302	2	2	49	14	15	19	15	8
Indian, Chinese, and Japanese.....	230	1	17	1	.....	7	.....	.....	1	1	1	1	1	2
MALES OF VOTING AGE														
Total number.....	85,954	1,970	1,059	811	1,063	2,878	1,488	1,329	1,565	2,524	1,579	1,827	1,893	1,089
Native white—Native parentage.....	35,054	1,223	722	536	709	1,669	56	661	834	1,009	1,237	360	1,422	75
Native white—Foreign or mixed parentage.....	20,240	324	204	137	224	590	172	293	343	612	217	597	297	102
Foreign-born white.....	29,950	421	116	131	130	538	1,260	374	370	898	121	804	165	818
Naturalized.....	16,453	245	99	100	66	340	427	288	262	492	103	632	80	358
Negro.....	591	1	15	6	.....	106	.....	1	17	4	4	6	8	2
ILLITERACY														
Total number 10 years old and over.....	228,499	4,954	2,824	2,217	3,515	7,625	3,324	3,767	3,931	6,624	4,130	5,321	5,081	2,679
Number illiterate.....	7,258	25	19	14	13	173	275	79	95	144	9	389	52	84
Native white 10 years old and over.....	167,566	4,187	2,552	1,938	3,166	6,198	1,246	3,066	3,237	4,901	3,887	3,609	4,737	1,218
Number illiterate.....	2,035	7	11	11	9	12	7	19	33	36	9	132	22	4
Foreign-born white 10 years old and over.....	57,239	760	232	263	345	1,157	2,078	759	658	1,711	229	1,697	329	1,456
Number illiterate.....	5,110	18	.....	3	4	151	268	60	61	108	.....	254	30	80
Negro 10 years old and over.....	1,490	6	37	15	4	293	2	2	35	11	13	14	14	3
Number illiterate.....	93	.....	6	.....	.....	8	.....	.....	1	.....	.....	3	.....	.....
Illiterate males of voting age.....	3,475	6	13	7	4	71	146	30	62	73	2	211	18	44
SCHOOL AGE AND ATTENDANCE														
Total number 6 to 20 years, inclusive.....	78,257	1,385	806	726	1,199	2,280	1,460	1,239	1,568	2,419	1,090	2,278	1,297	1,188
Number attending school.....	54,416	944	647	598	874	1,572	1,009	905	1,123	1,620	736	1,586	947	826
PERSONS 6 TO 14 YEARS, INCLUSIVE.														
Native white, number.....	43,563	735	467	427	491	1,184	823	685	948	1,332	634	1,352	729	647
Number attending school.....	40,384	688	452	421	424	1,121	774	645	902	1,198	533	1,227	676	621
Foreign-born white, number.....	2,148	17	5	4	8	68	84	8	17	37	7	38	6	75
Number attending school.....	1,850	10	5	4	7	58	74	7	16	31	5	30	6	68
Negro, number.....	280	2	5	4	1	44	.....	1	7	3	3	4	2	.....
Number attending school.....	252	2	5	4	.....	41	.....	1	7	2	3	4	2	.....
DWELLINGS AND FAMILIES														
Dwellings, number.....	63,788	1,448	948	716	915	2,295	731	1,140	1,178	1,923	1,341	1,457	1,771	649
Families, number.....	68,503	1,572	989	737	966	2,508	783	1,231	1,213	2,000	1,411	1,519	1,851	708

SUBJECT.	Dowa-giac.	East Jordan.	Glad-stone.	Grand Haven.	Grand Ledge.	Green-ville.	Ham-tramck. ¹	Han-cock.	Hast-ings.	High-land Park.	Hills-dale.	Hough-ton.	Ionia.	Iron Moun-tain. ¹
SEX, COLOR, AND NATIVITY														
Total population, 1910.....	5,088	2,516	4,211	5,856	2,893	4,045	3,569	8,981	4,383	4,120	5,001	5,113	5,030	9,216
1900.....	4,151	1,205	3,380	4,743	2,161	3,381	.....	4,050	3,172	427	4,151	3,359	5,209	9,242
Male.....	2,618	1,275	2,282	2,960	1,425	1,950	1,881	4,682	2,097	2,162	2,334	2,500	2,379	4,767
Female.....	2,470	1,241	1,929	2,896	1,468	2,095	1,678	4,299	2,286	1,958	2,667	2,613	2,651	4,449
Native white—Native parentage.....	3,684	1,235	972	1,736	2,278	2,612	539	1,288	3,459	1,875	4,000	1,433	2,924	706
Native white—Foreign or mixed parentage.....	763	919	1,805	2,722	445	994	1,674	4,511	651	1,315	768	2,466	1,342	4,761
Foreign-born white.....	471	356	1,423	1,364	167	427	1,201	3,162	272	915	228	1,184	744	3,741
Negro.....	159	6	10	30	3	12	85	12	1	15	4	23	18	4
Indian, Chinese, and Japanese.....	11	.....	1	4	.....	.....	.....	8	.....	.....	3	.....	2	4
MALES OF VOTING AGE														
Total number.....	1,697	755	1,264	1,784	946	1,257	943	2,611	1,424	1,233	1,562	1,502	1,578	2,424
Native white—Native parentage.....	1,107	329	224	355	704	752	113	218	1,057	487	1,185	321	886	128
Native white—Foreign or mixed parentage.....	273	234	282	749	149	283	240	770	226	335	264	597	318	414
Foreign-born white.....	263	187	783	665	92	219	568	1,611	140	404	108	566	366	1,878
Naturalized.....	88	121	352	393	44	156	262	786	95	247	73	390	268	1,208
Negro.....	53	5	4	15	1	3	22	4	1	7	2	11	6	2
ILLITERACY														
Total number 10 years old and over.....	4,210	1,942	3,122	4,738	2,390	3,304	2,506	6,733	3,668	3,217	4,250	4,081	4,216	6,857
Number illiterate.....	167	62	154	144	25	36	60	152	21	8	24	58	18	384
Native white 10 years old and over.....	3,637	1,581	1,726	3,380	2,222	2,871	1,252	3,645	3,396	2,331	4,016	2,880	3,472	3,193
Number illiterate.....	17	31	13	25	21	30	8	17	12	4	13	16	6	19
Foreign-born white 10 years old and over.....	447	355	1,387	1,326	165	426	1,185	3,070	271	874	227	1,173	727	3,658
Number illiterate.....	138	30	141	113	4	5	50	135	9	1	11	41	12	365
Negro 10 years old and over.....	119	6	8	29	3	7	69	10	1	12	4	21	15	2
Number illiterate.....	10	1	.....	6	.....	1	2	.....	.....	3	.....	1	.....	.....
Illiterate males of voting age.....	120	43	67	54	18	22	27	55	8	5	10	14	5	186
SCHOOL AGE AND ATTENDANCE														
Total number 6 to 20 years, inclusive.....	1,237	738	1,308	1,681	643	958	1,202	2,655	1,004	1,061	1,107	1,433	1,195	3,280
Number attending school.....	820	568	939	1,132	444	688	719	1,614	707	784	884	1,081	855	2,897
PERSONS 6 TO 14 YEARS, INCLUSIVE.														
Native white, number.....	657	454	752	904	363	535	663	1,513	562	664	619	827	670	1,877
Number attending school.....	602	437	713	847	343	506	574	1,340	528	622	602	787	634	1,803
Foreign-born white, number.....	17	4	59	45	3	5	104	119	4	46	.....	15	12	166
Number attending school.....	6	4	56	39	2	5	91	102	4	42	.....	14	10	152
Negro, number.....	25	.....	3	3	1	1	24	1	.....	2	.....	3	3	.....
Number attending school.....	25	.....	3	3	1	1	21	1	.....	2	.....	.....	3	.....
DWELLINGS AND FAMILIES														
Dwellings, number.....	1,255	552	788	1,336	803	1,055	661	1,414	1,166	949	1,370	933	1,347	1,658
Families, number.....	1,354	611	843	1,393	829	1,135	707	1,794	1,258	980	1,493	1,050	1,425	1,786

¹ For changes in boundaries, etc., see page 625.

TABLE IV.—COMPOSITION AND CHARACTERISTICS OF THE POPULATION FOR PLACES OF 2,500 TO 10,000—Contd.

SUBJECT.	Lapeer.	Lan- rum.	Luding- ton.	Mani- tique.	Marine City.	Mar- shall.	Mid- land.	Monroe.	Mount Clem- ens.	Mount Pleas- ant.	Munis- ing.	Negaun- see.	Niles.	Nor- way.
SEX, COLOR, AND NATIVITY														
Total population, 1910.....	3,946	8,537	9,132	4,722	3,770	4,236	2,527	6,893	7,707	3,972	2,952	3,460	5,156	4,974
1900.....	3,297	5,643	7,166	4,126	3,829	4,370	2,363	5,043	6,576	3,602	2,014	6,935	4,287	4,170
Male.....	1,922	4,220	4,602	2,539	1,866	2,010	1,232	3,484	3,597	1,860	1,659	4,797	2,521	2,620
Female.....	2,024	4,317	4,530	2,183	1,904	2,226	1,295	3,409	4,110	2,112	1,293	3,663	2,635	2,354
Native white—Native parentage.....	2,223	1,247	2,946	983	1,534	2,732	1,502	4,034	3,707	2,312	628	746	3,053	357
Native white—Foreign or mixed parentage.....	1,223	4,667	3,936	2,167	1,492	1,079	711	2,023	2,509	1,123	1,257	3,850	1,884	2,430
Foreign-born white.....	485	2,617	2,247	1,548	694	402	298	823	1,374	501	1,043	3,862	567	2,185
Negro.....	15			3		23	16	3	39	3	11	1	162	
Indian, Chinese, and Japanese.....		6	3	21					18	33	8	1		2
MALES OF VOTING AGE														
Total number.....	1,114	2,154	2,671	1,455	1,032	1,363	718	2,189	2,166	1,108	986	2,856	1,640	1,339
Native white—Native parentage.....	593	133	771	272	310	808	411	1,003	813	618	176	114	900	71
Native white—Foreign or mixed parentage.....	301	752	768	326	389	372	184	726	742	243	227	533	415	147
Foreign-born white.....	215	1,263	1,129	849	333	178	147	453	591	236	575	2,207	267	1,119
Naturalized.....	124	825	782	499	261	127	169	188	454	164	280	869	134	719
Negro.....	5			1		5	6	2	13	2	3	1	58	
ILLITERACY														
Total number 10 years old and over.....	3,397	6,344	7,307	3,806	2,946	3,645	1,965	5,674	6,233	3,212	2,266	6,474	4,336	3,579
Number illiterate.....	583	190	425	338	151	51	31	354	277	20	111	231	43	157
Native white 10 years old and over.....	2,908	3,771	5,092	2,076	2,174	3,232	1,655	4,857	4,826	2,685	1,244	2,705	3,642	1,499
Number illiterate.....	515	4	22	28	72	26	25	214	170	12	14	28	15	3
Foreign-born white 10 years old and over.....	474	2,567	2,212	1,508	672	393	296	814	1,358	499	1,009	3,767	561	2,078
Number illiterate.....	59	186	402	304	79	25	6	138	105	7	96	203	14	134
Negro 10 years old and over.....	15			1		20	15	3	33	3	7	1	133	
Number illiterate.....	9					2		2					14	
Illiterate males of voting age.....	166	69	188	170	60	24	15	180	104	11	58	114	17	77
SCHOOL AGE AND ATTENDANCE														
Total number 6 to 20 years, inclusive.....	1,154	2,813	2,830	1,473	1,063	962	705	1,807	2,109	1,100	886	2,514	1,275	1,738
Number attending school.....	634	2,141	1,940	1,109	760	690	563	1,166	1,480	871	614	1,612	896	1,247
PERSONS 6 TO 14 YEARS, INCLUSIVE.														
Native white, number.....	544	1,091	1,599	815	657	517	427	990	1,233	621	471	1,338	691	997
Number attending school.....	419	1,632	1,487	781	630	481	390	901	1,157	584	444	1,243	651	920
Foreign-born white, number.....	26	83	52	64	32	6	4	7	25	1	54	115	7	139
Number attending school.....	21	79	47	63	29	6	4	4	25		47	101	7	122
Negro, number.....	2			1		5	1		5	1	2		17	
Number attending school.....	1			1		5	1		4		1		16	
DWELLINGS AND FAMILIES														
Dwellings, number.....	810	1,441	1,866	886	886	1,215	632	1,619	1,897	969	541	1,336	1,368	890
Families, number.....	851	1,755	2,112	935	904	1,267	648	1,687	1,931	1,022	562	1,553	1,438	926

SUBJECT.	On- way.	Otsego.	Owosso.	Peto- key.	Red Jacket.	River Rouge.	St. Clair.	St. Johns.	St. Joseph.	South Haven.	Sturgis.	Three Rivers.	Wyann- dotta. ¹	Ypsi- landi.
SEX, COLOR, AND NATIVITY														
Total population, 1910.....	2,702	2,812	9,639	4,778	4,211	4,163	2,633	3,154	5,936	3,577	3,635	5,072	8,287	6,230
1900.....	1,204	2,073	8,696	5,285	4,603	1,743	2,643	3,388	5,155	4,009	2,465	3,550	5,183	7,378
Male.....	1,446	1,412	4,765	2,345	2,407	2,242	1,295	1,452	2,859	1,734	1,814	2,596	4,430	2,731
Female.....	1,256	1,400	4,874	2,433	1,804	1,921	1,338	1,702	3,077	1,843	1,821	2,476	3,857	3,499
Native white—Native parentage.....	1,140	2,184	5,815	2,742	384	1,449	988	2,425	2,444	2,166	2,507	3,888	2,320	3,725
Native white—Foreign or mixed parentage.....	1,085	425	2,465	1,291	1,859	1,487	1,102	523	1,940	921	826	790	3,277	1,449
Foreign-born white.....	477	198	1,352	696	1,953	1,227	535	192	1,468	443	291	377	2,688	614
Negro.....		5	7	17	15		2	9	82	45	11	17	2	434
Indian, Chinese, and Japanese.....				32			6		2	2				8
MALES OF VOTING AGE														
Total number.....	863	911	3,065	1,429	1,578	1,292	791	944	1,710	1,096	1,187	1,771	2,691	1,779
Native white—Native parentage.....	348	641	1,764	776	70	396	228	632	661	598	744	1,301	702	1,011
Native white—Foreign or mixed parentage.....	236	147	625	289	342	316	307	161	428	254	287	264	494	389
Foreign-born white.....	279	119	674	342	1,151	581	254	97	553	233	161	198	1,434	251
Naturalized.....	210	36	378	204	357	284	187	55	337	159	89	54	433	165
Negro.....		4	2	7			1	4	26	9	5	8	1	122
ILLITERACY														
Total number 10 years old and over.....	2,064	2,358	7,949	3,941	3,296	3,109	2,137	2,695	4,772	2,962	2,867	4,341	6,433	5,334
Number illiterate.....	80	61	48	36	261	237	47	32	103	36	10	62	578	43
Native white 10 years old and over.....	1,608	2,160	6,614	3,210	1,393	1,975	1,602	2,496	3,317	2,483	2,672	3,955	3,876	4,355
Number illiterate.....	23	26	18	9	2	97	21	21	16	14	5	19	63	9
Foreign-born white 10 years old and over.....	476	193	1,331	687	1,898	1,134	528	191	1,381	430	287	471	2,555	665
Number illiterate.....	57	34	30	24	253	140	28	10	81	20	5	32	513	20
Negro 10 years old and over.....		5	4	16			2	8	72	38	8	15	2	866
Number illiterate.....		1		1				1	6	2		1	14	
Illiterate males of voting age.....	55	45	29	16	170	120	19	14	45	10	3	22	338	15
SCHOOL AGE AND ATTENDANCE														
Total number 6 to 20 years, inclusive.....	794	739	2,400	1,303	1,046	1,252	727	783	1,591	920	865	1,185	2,308	1,522
Number attending school.....	529	489	1,604	972	702	836	508	600	1,067	670	572	660	1,402	1,188
PERSONS 6 TO 14 YEARS, INCLUSIVE.														
Native white, number.....	457	392	1,368	740	537	704	418	454	762	527	465	606	1,266	759
Number attending school.....	421	379	1,232	683	508	680	396	431	730	501	445	442	1,099	717
Foreign-born white, number.....	6	6	39	20	67	107	10	3	116	4	2	9	157	14
Number attending school.....	6	3	33	15	68	101	10	3	106	4	1	6	124	13
Negro, number.....			1	2					3	11	2	3		85
Number attending school.....			1						3	10	2	3		71
DWELLINGS AND FAMILIES														
Dwellings, number.....	578	679	2,512	1,166	555	850	654	906	1,307	913	929	1,241	1,656	1,687
Families, number.....	606	738	2,556	1,213	802	897	702	924	1,438	970	1,003	1,413	1,759	1,745

¹ For changes in boundaries, etc., see page 625.

STATISTICS OF POPULATION.

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TABLE V.—COMPOSITION AND CHARACTERISTICS OF THE POPULATION FOR WARDS OF CITIES OF 50,000 OR MORE.

DETROIT.

SUBJECT.	THE CITY.	WARD.							
		1	2	3	4	5	6	7	8
SEX, COLOR, AND NATIVITY									
Total population, 1910.....	465,786	25,916	17,109	23,539	22,960	29,632	21,047	21,833	22,043
Male.....	240,354	12,785	8,211	12,108	11,310	16,185	10,181	12,480	10,614
Female.....	225,412	13,131	8,898	11,341	11,650	13,447	10,866	9,353	11,429
Native white—Native parentage.....	115,106	10,833	8,202	4,658	9,488	4,175	7,824	2,934	7,254
Native white—Foreign or mixed parentage.....	188,255	7,892	4,650	7,843	7,160	10,818	7,099	8,477	8,502
Foreign-born white.....	156,565	6,555	4,157	8,250	6,208	13,454	6,092	10,017	6,247
Negro.....	5,741	550	96	2,744	100	1,177	29	399	39
Indian, Chinese, and Japanese.....	99	36	4	14	4	8	3	6	1
FOREIGN-BORN WHITE: Born in—									
Austria.....	14,160	121	51	557	33	1,136	24	1,978	35
Belgium.....	2,237	67	27	26	4	25	30	36	80
Canada—French.....	4,166	164	90	120	169	142	131	228	175
Canada—Other.....	37,779	2,934	2,354	1,554	3,694	1,473	3,590	832	3,462
England.....	9,032	750	498	404	793	413	848	241	719
France.....	637	48	26	31	36	39	36	34	34
Germany.....	44,674	860	372	1,433	452	2,752	378	2,692	498
Holland.....	584	23	16	14	29	18	14	21	16
Hungary.....	5,935	66	23	85	29	330	16	431	10
Ireland.....	5,584	315	249	169	380	180	568	245	645
Italy.....	5,724	175	9	648	17	2,403	4	1,816	26
Russia.....	18,644	373	57	2,444	67	4,074	58	1,176	18
Scotland.....	3,320	249	182	144	280	161	268	65	347
Sweden.....	601	45	36	35	59	25	22	12	69
Switzerland.....	595	31	6	15	18	44	17	48	24
Turkey.....	686	80	31	75	21	36	6	71	18
Other foreign countries.....	2,207	254	125	496	122	203	82	91	71
MALES OF VOTING AGE									
Total number.....	150,017	9,868	6,469	7,881	8,250	9,776	6,977	8,029	7,024
Native white—Native parentage.....	32,653	4,071	3,073	1,405	3,277	1,210	2,444	761	2,004
Native white—Foreign or mixed parentage.....	30,761	2,389	1,573	1,556	2,216	1,615	2,042	1,612	2,330
Foreign-born white.....	75,333	2,954	1,774	3,876	2,711	6,463	2,484	5,476	2,676
Naturalized.....	32,891	1,471	778	1,560	1,374	1,961	1,299	1,560	1,501
Negro.....	2,224	228	42	1,034	45	486	5	174	14
ILLITERACY AND SCHOOL ATTENDANCE									
Total number 10 years old and over.....	376,563	23,439	15,845	19,409	20,284	23,288	18,219	17,448	18,678
Number illiterate.....	18,731	253	36	1,328	108	2,405	106	2,577	186
Illiterate males of voting age.....	9,709	108	12	657	32	1,175	32	1,620	75
Total number 6 to 20 years, inclusive.....	122,979	4,887	2,864	5,991	4,400	8,242	4,622	5,741	5,108
Number attending school.....	69,898	2,843	1,633	3,421	2,673	4,551	2,719	2,898	3,220
DWELLINGS AND FAMILIES									
Dwellings, number.....	83,124	4,366	2,567	3,976	4,345	4,320	4,398	3,059	4,839
Families, number.....	100,356	5,534	3,703	4,983	5,424	6,038	5,292	4,197	5,397

SUBJECT	WARD.									
	9	10	11	12	13	14	15	16	17	18
SEX, COLOR, AND NATIVITY										
Total population, 1910.....	38,793	26,153	25,045	24,893	26,074	21,668	18,665	38,542	35,922	26,132
Male.....	20,574	12,663	12,762	12,532	13,429	10,978	9,667	21,009	17,923	14,553
Female.....	18,219	13,490	12,283	12,161	12,645	10,690	8,998	17,533	17,999	11,279
Native white—Native parentage.....	4,083	7,576	3,894	5,887	5,232	5,224	5,505	6,404	11,210	4,863
Native white—Foreign or mixed parentage.....	18,219	10,780	12,397	10,891	12,751	9,711	8,094	16,731	15,868	10,372
Foreign-born white.....	16,304	7,766	8,682	8,043	8,054	6,671	5,045	15,371	8,793	10,556
Negro.....	202	29	67	65	37	62	20	36	50	39
Indian, Chinese, and Japanese.....	5	2	5	7	.....	.....	1	.....	1	2
FOREIGN-BORN WHITE: Born in—										
Austria.....	1,405	188	287	514	133	320	48	5,491	61	1,773
Belgium.....	137	47	80	31	193	12	398	10	1,018	16
Canada—French.....	490	341	328	232	227	192	216	311	377	233
Canada—Other.....	1,087	3,406	873	2,083	1,317	1,739	1,536	1,835	2,396	273
England.....	308	713	229	501	328	467	878	476	684	21
France.....	54	35	33	23	26	31	50	60	2,782	3,027
Germany.....	7,362	1,488	4,762	2,697	4,499	2,727	1,687	4,208	15	62
Holland.....	47	19	109	18	80	14	60	204	30	3,114
Hungary.....	482	164	366	167	305	70	38	392	263	143
Ireland.....	180	664	144	348	199	230	250	32	45	85
Italy.....	330	45	69	11	14	14	25	85	35	35
Russia.....	4,079	75	1,191	1,101	491	534	49	2,117	35	702
Scotland.....	107	384	84	206	93	207	111	120	221	82
Sweden.....	24	45	9	19	38	36	20	27	57	14
Switzerland.....	59	30	36	6	43	24	62	32	74	16
Turkey.....	47	3	5	20	5	.....	19	1	1	247
Other foreign countries.....	106	89	77	56	73	54	89	73	112	34
MALES OF VOTING AGE										
Total number.....	11,755	7,909	7,123	7,357	7,577	6,411	6,196	12,234	10,509	8,875
Native white—Native parentage.....	883	1,987	717	1,481	1,056	1,271	1,456	1,791	2,575	1,191
Native white—Foreign or mixed parentage.....	2,559	2,602	2,164	2,119	2,662	2,019	2,194	2,521	3,936	1,647
Foreign-born white.....	8,233	3,308	4,221	3,742	3,847	3,101	2,536	7,908	2,982	6,031
Naturalized.....	3,117	1,848	2,215	1,966	2,165	1,825	1,496	2,661	2,476	1,608
Negro.....	75	11	20	14	12	20	9	14	15	6
ILLITERACY AND SCHOOL ATTENDANCE										
Total number 10 years old and over.....	29,717	21,453	19,384	19,425	20,228	17,105	15,452	29,210	28,015	19,968
Number illiterate.....	3,852	454	1,088	784	382	510	286	2,978	235	1,185
Illiterate males of voting age.....	2,016	162	504	365	141	243	127	1,646	93	701
Total number 6 to 20 years, inclusive.....	12,024	6,903	7,761	6,915	7,760	6,329	4,870	11,143	9,881	7,538
Number attending school.....	5,975	4,240	4,277	4,157	4,218	3,504	2,835	5,398	6,016	4,430
DWELLINGS AND FAMILIES										
Dwellings, number.....	5,345	5,492	4,067	4,865	4,749	4,400	3,803	6,217	7,681	4,635
Families, number.....	7,737	6,078	5,257	5,429	5,554	4,778	4,197	7,485	8,223	5,045

TABLE V.—COMPOSITION AND CHARACTERISTICS OF THE POPULATION FOR WARDS OF CITIES OF 50,000 OR MORE—Continued.

GRAND RAPIDS.

SUBJECT.	THE CITY.	WARD.											
		1	2	3	4	5	6	7	8	9	10	11	12
SEX, COLOR, AND NATIVITY													
Total population, 1910.....	112,571	7,022	4,638	10,880	10,491	12,653	15,031	8,916	4,504	6,485	11,823	10,769	9,358
Male.....	55,539	3,670	2,080	4,779	5,291	6,319	7,749	4,540	2,289	3,309	5,515	5,236	4,753
Female.....	57,032	3,352	2,549	6,101	5,200	6,334	7,282	4,376	2,215	3,176	6,308	5,533	4,606
Native white—Native parentage.....	40,777	2,854	1,950	5,341	4,488	4,094	2,477	2,400	1,460	2,170	4,732	5,269	3,542
Native white—Foreign or mixed parentage.....	42,767	2,318	1,589	3,490	3,554	5,238	6,790	3,709	1,896	2,581	4,368	3,621	3,613
Foreign-born white.....	28,335	1,723	1,076	2,017	2,419	3,211	5,750	2,804	1,135	1,729	2,458	1,823	2,190
Negro.....	665	127	9	25	29	110	13	2	13	5	264	55	13
Indian, Chinese, and Japanese.....	27	14	7	1	1	1	1	1	1	1	1	1	1
FOREIGN-BORN WHITE: Born in—													
Austria.....	549	8	9	9	199	26	68	118	51	39	6	7	9
Canada—French.....	197	15	2	31	8	15	21	34	16	6	14	14	21
Canada—Other.....	2,997	163	114	399	324	379	192	189	95	211	350	248	233
Denmark.....	260	5	3	11	30	74	18	31	12	7	39	20	10
England.....	903	56	31	117	121	122	66	49	31	65	93	104	48
Germany.....	4,546	157	64	162	473	354	818	999	484	599	115	152	169
Holland.....	11,891	736	674	953	393	1,704	2,806	134	71	324	1,536	1,062	1,498
Hungary.....	209	50	1	3	31	113	5	5	1	1	74	55	104
Ireland.....	871	115	38	141	51	124	20	34	48	67	128	2	6
Italy.....	319	141	4	4	4	20	16	41	13	19	12	6	12
Norway.....	177	2	6	18	12	20	10	10	13	19	12	6	12
Russia.....	3,557	21	71	21	522	163	1,405	894	175	281	3	3	1
Scotland.....	222	8	12	37	29	27	17	13	13	9	30	17	10
Sweden.....	929	18	25	54	141	100	149	198	108	45	32	21	38
Turkey.....	284	21	5	8	3	4	14	32	33	16	5	2	2
Other foreign countries.....	424	17	17	49	78	99	27	33	16	28	20	15	25
MALES OF VOTING AGE													
Total number.....	34,295	2,456	1,346	3,302	3,529	3,630	4,334	2,804	1,449	2,000	3,441	3,195	2,809
Native white—Native parentage.....	11,792	933	570	1,585	1,541	1,088	648	678	430	608	1,277	1,459	975
Native white—Foreign or mixed parentage.....	8,527	579	313	826	773	999	864	683	438	518	938	841	755
Foreign-born white.....	13,089	867	445	881	1,204	1,503	2,817	1,441	576	871	1,132	877	1,075
Naturalized.....	7,758	442	261	471	590	961	1,511	717	358	494	667	607	679
Negro.....	264	77	5	6	10	40	4	1	5	3	93	17	3
ILLITERACY AND SCHOOL ATTENDANCE													
Total number 10 years old and over.....	91,390	5,830	3,957	9,452	8,747	10,055	11,519	7,178	3,710	5,212	9,673	8,704	7,853
Number illiterate.....	2,271	176	110	64	382	143	570	307	72	170	95	47	135
Illiterate males of voting age.....	933	78	27	19	155	36	263	148	24	96	36	13	38
Total number 6 to 20 years, inclusive.....	30,138	1,750	1,201	2,310	2,381	3,802	4,732	2,456	1,166	1,823	3,044	2,846	2,627
Number attending school.....	19,141	982	739	1,590	1,353	2,433	3,002	1,532	586	1,076	2,021	2,056	1,721
DWELLINGS AND FAMILIES													
Dwellings, number.....	23,432	1,432	958	2,458	2,028	2,784	2,672	1,777	877	1,275	2,676	2,496	1,999
Families, number.....	26,925	1,720	1,066	2,831	2,435	3,014	3,222	2,100	1,088	1,486	2,947	2,759	2,257

SAGINAW.

SUBJECT.	THE CITY.	WARD.								
		1	2	3	4	5	6	7	8	9
SEX, COLOR, AND NATIVITY										
Total population, 1910.....	50,810	3,280	2,166	2,692	2,620	2,407	2,549	2,092	2,858	2,756
Male.....	24,850	1,601	1,047	1,597	1,195	1,190	1,215	884	1,290	1,295
Female.....	25,960	1,679	1,119	1,095	1,425	1,217	1,334	1,208	1,568	1,461
Native white—Native parentage.....	17,257	1,322	875	828	828	697	632	1,040	1,237	1,032
Native white—Foreign or mixed parentage.....	21,225	1,269	774	1,088	1,178	1,156	1,254	671	1,048	1,123
Foreign-born white.....	11,701	670	399	682	607	627	640	381	553	572
Negro.....	313	9	18	51	6	27	23	48	19	28
Indian, Chinese, and Japanese.....	14	1	1	4	1	1	1	2	1	1
FOREIGN-BORN WHITE: Born in—										
Austria.....	222	5	3	8	11	103	20	1	5	6
Canada—French.....	729	41	9	21	9	12	1	20	93	78
Canada—Other.....	3,291	297	196	255	200	77	107	156	235	218
Denmark.....	45	3	2	3	3	1	3	1	1	2
England.....	737	40	26	52	35	17	12	26	46	63
France.....	135	1	1	6	1	1	1	2	2	10
Germany.....	4,408	155	78	192	268	368	454	74	94	115
Hungary.....	114	1	2	4	4	6	1	1	1	1
Ireland.....	398	55	18	40	24	7	14	35	24	24
Italy.....	218	23	14	47	16	1	7	2	2	1
Norway.....	29	2	1	1	1	1	1	2	2	1
Russia.....	782	12	2	13	4	23	22	13	3	5
Scotland.....	368	36	36	22	19	3	9	6	21	34
Sweden.....	67	4	3	6	1	2	1	7	4	4
Switzerland.....	60	2	1	4	6	4	2	3	1	3
Other foreign countries.....	120	2	9	12	6	1	1	7	7	8
MALES OF VOTING AGE										
Total number.....	15,347	896	780	1,268	820	736	747	646	766	780
Native white—Native parentage.....	4,326	332	240	363	199	117	117	319	270	233
Native white—Foreign or mixed parentage.....	5,303	331	286	485	333	297	315	165	235	267
Foreign-born white.....	5,584	328	186	353	286	311	309	145	254	270
Naturalized.....	3,799	242	40	261	221	211	238	106	177	179
Negro.....	127	5	8	33	2	11	6	16	6	10
ILLITERACY AND SCHOOL ATTENDANCE										
Total number 10 years old and over.....	41,483	2,593	1,937	2,460	2,236	1,963	2,126	1,902	2,341	2,272
Number illiterate.....	1,267	15	5	17	31	176	176	33	51	51
Illiterate males of voting age.....	549	7	1	6	7	59	59	14	19	19
Total number 6 to 20 years, inclusive.....	13,619	842	481	489	571	625	709	406	831	776
Number attending school.....	8,771	540	258	237	370	398	465	249	642	536
DWELLINGS AND FAMILIES										
Dwellings, number.....	11,563	739	473	454	679	609	606	463	637	690
Families, number.....	11,926	761	497	478	714	621	623	475	646	702

STATISTICS OF POPULATION.

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TABLE V.—COMPOSITION AND CHARACTERISTICS OF THE POPULATION FOR WARDS OF CITIES OF 50,000 OR MORE—Continued.

SAGINAW—Continued.

SUBJECT.	WARD.										
	10	11	12	13	14	15	16	17	18	19	20
SEX, COLOR, AND NATIVITY											
Total population, 1910.....	2,643	2,321	2,358	2,194	2,734	1,864	1,958	1,857	1,908	3,842	3,610
Male.....	1,316	1,187	1,239	1,099	1,321	906	915	826	941	1,958	1,828
Female.....	1,327	1,134	1,119	1,095	1,413	958	1,043	831	967	1,885	1,782
Native white—Native parentage.....	752	823	814	612	1,102	650	806	579	647	1,209	724
Native white—Foreign or mixed parentage.....	1,258	902	933	991	1,094	793	778	718	794	1,623	1,780
Foreign-born white.....	600	596	605	591	527	412	366	360	467	1,000	1,087
Negro.....	33	2	2	2	11	8	8	8	8	11	19
Indian, Chinese, and Japanese.....	4	4	4	4	4	4	4	4	4	4	4
FOREIGN-BORN WHITE: Born in—											
Austria.....	16	2	1	1	2	5	7	7	8	12	6
Canada—French.....	1	87	70	14	42	45	12	21	13	123	17
Canada—Other.....	128	174	119	133	239	152	123	81	132	176	93
Denmark.....	4	1	1	1	5	1	2	2	2	7	1
England.....	73	54	23	16	38	14	29	11	39	101	22
France.....	2	7	2	2	3	3	3	3	1	19	75
Germany.....	258	101	94	298	123	115	141	165	168	330	817
Hungary.....	1	12	17	4	3	3	3	3	3	68	6
Ireland.....	6	10	13	15	23	13	13	10	15	33	18
Italy.....	2	1	2	2	2	2	2	2	2	3	1
Norway.....	92	123	210	35	10	5	7	7	47	33	7
Russia.....	13	18	13	4	16	16	12	9	26	41	12
Scotland.....	2	6	2	6	3	2	3	1	7	9	5
Sweden.....	2	1	8	3	7	8	5	3	7	19	7
Switzerland.....	2	1	8	3	7	8	5	3	7	19	7
Other foreign countries.....	2	1	8	3	7	8	5	3	7	19	7
MALES OF VOTING AGE											
Total number.....	723	668	723	624	797	541	617	521	550	1,091	973
Native white—Native parentage.....	157	207	205	150	251	152	233	146	142	275	118
Native white—Foreign or mixed parentage.....	264	182	211	188	287	202	208	214	194	353	346
Foreign-born white.....	291	279	305	286	255	187	171	161	214	459	504
Naturalized.....	217	178	153	209	208	137	121	117	111	313	360
Negro.....	11	1	1	1	4	4	5	5	4	4	5
ILLITERACY AND SCHOOL ATTENDANCE											
Total number 10 years old and over.....	2,084	1,809	1,818	1,748	2,263	1,530	1,702	1,406	1,527	2,913	2,853
Number illiterate.....	8	101	192	179	7	29	17	26	58	159	163
Illiterate males of voting age.....	1	50	95	87	3	11	7	15	22	84	61
Total number 6 to 20 years, inclusive.....	801	699	666	671	763	495	474	451	580	1,145	1,174
Number attending school.....	537	442	441	415	546	303	275	308	371	721	687
DWELLINGS AND FAMILIES											
Dwellings, number.....	585	521	538	529	625	428	471	386	442	863	825
Families, number.....	631	538	555	534	634	449	489	407	449	893	830

NOTES REGARDING CHANGES IN BOUNDARIES, ETC.

COUNTIES.

ALGER.—Organized from part of Schoolcraft in 1835.
 ARENAC.—Organized from part of Bay in 1833.
 BARAGA.—Organized from part of Houghton in 1875.
 BAY.—Part taken to form Arenac in 1833.
 CHARLEVOIX.—Part annexed to Emmet between 1890 and 1900; part of Manistowic annexed in 1896.
 CHIPPEWA.—Part taken to form part of Luce in 1837.
 DICKINSON.—Organized from parts of Iron, Marquette, and Menominee in 1891.
 EMMET.—Part of Charlevoix annexed between 1890 and 1900.
 GOGEBIC.—Organized from part of Ontonagon in 1837.
 HOUGHTON.—Part taken to form Baraga in 1875.
 IRON.—Organized from parts of Marquette and Menominee in 1835 and parts of Marquette and Menominee annexed in 1891; part taken to form part of Dickinson in 1891.
 KEWEENAW.—Isle Royal annexed in 1897.
 LEELANAU.—Part of Manistowic annexed in 1896.
 LUCE.—Organized from parts of Chippewa and Mackinac in 1837.
 MACKINAC.—Part taken to form part of Luce in 1837.
 MANISTEE.—Part annexed to Wexford in 1873; part of Wexford annexed between 1880 and 1890.
 MARQUETTE.—Parts taken to form part of Iron in 1835 and part of Dickinson in 1891; part annexed to Iron in 1891.
 MENOMINEE.—Parts taken to form part of Iron in 1835 and part of Dickinson in 1891; part annexed to Iron in 1891.

ONTONAGON.—Part taken to form Gogebic in 1837.

SCHOOLCRAFT.—Part taken to form Alger in 1835.
 WEXFORD.—Part of Manistee annexed in 1873; part annexed to Manistowic between 1890 and 1896.

INCORPORATED PLACES.

ADRIAN.—Part of Adrian township annexed in 1904.
 ALPENA.—Parts of Alpena township annexed in 1905 and 1907.
 BAY CITY.—Part annexed to Bangor township in 1901; West Bay City annexed in 1905.
 BENTON HARBOR.—Part of Benton township annexed in 1910.
 DETROIT.—Parts of Greenfield and Hamtramck townships annexed between 1890 and 1900; parts of Greenfield township annexed in 1905 and 1907, part of Springwells township (including Delray village) annexed in 1906, and parts of Grosse Pointe and Hamtramck townships annexed in 1907.
 FLINT.—Parts of Burton township annexed in 1901, 1907, and 1910, and parts of Flint, Genesee, and Mount Morris townships annexed in 1910.
 GRAND RAPIDS.—Parts of Paris and Wyoming townships annexed between 1890 and 1900.
 HAMTRAMCK.—Incorporated in 1901.
 IRON MOUNTAIN.—Part of Breitung township annexed in 1907.
 MANISTEE.—Part of Filer township annexed in 1907.
 PORT HURON.—Parts annexed to Port Huron township in 1903 and 1905.
 SAGINAW.—Part of Saginaw township annexed in 1907.
 WYANDOTTE.—Part of Ecorse township (including Glenwood village) annexed in 1905.

CHAPTER 3.

STATISTICS OF AGRICULTURE FOR THE STATE AND ITS COUNTIES.

Introduction.—This chapter presents a complete statement of the statistics of agriculture for Michigan collected at the census of 1910. Statistics of farms and farm property relate to April 15, 1910; those of farm products, expenses, and receipts are for the calendar year 1909.

Definitions.—To assist in securing comparability for its statistics of agriculture, the Bureau of the Census provided the enumerators with certain definitions and instructions, the more important of which were essentially as given below.

Farm.—A "farm" for census purposes is all the land which is directly farmed by one person managing and conducting agricultural operations, either by his own labor alone or with the assistance of members of his household or hired employees. The term "agricultural operations" is used as a general term referring to the work of growing crops, producing other agricultural products, and raising animals, fowls, and bees. A "farm" as thus defined may consist of a single tract of land, or of a number of separate and distinct tracts, and these several tracts may be held under different tenures, as where one tract is owned by the farmer and another tract is hired by him. Further, when a landowner has one or more tenants, renters, croppers, or managers, the land operated by each is considered a "farm."

In applying the foregoing definition of a "farm" for census purposes, enumerators were instructed to report as a "farm" any tract of 3 or more acres used for agricultural purposes, and also any tract containing less than 3 acres which produced at least \$250 worth of farm products in the year 1909.

Farmer.—A "farmer" or "farm operator," according to the census definition, is a person who directs the operations of a farm. Hence owners of farms who do not themselves direct the farm operations are not reported as "farmers." Farmers are divided by the Bureau of the Census into three general classes according to the character of their tenure, namely, owners, tenants, and managers.

Farm owners include (1) farmers operating their own land only, and (2) those operating both their own land and some land hired from others. The latter are sometimes referred to in the census reports as "part owners," the term "owners" being then restricted to those owning all their land.

Farm tenants are farmers who, as tenants, renters, or croppers, operate hired land only. They were reported in 1910 in three classes: (1) *Share tenants*—those who pay a certain share of the products, as one-half, one-third, or one-quarter; (2) *share-cash tenants*—those who pay a share of the products for part of the land rented by them and cash for part; and (3) *cash tenants*—those who pay a cash rental or a stated amount of labor or products, such as \$7, 10 bushels of wheat, or 100 pounds of seed cotton per acre.

Managers are farmers who are conducting farm operations for the owner for wages or a salary.

Farm land.—Farm land is divided into (1) improved land, (2) woodland, and (3) all other unimproved land. The same classification was followed in 1880. At former censuses, except that of 1880, farm land was divided into improved land and unimproved land, woodland being included with unimproved land. *Improved*

land includes all land regularly tilled or mowed, land pastured and cropped in rotation, land lying fallow, land in gardens, orchards, vineyards, and nurseries, and land occupied by farm buildings. *Woodland* includes all land covered with natural or planted forest trees, which produce, or later may produce, firewood or other forest products. *All other unimproved land* includes brush land, rough or stony land, swamp land, and any other land which is not improved or in forest. The census classification of farm land as "improved land," "woodland," and "other unimproved land" is one not always easy for the farmers or enumerators to make, and the statistics therefore must be considered at best only a close approximation.

Total value of farm products.—No attempt has been made at this census to compute or even to estimate approximately the total value of farm products. Among the numerous difficulties which stand in the way of obtaining a total which would be at once comprehensive, free from duplication, and confined exclusively to the products of a definite period of time are the following:

(1) The duplication resulting from the feeding of farm crops to farm live stock, when the value both of the products derived from such live stock and of the crops are included in the same total. In 1900 an attempt was made to eliminate this duplication by means of an inquiry as to the total value of the products of each farm fed to the live stock on that farm, but, aside from the fact that this would not eliminate the duplication where the products of one farm are fed to the live stock of another farm, it is believed that the farmers were unable to make even approximately accurate answers to the inquiry, and it was accordingly not included in the schedule for 1910.

(2) The fact that farmers may buy domestic animals during the census year which are subsequently sold or slaughtered during the same year, and that it is impossible to eliminate the duplication accurately; and the further fact that the value of domestic animals sold or slaughtered, or of forest products cut, during a given year (as well as some other minor items) does not usually represent a value created wholly during that year, and that it is quite impossible to ascertain the value created during the year.

(3) The fact that the returns for some products are incomplete. The returns for all products are to a considerable extent estimates made by the farmers. Special difficulty was encountered in cases where the person in possession of the farm in April, 1910, when the census was taken, was not in possession of it during the crop year 1909. In such cases the farmer was not always able to report completely and accurately the products of the land for the preceding year. It is probable that the returns for the principal crops are in general fairly accurate, but that those for minor crops and for dairy and poultry products are frequently understatements, particularly because the home consumption was disregarded or underestimated. In the belief that no accurate result could be obtained from such an inquiry, the Bureau of the Census did not even attempt to ascertain the total quantity and value of certain by-products, such as straw and cornstalks, which are of considerable importance, the schedule calling only for the value of such by-products sold.

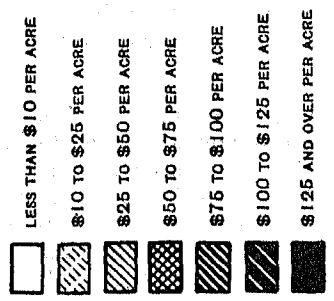
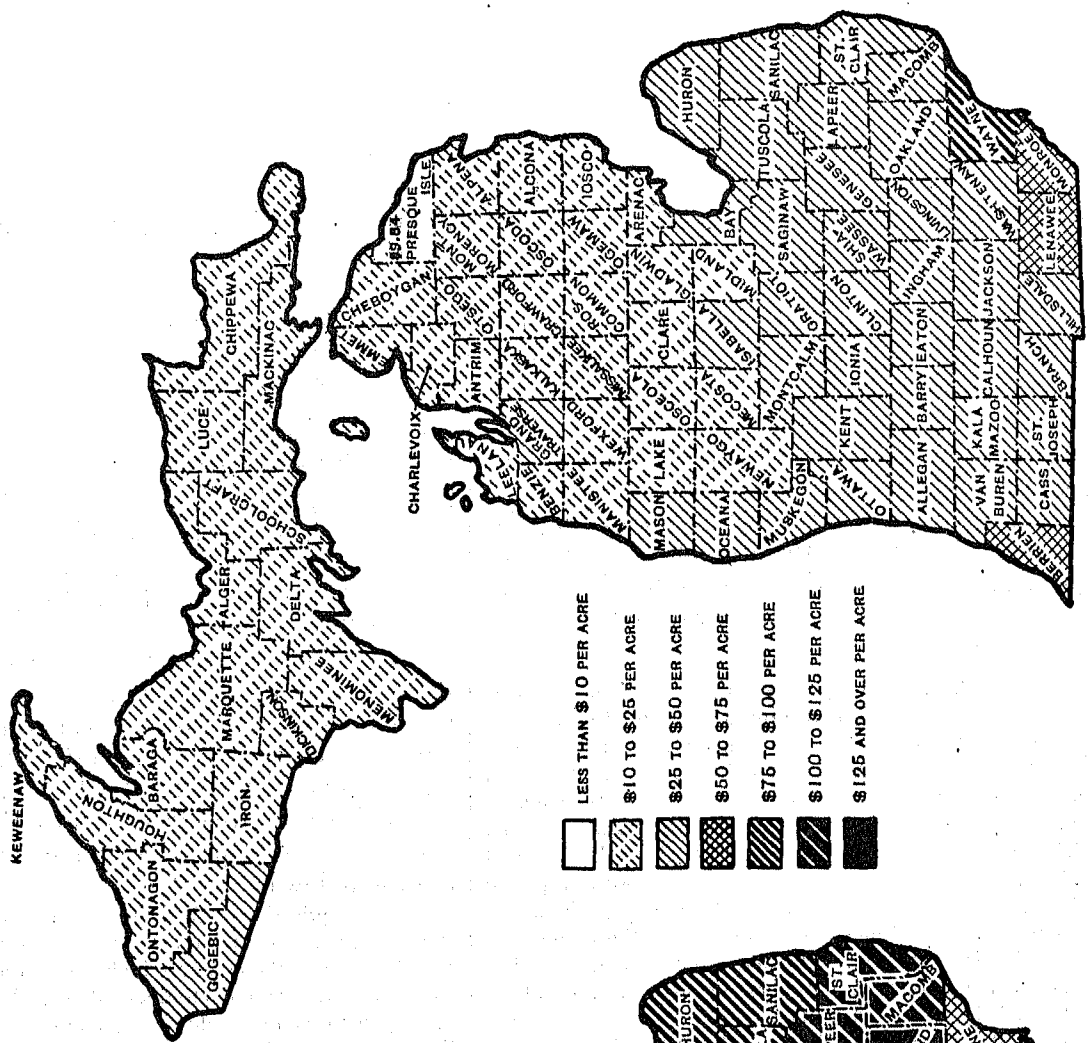
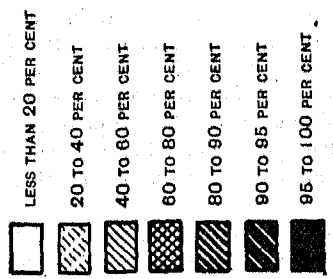
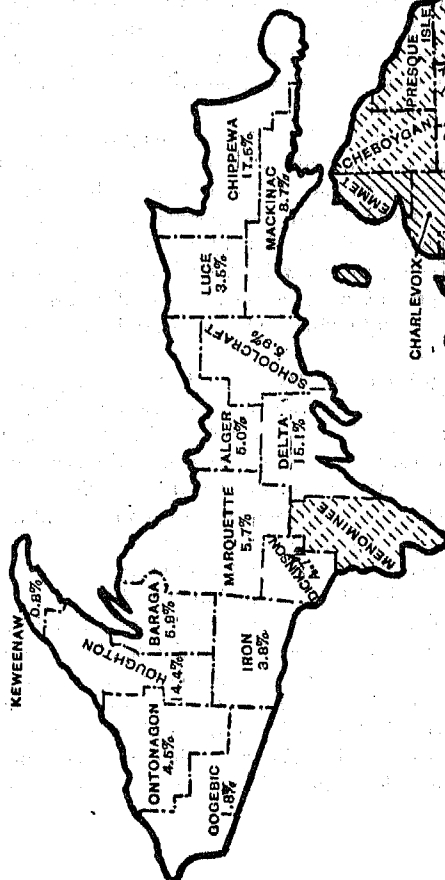
PER CENT OF LAND AREA IN FARMS, AND AVERAGE VALUE OF FARM LAND PER ACRE, IN MICHIGAN, BY COUNTIES: 1910.

PER CENT OF LAND AREA IN FARMS.

AVERAGE VALUE OF FARM LAND PER ACRE.

[Average for the state, \$32.48.]

When the value is less than \$10 per acre, it is inserted under the county name.



FARMS AND FARM PROPERTY.

Michigan ranks twenty-first in land area and eighth in population among the states and territories of continental United States. The entire area of the state has been glaciated, and glacial deposits ranging from a few feet to 200 or 300 feet in thickness cover the greater portion of the southern peninsula. The northern peninsula has less glacial deposit. The most usual soils of the southern peninsula consist of yellow, brown, and gray loams, with sandy loams in the region of the glacial moraines and till plains, although extensive areas of sands and gravels occupy the valleys even in this region. The topography is rolling to ridged and the drainage is fairly well established, although numerous small lakes and ponds, together with sluggish stream channels, are frequently bordered by swampy areas. The soils of the south central and southwestern parts of the state are well suited to the production of corn, winter wheat, oats, and grass, while in the vicinity of the lakes much soil is especially suited to the production of sugar beets. In the northern part of the lower peninsula, and in a limited portion of the upper peninsula, are soils well suited to the production of Irish potatoes, buckwheat, rye, and clover. On the drained swamp lands along the margins of lakes and rivers are many acres used for growing sugar beets, celery, onions, and cabbages.

The two maps on the opposite page show by counties the proportion of the total land area which is in farms and the average value of farm land per acre. More than half of the state's land surface is included in

farms. In the upper peninsula, however, no county, except Menominee, has as much as 20 per cent of its land in farms, and five counties grouped in the northern part of the lower peninsula fall in the same class. This group is surrounded by counties that have one-fifth to three-fifths of their land in farms. Farther south is a belt in which over four-fifths of the land is in farms, and south of this is a group of counties in which the proportion exceeds nine-tenths.

The average value of farm land per acre for the state is \$32.48. The second map shows that the average value per acre falls between \$10 and \$25 in almost every county of the upper peninsula and of the north half of the lower peninsula. The remaining counties fall in the "\$25 to \$50 per acre" class, excepting four counties in the extreme southern part of the state which rise above the \$50 mark, and one county in the northern part of the lower peninsula in which the average value per acre is a little less than \$10.

Progress during the decade 1900 to 1910.—During the last decade the population of the state increased 389,191, or 16.1 per cent; the number of farms, 3,699, or 1.8 per cent; the land in farms, 1,378,916 acres, or 7.9 per cent; while the improved land in farms increased 1,032,828 acres, or 8.8 per cent. During this period the average size of farms increased by more than 5 acres.

The following table summarizes for the state the more significant facts relating to population and land area, the number, value, and acreage of farms, and the value of all other farm property in 1910 and 1900:

NUMBER, AREA, AND VALUE OF FARMS.	1910 (April 15)	1900 (June 1)	INCREASE.	
			Amount.	Per cent.
Population.....	2,810,173	2,420,982	389,191	16.1
Number of all farms.....	206,960	203,261	3,699	1.8
Approximate land area of the state.....acres..	36,787,200	36,787,200		
Land in farms.....acres..	18,940,614	17,561,698	1,378,916	7.9
Improved land in farms.....acres..	12,832,078	11,799,250	1,032,828	8.8
Average acres per farm.....	91.5	86.4	5.1	5.9
Value of farm property:				
Total.....	\$1,088,858,379	\$690,355,734	\$398,502,645	57.7
Land.....	615,258,348	423,569,950	191,688,398	45.3
Buildings.....	285,879,951	158,947,760	126,932,191	79.9
Implements and machinery.....	49,916,285	28,795,380	21,120,905	73.8
Domestic animals, poultry, and bees.....	137,803,795	79,042,644	58,761,151	74.3
Average value of all property per farm.....	\$5,261	\$3,396	\$1,865	54.9
Average value of land per acre.....	\$32.48	\$24.12	\$8.36	34.7

Farm property, which includes land, buildings, implements and machinery, and live stock (domestic animals, poultry, and bees), increased in value during the decade nearly \$400,000,000, or 57.7 per cent.

This great increase is made up of increases of nearly \$192,000,000 in the value of land, and of almost \$127,000,000 in the value of buildings. There is also an increase of nearly \$80,000,000 in the value of farm

equipment, which include implements and machinery and live stock, of which nearly three-fourths represents the increase in the value of live stock, and the remainder the increase in the value of implements and machinery. In considering the increase of values in agriculture the general increase in the prices of all commodities in the last 10 years should be borne in mind.

The average value of a farm with its equipment in 1900 was \$3,396, while 10 years later it was \$5,261. The average value of land rose from \$24.12 per acre in 1900 to \$32.48 in 1910, or 34.7 per cent. This advance in land was accompanied by relatively much greater increases in the average value per farm of buildings, implements and machinery, and live stock.

Population, number of farms, and farm acreage: 1850 to 1910.—The table following presents, for the state as a whole for each census from 1850 to 1910, inclusive, a statement of the total population, the number of farms, and the acreage of farm land and of improved land in farms. It also gives the percentage of the land area in farms, the percentage of farm land improved, and the percentage of increase during each decade in the number of farms and in the land in farms.

CENSUS YEAR.	Population.	FARMS.		LAND IN FARMS.			Per cent of land area in farms.	Per cent of farm land improved.
		Number.	Per cent of increase.	All land.		Improved land (acres).		
				Acres.	Per cent of increase.			
1910....	2,810,173	206,960	1.8	18,940,614	7.9	12,832,078	51.5	67.8
1900....	2,420,982	203,261	17.9	17,561,698	13.8	11,799,250	47.7	67.2
1890....	2,093,890	172,344	11.9	14,785,686	7.1	9,865,350	40.2	68.7
1880....	1,636,937	154,008	55.9	13,807,240	37.8	8,290,862	37.5	60.1
1870....	1,184,059	98,786	58.3	10,019,142	42.5	5,098,939	27.2	50.9
1860....	749,113	62,422	53.1	7,080,834	60.4	3,476,296	19.1	49.4
1850....	397,654	34,080	.....	4,383,890	.....	1,029,110	11.9	44.0

The population of the state is 2,810,173, or more than seven times as great as in 1850. The increases have been remarkably uniform throughout the period.

There are 206,960 farms in Michigan, or over six times as many as in 1850. This increase was very rapid from 1850 to 1880, averaging 3,997 farms per year. During the next 20 years the increase was on the average 2,463 per year; but during the decade just past the average increase has been only 370 per year, or 1.8 per cent for the decade. This last increase is concentrated in the northern part of the state, while many southern counties show decreases.

The land surface of Michigan is approximately 36,787,200 acres. Of this area, 18,940,614 acres, or 51.5 per cent, are included in farms. The total farm acreage increased 7.9 per cent during the last decade. Of the farm acreage, 12,832,078 acres, or 67.8 per cent, are reported as improved land, representing 34.9 per cent of the total land area of the state. The reported acreage of improved land increased from 1900 to 1910 by a greater percentage than did the total acreage in farms, the percentage of farm land which is improved being slightly higher in 1910 than in 1900.

The preceding table shows also a rapid increase from 1850 to 1880 in the total farm acreage and in the acreage of improved land. The proportion of the total land area of the state which was occupied by farms rose during this period from 11.9 to 37.5 per cent, while the improved land increased from 44 to 60.1 per cent of the total land in farms. Since 1880 the increase in the total farm acreage has been much slower, and since 1890 the proportion of farm land improved has risen only slightly.

Values of farm property: 1850 to 1910.—The agricultural changes in Michigan since 1850, as reflected in the values of the several classes of farm property, are shown in the table which follows:

CENSUS YEAR.	FARM PROPERTY.							
	Total.		Land and buildings.		Implements and machinery.		Domestic animals, poultry, and bees.	
	Value.	Per cent of increase.	Value.	Per cent of increase.	Value.	Per cent of increase.	Value.	Per cent of increase.
1910.....	\$1,088,858,379	57.7	\$901,138,209	54.7	\$49,916,285	73.3	\$137,803,795	74.3
1900.....	690,858,794	6.6	582,517,710	4.7	28,795,380	29.8	79,042,644	13.6
1890.....	647,038,255	12.8	556,190,670	11.4	22,182,600	14.2	69,564,985	24.8
1880.....	574,242,654	55.4	499,103,181	56.7	19,419,360	77.0	55,720,113	39.8
1870 ¹	369,409,941	94.0	318,592,403	98.1	10,969,533	88.5	39,847,895	68.0
1860.....	190,371,098	203.3	100,830,495	210.1	5,819,832	101.3	23,714,771	196.1
1850.....	62,772,551	.....	51,872,446	.....	2,801,371	.....	8,008,734	.....

¹ Computed gold values, being 80 per cent of the currency values reported.

The total wealth of the state in the form of farm property is over a billion dollars, of which 82.8 per cent is represented by land and buildings, 12.7 per cent by live stock, and 4.6 per cent by implements and machinery. The percentage of increase in the total value of farm property was greater from 1900 to 1910 than in any other decade since 1870, and the actual amount of increase was nearly twice as great as the largest increase reported for any previous decade. Of the total increase of \$398,503,000 during the past decade, \$318,621,000 represents the increase in value of land and buildings, \$21,121,000 the increase in value of implements and machinery, and \$58,761,000 the increase in value of live stock.

Average acreage and values per farm: 1850 to 1910.—The changes which have taken place during the past 60 years in the average acreage of Michigan farms and in the average values of the various classes of farm property, as well as in the average value per acre of land and buildings, are shown in the following table:

CENSUS YEAR.	Average acres per farm.	AVERAGE VALUE PER FARM. ¹				Average value of land and buildings per acre.
		All farm property.	Land and buildings.	Implements and machinery.	Domestic animals, poultry, and bees.	
1910.....	91.5	\$5,261	\$4,354	\$241	\$666	\$47.58
1900.....	80.4	3,396	2,866	142	389	33.17
1890.....	85.8	3,760	3,227	129	464	37.62
1880.....	89.7	3,729	3,241	126	362	36.15
1870 ²	101.4	3,739	3,225	111	403	31.80
1860.....	112.6	3,050	2,677	93	380	22.88
1850.....	128.6	1,841	1,522	85	235	11.83

¹ Averages are based on "all farms" in state.

² Computed gold values, being 80 per cent of the currency values reported.

The average size of the Michigan farm decreased 42.8 acres in the 40 years from 1850 to 1890. Since 1890 there has been an increase of 5.7 acres. The average farm is now larger than at any earlier census since 1870, but is 37.1 acres smaller than in 1850.

The average value of a Michigan farm, including its equipment, has grown during the last decade from \$3,396 to \$5,261. Of this \$5,261, \$4,354 represents the value of land and buildings, \$666 that of live stock, and \$241 that of implements and machinery. The average value per farm has increased more in the last decade than during the preceding half century, and is now approaching three times the value it had in 1850. During the last decade the average value of land and buildings has increased \$14.41 per acre, or two-thirds as much as during the preceding half century. The value per farm of farm equipment, which includes implements and machinery and live stock, is nearly three times as great as 60 years ago.

Farm tenure: 1880 to 1910.—The following table shows the distribution of the farms of the state according to character of tenure at each census since 1880:

TENURE.	1910	1900	1890	1880
Number of all farms.....	206,960	203,261	172,344	154,008
Farms operated by owners and managers.....	174,271	171,048	148,208	138,597
Farms consisting of owned land only.....	151,005	153,196	(1)	(1)
Farms consisting of owned and hired land.....	21,305	15,618	(1)	(1)
Farms operated by managers.....	1,961	2,234	(1)	(1)
Farms operated by tenants.....	32,689	32,213	24,136	15,411
Share tenants.....	20,378	22,482	15,924	10,396
Share-cash tenants ²	870			
Cash tenants.....	9,029	9,731	8,212	5,015
Tenure not specified ³	1,812			
Per cent of farms operated by—				
Owners and managers.....	84.2	84.1	86.0	90.0
Tenants.....	15.8	15.9	14.0	10.0
Share and share-cash.....	10.3	11.1	9.2	8.8
Cash and nonspecified.....	5.5	4.8	4.8	3.3

¹ Not reported separately.
² Share-cash tenants were doubtless largely included with share tenants in 1900, 1890 and 1880.
³ Prior to 1910 nonspecified tenants were included with cash tenants.

The total number of farms increased 3,699 during the last decade, or 1.8 per cent; the number of farms operated by owners and managers increased 3,223, or 1.9 per cent; the number operated by tenants increased 476, or 1.5 per cent.

In 1880, 10 out of every 100 farms were operated by tenants; but after that time the relative importance of tenancy increased rapidly, and in 1900 approximately 16 out of every 100 farms were thus operated. The proportion in 1910 was the same as in 1900.

Throughout the 30-year period the number of cash tenants, including those for whom the form of tenure was not reported, has continuously increased. The number of share and share-cash tenants increased till 1900, but during the last decade a decrease of 1,234, or 5.5 per cent, occurred in the number of such tenants. Of the total number of farms in 1910, those reported as rented for cash, including those for which the form of tenure is not reported, represent 5.5 per cent, and those reported as rented in whole or in part for a share of the products represent 10.3 per cent.

The following table shows the acreage, improved acreage, and value of land and buildings for farms operated by owners (including part owners), managers, and tenants, respectively:

FARMS OPERATED BY—	ALL LAND IN FARMS (ACRES).		IMPROVED LAND IN FARMS (ACRES).		VALUE OF LAND AND BUILDINGS.	
	1910	1900	1910	1900	1910	1900
Total.....	18,940,614	17,561,698	12,832,078	11,799,250	\$901,138,299	\$582,517,710
Owners.....	15,107,494	14,078,277	10,142,159	9,344,023	699,059,567	452,785,700
Managers.....	452,504	424,311	217,109	244,491	22,981,178	16,991,270
Tenants.....	3,380,616	3,059,110	2,472,810	2,210,736	179,097,554	112,739,740

The following table shows the per cent distribution by tenure groups of the items in the preceding table, and also of the number of farms:

FARMS OPERATED BY—	PER CENT OF TOTAL.							
	Number of farms.		All land in farms.		Improved land in farms.		Value of land and buildings.	
	1910	1900	1910	1900	1910	1900	1910	1900
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Owners.....	83.3	83.1	79.8	80.2	79.0	79.2	77.6	77.7
Managers.....	0.9	1.1	2.4	2.4	1.7	2.1	2.6	2.9
Tenants.....	15.8	15.9	17.8	17.4	19.3	18.7	19.9	19.4

It will be seen that, in 1910, 79.8 per cent of all land in farms was in farms operated by their owners (including part owners), 2.4 per cent in farms operated by managers, and 17.8 per cent operated by tenants, the per cent distribution being practically the same in 1910 as in 1900.

As shown by the next table, the average size of farms operated by managers in 1910 (230.8 acres) was about two and one-fourth times as great as that of farms operated by tenants (103.4 acres), which was in turn larger than that of farms operated by owners (87.7 acres). The average size of farms in each class increased between 1900 and 1910, the greatest increase being that for farms operated by managers. In 1910 the percentage of farm land improved was highest for tenant farms and lowest for farms operated by managers.

FARMS OPERATED BY—	AVERAGE ACRES PER FARM.				PER CENT OF FARM LAND IMPROVED.		AVERAGE VALUE OF LAND AND BUILDINGS.			
	All land.		Improved land.		PER CENT OF FARM LAND IMPROVED.		Per farm.		Per acre.	
	1910	1900	1910	1900	1910	1900	1910	1900	1910	1900
Total.....	91.5	88.4	62.0	58.0	67.8	67.2	\$4,354	\$2,866	\$47.53	\$33.17
Owners.....	87.7	83.4	53.9	53.4	67.1	66.4	4,037	2,682	46.27	32.16
Managers.....	230.8	189.9	110.7	109.4	48.0	57.6	11,719	7,006	50.79	40.04
Tenants.....	103.4	95.0	75.6	68.6	73.1	72.3	5,479	3,500	52.98	36.85

Farm mortgages: 1890 to 1910.—The Eleventh Census (1890) was the first to collect data relating to mortgage debt on farms. The basis of the returns was the "farm home" occupied by its owner. The same class of information was secured by the population schedules of the Twelfth Census (1900). The agricultural schedules of the Thirteenth Census (1910) secured practically the same information, except that the basis

was "owned farms" instead of "owned farm homes," a difference involving no appreciable incomparability.

The following table relates to farms operated by persons owning all or part of the land, and shows for 1910 (1) the number of such farms reported as free from mortgage; (2) the number reported as mortgaged; and (3) the number for which no mortgage reports were secured. Comparable items are included for 1900 and 1890.

CLASS.	OWNED FARMS. ¹		OWNED FARM HOMES.		OWNED FARM HOMES. ²	
	1910		1900		1890	
	Number.	Per cent. ³	Number.	Per cent. ³	Number.	Per cent.
Total.....	172,310		168,062		146,697	
Free from mortgage.....	88,705	51.8	85,490	51.7	74,302	50.6
Mortgaged.....	82,631	48.2	79,780	48.3	72,395	49.4
Unknown.....	974		2,788			

¹ Includes all farms owned in whole or in part by the operator.

² The 1,762 "owned farm homes" for which no reports were secured were distributed between "free from mortgage" and "mortgaged" in 1890.

³ Per cent of combined total of "free from mortgage" and "mortgaged."

In 1910 the total number of farms owned in whole or in part by the operators was 172,310. Of this number, 88,705 were reported as free from mortgage; 82,631 were reported as mortgaged; and for 974 no report relative to mortgage indebtedness was obtained. The number of mortgaged farms constituted 48.2 per cent of the total number of owned farms, exclusive of those for which no mortgage report was obtained. The percentage is only slightly smaller than it was in 1900 and in 1890. It may be noted that the percentages given for the three censuses are comparable, but that the number of mortgaged and unmortgaged farms reported in 1890 is not entirely comparable with the numbers reported at the later censuses, because at the census of 1890 the farms for which no reports were secured were distributed between the two classes of mortgaged and unmortgaged farms. It can be seen, however, that from 1890 to 1910 the number of farms free from mortgage has increased faster relatively than those mortgaged.

The statement of mortgage debt and of the value of mortgaged farm property is restricted to the farms of those farmers who own all of their land and report the amount as well as the fact of indebtedness. Of the 82,631 farms reported as mortgaged, 70,803 are wholly owned by the farmers, and for 68,655 of these the amount of mortgage debt is reported. Only these last-mentioned farms are included for 1910 in the next table, which presents data relating to mortgaged farms for 1910 and 1890. In this connection it should be noted that in 1890 the amount of mortgage debt of farms with incomplete reports was estimated according to the percentages and averages obtained from farms with full reports, but that no such estimate is here made for 1910. The table gives a comparative statement of the value of mortgaged farms owned entirely by their operators and the amount of indebtedness, together with the average value of such farms,

the average debt per farm, and the average equity per farm for 1910 and 1890. Data regarding the amount of mortgage debt were not obtained in 1900.

	OWNED FARMS OR FARM HOMES MORTGAGED.		INCREASE.	
	1910 ¹	1890 ²	Amount.	Per cent.
Number.....	68,655	72,395		
Value—Land and buildings.....	\$250,874,010	\$198,904,438		
Amount of mortgage debt.....	\$76,997,030	\$64,414,980		
Per cent of debt to value.....	30.3	32.4		
Average value per farm.....	\$3,654	\$2,748	\$906	33.0
Average debt per farm.....	\$1,107	\$890	\$217	24.4
Average equity per farm.....	\$2,547	\$1,858	\$689	37.1

¹ Includes only farms consisting wholly of owned land and reporting value of farm and amount of debt.

² Includes all owned farm homes, estimates being made of value of farms and amount of debt for all defective reports.

The average debt of mortgaged farms increased in the 20 years from \$890 to \$1,107, or 24.4 per cent, while the average value of such farms rose from \$2,748 to \$3,654, or 33 per cent. Thus the owner's equity increased from \$1,858 to \$2,547, or 37.1 per cent. As a result of the greater relative increase in farm value than in farm debt, the mortgage indebtedness, which was 32.4 per cent of the value of the mortgaged farms in 1890, had decreased to 30.3 per cent of that value in 1910.

Farms by size groups: 1910 and 1900.—The table following shows the distribution of farms by size groups at the censuses of 1910 and 1900:

SIZE GROUP.	NUMBER OF FARMS.		INCREASE. ¹		PER CENT OF TOTAL.	
	1910	1900	Number.	Per cent.	1910	1900
Total.....	206,960	203,261	3,699	1.8	100.0	100.0
Under 3 acres.....	387	1,068	-671	-63.4	0.2	0.5
3 to 9 acres.....	6,879	5,077	1,802	31.6	3.2	2.6
10 to 19 acres.....	7,719	7,335	384	5.2	3.7	3.6
20 to 49 acres.....	49,890	59,197	-9,307	-15.7	24.1	29.1
50 to 99 acres.....	73,748	71,021	2,727	3.8	35.6	34.9
100 to 174 acres.....	50,622	48,741	6,881	15.7	24.5	21.5
175 to 259 acres.....	12,426	10,815	1,611	14.9	6.0	5.3
260 to 499 acres.....	4,717	4,304	413	8.1	2.3	2.1
500 to 999 acres.....	607	517	90	17.4	0.3	0.3
1,000 acres and over....	165	136	29	21.3	0.1	0.1

¹ A minus sign (-) denotes decrease.

More than one-third of all Michigan farms are between 50 and 99 acres in size. Nearly one-fourth comprise 20 to 49 acres, and approximately another fourth comprise from 100 to 174 acres. These three groups include the 40, 80, and 160 acre farms and together constitute about five-sixths of the farms of the state. Farms of under 20 acres represent only 7.1 per cent of the total number, and farms of 175 acres or more represent only 8.7 per cent.

A study of the distribution of farms by size groups discloses the fact that the greatest relative gain in number from 1900 to 1910 was made in the "3 to 9 acres" group, while the greatest actual gain occurred in the "100 to 174 acres" group. The number of places "under 3 acres" reported as farms is reported as only a little over one-third as great as 10 years ago. This decrease may represent an actual decrease in that type of farm or may be due to a different interpretation by the enumerators as to what to include as a

small farm. The "20 to 49 acres" group also shows a marked decrease, but all higher groups have increased.

The next table shows the total and improved acreage and the value of land and buildings for farms of various size groups, consolidating into one group the farms of less than 20 acres (numbering in all 14,785), and also the farms of between 175 and 499 acres (numbering 17,143):

SIZE GROUP.	ALL LAND IN FARMS (ACRES).		IMPROVED LAND IN FARMS (ACRES).		VALUE OF LAND AND BUILDINGS.	
	1910	1900	1910	1900	1910	1900
Total.....	18,940,614	17,561,698	12,832,078	11,799,250	\$901,138,299	\$582,517,710
Under 20 acres.....	137,131	130,371	121,750	115,101	28,255,364	17,220,790
20 to 49 acres.....	1,814,802	2,183,332	1,351,445	1,581,657	106,804,968	80,880,590
50 to 99 acres.....	5,537,099	5,305,994	3,992,814	3,723,015	271,485,989	177,565,910
100 to 174 acres.....	6,591,003	5,692,182	4,539,148	3,823,643	301,276,358	182,756,600
175 to 499 acres.....	4,125,482	3,675,789	2,602,019	2,335,353	174,584,535	113,004,650
500 to 999 acres.....	391,180	324,843	159,477	157,702	13,040,547	8,250,250
1,000 acres and over.....	343,917	249,237	59,425	62,719	5,690,538	2,847,920

The following table shows the per cent distribution, by size groups, of the items presented in the preceding table, and also of the number of farms:

SIZE GROUP.	PER CENT OF TOTAL.							
	Number of farms.		All land in farms.		Improved land in farms.		Value of land and buildings.	
	1910	1900	1910	1900	1910	1900	1910	1900
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 20 acres.....	7.1	6.6	0.7	0.7	0.9	1.0	3.1	3.0
20 to 49 acres.....	24.1	29.1	9.6	12.4	10.5	13.4	11.9	13.9
50 to 99 acres.....	35.6	34.9	29.2	30.2	31.2	31.6	30.1	30.5
100 to 174 acres.....	24.5	21.5	34.8	32.4	35.4	32.4	33.4	31.4
175 to 499 acres.....	8.3	7.5	21.8	20.9	20.3	19.8	19.4	19.4
500 to 999 acres.....	0.3	0.3	2.1	1.8	1.2	1.3	1.4	1.4
1,000 acres and over.....	0.1	0.1	1.8	1.4	0.5	0.5	0.6	0.5

Of the total farm acreage of the state in 1910, 34.8 per cent was in farms of 100 to 174 acres, and 29.2 per cent in farms of 50 to 99 acres, these two being from the standpoint of aggregate acreage the most important size groups. Between 1900 and 1910 the proportion of the total acreage which was in farms of every size group of 100 acres or more increased, while that in farms of 20 to 49 and of 50 to 99 acres decreased, and that in farms of under 20 acres remained the same.

As shown by the next table, the percentage of farm land improved diminishes as the average size of the farms increases. For this reason and also because buildings have normally a higher value in proportion to farm acreage on small than on large farms, the average

value of land and buildings per acre of land also diminishes with the increase in the size of the farms; it is very much higher for the farms under 20 acres in size than for those of any other group.

SIZE GROUP.	PER CENT OF FARM LAND IMPROVED.		AVERAGE VALUE OF LAND AND BUILDINGS.			
			Per farm.		Per acre.	
	1910	1900	1910	1900	1910	1900
Total.....	67.8	67.2	\$4,354	\$2,866	\$47.58	\$33.17
Under 20 acres.....	88.8	88.3	1,911	1,278	206.05	132.09
20 to 49 acres.....	74.5	72.4	2,141	1,366	58.85	37.04
50 to 99 acres.....	72.2	70.2	3,681	2,500	49.03	33.46
100 to 174 acres.....	68.9	67.2	5,951	4,178	45.71	32.11
175 to 499 acres.....	63.1	63.5	10,184	7,445	42.32	30.74
500 to 999 acres.....	40.8	48.5	21,484	15,958	33.34	25.40
1,000 acres and ov.....	17.3	25.2	34,488	20,941	16.55	11.43

Color and nativity of farmers: 1910.—Prior to the Thirteenth Census no attempt was made to secure information on the farm schedules concerning the nativity of farmers. The table which follows shows the color and nativity of farm operators by character of tenure for 1910:

COLOR AND NATIVITY.	FARM OPERATORS.							
	Total.		Own-ers.	Ten-ants.	Man-agers.	Per cent of total.		
	Num-ber.	Per cent dis-tribu-tion.				Own-ers.	Ten-ants.	Man-agers.
Total.....	206,960	100.0	172,310	32,689	1,961	83.3	15.8	0.9
Native white.....	147,790	71.4	118,660	27,609	1,521	80.3	18.7	1.0
Foreign-born white.....	58,224	28.1	52,865	4,928	431	90.8	8.5	0.7
Negro and other nonwhite.....	946	0.5	785	152	9	83.0	16.1	1.0

Seven out of ten Michigan farmers were native whites, and nearly all the remainder foreign-born whites. The 946 nonwhite farmers, of whom 306 were Indians and 640 negroes, constitute only five-tenths of 1 per cent of the farmers in the state. Of the native whites, 18.7 per cent were tenants, as compared with 8.5 per cent among the foreign-born whites and 16.1 per cent among nonwhites.

Of the 58,224 foreign-born white farmers in Michigan in 1910, 20,129 were born in Canada, 15,788 in Germany, 3,931 in Holland, 3,913 in England, 3,330 in Sweden, 2,011 in Ireland, and 1,381 in Denmark. Other European countries were represented by 7,670 farmers and non-European countries, other than Canada, by 71.

DOMESTIC ANIMALS, POULTRY, AND BEES.

Domestic animals on farms: 1910.—The census of 1910 was taken as of April 15, and that of 1900 as of June 1. Since a great many domestic animals are born during the six weeks between April 15 and June 1, and on the other hand a considerable number of older animals are slaughtered or die during the same period, the numbers of the different classes of animals for the two censuses are not closely comparable, and the same is true in somewhat less degree of the values. For this reason the figures for 1900 are not presented

in this chapter, but in the general reports of the census the figures for the several states will be presented and the extent to which their comparability is affected by the change in the date of enumeration will be discussed.

Of all the farms in the state, 89.4 per cent report cattle. "Dairy cows" are reported by 88.5 per cent of the farms, and "other cows" by 21.2 per cent. Only about 1 per cent of the farms have cattle without having dairy cows. The farms reporting dairy

cows show an average of over 4 per farm. The total number of cows materially increased during the decade 1900 to 1910, while the average value of dairy cows increased from \$30.65 to \$38.21.

The following table summarizes the statistics of domestic animals on farms for the state, recorded as of April 15, 1910. Cattle and sheep are divided into age and sex groups, while horses, mules, and swine are presented by age groups only.

AGE AND SEX GROUP.	FARMS REPORTING.		ANIMALS.		
	Number.	Percent of all farms.	Number.	Value.	Average value.
Total.....	196,655	95.0	.....	\$131,740,348	.....
Cattle.....	185,081	89.4	1,497,823	40,500,318	\$27.04
Dairy cows (cows and heifers kept for milk, born before Jan. 1, 1909).....	183,098	88.5	707,083	29,312,252	38.21
Other cows (cows and heifers not kept for milk, born before Jan. 1, 1909).....	43,876	21.2	109,801	2,579,668	24.15
Heifers born in 1909.....	95,209	46.0	205,000	3,034,174	14.80
Calves born after Jan. 1, 1910.....	103,377	49.9	236,050	1,544,581	6.54
Steers and bulls born in 1909.....	51,888	25.1	119,263	1,845,454	15.47
Steers and bulls born before Jan. 1, 1909.....	21,710	10.5	63,626	2,184,194	34.33
Horses.....	184,267	89.0	610,033	71,312,474	116.90
Mares, stallions, and geldings born before Jan. 1, 1909.....	183,794	88.8	560,936	68,273,456	121.72
Colts born in 1909.....	32,338	15.6	41,474	2,775,456	66.92
Colts born after Jan. 1, 1910.....	6,885	3.3	7,623	253,562	33.92
Mules.....	1,865	0.9	3,700	493,825	133.47
Mules born before Jan. 1, 1909.....	1,675	0.8	3,329	469,927	141.16
Mule colts born in 1909.....	244	0.1	309	21,641	70.04
Mule colts born after Jan. 1, 1910.....	59	(¹)	62	2,257	36.40
Asses and burros.....	144	0.1	233	23,932	102.71
Swine.....	131,653	63.6	1,245,833	9,755,042	7.83
Hogs and pigs born before Jan. 1, 1910.....	126,107	60.9	655,921	8,284,483	12.63
Pigs born after Jan. 1, 1910.....	59,337	28.7	589,912	1,470,559	2.49
Sheep.....	54,865	26.5	2,306,476	9,646,565	4.18
Ewes born before Jan. 1, 1910.....	54,146	26.2	1,433,263	7,740,957	5.40
Rams and wethers born before Jan. 1, 1910.....	25,087	12.1	111,978	679,784	6.07
Lambs born after Jan. 1, 1910.....	41,309	20.0	761,235	1,225,824	1.61
Goats.....	686	0.3	5,080	14,192	2.79

¹ Less than one-tenth of 1 per cent.

The census of 1900 was taken as of June 1, after all the spring calves were born, while that of 1910 was taken as of April 15, before the close of the calving season and when the calves on hand were on the average younger than at the enumeration of 1900. As a result, the calves enumerated were fewer in number and of lower average value in 1910 than in 1900, the number decreasing from 375,000 to 236,000, and the average value decreasing from \$6.63 to \$6.54.

Horses are reported by 89 per cent of all the farms in the state, but only 15.6 per cent report colts born in 1909, and 3.3 per cent spring colts. Spring colts are valued at a little over half as much as yearlings and over a quarter as much as mature horses, the

average value of the latter being reported at \$121.72. About one farm out of every hundred reports mules and mule colts. The average value of mules is considerably higher than that of horses.

Sheep and lambs are reported from 54,865 farms, or 26.5 per cent of all farms in the state. Of these 54,865 farms, 75.3 per cent report spring lambs, the number of the latter being equal to 53.1 per cent of the number of ewes. Ewes are reported from all but 719 of the farms reporting sheep, and for the farms reporting, the average is over 26 ewes per farm. The farms reporting rams and wethers show an average of over 4 per farm.

Of all farms, 63.6 per cent report swine, the average number being over 9 per farm reporting. The average value of the swine reported as "hogs and pigs born before January 1, 1910," is \$12.63 per head, while that of spring pigs is about one-fifth of this amount.

Poultry on farms: 1910 and 1900.—The next table gives the numbers of the various kinds of poultry reported in 1910 and 1900, together with their value and the number of farms reporting each kind in 1910:

KIND.	1910 (April 15)				1900 (June 1)
	Farms reporting.		Number of fowls.	Value.	Number of fowls.
	Number.	Percent of all farms.			
Total.....	189,417	91.5	9,967,039	\$5,610,958	8,405,060
Chickens.....	180,315	91.5	9,608,401	5,306,517	8,033,531
Turkeys.....	20,710	10.0	81,263	166,332	101,863
Ducks.....	14,214	6.9	54,723	87,060	106,399
Geese.....	18,179	8.8	66,772	87,186	73,267
Guinea fowls.....	6,248	3.0	26,274	11,161	(¹)
Pigeons.....	2,427	1.2	39,510	12,336	(²)
All other.....	27	(³)	96	366	(⁴)

¹ Included with chickens.

² Not reported.

³ Twenty-one farms report 38 peafowls, valued at \$155; 5 farms report 38 pheasants, valued at \$111; 1 farm reports 20 wild geese, valued at \$100.

⁴ Less than one-tenth of 1 per cent.

The increase in the number of fowls on Michigan farms during the last decade was 18.6 per cent, while the value more than doubled, increasing from \$2,686,000 to \$5,611,000. The number of farms reporting poultry has increased from 185,241 to 189,417, and the average number of fowls per farm reporting from 45 to 53. It will be noted that pigeons and certain other fowls returned in small numbers in 1910 were not enumerated at the earlier census. The value of poultry and the number of farms reporting were obtained in 1900 for the total of all fowls only, and not for each kind as in 1910.

Bees on farms: 1910 and 1900.—The number of farms reporting bees has decreased from 18,122 in 1900 to 16,892 in 1910, or 6.8 per cent. The number of colonies of bees increased from 100,397 to 115,274, or 14.8 per cent, and their value increased from \$352,469 to \$446,464, or 26.7 per cent. The average value of bees per farm reporting was \$19.45 in 1900 and \$26.43 in 1910. About 8 farms in every 100 report bees.

Domestic animals not on farms: 1910.—Most of the domestic animals not on farms are found in cities, towns, and villages. Statistics for such animals are shown below. No provision was made by law to secure data pertaining to poultry and bees not on farms. In the next table age groups are omitted for the sake of brevity.

KIND.	Number of inclosures reporting.	ANIMALS.		
		Number.	Value.	Average value.
Total	67,383		\$15,700,343	
All cattle.....	27,622	47,385	1,745,203	\$36.83
Dairy cows.....	26,518	35,345	1,576,702	44.61
Horses.....	50,989	100,238	13,660,280	136.28
Mules.....	277	700	105,514	150.73
Asses and burros.....	63	74	6,001	81.09
Swine.....	3,931	13,894	144,986	10.44
Sheep.....	318	6,453	32,231	4.99
Goats.....	292	2,116	6,128	2.90

As would be expected, horses are by far the most important class of domestic animals not on farms, both in number and in value; cattle, about three-

fourths of which are dairy cows, rank next in importance.

Domestic animals on farms and not on farms: 1910.—The following table gives the total number and value of domestic animals, distinguishing those on farms from those not on farms:

KIND.	DOMESTIC ANIMALS.					
	Total.		On farms.		Not on farms.	
	Number.	Value.	Number.	Value.	Number.	Value.
Total		\$147,446,691		\$131,746,348		\$15,700,343
All cattle.....	1,545,208	42,245,521	1,497,823	40,500,318	47,385	1,745,203
Dairy cows.....	802,428	30,888,954	767,083	29,312,252	35,345	1,576,702
Horses.....	710,271	84,972,754	610,033	71,312,474	100,238	13,660,280
Mules.....	4,400	599,339	3,700	493,825	700	105,514
Asses and burros.....	307	29,933	233	23,832	74	6,001
Swine.....	1,259,727	9,900,028	1,245,833	9,755,942	13,894	144,986
Sheep.....	2,312,929	9,678,793	2,306,476	9,646,565	6,453	32,231
Goats.....	7,196	20,320	5,080	14,192	2,116	6,128

The total value of all domestic animals in the state in 1910 was \$147,447,000, of which the value of animals not on farms constituted 10.6 per cent.

LIVE STOCK PRODUCTS.

The returns for live stock products obtained at the census of 1910, like those for crops, relate to the activities of the calendar year 1909. It is impossible to give a total representing the annual production of live stock products for the reason that, as shown elsewhere, the total value of products from the business of raising domestic animals for use, sale, or slaughter can not be calculated from the census returns. Even if this value could be ascertained and were added to the value of the crops the sum would not correctly represent the total value of farm products, because, as already more fully explained, duplication would result from the fact that part of the crops are fed to the live stock.

Dairy products: 1909 and 1899.—The number of farms reporting dairy cows on April 15, 1910, was 183,098, but only 168,360 reported dairy products in 1909. That there should be this difference is not surprising. Doubtless some farmers who had dairy cows in 1910 had none in 1909, while other farmers neglected to give information for the preceding year, or were unable to do so, perhaps because the farm was then in other hands. Dairy products in general are somewhat less accurately reported than the principal crops. This is particularly the case as regards the quantity of milk produced. The number of farms which made any report of milk produced during 1909 was 144,261 (considerably less than the total number reporting dairy products), and the number of dairy cows on such farms on April 15, 1910, was 616,000. The amount of milk reported was 283,387,000 gallons; assuming that there were the same number of cows in 1909 as in 1910, this would represent an average of 460 gallons per cow. In considering this average, however, it should be borne in mind that the quantity of milk

reported is probably deficient and that the distinction between dairy and other cows is not always strictly observed in the census returns.

The following table shows the principal statistics relative to dairy products in 1909, with certain comparative statistics for 1899:

	FARMS REPORTING.		Number or quantity.	Unit.	VALUE.	
	Number.	Per cent of all farms.			Total.	Average per unit.
Dairy cows on farms April 15, 1910.....	183,098	88.5	767,083	Head		
On farms reporting dairy products in 1909.....	168,360	81.3	727,832	Head		
On farms reporting milk produced in 1909.....	144,261	69.7	615,520	Head		
Specified dairy products, 1909:						
Milk reported.....			283,387,201	Gals.		
Butter made.....	131,519	63.5	50,405,420	Lbs.	\$11,805,872	\$0.23
Cheese made.....	249	0.1	291,176	Lbs.	36,228	0.12
Milk sold.....	25,853	12.5	74,025,769	Gals.	8,365,401	0.11
Cream sold.....	9,537	4.6	2,485,061	Gals.	1,675,024	0.67
Butter fat sold.....	28,334	13.7	18,287,691	Lbs.	4,845,013	0.26
Butter sold.....	92,853	44.9	30,010,783	Lbs.	7,178,433	0.24
Cheese sold.....	178	0.1	284,026	Lbs.	35,307	0.12
Total receipts from sales, 1909.....					22,099,178	
Total value of milk, cream, and butter fat sold and butter and cheese made, 1909.....					26,727,538	
Specified dairy products, 1899:						
Butter made.....	156,955	77.2	60,051,998	Lbs.		
Cheese made.....	253	0.1	331,176	Lbs.		
Butter sold.....			34,335,641	Lbs.	5,099,679	0.15
Cheese sold.....			316,207	Lbs.	29,558	0.09

By reason of the incompleteness of the returns for milk produced, the Census Bureau has made no attempt to determine the total value of dairy products for 1909. For convenience a partial total has been

presented comprising the reported value of milk, cream, and butter fat sold and the reported value of butter and cheese made, whether for home consumption or for sale. The total thus obtained for 1909 is \$26,728,000, which may be defined as the total value of dairy products exclusive of milk and cream used on the farm producing.

Somewhat more than one-fourth of the milk produced in Michigan in 1909 was sold as such. A comparatively large quantity of milk and cream was sold on the butter fat basis. The butter made on farms in 1909 was valued at \$11,806,000.

Comparisons are made between 1909 and 1899 for but few of the census items relating to dairy products, for the reason that in 1899 estimates were made for farms with incomplete reports, which was not done at the census of 1910. The figures for milk produced and milk sold are particularly affected, but those for butter and cheese are approximately comparable. The table shows a material decrease between 1899 and 1909 in the amount of butter made, and also in the production of cheese.

Wool: 1909 and 1899.—The table below gives statistics as to the production of wool on farms, the figures being partly based on estimates:¹

	Number of farms reporting.	Sheep of shearing age.	WOOL PRODUCED.		
			Fleeces (number).	Weight (pounds).	Value.
Sheep of shearing age on farms April 15, 1910.....	54,871	1,545,241			
Wool produced, as reported, 1909.....	49,044		1,505,258	11,231,700	\$3,213,946
On farms reporting sheep April 15, 1910.....	45,860	1,372,804	1,417,862	10,630,158	3,045,746
On other farms.....	3,184		87,396	601,542	188,200
Total production of wool (partly estimated):					
1909.....			1,595,950	11,965,405	3,428,320
1899.....			1,734,228	12,202,844	2,454,399
Increase, 1899 to 1909.....			-138,260	-237,439	973,921
Per cent of increase.....			-8.0	-1.9	39.7

¹ A minus sign (-) denotes decrease.

The total number of sheep of shearing age in Michigan on April 15, 1910, was 1,545,000, representing a decrease of 5 per cent as compared with the number on June 1, 1900 (1,626,000). The approxi-

¹ Farmers should be able in general to report the production of wool more accurately than that of dairy products. There were, however, 9,011 farmers who reported the possession of 172,437 sheep of shearing age on April 15, 1910, without reporting any wool produced in 1909. Probably in a large proportion of cases this failure was due to the fact that they did not have these sheep, or did not occupy the same farm, during the preceding year. The returns of farms reporting wool in 1909 but no sheep of shearing age on April 15, 1910, would partially make up this deficiency, but it is believed that in many cases enumerators, having found that a farm had no sheep in 1910, omitted the inquiry as to wool produced in 1909 and thus missed more or less wool actually produced. It is a fairly safe assumption that the entire production of wool in 1909 bore the same relation to the entire number of sheep of shearing age on April 15, 1910, as the production of wool on those farms reporting both production and sheep bore to the number of sheep reported on such farms. Statistics for this group of farms are given in the table, and the total wool product, estimated on the basis of the above assumption, is also given.

mate production of wool during 1909 was 1,596,000 fleeces, weighing 11,965,000 pounds, and valued at \$3,428,000. Of these totals about 6 per cent represent estimates. The number of fleeces produced in 1909 was 8 per cent less than in 1899. The average weight per fleece in 1909 was 7.5 pounds, as compared with 7 pounds in 1899, and the average value per pound was 29 cents, as compared with 20 cents in 1899.

Goat hair and mohair: 1909 and 1899.—Although 686 farmers reported 5,080 goats and kids on their farms April 15, 1910, only 117 reported the production of goat hair or mohair during 1909. These farmers reported 1,559 fleeces, weighing 5,677 pounds and valued at \$1,712. Although the production is still unimportant, some increase is shown over that in 1899. Many farmers who have goats do not produce goat hair or mohair, but it is believed that the report is somewhat short of the actual production.

Poultry products: 1909 and 1899.—The statement below gives data relative to the production and sale of eggs and poultry:

	Number of farms reporting.	Number of fowls on hand.	PRODUCT.	
			Quantity.	Value.
Fowls on farms April 15, 1910.....	189,417	9,967,030		
On farms reporting eggs produced in 1909.....	171,884	9,361,763		
On other farms.....	17,533	605,270		
Eggs produced, as reported, 1909.....	173,641		56,176,525	\$11,002,435
Total production of eggs (partly estimated):				
1909.....			59,915,851	11,784,799
1899.....			54,318,410	6,104,462
Increase, 1899 to 1909.....			5,597,441	5,680,337
Per cent of increase.....			10.3	92.2
Eggs sold, as reported, 1909.....	154,060		38,568,386	7,547,202
Fowls on farms April 15, 1910:				
On farms reporting poultry raised in 1909.....	166,455	9,183,322		
On other farms.....	22,962	788,717		
Poultry raised, as reported, 1909.....	168,621		No. of fowls 11,804,995	5,704,002
Total poultry raised (partly estimated):				
1909.....			12,877,537	6,191,440
1899.....			4,551,945	1,551,945
Increase, 1899 to 1909.....			8,325,592	4,639,495
Per cent of increase.....				36.0
Fowls sold, as reported, 1909.....	120,804		5,289,794	2,746,226

The total number of fowls on Michigan farms on April 15, 1910, was 9,967,000. Of the 189,417 farms reporting fowls, 17,533 did not report any eggs produced in 1909, and 22,962 did not report any poultry raised in 1909. The production of eggs actually reported for the year 1909 was 56,177,000 dozens, valued at \$11,002,000. According to the Twelfth Census reports, the production of eggs in 1899 was 54,318,000 dozens, the value being \$6,104,000. The latter figures, however, are somewhat in excess of the actual returns at that census, because they include estimates made to cover those cases where the schedules returned fowls on hand without reporting the production of eggs. In order to make the returns for 1909 comparable with those published for 1899 similar estimates have been made, the method of estimate and the justification therefor being substantially the

same as in the case of wool. The total production of eggs in 1909, including these estimates, was 59,916,000 dozens, valued at \$11,735,000. The total production of poultry in 1909, including estimates made on the same basis as for eggs, was 12,878,000 fowls, valued at \$6,191,000.

Honey and wax: 1909.—Although, as noted elsewhere, 16,892 farms reported 115,274 colonies of bees on hand April 15, 1910, 5,643 of these farms, with 15,147 colonies on hand April 15, 1910, made no report of honey or wax produced in 1909. The actual returns show the production of 2,507,810 pounds of honey, valued at \$289,137, and 28,524 pounds of wax, valued at \$7,605. The true totals are doubtless somewhat above these figures.

Sale or slaughter of domestic animals on farms: 1909 and 1899.—The next statement presents statistics relating to the sale or slaughter of domestic animals by Michigan farmers during the year 1909, with certain items for 1899.

The total value of domestic animals sold during 1909 was \$35,915,000, and that of animals slaughtered on farms \$7,652,000, making an aggregate of \$43,567,000. This total, however, involves considerable duplication, resulting from the resale or slaughter of animals which had been purchased by the farmers during the same year.

The value of the cattle (including calves) sold during 1909 represented about one-third of the total value of animals sold, and the value of swine sold represented somewhat less than one-third.

The census of 1900 called for the receipts from the sale of all domestic animals raised on the farms reporting, and the total value of those slaughtered during 1899, which amounted, respectively, to \$18,344,000 and \$5,334,000. The item of sales is not closely comparable with that for 1909, when the inquiry covered all sales whether of animals raised on the farms reporting or elsewhere. It is believed, however, that in many cases the returns for 1899 also included receipts from sales of animals not actually raised on the farms reporting.

	FARMS REPORTING.		Number of animals.	VALUE.	
	Number.	Percent of all farms.		Total.	Average.
1909—All domestic animals:					
Sold.....				\$35,915,379	
Slaughtered.....				7,652,048	
Calves:					
Sold.....	84,626	40.9	293,525	2,334,647	\$7.95
Slaughtered.....	16,091	7.8	61,896	506,842	8.19
Other cattle:					
Sold.....	82,230	39.7	319,063	10,441,882	32.73
Slaughtered.....	19,852	9.6	43,619	1,190,412	27.29
Horses:					
Sold.....	30,297	14.6	52,432	6,393,341	121.94
Mules:					
Sold.....	271	0.1	484	64,758	133.80
Asses and burros:					
Sold.....	20	(¹)	50	2,739	54.78
Swine:					
Sold.....	85,168	41.2	981,880	10,820,875	11.02
Slaughtered.....	114,104	55.1	381,247	5,374,253	15.41
Sheep:					
Sold.....	36,004	17.4	1,140,614	5,847,488	5.13
Slaughtered.....	3,012	1.5	17,818	80,108	4.50
Goats:					
Sold.....	135	0.1	2,410	9,649	4.00
Slaughtered.....	40	(¹)	117	433	3.70
1899—All domestic animals:					
Sold.....				18,344,000	
Slaughtered.....				5,333,786	

¹ Less than one-tenth of 1 per cent.
² Schedules called for receipts from sales of animals raised on the farms reporting.

CROPS.

Summary: 1909 and 1899.—The next table summarizes the census data relative to all farm crops of 1909 and 1899. It includes not only general farm crops, but also flowers and plants, nursery products, and forest products of farms. In comparing one year with the other it should be borne in mind that acreage is on the whole a better index of the general changes or tendencies of agriculture than either the quantity or the value of the crops, since variations in quantity may be due largely to temporarily favorable or unfavorable climatic conditions, and variations in the value of the crops are largely affected by changes in prices. (See also discussion of "Total value of farm products.")

The total value of crops in 1909 was \$162,005,000. Of this amount, 87.6 per cent was contributed by crops for which the acreage as well as the value was reported, the remainder consisting of the value of by-products (straw, garden and grass seeds, etc.) derived from the same land as other crops reported, or of orchard fruits, nuts, forest products, and the like. The combined acreage of crops for which acreage was reported was 8,198,578, representing 63.9 per cent of the total im-

proved land in farms (12,832,078 acres). Most of the remaining improved land doubtless consisted of improved pasture, land lying fallow, house and farm yards, and land occupied by orchards and vineyards, the acreage for which is not reported.

The general character of Michigan agriculture is indicated by the fact that more than two-fifths (43.5 per cent) of the total value of crops in 1909 was contributed by the cereals, more than one-fifth (22.2 per cent) by hay and forage, and one-tenth (10 per cent) by potatoes and other vegetables. The remainder, representing in value 24.3 per cent of the total, consisted mainly of grains and seeds, other than cereals, of fruits and nuts, and of forest products.

The total value of crops in 1909 was 74.9 per cent greater than that in 1899; this increase was no doubt largely due to higher prices. There was an increase of 5.9 per cent in the total acreage of crops for which acreage was reported, the greatest absolute increases being those in the acreage of hay and forage and of grains and seeds, other than cereals, and the greatest decrease that in the acreage of cereals.

	ACRES.				PER CENT OF IMPROVED LAND OCCUPIED.		VALUE OF PRODUCTS.					
	1909	1899	Increase. ¹		1909	1899	1909	1899	Increase. ¹		Per cent of total.	
			Amount.	Per cent.					Amount.	Per cent.	1909	1899
All crops.....							\$162,004,681	\$92,625,715	\$69,378,966	74.9	100.0	100.0
Crops with acreage reports.....	8,198,878	7,741,175	457,403	5.9	63.9	65.6	141,976,000	80,455,649	61,520,351	76.5	87.6	88.9
Cereals.....	4,415,629	4,721,126	-305,497	-6.5	34.4	40.0	70,544,250	41,819,042	28,725,208	68.7	43.5	45.1
Other grains and seeds.....	498,926	239,284	259,642	108.5	3.9	2.0	11,060,285	3,060,261	8,000,024	261.4	6.8	3.3
Hay and forage.....	2,715,301	2,328,498	386,803	16.6	21.2	19.7	36,040,087	21,792,987	14,247,100	65.4	22.2	23.5
Tobacco.....	31	97	-66	(6)	(*)	(*)	3,390	5,345	-1,955	-36.6	(*)	(*)
Sugar crops.....	79,195	40,624	38,571	94.9	0.6	0.3	4,032,718	887,967	3,144,751	354.1	2.5	1.0
Sundry minor crops.....	7,973	10,754	-2,781	-25.9	0.1	0.1	278,539	193,252	85,287	44.1	0.2	0.2
Potatoes and sweet potatoes and yams.....	365,507	312,034	53,473	17.1	2.8	2.6	9,914,683	6,761,750	3,152,933	46.6	6.1	7.3
Other vegetables.....	90,861	57,501	33,360	58.0	0.7	0.5	6,286,645	3,394,265	2,892,380	85.2	3.9	3.7
Flowers and plants and nursery products.....	3,736	2,060	1,676	81.4	(*)	(*)	1,786,538	860,531	926,007	107.6	1.1	0.9
Small fruits.....	21,419	29,197	-7,778	-28.6	0.2	0.2	2,028,865	1,680,249	348,616	20.7	1.3	1.8
Crops with no acreage reports.....							20,028,681	12,170,066	7,858,615	64.6	12.4	13.1
Seeds.....							1,008,761	343,700	665,061	193.5	0.6	0.4
Fruits and nuts.....							10,570,855	4,186,549	6,384,306	152.5	6.5	4.5
Maple sugar and sirup.....							333,791	100,596	233,195	231.8	0.2	0.1
Forest products of farms.....							7,911,901	7,530,369	381,532	5.1	4.9	8.1
Miscellaneous.....							203,378	8,852	194,521	2,197.5	0.1	(*)

¹ A minus sign (-) denotes decrease.
² Per cent not calculated when base is less than 100.

³ Less than one-tenth of 1 per cent.
⁴ Includes value of raisins and other dried fruits, wine, cider, vinegar, etc.

General farm crops, minor grains and seeds, and sundry minor crops: 1879 to 1909.—The following table presents statistics for 1909 regarding cereals, other grains and seeds, hay and forage, potatoes, tobacco, and sundry minor crops:

CROP.	Farms report- ing.	Acres harvested.	QUANTITY.		Value.
			Amount.	Unit.	
Cereals, total.....		4,415,629	121,862,638	Bu.....	\$70,544,250
Corn.....	161,901	1,589,596	52,906,842	Bu.....	29,580,929
Oats.....	141,731	1,429,076	43,809,502	Bu.....	18,506,185
Wheat, total.....	82,214	802,137	16,025,791	Bu.....	16,586,868
Common winter.....	79,588	793,606	15,899,301	Bu.....	16,459,878
Common spring.....	2,745	8,368	124,082	Bu.....	126,684
Durum or macaroni.....	61	163	2,408	Bu.....	2,306
Emmer and spelt.....	1,816	6,742	154,103	Bu.....	97,414
Barley.....	21,601	93,065	2,132,101	Bu.....	1,232,344
Buckwheat.....	17,933	75,909	958,119	Bu.....	594,748
Rye.....	48,889	419,020	5,814,394	Bu.....	3,944,616
Kafir corn and milo maize.....	24	84	1,786	Bu.....	1,136
Other grains and seeds with acreage report, total.....		498,926	6,448,970	Bu.....	11,060,285
Dry edible beans.....	55,460	403,669	5,282,511	Bu.....	9,716,315
Flaxseed.....	187	261	2,943	Bu.....	4,951
Peanuts.....	25	64	1,111	Bu.....	1,089
Dry peas.....	18,128	94,932	1,162,403	Bu.....	1,337,430
Seeds with no acreage report, total.....					1,008,761
Timothy seed.....	223	(*)	10,682	Bu.....	19,466
Clover seed.....	10,537	(*)	138,289	Bu.....	940,448
Alfalfa seed.....	21	(*)	203	Bu.....	1,747
Millet seed.....	40	(*)	2,226	Bu.....	2,208
Other tame grass seed.....	12	(*)	167	Bu.....	786
Flower and garden seeds.....	128	(*)			44,106
Hay and forage, total.....	170,956	2,715,301	3,632,939	Tons.	36,040,087
Timothy alone.....	68,731	749,563	929,165	Tons.	10,499,364
Timothy and clover mixed.....	119,320	1,625,229	1,991,618	Tons.	21,276,325
Clover alone.....	18,987	168,180	216,862	Tons.	2,103,819
Alfalfa.....	1,456	6,553	13,872	Tons.	160,273
Millet or Hungarian grass.....	3,987	11,088	16,349	Tons.	136,007
Other tame or cultivated grasses.....	1,236	11,820	10,411	Tons.	91,787
Wild, salt, or prairie grasses.....	3,899	33,345	39,970	Tons.	232,416
Grains cut green.....	3,683	19,415	29,035	Tons.	170,997
Coarse forage.....	13,004	89,338	379,279	Tons.	1,323,278
Root forage.....	1,132	770	6,378	Tons.	45,821
Potatoes.....	176,649	365,453	38,243,828	Bu.....	9,913,778
Sweet potatoes and yams.....	124	24	909	Bu.....	905
Tobacco.....	108	31	29,855	Lbs.....	3,390
Sundry minor crops, total.....		7,973			278,539
Mint and mint oil.....	446	6,360	121,169	Lbs.....	194,391
Ginseng.....	41	(*)			13,794
Chicory.....	525	1,534	9,602	Tons.	70,020

¹ Includes small amount of golden seal seed.
² The entire acreage from which these seeds were secured is believed to be included in the acreage given elsewhere for hay and forage crops, flowers and plants, etc.
³ Includes small amounts of hops, broom corn, and willows.
⁴ Reported in small fractions.

The leading crops covered by the table, in the order of their importance as judged by value, are hay and forage, \$36,040,000; corn, \$29,581,000; oats, \$18,506,000; wheat, \$16,587,000; potatoes, \$9,914,000; dry edible beans, \$9,716,000; and rye, \$3,945,000. It should be noted, however, that several crops, statistics for which appear elsewhere, are more important than rye.

Hay and forage is the leading crop of the state in acreage as well as in value, its acreage being over 70 per cent greater and its value over 20 per cent greater than that of corn, which is the crop next in rank. Of the hay and forage crops, "timothy and clover mixed" constitutes about three-fifths in both acreage and value, the next of these crops in order being "timothy alone" with less than half the acreage and value of "timothy and clover mixed."

Corn represents about one-third of the total acreage of all cereals and over two-fifths of the total value. As compared with corn, the wheat crop has about half as great an acreage, but more than half as great a value. Rye has an acreage more than half as great as that of wheat, but in value it is less than a fourth as great.

Aside from the cereals and hay and forage, the two most important crops are beans and potatoes. These two crops have nearly the same value, although the acreage of potatoes is smaller than that of beans.

The fluctuations in the acreages of some of the principal crops during the past 30 years are shown in the following table:

CROP YEAR.	ACRES HARVESTED.					
	Corn.	Oats.	Wheat.	Barley.	Rye.	Hay and forage.
1909.....	1,589,596	1,429,076	802,137	93,065	419,020	2,715,301
1899.....	1,501,159	1,019,438	1,925,769	44,965	174,086	2,328,498
1889.....	994,597	1,085,759	1,501,225	99,305	140,754	2,024,730
1879.....	919,656	536,187	1,822,749	54,506	22,815	1,246,441

During the 30 years covered by the table the corn acreage made a gain of 72.8 per cent, the greatest gain occurring during the decade 1889 to 1899. The acreage of oats increased 166.5 per cent during the same period, although it decreased a little from 1889 to 1899. Wheat acreage was slightly larger in 1899 than in 1879, but the sharp decline of the last decade brought it considerably below one-half of the acreage of 30 years ago. The acreage of barley has varied considerably; an increase of 82.2 per cent from 1879 to 1889 was followed by a decline of 54.7 per cent from 1889 to 1899, and in 1909 by a gain of 107 per cent, which brought it not very far below the figure of 20 years before. The acreage of rye has increased throughout the period and in 1909 was over eighteen times as great as in 1879. Hay and forage considerably more than doubled in acreage during the 30 years, the greater part of the gain occurring in the first decade.

The following table shows for 1909 and 1899 the percentage which the farms reporting specified crops represented of all farms, the percentage of improved land devoted to these crops, and the percentage of increase or decrease in the acreage of each crop during the decade, together with the average yields and average values per acre for 1909:

CROP.	PER CENT OF FARMS REPORTING.		PER CENT OF IMPROVED LAND.		Per cent of increase in acres: 1899 to 1909 ¹	AVERAGE YIELD PER ACRE.	AVERAGE VALUE PER ACRE.
	1909	1899	1909	1899		1909	1909
Corn.....	78.2	81.3	12.4	12.7	5.9	33.3 Bu.	\$18.61
Oats.....	68.5	59.7	11.1	8.6	40.2	30.7 Bu.	12.95
Wheat.....	39.7	66.9	6.3	16.3	-53.3	20.0 Bu.	20.68
Barley.....	10.4	5.1	0.7	0.4	107.0	22.9 Bu.	13.24
Buckwheat.....	8.7	10.2	0.6	0.5	36.4	12.6 Bu.	7.84
Rye.....	23.6	13.1	3.3	1.5	140.7	13.9 Bu.	9.41
Dry edible beans.....	26.8	14.1	3.1	1.4	141.7	13.1 Bu.	24.07
Dry peas.....	8.8	8.7	0.7	0.6	33.0	12.2 Bu.	14.09
Hay and forage.....	82.6	34.5	21.2	19.7	16.6	1.34 Tons.	13.27
Potatoes.....	85.3	81.8	2.8	2.6	17.2	104.6 Bu.	27.13

¹ A minus sign (-) denotes decrease.

Over four-fifths of the farms report potatoes and hay and forage, and a little smaller proportion report corn. Oats are reported by about 7 farms in 10; wheat by 4 in 10; and barley by 1 in 10. Nearly one-fourth of the farms report rye, and slightly over that proportion report beans.

Approximately one-half of the improved land is occupied by corn, oats, wheat, and hay and forage. The largest relative gains in acreage were made in beans, rye, and barley, though the absolute gains were much larger in the acreages of oats and hay and forage.

In 1909 the average yield per acre of corn was 3.6 bushels greater than in 1899, and of wheat, nearly double that of 1899; while the yield of oats was 4.9 bushels less than at the former period.

The average value per acre of all cereals combined is \$15.98, wheat and corn ranking above this average and all other cereals below it. For hay and forage the average value per acre is \$2.71 less than for all cereals combined.

By far the greater part of the corn is grown in the southern half of the lower peninsula, and as a whole

this section shows an increase in acreage, although for 17 of the counties decreases are recorded. The percentages of increase in the acreages in the northern counties are large, though the actual gains are relatively unimportant. The increase in the acreage of oats is distributed very generally over the state, only five counties showing decreases. The greatest actual gains are in a few of the south central counties, though, like corn, the greatest relative gains are in the northern counties. Wheat acreage decreased in all but one county in the southern peninsula; in the few counties in the northern peninsula where increases occurred the acreage is inconsiderable. Rye increased in acreage in all but three counties in the southern peninsula. One-fourth of the rye acreage of the state is in six counties—Montcalm, Kent, Jackson, Mecosta, Oakland, and Livingston. The greater part of the hay and forage crop is grown in the southern part of the state, but its acreage extends farther to the north than the main corn acreage. The acreage of alfalfa is almost entirely confined to the southern peninsula and is well scattered over the counties of this part of the state, though Lenawee County has almost one-sixth of the whole.

Vegetables, flowers and plants, and nursery products: 1909 and 1899.—The table which follows shows details with regard to vegetables (not including potatoes and sweet potatoes and yams, which appear elsewhere), and also with regard to flowers and plants and nursery products:

CROP.	FARMS REPORTING: 1909		ACRES.		VALUE OF PRODUCTS.	
	Num-ber.	Per cent of all farms.	1909	1899	1909	1899
Vegetables, other than potatoes and sweet potatoes and yams, total.....	148,030	71.5	90,861	57,501	\$6,286,645	\$3,394,265
Farms reporting a product of \$500 or over.....	1,401	0.7	11,933	.....	1,528,349	.....
All other farms.....	146,629	70.8	78,928	.....	4,758,296	.....
Flowers and plants, total.....	353	0.2	702	220	1,143,764	521,987
Farms reporting a product of \$250 or over.....	268	0.1	.....	.....	1,132,325	.....
All other farms.....	85	(²)	.....	.....	11,439	.....
Nursery products, total.....	313	0.2	3,034	1,840	642,774	338,544
Farms reporting a product of \$250 or over.....	61	(²)	.....	.....	625,143	.....
All other farms.....	252	0.1	.....	.....	17,631	.....

¹ Does not include 12,660 farms which reported that they had vegetable gardens, but gave no information as to their products.
² Less than one-tenth of 1 per cent.

In 1909 the total acreage of potatoes and other vegetables was 456,368 and their value \$16,201,328. Excluding (so far as reported separately¹) potatoes and sweet potatoes and yams, the acreage of vegetables was 90,861 and their value \$6,287,000, both acreage and value being materially greater than in 1899. The table distinguishes between farms which make the raising of vegetables a business of some

¹ It is probable that some of the potatoes and sweet potatoes and yams raised in farm gardens were not reported separately by farmers, but were included in their returns for vegetables.

importance (having produced vegetables valued at \$500 or more in 1909) and other farms, on most of which vegetables are raised mainly for home consumption. There were, in 1909, 1,401 farms in the first class, containing about one-eighth of the total acreage of vegetables, and contributing about one-fourth of the total value, the average acreage of vegetables per farm for these farms being 8.5 and the average value of product per acre \$128.08.

The raising of flowers and plants and of nursery products is also of some importance in Michigan, 3,736 acres being devoted to them in 1909, and the output being valued at \$1,786,538. Most of the product was raised on farms where these branches of agriculture were carried on as an important business.

Small fruits: 1909 and 1899.—The following table shows data with regard to small fruits on farms:

CROP.	Number of farms reporting: 1909	ACRES.		Quantity (quarts): 1909	Value: 1909
		1909	1899		
Small fruits, total.....		21,419	29,197	27,214,659	\$2,028,865
Strawberries.....	16,798	8,051	10,837	14,218,768	1,000,788
Blackberries and dewberries.....	4,707	2,973	4,385	3,075,954	218,174
Raspberries and loganberries.....	11,075	8,786	10,193	8,381,943	695,019
Currants.....	3,458	609	2,286	768,259	58,288
Gooseberries.....	1,637	297	559	403,680	28,632
Cranberries.....	91	202	150	125,536	6,992
Other berries.....	141	501	787	240,519	20,672

Strawberries are by far the most important of the small fruits raised in Michigan, with raspberries and loganberries ranking next, and blackberries and dewberries ranking third. The total acreage of small fruits in 1909 was 21,419 and in 1899, 29,197, a decrease of 26.6 per cent. The production in 1909 was 27,215,000 quarts, as compared with 40,168,000 quarts in 1899, and the value \$2,029,000, as compared with \$1,680,000.

Orchard fruits, grapes, and nuts: 1909 and 1899.—The next table presents data with regard to orchard fruits, grapes, and nuts. The acreage devoted to these products was not ascertained. In comparing one year with the other the number of trees or vines of bearing age is on the whole a better index of the general changes or tendencies than the quantity of product, but the data for the censuses of 1910 and 1900 are not closely comparable, and the product is therefore compared, although variations may be due largely to temporarily favorable or unfavorable climatic conditions.

The total quantity of orchard fruits produced in 1909 was 15,220,000 bushels, valued at \$9,021,000. Apples contributed about four-fifths of this quantity, peaches and nectarines and pears most of the remainder. The production of grapes in 1909 amounted to 120,696,000 pounds, valued at \$1,531,000, and of nuts to 961,000 pounds, valued at \$19,000. Most of the nuts consisted of black walnuts, hickory nuts, and butternuts.

The production of all orchard fruits together in 1909 was 54.4 per cent more than in 1899, while the production of grapes was about three times as great in 1909 as in 1899. The value of orchard fruits increased from \$3,676,000 in 1899 to \$9,021,000 in 1909, and of grapes from \$503,000 in 1899 to \$1,531,000 in 1909. It should be noted in this connection that the values for 1899 include the value of more advanced products derived from orchard fruits or grapes, such as cider, vinegar, dried fruits, and the like, and may therefore involve some duplication, while the values shown for 1909 relate only to the products in their original condition.

CROP.	TREES OR VINES OF BEARING AGE: 1910		TREES OR VINES NOT OF BEARING AGE: 1910		PRODUCT.		
	Farms reporting.	Number.	Farms reporting.	Number.	Quantity. ¹	Value.	Quantity. ¹
Orchard fruits, total.....		12,842,827		6,679,949	15,220,104	\$9,020,842	8,859,862
Apples.....	153,026	7,534,343	87,840	2,253,072	12,332,296	5,969,080	8,931,569
Peaches and nectarines.....	47,060	2,907,170	28,377	2,991,090	1,686,586	1,700,330	339,637
Pears.....	75,567	1,136,151	29,058	623,931	666,023	535,771	170,702
Plums and prunes.....	49,498	464,917	25,331	253,479	181,188	205,765	213,682
Cherries.....	73,913	760,183	29,792	540,580	338,945	590,829	194,541
Apricots.....	1,512	4,447	751	2,450	1,508	2,127	730
Quinces.....	7,233	35,461	2,508	15,302	13,484	10,858	(²)
Mulberries.....	38	155	16	45	74	82	(²)
Unclassified.....							9,001
Grapes.....	41,436	11,013,576	11,040	1,869,648	120,695,997	1,531,057	41,530,369
Nuts, total.....		37,297		7,500	961,137	18,956	470,700
Black walnuts.....	2,429	16,105	401	3,520	546,779	7,804	(²)
Butternuts.....	613	2,929	64	545	112,488	1,552	(²)
Chestnuts.....	152	3,174	34	867	23,369	2,762	(²)
Hickory nuts.....	1,655	14,943	88	2,513	276,015	6,681	(²)
Unclassified.....							470,700

¹ Expressed in bushels for orchard fruits and pounds for grapes and nuts.
² Included with "unclassified."
³ Consists of products not separately named by the enumerator, but grouped under the designation "all other."
⁴ Includes almonds, pecans, filberts, hazelnuts, sweet nuts, beechnuts, and other nuts.

The following table shows the quantities of the more advanced products manufactured by farmers from orchard fruits and grapes. Values were not called for on the schedule.

PRODUCT.	FARMS REPORTING: 1909		QUANTITY PRODUCED.		
	Number.	Percent of all farms.	Unit.	1909	1899
Cider.....	42,663	20.6	Gals....	3,386,138	2,295,562
Vinegar.....	12,650	6.1	Gals....	602,697	434,574
Wine and grape juice.....	4,259	2.1	Gals....	199,030	134,859
Dried fruits.....	818	0.4	Lbs....	43,328	143,330

Sugar crops: 1909 and 1899.—The next table shows data with regard to maple trees and their products and for sugar beets, as well as for sorghum cane, which in this state is unimportant. The value of sugar beets produced in 1909 was \$4,014,000, as compared with \$877,000 in 1899, while the value of maple sugar and sirup produced in 1909 was \$334,000, as compared with \$101,000 in 1899.

PRODUCT.	FARMS REPORTING.		Acres.	PRODUCT.		
	Num-ber.	Percent of all farms.		Amount.	Unit.	Value.
Maple sugar and sirup:						
Total, 1909.....	6,542	3.2	1986,737			\$333,791
Sugar made.....	1,308	0.6		293,301	Lbs.	35,341
Sirup made.....	6,309	3.1		269,093	Gals.	298,450
Total, 1899.....	3,168	1.6				100,596
Sugar made.....				302,715	Lbs.	26,693
Sirup made.....				82,997	Gals.	73,903
Sugar beets:						
1909 ¹	14,690	7.1	78,779	707,639	Tons.	4,014,123
1899.....	9,085	4.5	40,247	215,373	Tons.	877,481
Sorghum cane:						
Total, 1909 ²						18,595
Cane grown.....	1,251	0.6	416	2,765	Tons.	
Sirup made.....	1,223	0.6		21,350	Gals.	12,826
Total, 1899.....						10,486
Cane grown.....	1,276	0.6	377	2,787	Tons.	
Cane sold as such.....				198	Tons.	604
Sirup made.....				24,059	Gals.	9,882

¹ Number of trees.
² Includes beets used as root forage.
³ Includes cane used as coarse forage.

Forest products: 1909 and 1899.—The census schedules for 1910 called for the "value of all firewood, fencing material, logs, railroad ties, telegraph and telephone poles, materials for barrels, bark, naval stores, or other forest products cut or produced in 1909 whether used on farm, sold, or on hand April 15, 1910;" and also, in a separate item, for the "amount received from sale of standing timber in 1909." There were

90,365 farms in Michigan (43.7 per cent of all farms in the state), which reported forest products in 1909, the total value of such products being \$7,911,901, as compared with \$7,530,369 in 1899, an increase of 5.1 per cent. Of the value in 1909, \$4,380,879 was reported as that of products used or to be used on the farms themselves, \$2,879,437 as that of products sold or for sale, and \$651,585 as the amount received for standing timber. It should be noted that forest products not produced on farms are not included in this report.

Miscellaneous crops: 1909.—Straw and cornstalks derived as by-products from the production of grain and corn have a considerable value for feed and other purposes. They are, however, mainly consumed on the farms producing them. The Census Bureau made no attempt to ascertain the total quantity or value of these products, but the schedules called for the quantity and value of those sold during the year 1909. The returns show that 26 farmers reported the sale of 145 tons of flax fiber, valued at \$1,418, and 15 farmers reported the sale of 120 tons of flax straw, valued at \$1,195. In addition, 4,496 farmers in Michigan sold, during 1909, 31,196 tons of straw, for which they received \$140,839, and that 3,496 farmers sold 13,905 tons of cornstalks and leaves, for which they received \$59,921.

SELECTED FARM EXPENSES AND RECEIPTS.

Farm expenses: 1909 and 1899.—The next table shows the number of farms reporting expenditures for labor, feed, and fertilizer at the census of 1910, as well as the sums expended in 1909 and 1899:

EXPENSE.	1909		Amount.	1899	INCREASE.		
	Farms reporting.				Amount.	Amount.	Per cent.
	Number.	Percent of all farms.					
Labor.....	111,842	54.0	\$19,063,082	\$10,717,220	\$8,345,862	77.9	
Feed.....	75,882	36.7	5,682,915	(¹)			
Fertilizer.....	31,827	15.1	946,354	492,360	452,994	92.0	

¹ Not reported at the census of 1900.

Over one-half of the farmers of Michigan hire labor, and the average amount expended by those hiring is \$170.45. More than one-fifth of this amount is in the form of rent and board. The total amount expended in 1909 was nearly 78 per cent greater than in 1899. At prior censuses no tabulation was made of the number of farmers reporting expenditures for labor.

Thirty-seven farmers out of every one hundred report some expenditure for feed, while only fifteen

out of every one hundred report the purchase of fertilizer. Nearly twice as much was spent in 1909 for fertilizer as in 1899, and the average expenditure per farm for those reporting is \$30.

Receipts from sale of feedable crops: 1909.—An effort was made at the census of 1910 to secure as complete a statement as possible of the sales as well as of the production of the more important feedable crops (that is, crops ordinarily fed to live stock). The following table summarizes the data reported:

CROP.	FARMS REPORTING.		QUANTITY SOLD.		Amount received.
	Number.	Percent of all farms.	Amount.	Unit.	
Total.....					\$12,234,203
Corn.....	21,747	10.5	2,809,455	Bu.....	1,679,307
Oats.....	42,166	20.4	7,910,857	Bu.....	3,432,668
Barley.....	2,009	1.0	153,310	Bu.....	87,738
Hay and coarse forage.....	46,702	22.6	632,793	Tons...	7,034,490

While the total amount expended by Michigan farmers for the purchase of feed in 1909 was \$5,683,000, the total receipts from the sale of feed by those reporting sales amounted to \$12,234,000.

COUNTY TABLES.

Tables 1 to 6, which follow, present by counties the more important agricultural data collected at the Thirteenth Census, 1910.

Changes in 1900 figures.—After the volumes of the Twelfth Decennial United States Census (1900) had

been printed, a further detailed study and analysis of the data there presented brought to light certain errors in the total farm acreage of Hillsdale County. The corrected acreage is 377,341, and not 390,614 as shown in the county tables.

TABLE 1.—FARMS AND FARM PROPERTY,

[Comparative data for June 1, 1900, in italics.]

	THE STATE.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.
1 Population.....	2,810,173	5,703	7,675	89,819	19,965	15,692
2 <i>Population in 1900.....</i>	<i>2,420,922</i>	<i>5,691</i>	<i>6,368</i>	<i>53,312</i>	<i>18,254</i>	<i>10,508</i>
3 Number of all farms.....	206,960	884	278	6,217	1,326	1,641
4 <i>Number of all farms in 1900.....</i>	<i>203,261</i>	<i>743</i>	<i>124</i>	<i>6,039</i>	<i>1,187</i>	<i>1,233</i>
Color and nativity of farmers:						
5 Native white.....	147,790	383	70	4,754	514	1,039
6 Foreign-born white.....	58,224	496	208	1,396	811	596
7 Negro and other nonwhite.....	946	5	.....	67	1	6
Number of farms, classified by size:						
8 Under 3 acres.....	387	.....	.....	5	2	4
9 3 to 9 acres.....	6,679	4	2	195	3	21
10 10 to 19 acres.....	7,719	8	9	323	7	44
11 20 to 49 acres.....	49,890	203	128	1,910	293	449
12 50 to 99 acres.....	73,748	351	78	2,299	557	657
13 100 to 174 acres.....	50,022	226	45	1,161	333	351
14 175 to 259 acres.....	12,426	54	8	233	85	76
15 260 to 499 acres.....	4,717	26	5	78	36	32
16 500 to 999 acres.....	607	6	1	8	7	7
17 1,000 acres and over.....	165	6	2	6	3	.....
LAND AND FARM AREA						
18 Approximate land area..... acres.	36,787,200	437,760	588,800	533,120	373,760	304,000
19 Land in farms..... acres.	18,940,614	104,732	29,539	472,708	147,970	145,430
20 <i>Land in farms in 1900.....</i>	<i>17,661,638</i>	<i>90,793</i>	<i>14,539</i>	<i>461,060</i>	<i>120,232</i>	<i>100,527</i>
21 Improved land in farms..... acres.	12,832,078	38,037	5,643	354,105	51,403	78,810
22 <i>Improved land in farms in 1900.....</i>	<i>11,799,290</i>	<i>25,391</i>	<i>2,290</i>	<i>333,214</i>	<i>38,263</i>	<i>55,624</i>
23 Woodland in farms..... acres.	2,927,554	19,687	20,255	64,650	23,209	38,966
24 Other unimproved land in farms..... acres.	3,180,932	47,008	3,041	54,047	73,364	28,254
25 Per cent of land area in farms.....	51.5	23.9	5.0	89.7	39.6	47.8
26 Per cent of farm land improved.....	67.8	36.2	19.1	74.9	34.7	54.2
27 Average acres per farm.....	91.5	118.5	108.3	76.0	111.6	88.6
28 Average improved acres per farm.....	62.0	43.0	20.3	57.0	38.8	48.0
VALUE OF FARM PROPERTY						
29 All farm property..... dollars.	1,088,858,379	2,485,841	814,237	32,108,556	3,338,255	4,861,093
30 <i>All farm property in 1900.....</i>	<i>690,355,734</i>	<i>999,686</i>	<i>153,388</i>	<i>19,850,223</i>	<i>1,830,038</i>	<i>2,447,490</i>
31 Per cent increase, 1900-1910.....	57.7	148.7	430.9	61.8	82.4	98.6
32 Land..... dollars.	615,258,348	1,336,190	514,250	17,903,302	1,690,843	2,539,590
33 <i>Land in 1900.....</i>	<i>425,609,660</i>	<i>501,910</i>	<i>86,290</i>	<i>12,225,280</i>	<i>938,470</i>	<i>1,278,210</i>
34 Buildings..... dollars.	285,879,951	580,846	171,425	8,933,970	863,105	1,532,640
35 <i>Buildings in 1900.....</i>	<i>168,847,760</i>	<i>124,120</i>	<i>27,630</i>	<i>4,856,110</i>	<i>361,690</i>	<i>660,250</i>
36 Implements and machinery..... dollars.	49,916,285	155,845	45,778	1,409,118	234,243	290,330
37 <i>Implements, etc., in 1900.....</i>	<i>28,793,380</i>	<i>71,810</i>	<i>10,710</i>	<i>825,260</i>	<i>122,330</i>	<i>166,330</i>
38 Domestic animals, poultry, and bees..... dollars.	117,803,795	408,960	82,784	3,812,166	550,064	692,042
39 <i>Domestic animals, etc., in 1900.....</i>	<i>79,042,644</i>	<i>231,816</i>	<i>30,328</i>	<i>1,945,593</i>	<i>337,608</i>	<i>446,100</i>
Per cent of value of all property in—						
40 Land.....	56.5	53.7	63.2	55.8	50.7	52.2
41 Buildings.....	26.3	23.6	21.1	28.0	25.9	27.4
42 Implements and machinery.....	4.6	6.3	5.6	4.4	7.0	6.1
43 Domestic animals, poultry, and bees.....	12.7	16.4	10.2	11.9	16.5	14.2
Average values:						
44 All property per farm..... dollars.	5,261	2,812	2,929	5,165	2,518	2,962
45 Land and buildings per farm..... dollars.	4,354	2,175	2,468	4,325	1,928	2,360
46 Land per acre..... dollars.	32.48	12.78	17.41	37.87	11.43	17.46
47 <i>Land per acre in 1900.....</i>	<i>24.12</i>	<i>8.22</i>	<i>5.87</i>	<i>28.51</i>	<i>8.22</i>	<i>12.02</i>
DOMESTIC ANIMALS (farms and ranges)						
48 Farms reporting domestic animals.....	196,655	824	222	5,815	1,244	1,500
49 Value of domestic animals..... dollars.	131,746,348	396,135	79,579	3,610,668	535,564	652,789
Cattle:						
50 Total number.....	1,497,822	5,643	1,025	44,187	8,134	8,908
51 Dairy cows.....	767,083	2,738	480	24,213	4,050	4,161
52 Other cows.....	106,801	400	90	2,804	663	4,772
53 Yearling heifers.....	205,000	831	182	6,182	1,291	1,569
54 Calves.....	226,050	1,008	196	7,014	1,291	1,498
55 Yearling steers and bulls.....	119,263	488	68	2,888	634	704
56 Other steers and bulls.....	63,626	180	9	1,086	205	204
57 Value..... dollars.	40,500,318	115,023	31,248	1,225,483	159,853	200,649
Horses:						
58 Total number.....	610,033	1,941	299	17,359	2,975	3,859
59 Mature horses.....	560,936	1,773	293	16,107	2,701	3,151
60 Yearling colts.....	41,474	160	4	1,018	254	204
61 Spring colts.....	7,623	8	2	234	20	34
62 Value..... dollars.	71,312,474	234,118	45,746	1,968,743	329,344	400,265
Mules:						
63 Total number.....	3,700	6	.....	130	2	36
64 Mature mules.....	3,329	6	.....	122	2	20
65 Yearling colts.....	309	.....	.....	7	.....	9
66 Spring colts.....	62	.....	.....	1	.....	7
67 Value..... dollars.	493,825	485	.....	20,110	70	3,364
Asses and burros:						
68 Number.....	233	1	.....	8	.....	5
69 Value..... dollars.	23,932	10	.....	929	.....	1,430
Swine:						
70 Total number.....	1,245,833	1,741	225	32,573	3,743	4,316
71 Mature hogs.....	655,921	1,207	124	16,851	2,459	2,971
72 Spring pigs.....	589,912	534	101	15,722	1,284	1,345
73 Value..... dollars.	9,755,042	14,066	2,509	278,658	24,111	36,570
Sheep:						
74 Total number.....	2,306,476	8,267	9	27,891	5,785	2,658
75 Rams, ewes, and wethers.....	1,545,241	5,593	9	19,179	4,063	1,911
76 Spring lambs.....	761,235	2,669	.....	8,712	1,722	747
77 Value..... dollars.	9,646,565	32,383	76	116,329	21,925	10,394
Goats:						
78 Number.....	5,080	7	.....	122	53	34
79 Value..... dollars.	14,192	50	.....	416	261	117
POULTRY AND BEES						
80 Number of poultry of all kinds.....	9,967,039	22,113	5,528	321,956	31,587	51,800
81 Value..... dollars.	5,610,958	9,992	3,205	188,166	12,579	27,170
82 Number of colonies of bees.....	115,274	157	3,835	342	342	2,581
83 Value..... dollars.	446,464	833	.....	13,332	1,921	12,083

1 Includes deer, valued at \$25.

TABLE 1.—FARMS AND FARM PROPERTY,

[Comparative data for June 1, 1900, in Italics.]

	Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.
1 Population.....	23,129	3,934	30,108	20,524	30,499	18,561	64,555	8,413
2 <i>Population in 1900.....</i>	<i>25,156</i>	<i>2,943</i>	<i>25,881</i>	<i>17,890</i>	<i>31,668</i>	<i>15,831</i>	<i>41,804</i>	<i>6,664</i>
3 Number of all farms.....	3,497	248	1,128	235	3,902	1,457	3,896	1,395
4 <i>Number of all farms in 1900.....</i>	<i>5,777</i>	<i>228</i>	<i>898</i>	<i>118</i>	<i>4,190</i>	<i>1,134</i>	<i>4,601</i>	<i>769</i>
5 Color and nativity of farmers:								
6 Native white.....	3,073	170	274	48	3,679	1,014	3,298	858
7 Foreign-born white.....	418	76	845	187	220	410	596	583
8 Negro and other nonwhite.....	6	2	9	.....	3	33	2	4
9 Number of farms, classified by size:								
10 Under 3 acres.....	9	1	1	1	2	7	9	.....
11 3 to 9 acres.....	77	1	13	3	111	33	131	11
12 10 to 19 acres.....	85	5	11	3	100	64	159	12
13 20 to 49 acres.....	573	63	292	90	804	418	670	456
14 50 to 99 acres.....	1,294	63	419	63	1,550	533	1,366	544
15 100 to 174 acres.....	1,093	64	275	49	1,050	305	1,113	286
16 175 to 259 acres.....	269	23	81	10	221	63	320	52
17 260 to 499 acres.....	92	15	30	13	50	27	124	25
18 500 to 999 acres.....	3	8	5	3	7	7	13	7
19 1,000 acres and over.....	1	5	1	.....	1	.....	1	2
LAND AND FARM AREA								
20 Approximate land area..... acres.	365,440	368,000	748,160	496,640	365,440	310,400	419,200	332,160
21 Land in farms..... acres.	351,640	46,610	112,811	23,480	345,853	124,072	388,476	128,568
22 <i>Land in farms in 1900.....</i>	<i>356,527</i>	<i>29,248</i>	<i>93,710</i>	<i>12,395</i>	<i>351,743</i>	<i>101,701</i>	<i>400,681</i>	<i>60,373</i>
23 Improved land in farms..... acres.	282,250	10,701	42,932	8,342	268,897	54,265	312,978	54,123
24 <i>Improved land in farms in 1900.....</i>	<i>277,621</i>	<i>7,823</i>	<i>33,088</i>	<i>5,070</i>	<i>264,628</i>	<i>38,188</i>	<i>312,829</i>	<i>26,060</i>
25 Woodland in farms..... acres.	58,745	17,022	33,987	4,650	36,271	50,265	39,257	10,821
26 Other unimproved land in farms..... acres.	30,633	18,887	35,892	10,488	40,685	20,442	36,241	63,564
27 Per cent of land area in farms.....	96.2	12.7	15.1	4.7	94.6	40.3	92.7	38.7
28 Per cent of farm land improved.....	80.3	23.0	38.1	35.5	77.7	43.4	80.6	42.1
29 Average acres per farm.....	100.6	187.9	100.0	99.9	88.6	85.8	99.7	92.2
30 Average improved acres per farm.....	80.7	43.1	38.1	35.5	68.9	37.2	80.3	38.8
VALUE OF FARM PROPERTY								
31 All farm property..... dollars.	25,550,457	787,245	3,509,854	941,392	22,896,874	4,084,950	24,974,322	4,072,100
32 <i>All farm property in 1900.....</i>	<i>16,886,491</i>	<i>251,663</i>	<i>1,737,452</i>	<i>232,576</i>	<i>16,065,393</i>	<i>2,372,304</i>	<i>18,880,467</i>	<i>1,102,656</i>
33 Per cent increase, 1900-1910.....	51.3	212.8	102.0	233.1	42.5	72.2	32.3	269.2
34 Land..... dollars.	14,875,812	490,380	1,742,405	443,305	12,506,039	2,140,330	13,665,970	2,381,222
35 <i>Land in 1900.....</i>	<i>16,476,460</i>	<i>123,050</i>	<i>881,830</i>	<i>138,210</i>	<i>9,640,430</i>	<i>1,369,000</i>	<i>11,106,430</i>	<i>699,150</i>
36 Buildings..... dollars.	6,405,103	157,960	966,170	302,825	6,340,790	1,141,385	7,016,100	852,700
37 <i>Buildings in 1900.....</i>	<i>3,833,520</i>	<i>68,900</i>	<i>390,930</i>	<i>68,950</i>	<i>5,946,480</i>	<i>497,610</i>	<i>4,879,160</i>	<i>406,360</i>
38 Implements and machinery..... dollars.	1,034,504	50,187	266,206	70,357	945,634	234,569	1,024,819	201,336
39 <i>Implements, etc., in 1900.....</i>	<i>630,990</i>	<i>22,010</i>	<i>136,730</i>	<i>17,790</i>	<i>681,930</i>	<i>139,490</i>	<i>1,702,670</i>	<i>78,240</i>
40 Domestic animals, poultry, and bees..... dollars.	3,234,948	88,718	535,073	124,905	3,104,411	568,666	3,267,433	636,842
41 <i>Domestic animals, etc., in 1900.....</i>	<i>1,945,461</i>	<i>68,308</i>	<i>327,962</i>	<i>67,656</i>	<i>1,816,683</i>	<i>368,204</i>	<i>2,192,207</i>	<i>218,506</i>
42 Per cent of value of all property in—								
43 Land.....	58.2	62.3	49.6	47.1	54.6	52.4	54.7	58.5
44 Buildings.....	25.1	20.1	27.5	32.2	27.7	27.9	28.1	20.9
45 Implements and machinery.....	4.0	6.4	7.6	7.5	4.1	5.7	4.1	4.9
46 Domestic animals, poultry, and bees.....	12.7	11.3	15.2	13.3	13.6	13.9	13.1	15.6
47 Average values:								
48 All property per farm..... dollars.	7,306	3,174	3,112	4,006	5,868	2,804	6,410	2,910
49 Land and buildings per farm..... dollars.	6,085	2,614	2,401	3,175	4,830	2,252	5,300	2,318
50 Land per acre..... dollars.	42.30	10.52	15.45	18.88	36.16	17.13	35.18	18.52
51 <i>Land per acre in 1900.....</i>	<i>29.40</i>	<i>4.21</i>	<i>9.41</i>	<i>11.15</i>	<i>27.41</i>	<i>13.46</i>	<i>27.72</i>	<i>9.24</i>
DOMESTIC ANIMALS (farms and ranges)								
52 Farms reporting domestic animals.....	3,402	221	1,053	209	3,827	1,321	3,779	1,296
53 Value of domestic animals..... dollars.	3,103,067	85,330	517,131	121,601	2,971,660	541,671	3,133,285	610,600
54 Cattle:								
55 Total number.....	27,823	1,182	7,142	1,587	27,806	7,356	32,255	7,641
56 Dairy cows.....	13,869	555	3,468	785	13,485	3,800	16,551	3,562
57 Other cows.....	1,841	142	698	117	2,171	448	2,091	536
58 Yearling heifers.....	3,880	180	1,031	249	3,907	1,074	4,583	1,230
59 Calves.....	4,233	199	1,207	288	3,990	1,242	5,148	1,386
60 Yearling steers and bulls.....	2,752	65	437	87	2,705	611	2,622	662
61 Other steers and bulls.....	1,248	41	301	63	1,548	181	1,260	265
62 Value..... dollars.	785,319	27,380	164,582	40,704	769,191	180,921	893,165	182,914
63 Horses:								
64 Total number.....	13,063	463	2,578	518	12,984	2,681	14,117	3,043
65 Mature horses.....	11,790	445	2,413	510	11,864	2,607	12,978	2,678
66 Yearling colts.....	1,034	17	159	7	907	69	1,013	341
67 Spring colts.....	239	1	6	1	213	5	128	24
68 Value..... dollars.	1,525,049	48,255	327,175	74,911	1,485,654	320,449	1,652,417	346,612
69 Mules:								
70 Total number.....	105	.....	2	.....	129	6	94	12
71 Mature mules.....	92	.....	2	.....	111	6	36	12
72 Yearling colts.....	12	.....	.....	.....	15	.....	7	.....
73 Spring colts.....	1	.....	.....	.....	3	.....	1	.....
74 Value..... dollars.	15,555	.....	300	.....	16,705	500	12,232	975
75 Asses and burros:								
76 Number.....	4	.....	.....	.....	1	.....	7	.....
77 Value..... dollars.	788	.....	.....	.....	50	.....	330	.....
78 Swine:								
79 Total number.....	42,018	322	2,054	528	30,318	4,067	28,415	4,258
80 Mature hogs.....	18,873	247	1,383	363	15,301	2,810	14,313	2,094
81 Spring pigs.....	23,145	75	671	165	14,987	1,257	14,102	2,164
82 Value..... dollars.	284,169	3,278	19,621	4,876	238,784	33,033	215,584	29,259
83 Sheep:								
84 Total number.....	119,987	1,328	1,578	309	115,055	1,605	83,555	10,973
85 Rams, ewes, and wethers.....	76,353	1,060	1,002	193	77,287	1,020	58,606	7,255
86 Spring lambs.....	43,634	268	576	116	37,818	585	24,949	3,718
87 Value..... dollars.	491,986	6,417	5,418	1,108	461,100	6,748	359,440	50,791
88 Goats:								
89 Number.....	118	.....	4	1	91	5	56	12
90 Value..... dollars.	201	.....	35	2	176	23	117	49
POULTRY AND BEES								
91 Number of poultry of all kinds.....	223,363	6,467	35,004	6,179	220,783	43,909	199,923	36,037
92 Value..... dollars.	123,442	3,333	17,939	3,164	123,123	24,403	118,121	18,631
93 Number of colonies of bees.....	2,594	10	1	20	2,490	519	3,683	1,353
94 Value..... dollars.	8,439	55	3	140	9,628	2,589	16,027	7,611

¹ See explanation for 1900 figures at close of text.

TABLE I.—FARMS AND FARM PROPERTY,

[Comparative data for June 1, 1900, in italics.]

	Kalkaska.	Kent.	Keweenaw.	Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.
1 Population.....	8,097	159,145	7,156	4,939	26,033	10,608	47,907	17,736	4,004
2 <i>Population in 1900.</i>	7,153	129,714	5,217	4,367	27,641	10,656	43,406	19,664	2,383
3 Number of all farms.....	842	6,276	36	732	3,808	1,444	5,334	2,775	195
4 <i>Number of all farms in 1900.</i>	679	6,654	22	626	4,051	1,395	5,334	3,032	144
5 Color and nativity of farmers:									
6 Native white.....	655	4,472	5	461	2,727	826	4,722	2,418	76
7 Foreign-born white.....	185	1,792	31	271	1,080	574	609	356	119
8 Negro and other nonwhite.....	2	12				44	3	1	
9 Number of farms, classified by size:									
10 Under 3 acres.....	1	23			5		10	2	
11 3 to 9 acres.....	2	337		16	85		11	277	6
12 10 to 19 acres.....	7	411		13	96		25	244	6
13 20 to 49 acres.....	221	1,614		17	163		256	996	58
14 50 to 99 acres.....	338	2,265		10	265		1,399	1,981	61
15 100 to 174 acres.....	207	1,375	2	176	1,137	462	1,417	908	45
16 175 to 259 acres.....	47	286	5	49	316	107	314	420	8
17 260 to 499 acres.....	12	70		37	131	46	91	170	9
18 500 to 999 acres.....	6	4		1	13	3	4	11	2
19 1,000 acres and over.....	1			4	1	1			1
LAND AND FARM AREA									
20 Approximate land area.....acres.	366,720	550,400	354,560	370,560	426,240	216,320	475,520	363,520	588,800
21 Land in farms.....acres.	80,501	486,043	2,731	87,730	400,452	159,303	462,032	349,075	20,732
22 <i>Land in farms in 1900.</i>.....acres.	59,892	490,090	3,708	60,421	395,611	119,853	469,848	351,687	15,780
23 Improved land in farms.....acres.	42,563	365,717	1,236	33,584	296,802	83,812	379,563	247,364	7,626
24 <i>Improved land in farms in 1900.</i>.....acres.	27,338	332,902	1,541	24,851	233,783	65,628	374,770	250,065	4,380
25 Woodland in farms.....acres.	16,611	69,618	475	25,541	51,108	57,731	53,837	47,117	8,971
26 Other unimproved land in farms.....acres.	21,327	50,708	1,020	28,305	52,542	17,760	28,632	54,594	3,335
27 Per cent of land area in farms.....	22.0	88.3	0.8	23.7	93.9	73.6	97.2	96.0	3.5
28 Per cent of farm land improved.....	52.9	75.2	45.3	38.6	74.1	52.6	82.2	70.9	38.2
29 Average acres per farm.....	95.6	77.4	75.9	119.8	105.2	110.3	86.6	125.8	106.3
30 Average improved acres per farm.....	50.5	58.3	34.3	46.3	77.9	58.0	71.2	89.1	40.6
VALUE OF FARM PROPERTY									
31 All farm property.....dollars.	2,533,869	34,625,818	95,131	2,245,762	20,285,943	6,120,448	41,339,762	17,908,988	826,646
32 <i>All farm property in 1900.</i>.....dollars.	1,265,685	23,908,449	50,410	1,001,968	13,868,063	3,479,103	25,693,766	13,989,371	249,484
33 Per cent increase, 1900-1910.....	100.2	44.8	88.7	124.1	46.4	75.9	63.5	28.0	151.1
34 Land.....dollars.	1,300,080	18,957,400	43,900	1,230,841	10,215,824	3,269,205	24,606,719	9,483,769	319,225
35 <i>Land in 1900.</i>.....dollars.	674,070	15,080,270	28,580	645,690	8,017,410	1,908,760	15,496,740	3,595,360	137,660
36 Buildings.....dollars.	710,845	10,057,730	30,125	558,170	5,741,528	1,816,225	10,581,205	4,927,025	169,175
37 <i>Buildings in 1900.</i>.....dollars.	285,390	5,714,890	8,870	208,140	3,434,170	917,770	6,359,160	3,376,550	50,970
38 Implements and machinery.....dollars.	158,874	1,640,102	7,800	135,735	1,128,366	350,993	1,684,167	809,459	40,874
39 <i>Implements, etc., in 1900.</i>.....dollars.	88,590	831,630	4,280	64,800	593,700	193,580	986,490	499,010	16,330
40 Domestic animals, poultry, and bees.....dollars.	364,070	3,970,886	13,406	321,016	3,200,225	684,025	4,967,671	2,688,735	97,272
41 <i>Domestic animals, etc., in 1900.</i>.....dollars.	208,665	2,231,759	8,700	184,038	1,807,733	459,193	2,791,376	1,619,951	44,634
42 Per cent of value of all property in—									
43 Land.....	51.3	54.7	46.0	54.8	50.4	53.4	58.8	53.0	50.9
44 Buildings.....	28.1	29.0	31.7	24.9	28.3	29.7	25.3	27.5	27.0
45 Implements and machinery.....	6.3	4.7	8.2	6.0	5.6	5.7	4.0	4.5	6.5
46 Domestic animals, poultry, and bees.....	14.4	11.5	14.1	14.3	15.8	11.2	11.9	15.0	15.5
47 Average values:									
48 All property per farm.....dollars.	3,009	5,517	2,643	3,068	5,327	4,239	7,644	6,454	3,212
49 Land and buildings per farm.....dollars.	2,388	4,623	2,053	2,444	4,190	3,522	6,697	5,193	2,605
50 Land per acre.....dollars.	16.15	39.00	16.04	14.03	25.51	20.52	53.26	27.17	15.40
51 <i>Land per acre in 1900.</i>.....dollars.	11.85	30.63	7.71	9.03	20.37	15.59	32.98	24.44	10.08
DOMESTIC ANIMALS (farms and ranges)									
52 Farms reporting domestic animals.....	778	5,989	33	679	3,724	1,361	5,154	2,685	164
53 Value of domestic animals.....dollars.	348,232	3,799,342	12,859	309,241	3,069,266	657,714	4,713,176	2,587,046	94,441
54 Cattle:									
55 Total number.....	4,227	44,922	140	4,508	34,315	9,456	49,923	26,657	1,099
56 Dairy cows.....	2,118	25,015	61	2,054	16,322	4,618	25,924	13,280	550
57 Other cows.....	239	2,733	39	451	2,140	689	2,901	2,850	64
58 Yearling heifers.....	645	6,147	17	661	4,879	1,336	6,059	4,234	158
59 Calves.....	716	7,474	9	703	5,893	1,361	8,663	2,569	202
60 Yearling steers and bulls.....	407	2,603	13	402	3,552	926	3,135	2,274	108
61 Other steers and bulls.....	102	950	1	237	1,529	506	3,241	1,450	22
62 Value.....dollars.	102,575	1,202,151	4,965	104,008	886,333	192,172	1,655,709	882,043	31,872
63 Horses:									
64 Total number.....	1,788	17,404	64	1,575	13,588	3,336	18,181	10,321	376
65 Mature horses.....	1,665	16,205	63	1,440	12,371	3,171	16,759	9,554	354
66 Yearling colts.....	84	996	1	129	1,069	143	1,134	645	22
67 Spring colts.....	9	203		6	148	22	288	122	
68 Value.....dollars.	223,067	2,130,230	7,689	174,307	1,590,250	413,000	2,073,558	1,182,729	55,235
69 Mules:									
70 Total number.....	11	83		4	36	14	177	44	
71 Mature mules.....	11	78		4	32	13	160	35	
72 Yearling colts.....		4			4	1	15	9	
73 Spring colts.....		1					2		
74 Value.....dollars.	1,625	12,652		460	4,540	1,660	23,875	5,525	
75 Asses and burros:									
76 Number.....	1	4			2	2	10	4	
77 Value.....dollars.	50	210			55	60	2,310	525	
78 Swine:									
79 Total number.....	2,208	32,428	17	1,304	25,221	5,001	77,368	21,828	676
80 Mature hogs.....	1,785	17,960	17	849	12,925	3,552	38,845	11,840	521
81 Spring pigs.....	423	14,468		455	12,296	1,449	38,523	9,988	155
82 Value.....dollars.	19,215	297,263	205	11,650	195,315	41,650	582,817	172,261	7,130
83 Sheep:									
84 Total number.....	446	39,296		3,779	88,813	2,388	90,654	89,647	44
85 Rams, ewes, and wethers.....	323	26,601		2,714	60,706	1,525	59,431	59,808	34
86 Spring lambs.....	123	12,695		1,065	28,107	863	31,223	29,839	10
87 Value.....dollars.	1,700	156,387		18,606	392,723	9,097	374,371	343,536	204
88 Goats:									
89 Number.....		181		57	16	3	232	160	
90 Value.....dollars.		449		210	51	75	536	427	
POULTRY AND BEES									
91 Number of poultry of all kinds.....	25,681	261,697	840	20,728	212,495	57,079	396,537	161,192	5,220
92 Value.....dollars.	13,203	155,117	547	10,224	118,454	25,019	245,896	94,865	2,831
93 Number of colonies of bees.....	531	4,216		332	3,442	291	2,579	2,050	
94 Value.....dollars.	2,635	16,427		1,551	12,505	1,292	8,599	6,824	

TABLE 2.—NUMBER, ACREAGE, AND VALUE OF FARMS CLASSIFIED BY TENURE; COLOR AND

[Comparative data for June 1, 1900, in italics.]

	THE STATE.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.	
FARMS OPERATED BY OWNERS							
1	Number of farms.....	172,310	808	269	5,319	1,248	1,500
2	Number of farms in 1900.....	<i>168,814</i>	<i>701</i>	<i>121</i>	<i>6,148</i>	<i>1,090</i>	<i>1,168</i>
3	Per cent of all farms.....	83.3	91.4	96.8	85.6	94.1	91.8
4	Per cent of all farms in 1900.....	<i>83.1</i>	<i>84.5</i>	<i>87.6</i>	<i>84.4</i>	<i>91.8</i>	<i>90.1</i>
5	Land in farms..... acres	15,107,494	86,119	20,357	384,850	123,636	130,505
6	Improved land in farms..... acres	10,142,159	33,838	5,280	289,812	46,633	70,168
7	Value of land and buildings..... dollars	699,059,567	1,656,656	449,225	21,941,433	2,285,610	3,505,560
Degree of ownership:							
8	Farms consisting of owned land only.....	151,005	758	268	4,631	1,206	1,376
9	Farms consisting of owned and hired land.....	21,305	50	1	688	42	130
Color and nativity of owners:							
10	Native white.....	118,660	338	67	3,963	480	627
11	Foreign-born white.....	52,865	465	202	1,296	767	573
12	Negro and other nonwhite.....	785	5		60	1	6
FARMS OPERATED BY TENANTS							
13	Number of farms.....	32,689	66	4	807	57	122
14	Number of farms in 1900.....	<i>32,213</i>	<i>58</i>	<i>2</i>	<i>808</i>	<i>48</i>	<i>184</i>
15	Per cent of all farms.....	15.8	7.5	1.4	13.0	4.3	7.4
16	Per cent of all farms in 1900.....	<i>16.9</i>	<i>4.8</i>	<i>1.6</i>	<i>14.5</i>	<i>4.0</i>	<i>8.7</i>
17	Land in farms..... acres	3,380,616	8,513	417	71,706	6,038	12,802
18	Improved land in farms..... acres	2,472,310	3,109	258	55,191	2,620	7,108
19	Value of land and buildings..... dollars	179,097,554	154,150	19,300	4,086,289	120,000	294,510
Form of tenancy:							
20	Share tenants.....	20,378	14		531	32	50
21	Share-cash tenants.....	870	1		24	1	3
22	Cash tenants.....	9,629	44	1	243	17	49
23	Tenure not specified.....	1,812	7	3	9	7	20
Color and nativity of tenants:							
24	Native white.....	27,609	40	3	714	28	102
25	Foreign-born white.....	4,928	26	1	89	29	20
26	Negro and other nonwhite.....	152			4		
FARMS OPERATED BY MANAGERS							
27	Number of farms.....	1,961	10	5	91	21	13
28	Number of farms in 1900.....	<i>2,231</i>	<i>8</i>	<i>1</i>	<i>79</i>	<i>49</i>	<i>5</i>
29	Land in farms..... acres	452,504	10,100	8,765	16,152	18,302	2,123
30	Improved land in farms..... acres	217,109	1,090	105	9,102	2,150	1,584
31	Value of land and buildings..... dollars	22,981,178	112,200	217,150	869,550	148,338	72,160
MORTGAGE DEBT REPORTS¹							
For all farms operated by owners:							
32	Number free from mortgage debt.....	88,705	442	217	2,709	735	652
33	Number with mortgage debt.....	82,631	366	52	2,578	507	849
34	Number with no mortgage report.....	974			32	6	6
For farms consisting of owned land only:							
35	Number reporting debt and amount.....	68,655	337	41	2,131	476	741
36	Value of their land and buildings..... dollars	250,874,010	688,195	75,700	8,426,044	842,680	1,546,886
37	Amount of mortgages debt..... dollars	76,997,030	173,958	14,310	2,672,967	175,771	421,718
38	Per cent of value of land and buildings.....	30.3	25.3	18.9	31.7	20.9	27.3

¹ No mortgage reports were secured for farms operated by tenants and managers. (See explanation in text.)

TABLE 3.—LIVE STOCK PRODUCTS, AND DOMESTIC ANIMALS

LIVE STOCK PRODUCTS								
Dairy Products								
1	Dairy cows on farms reporting dairy products.....	number..	727,832	2,486	451	23,336	3,796	3,884
2	Dairy cows on farms reporting milk produced.....	number..	615,820	1,709	442	20,507	2,889	3,482
3	Milk—Produced.....	gallons..	289,387,201	741,607	168,620	10,283,549	1,008,894	1,852,716
4	Sold.....	gallons..	74,026,769	414	20,817	2,000,328	66,318	71,901
5	Cream sold.....	gallons..	2,486,061	4,533	346	59,225	11,497	12,295
6	Butter fat sold.....	pounds..	18,287,691	42,247		1,558,262	10,293	20,067
7	Butter—Produced.....	pounds..	50,405,424	227,668	35,319	991,300	278,194	457,462
8	Sold.....	pounds..	30,010,783	118,867	14,387	585,200	145,408	241,043
9	Cheese—Produced.....	pounds..	291,178			5,214	400	
10	Sold.....	pounds..	284,026			4,858	300	
11	Value of dairy products, excluding home use of milk and cream.....	dollars..	28,727,538	64,262	13,190	906,911	88,333	127,660
12	Receipts from sale of dairy products.....	dollars..	22,099,178	39,845	7,683	810,531	56,405	80,811
Poultry Products								
13	Poultry—Raised.....	number..	11,864,965	22,526	7,042	328,689	49,648	71,637
14	Sold.....	number..	5,289,794	6,367	2,210	147,347	20,891	26,300
15	Eggs—Produced.....	dozens..	56,176,525	123,573	29,462	1,887,593	189,466	285,613
16	Sold.....	dozens..	38,568,388	65,961	10,670	1,351,703	77,546	154,161
17	Value of poultry and eggs produced.....	dollars..	16,707,037	32,382	10,031	527,600	52,702	84,080
18	Receipts from sale of poultry and eggs.....	dollars..	10,293,428	15,415	3,792	334,988	22,871	40,641
Honey and Wax								
19	Honey produced.....	pounds..	2,507,810	3,704		47,137	11,447	91,231
20	Wax produced.....	pounds..	28,524	5		736	343	070
21	Value of honey and wax produced.....	dollars..	296,742	492		5,723	1,639	8,432
Wool, Mohair, and Goat Hair								
22	Wool, fleeces shorn.....	number..	1,505,258	6,347	2	17,914	4,145	1,308
23	Mohair and goat hair, fleeces shorn.....	number..	1,559	7		10	52	30
24	Value of wool and mohair produced.....	dollars..	3,215,658	11,076	3	37,725	7,886	2,569
DOMESTIC ANIMALS SOLD OR SLAUGHTERED								
25	Calves—Sold or slaughtered.....	number..	355,421	1,249	109	11,736	1,181	864
26	Other cattle—Sold or slaughtered.....	number..	362,682	2,273	228	7,671	2,794	2,759
27	Horses, mules, and asses and burros—Sold.....	number..	52,966	291	19	1,759	203	519
28	Pigs—Sold or slaughtered.....	number..	1,363,127	1,957	216	37,678	4,019	5,155
29	Sheep and goats—Sold or slaughtered.....	number..	1,180,959	4,096		10,657	4,664	414
30	Receipts from sale of animals.....	dollars..	35,915,379	102,251	6,249	788,852	107,631	95,998
31	Value of animals slaughtered.....	dollars..	7,652,048	23,468	7,809	265,193	40,693	74,674

STATISTICS OF AGRICULTURE.

NATIVITY OF FARMERS; AND MORTGAGE DEBT, BY COUNTIES: APRIL 15, 1910.

[Comparative data for June 1, 1900, in italics.]

	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.	Chippewa.	Clare.
1	1,301	400	2,743	2,965	1,132	4,294	2,508	2,760	1,780	1,312	1,425	1,287	1,193
2	<i>1,087</i>	<i>353</i>	<i>2,837</i>	<i>2,853</i>	<i>871</i>	<i>4,213</i>	<i>2,741</i>	<i>3,041</i>	<i>1,038</i>	<i>1,191</i>	<i>1,034</i>	<i>1,247</i>	<i>1,767</i>
3	90.3	97.1	80.0	91.7	90.9	81.3	74.2	73.4	69.6	89.9	95.1	92.0	91.6
4	<i>91.7</i>	<i>97.5</i>	<i>80.9</i>	<i>88.7</i>	<i>91.3</i>	<i>83.3</i>	<i>78.9</i>	<i>74.3</i>	<i>76.2</i>	<i>92.0</i>	<i>94.0</i>	<i>91.4</i>	<i>90.0</i>
5	99,839	33,823	258,246	194,073	90,374	253,127	213,310	273,165	192,010	111,018	114,848	151,532	144,390
6	48,042	9,025	193,108	129,703	44,516	205,477	159,022	204,588	144,258	54,261	48,554	72,186	47,736
7	2,675,280	894,205	11,491,951	9,801,850	2,749,665	23,554,246	12,600,245	13,391,347	9,945,274	2,735,110	2,558,221	3,385,870	2,637,335
8	1,206	400	2,245	2,734	1,037	3,596	1,999	2,352	1,335	1,211	1,354	1,150	1,053
9	95	-----	498	231	95	698	509	408	445	101	71	137	140
10	636	44	2,467	1,512	841	2,985	2,267	2,424	1,526	890	737	182	837
11	653	344	274	1,447	282	1,290	237	325	120	496	677	1,101	356
12	12	12	2	6	9	19	4	11	134	16	11	4	-----
13	127	9	692	254	101	817	850	969	756	133	63	98	101
14	<i>91</i>	<i>5</i>	<i>693</i>	<i>305</i>	<i>73</i>	<i>828</i>	<i>712</i>	<i>971</i>	<i>806</i>	<i>100</i>	<i>55</i>	<i>82</i>	<i>67</i>
15	8.3	2.2	19.3	7.9	8.1	15.6	25.4	25.8	29.6	9.1	4.2	7.0	7.8
16	<i>7.7</i>	<i>2.1</i>	<i>18.5</i>	<i>8.5</i>	<i>7.6</i>	<i>16.1</i>	<i>20.5</i>	<i>23.7</i>	<i>23.2</i>	<i>7.7</i>	<i>4.7</i>	<i>7.9</i>	<i>7.9</i>
17	11,772	698	74,807	15,472	7,386	70,237	91,649	132,551	101,045	12,891	4,785	10,937	13,499
18	5,899	189	56,570	11,269	3,960	56,527	68,202	101,752	78,250	6,186	1,985	5,338	4,845
19	298,590	14,850	3,377,200	916,550	187,105	5,324,935	5,350,576	7,729,030	5,406,165	279,485	82,470	354,100	252,145
20	61	-----	501	41	72	547	675	789	660	58	26	15	63
21	2	6	6	2	-----	24	46	16	12	2	-----	2	1
22	46	6	80	193	18	211	112	102	77	46	28	62	35
23	18	3	15	18	11	35	26	62	7	27	9	19	2
24	86	2	630	157	86	720	845	903	683	97	49	80	78
25	41	7	30	97	14	91	14	65	22	33	14	67	23
26	-----	-----	2	-----	1	6	-----	1	51	3	-----	1	-----
27	12	3	23	14	12	141	11	32	20	15	11	14	8
28	<i>8</i>	<i>1</i>	<i>21</i>	<i>57</i>	<i>6</i>	<i>54</i>	<i>22</i>	<i>88</i>	<i>15</i>	<i>4</i>	<i>15</i>	<i>7</i>	<i>13</i>
29	2,565	325	3,783	3,072	828	9,962	1,530	6,085	2,330	3,716	775	13,748	7,016
30	1,630	150	2,469	1,663	380	7,070	1,095	4,628	1,632	1,160	406	1,812	1,340
31	129,500	23,500	201,150	131,100	30,350	1,705,605	131,650	334,400	162,330	84,000	22,200	213,200	117,800
32	664	298	1,464	1,480	564	2,300	1,226	1,593	1,102	697	771	797	580
33	632	102	1,271	1,478	562	1,976	1,271	1,232	673	609	651	483	611
34	5	-----	8	7	6	18	11	25	5	6	3	7	2
35	564	100	957	1,317	495	1,568	922	970	437	533	600	396	515
36	1,183,220	199,865	3,627,892	3,661,540	1,115,480	7,736,698	4,184,770	4,337,075	2,095,973	1,024,110	981,133	1,009,950	1,088,855
37	314,192	51,035	1,169,692	1,170,088	232,278	2,188,353	1,313,993	1,461,239	597,380	255,926	260,632	310,888	261,485
38	26.4	25.9	32.2	32.0	20.8	23.3	31.4	33.7	28.5	25.0	25.5	30.8	24.0

SOLD OR SLAUGHTERED ON FARMS, BY COUNTIES: 1909.

1	4,072	734	11,642	11,759	2,190	13,551	11,026	14,896	8,616	3,634	3,243	4,532	2,548
2	3,355	732	10,046	10,036	2,144	12,516	7,330	10,058	7,783	3,599	3,196	3,797	2,310
3	1,400,596	308,641	4,943,156	4,422,056	920,361	5,351,083	2,995,745	4,334,598	3,567,285	1,708,176	1,517,872	1,635,134	1,448,183
4	83,802	4,271	196,400	1,817,952	30,003	1,069,314	362,168	1,134,605	272,292	174,699	65,216	247,135	24,783
5	32,773	16	89,680	73,407	4,477	5,329	17,745	68,063	43,495	4,329	1,234	7,689	11,217
6	154,722	-----	519,440	101,353	6,001	250,733	293,080	238,655	171,058	5,627	3,378	-----	48,796
7	227,715	88,132	848,264	802,902	227,698	1,177,648	1,024,713	1,148,553	787,543	412,141	337,463	480,911	276,936
8	90,144	36,274	529,821	489,188	115,256	779,577	678,644	829,257	526,284	240,281	216,043	278,405	129,705
9	-----	80	-----	3,700	2,575	1,434	-----	1,144	150	15,700	125	-----	-----
10	-----	-----	3,700	3,700	2,500	1,155	-----	970	-----	15,700	125	-----	-----
11	113,681	21,874	402,096	438,007	64,969	494,590	352,670	528,561	299,089	133,550	110,748	165,187	76,938
12	86,660	9,707	380,440	366,678	39,103	399,526	277,924	455,324	237,173	93,524	69,240	117,212	48,681
13	58,061	10,105	190,455	140,746	46,052	313,677	217,131	241,848	186,439	71,546	57,026	53,242	54,423
14	20,217	1,820	102,537	43,364	17,568	113,694	116,000	120,541	75,976	28,824	15,227	24,449	19,527
15	197,828	51,118	1,127,235	614,474	174,307	1,117,711	1,280,237	1,197,636	771,761	293,397	192,472	188,475	230,127
16	105,999	19,025	811,011	347,133	90,892	621,589	968,118	855,761	542,091	166,616	86,420	75,160	145,694
17	60,165	16,136	316,761	186,556	52,497	379,150	357,828	362,583	248,664	90,884	66,985	60,909	60,909
18	28,086	5,265	213,316	90,872	24,871	187,874	251,493	235,181	146,789	48,958	25,571	31,080	33,869
19	16,367	-----	29,176	34,391	15,502	30,688	18,726	22,020	25,883	50,904	19,508	500	12,166
20	105	-----	325	242	243	340	516	286	347	527	297	5	249
21	1,721	-----	3,715	4,118	1,793	4,219	2,282	2,873	3,357	5,046	2,562	88	1,360
22	4,363	12	40,108	2,799	503	9,221	47,993	46,806	21,316	2,087	814	4,580	10,568
23	1	-----	37	-----	9	9	30	136	174	4	5	18	2
24	9,505	35	100,189	5,317	944	20,133	105,453	94,221	43,156	3,842	1,837	8,377	20,660
25	1,485	244	5,017	4,886	632	7,784	6,340	7,350	4,566	1,158	817	1,809	862
26	2,566	305	5,937	4,636	908	3,818	5,001	9,153	3,035	1,797	1,747	2,412	2,373
27	372	20	1,123	460	153	1,093	1,016	1,046	636	240	182	360	314
28	3,810	111	33,851	12,549	3,183	28,120	41,544	43,296	28,610	4,608	3,952	3,045	3,836
29	3,011	8	37,367	1,717	339	5,913	32,599	42,515	13,717	878	468	2,520	6,112
30	127,956	6,395	914,894	228,502	49,506	561,317	936,032	1,235,426	590,048	74,033	64,965	107,624	136,269
31	30,902	8,565	110,693	138,977	31,976	207,623	193,554	107,173	106,922	59,787	46,885	56,254	30,389

TABLE 2.—NUMBER, ACREAGE, AND VALUE OF FARMS CLASSIFIED BY TENURE; COLOR AND

[Comparative data for June 1, 1900, in italics.]

	Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.
FARMS OPERATED BY OWNERS								
1	Number of farms.....	2,725	221	1,067	221	2,090	1,383	2,093
2	Number of farms in 1900.....	<i>3,072</i>	<i>218</i>	<i>796</i>	<i>100</i>	<i>3,368</i>	<i>1,054</i>	<i>3,493</i>
3	Per cent of all farms.....	77.9	89.1	94.6	94.0	76.6	91.5	76.6
4	Per cent of all farms in 1900.....	<i>81.3</i>	<i>95.6</i>	<i>91.7</i>	<i>84.7</i>	<i>80.4</i>	<i>91.2</i>	<i>90.9</i>
5	Land in farms..... acres.....	266,787	28,785	103,586	20,299	250,611	113,207	280,485
6	Improved land in farms..... acres.....	216,444	8,128	88,824	6,994	196,059	48,991	228,824
7	Value of land and buildings..... dollars.....	16,309,230	436,340	2,469,375	677,430	13,854,174	3,000,285	14,927,940
8	Degree of ownership:							
9	Farms consisting of owned land only.....	2,266	205	1,017	215	2,530	1,210	2,497
10	Farms consisting of owned and hired land.....	459	16	50	6	460	117	486
11	Color and nativity of owners:							
12	Native white.....	2,353	154	247	42	2,797	915	2,491
13	Foreign-born white.....	367	66	811	179	191	388	400
14	Negro and other nonwhite.....	5	1	9	2	30	2	4
FARMS OPERATED BY TENANTS								
15	Number of farms.....	756	18	44	9	904	115	846
16	Number of farms in 1900.....	<i>685</i>	<i>9</i>	<i>49</i>	<i>15</i>	<i>308</i>	<i>98</i>	<i>360</i>
17	Per cent of all farms.....	21.6	7.3	8.9	8.8	23.2	7.9	21.7
18	Per cent of all farms in 1900.....	<i>18.1</i>	<i>3.9</i>	<i>6.6</i>	<i>11.0</i>	<i>19.5</i>	<i>8.6</i>	<i>21.1</i>
19	Land in farms..... acres.....	82,857	4,385	5,749	1,476	93,423	10,993	94,054
20	Improved land in farms..... acres.....	64,190	909	2,101	508	71,524	4,768	74,945
21	Value of land and buildings..... dollars.....	4,846,200	61,100	132,100	38,000	4,901,605	254,330	4,916,460
22	Form of tenancy:							
23	Share tenants.....	553	4	9	1	714	54	683
24	Share-cash tenants.....	16	1	2	1	18	2	20
25	Cash tenants.....	113	11	20	4	137	45	170
26	Tenure not specified.....	74	2	14	4	35	14	23
27	Color and nativity of tenants:							
28	Native white.....	707	11	18	5	874	93	748
29	Foreign-born white.....	48	6	26	4	20	19	98
30	Negro and other nonwhite.....	1	1	1	1	1	3	19
FARMS OPERATED BY MANAGERS								
31	Number of farms.....	16	9	17	5	8	9	67
32	Number of farms in 1900.....	<i>22</i>	<i>1</i>	<i>25</i>	<i>5</i>	<i>14</i>	<i>2</i>	<i>68</i>
33	Land in farms..... acres.....	1,096	13,440	3,478	1,705	1,819	712	13,937
34	Improved land in farms..... acres.....	1,628	1,684	2,007	840	1,314	511	11,299
35	Value of land and buildings..... dollars.....	184,485	151,900	107,100	30,700	91,050	27,100	837,670
MORTGAGE DEBT REPORTS:								
36	For all farms operated by owners:							
37	Number free from mortgage debt.....	1,431	148	710	173	1,488	605	1,436
38	Number with mortgage debt.....	1,278	72	355	46	1,473	721	1,528
39	Number with no mortgage report.....	16	1	2	2	29	7	19
40	For farms consisting of owned land only:							
41	Number reporting debt and amount.....	1,002	59	330	43	1,134	623	787
42	Value of their land and buildings..... dollars.....	5,134,440	86,500	776,910	116,420	4,919,831	1,807,190	5,165,210
43	Amount of mortgage debt..... dollars.....	1,622,344	17,939	198,048	27,932	1,553,908	397,236	1,641,904
44	Per cent of value of land and buildings.....	31.6	20.4	25.5	24.0	31.6	25.8	31.8

1 No mortgage reports were secured for farms operated by tenants and managers. (See explanation in text.)

TABLE 3.—LIVE STOCK PRODUCTS, AND DOMESTIC ANIMALS

LIVE STOCK PRODUCTS								
Dairy Products								
1	Dairy cows on farms reporting dairy products..... number.....	12,909	479	3,114	664	12,888	3,036	15,852
2	Dairy cows on farms reporting milk produced..... number.....	9,593	377	2,765	650	11,931	3,699	12,895
3	Milk—Produced..... gallons.....	4,305,455	157,427	1,024,290	241,367	6,031,242	1,002,445	5,548,833
4	Sold..... gallons.....	1,591,011	11,045	96,726	25,828	1,278,598	251,216	1,228,399
5	Cream sold..... gallons.....	84,896	123	1,078	1,200	31,827	12,207	50,299
6	Butter fat sold..... pounds.....	162,629	.....	.....	5,407	352,230	.....	814,552
7	Butter—Produced..... pounds.....	851,408	53,831	287,332	47,060	1,128,778	394,145	1,909,516
8	Sold..... pounds.....	526,496	82,528	172,106	23,637	687,403	213,842	813,524
9	Cheese—Produced..... pounds.....	9,302	.....	.....	195	450	3,326	5,650
10	Sold..... pounds.....	9,802	.....	.....	72	450	3,316	5,000
11	Value of dairy products, excluding home use of milk and cream..... dollars.....	448,177	10,557	94,101	20,394	500,817	162,390	604,257
12	Receipts from sale of dairy products..... dollars.....	375,257	11,119	65,169	14,420	400,647	123,177	481,694
Poultry Products								
13	Poultry—Raised..... number.....	211,750	8,678	36,096	8,016	208,013	66,301	218,234
14	Sold..... number.....	103,146	3,154	11,545	1,651	105,066	28,190	109,174
15	Eggs—Produced..... dozens.....	1,281,917	30,104	216,373	32,112	1,248,178	270,255	1,003,188
16	Sold..... dozens.....	974,813	15,019	107,044	10,284	886,731	150,210	670,886
17	Value of poultry and eggs produced..... dollars.....	355,375	10,100	62,587	10,869	351,679	89,770	316,907
18	Receipts from sale of poultry and eggs..... dollars.....	243,089	4,935	29,660	3,439	231,089	40,873	107,802
Honey and Wax								
19	Honey produced..... pounds.....	42,041	115	.....	2,000	39,300	14,318	107,525
20	Wax produced..... pounds.....	488	.....	.....	25	754	170	727
21	Value of honey and wax produced..... dollars.....	4,951	18	.....	190	4,700	1,321	12,368
Wool, Mohair, and Goat Hair								
22	Wool, fleeces shorn..... number.....	73,187	921	806	106	73,553	718	60,304
23	Mohair and goat hair, fleeces shorn..... number.....	.....	1	1	.....	.....	13	.....
24	Value of wool and mohair produced..... dollars.....	147,000	1,713	1,761	114	154,413	1,305	125,476
DOMESTIC ANIMALS SOLD OR SLAUGHTERED								
25	Cattle—Sold or slaughtered..... number.....	5,849	209	933	120	4,885	1,075	7,074
26	Other cattle—Sold or slaughtered..... number.....	6,865	441	1,550	204	6,209	1,988	7,051
27	Horses, mules, and asses and burros—Sold..... number.....	1,000	35	108	16	1,064	241	1,274
28	Pigs—Sold or slaughtered..... number.....	41,807	435	2,163	233	30,660	4,350	33,399
29	Sheep and goats—Sold or slaughtered..... number.....	45,439	338	680	78	42,640	440	53,059
30	Receipts from sale of animals..... dollars.....	1,024,328	9,494	43,163	5,081	904,055	67,054	1,005,033
31	Value of animals slaughtered..... dollars.....	111,508	13,000	44,978	7,140	100,320	74,157	161,985

STATISTICS OF AGRICULTURE.

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NATIVITY OF FARMERS; AND MORTGAGE DEBT, BY COUNTIES: APRIL 15, 1910—Continued.

[Comparative data for June 1, 1900, in italics.]

	Gogebic.	Grand Traverse.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	Iosco.	Iron.	Isabella.	Jackson.	Kalamazoo.
1	250	1,801	3,433	3,214	776	4,356	2,736	2,768	890	369	3,028	2,822	2,557
2	73	<i>1,520</i>	<i>3,404</i>	<i>3,372</i>	<i>875</i>	<i>4,831</i>	<i>5,107</i>	<i>3,252</i>	<i>658</i>	<i>220</i>	<i>2,906</i>	<i>2,959</i>	<i>2,428</i>
3	97.3	88.7	81.0	74.8	75.1	92.1	78.0	76.6	92.9	96.9	87.6	76.6	75.8
4	<i>87.5</i>	<i>88.8</i>	<i>82.9</i>	<i>76.8</i>	<i>78.0</i>	<i>89.9</i>	<i>81.4</i>	<i>80.3</i>	<i>89.9</i>	<i>85.2</i>	<i>84.5</i>	<i>76.7</i>	<i>78.4</i>
5	12,769	152,235	207,232	262,696	77,050	428,072	249,307	260,668	94,514	28,309	261,362	304,062	230,234
6	4,563	65,082	109,708	206,075	28,043	324,286	185,566	206,800	35,937	8,596	168,033	219,736	186,759
7	690,650	6,059,170	14,806,477	15,959,988	2,687,420	19,282,560	13,447,581	14,121,452	1,853,165	990,420	10,777,420	15,495,195	13,934,984
8	245	1,003	2,803	2,726	751	4,016	2,251	2,343	800	369	2,592	2,481	2,099
9	5	108	570	488	25	340	485	415	90	-----	496	381	458
10	15	1,390	3,009	3,054	94	1,603	2,474	2,464	421	00	2,124	2,519	2,103
11	235	465	414	1,059	682	2,062	259	293	467	309	843	338	449
12	-----	-----	10	1	-----	1	3	1	2	-----	61	5	5
13	6	208	751	1,067	249	350	739	823	55	9	407	828	782
14	8	<i>178</i>	<i>761</i>	<i>963</i>	<i>88</i>	<i>413</i>	<i>672</i>	<i>760</i>	<i>61</i>	<i>9</i>	<i>468</i>	<i>837</i>	<i>819</i>
15	2.3	10.2	17.9	24.8	24.1	7.4	21.1	22.8	5.7	2.4	11.8	22.2	23.2
16	<i>2.5</i>	<i>10.2</i>	<i>16.6</i>	<i>21.9</i>	<i>22.9</i>	<i>8.5</i>	<i>17.6</i>	<i>18.8</i>	<i>8.2</i>	<i>3.9</i>	<i>14.1</i>	<i>21.7</i>	<i>24.8</i>
17	334	20,538	62,704	100,447	15,180	36,116	78,011	86,999	8,528	739	34,453	111,718	95,239
18	163	12,406	47,200	84,202	7,377	26,063	57,956	68,124	2,868	280	23,332	79,913	76,209
19	20,725	782,370	3,443,567	6,419,215	438,517	1,481,980	4,110,447	4,702,423	136,339	22,800	1,581,430	5,475,528	5,698,758
20	1	159	558	806	6	107	548	564	20	2	266	644	580
21	-----	2	26	45	-----	8	19	54	-----	-----	11	22	14
22	4	28	152	198	240	197	138	117	18	7	106	146	103
23	1	19	15	18	3	38	34	88	15	-----	24	16	85
24	2	179	705	1,046	21	192	708	776	40	7	355	771	698
25	4	27	45	20	227	168	30	47	15	2	44	57	84
26	-----	2	1	1	-----	1	-----	-----	-----	-----	8	-----	-----
27	1	22	21	17	8	22	33	21	13	2	21	46	33
28	-----	<i>17</i>	<i>22</i>	<i>56</i>	<i>4</i>	<i>77</i>	<i>86</i>	<i>40</i>	<i>14</i>	<i>2</i>	<i>45</i>	<i>64</i>	<i>61</i>
29	10	3,878	3,122	3,487	1,627	7,807	5,777	3,838	9,668	320	2,284	6,697	5,541
30	16	1,890	1,925	2,037	501	5,782	4,556	2,947	1,930	152	1,709	4,738	4,170
31	1,000	293,120	146,330	215,625	90,200	236,400	393,470	243,492	121,000	8,000	144,475	406,100	313,310
32	187	893	1,401	1,735	602	2,016	1,517	1,503	492	322	1,268	1,636	1,379
33	63	908	2,022	1,455	168	2,329	1,200	1,222	396	45	1,734	1,202	1,145
34	-----	5	10	24	6	11	19	23	2	-----	6	24	83
35	58	767	1,594	1,130	155	2,066	917	977	344	43	1,411	985	889
36	167,775	2,308,020	6,597,640	5,181,707	637,775	8,831,300	4,073,852	4,645,050	712,437	112,800	4,701,015	4,885,161	4,141,552
37	30,715	630,147	1,886,184	1,610,244	143,396	2,583,049	1,300,603	1,472,598	179,842	15,830	1,167,804	1,505,983	1,716,236
38	18.3	27.4	28.7	31.1	22.5	29.2	31.9	31.7	25.2	14.0	24.8	30.8	41.4

SOLD OR SLAUGHTERED ON FARMS, BY COUNTIES: 1909—Continued.

1	690	4,571	13,008	15,829	2,654	21,850	12,705	12,800	2,662	1,034	10,447	16,088	11,746
2	807	4,467	11,149	13,795	2,501	17,270	11,099	10,280	2,661	1,014	10,253	13,223	10,597
3	389,969	2,050,597	5,215,250	6,367,049	1,255,850	6,767,913	5,579,749	4,614,469	1,184,550	417,630	5,149,441	5,993,217	4,868,822
4	52,952	131,934	1,051,000	2,513,223	251,952	1,464,016	2,056,246	631,013	37,324	100,075	708,685	2,750,548	721,692
5	1,455	6,086	26,701	81,720	18,767	100,728	21,837	51,817	16,147	3,086	46,324	23,970	90,189
6	-----	15,127	562,848	191,702	-----	797,237	64,733	419,030	28,425	-----	200,858	442,317	235,828
7	84,055	545,091	833,524	1,100,065	182,280	777,728	1,073,706	878,587	231,842	97,744	877,990	920,892	956,039
8	47,769	275,744	376,146	684,949	83,436	283,248	698,894	477,863	118,481	56,215	400,217	637,829	626,556
9	250	-----	-----	3,716	9,105	9,980	6,678	40	100	268	400	400	3,125
10	-----	-----	-----	3,716	8,630	9,542	6,676	40	-----	50	400	4,166	3,125
11	34,350	151,826	451,467	578,974	142,724	555,665	480,911	428,217	86,718	36,448	343,811	653,396	452,883
12	24,443	93,755	350,479	484,982	115,670	451,820	402,483	341,334	59,258	25,994	242,365	588,156	374,329
13	5,868	91,281	309,021	302,823	39,229	255,794	224,801	212,290	29,962	9,620	194,062	271,137	180,426
14	895	32,447	128,354	146,679	15,197	93,363	111,187	113,145	11,270	2,094	80,304	119,534	88,233
15	29,069	419,807	1,210,532	1,819,030	101,489	1,008,903	1,053,596	1,115,883	160,089	65,061	943,799	1,274,657	845,001
16	9,258	215,492	933,841	1,409,088	46,993	1,205,041	752,543	764,066	81,403	28,300	681,129	941,808	523,008
17	10,097	110,896	381,778	505,332	51,279	400,170	320,040	320,412	41,408	19,586	295,516	394,499	264,114
18	2,585	55,883	246,270	354,274	22,991	265,851	209,545	208,624	19,764	7,614	166,413	257,285	152,537
19	-----	10,812	51,166	38,017	-----	73,089	47,368	48,791	21,492	10	40,022	28,209	15,934
20	-----	416	591	1,133	-----	1,292	668	759	256	-----	351	288	157
21	-----	2,221	5,706	4,743	-----	8,179	6,019	6,103	2,606	2	4,092	3,403	2,166
22	28	2,679	39,478	57,373	44	22,890	67,666	63,092	6,643	29	24,944	53,453	25,620
23	-----	-----	200	-----	-----	8	2	5	-----	-----	30	50	4
24	28	5,426	82,852	120,660	130	52,139	138,983	126,303	11,912	65	55,093	120,224	54,064
25	176	1,489	6,772	9,323	946	4,982	6,192	5,933	847	490	4,373	7,855	6,287
26	172	2,379	6,422	8,217	1,040	14,855	8,925	8,183	2,453	380	8,308	7,029	4,418
27	7	389	1,552	1,213	69	1,559	1,096	1,324	328	6	1,143	1,080	723
28	38	7,926	36,650	59,354	1,060	25,866	33,012	42,640	2,718	352	20,097	39,274	28,941
29	25	1,940	25,500	63,874	28	16,330	39,273	49,957	9,329	21	20,162	35,986	26,865
30	4,108	130,777	883,421	1,489,089	27,748	840,161	1,085,371	1,182,835	123,988	8,709	633,829	1,061,673	708,789
31	5,093	83,771	101,804	153,835	31,827	194,352	115,711	124,310	84,856	10,043	97,279	173,348	120,411

TABLE 2.—NUMBER, ACREAGE, AND VALUE OF FARMS CLASSIFIED BY TENURE; COLOR AND

[Comparative data for June 1, 1900, in italics.]

	Kalkaska.	Kent.	Keweenaw.	Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.	
FARMS OPERATED BY OWNERS										
1	Number of farms.....	770	5,058	18	660	3,093	1,339	3,877	2,221	176
2	Number of farms in 1900.....	<i>601</i>	<i>5,149</i>	<i>18</i>	<i>574</i>	<i>5,241</i>	<i>1,234</i>	<i>4,340</i>	<i>2,554</i>	<i>129</i>
3	Per cent of all farms.....	91.4	80.6	50.0	90.2	81.2	92.7	72.7	80.0	90.3
4	Per cent of all farms in 1900.....	<i>88.5</i>	<i>73.8</i>	<i>31.8</i>	<i>91.8</i>	<i>80.0</i>	<i>92.0</i>	<i>76.8</i>	<i>82.2</i>	<i>89.6</i>
5	Land in farms..... acres	72,805	384,290	1,796	77,835	310,861	138,096	315,184	269,056	15,530
6	Improved land in farms..... acres	38,282	288,869	783	30,724	231,688	75,949	259,838	191,358	5,954
7	Value of land and buildings..... dollars	1,795,325	22,486,180	50,476	1,618,136	12,423,087	4,402,830	23,997,388	11,101,314	347,550
Degree of ownership:										
8	Farms consisting of owned land only.....	732	4,486	16	567	2,789	1,237	3,397	1,838	164
9	Farms consisting of owned and hired land.....	38	572	2	93	304	102	480	383	12
Color and nativity of owners:										
10	Native white.....	593	3,577	3	402	2,140	737	3,357	1,922	67
11	Foreign-born white.....	175	1,471	15	258	952	559	518	298	109
12	Negro and other nonwhite.....	2	10			1	43	2	1	
FARMS OPERATED BY TENANTS										
13	Number of farms.....	67	1,151	17	66	687	92	1,436	524	8
14	Number of farms in 1900.....	<i>75</i>	<i>1,502</i>	<i>4</i>	<i>40</i>	<i>779</i>	<i>100</i>	<i>1,234</i>	<i>551</i>	<i>12</i>
15	Per cent of all farms.....	8.0	18.3	47.2	9.0	18.0	6.4	26.9	18.9	4.1
16	Per cent of all farms in 1900.....	<i>11.0</i>	<i>19.9</i>	<i>18.2</i>	<i>7.4</i>	<i>19.2</i>	<i>7.2</i>	<i>22.7</i>	<i>17.2</i>	<i>3.2</i>
17	Land in farms..... acres	6,636	94,379	855	6,343	22,794	10,735	144,400	74,524	524
18	Improved land in farms..... acres	3,855	71,005	378	2,800	60,547	6,175	117,814	52,115	320
19	Value of land and buildings..... dollars	187,200	5,664,675	22,650	133,795	3,261,315	325,050	10,058,616	2,979,200	20,100
Form of tenancy:										
20	Share tenants.....	42	500		47	397	48	951	439	
21	Share-cash tenants.....		28		1	10	5	45	13	
22	Cash tenants.....	16	545	9	14	213	32	410	68	3
23	Tenure not specified.....	9	78	8	4	87	7	30	4	5
Color and nativity of tenants:										
24	Native white.....	58	841	1	56	566	79	1,347	470	4
25	Foreign-born white.....	9	308	16	10	121	12	88	54	4
26	Negro and other nonwhite.....		2				1	1		
FARMS OPERATED BY MANAGERS										
27	Number of farms.....	5	67	1	6	28	13	21	30	11
28	Number of farms in 1900.....	<i>3</i>	<i>103</i>		<i>5</i>	<i>34</i>	<i>11</i>	<i>29</i>	<i>17</i>	<i>3</i>
29	Land in farms..... acres	1,060	7,374	80	3,552	6,797	10,472	2,358	5,495	4,678
30	Improved land in farms..... acres	423	5,843	75	354	4,507	1,688	1,941	3,891	1,652
31	Value of land and buildings..... dollars	28,400	863,975	800	37,060	272,950	356,950	231,921	240,280	120,750
MORTGAGE DEBT REPORTS										
For all farms operated by owners:										
32	Number free from mortgage debt.....	390	2,463	16	337	1,439	801	2,168	1,171	123
33	Number with mortgage debt.....	379	2,528	2	320	1,644	538	1,683	1,040	47
34	Number with no mortgage report.....	1	67		3	10		26	10	1
For farms consisting of owned land only:										
35	Number reporting debt and amount.....	350	2,147	2	258	1,420	468	1,390	811	37
36	Value of their land and buildings..... dollars	742,400	8,680,095	3,950	567,390	5,160,732	1,453,145	8,230,019	3,693,377	78,900
37	Amount of mortgage debt..... dollars	169,843	2,024,114	500	143,774	1,740,502	344,065	2,509,208	1,309,748	17,300
38	Per cent of value of land and buildings.....	21.5	33.7	12.7	25.3	33.7	23.7	31.2	35.5	21.9

¹ No mortgage reports were secured for farms operated by tenants and managers. (See explanation in text.)

TABLE 3.—LIVE STOCK PRODUCTS, AND DOMESTIC ANIMALS

LIVE STOCK PRODUCTS										
Dairy Products										
1	Dairy cows on farms reporting dairy products.....	2,031	23,383	54	1,903	15,712	4,513	24,519	12,821	515
2	Dairy cows on farms reporting milk produced.....	2,010	19,955	52	1,943	12,240	4,343	21,010	11,153	503
3	Milk—Produced..... gallons	1,111,766	9,414,449	19,345	891,473	5,740,930	1,691,089	10,689,961	5,595,182	181,653
4	Sold..... gallons	12,135	2,819,930	1,650	23,280	516,065	41,338	6,530,730	2,744,377	1,692
5	Cream sold..... gallons	3,990	106,072		11,654	46,223	16,882	87,314	24,816	46
6	Butter fat sold..... pounds	19,275	538,951		30,367	526,567	29,237	239,526	173,996	
7	Butter—Produced..... pounds	249,674	1,028,492	3,566	169,336	1,380,131	362,324	1,079,769	601,202	36,969
8	Sold..... pounds	146,251	1,273,268	1,487	87,307	878,595	204,110	689,684	393,653	17,555
9	Cheese—Produced..... pounds		81,210	10		25,500		2,500	500	
10	Sold..... pounds		30,850			24,700		2,500	500	
11	Value of dairy products, excluding home use of milk and cream..... dollars	65,692	1,096,088	1,382	54,310	552,728	104,682	1,009,611	524,078	9,648
12	Receipts from sale of dairy products..... dollars	42,655	941,975	771	36,977	436,495	70,558	923,092	456,599	4,887
Poultry Products										
13	Poultry—Raised..... number	36,293	335,801	1,242	25,905	222,570	62,327	488,910	164,220	7,753
14	Sold..... number	12,420	180,814	435	8,675	106,223	18,641	237,956	83,902	2,368
15	Eggs—Produced..... dozens	185,128	1,398,160	3,707	110,022	1,189,111	373,427	2,188,167	887,207	24,776
16	Sold..... dozens	101,601	839,953	2,417	62,836	864,111	226,878	1,674,896	640,777	5,500
17	Value of poultry and eggs produced..... dollars	40,402	431,698	1,682	31,893	342,145	91,005	703,210	253,616	9,022
18	Receipts from sale of poultry and eggs..... dollars	23,470	262,171	1,018	15,442	227,146	49,701	471,609	170,108	2,389
Honey and Wax										
19	Honey produced..... pounds	21,694	78,473		6,086	75,899	6,658	55,490	40,696	
20	Wax produced..... pounds	250	1,346		70	505	159	1,325	303	
21	Value of honey and wax produced..... dollars	2,024	9,732		600	9,510	870	6,853	4,814	
Wool, Mohair, and Goat Hair										
22	Wool, fleeces shorn..... number	354	25,901		2,792	53,148	1,458	60,434	55,931	91
23	Mohair and goat hair, fleeces shorn..... number		60		13	3		1		
24	Value of wool and mohair produced..... dollars	684	57,713		5,226	139,600	2,794	137,100	131,276	162
DOMESTIC ANIMALS SOLD OR SLAUGHTERED										
25	Calves—Sold or slaughtered..... number	498	13,493	8	509	6,604	927	16,518	5,265	150
26	Other cattle—Sold or slaughtered..... number	1,218	11,430	20	1,389	9,913	1,979	12,977	6,249	217
27	Horses, mules, and asses and burros—Sold..... number	128	1,413	2	113	1,425	251	1,351	654	41
28	Swine—Sold or slaughtered..... number	3,024	35,377	13	1,835	29,375	5,511	81,435	23,259	653
29	Sheep and goats—Sold or slaughtered..... number	176	16,361		2,209	38,707	595	67,081	39,097	80
30	Receipts from sale of animals..... dollars	46,065	845,876	485	59,107	972,520	92,427	2,161,724	855,371	14,299
31	Value of animals slaughtered..... dollars	37,125	281,422	536	18,282	125,951	57,199	166,493	87,561	7,234

STATISTICS OF AGRICULTURE.

NATIVITY OF FARMERS; AND MORTGAGE DEBT, BY COUNTIES: APRIL 15, 1910—Continued.

[Comparative data for June 1, 1900, in Italics.]

	Maackinac.	Macomb.	Manistee.	Marquette.	Mason.	Mecosta.	Menominee.	Midland.	Missaukee.	Monroe.	Montcalm.	Montmorency.	Muskegon.
1	460	3,048	1,494	504	1,936	2,471	1,617	1,935	1,296	3,445	4,061	432	2,023
2	368	3,076	1,166	400	1,717	2,559	1,367	1,869	4,981	3,616	4,036	311	2,018
3	93.9	81.0	90.7	-85.3	91.1	87.5	96.4	86.2	90.1	79.3	86.3	92.7	85.3
4	92.9	79.9	91.8	89.7	91.1	86.2	95.6	86.8	94.7	81.1	85.6	92.6	85.2
5	54,481	215,644	129,580	56,931	151,652	237,624	155,024	-147,867	130,599	253,970	333,320	48,704	143,775
6	19,754	175,518	67,057	20,048	90,545	136,567	58,411	78,980	54,182	214,375	225,199	15,685	88,551
7	961,360	14,764,600	4,290,233	1,181,830	6,724,030	6,012,590	3,983,561	5,007,606	3,143,769	17,863,397	13,164,871	832,621	6,349,070
8	445	2,062	1,358	532	1,740	2,170	1,579	1,685	1,133	2,984	3,547	393	1,850
9	15	380	196	82	190	301	38	250	163	464	514	39	173
10	123	2,029	805	119	1,109	1,745	430	1,240	776	2,863	2,869	247	1,010
11	328	1,019	685	445	812	688	1,187	677	516	578	1,170	185	1,010
12	9		4		15	38		18	4	7	22		3
13	20	600	144	81	172	336	38	300	132	844	593	31	318
14	31	788	98	48	140	590	51	261	47	324	639	20	299
15	5.9	18.3	8.7	12.3	8.1	11.9	2.3	13.4	9.2	19.5	12.7	6.7	13.4
16	5.3	18.0	7.5	8.3	7.4	13.1	2.2	12.1	4.5	18.6	13.6	6.0	12.8
17	3,701	67,721	13,206	5,437	13,978	40,336	2,924	25,936	14,771	71,716	53,887	4,246	29,300
18	1,367	53,588	7,138	2,163	9,190	21,728	1,396	14,844	6,171	59,973	37,368	1,536	18,401
19	60,250	4,190,180	483,470	161,798	639,500	926,245	102,150	890,410	305,315	5,251,103	2,200,390	80,660	1,211,566
20	6	335	78	4	103	207	4	178	94	396	504	14	146
21		17	1		5	12		5	2	25	7	1	12
22	14	330	45	62	58	61	22	98	34	409	73	12	125
23	9	2	20	15	6	56	12	21	2	14	9	4	35
24	12	520	116	10	147	289	19	264	105	789	520	24	239
25	17	161	27	71	25	45	19	35	27	72	69	7	76
26			1		2	4		3		3	4		3
27	1	26	10	16	16	16	22	11	11	29	24	3	32
28	7	48	17	11	23	21	22	23	8	18	59	5	23
29	7	3,138	2,207	5,438	5,665	7,821	9,495	2,823	1,985	6,560	5,663	2,765	6,935
30	7	2,428	836	830	1,190	1,601	4,783	913	565	5,423	2,834	285	2,704
31	500	207,685	97,240	82,860	154,186	122,500	278,160	65,115	44,625	724,900	191,172	25,000	269,600
32	313	1,585	740	430	815	1,092	810	784	532	1,730	1,823	265	1,174
33	145	1,458	745	122	1,117	1,377	801	1,122	760	1,705	2,229	161	839
34	2	10	9	3	4	2	6	29	4	13	9	6	10
35	111	1,230	642	103	977	1,160	754	924	643	1,432	1,841	145	714
36	304,010	5,781,292	1,025,325	189,875	3,102,950	2,588,580	1,767,531	2,236,695	1,468,600	6,502,322	5,333,235	274,440	2,058,315
37	72,581	2,149,230	424,424	55,646	782,399	705,209	503,093	591,093	381,937	2,088,766	1,566,950	60,180	556,473
38	28.9	37.2	26.1	29.8	25.2	27.2	28.5	26.4	26.0	32.1	29.4	21.9	27.0

SOLD OR SLAUGHTERED ON FARMS, BY COUNTIES: 1909—Continued.

1	1,165	18,081	4,358	1,828	5,867	8,275	7,030	6,781	4,384	16,706	13,312	971	8,117
2	1,136	15,432	4,268	1,649	5,598	7,970	5,432	4,968	3,878	14,136	12,967	943	6,506
3	482,169	6,779,879	1,601,207	597,080	2,182,838	3,951,310	1,876,510	2,277,018	1,791,840	5,637,102	6,254,203	463,009	2,711,709
4	18,888	2,170,467	148,210	100,256	83,169	94,186	385,029	29,310	3,304	3,958,541	878,195	4,472	567,277
5	884	47,079	0,080	4,628	33,599	73,505	50,004	34,675	8,477	30,726	47,852	31	19,595
6	6,917	557,775	9,341		69,616	220,236	36,803	327,313	151,280	26,555	338,091	15,243	150,117
7	121,668	1,085,243	366,793	144,818	589,039	710,051	480,501	468,444	360,374	657,662	1,138,229	107,695	680,315
8	60,847	787,152	200,632	85,168	326,435	365,949	267,063	227,926	209,974	423,968	575,215	47,271	393,959
9		410	1,870	500	450		80	500		840	26,431		1,800
10		890		400	850			500		700	26,431		1,666
11	86,297	699,961	128,218	97,292	185,241	273,492	208,522	211,319	127,525	581,950	457,191	27,538	307,428
12	21,110	620,984	91,403	51,472	129,477	200,766	156,365	161,436	98,720	528,152	342,836	14,773	232,816
13	17,123	201,762	64,225	24,120	92,667	139,677	53,921	80,545	49,648	466,199	242,905	14,916	115,552
14	6,759	136,869	23,881	5,735	39,047	52,009	11,609	40,541	15,872	198,195	96,836	5,239	58,144
15	70,590	1,298,960	275,917	117,177	394,198	650,916	317,118	390,671	243,191	1,752,878	1,364,680	75,210	507,031
16	22,532	939,931	162,012	60,123	200,594	451,205	133,829	145,389	145,389	1,322,335	1,011,984	30,311	314,588
17	22,082	417,187	74,415	41,609	107,773	181,631	-85,622	100,503	64,893	559,930	361,707	18,083	158,270
18	7,916	269,398	88,367	17,910	55,315	108,824	32,617	64,277	33,155	355,632	234,758	7,562	91,538
19		51,140	10,100	20	17,329	44,184	1,906	50,036	30,466	27,328	49,483	16,142	22,478
20		783	304		220	650	74	545	840	270	525	80	120
21		6,430	1,884	5	2,320	5,120	344	5,613	3,367	3,506	5,955	1,988	2,922
22	457	20,970	1,520	103	2,893	11,157	1,130	8,663	2,334	11,235	17,810	1,473	3,409
23		35			3	96	1	3		1	21		
24	872	46,740	2,493	155	5,384	22,916	1,641	18,269	4,719	22,608	35,560	2,904	8,016
25	251	12,154	1,740	792	2,482	4,103	2,795	2,483	1,318	12,282	5,987	253	3,756
26	401	5,338	2,084	741	2,638	4,347	2,548	3,495	2,841	4,890	7,885	737	2,944
27	52	791	253	42	314	861	232	526	465	1,041	1,438	70	386
28	927	28,600	5,480	904	7,699	10,851	4,186	8,978	4,250	40,899	21,217	1,286	7,847
29	307	16,257	1,130	35	2,089	6,740	794	5,881	1,376	9,492	12,252	969	1,885
30	15,965	494,204	101,800	20,880	142,387	305,079	64,877	223,671	133,244	744,988	595,965	27,316	150,938
31	15,424	350,420	59,576	21,788	73,523	74,936	75,846	47,597	46,861	246,125	113,421	16,514	82,317

TABLE 2.—NUMBER, ACREAGE, AND VALUE OF FARMS CLASSIFIED BY TENURE; COLOR AND

[Comparative data for June 1, 1900, in Italics.]

	Newaygo.	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Osceola.	Oscoda.	Otsego.	Ottawa.
FARMS OPERATED BY OWNERS									
1	2,760	3,751	2,455	1,178	353	2,312	322	525	4,059
2	<i>8,596</i>	<i>3,677</i>	<i>2,909</i>	<i>768</i>	<i>178</i>	<i>2,087</i>	<i>186</i>	<i>522</i>	<i>3,956</i>
3	89.1	75.1	87.5	91.8	95.1	89.8	93.0	95.3	88.2
4	<i>89.1</i>	<i>79.9</i>	<i>87.1</i>	<i>82.7</i>	<i>95.2</i>	<i>88.0</i>	<i>88.1</i>	<i>91.6</i>	<i>87.0</i>
5	279,314	382,400	204,083	121,002	34,850	221,527	55,069	50,095	283,123
6	143,724	288,143	129,996	47,764	10,010	115,026	14,788	25,991	215,714
7	8,004,465	10,864,081	8,562,280	2,466,705	994,495	6,820,040	804,940	1,201,355	10,768,344
Degree of ownership:									
8	2,507	3,300	2,168	1,054	340	2,030	270	486	3,097
9	283	451	287	124	4	282	52	39	362
Color and nativity of owners:									
10	1,950	3,020	1,707	600	92	1,435	262	286	2,241
11	830	729	043	514	260	876	59	239	1,817
12	4	2	15	4	1	1	1	1	1
FARMS OPERATED BY TENANTS									
13	320	1,140	318	91	12	247	21	23	503
14	<i>291</i>	<i>1,207</i>	<i>310</i>	<i>60</i>	<i>0</i>	<i>236</i>	<i>21</i>	<i>30</i>	<i>556</i>
15	10.2	22.8	11.3	7.1	3.2	0.0	0.1	4.2	10.9
16	<i>10.2</i>	<i>24.3</i>	<i>11.7</i>	<i>6.2</i>	<i>3.2</i>	<i>10.3</i>	<i>10.0</i>	<i>0.8</i>	<i>12.3</i>
17	39,600	144,255	35,397	11,168	1,323	24,540	3,375	2,204	37,285
18	19,959	107,630	10,418	4,820	357	12,074	1,810	1,356	28,766
19	1,328,341	6,980,100	1,172,075	247,575	34,100	604,900	63,600	52,300	2,413,185
Form of tenancy:									
20	100	643	228	38	1	145	11	14	158
21	7	48	5	43	8	77	8	6	267
22	04	373	75	10	2	10	1	2	60
23	53	70	10	10	2	10	1	2	60
Color and nativity of tenants:									
24	280	947	262	63	5	200	10	14	348
25	40	192	55	28	7	45	2	0	155
26	1	1	1	1	1	2	1	1	1
FARMS OPERATED BY MANAGERS									
27	20	102	33	14	0	15	1	3	41
28	<i>19</i>	<i>93</i>	<i>31</i>	<i>9</i>	<i>0</i>	<i>14</i>	<i>1</i>	<i>2</i>	<i>31</i>
29	0,741	15,587	3,615	12,468	1,000	2,410	880	000	3,721
30	2,389	11,969	2,368	2,844	1,025	1,003	120	280	2,765
31	153,100	1,844,235	185,000	175,200	40,500	110,500	13,200	10,000	522,900
MORTGAGE DEBT REPORTS ¹									
For all farms operated by owners:									
32	1,338	2,060	1,120	420	285	1,034	183	204	1,080
33	1,445	1,041	1,321	755	67	1,267	188	259	2,111
34	7	41	5	3	1	11	1	2	18
For farms consisting of owned land only:									
35	1,233	1,347	1,101	655	62	1,071	90	225	1,842
36	3,099,849	6,728,747	3,043,080	1,278,005	203,200	2,340,370	283,790	443,805	7,295,875
37	927,979	2,289,795	958,250	349,489	43,085	630,353	40,027	102,348	2,519,423
38	25.1	34.0	20.3	27.3	21.5	27.2	17.5	23.1	34.5

¹ No mortgage reports were secured for farms operated by tenants and managers. (See explanation in text.)

TABLE 3.—LIVE STOCK PRODUCTS, AND DOMESTIC ANIMALS

LIVE STOCK PRODUCTS									
Dairy Products									
1	10,217	21,041	7,742	3,151	815	7,100	834	1,109	22,744
2	7,325	17,987	6,173	3,071	734	6,076	808	1,120	19,354
3	3,193,461	9,574,102	2,430,040	1,093,020	289,890	3,333,019	354,491	405,862	6,801,472
4	162,349	5,244,149	73,932	3,373	2,590	60,380	1,771	17,804	3,400,067
5	34,850	65,204	22,371	5,322	712	70,003	.....	300	19,303
6	616,588	45,008	380,133	60,720	20,044	205,525	.....	.....	1,223,456
7	550,212	1,059,200	550,007	315,733	71,800	510,003	07,223	123,541	1,220,707
8	295,976	1,140,098	204,074	104,072	30,306	211,000	48,301	08,802	943,176
9	500	1,250	60	.....	.....	.....	.....	454	.....
10	500	1,250	20	.....	.....	.....	.....	454	.....
11	350,132	1,008,201	252,763	83,063	20,024	220,724	20,073	29,324	1,081,087
12	295,311	947,772	100,010	62,011	15,287	157,702	10,320	18,240	955,144
Poultry Products									
13	144,700	348,966	121,226	47,875	7,785	92,892	10,485	17,385	285,804
14	04,726	173,094	50,092	15,389	660	37,101	2,038	4,445	120,884
15	508,082	1,351,642	554,431	202,085	27,853	522,750	42,620	74,170	1,710,030
16	388,319	885,197	343,500	100,523	8,953	317,032	15,540	37,261	1,308,521
17	108,737	473,111	140,885	60,615	11,020	133,722	10,093	21,450	458,949
18	90,502	290,548	83,067	25,732	2,550	74,042	3,525	0,211	310,800
Honey and Wax									
19	41,462	52,823	37,114	30,110	4,200	20,361	3,548	2,350	29,142
20	194	603	171	115	70	85	2	.....	305
21	4,789	6,751	4,062	4,615	763	3,058	437	202	3,795
Wool, Mohair, and Goat Hair									
22	8,253	40,588	3,950	0,470	237	0,054	4,100	52	8,087
23	111	17	8	.....	.....	11	21	.....	11
24	17,446	102,359	8,302	12,630	400	20,442	7,578	104	17,461
DOMESTIC ANIMALS SOLD OR SLAUGHTERED									
25	4,827	15,440	2,722	1,090	01	3,410	245	220	18,118
26	4,750	11,986	2,844	3,285	200	5,017	562	901	0,773
27	670	1,403	574	807	18	623	78	03	013
28	12,487	34,739	9,021	4,833	270	0,538	500	1,180	27,400
29	4,120	41,536	2,203	8,587	70	7,079	1,708	24	0,428
30	280,300	1,210,733	186,154	179,046	8,400	300,241	24,407	30,820	535,769
31	92,252	225,721	73,703	37,708	0,354	06,032	14,448	12,794	236,230

TABLE 4.—VALUE OF ALL CROPS AND PRINCIPAL CLASSES THEREOF, AND

		THE STATE.	Alcona.	Algor.	Allegan.	Alpena.	Antrim.	Arenac.
VALUE OF ALL CROPS								
1	Total.....	dollars.. 162, 004, 681	372, 638	116, 730	4, 596, 801	545, 029	789, 637	642, 855
2	Cereals.....	dollars.. 70, 544, 250	110, 070	7, 090	2, 114, 632	124, 656	244, 844	199, 325
3	Other grains and seeds.....	dollars.. 12, 090, 040	50, 173	5, 362	89, 300	40, 669	61, 903	125, 792
4	Hay and forage.....	dollars.. 36, 040, 087	110, 179	31, 220	924, 774	169, 674	141, 407	157, 155
5	Vegetables.....	dollars.. 16, 201, 328	39, 469	35, 350	400, 800	79, 392	125, 447	60, 033
6	Fruits and nuts.....	dollars.. 12, 599, 720	16, 783	8, 964	798, 625	34, 200	109, 230	20, 234
7	All other crops.....	dollars.. 14, 550, 250	39, 374	33, 733	268, 704	87, 349	106, 800	80, 316
SELECTED CROPS (acres and quantity)								
8	Cereals:							
9	Total.....	acres.. 4, 415, 699	8, 860	404	129, 751	11, 346	20, 267	14, 190
10	Corn.....	bushels.. 121, 862, 038	184, 863	10, 769	3, 484, 108	210, 674	419, 266	392, 923
11	Oats.....	acres.. 1, 539, 590	981	15	54, 636	840	7, 323	5, 012
12	Wheat.....	bushels.. 62, 906, 842	30, 928	444	1, 862, 628	24, 027	203, 614	144, 072
13	Emmer and spelt.....	acres.. 1, 420, 070	4, 182	256	26, 932	7, 277	5, 607	5, 953
14	Barley.....	bushels.. 43, 869, 502	84, 769	7, 268	702, 632	141, 245	117, 305	193, 846
15	Buckwheat.....	acres.. 802, 137	1, 367	41	31, 144	1, 851	1, 950	1, 108
16	Rye.....	bushels.. 10, 025, 701	24, 501	770	621, 690	25, 448	28, 090	18, 506
17	Other grains:	acres.. 6, 742	639	20	37	218	151	62
18	Dry peas.....	bushels.. 154, 103	13, 214	647	636	3, 774	1, 939	2, 073
19	Dry edible beans.....	acres.. 93, 065	174	46	484	289	121	126
20	Hay and forage:	bushels.. 2, 132, 101	3, 707	1, 104	8, 308	4, 883	1, 892	3, 308
21	Total.....	acres.. 75, 909	110	3	2, 695	81	1, 091	1, 092
22	Timothy alone.....	bushels.. 958, 110	1, 334	52	37, 997	921	12, 920	2, 090
23	Timothy and clover mixed.....	acres.. 410, 020	1, 411	23	18, 323	700	4, 121	1, 767
24	Clover alone.....	bushels.. 5, 814, 394	20, 293	484	170, 245	10, 376	52, 323	29, 028
25	Alfalfa.....	acres.. 94, 032	3, 080	311	53	3, 020	1, 893	2, 316
26	Millet or Hungarian grass.....	bushels.. 1, 162, 403	41, 425	4, 220	558	40, 704	15, 868	28, 877
27	Other tame or cultivated grasses.....	acres.. 403, 069	260	.....	3, 361	155	1, 690	3, 778
28	Wild, salt, or prairie grasses.....	bushels.. 5, 282, 511	4, 301	0	37, 568	2, 123	19, 126	49, 265
29	Special crops:							
30	Potatoes.....	acres.. 2, 715, 301	9, 459	1, 995	66, 031	16, 191	13, 127	12, 693
31	All other vegetables.....	tons.. 3, 638, 939	8, 559	2, 333	97, 806	11, 790	19, 675	15, 466
32	Sugar beets.....	acres.. 2, 572, 433	9, 113	1, 844	62, 742	15, 702	13, 369	12, 167
33	Maple trees.....	tons.. 3, 178, 277	7, 981	1, 895	32, 089	11, 113	9, 059	14, 414
34	Maple sugar (made).....	acres.. 749, 593	2, 224	913	21, 978	2, 075	2, 123	2, 364
35	Maple sirup (made).....	tons.. 920, 165	1, 070	230	29, 318	2, 194	1, 443	2, 559
36	Other special crops.....	acres.. 1, 625, 220	6, 763	1, 462	35, 797	12, 462	9, 048	9, 485
37	Alfalfa.....	tons.. 1, 091, 618	5, 892	1, 571	46, 941	8, 668	7, 635	11, 339
38	Millet or Hungarian grass.....	acres.. 108, 180	88	25	4, 235	171	770	186
39	Wild, salt, or prairie grasses.....	tons.. 210, 862	90	61	5, 814	185	563	198
40	Grains cut green.....	acres.. 6, 553	4	6	65	1	41	8
41	Coarse forage.....	tons.. 13, 872	3	6	140	1	47	8
42	Wild, salt, or prairie grasses.....	acres.. 11, 088	27	18	274	17	152	154
43	Grains cut green.....	tons.. 16, 349	30	31	374	18	174	300
44	Coarse forage.....	acres.. 11, 820	20	22	398	86	285	15
45	Wild, salt, or prairie grasses.....	tons.. 10, 411	20	6	402	87	97	15
46	Grains cut green.....	acres.. 33, 345	97	.....	922	67	97	45
47	Coarse forage.....	tons.. 30, 970	94	.....	1, 079	72	77	77
48	Special crops:	acres.. 19, 415	95	135	390	230	125	88
49	Potatoes.....	acres.. 20, 035	69	227	2, 281	148	196	110
50	All other vegetables.....	acres.. 89, 338	153	14	1, 054	192	521	278
51	Sugar beets.....	tons.. 370, 270	400	98	11, 293	457	2, 149	638
52	Maple trees.....	acres.. 365, 483	730	541	8, 284	1, 912	5, 008	1, 313
53	Maple sugar (made).....	bushels.. 38, 243, 828	108, 405	70, 470	935, 438	184, 700	611, 272	137, 242
54	Maple sirup (made).....	acres.. 90, 885	175	114	3, 182	425	777	442
55	Other special crops.....	acres.. 78, 779	.....	.....	1, 257	8	179	738
56	Alfalfa.....	tons.. 707, 630	.....	.....	5, 652	21	1, 217	6, 890
57	Millet or Hungarian grass.....	number.. 980, 737	902	1, 940	88, 586	812	4, 109	2, 474
58	Grains cut green.....	pounds.. 293, 301	.....	20	13, 930	10	20	.....
59	Coarse forage.....	gallons.. 209, 093	287	.....	12, 197	174	1, 013	449
FRUITS AND NUTS								
60	Orchard fruits:							
61	Total.....	acres.. 12, 842, 827	20, 544	3, 140	809, 597	36, 618	140, 445	24, 834
62	Apples.....	bushels.. 15, 220, 104	26, 092	2, 398	1, 018, 400	41, 063	180, 481	25, 770
63	Peaches and nectarines.....	acres.. 7, 534, 343	17, 045	2, 775	287, 701	31, 512	109, 866	10, 238
64	Pears.....	bushels.. 12, 832, 260	23, 969	2, 256	719, 173	37, 013	170, 018	22, 070
65	Plums and prunes.....	acres.. 2, 907, 170	190	.....	264, 847	427	15, 687	432
66	Cherries.....	bushels.. 1, 680, 589	73	.....	106, 277	299	5, 787	241
67	Quinces.....	acres.. 1, 139, 151	777	8	147, 444	1, 269	4, 835	968
68	Grapes.....	bushels.. 696, 023	633	3	61, 806	1, 074	2, 307	798
69	Small fruits:	acres.. 464, 917	1, 162	272	45, 255	1, 435	4, 308	2, 824
70	Total.....	bushels.. 181, 188	508	99	15, 975	704	2, 082	1, 912
71	Strawberries.....	acres.. 700, 188	1, 347	85	62, 091	1, 035	5, 643	1, 293
72	Raspberries and loganberries.....	bushels.. 338, 945	815	40	23, 255	1, 297	3, 750	802
73	Nuts.....	acres.. 35, 461	2	.....	5, 119	11	11	11
74	Other nuts.....	bushels.. 18, 484	1	.....	1, 905	1	72	1
75	Small fruits:	acres.. 11, 013, 576	121	.....	172, 361	132	4, 133	2, 307
76	Total.....	pounds.. 120, 695, 997	1, 458	.....	1, 360, 292	1, 251	32, 945	32, 037
77	Strawberries.....	acres.. 31, 419	5	8	1, 023	56	30	15
78	Raspberries and loganberries.....	quarts.. 27, 214, 659	9, 868	14, 328	1, 443, 941	69, 516	24, 893	15, 980
79	Nuts.....	acres.. 8, 051	3	8	442	40	17	11
80	Other nuts.....	quarts.. 14, 218, 768	3, 541	13, 754	783, 391	61, 927	15, 169	12, 698
81	Total.....	quarts.. 8, 766	2	.....	196	6	9	3
		quarts.. 8, 381, 943	3, 829	590	180, 098	5, 463	7, 169	1, 828
		acres.. 37, 297	.....	.....	1, 108	53	96	62
		pounds.. 901, 187	.....	.....	41, 152	650	4, 025	1, 100

TABLE 5.—SELECTED FARM EXPENSES

1	Labor.....							
2	Farms reporting.....	dollars.. 111, 842	290	170	3, 000	485	804	693
3	Cash expended.....	dollars.. 15, 079, 667	28, 894	29, 335	422, 105	51, 801	78, 954	65, 162
4	Rent and board furnished.....	dollars.. 3, 089, 415	9, 873	0, 023	103, 250	17, 630	15, 551	15, 904
5	Fertilizer.....							
6	Farms reporting.....	dollars.. 31, 327	2	7	715	17	62	9
7	Amount expended.....	dollars.. 945, 354	16	934	27, 408	864	2, 177	164
8	Feed.....							
9	Farms reporting.....	dollars.. 76, 882	323	202	2, 800	703	714	514
10	Amount expended.....	dollars.. 5, 682, 915	19, 562	21, 618	179, 650	64, 153	62, 878	25, 720
11	Receipts from sale of feedable crops.....	dollars.. 12, 284, 208	16, 843	2, 815	257, 093	33, 092	19, 500	44, 292

SUPPLEMENT FOR MICHIGAN.

TABLE 4.—VALUE OF ALL CROPS AND PRINCIPAL CLASSES THEREOF, AND

		Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Geneseo.	Gladwin.
VALUE OF ALL CROPS									
1	Total.....	dollars 3,457,698	112,323	781,830	153,561	3,643,858	701,064	4,118,462	569,634
2	Cereals.....	dollars 1,794,074	23,302	121,028	29,195	1,030,981	169,707	1,523,634	182,401
3	Other grains and seeds.....	dollars 490,877	5,586	46,143	1,067	578,735	60,294	608,961	81,381
4	Hay and forage.....	dollars 117,332	31,901	207,125	51,682	883,226	118,131	1,230,220	171,430
5	Vegetables.....	dollars 137,791	16,800	129,990	35,266	174,214	142,173	237,809	63,365
6	Fruits and nuts.....	dollars 154,717	15,993	19,727	1,534	155,170	70,213	151,025	11,829
7	All other crops.....	dollars 162,037	18,051	212,947	34,817	215,523	151,448	270,513	59,228
SELECTED CROPS (acres and quantity)									
8	Cereals:								
9	Total.....	acres 106,788	1,923	8,787	1,681	90,874	13,459	95,954	13,878
10	Corn.....	bushels 3,099,456	40,941	227,471	53,643	2,900,687	273,602	2,634,822	341,437
11	acres.....	36,463	513	163	42	34,981	3,969	30,408	3,681
12	Oats.....	bushels 1,238,551	14,276	5,250	989	1,376,405	108,073	935,943	108,046
13	acres.....	36,045	909	6,250	1,438	28,840	5,205	36,205	4,404
14	Wheat.....	bushels 1,250,103	20,509	174,382	47,893	978,556	108,505	1,167,501	138,600
15	acres.....	26,970	141	511	95	16,436	1,082	14,734	2,023
16	Emmer and spelt.....	bushels 477,870	1,609	7,516	1,958	356,864	13,066	278,064	31,388
17	acres.....	27	22	238	.....	43	127	54	254
18	Barley.....	bushels 512	444	6,537	.....	1,241	2,372	1,605	5,012
19	acres.....	3,152	21	1,028	70	2,107	260	5,047	228
20	Buckwheat.....	bushels 69,017	397	22,907	1,895	40,350	3,690	117,141	5,748
21	acres.....	280	170	142	8	462	607	1,040	151
22	Rye.....	bushels 3,455	1,005	1,806	250	5,042	8,089	11,821	1,238
23	acres.....	3,822	147	440	10	7,003	2,209	8,376	3,066
24	bushels.....	50,348	1,771	8,017	658	132,270	20,147	122,687	50,720
25	Other grains:								
26	Dry peas.....	acres 127	141	2,882	45	32	3,154	41	4,204
27	bushels.....	1,018	1,004	40,773	809	470	30,146	514	45,900
28	Dry edible beans.....	acres 17,782	13	92	.....	19,867	608	26,638	1,252
29	bushels.....	238,237	93	1,860	.....	307,500	5,851	341,344	10,922
30	Hay and forage:								
31	Total.....	acres 50,537	2,640	16,884	3,468	58,935	10,425	84,503	12,360
32	tons.....	70,814	2,508	17,817	3,583	88,314	12,209	121,209	17,801
33	All tame or cultivated grasses.....	acres 48,001	2,455	10,180	3,146	58,093	9,340	81,504	11,827
34	tons.....	66,378	2,253	10,266	3,160	85,633	6,416	108,926	15,285
35	Timothy alone.....	acres 17,020	231	4,772	1,320	23,247	1,008	32,121	791
36	tons.....	24,052	203	4,360	1,257	34,200	610	42,812	1,074
37	Timothy and clover mixed.....	acres 26,672	1,881	11,070	1,776	31,565	7,725	43,361	9,857
38	tons.....	36,152	1,764	11,573	1,821	46,635	5,270	57,363	13,038
39	Clover alone.....	acres 3,884	278	73	27	3,067	410	5,748	749
40	tons.....	5,420	109	78	45	4,466	203	8,434	984
41	Alfalfa.....	acres 112	.....	.....	.....	.....	.....	.....	.....
42	tons.....	261	.....	.....	.....	.....	.....	.....	.....
43	Millet or Hungarian grass.....	acres 130	65	52	10	96	158	50	127
44	tons.....	191	87	79	31	178	211	89	193
45	Other tame or cultivated grasses.....	acres 264	.....	200	4	81	35	103	.....
46	tons.....	263	.....	151	6	70	20	75	.....
47	Wild, salt, or prairie grasses.....	acres 349	139	101	41	152	20	112	187
48	tons.....	428	175	98	11	196	2	140	257
49	Grains cut green.....	acres 1,142	32	840	251	178	217	1,179	56
50	tons.....	804	32	377	258	505	350	2,090	67
51	Coarse forage.....	acres 955	3	219	30	511	824	1,704	583
52	tons.....	3,139	8	1,033	154	1,062	3,378	0,984	1,950
53	Special crops:								
54	Potatoes.....	acres 2,112	416	2,132	470	2,531	3,059	4,792	1,104
55	bushels.....	219,926	35,681	276,048	79,874	305,330	307,932	452,415	79,818
56	All other vegetables.....	acres 1,039	72	301	81	1,105	759	1,226	564
57	Sugar beets.....	acres 788	.....	13	.....	700	24	2,630	277
58	tons.....	5,708	.....	94	.....	6,081	145	21,250	1,592
59	Maple trees.....	number 35,546	262	11,025	260	118,101	0,790	41,459	700
60	Maple sugar (made).....	pounds 7,145	.....	1,160	17	90,511	416	3,544	.....
61	Maple sirup (made).....	gallons 9,689	125	3,403	80	26,096	2,797	10,625	83
FRUITS AND NUTS									
62	Orchard fruits:								
63	Total.....	trees 198,205	43,076	28,590	1,528	206,242	70,128	205,707	14,307
64	bushels.....	425,708	18,252	25,358	1,520	358,545	108,359	143,800	15,704
65	Apples.....	trees 157,212	42,123	27,025	1,442	168,755	55,966	157,519	10,599
66	bushels.....	414,314	17,723	24,905	1,510	346,215	91,452	130,568	13,456
67	Peaches and nectarines.....	trees 10,268	7	.....	.....	14,425	623	17,229	477
68	bushels.....	2,054	3	59	.....	2,930	289	2,373	311
69	Pears.....	trees 8,057	212	50	.....	9,820	3,179	11,845	675
70	bushels.....	5,847	118	15	.....	6,260	3,011	6,978	412
71	Plums and prunes.....	trees 4,964	168	191	5	4,070	4,315	4,862	1,469
72	bushels.....	621	77	22	.....	570	2,563	505	1,026
73	Cherries.....	trees 8,382	566	648	70	7,872	5,942	13,930	1,060
74	bushels.....	2,733	326	267	10	2,273	4,975	3,296	496
75	Quinces.....	trees 261	.....	.....	.....	660	20	240	15
76	bushels.....	124	.....	.....	.....	258	.....	74	1
77	Grapes.....	vines 6,261	42	1	.....	6,315	520	42,129	623
78	pounds.....	91,589	510	100	.....	96,042	8,490	248,853	10,465
79	Small fruits:								
80	Total.....	acres 127	1	9	1	109	130	520	9
81	Strawberries.....	quarts 180,342	1,197	8,560	4,399	151,303	113,425	561,103	9,878
82	acres.....	62	.....	6	1	52	60	124	4
83	Raspberries and loganberries.....	quarts 107,130	891	4,113	4,060	113,897	47,939	214,998	4,728
84	acres.....	38	.....	.....	.....	26	64	358	4
85	Nuts.....	trees 1,684	25	.....	.....	441	11	652	1
86	pounds.....	42,456	109	.....	.....	20,102	90	12,532	.....

TABLE 5.—SELECTED FARM EXPENSES

1	Labor.....								
2	Farms reporting.....	2,211	122	550	135	2,112	639	2,429	594
3	Cash expended.....	dollars 269,791	18,078	81,217	29,801	234,273	60,927	399,087	46,296
4	Rent and board furnished.....	dollars 73,379	4,309	30,681	11,970	56,014	13,990	107,058	18,451
5	Fertilizer.....								
6	Farms reporting.....	204	4	12	1	580	119	1,429	11
7	Amount expended.....	dollars 5,006	271	374	50	14,580	2,788	40,613	237
8	Feed.....								
9	Farms reporting.....	843	133	542	102	870	801	1,112	445
10	Amount expended.....	dollars 49,139	12,456	57,127	10,406	51,504	74,204	96,425	24,683
11	Receipts from sale of feedable crops.....	dollars 241,964	3,665	52,041	7,588	342,334	18,613	512,248	37,685

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ACREAGE AND PRODUCTION OF PRINCIPAL CROPS, BY COUNTIES: 1909—Continued.

Table with 13 columns representing counties: Mackinac, Macomb, Manistee, Marquette, Mason, Mecosta, Monominee, Midland, Missaukee, Monroe, Montcalm, Montmorency, and Muskegon. Rows list various crops and their corresponding acreage and production values.

AND RECEIPTS, BY COUNTIES: 1909—Continued.

Table with 13 columns representing counties: Mackinac, Macomb, Manistee, Marquette, Mason, Mecosta, Monominee, Midland, Missaukee, Monroe, Montcalm, Montmorency, and Muskegon. Rows list various crops and their corresponding receipt values.

TABLE 6.—NUMBER AND VALUE OF DOMESTIC ANIMALS NOT ON FARMS, BY COUNTIES: APRIL 15, 1910.

	THE STATE.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	
1	Inoclosures reporting domestic animals...	67,383	83	221	979	461	253	197	235	723	1,436
2	Value of domestic animals.....dollars..	15,700,343	15,830	72,400	198,299	89,130	76,688	35,989	57,997	139,030	303,396
3	Cattle:										
4	Total number.....	47,385	115	303	500	288	217	254	407	436	642
5	Value.....dollars..	1,745,203	2,777	11,486	19,355	9,093	7,266	7,265	14,053	16,350	23,775
6	Number of dairy cows.....	35,345	80	219	300	247	149	155	254	321	511
7	Horses:										
8	Total number.....	100,238	108	377	1,430	573	549	253	206	952	2,084
9	Value.....dollars..	13,660,280	12,776	58,847	171,448	79,169	66,630	27,565	43,215	110,760	275,384
10	Number of mature horses.....	99,154	108	373	1,413	567	543	244	206	935	2,065
11	Mules and asses and burros:										
12	Total number.....	774	0	29	0	2	0	1	0	8	33
13	Value.....dollars..	111,515	0	5,265	0	300	0	50	0	1,200	2,000
14	Number of mature mules.....	684	0	28	0	2	0	0	0	4	33
15	Swine:										
16	Total number.....	13,894	29	84	170	125	253	47	65	116	263
17	Value.....dollars..	144,936	267	1,002	2,138	863	2,407	387	670	1,205	2,079
18	Sheep and goats:										
19	Total number.....	8,569	2	23	16	26	9	172	0	87	24
20	Value.....dollars..	38,359	10	101	93	95	85	772	0	455	148

	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.	Chippewa.	Clare.	Clinton.	
1	Inoclosures reporting domestic animals...	240	1,183	919	1,798	810	406	452	586	232	697
2	Value of domestic animals.....dollars..	61,444	261,004	176,164	396,052	153,195	112,120	106,056	144,272	48,210	131,299
3	Cattle:										
4	Total number.....	247	610	456	653	528	353	380	724	282	882
5	Value.....dollars..	8,111	23,466	17,486	24,104	10,187	12,060	12,630	10,624	8,201	14,463
6	Number of dairy cows.....	176	469	363	482	407	262	263	432	180	302
7	Horses:										
8	Total number.....	415	1,884	1,301	2,706	1,123	684	643	800	288	948
9	Value.....dollars..	51,823	220,931	154,937	304,315	129,365	92,797	90,355	117,642	39,544	112,412
10	Number of mature horses.....	411	1,869	1,280	2,739	1,109	675	623	794	276	935
11	Mules and asses and burros:										
12	Total number.....	5	48	12	25	12	29	5	22	4	9
13	Value.....dollars..	616	6,675	1,050	3,600	1,370	5,875	595	3,782	540	1,925
14	Number of mature mules.....	5	46	10	26	11	20	2	22	3	3
15	Swine:										
16	Total number.....	52	130	241	383	255	165	186	105	66	171
17	Value.....dollars..	570	1,311	2,047	3,845	2,784	1,388	2,254	1,237	388	1,604
18	Sheep and goats:										
19	Total number.....	0	63	125	44	153	0	53	702	186	224
20	Value.....dollars..	24	221	650	188	403	0	216	702	447	895

	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogobie.	Grand Traverse.	Gratiot.	
1	Inoclosures reporting domestic animals...	97	716	1,035	1,248	357	1,711	148	1,113	539	811
2	Value of domestic animals.....dollars..	25,483	108,525	176,120	230,144	100,511	431,200	34,038	193,195	135,251	144,543
3	Cattle:										
4	Total number.....	129	840	1,523	693	193	588	112	1,759	259	605
5	Value.....dollars..	4,368	20,192	48,121	25,864	7,337	23,015	3,565	71,237	9,290	21,415
6	Number of dairy cows.....	106	667	1,054	544	160	442	76	1,308	221	478
7	Horses:										
8	Total number.....	150	1,035	624	1,670	628	2,701	198	698	907	1,002
9	Value.....dollars..	19,770	100,470	125,538	206,000	90,726	400,684	30,085	119,605	124,578	118,611
10	Number of mature horses.....	148	1,012	621	1,631	625	2,738	193	690	891	975
11	Mules and asses and burros:										
12	Total number.....	7	2	2	16	3	23	0	2	5	5
13	Value.....dollars..	795	460	200	2,080	325	3,675	0	325	750	500
14	Number of mature mules.....	4	2	2	11	2	23	0	2	5	4
15	Swine:										
16	Total number.....	38	266	230	262	105	128	14	215	57	285
17	Value.....dollars..	510	2,410	2,270	2,522	1,943	1,395	109	1,863	587	3,211
18	Sheep and goats:										
19	Total number.....	4	5	0	477	32	550	35	33	5	155
20	Value.....dollars..	40	33	0	1,478	180	2,531	279	165	40	896

	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	Iosco.	Iron.	Isabella.	Jackson.	Kalamazoo.
1	Inoclosures reporting domestic animals...	1,020	3,076	802	1,541	1,295	322	623	1,076	1,412
2	Value of domestic animals.....dollars..	183,101	621,100	162,492	335,459	258,806	58,802	100,338	342,021	328,302
3	Cattle:									
4	Total number.....	568	4,142	722	622	839	343	836	440	814
5	Value.....dollars..	21,969	188,148	24,375	30,367	28,236	10,313	30,461	15,103	30,568
6	Number of dairy cows.....	417	3,207	550	406	586	277	650	336	634
7	Horses:									
8	Total number.....	1,335	2,631	908	2,452	1,700	357	487	697	2,371
9	Value.....dollars..	155,191	431,400	134,585	360,044	223,529	47,485	60,118	84,853	306,068
10	Number of mature horses.....	1,318	2,622	853	2,414	1,760	347	486	676	2,346
11	Mules and asses and burros:									
12	Total number.....	12	0	5	5	15	0	2	3	24
13	Value.....dollars..	1,835	0	925	1,335	2,000	0	260	440	2,790
14	Number of mature mules.....	9	0	4	2	12	0	2	2	15
15	Swine:									
16	Total number.....	329	134	255	301	275	122	58	118	324
17	Value.....dollars..	3,406	1,406	2,108	3,383	2,747	931	500	1,263	3,372
18	Sheep and goats:									
19	Total number.....	162	12	118	86	423	14	0	330	87
20	Value.....dollars..	700	155	499	430	2,354	73	0	1,472	128

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TABLE 6.—NUMBER AND VALUE OF DOMESTIC ANIMALS NOT ON FARMS, BY COUNTIES: APRIL 15, 1910—Continued.

	Kalkaska.	Kent.	Keweenaw.	Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.	Mackinac.	Macomb.
1 Inclosures reporting domestic animals..	102	3,134	350	114	783	170	1,546	656	82	349	769
2 Value of domestic animals.....dollars..	64,488	881,400	52,520	21,503	100,284	41,220	318,423	130,144	16,295	110,730	208,559
3 Cattle:											
4 Total number.....	174	1,220	546	195	510	214	474	347	93	531	319
5 Value.....dollars..	5,807	46,870	23,397	5,005	18,942	6,303	20,137	12,127	3,990	17,987	12,310
6 Number of dairy cows.....	110	1,001	409	131	360	143	384	251	78	310	268
7 Horses:											
8 Total number.....	380	5,784	217	121	1,108	271	2,174	888	75	608	1,233
9 Value.....dollars..	56,065	820,099	28,094	15,260	130,323	34,031	291,855	114,420	12,040	80,755	195,069
10 Number of mature horses.....	383	5,788	217	117	1,081	290	2,148	880	73	605	1,220
11 Mules and asses and burros:											
12 Total number.....		30	3		3	1	19	8		1	3
13 Value.....dollars..		3,820	180		375	500	2,110	1,045		50	230
14 Number of mature mules.....		29			1		18	6			2
15 Swine:											
16 Total number.....	159	123	25	65	104	26	178	155	37	217	72
17 Value.....dollars..	1,626	1,448	230	538	1,417	308	1,551	2,035	265	2,279	824
18 Sheep and goats:											
19 Total number.....		27	2	12	42	6	371	161		145	33
20 Value.....dollars..		172	10	50	227	18	2,770	617		659	126

	Manistee.	Marquette.	Mason.	Mecosta.	Menominee.	Midland.	Missaukee.	Monroe.	Montcalm.	Montmorency.	Muskegon.
1 Inclosures reporting domestic animals..	630	1,088	360	486	425	323	263	738	843	67	810
2 Value of domestic animals.....dollars..	121,119	382,974	84,342	92,746	117,929	55,534	51,460	143,989	164,244	14,472	195,789
3 Cattle:											
4 Total number.....	400	3,391	347	334	466	392	337	318	663	75	543
5 Value.....dollars..	13,508	121,402	11,937	10,436	13,573	11,907	10,700	10,686	22,522	2,116	19,489
6 Number of dairy cows.....	351	3,207	260	258	346	235	245	241	503	49	420
7 Horses:											
8 Total number.....	807	1,611	510	609	718	366	309	1,014	1,180	103	1,313
9 Value.....dollars..	108,503	252,024	72,731	81,008	100,900	41,745	39,889	131,180	138,463	11,925	173,845
10 Number of mature horses.....	803	1,591	506	598	712	357	299	998	1,157	102	1,310
11 Mules and asses and burros:											
12 Total number.....	1	32	3			1		4	8	1	11
13 Value.....dollars..	20	4,000	375			75		235	1,125	50	2,150
14 Number of mature mules.....	1	31	3			1		3	6	1	10
15 Swine:											
16 Total number.....	100	340	30	63	282	128	100	216	195	58	44
17 Value.....dollars..	1,535	3,743	193	616	3,385	1,536	844	1,859	1,718	381	244
18 Sheep and goats:											
19 Total number.....	89	1	2	5	18	61	6	6	72		19
20 Value.....dollars..	493	5	6	26	71	271	27	29	416		61

	Newaygo.	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Oscoda.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscommon.
1 Inclosures reporting domestic animals..	258	1,258	382	181	344	429	14	159	722	272	82
2 Value of domestic animals.....dollars..	50,715	200,022	89,556	36,542	90,408	89,143	3,719	59,207	178,351	55,078	24,020
3 Cattle:											
4 Total number.....	253	588	290	171	600	415	33	151	363	198	80
5 Value.....dollars..	7,833	23,935	10,858	5,837	22,582	13,392	900	5,547	13,261	6,292	2,554
6 Number of dairy cows.....	184	405	220	127	394	302	19	108	277	170	52
7 Horses:											
8 Total number.....	425	1,032	527	265	416	578	21	361	1,244	361	134
9 Value.....dollars..	50,592	204,804	71,400	30,436	71,959	74,250	2,765	52,080	157,789	47,730	18,480
10 Number of mature horses.....	414	1,010	522	263	412	566	20	359	1,230	361	129
11 Mules and asses and burros:											
12 Total number.....	4	8	3			4		2	23	3	5
13 Value.....dollars..	640	535	415			475		425	5,800	300	1,000
14 Number of mature mules.....	4	4	3			4		2	23	3	5
15 Swine:											
16 Total number.....	42	139	71	20	158	65	3	168	138	165	38
17 Value.....dollars..	478	1,403	807	254	1,619	635	54	1,215	1,391	1,842	360
18 Sheep and goats:											
19 Total number.....	37	85	13	3	2	100			27	6	1,029
20 Value.....dollars..	172	485	70	15	8	388			110	14	1,629

	Saginaw.	St. Clair.	St. Joseph.	Sanilac.	Schoolcraft.	Shiawassee.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Wexford.
1 Inclosures reporting domestic animals..	1,732	1,054	1,069	872	234	1,149	781	1,035	1,199	6,699	432
2 Value of domestic animals.....dollars..	377,850	228,415	220,178	168,753	60,587	237,564	159,832	200,351	295,403	2,464,442	132,798
3 Cattle:											
4 Total number.....	899	636	653	782	293	588	632	597	529	2,248	364
5 Value.....dollars..	31,745	22,042	22,818	20,990	9,353	22,665	21,963	22,243	20,152	94,866	13,366
6 Number of dairy cows.....	736	496	476	534	194	471	480	482	373	1,494	288
7 Horses:											
8 Total number.....	2,631	1,438	1,614	1,077	405	1,543	1,061	1,485	1,964	15,554	822
9 Value.....dollars..	340,198	204,102	191,657	134,043	48,230	210,496	132,916	175,407	272,970	2,325,735	116,897
10 Number of mature horses.....	2,613	1,404	1,587	1,050	404	1,527	1,040	1,459	1,943	15,535	818
11 Mules and asses and burros:											
12 Total number.....	20	1	12	4	2	13	17	10	3	106	4
13 Value.....dollars..	3,440	150	1,835	645	400	2,156	2,460	1,425	325	14,715	400
14 Number of mature mules.....	28	1	12	3	2	12	15	8	3	96	4
15 Swine:											
16 Total number.....	303	152	306	199	203	151	128	90	183	1,502	153
17 Value.....dollars..	2,373	1,370	2,990	1,629	2,604	1,533	1,243	1,223	1,813	22,311	1,900
18 Sheep and goats:											
19 Total number.....	23	38	157	122		143	265	12	51	971	56
20 Value.....dollars..	94	151	867	536		714	1,300	53	203	6,815	235

CHAPTER 4.

STATISTICS OF MANUFACTURES FOR THE STATE, CITIES, AND INDUSTRIES.

Introduction.—This chapter gives the statistics of manufactures for the state of Michigan for the calendar year 1909, as shown by the Thirteenth Census.

The text summarizes the general results of the census inquiry, presenting a series of special tables in which the main facts printed in the general tables are given in convenient form for the state as a whole and for important industries. It also presents tables in which the statistics for the industries of the state as a whole and for a few important industries are classified by character of ownership, size of establishments, number of wage earners, and prevailing hours of labor, information which could not be presented in general tables for each industry without disclosing the facts for individual establishments.

At the end of the chapter are three general tables.

Table I gives for 1909, 1904, and 1899 the number of establishments and of persons engaged in the industries, primary power, capital, salaries and wages, cost of materials, value of products, and value added by manufacture reported for all industries combined and for certain important industries (1) for the state as a whole and (2) for the cities of Detroit, Grand Rapids, and Saginaw. It also gives the same items for all industries combined for every city having in 1910 a population of over 10,000 but less than 50,000.

Table II gives statistics in detail for 1909 for the state and for a larger number of industries.

Table III gives statistics in detail for 1909 for Detroit, Grand Rapids, and Saginaw, for all industries combined and selected industries, and for each city having from 10,000 to 50,000 inhabitants for all industries combined.

Scope of census: Factory industries.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of organization, location of establishments, size of establishments, labor force, and similar subjects. When use is made of the data for these purposes it is imperative that due attention should be given to the limitations of the figures. Particularly is this true when the attempt is made to derive from them figures purporting to show average wages, cost of production, or profits. These limitations will be fully discussed in the general report on manufactures for the United States as a whole.

The census of 1909, like that of 1904, was confined to manufacturing establishments conducted under the factory system, as distinguished from the neighborhood, hand, and building industries. Where statistics for 1899 are given they have been reduced

to a comparable basis by eliminating the latter classes of industries. The census does not include establishments which were idle during the entire year, or had a value of products of less than \$500, or the manufacturing done in educational, eleemosynary, and penal institutions, or in governmental establishments, except those of the Federal Government.

Period covered.—The returns cover the calendar year 1909, or the business year which corresponds most nearly to that calendar year. The statistics cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—The term "establishment" comprises the factories, mills, or plants which are under a common ownership or control, and for which one set of books of account is kept.

If, however, the plants constituting an establishment as thus defined were not all located within the same city or state, separate reports were secured in order that the separate totals might be included in the statistics for each city or state. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products very different from those covered by the class designation, and, on the other hand, may not include the total product covered by this designation, because some part of this product may be made in establishments in which it is not the product of chief value.

Selected industries.—The general tables at the end of this chapter give the principal facts separately for the industries of the state. A selection has been made of the leading industries of the state for more detailed consideration. Sometimes an industry of greater importance than some of those selected is omitted because it comprises so few establishments that these detailed presentations would reveal the operations of individual concerns.

Comparisons with previous censuses.—Owing to the changes in industrial conditions it is not always possible to classify establishments by industries in such a way as to permit accurate comparison with preceding censuses. Table I, giving comparable figures for 1909, 1904, and 1899, therefore, does not embrace all the industries shown for 1909 in Table II.

Influence of increased prices.—In considering changes in cost of materials, value of products, and value added by manufacture, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures can not be taken as an exact measure of increase in the volume of business.

Persons engaged in industry.—At the censuses of 1909, 1904, and 1899, the following general classes of persons engaged in manufacturing industries have been distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks, and (5) wage earners. In the censuses of 1904 and 1899 these five classes were shown according to the three main groups: (1) Proprietors and firm members, (2) salaried officials, clerks, etc., and (3) wage earners. The second group included the three classes of salaried officers of corporations, superintendents and managers, and clerks. In the present census an entirely different

grouping is employed: That into (1) proprietors and officials, (2) clerks, and (3) wage earners. The first group includes proprietors and firm members, salaried officers of corporations, and superintendents and managers.

At this census the number of persons engaged in the industries, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for December 15, or the nearest representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where conditions were exceptional, and particularly in the case of certain seasonal industries, such as canning, the December date could not be accepted as typical and an earlier date had to be chosen.

In the case of employees other than wage earners the number thus reported on December 15, or other representative day, has been treated as equivalent to the average for the year, since the number of employees of this class does not vary much from month to month in a given industry. In the case of wage earners the average is obtained in the manner explained in the next paragraph.

Wage earners.—In addition to the report by sex and age of the number of wage earners on December 15, or other representative day, a report was obtained of the number employed on the 15th of each month, without distinction of sex or age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported each month by 12. The average thus obtained represents the number of wage earners that would be required to perform the work done if all were constantly employed during the entire year. Accordingly, the importance of any industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given for each separate industry, is not totaled for all industries combined, because in view of the variations of date such a total is believed not to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries, as compared with industries in continual operation.

In particular, totals by sex and age for the wage earners reported for the representative day would be misleading because of the undue weight given to seasonal industries, in some of which, such as canning and preserving, the distribution of the wage earners by sex and age is materially different from that in most industries of more regular operation. In order to determine as nearly as possible the sex and age distribution of the average number of wage earners in the state as a whole, the following procedure has been adopted:

The percentage distribution by sex and age of the wage earners in each industry, for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. This percentage has been applied to the average number of wage earners for the year in that industry, to determine the average number of men, women, and children employed. These calculated averages for the several industries have been added up to give the average distribution for the state as a whole.

In 1899 and 1904 the schedule called for the average number of wage earners of each sex 16 years and over, and the total number under 16 years of age, for each month, and these monthly statements were combined in an annual average. Comparatively few manufacturing concerns, however, keep their books in such way as to show readily the number of men, women, and children (under 16) employed each month. These monthly returns by sex and age were, in fact, largely estimates. It was believed that a more accurate and reliable sex and age distribution could be secured by taking as a basis of estimate the actual numbers employed on a single day.

Prevailing hours of labor.—The census made no attempt to ascertain the number of employees working a given number of hours

per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one period to another are disregarded, and no attention is given to the fact that a limited number of employees may have hours differing from those of the majority. In the tables all the wage earners of each establishment are counted in the class within which the establishment itself falls. In most establishments, however, all or practically all the employees work the same number of hours, so that these figures give a substantially correct picture of the hours of labor in manufacturing industries.

Capital.—For reasons stated in prior census reports, the statistics of capital secured by the census canvass are so defective as to be without value, except as indicating very general conditions. The instructions on the schedule for securing capital were as follows:

The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises.

Materials.—Cost of materials refers to the materials used during the year, which may be more or less than the materials purchased during the year. The term materials includes fuel, rent of power and heat, mill supplies, and containers, as well as materials forming a constituent part of the product. Fuel includes all fuel used, whether for heat, light, or power, or for the process of manufacture.

Expenses.—Under "Expenses" are included all items of expense incident to the year's business, except interest, whether on bonds or other forms of indebtedness, and allowances for depreciation.

Value of products.—The value of products for any industry includes the total value of all products manufactured in establishments whose products of chief value fall under the industry designation. The amounts given represent the selling value at the factory of all products manufactured during the year, which may differ from the value of the products sold. Amounts received for work on materials furnished by others are included.

Value added by manufacture.—The value of products is not a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing process carried on in the industry itself. Another part of it, and often by far the larger part, represents the value of the materials used, which have been produced by agriculture or mining or by other industrial establishments. For many purposes, therefore, the best measure of the importance of different classes of industry is the value created as the result of the manufacturing operations carried on within the industry. This value is obtained by deducting the cost of the materials consumed from the value of the product. The figure thus obtained is termed in the census reports "value added by manufacture."

There is a further statistical advantage which "value added" has over gross value of products. In combining the value of products for all industries the value of products produced by one establishment and used as materials in another is duplicated, and the total, therefore, gives a greatly exaggerated idea of the wealth created. No such duplication takes place in the total "value added by manufacture."

Cost of manufacture and profits.—Census data do not show the entire cost of manufacture, and consequently can not be used to show profits. No account has been taken of interest and depreciation. Even if the amount of profit could be determined by deducting the expenses from the value of the products the rate of profit on the investment could not properly be calculated, because of the very defective character of the returns regarding capital.

Primary power.—The figures given for this item show the total of the primary power used by the establishments. They do not cover the power developed by motors operated by such power, the inclusion of which would evidently result in duplication.

Location of establishments.—The Census Bureau has classified establishments by their location in cities or classes of cities. In interpreting these figures due consideration should be given to the fact that often establishments are located just outside the boundaries of cities, and are necessarily so classified, though locally they are looked upon as constituting a part of the manufacturing interests of the cities.

Laundries.—The census of 1909 was the first to include statistics of laundries. The reports are confined to establishments using mechanical power. The data are presented separately and are not included in the general total for manufacturing industries.

Custom sawmills and gristmills.—In order to make the statistics for 1909 comparable with those for 1904 the data for these mills have been excluded from all the tables presenting general statistics.

INDUSTRIES IN GENERAL.

General character of the state.—Michigan, with a gross area of 57,980 square miles, of which 500 represent water surface, and a population in 1910 of 2,810,173, ranks twenty-second in area and eighth in population among the 49 states and territories of continental United States. The total population was 2,420,982 in 1900 and 2,093,890 in 1890. In 1910 the density of population for the entire state was 48.9 per square mile, the corresponding figure for 1900 being 42.1. In 1910, 47.2 per cent of the entire population of the state resided in cities and incorporated villages having 2,500 inhabitants or over, as against 39.3 per cent in 1900.

In 1910 the following three cities in the state had a population of over 50,000: Detroit, 465,766; Grand Rapids, 112,571; and Saginaw, 50,510. There were also 21 cities having a population of over 10,000 but less than 50,000. (See table on page 680.) These 24 cities of more than 10,000 inhabitants contained 37.1 per cent of the total population of the state in 1910 and were credited with 68.5 per cent of the total value of its manufactures for 1909. Apart from these cities, only 10.1 per cent of the population resided in places of 2,500 inhabitants or over.

The growth of the manufacturing industries has been closely related to the development of the transportation facilities of the state. The rapid advance in manufactures dates from about 1825, when the Erie Canal, affording connection with the eastern seaboard, was opened. The transportation facilities of the state at present, both by rail and by water, are excellent. With 9,059 miles of railroad in 1909, Michigan was the sixth state in the Union in the length of its trackage.¹ The state borders on four of the Great Lakes, which furnish splendid intrastate and interstate communication by water. Detroit, located on the main lines of several of the most important railroad systems connecting the Eastern states with the Middle West, and near the western end of Lake Erie, is particularly well situated as a commercial center.

Importance and growth of manufactures.—Michigan has for many years been one of the leading manufacturing states. In 1849 the value of its manufactured products amounted to \$11,169,000; by 1869 it had increased to \$118,395,000; and in 1909 it amounted to \$685,109,000. The early development of manufactures in the state was due largely to the utilization

of its extensive forests, while the growing markets afforded by the rapidly developing West, the advantageous situation of the state with respect to the markets of both the East and the West, and its important agricultural and mineral resources have also been influential factors in its later progress.

During 1849 an average of 9,344 wage earners, representing 2.3 per cent of the total population of the state, were employed in manufactures, while in 1909 an average of 231,499 wage earners, or 8.2 per cent of the total population, were so engaged. During this period the gross value of manufactured products per capita of the total population of the state increased from \$28 to \$244. The proportion which the manufactures of the state represented of the total value of the products of manufacturing industries in the United States increased from 1.1 per cent in 1849 to 2.8 per cent in 1899 and 3.3 per cent in 1909. The growing industrial importance of Michigan is indicated by the fact that in the value of manufactured products it has advanced from seventeenth place among the states of the Union in 1849 to ninth in 1899, eighth in 1904, and seventh in 1909.

The table on the next page gives the most important figures relative to all classes of manufactures combined for 1909, 1904, and 1899, together with the percentages of increase from census to census.

In 1909 the state of Michigan had 9,159 manufacturing establishments, which gave employment to an average of 271,071 persons during the year and paid out \$153,838,000 in salaries and wages. Of the persons employed, 231,499 were wage earners. These establishments turned out products to the value of \$685,109,000, to produce which materials costing \$368,612,000 were utilized. The value added by manufacture was thus \$316,497,000, which figure, as explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

In general, this table brings out the fact that the manufacturing industries of Michigan as a whole showed a greater development during the more recent five-year period, 1904-1909, than during the preceding five-year period, 1899-1904. The absolute gain in value of products for the five years from 1904 to 1909 was \$255,989,000, which surpassed the total value of products for the state in any census year prior to 1889. During this period the number of establishments increased 23 per cent, the average number of wage

¹ Statistics of Railways in the United States, Interstate Commerce Commission, 1909.

earners 32.1 per cent, and the amount paid in wages 46.4 per cent, while the value of products increased 59.7 per cent and the value added by manufacture 59 per cent.

As pointed out in the Introduction, it would be

improper to infer that manufactures increased in volume to the full extent indicated by these figures regarding values, since the increase shown is certainly due, in part, to the increase that has taken place in the prices of commodities.

	NUMBER OR AMOUNT.			PER CENT OF INCREASE.	
	1900	1904	1899	1904-1900	1899-1904
Number of establishments.....	9,159	7,446	7,310	23.0	1.9
Persons engaged in manufactures.....	271,071	200,196	(1)	35.4	.....
Proprietors and firm members.....	8,965	7,732	(1)	15.9	.....
Salaried employees.....	30,607	17,235	13,350	77.6	29.1
Wage earners (average number).....	231,499	175,229	155,800	92.1	12.5
Primary horsepower.....	598,288	440,890	368,497	35.7	19.6
Capital.....	\$583,947,000	\$337,894,000	\$246,997,000	72.8	36.8
Expenses.....	591,296,000	374,842,000	275,876,000	57.7	35.9
Services.....	153,838,000	98,749,000	74,868,000	55.8	31.9
Salaries.....	34,870,000	17,470,000	12,336,000	99.6	41.6
Wages.....	118,968,000	81,279,000	62,532,000	46.4	30.0
Materials.....	368,612,000	230,081,000	175,966,000	60.2	30.8
Miscellaneous.....	68,846,000	46,012,000	25,042,000	40.6	88.7
Value of products.....	685,109,000	429,120,000	319,692,000	59.7	34.2
Value added by manufacture (value of products less cost of materials).....	316,497,000	199,039,000	143,726,000	59.0	38.5

¹ Figures not available.

The relative importance and growth of the leading manufacturing industries of the state are shown in the table on page 673.

It should be borne in mind, in considering this table, that the value of products in some of the industries involves a certain amount of duplication, due to the use of the product of one establishment in the industry as material for another establishment.

In addition to the 58 industries presented separately in the table for which products valued at more than \$1,000,000 were reported, there are 13 other industries which had a value of products in excess of that amount in 1909. They are included under the head of "All other industries" in the table, in some cases, because the operations of individual establishments would be disclosed if they were shown separately; in others, because the returns do not properly present the true condition of the industry, for the reason that it is more or less interwoven with one or more other industries; and in still others, because comparative statistics can not be presented for either 1899 or 1904, on account of changes in classification or because such figures would disclose the operations of individual establishments. Of these industries the smelting and refining of copper was the most important, and ranked high among the leading industries of the state. The construction of steam-railroad cars, consisting in Michigan almost entirely of freight cars, was next in importance, but there were only two establishments in the state in 1909 engaged in this industry. Detroit was an important center of the industry, having one of the largest car plants in the country. The manufacture of cash registers and calculating machines is another important industry for which separate statistics can not be presented. This industry also was centered in Detroit and has developed almost wholly within the

past five years. The manufacture of billiard tables and materials, and the manufacture of matches are not among the leading industries in the state, but are worthy of mention because Michigan is one of the chief states of the Union in both branches of manufacture. The eight remaining industries having products valued at more than \$1,000,000 which are included under "All other" are: Blacking and cleansing and polishing preparations; explosives; house-furnishing goods, "not elsewhere specified;" iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills; liquors, distilled; rubber goods, "not elsewhere specified;" silk and silk goods; and wire. The statistics for 1909, however, for the manufacture of blacking and cleansing and polishing preparations, and the manufacture of iron and steel, bolts, nuts, washers, and rivets, other than in steel works or rolling mills, are presented in Table II, page 702.

The most important industries listed in the table, in which they are arranged in the order of the value of products, call for brief consideration.

Automobiles, including bodies and parts.—The manufacture of automobiles in Michigan on any considerable scale commenced in Detroit less than a decade ago, although it had been carried on to a limited extent prior to that time. The industry developed rapidly, and by 1904 Michigan had become the leading state in the manufacture of automobiles, which position it held in 1909. In 1904 Michigan contributed 26.6 per cent of the total value of products for this industry for the country as a whole, while in 1909 the proportion had increased to 38.8 per cent. The total value of products for this industry in Michigan in 1909 was \$96,651,000, which was more than twelve times the amount reported for 1904, while the value added by

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manufacture in 1909 was over nine times that reported for 1904. Of the total value of manufactured products and value added by manufacture for the state in 1909, the automobile industry contributed 14.1 per cent and 13.5 per cent, respectively, while of the total increase of \$255,989,000 in value of products for all manufacturing industries in the state from 1904 to 1909,

\$88,654,000, or over one-third, was reported for this one industry. This classification also includes the manufacture of automobile parts and accessories, but this branch of the industry has become so interwoven with other industries that it is impossible to determine to what extent it is covered by the statistics for the automobile industry.

INDUSTRY,	Number of establishments.	WAGE EARNERS,		VALUE OF PRODUCTS,		VALUE ADDED BY MANUFACTURE,		PER CENT OF INCREASE. ¹			
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	Value of products.		Value added by manufacture.	
								1904-1909	1909-1904	1904-1909	1909-1904
All industries.....	9,189	231,499	100.0	\$685,109,000	100.0	\$316,497,000	100.0	59.7	34.2	59.0	38.5
Automobiles, including bodies and parts.....	113	25,444	11.0	96,684,000	14.1	42,769,000	13.5	1,108.6	-----	839.2	-----
Lumber and timber products.....	1,180	35,027	15.4	61,514,000	9.0	32,472,000	10.3	7.5	-16.7	(*)	-11.2
Foundry and machine-shop products.....	654	21,049	9.4	45,309,000	6.6	20,088,000	6.4	44.4	23.6	53.8	16.6
Flour-mill and gristmill products.....	520	1,530	0.7	34,861,000	5.1	5,502,000	1.7	31.5	22.5	77.6	-4.3
Furniture and refrigerators.....	202	10,610	7.2	28,642,000	4.2	10,924,000	5.4	39.7	27.8	42.7	36.0
Printing and publishing.....	1,045	7,210	3.1	17,848,000	2.5	12,413,000	3.9	44.0	46.8	43.9	37.8
Tobacco manufactures.....	720	7,876	3.4	16,179,000	2.4	8,971,000	2.8	36.4	28.3	27.3	24.8
Leather, tanned, curried, and finished.....	24	2,201	1.0	15,381,000	2.2	3,210,000	1.0	64.1	55.3	55.1	56.9
Butter, cheese, and condensed milk.....	435	1,073	0.5	14,287,000	2.1	1,910,000	0.6	74.0	109.5	61.6	83.3
Paper and wood pulp.....	32	4,327	1.9	13,922,000	2.0	4,897,000	1.6	89.6	74.0	77.4	82.8
Brass and bronze products.....	60	4,771	2.1	13,890,000	2.0	4,897,000	1.6	-----	-----	-----	-----
Patent medicines and compounds and druggists' preparations.....	150	3,240	1.4	13,475,000	2.0	8,534,000	2.7	28.7	43.7	27.9	51.7
Slaughtering and meat packing.....	45	902	0.4	13,435,000	2.0	1,769,000	0.6	111.4	17.7	143.3	24.9
Chemicals.....	30	3,174	1.4	12,890,000	1.9	7,818,000	2.5	42.6	69.7	68.7	75.8
Food preparations.....	40	1,303	0.6	11,492,000	1.7	6,742,000	2.1	70.2	267.0	49.9	270.5
Bread and other bakery products.....	816	2,037	1.1	11,082,000	1.6	4,411,000	1.4	55.7	73.6	35.2	76.9
Beet sugar.....	11	1,460	0.6	10,477,000	1.5	4,249,000	1.3	94.8	235.7	162.3	228.7
Carriages and wagons and materials.....	212	4,034	1.7	10,159,000	1.5	4,897,000	1.6	-31.8	15.5	-24.3	20.8
Liquors, malt.....	70	1,527	0.7	9,840,000	1.4	7,419,000	2.3	40.6	32.1	39.3	29.1
Agricultural implements.....	32	2,359	1.0	9,273,000	1.4	6,388,000	2.0	6.3	37.5	22.2	36.4
Stoves and furnaces, including gas and oil stoves.....	33	4,482	1.9	9,123,000	1.3	6,307,000	2.0	13.7	-----	19.2	-----
Paint and varnish.....	20	1,024	0.4	7,416,000	1.1	3,384,000	1.1	24.5	75.9	33.0	79.3
Cars and general shop construction and repairs by steam-railroad companies.....	32	5,401	2.3	6,838,000	1.0	3,922,000	1.2	27.4	28.9	41.6	25.2
Gas, illuminating and heating.....	55	1,771	0.8	6,748,000	1.0	4,519,000	1.5	74.5	162.5	68.2	133.7
Clothing, men's, including shirts.....	40	3,680	1.6	6,532,000	1.0	3,143,000	1.0	55.4	2.6	87.4	-2.7
Iron and steel, blast furnaces.....	11	1,916	0.4	5,824,000	0.8	1,600,000	0.5	25.4	99.6	3.9	67.0
Wirework, including wire rope and cable.....	37	909	0.4	5,285,000	0.8	1,859,000	0.6	52.8	167.7	25.2	107.5
Boots and shoes, including cutstock and findings.....	23	2,455	1.1	5,250,000	0.7	1,909,000	0.6	48.9	84.4	26.0	101.7
Shipbuilding, including boat building.....	91	2,344	1.0	5,034,000	0.8	2,544,000	0.8	69.3	-32.9	39.3	-15.2
Canning and preserving.....	104	2,073	0.9	4,971,000	0.7	1,897,000	0.6	30.2	43.7	31.5	72.6
Copper, tin, and sheet-iron products.....	152	2,380	1.0	4,929,000	0.7	2,384,000	0.8	70.6	177.0	59.7	234.0
Corsets.....	14	2,461	1.1	4,368,000	0.6	2,491,000	0.8	121.2	16.0	95.4	27.9
Musical instruments, pianos and organs and materials.....	17	1,779	0.8	4,220,000	0.6	2,217,000	0.7	113.0	68.1	79.7	74.8
Hosiery and knit goods.....	35	2,545	1.1	4,029,000	0.6	1,682,000	0.6	11.2	29.8	11.8	33.6
Copperage and wooden goods, not elsewhere specified.....	101	2,642	1.1	3,980,000	0.6	1,985,000	0.6	2.5	95.7	-5.4	105.0
Salt.....	27	1,303	0.6	3,053,000	0.5	2,010,000	0.6	51.9	-2.3	65.6	-11.1
Clothing, women's.....	32	2,194	0.9	3,537,000	0.5	1,877,000	0.6	-1.2	66.4	-1.1	94.7
Paper goods, not elsewhere specified.....	18	1,181	0.5	3,551,000	0.5	1,593,000	0.5	167.2	-----	211.5	-----
Confectionery.....	60	1,052	0.5	2,944,000	0.4	1,147,000	0.4	73.3	25.4	72.2	18.9
Cement.....	13	1,306	0.6	2,915,000	0.4	1,512,000	0.5	13.9	-----	-3.4	-----
Iron and steel, steel works and rolling mills.....	8	1,183	0.5	2,670,000	0.4	1,072,000	0.3	-1.5	-24.1	17.5	-24.6
Boxes, fancy and paper.....	10	1,326	0.6	2,663,000	0.4	1,035,000	0.3	190.6	155.0	114.7	123.1
Leather goods.....	57	834	0.4	2,500,000	0.4	1,102,000	0.4	84.3	-4.3	75.2	-2.8
Wood distillation, not including turpentine and rosin.....	12	806	0.3	2,399,000	0.4	1,244,000	0.4	225.1	-----	221.4	-----
Electrical machinery, apparatus, and supplies.....	40	1,218	0.5	2,327,000	0.3	1,297,000	0.4	231.5	60.3	217.9	59.4
Fur goods.....	31	619	0.3	2,284,000	0.3	1,300,000	0.4	29.0	2.5	76.9	26.1
Brick and tile.....	124	1,565	0.7	2,047,000	0.3	1,472,000	0.5	24.0	45.3	20.1	36.7
Show cases.....	11	823	0.4	1,860,000	0.3	1,070,000	0.3	60.2	769.4	61.4	670.9
Wood, turned and carved.....	58	1,137	0.5	1,708,000	0.3	1,074,000	0.3	9.0	69.6	9.8	53.5
Woolen, worsted, and felt goods, and wool hats.....	15	554	0.2	1,571,000	0.2	708,000	0.2	-----	-----	-----	-----
Gas and electric fixtures and lamps and reflectors.....	20	395	0.2	1,546,000	0.2	604,000	0.3	-----	-----	-----	-----
Marble and stone work.....	113	551	0.2	1,504,000	0.2	612,000	0.3	38.2	10.6	32.6	26.5
Wall plaster.....	10	746	0.3	1,421,000	0.2	1,009,000	0.3	69.8	-----	118.4	-----
Springs, steel, car and carriage.....	5	583	0.3	1,308,000	0.2	760,000	0.2	141.8	-7.4	189.6	-4.8
Cars and general shop construction and repairs by street-railroad companies.....	15	574	0.2	1,301,000	0.2	352,000	0.1	121.3	96.7	28.0	95.0
Window shades and fixtures.....	7	636	0.3	1,296,000	0.2	489,000	0.2	155.1	-----	230.4	-----
Cutlery and tools, not elsewhere specified.....	37	668	0.3	1,124,000	0.2	740,000	0.2	54.0	58.7	58.1	56.5
Coffins, burial cases, and undertakers' goods.....	18	430	0.2	1,085,000	0.2	592,000	0.2	-11.4	54.9	-15.4	63.6
Artificial stone.....	191	514	0.2	908,000	0.1	559,000	0.2	663.0	-----	635.5	-----
Mattresses and spring beds.....	14	306	0.1	689,000	0.1	282,000	0.1	34.0	-1.3	54.1	-3.0
Fancy articles, not elsewhere specified.....	11	1,147	0.5	593,000	0.1	394,000	0.1	-----	-----	52.3	278.4
Scales and balances.....	4	228	0.1	524,000	0.1	295,000	0.1	103.1	228.6	-4.1	12.1
Oil, essential.....	23	54	(*)	486,000	0.1	71,000	(*)	102.5	29.0	-----	-----
All other industries.....	046	21,562	9.3	87,874,000	12.8	34,532,000	10.9	-----	-----	-----	-----

¹ Percentages are based on figures in Table I; a minus sign (-) denotes decrease. Where the percentages are omitted, comparable figures can not be given.
² Less than one-tenth of 1 per cent.

A number of the foundries and machine shops were engaged incidentally in the manufacture of automobile parts and accessories, and rubber automobile tires form a very important item in the manufacture of "Rubber goods, not elsewhere specified." Many electric attachments and motors are also made in establishments engaged in the general manufacture of electrical machinery, apparatus, and supplies, and the brass mountings and fixtures used on automobiles are made to a considerable extent in establishments primarily engaged in the manufacture of brass and bronze products.

Lumber and timber products.—This classification includes logging plants whose chief products are logs and bolts; sawmills, shingle mills, and planing mills producing rough lumber, shingles, lath, cooperage materials, sash, doors, blinds, interior finish, and other millwork; and wooden packing-box factories. The statistics for those mills engaged exclusively in custom sawing for local consumption are not included here, but are shown separately on page 693. Until the rise of the automobile industry, this was the most important industry in the state as measured by value of products, and it still continues to lead all others in number of establishments, average number of wage earners, and amount paid in wages. The supply of timber in the state has been declining steadily, and the value of products showed a decrease both from 1889 to 1899 and from 1899 to 1904. Since 1904, however, the industry has shown a slight increase in this respect. In 1909 the total value of products reported for this industry was \$61,514,000 and it gave employment to an average of 35,627 wage earners during the year.

Foundry and machine-shop products.—In addition to the general class of foundries and machine shops, this industry also includes establishments which manufacture bells, gas machines and motors, hardware, plumbers' supplies, steam fittings, and structural ironwork. The industry was really of greater importance in the state than is indicated by the statistics, as some machine shops manufactured a distinctive product and were assigned to other classifications. A number of the most important establishments were engaged in the manufacture of cast-iron radiators and boilers for steam and hot-water heating, gas engines and automobile motors, and cranes and pile drivers. The gross value of products increased from \$25,430,000 in 1899 to \$45,399,000 in 1909, or 78.5 per cent for the decade.

Food and kindred products.—This group of industries in Michigan includes seven industries, namely, flour mills and gristmills; the butter, cheese, and condensed-milk industry; slaughtering and meat packing; the manufacture of food preparations; bakeries; the beet-sugar industry; and canning and preserving. The figures for the mills which do custom grinding only

are not included in the general tables but are shown in a separate statement on page 693. Under the slaughtering and meat-packing classification are included wholesale establishments which do slaughtering, prepare or pack meat, and manufacture sausage. The classification "Food preparations" includes the statistics for the factories which manufacture fancy cereals, mincemeat, canned soups, and similar preparations as chief products. The canning and preserving industry embraces all establishments in which fruit, vegetables, and fish are canned or preserved, as well as those which prepare pickles, preserves, and sauces. In 1909 there were 1,980 establishments reported for these seven industries, which employed 10,978 wage earners and manufactured products valued at \$100,605,000, adding \$26,480,000 to the cost of materials by the process of manufacture. This group of industries, however, is of much less importance relatively when measured by value added by manufacture or average number of wage earners than when measured by value of products, owing principally to the comparatively simple processes involved in the manufacture of flour-mill and gristmill products, and butter, cheese, and condensed milk, and in slaughtering and meat packing. Each of these seven industries showed a noteworthy increase in value of products during the decade, the largest percentage of gain being that of 554 in the beet-sugar industry, and the smallest that of 61.1 in the flour-mill and gristmill industry.

Furniture and refrigerators.—Michigan was the second state in the Union in the manufacture of furniture and refrigerators in 1909, and first in the manufacture of refrigerators alone. Of the 202 establishments included in this classification in 1909, only 10 were primarily engaged in the manufacture of refrigerators, the value of the output of these establishments constituting about one-twelfth of the total value of products reported for the industry. The importance of the industry in the state is no doubt due largely to the abundant available supply of pine and hardwood suitable for these purposes. While the supply of such woods in the state has diminished in late years, the quantity of high-grade lumber imported has increased largely, and the industry in the state has maintained the impetus afforded by its early natural advantages and continued to prosper, as is indicated by the fact that the average number of wage earners employed increased from 12,833 to 16,610, or 29.4 per cent, and the value of products from \$16,040,000 to \$28,642,000, or 78.6 per cent, during the decade. During this period, however, the proportion which the value of the products of the furniture and refrigerator industry in Michigan formed of the total reported for the industry in the United States has decreased, being 11.9 per cent in 1909 and 12.3 per cent in 1899.

Printing and publishing.—This industry includes establishments engaged in printing and publishing newspapers and periodicals, books, or music; job printing offices; establishments engaged in bookbinding and blank-book making; and those that make a specialty of lithographing and of steel or copper-plate engraving. This is the second industry in the state in number of establishments, reporting in 1909 about one-ninth of all manufacturing establishments, although it employed only 3.1 per cent of the wage earners and contributed only 2.5 per cent of the value of products. The industry experienced a decided growth during the last decade, the number of wage earners increasing 2,177, or 43.2 per cent, and the value of products \$9,142,000, or 111.4 per cent.

Tobacco manufactures.—This industry covers the manufacture of cigars, cigarettes, chewing and smoking tobacco, and snuff. Of the 729 establishments included in the industry, all but 14 were engaged primarily in the manufacture of cigars and cigarettes, but the value of the output formed only about three-fifths of the total shown for the entire industry. Detroit is the center of the industry, as it reported over three-fourths of the total value of the tobacco products for the state in 1909. The total value of products increased from \$9,245,000 in 1899 to \$11,864,000 in 1904 and \$16,179,000 in 1909, making a gain of \$6,934,000, or 75 per cent, for the decade.

Leather, tanned, curried, and finished.—This industry includes not only establishments which are engaged primarily in the tanning, currying, and finishing of leather for themselves but also those which treat hides or skins for others. The cost of materials and the value of products, however, do not include the cost or value of the hides or skins treated under contract. In 1849 Michigan reported 61 establishments, which employed only 283 wage earners and turned out products valued at only \$402,000, whereas in 1909, 24 plants were reported, which engaged 2,291 wage earners, and the value of whose products amounted to \$15,331,000. The real development of the industry, however, has taken place since 1889, when the value of products was only \$1,744,000. During the following 10 years the value of the output of the tanneries in the state increased over 240 per cent, while during the next decade the increase was over 150 per cent.

Paper and wood pulp.—Of the 32 establishments included in this classification, there were 8 which manufactured both pulp and paper and 24 which produced paper only. All but 5 of the last-named mills used wood pulp to some extent. The development of the industry in Michigan has been due to the more extensive use of wood pulp in the manufacture of paper. In 1889 there were 31 establishments reported for the

state, which employed an average of 1,219 wage earners and manufactured products valued at \$2,919,000. The growth during the decade 1899-1909 was particularly noteworthy, as the value of products increased from \$4,218,000 to \$13,922,000, a gain of \$9,704,000, or 230.1 per cent.

Brass and bronze products.—In 1909 this industry in Michigan included 60 establishments, of which 45 were primarily engaged in the manufacture of brass castings and brass goods, such as oiling devices, brass spigots, and automobile and motor specialties; 12, in the manufacture of brass ware, such as ornaments for furniture, stair rods, and automobile parts; 2, in the production of rolled brass and copper; and 1, in the manufacture of brass. The remarkable development of this industry in the state during recent years has been due mainly to the increased demand for brass specialties in the manufacture of automobiles. The total value of products increased from \$2,148,000 in 1899 to \$13,890,000 in 1909. Michigan ranked third among the states of the Union in this industry, as measured by value of products.

Patent medicines and compounds and druggists' preparations.—Of the 159 establishments reported in 1909, 116 were primarily engaged in the manufacture of patent medicines and compounds, but the total value of products for these establishments represented only about one-eighth of the total shown for the industry. The 18 establishments engaged in the manufacture of druggists' preparations contributed about four-fifths of the total value of products. This industry also included 25 establishments manufacturing perfumes and cosmetics in 1909. Michigan is second among the states of the Union in the industry as a whole and first in the manufacture of druggists' preparations. In 1909 the total value of products was \$13,475,000, as compared with \$7,284,000 in 1899.

Chemicals.—Although this industry did not rank among the first in the state, Michigan held fourth place among the states of the Union in the value of chemical products manufactured. The large supply of brine from the salt wells of the state has made the manufacture of alkali products of great importance. The value of sodas forms about five-eighths of the total value of products for this industry in 1909. A comparatively large number of small establishments were engaged in the manufacture of potash, principally from wood ashes. The growth of the industry has been rapid, the value of products being \$12,890,000 in 1909, an increase over 1899 of 142.1 per cent.

Carriages and wagons and materials.—This classification includes those establishments which made five or more horse-drawn vehicles during the year, as well as those engaged in the manufacture of carriage or

wagon bodies, tops, or other parts. In contrast to the great increase noted in the automobile industry from 1904 to 1909 has been the decline in the manufacture of carriages and wagons during the same period. While the value of products of this industry increased from \$12,887,000 in 1899 to \$14,889,000 in 1904, it decreased to \$10,159,000 in 1909, a loss of 31.8 per cent in the last five years.

Other industries which are of less importance in the state but in which Michigan holds high rank among the states are the manufacture of stoves and furnaces and of corsets, the salt industry, wood distillation, and the manufacture of fur goods, show cases, and wall plaster.

Several industries are not fully represented by the statistics given in the preceding table, because to a large extent they are interwoven with one or more other industries. Important among these are the manufacture of steel springs for cars and carriages, the making of window shades and fixtures, the production of wire-work, including wire rope and cable, and the turning and carving of wood.

The rank of the industries when measured by value added by manufacture differs considerably from their rank based on value of products. Of all the industries presented separately in this table, only six hold the same position when ranked according to value added by manufacture. Noticeable changes in rank are found in the case of slaughtering and meat packing, which drops from thirteenth place in gross value to thirty-sixth place in added value; the butter, cheese, and condensed-milk industry, which falls from ninth to thirty-first place; the leather industry, which drops from eighth to twenty-second; and the flour-mill and gristmill industry, which falls from fourth to thirteenth place. On the other hand, the malt-liquor industry advances from nineteenth to ninth place; the manufacture of salt from thirty-sixth to twenty-eighth; the manufacture of agricultural implements from twentieth to eleventh; and the manufacture of stoves and furnaces from twenty-first to twelfth.

This table shows also the percentages of increase or decrease for each industry in respect to value of products and value added by manufacture in all cases where comparable statistics can be presented. Exceptionally large increases are shown for several of the industries for each of the five-year periods, while others show marked decreases. From 1904 to 1909 the largest increases in both items are shown for the manufacture of automobiles, artificial stone, and electrical machinery, apparatus, and supplies, and for wood distillation, not including turpentine and rosin. In these four industries the percentages of increase in value of products ranged from 1,108.6 to 225.1. From 1899 to 1904 the largest gains in both items are shown for the manufacture of show cases, food preparations, beet sugar, and scales and balances. In value of products

four industries show a decrease from 1904 to 1909 and seven a decrease from 1899 to 1904, while in value added by manufacture decreases from 1904 to 1909 were reported for six industries and from 1899 to 1904 for nine industries. The largest relative decrease in value of products from 1904 to 1909 (31.8 per cent) was in the carriage and wagon industry.

Persons engaged in manufacturing industries.—The following table shows, for 1909, the distribution of the number of persons engaged in manufactures, the average number of wage earners being distributed by sex and age. It should be borne in mind, however, that the sex and age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the Introduction.

CLASS.	PERSONS ENGAGED IN MANUFACTURES.		
	Total.	Male.	Female.
All classes	271,071	231,915	39,156
Proprietors and officials	16,996	16,434	562
Proprietors and firm members	8,965	8,564	401
Salaried officers of corporations	3,089	3,026	63
Superintendents and managers	4,942	4,844	98
Clerks	22,576	16,183	6,393
Wage earners (average number)	231,499	199,298	32,201
16 years of age and over	228,982	197,777	31,205
Under 16 years of age	2,517	1,521	996

The average number of persons engaged in manufactures during 1909 was 271,071, of whom 231,499 were wage earners. Of the remainder, 16,996 were proprietors and officials, and 22,576 were clerks. Corresponding figures for individual industries will be found in Table II, page 702.

The next table shows, for 1909, the percentages of proprietors and officials, clerks, and wage earners, respectively, among the total number of persons employed in manufactures. It covers all industries combined and 29 important industries individually.

Of the total number of persons engaged in all manufacturing industries, 6.3 per cent were proprietors and officials, 8.3 per cent clerks, and 85.4 per cent wage earners. The highest percentages of proprietors and officials shown for any of the individual industries were for the flour mills and gristmills, the butter, cheese, and condensed-milk factories, and the bakeries, in which industries they constituted 31.8, 30.9, and 24.7 per cent, respectively, of the total number of persons engaged. In these industries the majority of the establishments are comparatively small, and the work is to a large extent done by the proprietors or their immediate representatives, so that the proportion of persons engaged in these industries falling into the class of proprietors and officials is very much higher than for most other industries or for all industries combined.*

On account of the large average number of wage earners in the establishments engaged in the manufacture of automobiles, of boots and shoes, and of paper and wood pulp, and in the steam-railroad repair shops, these industries show the smallest proportions of proprietors and officials.

of children under 16 years of age in the total number of wage earners was larger in the boot and shoe industry than in any other industry in the state, the largest actual number of such wage earners was reported for the tobacco-manufactures industry, in which 534 children were employed, representing 6.3 per cent of the total number of wage earners engaged in the industry.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number)
All industries.....	271,071	6.3	8.3	85.4
Agricultural implements.....	3,041	5.3	17.1	77.6
Automobiles, including bodies and parts.....	28,098	1.9	7.5	90.6
Beet sugar.....	1,755	3.2	13.6	83.2
Boots and shoes, including out stock and findings.....	2,703	2.1	7.0	90.8
Brass and bronze products.....	5,211	3.2	5.3	91.6
Bread and other bakery products.....	3,984	24.7	9.1	65.2
Butter, cheese, and condensed milk.....	1,740	30.9	7.5	61.7
Carriages and wagons and materials.....	4,707	7.7	6.6	85.7
Cars and general shop construction and repairs by steam-railroad companies.....	5,706	2.2	3.1	94.7
Chemicals.....	3,512	3.2	6.4	90.4
Clothing, men's, including shirts.....	3,944	2.9	6.4	90.8
Flour-mill and gristmill products.....	2,623	31.8	9.9	58.3
Food preparations.....	1,672	5.6	10.4	77.9
Foundry and machine-shop products.....	25,334	5.9	8.7	85.5
Furniture and refrigerators.....	18,299	3.2	6.1	90.8
Gas, illuminating and heating.....	2,435	6.3	20.9	72.7
Iron and steel, blast furnaces.....	1,101	3.3	4.4	92.3
Leather, tanned, curried, and finished.....	2,440	2.7	3.4	93.9
Liquors, malt.....	2,001	10.6	13.1	76.3
Lumber and timber products.....	39,011	5.8	2.8	91.3
Paint and varnish.....	1,857	4.2	34.0	61.8
Paper and wood pulp.....	4,581	2.2	3.4	94.5
Patent medicines and compounds and druggists' preparations.....	5,124	6.3	30.2	63.4
Printing and publishing.....	11,048	13.9	20.7	65.3
Shipbuilding, including boat building.....	2,758	5.4	9.6	85.0
Slaughtering and meat packing.....	1,114	7.6	11.4	81.0
Stoves and furnaces, including gas and oil stoves.....	5,027	2.8	8.0	89.2
Tobacco manufactures.....	9,242	10.2	4.5	85.2
Wirework, including wire rope and cable.....	1,261	6.5	21.4	72.1
All other industries.....	69,942	6.6	8.4	85.0

INDUSTRY.	WAGE EARNERS.			
	Average number. ¹	Per cent of total.		
		16 years of age and over.		Under 16 years of age.
Male.	Female.			
All industries.....	231,499	85.4	13.5	1.1
Agricultural implements.....	2,359	99.4	0.1	0.4
Automobiles, including bodies and parts.....	25,444	98.9	1.1	(*)
Beet sugar.....	1,460	99.7	0.3	.....
Boots and shoes, including out stock and findings.....	2,455	58.5	35.1	6.4
Brass and bronze products.....	4,771	93.7	3.1	3.2
Bread and other bakery products.....	2,637	80.0	18.2	1.8
Butter, cheese, and condensed milk.....	1,073	90.7	9.1	0.2
Carriages and wagons and materials.....	4,034	98.2	1.7	0.1
Cars and general shop construction and repairs by steam-railroad companies.....	5,401	99.8	0.1	0.2
Chemicals.....	3,174	99.0	0.8	0.3
Clothing, men's, including shirts.....	3,580	12.5	87.5	.....
Flour-mill and gristmill products.....	1,530	98.2	0.9	0.3
Food preparations.....	1,303	62.8	37.2	.....
Foundry and machine-shop products.....	21,649	98.0	1.4	0.5
Furniture and refrigerators.....	16,610	95.6	2.7	1.7
Gas, illuminating and heating.....	1,771	99.7	0.2	0.1
Iron and steel, blast furnaces.....	1,016	99.9	0.1	.....
Leather, tanned, curried, and finished.....	2,291	98.8	0.3	0.8
Liquors, malt.....	1,527	99.1	0.9	.....
Lumber and timber products.....	35,027	99.1	0.5	0.4
Paint and varnish.....	1,024	88.5	10.3	1.3
Paper and wood pulp.....	4,327	82.3	17.7	.....
Patent medicines and compounds and druggists' preparations.....	3,249	50.7	47.9	1.4
Printing and publishing.....	7,219	73.5	25.1	1.4
Shipbuilding, including boat building.....	2,844	99.7	0.3	.....
Slaughtering and meat packing.....	902	96.3	3.0	0.7
Stoves and furnaces, including gas and oil stoves.....	4,482	98.1	0.1	1.8
Tobacco manufactures.....	7,870	28.2	65.4	6.3
Wirework, including wire rope and cable.....	909	89.3	9.0	1.7
All other industries.....	59,455	73.2	25.4	1.4

¹ For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see Introduction.
² Less than one-tenth of 1 per cent.

The next table shows, for 1909, in percentages, for all industries combined, the distribution of the average number of wage earners by age periods, and for those 16 years of age and over by sex, calculated in the manner described in the Introduction. It also shows, for some of the important industries separately, a similar distribution of wage earners as reported for December 15, or the nearest representative day. As a means of judging the importance of the several industries, the average number employed for the year is also given in each case.

In order to compare the distribution of persons engaged in manufactures in 1909 with that shown at the census of 1904 it is necessary to use the classification employed at the earlier census. (See Introduction.) The following table makes this comparison according to occupational status:

For all industries combined, 85.4 per cent of the average number of wage earners were males 16 years of age and over, 13.5 per cent females 16 years of age and over, and only 1.1 per cent children under the age of 16. Women 16 years of age and over constituted 87.5 per cent of all wage earners in the men's clothing industry; 65.4 per cent of the total in the tobacco-manufactures industry; and 47.9 per cent of the total in the manufacture of patent medicines and compounds and druggists' preparations. A large number of women were also employed in making food preparations, in boot and shoe factories, and in printing and publishing establishments. Although the proportion

CLASS.	PERSONS ENGAGED IN MANUFACTURES.				
	1909		1904		Per cent of increase, 1904-1909.
	Number.	Percent distribution.	Number.	Percent distribution.	
Total.....	271,071	100.0	200,196	100.0	35.4
Proprietors and firm members.....	8,965	3.3	7,732	3.9	15.9
Salaried employees.....	30,607	11.3	17,235	8.6	77.6
Wage earners (average number)....	231,499	85.4	175,229	87.5	32.1

Comparable figures are not obtainable for 1899. The table shows a greater percentage of increase in the salaried employees than in the other two classes.

The next table shows the average number of wage earners, distributed according to age periods, and in the case of those 16 years of age and over according to sex, for 1909, 1904, and 1899. The averages for 1909 are estimated on the basis of the actual number reported for a single representative day. (See Introduction.)

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Percent distribution.	Number.	Percent distribution.	Number.	Percent distribution.
Total.....	231,499	100.0	175,229	100.0	155,800	100.0
16 years of age and over..	228,982	98.9	171,946	98.1	153,279	98.4
Male.....	197,777	85.4	147,676	84.3	134,265	86.2
Female.....	31,205	13.5	24,270	13.8	19,014	12.2
Under 16 years of age....	2,517	1.1	3,283	1.9	2,521	1.6

This table indicates that for all industries combined there has not been much change in the proportions of male and female wage earners 16 years of age and over. In 1909 males 16 years of age and over formed 85.4 per cent of all wage earners, as compared with 84.3 per cent in 1904 and 86.2 per cent in 1899. The number of children employed in 1909 was practically the same as in 1899, but shows a decrease of 766 since 1904, while the proportion of such wage earners was somewhat less in 1909 than at either of the other two censuses.

Wage earners employed, by months.—The following table gives the number of wage earners employed on the 15th of each month during the year 1909 for all industries combined, for the beet-sugar industry, and for all other industries combined; it gives also the percentage which the number reported for each month is of the greatest number reported for any month.

MONTH.	WAGE EARNERS.					
	All industries.		Beet sugar.		All other industries.	
	Number.	Percent of maximum.	Number.	Percent of maximum.	Number.	Percent of maximum.
January.....	211,679	84.6	925	21.2	210,754	85.6
February.....	218,230	87.3	290	6.6	217,940	88.5
March.....	223,087	89.2	292	6.7	222,795	90.5
April.....	222,273	88.9	403	9.2	221,870	90.1
May.....	226,811	90.7	536	12.3	226,275	91.9
June.....	229,058	91.6	576	13.2	228,482	92.8
July.....	232,023	92.8	675	15.4	231,348	93.9
August.....	235,804	94.3	755	17.3	235,049	95.4
September.....	240,310	96.1	878	20.1	239,432	97.2
October.....	241,912	96.7	4,050	92.6	237,832	96.6
November.....	246,729	98.7	4,372	100.0	242,357	98.4
December.....	250,078	100.0	3,773	86.3	246,306	100.0

In Table II, page 702, are shown, for practically all of the important industries in the state, the largest number and also the smallest number of wage earners re-

ported for any month. The figures are for the 15th day, or the nearest representative day, of the month.

The manufacture of beet sugar was the only seasonal industry of importance in the state. In this industry there was a variation in the number of wage earners employed from a minimum of 290 in February to a maximum of 4,372 in November, but the number employed was so small that the fluctuations in the industry affect but slightly the totals for all industries combined. It will be observed that, except for a slight decrease in April, the number of wage earners in all industries combined increased steadily throughout the year from January, the month of least activity, to December, the month of greatest activity.

Prevailing hours of labor.—In the next table wage earners have been classified according to the hours of labor prevailing in the establishments in which they are employed. In making this classification the average number of wage earners employed during the year is used, and the number employed in each establishment is classified as a total according to the hours prevailing in that establishment, even though a few employees work a greater or less number of hours.

It is evident from the figures that for nearly one-half of the wage earners employed in the manufacturing industries of Michigan the hours of labor were 60 a week. Of the remainder, the majority worked either 54 hours a week or between 54 and 60 hours a week. Only 7.7 per cent of the total worked in establishments where the prevailing number of hours of labor was less than 54 a week, and only 4.3 per cent in establishments where it was more than 60 a week.

Of the wage earners employed in the lumber industry, 32,413, or 91 per cent, were in establishments where the prevailing hours were 60 a week; in the furniture and refrigerator industry, 12,109, or 72.9 per cent, were in such establishments; and in the automobile industry, 13,564, or 53.3 per cent. More than one-half of the 113,762 wage earners in this class of establishments were therefore employed in these three industries. In the foundries and machine shops the hours usually ranged from 54 to 60 a week. In the distillation of wood and in the chemical and the gas industries, more than half the wage earners worked over 60 hours per week, while in the beet-sugar, blast-furnace, and cement industries all or the greater part of the wage earners worked 72 hours per week or more. On the other hand, in the manufacture of men's clothing, more than half the wage earners worked 48 hours per week or less, and the same hours prevailed for about one-third of the wage earners in marble and stone work, in the breweries, in printing and publishing establishments, and in the tobacco-manufactures industry.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS GROUPED ACCORDING TO PREVAILING HOURS OF WORK PER WEEK.								
	Total.	48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All industries	231,499	11,174	6,612	38,449	51,552	113,782	2,748	1,284	5,918
Agricultural implements.....	2,359			1,119	787	453			
Artificial stone.....	514	3		159	25	327			
Automobiles, including bodies and parts.....	25,444	2	17	4,775	7,086	13,564			
Beet sugar.....	1,460								1,460
Boots and shoes, including cut stock and findings.....	2,455	6	11	1,674	572	192			
Boxes, fancy and paper.....	1,326		12	499	470	345			
Brass and bronze products.....	4,771		35	102	2,332	2,302			
Bread and other bakery products.....	2,637	128	120	702	195	1,211	201	52	28
Brick and tile.....	1,565	378	66	130	2	989			
Butter, cheese, and condensed milk.....	1,073	145	13	27	44	750	68	25	1
Canning and preserving.....	2,073	6		58	373	1,589	15	27	5
Carriages and wagons and materials.....	4,034	55		53	2,105	1,821			
Cars and general shop construction and repairs by steam-railroad companies.....	5,401		642	1,400	1,905	1,276	118		
Cars and general shop construction and repairs by street-railroad companies.....	574			360	19	190	2		3
Cement.....	1,306					38	204		974
Chemicals.....	3,174			2	1,426	35	174	96	1,441
Clothing, men's, including shirts.....	3,580	2,224	79	809	429	39			
Clothing, women's.....	2,194	114	823	1,161	48	48			
Coffins, burial cases, and undertakers' goods.....	439	2		56	151	230			
Confectionery.....	1,052	39	2	462	225	318	4	2	
Cooperage and wooden goods, not elsewhere specified.....	2,642	252		27	17	2,346			
Copper, tin, and sheet-iron products.....	2,386	81	54	907	620	723	1		
Corsets.....	2,461	7	42	1,090	299	123			
Cutlery and tools, not elsewhere specified.....	668			4	259	405			
Electrical machinery, apparatus, and supplies.....	1,218	4	26	236	310	642			
Fancy articles, not elsewhere specified.....	1,147	3	6	104	1,031	3			
Flour-mill and gristmill products.....	1,530	115	33	11	10	1,219	85	57	
Food preparations.....	1,303	5	17	34	127	834		279	7
Foundry and machine-shop products.....	21,649	160	108	3,936	9,335	8,096	14		
Fur goods.....	619		37	383	133	66			
Furniture and refrigerators.....	16,610	53	44	1,249	3,155	12,109			
Gas and electric fixtures and lamps and reflectors.....	295		21	28	158	190			
Gas, illuminating and heating.....	1,771	1		22	779	779	353	40	521
Hosiery and knit goods.....	2,545	8	308	807	756	666			
Iron and steel, blast furnaces.....	1,016						55		961
Iron and steel, steel works and rolling mills.....	1,182				317	866			
Leather goods.....	834			43	276	515			
Leather, tanned, curried, and finished.....	2,261				519	1,772			
Liquors, malt.....	1,527	605	8	378		423		113	
Lumber and timber products.....	35,627	341	263	721	1,762	32,413	124	3	
Marble and stone work.....	551	228	1	172	15	135			
Mattresses and spring beds.....	306			16	273	17			
Musical instruments, pianos and organs and materias.....	1,779		1	51	1,106	621			
Oil, essential.....	54				5	48	1		
Paint and varnish.....	1,024		25	634	69	260			
Paper and wood pulp.....	4,327				225	2,534	1,084	464	
Paper goods, not elsewhere specified.....	1,181	3	15	410	592	161			
Patent medicines and compounds and druggists' preparations.....	3,249	71	580	2,161	357	79	1		
Printing and publishing.....	7,219	2,718	833	2,334	833	500	1		
Salt.....	1,363	15		99	9	1,173	9	4	54
Scales and balances.....	228				228				
Shipbuilding, including boat building.....	2,344	2	3	85	1,093	1,161			
Show cases.....	823			72	130	621			
Slaughtering and meat packing.....	902	14		35	3	849	1		
Springs, steel, car and carriage.....	588				200	388			
Stoves and furnaces, including gas and oil stoves.....	4,482	255	671	60	1,180	2,316			
Tobacco manufactures.....	7,876	2,509	1,173	1,854	1,981	356	3		
Wall plaster.....	746			38	1	648		59	
Window shades and fixtures.....	636	24		68	231	263			
Wirework, including wire rope and cable.....	909		21	232	259	397			
Wood distillation, not including turpentine and rosin.....	806				6	345	83		307
Wood, turned and carved.....	1,137	10	18	20	36	1,053			
Woolen, worsted, and felt goods, and wool hats.....	554			25	51	478			
All other industries.....	21,562	538	484	5,595	5,294	9,416	52	37	96

Location of establishments.—The next table shows the extent to which the manufactures of Michigan are centralized in cities of 10,000 population or over. (See Introduction.) The comparison is confined here, as in other states, to the years 1899 and 1909, in the absence of a Federal census of population by which the grouping of cities in 1904 could be determined.

In 1909 the proportion of the total value of manufactured products reported from cities having over 10,000 inhabitants was 68.5 per cent, as compared with 55.7 per cent in 1899. It is natural that such

cities should show an increase in relative industrial importance in a state where the lumber industry is declining and where the chief growth in manufacturing is in such industries as the manufacture of automobiles, foundries and machine shops, the manufacture of furniture, and other industries generally conducted in large factories located in or near the centers of population.

The cities having a population of over 100,000 contributed 43.1 per cent of the total value of products in 1909, as compared with only 27.6 per cent in 1899. A part of this increase is occasioned by an addition to

the group. In 1899 Detroit was the only city in the state having over 100,000 inhabitants, but during the succeeding decade the population of Grand Rapids, which is an important manufacturing center, passed this figure, so that for 1909 its statistics are included with those of Detroit.

For 1909 the group comprising the cities having between 25,000 and 100,000 inhabitants, which reported 17.8 per cent of the total value of the manufactured products of the state in that year, includes

Saginaw, Bay City, Kalamazoo, Flint, Jackson, Lansing, and Battle Creek. In 1900, however, Kalamazoo, Flint, Lansing, and Battle Creek all had less than 25,000 inhabitants, so that for 1899 their statistics are included with those for the cities having between 10,000 and 25,000 inhabitants. The transfer of these four cities, therefore, largely accounts for the increased proportions of the totals for the various items shown for the cities having between 25,000 and 100,000 inhabitants.

ITEM.	Year.	Aggregate.	CITIES HAVING A POPULATION OF 10,000 AND OVER.								DISTRICTS OUTSIDE OF CITIES HAVING A POPULATION OF 10,000 AND OVER.	
			Total.		10,000 to 25,000.		25,000 to 100,000.		100,000 and over.		Number or amount.	Percent of total.
			Number or amount.	Percent of total.	Number or amount.	Percent of total.	Number or amount.	Percent of total.	Number or amount.	Percent of total.		
Population.....	1910	2,810,173	1,043,746	37.1	203,817	7.3	261,592	9.3	573,337	20.6	1,766,427	62.9
	1900	2,420,982	681,312	28.1	199,771	8.2	195,837	8.1	285,704	11.8	1,739,670	71.9
Number of establishments.....	1909	9,159	4,500	49.1	815	8.9	1,125	12.3	2,560	27.9	4,659	50.9
	1899	7,310	2,892	39.6	773	10.6	860	11.8	1,259	17.2	4,418	60.4
Average number of wage earners	1909	231,499	157,325	68.0	20,380	8.8	38,344	16.6	98,601	42.6	74,174	32.0
	1899	155,800	84,805	54.4	21,274	13.7	25,158	16.1	38,373	24.6	70,995	45.6
Value of products.....	1909	\$685,109,169	\$469,003,103	68.5	\$52,485,164	7.6	\$121,985,141	17.8	\$295,222,798	43.1	\$215,506,066	31.5
	1899	319,091,856	178,124,393	55.7	43,156,684	13.5	49,601,755	14.6	88,365,924	27.6	141,567,463	44.3
Value added by manufacture...	1909	316,497,147	227,482,140	71.9	23,887,087	7.6	58,325,512	18.4	145,269,541	45.9	89,015,007	28.1
	1899	143,725,728	85,008,397	59.1	22,296,278	15.5	21,353,692	14.8	41,358,427	28.8	58,717,331	40.9

The group of cities having a population of between 10,000 and 25,000 was augmented in 1909 by the addition of Pontiac, Escanaba, Ironwood, Traverse City, Adrian, and Holland, all of which had less than 10,000 inhabitants in 1900. In spite of these additions, however, the group, owing to the loss of the four cities above mentioned, shows a smaller proportion in 1909 as compared with 1899 of the total for each item covered by the table.

The population in 1910 and 1900 of the 24 cities which had 10,000 inhabitants or over in 1910 is given in the following tabular statement:

CITY.	1910	1900	CITY.	1910	1900
Detroit.....	465,766	285,704	Pontiac.....	14,532	9,769
Grand Rapids...	112,571	87,505	Escanaba.....	13,194	9,549
Saginaw.....	50,510	42,845	Ironwood.....	12,821	9,765
Bay City.....	45,168	40,747	Alpena.....	12,706	11,802
Kalamazoo.....	39,437	24,404	Sault Ste. Marie.	12,615	10,538
Flint.....	38,550	13,103	Ishpeming.....	12,448	13,255
Jackson.....	31,433	25,180	Manistee.....	12,381	14,260
Lansing.....	31,229	18,485	Traverse City...	12,115	9,407
Battle Creek.....	25,267	18,563	Marquette.....	11,503	10,058
Muskegon.....	24,062	20,818	Adrian.....	10,763	9,654
Port Huron.....	18,863	19,158	Menominee.....	10,507	12,818
Ann Arbor.....	14,817	14,509	Holland.....	10,490	7,790

¹ Includes population of West Bay City, annexed to Bay City in 1905.

The relative importance in manufactures of each of these 24 cities is shown in the next table, in which the value of products and average number of wage earners reported for each are shown separately for 1909, 1904, and 1899, so far as comparative figures are available.

Every city for which comparative figures are available, except Port Huron, Marquette, Escanaba, and Ishpeming, shows an increase in value of products from 1904 to 1909, and all except Bay City, Menominee,

and Manistee show increases from 1899 to 1904. Many of the cities enumerated in the list, however, are not important as manufacturing centers.

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
Detroit.....	81,011	48,483	38,373	\$252,992,123	\$128,246,680	\$88,365,924
Grand Rapids...	17,590	15,514	12,929	42,230,675	30,689,987	22,228,487
Flint.....	7,088	2,161	1,960	24,118,007	6,177,170	4,713,044
Battle Creek.....	4,175	3,389	2,051	20,174,016	12,298,244	6,301,000
Saginaw ¹	5,990	4,445	4,205	18,833,047	10,078,508	8,652,978
Kalamazoo.....	6,272	5,666	3,870	17,903,560	13,141,767	7,186,368
Lansing.....	5,285	2,982	1,425	16,567,093	6,887,415	2,942,306
Jackson.....	4,797	3,967	3,715	14,005,671	8,348,125	6,709,995
Bay City ²	4,737	4,456	4,309	10,293,747	8,808,559	9,010,325
Muskegon.....	4,522	3,078	3,078	9,647,823	6,319,441	4,527,467
Adrian.....	1,059	1,502	1,030	6,085,126	4,897,426	2,124,923
Pontiac.....	1,739	1,296	1,092	5,893,961	3,047,422	2,470,887
Holland.....	1,940	(³)	(³)	4,622,265	(³)	(³)
Sault Ste. Marie..	1,005	895	317	4,618,715	2,412,481	728,169
Alpena.....	1,432	1,245	1,202	3,963,823	2,905,363	2,273,343
Menominee.....	1,700	1,489	1,703	3,727,596	2,973,935	4,075,825
Port Huron ¹	1,580	2,136	2,026	3,588,272	3,714,859	3,626,816
Manistee.....	2,125	2,084	2,103	3,344,087	3,256,601	3,025,317
Traverse City....	1,220	1,108	909	2,280,150	2,176,908	1,201,318
Ann Arbor.....	573	549	623	1,865,894	1,885,731	1,377,278
Marquette.....	498	738	836	1,254,553	2,364,081	1,585,083
Escanaba.....	720	949	520	1,074,109	1,332,979	609,822
Ironwood.....	201	87	90	877,416	201,783	145,122
Ishpeming.....	66	73	80	132,374	246,862	194,668

¹ Figures do not agree with those published in 1904, because it was necessary to revise the totals in order to include data only for those establishments located within the corporate limits of the city.

² In 1904 and 1899 the statistics for West Bay City, which was annexed to Bay City in 1905, are included.

³ Figures not available.

The value of the manufactured products of Detroit increased from \$88,365,924 in 1899 to \$252,992,123 in 1909, or 186.3 per cent, and the number of wage earners from 38,373 to 81,011, or 111.1 per cent. In 1909 Detroit contributed 36.9 per cent of the total value of the manufactured products of the state, as compared with 29.9 per cent in 1904 and 27.6 per cent in 1899, while its industries gave employment to

35 per cent of the total number of wage earners in the manufacturing industries of the state in 1909, as compared with 27.7 per cent in 1904 and 24.6 per cent in 1899. Ranked by value of manufactured products the city held fifteenth place among the cities of the United States in 1899, fourteenth in 1904, and sixth in 1909.

The manufacture of automobiles has become by far the most important industry of Detroit, accounting for 23.5 per cent of the total value of the city's manufactures in 1909, as compared with 4.9 per cent in 1904. The value of the automobile output of the city in 1904 was \$6,240,000, or 78 per cent of the state total for this industry, and in 1909 it was \$59,536,000, or 61.6 per cent of the state total. Foundries and machine shops, with \$18,296,000; slaughtering and meat packing, with \$12,850,000; tobacco manufactures, with \$12,773,000; the brass and bronze products industry, with \$12,297,000; and the patent medicine and compound industry, with \$11,558,000, are the other leading industries of the city, as measured by value of products.

In the case of 13 industries shown separately in Table I, both for the state and for Detroit, the city contributed more than half of the total value of products, as follows: Slaughtering and meat packing, 95.6 per cent; brass and bronze products, 88.5 per cent; steel works and rolling mills, 86 per cent; patent medicines, 85.8 per cent; tobacco manufactures, 78.9 per cent; fur goods, 76.1 per cent; men's clothing, 72.9 per cent; copper, tin, and sheet-iron products, 71.7 per cent; stoves and furnaces, 62.2 per cent; automobiles, 61.6 per cent; leather goods, 54.5 per cent; boots and shoes, 52.2 per cent; and malt liquors, 50.2 per cent.

In addition to the 45 industries presented separately for Detroit in Table I, page 696, there are 113 others which, for various reasons, are included in the group of "All other industries." Some of these industries are among the most important in the city, 10 of them having products in 1909 valued at more than \$1,000,000.¹

Grand Rapids, the second manufacturing city in the state, shows an increase in value of products from \$22,228,487 in 1899 to \$42,230,675 in 1909. By far the most important industry of the city is the manufacture of furniture, Grand Rapids being in fact the recognized center of the furniture industry in the United States. This industry, with products valued at \$12,630,000, contributed 29.9 per cent of the total value of the manufactured products of the city in 1909, and gave employment to 7,250, or 41.2 per cent of the total number of wage earners reported for all manufacturing industries of the city. The value of

products of the industry in the city represented 44.1 per cent and the number of wage earners employed 43.6 per cent of the corresponding totals for the industry in the state. Other important industries are the manufacture of flour-mill and gristmill and of foundry and machine-shop products, printing and publishing, and the lumber and timber products and bakery industries.

Flint, the third city in the state in value of manufactured products in 1909, owes its rapid advance from tenth place in 1904 to the development of the automobile industry, which, with the manufacture of carriages and wagons, accounts for over three-fourths of the total value of products of the city. The value of the city's manufactures increased 290.4 per cent from 1904 to 1909, an increase greater than that for any other city of 10,000 population or over in the state.

Battle Creek, which ranked seventh in value of products in 1899, was fourth both in 1904 and in 1909. During the past 10 years the value of the city's manufactures has more than trebled. This gain was due principally to the increase in the manufacture of food preparations, the total output of which was valued at \$9,717,000 in 1909, or 84.6 per cent of the total for the industry in the state. Battle Creek outranks all other cities in the United States in this branch of manufacturing. The manufacture of agricultural implements and of foundry and machine-shop products are other important industries.

Saginaw, although reporting an increase in value of manufactured products from \$8,652,978 in 1899 to \$18,833,047 in 1909, dropped from third place in importance in this respect in 1899 to fifth place in 1904 and 1909. The principal industries of the city are the manufacture of beet sugar, lumber and timber products, foundry and machine-shop products, cooperage and wooden goods, and furniture.

Kalamazoo dropped from third place among the cities of the state in value of manufactured products in 1904 to sixth place in 1909, in spite of an increase in this respect from \$13,141,767 to \$17,903,560. The leading industries of the city are the manufacture of paper and wood pulp, corsets, and foundry and machine-shop products, printing and publishing, and the manufacture of carriages and wagons.

Of the \$16,567,093 reported as the total value of products manufactured in Lansing in 1909, about one-half was contributed by the automobile industry, and mainly on account of the decided increase in this industry the city advanced from thirteenth place among the cities of the state in respect to value of manufactures in 1899 to seventh place in 1909. Foundries and machine shops are also important.

Jackson is another city which owes its rapid industrial growth largely to the manufacture of automobiles, the output of which represented about one-third of the total value of all manufactured products of the

¹ These industries were as follows:

Cars and general shop construction and repairs by street-railroad companies.	Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.
Cars, steam-railroad, not including operations of railroad companies.	Leather, tanned, curried, and finished.
Cash registers and calculating machines.	Matches.
Chemicals.	Paint and varnish.
Gas, illuminating and heating.	Rubber goods, not elsewhere specified.

city. The manufacture of carriages and wagons and of foundry and machine-shop products are also important industries.

The manufactured products of Bay City increased only 14.2 per cent in value during the decade, while those of Muskegon more than doubled. In the former, the lumber industry predominates, followed by foundries and machine shops; in Muskegon, the industries are more diversified and include the manufacture of billiard tables, foundry and machine-shop products, furniture, hosiery and knit goods, and paper and wood pulp. Muskegon was at one time a lumber town exclusively, and affords an illustration of the successful development of other manufacturing industries to supplant the disappearing sawmills. In Adrian the wirework industry accounts for more than half of the total value of manufactured products reported, and in Pontiac the manufacture of automobiles is the predominating industry.

Several of the less important cities show industrial development, the increase in the value of manufac-

tured products for Sault Ste. Marie being particularly noticeable (534.5 per cent in 10 years). The leading industry in each of the remaining cities mentioned in the table was as follows: Holland, the furniture industry; Sault Ste. Marie and Alpena, the tanning, currying, and finishing of leather; Menominee, Manistee, Traverse City, and Ironwood, the lumber industry; Port Huron, Marquette, and Escanaba, steam-railroad repair shops; Ann Arbor, flour mills and gristmills; and Ishpeming, bakeries.

Character of ownership.—The table that follows has for its purpose the presentation of conditions in respect to the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined comparative figures are given covering the censuses of 1909 and 1904. Comparative data for 1899 are not available. Figures for 1909 only are presented for several important industries individually. In order to avoid disclosing the operations of individual concerns it is necessary to omit several important industries from this table and the one following.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:									
1909.....	9,159	231,499	\$685,109,169	\$316,497,147	Butter, cheese, and condensed milk, 1909.....	435	1,073	\$14,287,499	\$1,910,697
1904.....	7,446	176,229	429,120,060	199,039,129	Individual.....	131	189	2,986,802	374,495
Individual:					Firm.....	84	157	2,512,295	335,324
1909.....	4,567	20,564	57,652,930	25,700,157	Corporation.....	118	518	5,531,195	888,520
1904.....	3,002	20,527	47,121,641	22,032,918	Other.....	102	209	3,257,107	312,356
Firm:					Per cent of total.....	100.0	100.0	100.0	100.0
1909.....	1,809	17,252	51,758,822	22,763,304	Individual.....	30.1	17.6	20.9	19.6
1904.....	1,724	22,589	52,523,806	23,557,908	Firm.....	19.3	14.6	17.6	17.5
Corporation:					Corporation.....	27.1	48.3	38.7	46.5
1909.....	2,638	193,139	571,102,107	267,060,506	Other.....	23.4	19.5	22.8	16.3
1904.....	2,044	131,894	328,185,756	153,159,910	Carriages and wagons and materials, 1909.....	212	4,034	\$10,158,883	\$4,896,627
Other:					Individual.....	124	348	714,140	437,434
1909.....	145	544	4,595,310	973,180	Firm.....	52	514	935,267	546,982
1904.....	76	219	1,288,857	288,393	Corporation.....	36	3,172	8,509,476	3,912,211
Per cent of total:					Per cent of total.....	100.0	100.0	100.0	100.0
1909.....	100.0	100.0	100.0	100.0	Individual.....	58.5	8.6	7.0	8.9
1904.....	100.0	100.0	100.0	100.0	Firm.....	24.5	12.7	9.2	11.2
Individual:					Corporation.....	17.0	78.6	83.8	79.9
1909.....	49.9	8.9	8.4	8.1	Chemicals, 1909.....	36	3,174	\$12,890,206	\$7,817,825
1904.....	48.4	11.7	11.0	11.1	Individual.....	19	20	46,873	35,420
Firm:					Firm.....	3	5	6,456	4,064
1909.....	19.8	7.5	7.6	7.2	Corporation.....	14	3,149	12,830,877	7,778,341
1904.....	23.2	12.9	12.2	11.8	Per cent of total.....	100.0	100.0	100.0	100.0
Corporation:					Individual.....	52.8	0.6	0.4	0.5
1909.....	28.8	83.4	83.4	84.4	Firm.....	8.3	0.2	(¹)	0.1
1904.....	27.4	75.3	76.5	76.9	Corporation.....	38.9	99.2	99.6	99.5
Other:					Clothing, men's, including shirts, 1909.....	40	3,580	\$6,532,331	\$3,143,805
1909.....	1.6	0.2	0.7	0.3	Individual.....	11	290	381,319	221,066
1904.....	1.0	0.1	0.3	0.1	Firm.....	14	459	1,113,636	495,157
Agricultural implements, 1909.....	32	2,359	\$9,272,787	\$6,382,634	Corporation.....	15	2,831	5,037,376	2,427,582
Individual.....	8	45	172,670	78,872	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	6	21	52,704	32,206	Individual.....	27.5	8.1	5.8	7.0
Corporation.....	18	2,293	9,047,413	6,271,556	Firm.....	35.0	12.8	17.0	15.7
Per cent of total.....	100.0	100.0	100.0	100.0	Corporation.....	37.5	79.1	77.1	77.2
Individual.....	25.0	1.9	1.9	1.2	Flour-mill and gristmill products, 1909.....	520	1,530	\$34,860,803	\$5,501,392
Firm.....	18.8	0.9	0.6	0.5	Individual.....	250	454	10,277,037	1,664,004
Corporation.....	56.2	97.2	97.6	98.3	Firm.....	178	348	7,736,584	1,357,486
Automobiles, including bodies and parts, 1909.....	113	25,444	\$96,651,451	\$42,769,030	Corporation.....	92	728	16,847,182	2,479,902
Individual.....	10	71	172,570	92,321	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	9	515	1,701,035	887,940	Individual.....	48.1	29.7	29.5	30.2
Corporation.....	94	24,858	94,777,846	41,788,769	Firm.....	34.2	22.2	22.2	24.7
Per cent of total.....	100.0	100.0	100.0	100.0	Corporation.....	17.7	47.6	48.3	45.1
Individual.....	8.3	0.3	0.2	0.2	Foundry and machine-shop products, 1909.....	654	21,649	\$45,399,023	\$26,688,471
Firm.....	8.0	2.0	1.8	2.1	Individual.....	200	1,501	3,000,602	1,749,351
Corporation.....	83.2	97.7	98.1	97.7	Firm.....	128	1,270	2,831,102	1,744,315
Bread and other bakery products, 1909.....	816	2,637	\$11,052,213	\$4,411,614	Corporation.....	326	18,878	39,567,319	23,194,805
Individual.....	686	1,398	5,800,674	2,289,262	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	106	343	1,596,963	607,758	Individual.....	30.6	6.9	6.6	6.6
Corporation.....	24	896	3,654,576	1,514,594	Firm.....	19.6	5.9	6.2	6.5
Per cent of total.....	100.0	100.0	100.0	100.0	Corporation.....	49.8	87.2	87.2	86.9
Individual.....	84.1	63.0	52.4	51.9					
Firm.....	13.0	13.0	14.4	13.8					
Corporation.....	2.9	34.0	33.2	34.3					

¹ Less than one-tenth of 1 per cent.

* Includes the groups "Other," to avoid disclosure of individual operations.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
Furniture and refrigerators, 1909.					Shipbuilding, including boat building, 1909.				
Individual.....	202	16, 610	\$28, 641, 684	\$16, 923, 456	Individual.....	91	2, 344	\$5, 033, 836	\$2, 544, 064
Firm.....	38	537	928, 794	561, 947	Firm.....	59	422	449, 136	261, 150
Corporation.....	27	593	997, 904	556, 950	Corporation.....	19	166	360, 539	210, 042
Per cent of total.....	137	15, 480	26, 714, 886	15, 804, 659	Corporation.....	13	1, 756	4, 227, 161	2, 072, 872
Individual.....	100.0	100.0	100.0	100.0	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	18.8	3.2	3.2	3.3	Individual.....	64.8	18.0	8.9	10.3
Corporation.....	13.4	3.6	3.5	3.3	Firm.....	20.9	7.1	7.2	8.3
Corporation.....	67.8	93.2	93.3	93.4	Corporation.....	14.3	74.9	84.0	81.5
Liquors, malt, 1909.					Slaughtering and meat packing, 1909.				
Individual.....	79	1, 527	\$9, 840, 108	\$7, 419, 069	Individual.....	45	902	\$13, 435, 114	\$1, 769, 289
Firm.....	12	55	317, 671	229, 728	Firm.....	26	103	1, 199, 986	242, 016
Corporation.....	13	151	1, 212, 617	947, 968	Corporation.....	12	72	1, 171, 597	198, 940
Per cent of total.....	54	1, 321	8, 309, 820	6, 241, 373	Corporation.....	7	727	11, 063, 531	1, 328, 333
Individual.....	100.0	100.0	100.0	100.0	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	15.2	3.6	3.2	3.1	Individual.....	57.8	11.4	8.9	13.7
Corporation.....	16.5	9.9	12.3	12.8	Firm.....	26.7	8.0	8.7	11.2
Corporation.....	68.4	86.5	84.4	84.1	Corporation.....	15.6	80.6	82.3	75.1
Lumber and timber products, 1909.					Stoves and furnaces, including gas and oil stoves, 1909.				
Individual.....	1, 180	35, 627	\$61, 513, 560	\$32, 471, 918	Individual.....	33	4, 482	\$9, 122, 873	\$6, 306, 633
Firm.....	580	5, 570	9, 888, 776	5, 103, 708	Individual.....	5	21	41, 163	26, 018
Corporation.....	311	5, 682	9, 696, 787	5, 145, 065	Corporation.....	28	4, 461	9, 081, 710	6, 280, 615
Per cent of total.....	289	24, 375	41, 947, 997	22, 223, 145	Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	100.0	100.0	100.0	100.0	Individual.....	15.2	0.5	0.5	0.4
Firm.....	49.2	15.6	16.0	15.7	Corporation.....	84.8	99.5	99.5	99.6
Corporation.....	26.4	15.9	15.8	15.8	Tobacco manufactures, 1909.				
Corporation.....	24.5	68.4	68.2	68.4	Individual.....	729	7, 876	\$16, 178, 533	\$8, 970, 598
Printing and publishing, 1909.					Firm.....	605	1, 925	3, 338, 052	2, 087, 942
Individual.....	1, 045	7, 219	\$17, 348, 341	\$12, 413, 815	Firm.....	91	794	1, 502, 697	814, 684
Firm.....	598	1, 805	3, 198, 694	2, 405, 930	Corporation.....	33	5, 157	11, 337, 784	6, 068, 072
Corporation.....	177	734	1, 407, 300	985, 368	Per cent of total.....	100.0	100.0	100.0	100.0
Other.....	233	4, 608	12, 469, 990	8, 786, 143	Individual.....	83.0	24.4	20.6	23.3
Per cent of total.....	37	72	272, 357	236, 374	Firm.....	12.5	10.1	9.3	9.1
Individual.....	100.0	100.0	100.0	100.0	Corporation.....	4.5	65.5	70.1	67.6
Firm.....	57.2	25.0	18.4	19.4					
Corporation.....	16.9	10.2	8.1	7.9					
Other.....	22.3	63.8	71.9	70.8					
Other.....	3.5	1.0	1.6	1.9					

¹ Includes the group "Firm," to avoid disclosure of individual operations.

The most important distinction shown is that between corporate and all other forms of ownership. Of the total number of establishments in all industries combined, 28.8 per cent were under corporate ownership in 1909, as against 71.2 per cent under all other forms. The corresponding figures for 1904 were 27.4 per cent and 72.6 per cent, respectively. In respect to value of products the difference was even more pronounced, but in the opposite direction, for in 1909 the establishments operated by corporations reported 83.4 per cent of the total, as against 16.6 per cent for establishments under all other forms of ownership, while in 1904 the corresponding figures were 76.5 per cent and 23.5 per cent, respectively. The establishments operated by firms and those operated by individuals both show decreases between 1904 and 1909 in their proportions of the totals for wage earners and value of products, the decreases being slightly greater in the case of firms.

In 5 of the 17 industries shown separately in the table the majority of the establishments were under the corporate form of ownership, while in all but 3 the establishments under this form of ownership contributed the major part of the total value of products. The 102 establishments in the butter, cheese, and condensed-milk industry which are classified in the table as under "Other" forms of ownership are for the most part cooperative creameries, established and operated by the farmers for the purpose of securing a better and steadier market for their milk and cream.

Size of establishment.—The tendency for manufacturing to become concentrated in large establishments, or the reverse, is a matter of interest from the standpoint of industrial organization. In order to throw some light upon it, the next table groups the establishments according to the value of their products. The table also shows the average size of establishments for all industries combined and for certain important industries separately, as measured by number of wage earners, value of products, and value added by manufacture. The totals for all industries are shown for the last two censuses, while for the individual industries figures are given for 1909 only.

This table shows that in 1909, of the 9,159 manufacturing establishments in the state only 88, or 1 per cent, had a value of products exceeding \$1,000,000 each. These establishments, however, had an average of 56,226 wage earners, or 24.3 per cent of the total number in all establishments, and reported 37.7 per cent of the total value of products and 34.2 per cent of the total value added by manufacture.

On the other hand, the very small establishments—that is, those having a value of products of less than \$5,000—constituted a considerable proportion (36.8 per cent) of the total number of establishments, but the value of their products amounted to only 1.1 per cent of the total. The establishments whose output was valued at \$100,000 but less than \$1,000,000 reported 44 per cent of the total value of products.

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
Lumber and timber products, 1909	1,180	35,627	\$61,513,560	\$32,471,918	Slaughtering and meat packing, 1909	45	902	\$13,435,114	\$1,769,289
Less than \$5,000	429	812	957,731	639,110	Less than \$5,000	7	5	19,165	6,915
\$5,000 and less than \$20,000	332	2,554	3,615,249	2,114,914	\$5,000 and less than \$20,000	10	20	102,927	33,695
\$20,000 and less than \$100,000	249	7,323	11,689,560	6,632,352	\$20,000 and less than \$100,000	18	94	882,649	193,145
\$100,000 and less than \$1,000,000	167	23,351	41,219,956	21,361,365	\$100,000 and less than \$1,000,000	7	139	2,860,028	394,833
\$1,000,000 and over	3	1,582	4,131,024	1,724,177	\$1,000,000 and over	3	644	9,589,445	1,140,701
Per cent of total	100.0	100.0	100.0	100.0	Per cent of total	100.0	100.0	100.0	100.0
Less than \$5,000	36.4	2.3	1.6	2.0	Less than \$5,000	15.6	0.6	0.1	0.4
\$5,000 and less than \$20,000	28.1	7.2	5.7	6.5	\$5,000 and less than \$20,000	22.2	2.2	0.8	1.9
\$20,000 and less than \$100,000	21.1	20.6	19.0	20.4	\$20,000 and less than \$100,000	40.0	10.4	6.4	10.9
\$100,000 and less than \$1,000,000	14.2	65.5	67.0	65.8	\$100,000 and less than \$1,000,000	15.6	15.4	21.3	22.3
\$1,000,000 and over	0.3	4.4	6.7	5.3	\$1,000,000 and over	6.7	71.4	71.4	64.5
Average per establishment		30	\$52,130	\$27,519	Average per establishment		20	\$298,558	\$39,318
Printing and publishing, 1909	1,045	7,219	\$17,348,341	\$12,413,815	Stoves and furnaces, including gas and oil stoves, 1909	33	4,482	\$9,122,873	\$6,306,633
Less than \$5,000	579	803	1,380,472	1,069,970	Less than \$5,000	5	15	16,182	10,298
\$5,000 and less than \$20,000	316	1,577	2,898,592	2,189,911	\$5,000 and less than \$20,000	8	29	97,841	53,308
\$20,000 and less than \$100,000	122	2,361	5,574,727	3,965,107	\$20,000 and less than \$100,000	7	165	815,227	191,403
\$100,000 and less than \$1,000,000	28	2,478	7,494,550	5,188,818	\$100,000 and less than \$1,000,000	9	1,026	2,334,121	1,526,226
Per cent of total	100.0	100.0	100.0	100.0	\$1,000,000 and over	4	3,247	6,359,502	4,525,398
Less than \$5,000	55.4	11.1	8.0	8.6	Per cent of total	100.0	100.0	100.0	100.0
\$5,000 and less than \$20,000	30.2	21.8	16.7	17.6	Less than \$5,000	15.2	0.3	0.2	0.2
\$20,000 and less than \$100,000	11.7	32.7	32.1	31.9	\$5,000 and less than \$20,000	24.2	0.6	1.1	0.8
\$100,000 and less than \$1,000,000	2.7	34.3	43.2	41.8	\$20,000 and less than \$100,000	21.2	3.7	3.5	3.0
Average per establishment		7	\$16,601	\$11,879	\$100,000 and less than \$1,000,000	27.3	22.9	25.6	24.2
					\$1,000,000 and over	12.1	72.4	69.7	71.8
					Average per establishment		136	\$276,451	\$191,110
Shipbuilding, including boat building, 1909	91	2,344	\$5,033,836	\$2,544,064	Tobacco manufactures, 1909	729	7,876	\$16,178,533	\$8,970,598
Less than \$5,000	62	38	102,145	64,735	Less than \$5,000	503	405	1,022,291	644,046
\$5,000 and less than \$20,000	21	101	197,958	117,093	\$5,000 and less than \$20,000	167	935	1,545,615	985,201
\$20,000 and less than \$100,000	9	335	373,579	233,320	\$20,000 and less than \$100,000	40	892	1,427,187	830,372
\$100,000 and less than \$1,000,000	9	1,820	4,360,154	2,128,916	\$100,000 and less than \$1,000,000	16	3,246	5,439,938	2,993,482
Per cent of total	100.0	100.0	100.0	100.0	\$1,000,000 and over	3	2,398	6,743,502	3,517,497
Less than \$5,000	57.1	1.6	2.0	2.5	Per cent of total	100.0	100.0	100.0	100.0
\$5,000 and less than \$20,000	23.1	4.3	3.9	4.6	Less than \$5,000	69.0	5.1	6.3	7.2
\$20,000 and less than \$100,000	9.9	16.4	7.4	9.2	\$5,000 and less than \$20,000	22.9	11.9	9.8	11.0
\$100,000 and less than \$1,000,000	9.9	77.6	86.6	83.7	\$20,000 and less than \$100,000	5.5	11.3	8.8	9.3
Average per establishment		26	\$55,317	\$27,957	\$100,000 and less than \$1,000,000	2.2	41.2	33.6	33.4
					\$1,000,000 and over	0.4	30.4	41.7	39.2
					Average per establishment		11	\$22,193	\$12,305

¹ Includes the group "\$1,000,000 and over."

It will be seen from the above table that during the five years from 1904 to 1909 there was a considerable increase, in the relative importance as measured by number of wage earners, value of products, and value added by manufacture, of the largest establishments—those reporting products valued at not less than \$1,000,000—and a decrease in that of all other classes.

The fact that between 1904 and 1909 the average value of products per establishment increased from \$57,631 to \$74,802, and the average value added by manufacture from \$26,731 to \$34,556 can not be taken as in itself indicating a tendency toward concentration. The increased values shown may be, and probably are, due in part to the increase that has taken place in the prices of commodities. The average number of wage earners per establishment increased from 24 to 25.

The 88 establishments reporting products valued at \$1,000,000 or over included 16 in the automobile industry, 5 flour mills, 5 foundries and machine shops, 4 establishments engaged in the manufacture of stoves and furnaces, and 3 each in the agricultural-implement, chemical, lumber, slaughtering and meat-packing, and tobacco-manufactures industries. The average value of output per establishment was \$855,323 in the automobile industry, \$358,061 in the chemical industry, \$298,558 in the slaughtering and meat-packing industry, \$289,775 in the agricultural-implement industry, and \$276,451 in the stove and furnace industry.

In some respects, and especially from the standpoint of conditions under which persons engaged in manufactures work, the best classification of establishments to bring out the feature of size is a classification according to the number of wage earners employed. The next table shows, for 1909, such a classification for all industries combined and for 29 important industries individually, and gives not only the number of establishments falling into each group, but also the average number of wage earners employed.

Of the 9,159 establishments reported for all industries, 13.1 per cent employed no wage earners; 51.3 per cent, from 1 to 5; 17.5 per cent, from 6 to 20; 7.9 per cent, from 21 to 50; and 10.2 per cent, 51 and over. The most numerous single group consists of the 4,697 establishments employing from 1 to 5 wage earners, and the next of the 1,600 establishments employing from 6 to 20 wage earners. There were 173 establishments that employed over 250 wage earners; 15 of these establishments, of which 5 were automobile factories, employed over 1,000 wage earners each.

Of the total number of wage earners, 41.5 per cent were in establishments employing over 250 wage earners. The single group having the largest number of wage earners was the group comprising the establishments employing from 101 to 250 wage earners each. This group employed 52,775 wage earners, or 22.8 per cent of the total. Practically one-half of the wage earners in the automobile industry were em-

ployed in the five plants employing over 1,000 each, and 68.3 per cent of those in the chemical industry were in the two plants employing over 1,000 each, while in the manufacture of patent medicines the one establishment in this group reported 55.1 per cent of the

total number of wage earners for the industry. In the steam-railroad repair shops and in the men's clothing, paint and varnish, and stove and furnace industries, more than one-half of the wage earners worked in plants employing more than 500 wage earners each.

INDUSTRY.	Total.	ESTABLISHMENTS EMPLOYING—								
		No wage earners.	1 to 5 wage earners.	6 to 20 wage earners.	21 to 50 wage earners.	51 to 100 wage earners.	101 to 250 wage earners.	251 to 500 wage earners.	501 to 1,000 wage earners.	Over 1,000 wage earners.
NUMBER OF ESTABLISHMENTS.										
All Industries.....	9,159	1,200	4,697	1,600	726	428	335	112	46	15
Agricultural implements.....	32	2	12	4	6	2	1	5	7	5
Automobiles, including bodies and parts.....	113		19	21	19	14	23	5		
Beet sugar.....	11				3	3	4		1	
Boots and shoes, including cut stock and findings.....	23		6	3	2	6	4	1	1	
Brass and bronze products.....	60	1	17	11	8	9	10	3		1
Bread and other bakery products.....	816	217	515	62	15	5	2			
Butter, cheese, and condensed milk.....	435	27	378	25	3					
Carriages and wagons and materials.....	212	31	115	36	9	12	4	4	1	
Cars and general shop construction and repairs by steam-railroad companies.....	32		8	5	3	4	3	4	5	
Chemicals.....	36	7	18	3	1	1	3	1		2
Clothing, men's, including shirts.....	40	1	4	13	7	7	5		3	
Flour-mill and gristmill products.....	520	62	415	44	7	2				
Food preparations.....	49	2	28	6			1		1	
Foundry and machine-shop products.....	654	45	236	169	93	59	39	8	5	
Furniture and refrigerators.....	202	5	33	29	43	43	32	15	2	
Gas, illuminating and heating.....	55		17	22	9	5	1		1	
Iron and steel, blast furnaces.....	11				2	6	2	1		
Leather, tanned, curried, and finished.....	24	1		3	7	4	8	1		
Liquors, malt.....	79		22	37	15	3	2			
Lumber and timber products.....	1,180	41	533	283	154	84	60	20	5	
Paint and varnish.....	20	1	7	8	1		2	1	1	
Paper and wood pulp.....	32			5	7	4	14	1	1	
Patent medicines and compounds and druggists' preparations.....	159	53	77	14	11		2	1		1
Printing and publishing.....	1,045	214	699	175	45	12	9	1		
Shipbuilding, including boat building.....	91	23	45	11	2	4	4	1	1	
Slaughtering and meat packing.....	45	5	26	6	5		2	1		
Stoves and furnaces, including gas and oil stoves.....	33		11	6	3	6	2	1	3	1
Tobacco manufactures.....	729	237	368	85	20	5	7	4	2	1
Wirework, including wire rope and cable.....	37	2	13	9	8	2	3			
All other industries.....	2,384	223	1,185	615	209	122	86	34	6	4
AVERAGE NUMBER OF WAGE EARNERS.										
All Industries.....	231,499		10,156	17,898	23,745	30,771	52,775	38,668	31,173	26,313
Agricultural implements.....	2,359		31	67	207	146	170	1,738		
Automobiles, including bodies and parts.....	25,444		61	241	604	1,044	3,637	2,025	5,212	12,620
Beet sugar.....	1,460				105	156	577		622	
Boots and shoes, including cut stock and findings.....	2,455		20	25	67	459	611	276	997	
Brass and bronze products.....	4,771		40	119	234	668	1,578	1,086		1,046
Bread and other bakery products.....	2,637		1,004	627	402	355	249			
Butter, cheese, and condensed milk.....	1,073		607	267	90	109				
Carriages and wagons and materials.....	4,034		247	343	238	825	582	1,245	504	
Cars and general shop construction and repairs by steam-railroad companies.....	5,401		28	64	117	289	541	1,517	2,845	
Chemicals.....	3,174		26	38	24	96	495	328		2,167
Clothing, men's, including shirts.....	3,580		15	167	255	390	813		1,940	
Flour-mill and gristmill products.....	1,530		798	326	269	137				
Food preparations.....	1,303		60	63	272	155	243		510	
Foundry and machine-shop products.....	21,649		587	1,953	2,913	4,204	6,260	2,744	2,988	
Furniture and refrigerators.....	16,610		76	323	1,491	3,093	5,100	5,294	1,233	
Gas, illuminating and heating.....	1,771		61	243	330	388	235		514	
Iron and steel, blast furnaces.....	1,016				75	394	284	263		
Leather, tanned, curried, and finished.....	2,291			53	288	339	1,311	300		
Liquors, malt.....	1,527		66	487	510	219	245			
Lumber and timber products.....	35,627		1,278	3,161	5,101	6,167	9,404	6,937	3,579	
Paint and varnish.....	1,024		17	79	39		258		631	
Paper and wood pulp.....	4,327			58	240	264	2,654	347	764	
Patent medicines and compounds and druggists' preparations.....	3,249		154	175	384		266	481		1,789
Printing and publishing.....	7,219		1,420	1,891	1,454	837	1,363	254		
Shipbuilding, including boat building.....	2,344		95	118	65	312	774	314	666	
Slaughtering and meat packing.....	902		53	56	149		347	297		
Stoves and furnaces, including gas and oil stoves.....	4,482		30	68	112	410	361	255	2,243	1,003
Tobacco manufactures.....	7,876		777	877	571	382	1,273	1,415	1,473	1,108
Wirework, including wire rope and cable.....	909		43	100	245	156	365			
All other industries.....	59,455		2,562	5,909	6,844	8,777	12,779	11,552	4,452	6,580

INDUSTRY.	Total.	ESTABLISHMENTS EMPLOYING—								
		No wage earners.	1 to 5 wage earners.	6 to 20 wage earners.	21 to 50 wage earners.	51 to 100 wage earners.	101 to 250 wage earners.	251 to 500 wage earners.	501 to 1,000 wage earners.	Over 1,000 wage earners.
		PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.								
All industries.....	100.0		4.4	7.7	10.3	13.3	22.8	16.7	13.6	11.4
Agricultural implements.....	100.0		1.3	2.8	8.8	6.2	7.2	78.7		
Automobiles, including bodies and parts.....	100.0		0.2	0.9	2.4	4.1	14.3	8.0	20.5	49.6
Beet sugar.....	100.0				7.2	10.7	39.5		42.6	
Boots and shoes, including cut stock and findings.....	100.0		0.8	1.0	2.7	18.7	24.9	11.2	40.6	
Brass and bronze products.....	100.0		0.8	2.5	4.9	14.0	33.1	22.8		21.9
Bread and other bakery products.....	100.0		38.1	23.8	15.2	13.5				
Butter, cheese, and condensed milk.....	100.0		56.6	24.9	8.4	10.2	9.4			
Carriages and wagons and materials.....	100.0		6.1	8.5	7.1	20.5	14.4	30.9	12.5	
Cars and general shop construction and repairs by steam-railroad companies.....	100.0		0.5	1.2	2.2	5.4	10.0	28.1	52.7	
Chemicals.....	100.0		0.8	1.2	0.8	3.0	15.6	10.3		68.3
Clothing, men's, including shirts.....	100.0		0.4	4.7	7.1	10.9	22.7		54.2	
Flour-mill and gristmill products.....	100.0		52.2	21.3	17.6	9.0				
Food preparations.....	100.0		4.6	4.8	20.9	11.9	18.6		39.1	
Foundry and machine-shop products.....	100.0		2.7	9.0	13.5	19.4	28.9	12.7	13.8	
Furniture and refrigerators.....	100.0		0.5	1.9	9.0	18.6	30.7	31.9	7.4	
Gas, illuminating and heating.....	100.0		3.4	13.7	18.6	21.9	13.3		29.0	
Iron and steel, blast furnaces.....	100.0				7.4	23.8	28.0	25.9		
Leather, tanned, curried, and finished.....	100.0			2.3	12.6	14.8	57.2	13.1		
Liquors, malt.....	100.0		4.3	31.9	33.4	14.3	16.0			
Lumber and timber products.....	100.0		3.6	8.9	14.3	17.3	26.4	19.5	10.0	
Paint and varnish.....	100.0		1.7	7.7	3.8		25.2		61.6	
Paper and wood pulp.....	100.0			1.3	5.5	6.1	61.3	8.0	17.7	
Patent medicines and compounds and druggists' preparations.....	100.0		4.7	5.4	11.8		8.2	14.8		55.1
Printing and publishing.....	100.0		19.7	26.2	20.1	11.6	18.9	3.5		
Shipbuilding, including boat building.....	100.0		4.1	5.0	2.8	13.3	33.0	13.4	28.4	
Slaughtering and meat packing.....	100.0		5.9	6.2	16.5		38.5	32.9		
Stoves and furnaces, including gas and oil stoves.....	100.0		0.7	1.5	2.5	9.1	8.1	5.7	50.0	22.4
Tobacco manufactures.....	100.0		9.9	11.1	7.2	4.8	16.2	18.0	18.7	14.1
Wirework, including wire rope and cable.....	100.0		4.7	11.0	27.0	17.2	40.2			
All other industries.....	100.0		4.3	9.9	11.5	14.8	21.5	19.4	7.5	11.1

Expenses.—As stated in the Introduction, the census does not purport to furnish figures that can be used for determining the cost of manufacture and profits. Facts of interest can, however, be brought out concerning the relative importance of the different classes of expenses which make up the total.

The table in the preceding column shows, for 1909, in percentages, the distribution of expenses among the classes indicated for all industries combined and for certain important industries separately. The figures on which the percentages are based appear in Table II, page 702.

The table shows that, for all industries combined, 62.3 per cent of the total expenses were incurred for materials, 26 per cent for services—that is, salaries and wages—and but 11.6 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries.

Engines and power.—The next table shows, for all industries combined, the number of engines or other motors, according to their character, employed in generating power (including electric motors operated by purchased current), and their total horsepower at the censuses of 1909, 1904, and 1899. It also shows separately the number and horsepower of electric motors, including those operated by current generated in the manufacturing establishments.

The table indicates that the total primary horsepower increased 72,393, or 19.6 per cent, from 1899 to 1904 and 157,398, or 35.7 per cent, from 1904 to 1909. The greater part of the increase was in owned steam and in rented electric power. In 1909, as in 1904 and 1899, steam power formed the major part of the total primary power reported, but notwithstanding an increase of 57,255 horsepower during the earlier five-year period and of 89,430 horsepower during the later period, the proportion which this kind of power formed of the

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries.....	5.9	20.1	62.3	11.6
Agricultural implements.....	10.3	16.9	33.7	34.1
Automobiles, including bodies and parts.....	3.3	20.1	69.8	6.8
Beet sugar.....	4.6	10.7	73.0	11.7
Boots and shoes, including cut stock and findings.....	5.0	18.9	67.6	8.5
Brass and bronze products.....	4.5	19.4	71.0	5.1
Bread and other bakery products.....	4.0	15.8	72.9	7.3
Butter, cheese, and condensed milk.....	1.4	4.1	91.1	3.4
Carriages and wagons and materials.....	5.9	24.8	58.2	11.1
Cars and general shop construction and repairs by steam-railroad companies.....	4.5	51.2	42.6	1.6
Chemicals.....	6.5	23.4	59.0	11.0
Clothing, men's, including shirts.....	6.9	21.5	59.8	12.0
Flour-mill and gristmill products.....	1.2	2.5	92.8	3.3
Food preparations.....	4.6	7.7	50.4	37.4
Foundry and machine-shop products.....	8.4	31.0	47.1	13.5
Furniture and refrigerators.....	8.3	32.5	46.0	13.1
Gas, illuminating and heating.....	12.1	24.5	47.6	15.8
Iron and steel, blast furnaces.....	2.8	11.9	79.4	5.9
Leather, tanned, curried, and finished.....	1.6	8.0	86.0	4.4
Liquors, malt.....	7.6	14.8	32.9	44.9
Lumber and timber products.....	4.3	30.0	63.4	12.3
Paint and varnish.....	13.5	8.5	61.3	16.7
Paper and wood pulp.....	3.4	17.2	72.7	6.7
Patent medicines and compounds and druggists' preparations.....	18.7	13.2	43.4	24.7
Printing and publishing.....	15.0	28.2	34.7	19.1
Shipbuilding, including boat building.....	6.5	29.2	52.7	11.6
Slaughtering and meat packing.....	1.2	3.8	92.3	2.6
Stoves and furnaces, including gas and oil stoves.....	9.5	35.7	35.5	19.3
Tobacco manufactures.....	4.9	20.9	48.9	25.3
Wirework, including wire rope and cable.....	6.8	8.9	71.8	12.5
All other industries.....	6.6	19.2	63.2	11.0

total primary power decreased from 86.5 per cent in 1899 to 85.3 per cent in 1904 and 77.8 per cent in 1909. The more general use of gas engines in recent years is shown, 1,167 such engines, with an indicated capacity of 13,988 horsepower, being reported in 1909, as against 954 engines, with 10,534 horsepower, in 1904, and 586 engines, with 5,603 horsepower, in 1899. The figures also show that the practice of renting electric power is increasing rapidly, 74,270 horsepower, or 12.4 per cent of the total primary power, being of this character in 1909, as compared with 12,411 horsepower, or 2.8 per cent, in 1904 and 4,264 horsepower, or 1.2 per cent, in 1899. The use of electric motors for the purpose of applying the power generated within the establishments is rapidly becoming more common, the horsepower of such motors increasing from 7,824 in 1899 to 27,559 in 1904 and 58,794 in 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.			PER CENT DISTRIBUTION OF HORSEPOWER.		
	1909	1904	1899 ¹	1909	1904	1899 ¹	1909	1904	1899
Primary power, total.....	15,527	6,616	6,538	598,288	440,890	368,497	100.0	100.0	100.0
Owned.....	6,967	6,616	6,536	521,543	426,074	362,112	87.2	96.6	98.3
Steam.....	5,068	4,978	5,220	465,520	376,090	318,836	77.8	85.3	86.5
Gas.....	1,167	954	586	13,988	10,534	5,603	2.3	2.4	1.5
Water wheels.....	700	684	730	41,442	39,342	36,529	6.9	8.9	9.9
Water motors.....	34	(*)	(*)	577	(*)	(*)	0.1	(*)	(*)
Other.....				16	108	1,145	(*)	(*)	0.3
Rented.....	8,560	(*)	(*)	76,745	14,816	6,385	12.8	3.4	1.7
Electric.....	8,560	(*)	(*)	74,270	12,411	4,264	12.4	2.8	1.2
Other.....				2,475	2,405	2,121	0.4	0.5	0.6
Electric motors.....	12,917	1,826	288	133,064	39,970	12,088	100.0	100.0	100.0
Run by current generated by establishment.....	4,357	1,826	288	58,794	27,559	7,824	44.2	68.9	64.7
Run by rented power.....	8,560	(*)	(*)	74,270	12,411	4,264	55.8	31.1	35.3

¹ Includes the neighborhood industries and hand trades, omitted in 1904 and 1909.
² Not reported. ³ Less than one-tenth of 1 per cent.

Fuel.—Closely related to the question of kind of power employed is that of the fuel consumed in generating this power, or otherwise used as material in the manufacturing processes.

The following table shows the quantity of each kind of fuel used in 1909 for all industries combined and for certain selected industries:

INDUSTRY.	Anthracite coal (tons).	Bituminous coal (tons).	Coke (tons).	Wood (cords).	Oil, including gasoline (barrels).	Gas (1,000 feet).
All industries.....	61,448	4,524,009	270,264	709,434	384,140	316,102
Agricultural implements.....	45	23,895	3,543	221	10,456	.....
Automobiles, including bodies and parts.....	1,451	98,900	5,178	1,810	34,939	90,610
Beet sugar.....	8,981	140,131	8,585	6	.....	.....
Boots and shoes, including cut stock and findings.....	5	3,766	15	35	.....	238
Brass and bronze products.....	2,684	55,381	16,106	201	15,333	8,491
Bread and other bakery products.....	5,038	11,505	9,683	18,186	215	29,756
Butter, cheese, and condensed milk.....	462	41,585	513	5,003	239	.....
Carrriages and wagons and materials.....	126	35,477	633	1,619	765	76
Cars and general shop construction and repairs by steam-railroad companies.....	722	79,292	795	1,153	10,171	799
Chemicals.....	11	1,065,882	320	2,194	2,440	.....
Clothing, men's, including shirts.....	18	3,561	7	8	26	2,455
Flour-mill and gristmill products.....	1,035	77,069	5	7,258	2,398	867
Food preparations.....	2,330	47,641	3,827	.....	35	38,968
Foundry and machine-shop products.....	2,251	157,055	44,141	3,857	19,119	21,814
Furniture and refrigerators.....	5,430	100,371	1,480	1,526	295	3,206
Gas, illuminating and heating.....	2,423	426,703	3,192	.....	111,857	.....
Iron and steel, blast furnaces.....	.....	9,167	123,174	173,224	.....	.....
Leather, tanned, curried, and finished.....	1,500	66,554	.....	52	1	.....
Liquors, malt.....	198	78,890	650	9,768	37	310
Lumber and timber products.....	1,251	70,242	20	7,656	1,799	1,777
Paint and varnish.....	31	17,827	2,040	.....	50	631
Paper and wood pulp.....	.....	385,344	.....	11,298	.....	47
Patent medicines and compounds and druggists' preparations.....	313	25,196	23	28	63	2,681
Printing and publishing.....	1,557	12,807	297	1,838	1,470	23,063
Shipbuilding, including boat building.....	13	26,933	636	279	2,346	14
Slaughtering and meat packing.....	45	19,644	.....	1,283	36	281
Smelting and refining, copper.....	5,862	63,426	3,097	.....	15	.....
Stoves and furnaces, including gas and oil stoves.....	98	26,658	12,482	685	499	3,782
Tobacco manufactures.....	865	9,890	150	617	1	689
Wirework, including wire rope and cable.....	9	4,929	140	.....	160	722
All other industries.....	16,704	1,338,258	20,532	460,309	169,376	24,825

NOTE.—In addition, there were 179,890 tons of other varieties of fuel reported.

SUPPLEMENTARY DATA REGARDING IMPORTANT INDUSTRIES.

(With statistics for laundries and custom sawmills and gristmills.)

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantity and cost of materials and the quantity and value of products and other information for securing which no provision is made on the general schedule. Data for 10 important industries in Michigan are here presented.

Automobiles, including bodies and parts.—The number and value of the different classes of machines manufactured, as reported at the censuses of 1909 and 1904, are shown in the next table.

There were 64,800 machines of all kinds, valued at \$70,359,749, turned out in 1909, as compared with 9,125 machines, valued at \$6,552,804, in 1904. The increase in value was much greater relatively than that in number, so that the average value per machine in 1909, \$1,086, was higher than in 1904, when it was \$718. The value of all other products reported, which, for the

most part, represents the value of automobile bodies and parts turned out by establishments engaged primarily in that branch of manufacture, increased even more rapidly than that of the complete machines, being more than eighteen times as great in 1909 as in 1904; the fact that the value of "All other products" in 1909 was \$26,291,702 indicates the importance of that branch of the industry.

While comparative figures in respect to the horsepower of the machines manufactured are not available for previous censuses, it is of interest to know that of the 64,800 machines reported for 1909, 4,328 were of less than 10 horsepower; 13,814, of 10 horsepower but less than 20; 17,938, of 20 horsepower but less than 30; 28,103, of 30 horsepower but less than 50; and 617, of 50 horsepower but less than 90.

In 1909 all the automobiles manufactured were gasoline, except 538 which were electric; in 1904 only

11 electric automobiles were reported. Of the total number of cars reported for 1909, 64,025, or 98.8 per cent, were passenger vehicles, and 775, or 1.2 per cent, were business vehicles. In 1904 only 102 of the last-named vehicles were reported, forming about the same proportion of the total number manufactured as in 1909. In 1909, 68.5 per cent of the passenger vehicles were touring cars, and 28.9 per cent runabouts.

PRODUCT.	1909		1904	
	Number.	Value.	Number.	Value.
Total value.....		\$96,651,451		\$7,996,534
Automobiles.....	64,800	70,359,749	9,125	6,552,804
Gasoline.....	64,262	69,130,223	9,114	6,537,404
Electric.....	538	1,229,526	11	16,490
Passenger vehicles.....	64,025	69,038,967	9,023	6,481,164
Buggies, runabouts, and touring cars.....	62,319	64,940,793	9,023	6,481,164
Limousines, cabs, etc.....	1,560	3,825,666	(¹)	
Omnibuses, ambulances, fire-department patrol, sight-seeing wagons, etc.....	146	273,108	(¹)	
Business vehicles(merchandise)	775	1,320,782	102	71,640
Delivery wagons.....	401	319,071	51	35,250
Trucks and all other.....	374	1,001,711	51	36,390
All other products, including bodies and parts and repair work.....		26,291,702		1,443,730

¹ Not reported.

Lumber and timber products.—This industry in Michigan dates from 1834, when the first steam sawmill was built in the Saginaw Valley. Its growth thereafter was very rapid, for in 1849 there were 558 establishments reported, which employed an average of 2,730 wage earners and turned out products valued at \$2,464,000. The industry was at first concentrated along the valleys of the Grand, Saginaw, and Muskegon Rivers and their tributaries, and at such lake ports as Alpena, Manistee, Ludington, Cheboygan, and Grand Haven.

The following statement of the production of rough lumber, lath, and shingles in 1909 and 1899 indicates the decline which has taken place in the sawmill branch of the lumber industry during the last decade:

PRODUCT.		1909	1899
Rough lumber.....	M feet b. m.	1,889,724	3,018,338
Lath.....	thousands..	218,308	259,917
Shingles.....	thousands..	891,649	1,926,110

In 1899 Michigan was the second state in the Union in the production of rough lumber, with a total output of 3,018,338 M feet board measure, but in 1909 it had dropped to tenth place in this respect, with a production of only 1,889,724 M feet, a decrease of 37.4 per cent in 10 years. The output of lath fell off 16 per cent and that of shingles 53.7 per cent during the same period.

Until recently the cut consisted very largely of white pine, but the depletion of the great white-pine forests, which made Michigan at one time the foremost lumber state, has necessitated the utilization of other

woods, of which the state has a considerable supply. In 1909 the combined output of softwood formed only a little over one-half of the total cut. Hemlock contributed nearly two-thirds and white pine only about one-fourth of the softwood, while small quantities of spruce, cedar, tamarack, and balsam fir were also reported. Maple was by far the most important of the hardwoods, while beech, basswood, birch, elm, and oak constituted most of the remainder. The state ranked first in 1909 in the cut of maple and beech.

Flour-mill and gristmill products.—The following tabular statement gives the quantity and value of products for the last three census years:

PRODUCT.	1909	1904	1899
Total value.....	\$34,880,803	\$26,512,027 ¹	\$21,643,547
Wheat flour:			
White—			
Barrels.....	3,409,122	3,860,809	
Value.....	\$18,659,601	\$16,987,310	4,050,329
Graham—			\$14,849,601
Barrels.....	38,678	40,410	
Value.....	\$178,990	\$167,780	
Corn meal and corn flour:			
Barrels.....	177,189	210,116	537,630
Value.....	\$606,706	\$506,615	\$1,029,936
Rye flour:			
Barrels.....	61,963	61,842	44,260
Value.....	\$266,698	\$219,597	\$128,567
Buckwheat flour:			
Pounds.....	20,161,026	21,930,856	13,626,863
Value.....	\$547,024	\$524,429	\$282,728
Barley meal:			
Pounds.....	33,600	205,770	546,550
Value.....	\$499	\$2,411	\$6,763
Hominy and grits:			
Pounds.....	38,610	43,802	2,669,950
Value.....	\$1,098	\$1,075	\$19,972
Feed:			
Tons.....	354,591	212,575	209,536
Value.....	\$10,203,552	\$4,535,938	\$3,626,216
Offal:			
Tons.....	166,219	191,829	154,011
Value.....	\$3,709,934	\$3,314,293	\$1,960,207
All other products.....	\$629,701	\$252,579	\$239,507

The output of wheat flour in 1909 was 453,419 barrels less than in 1904, and 602,529 barrels less than in 1899, representing a decrease of 11.6 per cent for the five-year period, and 14.9 per cent for the decade. Owing, however, to the higher price of flour prevailing in 1909, an increase of \$1,683,501, or 9.8 per cent, is shown in its value from 1904 to 1909, and of \$4,488,990, or 31.3 per cent, from 1899 to 1909. The increase during the more recent five-year period in the total value of products for the industry was due mainly to the decided advance in the value of feed reported, the output of which increased 66.8 per cent in quantity, and 124.9 per cent in value, during the five years. The value of corn meal and corn flour combined increased 19.8 per cent, but the output of these products decreased 15.7 per cent. Rye flour was the only product besides feed showing increases in both quantity and value, the increases being two-tenths of 1 per cent and 21.5 per cent, respectively.

Of the total value of products reported in 1909, the value of white flour formed 53.5 per cent; that of feed, which is made principally from corn and oats, 29.3 per cent; and that of offal, which consists chiefly

of bran and middlings, the by-products of the manufacture of wheat flour, 10.8 per cent. The corresponding proportions for 1904 were 64.1 per cent, 17.1 per cent, and 12.5 per cent, respectively.

The equipment of the flour mills and gristmills of the state in 1909 included 3,833 pairs of rolls and 336 runs of stone and steel burrs, as compared with 3,823 pairs of rolls and 406 runs of stone and steel burrs in 1904. Nineteen mills manufactured barrels in 1909 and two manufactured sacks.

Printing and publishing.—Although this industry as a whole in Michigan shows decided development during the decade 1899–1909, as measured by the financial statistics, the increase was due more to the extensive development of the book and job printing branch than to the growth in the publication of newspapers and periodicals. The following table gives the number and aggregate circulation of the newspapers and periodicals published in 1909, 1904, and 1899, classified according to frequency of issue:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total.....	747	787	706	2,766,282	3,074,297	2,374,403
Daily.....	87	86	70	681,919	544,282	370,848
Sunday.....	15	12	8	256,583	172,087	(¹)
Semiweekly and tri-weekly.....	34	30	28	82,640	99,339	200,073
Weekly.....	528	570	522	750,298	774,758	752,032
Monthly.....	73	74	65	927,601	1,372,519	984,025
All other classes.....	12	15	13	67,241	110,712	67,425

¹ Included in circulation of dailies.

Although both the total number of publications and their aggregate circulation were smaller in 1909 than in 1904, both were greater than in 1899. The circulation of all classes of publications except daily and Sunday newspapers decreased from 1904 to 1909, but the greatest decrease was in the circulation of monthlies, which fell off 444,918 during the five-year period. The combined circulation of the daily and Sunday editions was 938,502 in 1909, as compared with 370,848 in 1899, a gain of 153.1 per cent for the decade. The number of dailies increased from 70 in 1899 to 87 in 1909, while the number of Sunday editions increased from 8 to 15 during the same period.

The circulation of the weeklies increased somewhat between 1899 and 1904, but as a result of a decrease during the next five years it was slightly less in 1909 than at the beginning of the decade. The circulation of the semiweeklies and triweeklies fell off more than one-half, and that of the monthlies 5.7 per cent, during the decade, although there was a considerable increase in the latter class of publications from 1899 to 1904.

Of the 747 publications reported in 1909, 50, having a combined circulation of 144,082, were printed in foreign languages. Of these, 18 were printed in German, 10 each in Dutch and Finnish, 4 in Polish, 3 in Swedish, and 1 each in Croatian, French, Italian,

Italian and English, and Slovenian. Five of the 50 publications were dailies and 30 were weeklies.

Leather, tanned, curried, and finished.—The quantity and cost of the materials used in the industry and the quantity and value of its products for 1909, 1904, and 1899 are shown in the following statement:

MATERIAL OR PRODUCT.	1909	1904	1899
Materials used, total cost.....	\$12,120,971	\$7,271,023	\$4,697,367
Hides (all kinds):			
Number.....	1,430,885	1,126,456	751,935
Cost.....	\$5,022,645	\$5,292,740	\$3,582,896
Skins:			
Calf and kip—			
Number.....	918,666	312,951	
Cost.....	\$881,805	\$287,839	
All other—			620,507
Number.....	856,386	594,014	
Cost.....	\$173,383	\$224,774	\$329,831
All other materials.....	\$3,043,138	\$1,465,620	\$784,640
Products, total value.....	\$15,331,104	\$9,340,349	\$6,015,590
Leather:			
Sole—			
Sides.....	1,603,512	1,353,293	914,954
Value.....	\$7,326,276	\$4,954,749	\$3,090,684
Upper—			
Sides.....	716,396	406,235	231,559
Splits.....	760,801	532,757	100,000
Value.....	\$3,087,868	\$1,426,455	\$817,888
Harness—			
Sides.....	214,879	195,695	212,386
Value.....	\$1,210,132	\$854,690	\$989,832
Trunk, bag, and pocketbook.....	\$476,862	\$788,535	\$107,763
All other.....	\$2,840,322	\$1,010,006	\$585,108
All other products.....	\$225,619	\$153,650	\$231,102
Amount received for work on materials for others.....	\$164,025	\$152,264	\$133,213

The number of hides used increased 90.3 per cent and their cost 123.9 per cent from 1899 to 1909, while the number of skins used showed an even greater increase—186.1 per cent.

Hides were converted chiefly into sole, upper, and harness leather. Sole leather, practically all of which was hemlock, was the principal product, the output having increased 75.3 per cent during the decade. The quantity and value of upper leather increased substantially during the same time. The production of harness leathers shows a falling off in both quantity and value from 1899 to 1904, but more than made up these losses during the succeeding five years. Trunk, bag, and pocketbook leathers show a large increase in value in 1909 as compared with 1899, but a considerable loss as compared with 1904.

Butter, cheese, and condensed milk.—The increasing practice of separating the cream from the milk on the farm instead of sending the whole milk to the factories is indicated by the fact that in 1909, in spite of a considerable growth in the industry as a whole, only 270 cream separators were used in the various factories of the state, as compared with 379 in 1904. The quantity of milk used in the industry decreased from 670,230,324 pounds in 1904 to 478,008,911 pounds in 1909, whereas the quantity of cream made the remarkable increase from 7,714,987 pounds in 1904 to 83,241,827 pounds in 1909. The home separation of milk, together with the fact that in some sections of the state it is coming to be more profitable to sell the milk to retail dealers and to the creameries than to

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cheese factories, account in a measure for the decrease in the production of cheese during the period from 1904 to 1909. During this period the number of establishments engaged primarily in the manufacture of butter increased from 203 to 299, while the number of cheese factories decreased from 162 to 128. Eight condensed-milk factories were reported in 1909 as compared with 6 in 1904.

The quantity and value of products for 1909, 1904, and 1899 are presented in the following table:

PRODUCT.	1909	1904	1899
Total value.....	\$14,287,499	\$8,208,706	\$3,918,995
Butter:			
Packed solid—			
Pounds.....	30,328,760	19,272,730	7,553,059
Value.....	\$3,586,270	\$4,027,770	\$1,472,872
Prints or rolls—			
Pounds.....	5,183,000	1,740,270	267,653
Value.....	\$1,456,867	\$383,426	\$53,199
Cream sold:			
Pounds.....	2,572,764	3,139,609	1,049,312
Value.....	\$249,276	\$234,540	\$60,032
All other butter-factory products ¹	\$98,862	\$136,700	\$75,782
Cheese:			
Full-cream—			
Pounds.....	13,028,317	16,452,577	9,995,766
Value.....	\$1,860,879	\$1,076,280	\$932,776
Part-cream—			
Pounds.....	76,220	.....	.....
Value.....	\$10,984	.....	.....
Other kinds ² —			
Pounds.....	277,623	362,279	426,816
Value.....	\$40,012	\$41,796	\$49,783
All other cheese-factory products ³	\$6,516	\$26,212	\$11,934
Condensed milk:			
Sweetened—			
Pounds.....	27,695,866	27,266,506	18,378,869
Value.....	\$1,693,030	\$1,630,730	\$1,262,817
Unsweetened—			
Pounds.....	4,709,978	415,102	.....
Value.....	\$231,591	\$13,547	.....
All other products.....	\$53,212	\$37,705	.....

¹ Includes skimmed milk sold and casein. ² Includes skimmed-milk cheese.
³ Includes whey.

The increase in this industry was due principally to the greater production of butter, which in 1909 was more than four times as great in quantity and more than six times as great in value as in 1899. The greater part of the butter produced was packed solid, though an increasing proportion was put up in prints or rolls, 14.6 per cent of the total output being in this form in 1909, as compared with only 3.4 per cent in 1899. The amount of cheese manufactured was less in 1909 than in 1904, but greater than in 1899, although its value showed an increase at each census. The output of condensed milk increased steadily from census to census.

Paper and wood pulp.—Michigan ranked eighth among the states in the manufacture of paper and wood pulp in 1909. A total of 132,846 cords of wood was used, of which hemlock formed 43.8 per cent; spruce, domestic and imported, 22.5 per cent; slab wood and other mill waste, 18.2 per cent; and balsam fir, 9.9 per cent. The quantity and cost of the principal materials used in the manufacture of paper and wood pulp, the quantity and value of the principal products, and the equipment reported in 1909, 1904, and 1899 are shown in the next table.

MATERIAL, PRODUCT, OR MACHINE.	1909	1904	1899
Materials used, total cost.....	\$9,024,595	\$4,581,471	\$2,707,827
Pulp wood.....	\$858,230	\$486,748	\$161,314
Wood pulp, purchased:			
Tons.....	60,750	35,879	20,097
Cost.....	\$2,405,975	\$1,269,198	\$732,948
Ground—			
Tons.....	15,320	9,712	4,054
Cost.....	\$384,489	\$191,713	\$81,287
Sulphite fiber—			
Tons.....	29,070	15,197	14,476
Cost.....	\$1,329,972	\$630,761	\$338,682
Other chemical fiber—			
Tons.....	16,360	10,970	7,567
Cost.....	\$691,514	\$446,724	\$315,999
Rags, including cotton and flax waste and sweepings:			
Tons.....	11,939	8,192	4,902
Cost.....	\$333,886	\$199,937	\$137,772
Old and waste paper:			
Tons.....	114,497	60,417	32,836
Cost.....	\$2,183,302	\$1,058,014	\$700,270
All other materials.....	\$3,183,202	\$1,567,574	\$975,523
Products, total value.....	\$13,922,124	\$7,340,631	\$4,217,869
Book, cover, plate, and coated paper:			
Tons.....	85,048	52,048	48,200
Value.....	\$6,499,865	\$3,628,907	\$2,350,790
Wrapping paper:			
Tons.....	50,328	32,654	20,370
Value.....	\$2,709,583	\$1,565,861	\$811,750
Boards:			
Tons.....	56,342	26,882	14,051
Value.....	\$1,866,436	\$812,781	\$348,947
Building, roofing, and sheathing paper:			
Tons.....	5,539	3,308	1,337
Value.....	\$169,218	\$100,004	\$34,489
Wood pulp made for sale or for consumption in mills other than where produced:			
Tons.....	8,199	11,158	8,184
Value.....	\$300,948	\$407,286	\$346,516
All other products.....	\$2,286,074	\$825,132	\$325,427
Wood pulp:			
Quantity produced (including that used in mills where manufactured), tons.....	65,331	38,612	20,707
Ground.....	12,273	14,079	6,676
Soda fiber.....	.....	.....	1,033
Sulphite fiber.....	53,058	24,533	12,998
Equipment:			
Paper machines:			
Total number.....	68	55	46
Capacity, yearly, tons.....	301,345	181,108	111,669
Fourdriner—			
Number.....	43	34	23
Capacity per 24 hours, tons.....	573	444	(¹)
Cylinder—			
Number.....	25	21	23
Capacity per 24 hours, tons.....	321	185	(¹)
Pulp:			
Grinders, number.....	17	20	26
Digesters, number.....	27	24	18
Capacity, yearly, tons of pulp, total.....	74,932	40,410	20,558
Mechanical.....	18,303	25,810	(²)
Chemical.....	56,629	20,600	(²)

¹ Not reported.

² Not reported separately.

The total cost of materials used increased 97 per cent from 1904 to 1909. During the same period the total cost of pulp wood consumed increased 76.3 per cent, and that of wood pulp purchased 89.6 per cent. Out of a total of 60,750 tons of purchased wood pulp in 1909, 47.9 per cent was produced by the sulphite process, 26.9 per cent by other chemical processes, and the remainder by the mechanical process.

The principal product was book paper, the value of which represented nearly one-half of the total value of products in 1909. During the decade the quantity of this paper manufactured increased 78.5 per cent and the value 176.5 per cent. Wrapping paper and boards also show large increases. The total amount of wood pulp produced, including that used in the mills where it was manufactured, increased from 38,612 tons in 1904 to 65,331 tons in 1909. Of this total for 1909, 81.2 per cent was sulphite fiber and the remaining

18.8 per cent ground wood. The value of the "Wood pulp made for sale or for consumption in mills other than where produced" fairly represents the amount of duplication in the combined paper and wood pulp industry, because this product of the pulp mills of Michigan is used largely as material in the paper mills of the same state.

The number of paper machines increased 13 and the yearly capacity 120,237 tons from 1904 to 1909, while the corresponding increases from 1899 to 1904 were 9 and 69,439, respectively. The number of Four-drinier paper machines increased from 23 in 1899 to 43 in 1909, and the cylinder machines from 23 to 25. The number of digesters increased during the decade from 18 to 27, with a much greater relative increase in the output of sulphite fiber. There was a decrease from 1904 to 1909, however, in the number of grinders, accompanied by a decrease in the amount of ground wood produced, though more than twice as much ground wood was made in 1904, when 20 grinders were reported, as in 1899, when 26 grinders were reported.

Slaughtering and meat packing.—The following table gives the quantity and value of the various products reported for 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value	\$13,435,114	\$6,355,650	\$5,401,523
Beef, fresh:			
Pounds.....	24,099,494	12,149,200	16,467,625
Value.....	\$1,831,128	\$850,668	\$1,184,398
Veal, fresh:			
Pounds.....	2,603,074	992,370	674,400
Value.....	\$309,568	\$83,703	\$90,815
Mutton, fresh:			
Pounds.....	3,509,894	2,350,900	1,925,618
Value.....	\$363,474	\$199,644	\$159,932
Pork, fresh:			
Pounds.....	16,470,567	9,909,375	12,036,427
Value.....	\$2,014,770	\$839,370	\$821,545
Pork, salted or cured:			
Pounds.....	36,145,040	30,277,890	35,954,900
Value.....	\$4,707,150	\$3,003,527	\$2,470,251
Sausage, fresh or cured	\$1,397,533	\$381,580	\$277,091
Lard:			
Pounds.....	13,351,255	8,146,372	2,284,883
Value.....	\$1,859,703	\$824,370	\$161,885
Hides:			
Number.....	57,635	26,455	40,243
Pounds.....	2,982,942	1,619,500	1,897,918
Value.....	\$365,080	\$131,686	\$165,857
Pelts:			
Number.....	88,285	44,510	(¹)
Value.....	\$94,862	\$39,056	(¹)
All other products.....	\$391,816	\$202,046	\$99,729

¹ Figures not available.

The slaughtering and meat-packing industry has made large gains in Michigan during the past few years, the total value of products in 1909 being more than double that in 1904. The combined value of fresh and cured pork represented a little more than one-half the total for the industry in 1909. Both fresh and cured pork showed large actual gains in 1909 as compared with 1904, though not so great relatively as some of the other products. The most notable increases during this period were in the value of fresh beef, lard, and sausage, the value of the first being over twice as great, that of the second nearly three times as great, and that of the third over three and one-half times as great in 1909

as in 1904. All the other products enumerated, but more especially fresh veal, show considerable gains in both quantity and value for this five-year period. As a result of the increase in prices, however, the reported increase in value was in all cases greater than that in quantity.

Beet sugar.—The importance of the state in this industry and the increasing proportion that beet sugar constitutes of the total sugar production of the country make the supplemental data for this industry of particular interest.

The following table shows the quantity of beets used and the quantity and value of the different sugar-beet products reported for 1909, 1904, and 1899:

MATERIAL OR PRODUCT.	1909	1904	1899
Beets used, tons.....	816,609	535,508	205,925
Products, total value.....	\$10,476,876	\$5,378,004	\$1,602,268
Sugar:			
Granulated—			
Tons.....	103,864	59,966	16,369
Value.....	\$9,756,587	\$5,184,031	\$1,561,100
Raw—			
Tons.....	551	2,016	486
Value.....	\$41,404	\$120,109	\$39,184
Molasses and sirup:			
Gallons.....	5,016,748	1,081,131	321,100
Value.....	\$337,200	\$21,741	\$1,225
Pulp.....	\$339,025	\$45,414	\$341
All other products.....	\$2,660	\$6,709	\$516

The quantity of beets used increased from 205,925 tons in 1899 to 816,609 tons in 1909, and the quantity of granulated sugar manufactured from 16,369 tons to 103,864 tons during the same period. The value of granulated sugar constituted 93.1 per cent of the total value of products in 1909, molasses and sirup and pulp accounting for most of the remainder.

Carriages and wagons and materials.—The decline which has taken place in this industry during recent years is brought out in the following table, which shows the number and value of the different kinds of vehicles manufactured in 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value	\$10,158,883	\$14,889,457	\$12,887,134
Carriages (family and pleasure):			
Number.....	91,558	174,889	163,254
Value.....	\$4,453,090	\$7,784,444	\$7,425,764
Wagons:			
Number.....	28,720	52,273	49,909
Value.....	\$1,586,172	\$2,352,958	\$2,049,490
Business—			
Number.....	17,600	20,283	(¹)
Value.....	\$985,599	(¹)	(¹)
Farm—			
Number.....	10,937	30,621	(¹)
Value.....	\$523,803	(¹)	(¹)
Government, municipal, etc.—			
Number.....	183	1,469	(¹)
Value.....	\$76,770	(¹)	(¹)
Public conveyances (cabs, hacks, hansoms, hotel coaches, omnibuses, etc.):			
Number.....	201	120	.....
Value.....	\$118,490	\$118,026	.....
Sleighs and sleds:			
Number.....	32,751	63,180	51,149
Value.....	\$570,207	\$977,822	\$846,765
Automobiles:			
Number.....	143	.....	.....
Value.....	\$179,819	.....	.....
All other products, including parts and repair work.....	\$3,251,105	\$3,658,207	\$2,585,155

¹ Not reported separately.

During the past few years there has been, in Michigan, a considerable shifting of capital from the manufacture of carriages and wagons to the manufacture of automobiles. As a result of the increasing displacement of carriages and wagons by motor vehicles not only has the automobile industry attracted new capital into the state, but many factories which were formerly engaged in the manufacture of carriages and wagons have found it more profitable to use their plants for making automobiles or automobile bodies or parts.

Less than half as many pleasure carriages were manufactured in the state in 1909 as in 1899, and in the number of wagons the loss was nearly as great. The decreases took place mainly during the five years from 1904 to 1909.

Laundries.—Statistics for steam laundries are not included in the general tables, or in the totals for manufacturing industries. There were 219 such establishments in Michigan, 35 of which were in Detroit, 8 in Lansing, 5 each in Grand Rapids, Ann Arbor, and Battle Creek, and 4 each in Adrian, Jackson, Port Huron, and Saginaw.

The following statement summarizes the statistics:

Number of establishments.....	219
Persons engaged in the industry.....	4,328
Proprietors and firm members.....	249
Salaried employees.....	350
Wage earners (average number).....	3,729
Primary horsepower.....	4,071
Capital.....	\$2,009,251
Expenses.....	2,594,945
Services.....	1,602,951
Materials.....	621,786
Miscellaneous.....	370,208
Amount received for work done.....	3,261,841

The most common form of ownership was the individual, with 137 establishments. The firm and corporate forms of ownership were represented by 49 and 33 establishments, respectively. Ninety-six establishments had receipts for the year's business of less than \$5,000; 77, receipts of \$5,000 but less than \$20,000; 41, receipts of \$20,000 but less than \$100,000; and 5, receipts of \$100,000 but less than \$1,000,000.

The number of wage earners employed each month and the per cent which this number represents of the greatest number employed in any month were as shown in the next table.

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MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	3,434	83.8	July.....	4,066	99.3
February.....	3,423	83.6	August.....	4,096	100.0
March.....	3,463	84.5	September.....	3,987	97.3
April.....	3,567	87.1	October.....	3,795	92.7
May.....	3,639	88.8	November.....	3,726	91.0
June.....	3,821	93.3	December.....	3,732	91.1

The different kinds of primary power, the number of engines or motors, and the horsepower used in 1909 are shown in the following tabular statement:

KIND.	Number of engines or motors.	Horsepower.
Primary power, total.....		4,071
Owued:		
Steam.....	163	3,537
Gas.....	25	100
Water motors.....	1	1
Rented:		
Electric.....	90	430
Other.....		3

The kind and amount of fuel used are shown in the following statement:

KIND.	Unit.	Quantity.
Anthracite coal.....	Tons.....	854
Bituminous coal.....	Tons.....	43,030
Coke.....	Tons.....	361
Wood.....	Cords.....	2,041
Oil.....	Barrels.....	640
Gas.....	1,000 feet.....	14,981

Custom sawmills and gristmills.—Statistics for custom sawmills and gristmills are not included in the general tables or in the totals for manufacturing industries, but are presented in the following table:

	Custom sawmills.	Custom gristmills.
Number of establishments.....	197	208
Persons engaged in the industry.....	580	357
Proprietors and firm members.....	271	256
Salaried employees.....	3	8
Wage earners (average number).....	306	93
Primary horsepower.....	4,894	7,172
Capital.....	\$322,255	\$722,877
Expenses.....	125,639	1,851,926
Services.....	103,029	39,798
Materials.....	4,051	1,792,317
Miscellaneous.....	18,559	19,811
Value of products.....	236,209	1,214,461

¹Includes estimate of all grain ground. A similar estimate for value of lumber sawed by custom sawmills is impracticable.

STATISTICS OF MANUFACTURES.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.					Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).								
Expressed in thousands.														
DETROIT—Continued.														
Boots and shoes, including cut stock and findings.	1909	8	1,453	6	120	1,327	362	\$1,582	\$160	\$491	\$1,702	\$2,744	\$1,042	
	1904	18	1,037	6	105	926	.....	1,074	134	400	1,117	2,039	922
	1899	16	690	12	33	645	.....	741	33	235	702	1,213	511
Boxes, cigar.....	1909	4	260	4	7	240	164	140	7	76	111	228	127	
	1904	4	214	4	8	202	.....	102	7	62	85	184	98
	1899	3	160	4	4	152	.....	90	4	34	50	119	69
Boxes, fancy and paper.....	1909	7	400	6	23	366	142	357	35	115	148	282	234	
	1904	8	438	6	17	415	.....	265	26	97	115	213	198
	1899	5	399	4	14	381	.....	191	15	70	85	230	145
Brass and bronze products.....	1909	37	4,374	10	326	4,032	10,651	7,306	461	2,049	3,273	12,257	4,024	
	1904	23	2,199	20	147	2,032	.....	3,430	210	967	3,429	5,682	2,253
	1899	17	883	18	62	803	.....	1,069	85	333	920	1,633	713
Bread and other bakery products.....	1909	265	1,606	272	226	1,108	1,112	2,003	220	633	2,837	4,826	1,926	
	1904	159	1,165	164	127	874	.....	1,063	30	424	1,506	2,932	1,266
	1899	160	866	108	95	603	.....	806	65	274	1,004	1,877	873
Brick and tile.....	1909	10	205	13	9	183	564	267	8	109	84	285	202	
	1904	3	27	3	4	20	.....	68	2	12	10	33	23
	1899	3	39	3	1	35	.....	104	(*)	14	5	25	20
Canning and preserving.....	1909	9	496	6	82	408	549	1,276	99	157	855	1,588	713	
	1904	8	670	8	53	609	.....	721	71	174	1,144	1,788	644
	1899	15	212	2	32	178	.....	109	41	48	555	708	153
Carpets, rag.....	1909	7	27	8	.....	19	26	14	.....	9	3	20	17
	1904	4	40	5	4	31	.....	10	2	8	3	22	19
	1899	3	.....	.....	2	17	.....	17	1	6	1	10	9
Carriages and wagons and materials.....	1909	34	321	44	14	263	188	655	27	164	189	507	218	
	1904	25	966	31	41	894	.....	522	52	403	794	1,515	721
	1899	18	.....	.....	23	315	.....	553	31	149	350	666	318
Clothing, men's, including shirts.....	1909	22	3,008	27	195	2,788	951	2,473	250	963	2,352	4,781	2,409	
	1904	128	1,696	33	103	1,580	.....	1,276	96	472	1,791	2,957	1,186
	1899	126	1,414	33	74	1,307	.....	817	69	295	1,050	1,829	779
Clothing, women's.....	1909	27	1,041	29	91	921	154	825	82	357	661	1,494	833	
	1904	15	789	24	57	708	.....	317	44	233	694	1,168	474
	1899	10	684	16	31	637	.....	178	27	128	401	692	291
Coffins, burial cases, and undertakers' goods.	1909	5	117	6	16	95	148	156	21	56	117	268	151	
	1904	5	147	3	15	129	.....	190	22	63	138	285	147
	1899	7	145	8	20	117	.....	212	27	47	71	233	152
Confectionery.....	1909	23	501	30	84	387	341	374	69	139	629	1,126	507	
	1904	16	494	17	60	387	.....	303	55	115	517	845	328
	1899	13	.....	.....	78	360	.....	281	43	94	433	740	307
Cooperage and wooden goods, not elsewhere specified.	1909	9	144	13	5	126	155	141	8	56	131	241	119	
	1904	8	127	10	4	113	.....	101	3	51	203	300	97
	1899	11	140	12	4	124	.....	131	2	56	142	242	100
Copper, tin, and sheet-iron products.....	1909	72	2,152	74	146	1,932	1,453	3,890	158	851	1,932	3,534	1,602	
	1904	28	1,374	24	94	1,256	.....	1,274	95	508	1,117	2,258	1,141
	1899	18	.....	.....	25	358	.....	294	30	126	383	655	272
Cutlery and tools, not elsewhere specified.	1909	19	373	11	103	259	719	514	56	139	154	466	312	
	1904	15	88	1	15	72	.....	112	17	32	61	146	85
	1899	15	49	3	4	42	.....	65	7	21	9	66	47
Electrical machinery, apparatus, and supplies.	1909	23	685	16	129	541	575	1,066	145	226	493	1,148	655	
	1904	8	125	6	29	90	.....	177	27	35	65	191	126
	1899	9	150	8	20	122	.....	433	22	60	154	363	209
Electroplating.....	1909	8	121	6	11	104	160	67	9	66	60	169	109	
	1904	4	70	3	9	58	.....	13	7	24	6	51	45
	1899	4	55	4	7	44	.....	13	6	17	5	37	33
Emery and other abrasive wheels.....	1909	4	122	2	18	102	155	198	17	61	155	284	129	
	1904	3	73	3	11	59	.....	104	16	37	31	135	104
	1899	3	70	1	13	56	.....	85	9	34	72	138	66
Flags, banners, regalia, society badges, and emblems.	1909	5	51	3	8	40	23	46	6	14	30	89	39	
	1904	14	100	3	17	80	.....	92	18	66	62	153	101
	1899	13	95	4	8	83	.....	30	7	27	67	135	68
Flour-mill and gristmill products.....	1909	5	220	5	46	159	1,150	1,432	65	78	4,422	5,099	687	
	1904	7	156	8	25	123	.....	491	25	69	2,864	3,034	230
	1899	3	.....	.....	12	55	.....	258	8	28	1,264	1,455	201
Foundry and machine-shop products.....	1909	215	10,212	125	1,393	8,694	10,336	20,434	1,413	4,828	7,614	18,266	10,682	
	1904	125	7,194	92	761	6,341	.....	9,003	795	3,366	6,186	13,647	7,461
	1899	106	.....	.....	723	3,125	.....	12,223	803	3,621	5,149	12,714	7,574
Fur goods.....	1909	19	519	24	124	371	24	884	112	181	707	1,738	1,031	
	1904	10	311	14	29	288	.....	451	28	130	677	1,121	444
	1899	11	.....	.....	84	351	.....	320	53	143	890	1,302	443

* Excluding statistics for one establishment, to avoid disclosure of individual operations.
 † Excluding statistics for two establishments, to avoid disclosure of individual operations.
 ‡ Less than \$500.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
DETROIT—Continued.													
Furniture and refrigerators.....	1909	33	2,528	28	210	2,290	3,722	\$3,203	\$257	\$1,186	\$1,302	\$3,762	\$2,490
	1904	24	2,119	19	151	1,949		2,496	189	811	1,038	2,624	1,688
	1899	22	1,564	25	135	1,404		1,420	137	542	796	1,865	1,069
Hand stamps and stencils and brands..	1909	7	24	7	2	15	5	14	1	6	8	39	31
	1904	4	27	6	2	21		12		9	6	29	23
	1899	6	26	7	4	15		15	2	5	7	22	15
Hosiery and knit goods.....	1909	9	367	7	26	334	214	424	25	91	326	559	233
	1904	12	553	8	45	497		624	44	129	372	720	343
	1899	8	442	2	14	426		241	15	85	224	442	218
Iron and steel, steel works and rolling mills.	1909	5	1,964		75	989	3,430	1,969	114	559	1,317	2,297	980
	1904	4	862		30	832		1,447	37	431	1,604	2,362	768
	1899	4	1,146		25	1,121		1,794	28	595	2,169	3,199	1,040
Leather goods.....	1909	22	516	18	95	403	530	821	85	211	819	1,396	577
	1904	10	352	6	42	304		225	30	168	349	632	283
	1899	6			19	201		142	18	91	199	383	184
Liquors, malt.....	1909	18	838	13	179	646	3,886	5,208	250	495	1,185	4,942	3,757
	1904	19	618	10	115	493		3,977	173	368	795	3,272	2,477
	1899	20	539	12	115	412		2,800	133	257	547	2,593	2,046
Lumber and timber products.....	1909	59	2,322	52	224	2,046	4,029	4,608	241	1,013	3,759	6,110	2,351
	1904	30	1,160	26	101	1,039		1,435	107	554	1,196	2,167	971
	1899	43			71	1,252		1,444	63	431	1,280	2,204	924
Marble and stone work.....	1909	19	236	25	17	194	560	330	14	131	172	413	241
	1904	12	201	21	6	174		236	5	112	109	312	203
	1899	16			3	169		233	2	117	176	394	218
Models and patterns, not including paper patterns.	1909	17	222	18	16	188	95	106	15	125	24	238	214
	1904	7	76	7	1	68		18	1	36	4	50	46
	1899	7	103	10	1	92		17		46		68	64
Optical goods.....	1909	6	241	3	50	188	79	283	52	75	97	358	261
	1904	3	147	1	12	134		117	15	35	29	108	79
	1899	3			28	168		196	24	46	106	209	103
Patent medicines and compounds and druggists' preparations.	1909	74	4,289	54	1,417	2,818	1,819	10,179	1,853	1,328	4,304	11,558	7,254
	1904	42	3,189	34	876	2,280		7,912	862	859	3,500	9,423	5,914
	1899	34			814	2,022		3,693	720	654	2,450	6,176	3,726
Photo-engraving.....	1909	7	213	5	55	153	116	171	63	116	60	351	291
	1904	6	222	8	54	160		213	39	126	49	299	250
	1899	6	87	6	13	68		47	10	34	11	89	78
Printing and publishing.....	1909	224	4,058	212	1,327	2,519	2,602	4,168	1,166	1,570	2,044	7,291	5,247
	1904	155	2,836	160	756	1,920		2,873	698	1,114	1,410	4,855	3,445
	1899	140			918	1,576		2,116	641	794	816	3,499	2,683
Shipbuilding, including boat building..	1909	17	607	23	100	485	1,079	1,611	77	309	512	1,102	590
	1904	7	127	7	9	111		159	8	64	53	187	134
	1899	10	109	10	8	91		78	6	48	36	124	88
Show cases.....	1909	6	117	3	20	94	435	161	23	55	109	240	131
	1904	5	209	6	22	181		175	27	98	142	319	177
	1899												
Slaughtering and meat packing.....	1909	29	983	33	139	811	3,092	3,340	138	433	11,221	12,850	1,829
	1904	11	486	10	56	420		1,251	57	222	4,753	5,350	597
	1899	16	417	18	61	338		1,185	60	178	3,628	4,048	420
Stoves and furnaces, including gas and oil stoves.	1909	8	3,130		322	2,808	2,741	6,239	481	1,809	1,570	5,676	4,106
	1904	6	3,431	1	308	3,122		4,038	414	1,814	1,751	5,565	3,814
	1899												
Tobacco manufactures.....	1909	198	6,544	202	459	5,883	925	5,486	638	2,177	5,869	12,773	6,904
	1904	225	4,517	235	280	4,002		2,984	287	1,341	3,301	7,727	4,426
	1899	192	4,037	198	297	3,542		1,930	357	1,003	2,074	6,536	4,462
Umbrellas and canes.....	1909	3	17	4	4	9	3	26	2	2	22	41	19
	1904	5	82	6	12	64		89	12	22	164	240	76
	1899	4	86	4	8	74		36	6	16	138	181	43
All other industries.....	1909	355	21,637	340	3,338	17,959	39,344	66,789	4,548	9,864	30,390	59,842	29,452
	1904	238	12,805	229	1,155	11,421		35,795	1,105	5,479	20,675	34,895	14,220
	1899	262			1,036	16,464		30,821	1,095	4,154	18,631	29,221	10,590

¹ Excluding statistics for one establishment, to avoid disclosure of individual operations.

² Excluding statistics for two establishments, to avoid disclosure of individual operations.

³ Figures can not be shown without disclosing individual operations.

⁴ Not reported separately.

STATISTICS OF MANUFACTURES.

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TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
GRAND RAPIDS—All industries.	1909	524	20,327	447	2,290	17,590	27,676	\$38,783	\$2,943	\$9,217	\$19,736	\$42,231	\$22,495
	1904	388	17,366	386	1,488	15,814		25,431	1,871	7,318	14,422	30,630	16,288
	1899	382			1,148	12,929		22,692	1,137	5,298	11,181	22,228	11,107
Bread and other bakery products.....	1909	66	477	74	42	361	185	2,075	48	185	872	1,476	604
	1904	39	295	34	51	310		740	45	137	613	1,178	565
	1899	40	265	40	55	169		510	35	86	442	752	310
Brass and bronze products.....	1909	5	445	7	33	405	401	561	47	209	243	680	437
	1904	3	382	6	20	356		277	23	130	138	399	261
Brick and tile.....	1909	3	67		9	58	135	207	7	32	29	89	69
	1904	3	69	7	9	53		185	7	25	15	69	53
	1899												
Carpets, rag.....	1909	3	8	3	2	3	7	10	2	2	1	11	10
	1904	3	16	7	1	8		4	1	3	1	8	7
	1899	4				2		2		(¹)		3	2
Carriages and wagons and materials.....	1909	8	102	7	8	87	173	181	11	48	70	194	124
	1904	11	210	9	17	184		338	18	95	221	495	284
	1899	10	319	9	21	289		906	21	124	389	683	294
Clothing, men's, including shirts.....	1909	6	265	6	50	236	70	242	47	84	220	513	263
	1904	6	328	5	38	283		297	44	88	245	450	295
	1899	9	308	8	37	263		153	25	58	160	355	195
Copper, tin, and sheet-iron products....	1909	11	128	11	16	101	39	128	14	53	102	231	129
	1904	5	72	11	5	56		57	3	30	43	101	58
	1899	4			5	40		104	3	19	37	81	44
Cutlery and tools, not elsewhere specified.	1909	7	33	11	2	20	70	36	2	12	9	38	29
	1904	4	21	5	2	14		18	1	8	4	20	16
	1899	4	8	2	1	5		6		(¹)	2	7	5
Flour-mill and gristmill products.....	1909	8	184	6	60	118	1,610	1,153	66	72	3,045	3,781	736
	1904	6	147	8	33	104		900	40	64	2,165	2,371	295
	1899	6			23	92		650	20	45	1,809	1,875	266
Foundry and machine-shop products....	1909	49	1,815	40	243	1,532	2,107	2,515	280	825	1,134	2,740	1,606
	1904	33	1,121	28	129	964		1,318	142	473	682	1,668	986
	1899	32			123	911		1,420	87	390	557	1,362	805
Furniture and refrigerators.....	1909	54	7,854	33	571	7,250	10,305	13,222	927	3,903	4,937	12,630	7,693
	1904	38	7,071	20	397	6,654		8,095	558	3,240	3,583	8,409	5,826
	1899	34	6,570	11	323	6,236		8,362	418	2,582	3,245	7,495	4,150
Leather goods.....	1909	6	64	5	8	51	25	137	10	30	113	179	66
	1904	5	63	11	9	43		115	6	21	59	106	47
	1899	3			3	30		31	3	13	61	92	31
Leather, tanned, curried, and finished..	1909	3	106		10	98	437	570	14	56	545	705	160
	1904												
	1899	3	110	1	8	101		478	11	45	563	698	135
Lumber and timber products.....	1909	20	709	17	98	594	2,504	1,434	108	343	907	1,697	790
	1904	9	410	12	37	261		552	43	153	607	967	380
	1899	14	639	11	47	581		1,200	45	276	861	1,479	618
Marble and stone work.....	1909	6	62	7	14	41	77	121	13	34	39	108	69
	1904	4	43	5	2	36		45	2	27	49	102	53
	1899	4			6	14		20	3	10	11	33	22
Patent medicines and compounds and druggists' preparations.	1909	18	126	19	49	58	33	156	32	24	117	235	168
	1904	8	37	7	10	20		26	8	8	20	83	63
	1899	9	127	7	33	87		406	34	34	165	425	260
Printing and publishing.....	1909	68	1,148	53	263	832	781	1,629	297	459	587	2,037	1,470
	1904	48	801	38	168	597		744	170	318	357	1,292	935
	1899	40	626	41	100	485		1,339	75	233	181	725	544
Tobacco manufactures.....	1909	36	522	36	28	458	5	235	26	188	302	725	423
	1904	34	362	35	24	303		127	17	133	159	575	416
	1899	36	278	36	16	226		113	9	79	135	306	169
Wall plaster.....	1909	5	361		61	300	2,408	1,033	99	135	226	866	640
	1904	4	338	1	42	265		801	39	139	274	713	439
	1899												
All other industries.....	1909	142	5,819	112	723	4,984	6,403	12,637	903	2,493	6,238	13,226	6,983
	1904	135	5,482	137	474	4,371		10,281	498	2,192	5,175	10,684	5,509
	1899	130			347	3,368		6,992	347	1,262	2,801	5,868	3,257

¹ Figures do not agree with those published in 1904, because it was necessary to revise the totals in order to include data only for those establishments located within the corporate limits of the city.

² Figures can not be shown without disclosing individual operations.

³ Less than \$500.

⁴ Excluding statistics for one establishment, to avoid disclosure of individual operations.

⁵ Excluding statistics for two establishments, to avoid disclosure of individual operations.

⁶ Not reported separately.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employ-ees.	Wage earners (average number).							
Expressed in thousands.													
SAGINAW—All industries.....	1909	203	7,090	232	868	5,990	14,412	\$26,703	\$928	\$3,184	\$10,409	\$18,833	\$8,424
	1904	179	5,205	191	569	4,445		7,273	502	1,981	5,367	10,079	4,712
	1899	184			357	4,205		7,041	355	1,672	5,084	8,653	3,589
Bread and other bakery products.....	1909	9	112	12	17	83	76	134	13	42	223	328	106
	1904	9	68	10	5	53		59	2	27	75	131	56
	1899	15	47	15	1	31		41	(*)	13	42	74	32
Carriages and wagons and materials.....	1909	5	30	6		24	20	57		13	9	31	22
	1904	* 6	42	8	3	31		61	1	18	21	45	27
	1899	11	83	10	15	58		114	9	27	49	141	92
Cooperage and wooden goods, not elsewhere specified.	1909	9	690	14	34	642	1,648	982	48	207	699	1,206	507
	1904	9	543	12	29	502		464	44	174	454	913	464
	1899	* 7	217	8	5	204		217	5	69	121	224	103
Flour-mill and gristmill products.....	1909	4	101	3	40	59	457	551	30	32	558	731	173
	1904	4	82	5	22	55		280	17	24	551	652	101
	1899	3			11	34		192	9	19	341	407	66
Foundry and machine-shop products...	1909	23	871	25	148	698	1,674	2,064	210	432	788	1,838	1,050
	1904	14	886	11	115	760		1,299	122	429	918	1,884	906
	1899	10	652	7	70	575		1,094	89	286	721	1,256	535
Furniture and refrigerators.....	1909	12	484	8	59	417	896	1,090	43	199	326	881	555
	1904	5	194	4	16	174		152	11	80	92	212	120
	1899	4	103	5	6	92		92	6	36	59	131	72
Liquors, malt.....	1909	5	92	4	14	74	170	526	24	58	110	393	283
	1904	6	82	5	19	58		418	25	39	90	297	207
	1899	5	60	4	11	45		271	14	27	42	206	154
Lumber and timber products.....	1909	12	783	21	66	696	2,682	1,804	61	335	1,629	2,404	775
	1904	* 13	760	23	65	672		1,044	55	260	1,314	1,908	594
	1899	17			87	1,107		2,339	85	431	1,809	2,619	810
Marble and stone work.....	1909	4	27	7	3	17	80	26	2	12	22	50	28
	1904	3	33	5	2	26		20	1	20	21	68	47
	1899	3			2	27		24	1	18	17	57	40
Printing and publishing.....	1909	22	266	21	81	164	411	422	70	100	127	428	301
	1904	* 23	225	28	51	146		186	33	85	81	317	236
	1899	22	185	24	29	132		182	28	66	48	227	179
Salt.....	1909	3	15	3	2	10	30	29	2	6	20	44	24
	1904	4	14	5	9	9		31		4	13	27	14
	1899	10	82	6	8	68		182	5	32	70	147	77
Tobacco manufactures.....	1909	27	163	30	6	127		89	4	56	82	303	121
	1904	20	183	21	15	147		57	7	68	73	214	141
	1899	19	140	20	3	117		57	2	50	60	178	118
All other industries.....	1909	68	3,456	78	398	2,998	6,268	18,928	410	1,692	5,816	10,296	4,480
	1904	63	2,003	54	227	1,812		3,202	184	762	1,664	3,493	1,739
	1899	58			109	1,715		2,236	102	598	1,705	2,986	1,281

¹ Figures do not agree with those published in 1904, because it was necessary to revise the totals in order to include data only for those establishments located within the corporate limits of the city.

² Less than \$500.

³ Excluding statistics for one establishment, to avoid disclosure of individual operations.

⁴ Excluding statistics for two establishments, to avoid disclosure of individual operations.

STATISTICS OF MANUFACTURES.

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TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

CITY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Adrian.....	1909	80	1,466	66	341	1,059	3,211	\$5,086	\$327	\$540	\$4,150	\$6,065	\$1,935
	1904	65	1,830	48	280	1,502	.....	3,268	251	625	2,829	4,897	2,068
	1899	63	195	1,030	1,631	129	454	898	2,125	-1,227
Alpena.....	1909	58	1,614	57	125	1,432	10,670	5,798	151	711	2,301	2,964	1,663
	1904	57	1,369	60	64	1,245	.....	2,682	68	534	1,684	2,905	1,221
	1899	46	.....	.....	54	1,202	.....	2,356	46	496	1,276	2,272	947
Ann Arbor.....	1909	63	783	67	143	573	1,458	1,760	125	287	1,010	1,866	856
	1904	65	680	61	80	549	.....	1,095	62	244	774	1,286	612
	1899	71	.....	.....	67	622	.....	1,055	49	224	785	1,377	592
Battle Creek.....	1909	105	5,281	95	1,011	4,175	14,923	19,176	1,256	2,854	7,068	20,174	13,196
	1904	120	4,290	131	770	3,389	.....	13,039	872	1,583	3,984	12,298	8,214
	1899	75	.....	.....	432	2,051	.....	7,212	402	970	2,100	6,301	4,201
Bay City ¹	1909	182	5,357	178	442	4,787	17,872	10,289	467	2,118	5,647	10,294	4,647
	1904	173	4,899	161	282	4,456	.....	5,343	272	2,001	4,948	8,809	3,861
	1899	177	.....	.....	262	4,809	.....	6,843	243	1,801	5,235	9,010	3,775
Escanaba.....	1909	39	804	36	48	720	1,416	1,624	62	405	364	1,074	710
	1904	34	1,053	28	76	949	.....	1,019	77	452	404	1,333	929
	1899	26	.....	.....	25	520	.....	431	31	228	250	610	360
Flint.....	1909	104	7,840	117	635	7,088	8,240	18,085	535	4,429	13,971	24,118	10,147
	1904	70	2,494	84	249	2,161	.....	4,216	228	1,041	3,789	6,177	2,408
	1899	63	.....	.....	87	1,960	.....	2,507	73	802	2,784	4,713	1,959
Holland.....	1909	59	2,183	45	198	1,940	2,956	4,524	262	936	2,585	4,622	2,037
	1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ironwood.....	1909	14	229	15	12	201	521	204	14	88	201	377	176
	1904	13	108	14	7	87	.....	168	5	47	78	202	124
	1899	14	.....	.....	3	90	.....	88	3	46	55	145	90
Ishtepeming.....	1909	19	92	19	7	66	73	88	7	37	52	132	80
	1904	15	92	11	8	78	.....	199	11	42	142	247	195
	1899	14	.....	.....	5	80	.....	132	7	44	95	195	100
Jackson.....	1909	169	5,624	135	692	4,797	6,360	9,078	719	2,492	8,163	14,006	5,838
	1904	147	4,575	132	476	3,967	.....	5,346	427	1,838	4,272	8,348	4,076
	1899	117	.....	.....	374	3,715	.....	4,371	356	1,437	3,808	6,710	2,902
Kalamazoo.....	1909	193	7,527	152	1,103	6,272	14,449	15,395	1,236	3,149	9,505	17,904	8,399
	1904	157	6,467	133	693	5,666	.....	9,618	691	2,562	6,896	13,142	6,246
	1899	129	.....	.....	455	3,870	.....	5,571	432	1,428	3,893	7,186	3,293
Lansing.....	1909	169	6,152	142	725	5,285	8,720	13,131	808	2,707	8,802	16,567	7,765
	1904	98	3,405	83	340	2,952	.....	5,999	352	1,389	3,473	6,887	3,414
	1899	74	.....	.....	163	1,425	.....	2,047	135	577	1,632	2,942	1,310
Manistee.....	1909	64	2,365	78	182	2,125	6,811	3,248	183	1,019	1,289	3,244	2,055
	1904	47	2,238	33	121	2,084	.....	2,832	106	999	1,274	3,257	1,983
	1899	56	.....	.....	113	2,103	.....	3,606	111	964	1,376	3,625	2,240
Marquette.....	1909	34	601	29	74	498	1,500	1,392	82	305	556	1,255	699
	1904	31	814	23	53	788	.....	1,663	67	436	1,392	2,364	972
	1899	29	.....	.....	64	836	.....	1,177	76	355	813	1,585	772
Menominee.....	1909	52	1,930	41	189	1,700	4,770	5,213	205	718	1,657	3,728	2,071
	1904	45	1,630	35	106	1,489	.....	3,340	120	705	1,373	2,974	1,601
	1899	38	.....	.....	88	1,703	.....	3,788	129	769	1,537	4,076	2,239
Muskegon.....	1909	101	5,098	89	487	4,522	10,436	3,337	445	2,107	4,938	9,648	4,710
	1904	70	3,371	70	223	3,078	.....	4,790	257	1,211	3,526	6,319	2,788
	1899	67	.....	.....	164	3,078	.....	3,637	154	1,126	2,569	4,527	2,258
Pontiac.....	1909	42	2,009	27	243	1,739	2,854	3,826	221	1,037	3,241	5,894	2,653
	1904	47	1,474	37	141	1,296	.....	2,067	134	588	1,735	3,047	1,312
	1899	47	.....	.....	109	1,092	.....	1,295	79	422	1,602	2,471	869
Port Huron.....	1909	82	1,862	75	207	1,580	3,130	3,889	201	791	1,950	3,588	1,638
	1904	74	2,356	69	151	2,136	.....	3,205	155	1,107	1,747	3,715	1,968
	1899	78	.....	.....	216	2,028	.....	3,149	183	933	1,752	3,627	1,875
Sault Ste. Marie.....	1909	47	1,125	37	83	1,005	3,239	4,663	117	542	3,123	4,619	1,496
	1904	38	997	32	70	895	.....	1,634	89	403	1,427	2,412	985
	1899	33	.....	.....	24	317	.....	313	18	153	279	728	449
Traverse City.....	1909	61	1,403	54	129	1,220	4,231	1,958	139	444	1,183	2,289	1,106
	1904	46	1,217	43	66	1,168	.....	1,824	83	434	1,098	2,177	1,079
	1899	36	.....	.....	53	909	.....	870	44	392	515	1,201	686

¹ In 1904 and 1899 the statistics for West Bay City, which was annexed in 1905, are included.

² Figures not available.

³ Figures do not agree with those published in 1904, because it was necessary to revise the totals in order to include data only for those establishments located within the corporate limits of the city.

TABLE II.—DETAIL STATEMENT FOR

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, supts. and managers.	Clerks.		Average number.	Wage earners.		Total.	16 and over.		Under 16.				
					Male.	Female.		Number.			Male.	Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1 All industries.....	9,159	271,071	8,965	8,031	16,183	6,393	231,499	De 250,078	Ja 211,679	(1)	(1)	(1)	(1)	(1)	598,288		
2 Agricultural implements.....	32	3,041	22	140	418	102	2,359	De 2,593	Se 2,028	2,570	2,556	3	11	.....	5,195	
3 Artificial stone.....	191	791	228	24	17	8	514	Au 773	Ja 196	651	650	1	.....	.....	634
4 Automobiles, including bodies and parts.	113	28,098	29	518	1,628	479	25,444	Au 29,006	Ja 29,464	33,884	33,496	376	12	.....	25,938	
5 Baking powders and yeast.....	7	46	20	2	3	1	20	Oc 25	Jy 15	26	14	.....	.....	.....	58
6 Baskets, and rattan and willow ware..	18	419	21	13	9	3	373	Jy 503	Ja 116	427	347	78	.....	.....	900
7 Beet sugar.....	11	1,755	21	50	209	30	1,460	No 4,372	Fe 290	4,098	4,065	13	.....	.....	8,854
8 Blacking and cleansing and polishing preparations.	17	273	14	101	49	88	.....	Jy 98	De 74	74	58	16	.....	.....	249
9 Boots and shoes, including cut stock and findings.	23	2,703	9	49	127	63	2,455	De 2,547	My 2,395	2,547	1,490	893	99	65	786		
10 Boxes, cigar.....	12	392	9	12	8	1	362	Fe No 403	Ap Ja 330	420	171	231	8	10	255		
11 Boxes, fancy and paper.....	19	1,427	14	46	19	22	1,326	No 1,490	Ja 1,217	1,442	655	708	13	66	1,564		
12 Brass and bronze products.....	60	5,211	35	131	173	102	4,771	De 5,388	Je 4,472	5,660	5,306	174	175	5	11,622		
13 Bread and other bakery products.....	816	3,984	917	67	206	157	2,637	Au 2,782	Fe 2,468	2,760	2,207	504	28	21	1,953		
14 Brick and tile.....	124	1,806	140	69	22	10	1,565	Jy 2,467	Fe 586	2,130	2,122	.....	.....	.....	8,546
15 Brooms.....	29	153	34	.....	1	.....	118	My 126	Oc 95	124	83	31	9	1	84
16 Brushes.....	14	260	23	4	6	4	223	Je 240	Jy 200	229	127	96	3	3	222		
17 Butter, cheese, and condensed milk..	435	1,740	350	187	63	67	1,073	Jy 1,179	Fe 949	1,155	1,047	106	2	.....	476	
18 Canning and preserving.....	104	2,387	88	86	110	39	2,073	Se 4,172	Ja 654	3,003	1,696	1,841	40	26	3,374		
19 Carpets, rag.....	30	117	34	2	.....	2	76	Je 95	Ja 43	65	38	26	.....	.....	107
20 Carriages and wagons and materials..	212	4,707	240	121	209	103	4,034	Ap 4,347	Au 3,512	4,349	4,270	75	4	.....	6,362	
21 Cars and general shop construction and repairs by steam-railroad companies.	32	5,706	2	126	169	8	5,401	Oc 5,736	Je 4,868	5,738	5,725	3	10	.....	5,742	
22 Cars and general shop construction and repairs by street-railroad companies.	15	602	.....	15	11	2	574	De 626	Ja 517	626	626	.....	.....	.....	1,704
23 Cement.....	13	1,465	1	40	106	12	1,306	My 1,594	Fe 774	1,289	1,285	4	.....	.....	21,773
24 Chemicals.....	36	3,512	25	89	199	25	3,174	De 3,405	Ap 2,889	3,406	3,372	26	8	.....	26,594	
25 Clothing, men's, including shirts.....	40	3,944	42	71	171	80	3,580	De 3,878	Je 3,310	3,466	3,412	3	.....	.....	1,151
26 Clothing, women's.....	52	2,521	42	86	97	102	2,194	Mh 2,493	Oc 1,844	2,596	181	2,394	5	16	581		
27 Coffins, burial cases, and undertakers' goods.	18	553	8	30	61	15	439	Au 478	Au 307	478	412	66	.....	.....	711
28 Confectionery.....	56	1,335	66	38	93	86	1,052	No 1,317	Ja 877	1,248	492	728	3	25	812		
29 Cooperage and wooden goods, not elsewhere specified.	101	2,916	106	72	68	28	2,642	Oc 1,907	No 2,252	3,000	2,605	322	28	5	850		
30 Copper, tin, and sheet-iron products..	152	2,901	165	74	115	61	2,386	No 2,521	Ja 1,984	2,528	2,102	273	112	41	1,875		
31 Corsets.....	14	2,875	6	47	204	157	2,461	Oc 2,536	Ja 2,258	2,519	463	2,007	2	47	734		
32 Cutlery and tools, not elsewhere specified.	37	850	41	31	88	22	668	De 809	My 599	812	667	145	.....	.....	1,379
33 Dairymen's, poniterers', and apiarists' supplies.	6	15	6	.....	.....	1	8	Ap 11	Au 4	11	11	.....	.....	.....	20
34 Electrical machinery, apparatus, and supplies.	40	1,496	26	85	102	65	1,218	My 1,845	Au 1,051	1,302	975	327	.....	.....	1,355
35 Electroplating.....	14	152	13	7	.....	4	128	Ap 138	De 120	121	119	2	.....	.....	237
36 Emery and other abrasive wheels.....	4	122	2	7	6	5	102	De 121	Ja 92	121	93	28	.....	.....	155
37 Fancy articles, not elsewhere specified	11	1,218	7	18	32	14	1,147	Jy 1,725	Fe 637	1,054	726	293	15	20	87		
38 Flour-mill and gristmill products.....	520	2,623	660	173	165	95	1,530	Oc 1,645	Je 1,407	1,630	1,610	15	5	.....	38,991	
39 Food preparations.....	49	1,672	28	66	175	100	1,303	Se 1,534	Ja 1,044	1,618	1,016	602	.....	.....	8,983
40 Foundry and machine-shop products.	654	25,334	505	978	1,580	622	21,649	De 26,246	Ja 18,733	27,162	26,633	354	128	17	34,152		
41 Fur goods.....	31	824	38	23	74	70	619	Oc 763	Fe 496	702	268	423	7	4	232		
42 Furnishing goods, men's.....	24	522	30	9	24	17	442	Oc 467	Mh 422	478	46	419	6	7	174		
43 Furniture and refrigerators.....	202	18,299	120	458	751	360	16,610	De 17,732	Je 15,683	17,948	17,152	488	270	33	27,485		
44 Gas and electric fixtures and lamps and reflectors.	20	486	12	29	32	18	395	No 561	Fe 293	561	504	57	.....	.....	386
45 Gas, illuminating and heating.....	55	2,435	2	152	318	192	1,771	De 1,974	Mh 1,514	1,974	1,969	4	1	.....	6,055	
46 Gloves and mittens, leather.....	9	209	9	5	7	6	182	Mh 236	Au 134	248	87	149	2	10	107		
47 Hand stamps and stencils and brands.	10	108	11	1	.....	4	92	Ap 118	Au 31	91	59	29	2	1	56	
48 Hats and caps, other than felt, straw, and wool.	7	159	13	9	16	7	114	De 158	Ap 87	158	105	53	.....	.....	17
49 Hosiery and knit goods.....	35	2,818	19	78	100	76	2,545	No 2,671	Ja 2,237	2,675	560	2,044	21	50	3,291		
50 Ice, manufactured.....	5	113	2	10	11	8	87	Au 142	Ja 63	67	67	.....	.....	.....	1,959
51 Iron and steel, blast furnaces.....	11	1,101	.....	36	44	5	1,016	Se 1,235	Ja 699	1,227	1,226	1	.....	.....	17,403
52 Iron and steel, steel works and rolling mills.	8	1,273	.....	24	51	15	1,183	No 1,386	Jy 1,060	1,332	1,331	1	.....	.....	4,290
53 Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.	4	731	1	14	22	8	686	De 781	Ja 602	781	774	5	2	.....	813	
54 Jewelry.....	10	118	6	5	9	5	93	Mh 69	Jy 73	99	94	5	.....	.....	30
55 Leather goods.....	57	1,036	48	41	81	32	834	De 884	Fe 782	888	727	140	19	2	760		
56 Leather, tanned, curried, and finished.	24	2,440	5	60	63	21	2,291	De 2,392	Ap 2,190	2,392	2,364	8	20	.....	6,719	
57 Lime.....	11	181	10	9	5	.....	187	Jy 195	Ja 104	161	161	.....	.....	.....	265
58 Liquors, malt.....	79	2,001	46	166	239	22	1,527	Jy 1,670	Ja 1,434	1,523	1,509	14	.....	.....	9,219
59 Liquors, vinous.....	3	19	4	1	2	1	11	Se 21	Ja 6	21	16	5	.....	.....	.....
60 Lumber and timber products.....	1,180	39,011	1,310	962	844	268	35,027	De 37,463	Ap 33,004	43,689	43,300	217	167	5	133,739		
61 Marble and stone work.....	113	795	145	19	63	17	551	Je 632	Fe 378	580	580	.....	.....	.....	1,570
62 Mattresses and spring beds.....	14	357	14	9	17	11	306	Se 350	Ja 249	278	220	58	.....	.....	508

¹ No figures given for reasons explained in the Introduction.

TABLE II.—DETAIL STATEMENT FOR THE

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Primary horse-power.	
		Total.	Proprietors and firm members.	Clerks.		Average number.	Wage earners.				Total.	16 and over.		Under 16.			
				Male.	Female.		Number.					Male.	Female.	Male.	Female.		
							Maximum month.	Minimum month.	Maximum month.	Minimum month.							
1 Millinery and lace goods.....	5	40	7	.....	2	31	Ja ¹	45	De	18	35	18	17	.....	.....	1	
2 Mirrors.....	8	262	3	12	8	232	Sa	244	Ja	224	234	234	17	.....	.....	303	
3 Models and patterns, not including paper patterns.	32	271	37	9	3	216	De	269	Je	173	270	267	1	2	.....	189	
4 Musical instruments and materials, not specified.	9	211	9	13	12	159	Ap ¹	163	Au	154	158	150	8	.....	.....	161	
5 Musical instruments, pianos and organs and materials.	17	1,963	8	54	97	25	1,779	De	1,953	Ja	1,641	1,957	1,892	55	10	.....	2,690
6 Oil, essential.....	23	89	27	3	4	1	54	Au	111	Ja ¹	15	104	100	4	.....	365	
7 Oilcloth and linoleum.....	3	59	.....	8	10	2	39	Au	42	My ¹	37	41	41	.....	.....	219	
8 Optical goods.....	11	254	6	12	22	19	195	Se	203	Ja	184	193	102	73	12	6	88
9 Paint and varnish.....	20	1,057	11	59	444	119	1,024	My	1,055	Ja	915	1,056	934	108	11	3	2,362
10 Paper and wood pulp.....	32	4,581	5	95	120	34	4,327	Je	4,480	Mh	4,168	4,395	3,618	777	.....	.....	48,700
11 Paper goods, not elsewhere specified..	18	1,311	6	41	55	28	1,181	De	1,286	Ja	1,088	1,288	681	602	1	4	2,580
12 Patent medicines and compounds and druggists' preparations.	159	5,124	133	192	934	616	3,249	De	3,425	Jy	3,059	3,449	1,749	1,652	22	26	2,270
13 Photo-engraving.....	11	293	5	26	32	12	218	De	236	Ja	191	235	218	15	2	.....	145
14 Pottery, terra-cotta, and fire-clay products.	7	230	7	10	5	2	206	My	225	No	190	197	196	1	.....	.....	426
15 Printing and publishing.....	1,045	11,048	991	547	1,620	671	7,219	De	7,576	Ap	7,070	7,532	5,539	1,890	94	9	7,651
16 Pumps, not including steam pumps..	6	46	5	1	4	1	35	Je	41	Ja	29	39	39	.....	.....	.....	72
17 Salt.....	27	1,567	12	57	98	37	1,363	Je	1,463	Au	1,200	1,288	1,204	84	.....	.....	6,628
18 Saws.....	11	199	11	8	14	6	160	Ap	184	Au	149	157	130	27	.....	.....	538
19 Scales and balances.....	4	247	.....	8	6	5	223	Se	242	Ja	204	223	218	.....	5	.....	310
20 Shipbuilding, including boat building	91	2,758	103	46	193	72	2,344	My	3,492	No	1,536	2,206	2,200	6	.....	.....	6,485
21 Show cases.....	11	951	31	24	48	25	823	De	871	Ja	763	871	855	6	10	.....	1,403
22 Slaughtering and meat packing.....	45	1,114	55	30	107	20	902	De	962	My	864	923	889	28	6	.....	3,404
23 Springs, steel, car and carriage.....	5	633	.....	22	17	6	588	No	672	Fe	518	690	675	5	10	.....	908
24 Steam packing.....	4	38	3	4	6	1	24	No	30	My	20	30	30	.....	.....	.....	10
25 Stereotyping and electrotyping.....	3	37	3	1	4	2	27	Ja ²	27	Jy ²	27	27	26	.....	1	.....	69
26 Stoves and furnaces, including gas and oil stoves.	33	5,027	9	132	340	64	4,482	Oe	4,898	Ja	2,758	4,712	4,623	5	84	.....	5,910
27 Surgical appliances and artificial limbs	9	43	10	.....	3	14	16	Ja ¹	17	Mh ¹	16	18	12	6	.....	.....	6
28 Tobacco manufactures.....	729	9,242	813	134	363	56	7,876	No	8,349	Ap	7,429	8,469	2,395	5,540	48	486	937
29 Type founding and printing materials.	5	77	5	5	6	1	60	Je	106	Ja ¹	6	96	90	6	.....	.....	125
30 Umbrellas and canes.....	4	23	5	1	.....	3	14	My ¹	15	Ja ¹	13	14	2	12	.....	.....	4
31 Wall plaster.....	16	840	10	13	56	10	746	Ap	819	De	647	651	620	31	.....	.....	3,029
32 Window shades and fixtures.....	7	663	2	8	14	3	636	De	726	Jy	427	712	572	137	3	.....	1,236
33 Wirework, including wire rope and cable.	37	1,261	23	59	212	58	909	De	996	Jy	833	978	874	88	16	.....	1,900
34 Wood distillation, not including turpentine and rosin.	12	859	1	28	21	3	806	De	955	Jy	737	946	946	.....	.....	.....	5,012
35 Wood, turned and carved.....	58	1,278	68	42	22	9	1,137	Fe	1,287	Au	979	1,203	1,174	26	.....	3	4,695
36 Woolen, worsted, and felt goods, and wool hats.	15	610	18	26	9	3	554	De	606	Jy	515	607	344	261	.....	2	1,900
37 All other industries.....	584	20,107	693	577	1,728	541	16,568	.....	.....	.....	.....	.....	.....	.....	.....	.....	33,673

¹ Same number reported for one or more other months.

² Same number reported throughout the year.

³ All other industries embrace—

Artificial flowers and feathers and plumes.....	5	Cash registers and calculating machines.....	5	Explosives.....	3
Artists' materials.....	2	Charcoal.....	5	Fertilizers.....	3
Awnings, tents, and sails.....	17	China decorating.....	3	Files.....	2
Axle grease.....	1	Clocks and watches, including cases and materials..	4	Firearms and ammunition.....	1
Babbitt metal and solder.....	5	Cloth, sponging and refinishing.....	2	Flags, banners, regalia, society badges, and emblems.....	7
Bags, other than paper.....	2	Clothing, horse.....	1	Flavoring extracts.....	11
Bags, paper.....	1	Clothing, men's, buttonholes.....	1	Flax and hemp, dressed.....	1
Belting and hose, leather.....	5	Coffee and spice, roasting and grinding.....	12	Foundry supplies.....	1
Belting and hose, woven and rubber.....	1	Cordage and twine and jute and linen goods.....	1	Fuel, manufactured.....	1
Billiard tables and materials.....	1	Cordials and sirups.....	1	Furs, dressed.....	5
Bluing.....	2	Crucibles.....	2	Galvanizing.....	1
Butter, reworking.....	2	Dentists' materials.....	1	Glass.....	2
Buttons.....	2	Dyeing and finishing textiles.....	2	Glass, cutting, staining, and ornamenting.....	15
Calcium lights.....	1	Dyestuffs and extracts.....	1	Glucose and starch.....	1
Card cutting and designing.....	2	Enameling and japanning.....	2	Glue.....	1
Carriages and sleds, children's.....	9	Engravers' materials.....	1	Gold and silver, reducing and refining, not from the ore.....	1
Cars, steam-railroad, not including operations of railroad companies.....	2	Engraving and diesinking.....	4		
		Engraving, wood.....	2		

STATISTICS OF MANUFACTURES.

STATE, BY INDUSTRIES: 1909—Continued.

	Capital.	EXPENSES.									Value of products.	Value added by manuf-acture.	
		Total.	Services.			Materials.		Miscellaneous.					
			Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.			Other.
1	\$10,037	\$39,602		\$608	\$11,943	\$272	\$21,671	\$2,290	\$14		\$2,853	\$54,553	\$32,630
2	396,062	500,239	\$23,940	10,394	127,070	7,018	367,807	4,170	2,418		16,822	659,066	284,241
3	139,928	211,197	11,356	4,699	140,965	3,937	29,353	6,957	553	\$513	12,834	290,055	256,763
4	179,151	193,123	22,566	12,768	83,960	3,212	37,246	1,781	1,310		30,280	223,071	182,613
5	5,384,400	3,821,211	143,279	156,089	1,075,304	38,609	1,970,866	8,530	22,419		406,115	4,226,265	2,216,791
6	305,695	453,857	0,200	3,900	16,571	2,443	412,639		1,904		7,200	456,159	71,677
7	137,418	227,289	14,400	6,255	29,133	4,720	156,025	1,800	1,100		16,856	256,159	95,414
8	297,215	291,822	15,704	37,483	76,913	3,931	109,418	5,290	1,990		39,043	339,210	275,811
9	7,113,027	6,573,599	210,995	677,233	556,984	52,176	3,980,170	4,340	31,570	1,729	1,038,399	7,415,914	3,363,563
10	15,754,419	12,417,132	284,879	137,803	2,141,844	958,147	8,066,448		113,847	46,253	667,911	13,922,124	4,867,520
11	2,775,887	3,126,327	91,340	70,021	482,708	33,580	1,916,727	3,315	100,437	200	424,999	3,550,969	1,597,632
12	11,451,918	11,396,391	563,371	1,568,396	1,509,365	68,820	4,372,697	34,825	111,751	9,318	2,655,968	13,476,456	8,524,629
13	213,895	353,634	39,666	37,184	158,138	7,583	69,417	13,115	875	4,579	23,377	437,688	369,683
14	326,427	195,452	10,613	3,722	88,620	35,459	35,340		1,613		17,079	245,677	171,572
15	13,725,083	14,206,556	947,686	1,613,036	3,999,521	198,278	4,736,248	265,437	87,487	520,944	1,837,919	17,348,341	12,413,513
16	69,981	60,075	1,000	2,835	19,790	2,282	28,830		312		4,760	74,098	42,896
17	5,166,676	3,058,708	92,050	105,414	745,401	555,244	1,088,106		38,277	32,899	401,317	3,652,596	2,009,646
18	348,086	244,146	15,226	17,610	85,804	7,599	78,414		2,029		36,473	277,824	191,961
19	334,327	477,712	17,634	6,193	136,682	6,037	223,159		3,340	1,905	82,792	423,527	294,491
20	6,971,919	4,725,309	128,729	179,767	1,380,681	84,807	2,404,965	12,836	40,359	1,049	492,713	5,039,536	2,544,064
21	1,660,139	1,682,238	56,650	77,609	458,733	19,354	776,643		8,879	2,000	279,760	1,865,847	1,069,850
22	3,584,247	12,632,575	56,813	95,400	481,245	59,329	11,906,496	2,872	18,630		311,785	13,435,114	1,768,289
23	1,208,730	1,085,884	62,268	24,763	308,725	46,173	512,056		7,370		134,639	1,307,747	749,513
24	17,179	32,741	4,950	5,625	11,152	95	9,208		660		1,021	38,825	29,222
25	56,545	61,433	1,560	3,804	21,639	1,790	17,848		1,808		168	75,443	55,808
26	9,521,706	7,936,922	361,783	396,102	2,831,581	124,742	2,691,498	4,235	63,056	2,606	1,461,313	9,122,873	6,306,633
27	14,030	67,541		8,364	10,416	264	15,485		1,683		31,313	101,074	85,325
28	6,836,927	14,729,529	294,865	420,746	3,075,833	48,927	7,159,038	103,162	2,219,268		1,407,720	16,178,633	8,970,668
29	150,907	76,727	3,685	1,974	28,551	2,899	25,864		1,690		11,216	80,538	52,375
30	36,425	45,039	900	1,137	3,526	245	31,450		5,220		141	59,112	27,417
31	1,774,903	1,125,976	43,976	79,138	275,613	75,128	336,643		325		265,668	1,420,674	1,008,963
32	1,191,668	1,233,775	19,530	13,373	281,234	7,309	799,259		6,240		119,879	1,265,964	699,386
33	4,406,719	4,801,238	93,989	231,897	428,476	32,273	3,413,947		6,018		83,062	5,264,570	1,638,660
34	2,829,750	1,956,220	39,918	23,848	504,151	969,106	186,243		23,226		12,336	2,398,927	1,243,578
35	1,286,346	1,409,714	61,191	21,062	548,042	16,828	617,495		7,490		9,172	1,708,258	1,074,285
36	1,421,040	1,248,058	41,650	11,807	234,657	34,899	827,940		4,140		11,603	1,571,364	798,325
37	49,074,957	69,317,310	1,102,612	2,529,766	9,122,844	1,287,167	49,021,006	134,759	2,350,331	221,922	4,548,903	77,873,625	28,565,452

* All other industries embrace—Continued.

Graphite and graphite refining.....	1	Looking-glass and picture frames.....	16	Silverware and plated ware.....	1
Grease and tallow.....	13	Malt.....	4	Smelting and refining, copper.....	4
Grindstones.....	2	Matches.....	2	Smelting and refining, not from the ore.....	4
Hair work.....	5	Mineral and soda waters.....	97	Soap.....	5
Hats, fur-felt.....	1	Mucilage and paste.....	3	Sporting and athletic goods.....	13
Hats, straw.....	1	Needles, pins, and hooks and eyes.....	2	Statuary and art goods.....	2
Hones and whetstones.....	2	Oil, not elsewhere specified.....	4	Sulphuric, nitric, and mixed acids.....	5
Horseshoes, not made in steel works or rolling mills.....	1	Paving materials.....	1	Toys and games.....	1
House-furnishing goods, not elsewhere specified.....	7	Photographs and graphophones.....	1	Typewriters and supplies.....	2
Ink, printing.....	2	Photographic apparatus and materials.....	2	Upholstering materials.....	148
Ink, writing.....	3	Pipes, tobacco.....	1	Vinegar and cider.....	7
Instruments, professional and scientific.....	6	Roofing materials.....	5	Washing machines and clothes wringers.....	6
Iron and steel forgings.....	4	Rubber goods, not elsewhere specified.....	2	Waste.....	2
Kaolin and ground earths.....	1	Rules, ivory and wood.....	1	Wheelbarrows.....	1
Labels and tags.....	6	Safes and vaults.....	1	Windmills.....	1
Lests.....	2	Screws, machine.....	1	Wire.....	1
Lead, bar, pipe, and sheet.....	1	Signs and advertising novelties.....	3		
Liquors, distilled.....	2	Silk and silk goods, including throwsters.....	2		

TABLE III.—DETAIL STATEMENT FOR CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES, CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES. DETROIT.

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.									WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Primary horse-power.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.			
					Male.	Female.	Total.	16 and over.			Male.	Female.				
								Male.	Female.							
1 All industries.....	2,036	95,841	1,804	2,607	7,587	2,852	81,011	64,138	15,061	1,812	95,037	76,495	16,552	1,082	928	114,190
2 Automobiles, including bodies and parts...	68	17,437	.....	336	1,101	325	15,075	15,551	118	6	21,370	21,201	161	8	.....	14,666
3 Baskets, and rattan and willow ware.....	7	22	6	.....	.....	.....	16	11	5	.....	15	10	5	.....	28	
4 Blacking and cleansing and polishing preparations.	8	21	7	4	2	2	6	4	2	.....	6	4	2	.....	85	
5 Boots and shoes, including cut stock and findings.	8	1,453	6	25	66	29	1,327	768	429	130	1,336	774	431	80	51	362
6 Boxes, cigar.....	4	260	4	4	3	.....	249	91	141	17	267	98	151	8	10	164
7 Boxes, fancy and paper.....	7	400	6	14	8	6	366	67	252	47	418	76	288	7	47	142
8 Brass and bronze products.....	37	4,374	16	102	140	84	4,032	3,830	57	145	4,823	4,583	68	170	2	10,651
9 Bread and other bakery products.....	265	1,600	272	40	111	75	1,108	923	153	32	1,164	970	160	15	19	1,112
10 Brick and tile.....	10	205	13	5	2	2	183	183	.....	.....	205	205	.....	.....	.....	564
11 Canning and preserving.....	9	496	6	14	59	9	408	204	188	16	526	283	243	5	15	549
12 Carpets, rag.....	27	.....	8	.....	.....	.....	10	15	4	.....	10	8	2	.....	26	
13 Carriages and wagons and materials.....	34	321	44	3	5	3	263	262	1	.....	264	263	1	.....	188	
14 Clothing, men's, including shirts.....	22	3,008	27	44	103	48	2,786	326	2,460	.....	3,040	356	2,684	.....	961	
15 Clothing, women's.....	27	1,041	29	43	30	18	921	84	821	16	1,107	101	986	4	16	154
16 Coffins, burial cases, and undertakers' goods.	5	117	6	5	9	2	95	84	11	.....	96	85	11	.....	148	
17 Confectionery.....	23	501	30	15	23	46	387	176	190	21	437	199	215	1	22	341
18 Cooperage and wooden goods, not elsewhere specified.	9	144	13	2	1	2	126	115	11	.....	117	107	10	.....	155	
19 Copper, tin, and sheet-iron products.....	72	2,152	74	39	71	36	1,932	1,522	261	149	1,986	1,566	268	111	41	1,453
20 Cutlery and tools, not elsewhere specified.....	19	373	11	13	71	14	259	256	3	.....	311	308	3	.....	719	
21 Electrical machinery, apparatus, and supplies.	23	685	15	51	46	32	541	379	162	.....	632	457	195	.....	575	
22 Electroplating.....	8	121	6	7	.....	4	104	102	2	.....	100	98	2	.....	180	
23 Emery and other abrasive wheels.....	4	122	2	7	6	5	102	78	24	.....	121	93	28	.....	153	
24 Flags, banners, regalia, society badges, and emblems.	5	51	3	4	1	3	40	13	27	.....	32	10	22	.....	28	
25 Flour-mill and gristmill products.....	5	220	5	8	28	10	169	162	3	4	164	157	3	4	.....	1,150
26 Foundry and machine-shop products.....	215	10,212	125	388	716	289	8,694	8,488	101	105	11,233	10,967	130	119	17	10,336
27 Fur goods.....	10	519	24	13	49	62	371	95	267	9	446	114	321	7	4	24
28 Furniture and refrigerators.....	33	2,528	28	51	98	61	2,290	2,008	145	137	2,531	2,220	160	124	27	3,722
29 Hand stamps and stencils and brands.....	7	24	.....	.....	.....	.....	15	12	.....	.....	16	13	2	.....	5	
30 Hosiery and knit goods.....	9	367	7	.....	11	7	333	33	273	28	314	31	257	.....	26	214
31 Iron and steel, steel works and rolling mills.	5	1,064	.....	18	45	12	989	989	.....	.....	1,118	1,118	.....	.....	.....	3,430
32 Leather goods.....	22	516	13	19	56	20	403	327	67	9	425	345	71	9	.....	530
33 Liquors, malt.....	18	838	13	50	117	12	646	634	12	.....	655	653	12	.....	3,886	
34 Lumber and timber products.....	59	2,322	52	95	95	34	2,046	2,022	.....	24	2,175	2,150	.....	25	.....	4,029
35 Marble and stone work.....	19	236	25	5	3	4	194	194	.....	.....	187	187	.....	.....	560	
36 Models and patterns, not including paper patterns.	17	222	18	8	3	5	188	186	1	1	239	236	1	2	.....	95
37 Optical goods.....	6	241	3	9	22	19	188	97	74	17	185	95	73	11	6	79
38 Patent medicines and compounds and druggists' preparations.	74	4,289	54	134	766	517	2,818	1,467	1,320	41	2,988	1,545	1,400	17	26	1,819
39 Photo-engraving.....	7	213	5	18	27	10	153	146	5	2	168	151	5	2	.....	116
40 Printing and publishing.....	224	4,058	212	183	862	282	2,519	1,982	487	50	2,612	2,055	505	50	2	2,602
41 Shipbuilding, including boat building.....	17	607	22	17	47	36	485	481	4	.....	649	643	6	.....	1,079	
42 Show cases.....	6	117	3	11	4	5	94	90	1	3	106	101	1	4	.....	435
43 Slaughtering and meat packing.....	29	983	33	25	99	15	811	805	.....	6	813	807	.....	6	.....	3,092
44 Stoves and furnaces, including gas and oil stoves.	8	3,130	.....	74	221	27	2,808	2,726	1	81	2,911	2,826	1	84	.....	2,741
45 Tobacco manufactures.....	198	6,544	202	87	326	46	5,883	1,007	4,400	476	6,354	1,088	4,752	29	485	925
46 Umbrellas and canes.....	3	17	4	1	.....	.....	9	9	.....	.....	9	9	.....	.....	3	
47 All other industries ¹	355	21,637	340	603	2,166	629	17,959	15,153	2,567	239	20,336	17,158	2,907	159	112	30,344

¹ All other industries embrace: Agricultural implements, 3; artificial flowers and feathers and plumes, 5; artificial stone, 13; artists' materials, 1; awnings, tents, and sails, 7; habbit metal and solder, 3; bags, other than paper, 1; baking powders and yeast, 2; belting and hose, leather, 2; bluing, 1; brooms, 5; brushes, 8; butter, cheese, and condensed milk, 3; buttons, 2; calcium lights, 1; card cutting and designing, 1; carriages and sleds, children's, 4; cars and general shop construction and repairs by steam-railroad companies, 1; cars and general shop construction and repairs by street-railroad companies, 1; cars, steam-railroad, not including operations of railroad companies, 1; cash registers and calculating machines, 5; chemicals, 5; cloth, sponging and refinishing, 2; clothing, men's, buttonholes, 1; coffee and spice, roasting and grinding, 6; cordials and syrups, 1; corsets, 2; crucibles, 1; dentists' materials, 1; dyeing and finishing textiles, 1; dyestuffs and extracts, 1; enameling and japanning, 1; engraving and diesinking, 3; engraving, wood, 1; fancy articles, not elsewhere specified, 2; fertilizers, 1; files, 1; flavoring extracts, 4; food preparations, 11; foundry supplies, 1; fuel, manufactured, 1; furnishing goods, men's, 8; furs, dressed, 2; gas and electric fixtures and lamps and reflectors, 11; gas, illuminating and heating, 2; glass, cutting, staining, and ornamenting, 5; gloves and mittens, leather, 1; glue, 1; grease and tallow, 2; hair work, 5; hats and caps, other than felt, straw, and wool, 6; hats, straw, 1; hones and whetstones, 1; horseshoes, not made in steel works or rolling mills, 1; house-furnishing goods, not elsewhere specified, 3; ice, manufactured, 2; ink, printing, 1; ink, writing, 2; instruments, professional

GRAND RAPIDS.

1 All industries.....	524	20,327	447	617	1,121	552	17,590	15,157	2,320	113	18,836	16,297	2,420	99	20	27,676
2 Bread and other bakery products.....	66	477	74	2	29	11	361	242	114	5	372	249	118	3	2	185
3 Brass and bronze products.....	5	445	7	10	16	7	405	325	73	7	441	353	80	5	3	401
4 Brick and tile.....	3	67	.....	0	1	2	58	58	.....	.....	98	98	.....	.....	.....	185
5 Carpets, rag.....	3	9	3	1	.....	1	3	3	.....	.....	4	4	.....	.....	.....	7
6 Carriages and wagons and materials.....	8	102	7	3	4	1	87	87	.....	.....	87	87	.....	.....	.....	173
7 Clothing, men's, including shirts.....	6	295	6	9	21	20	239	24	215	.....	247	25	222	.....	.....	70
8 Copper, tin, and sheet-iron products.....	11	128	11	7	4	5	101	99	1	1	128	126	1	1	.....	39
9 Cutlery and tools, not elsewhere specified.....	7	33	11	2	.....	.....	20	20	.....	.....	18	18	.....	.....	.....	70
10 Flour-mill and gristmill products.....	3	184	6	12	34	14	118	118	.....	.....	126	126	.....	.....	.....	1,510
11 Foundry and machine-shop products.....	49	1,515	40	79	112	52	1,532	1,464	68	.....	1,753	1,675	78	.....	.....	2,107

TABLE III.—DETAIL STATEMENT FOR CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES, AND

CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES—Continued.

GRAND RAPIDS—Continued.

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.				
					Male.	Female.	Total.	16 and over.			Under 16.	Male.	Female.	Male.	Female.		
								Male.	Female.								
12 Furniture and refrigerators.....	54	7,854	33	141	306	124	7,250	7,091	94	65	7,796	7,626	104	66	10,305		
13 Leather goods.....	6	64	5	4	3	1	51	49	2	65	50	48	2	66	26		
14 Leather, tanned, curried, and finished.....	3	108	6	6	2	2	98	98	.....	.....	111	111	.....	.....	437
15 Lumber and timber products.....	20	709	17	37	42	19	594	591	3	.....	700	697	.....	3	2,504
16 Marble and stone work.....	6	62	7	1	11	2	41	41	.....	.....	45	45	.....	.....	77
17 Patent medicines and compounds and druggists' preparations.....	18	126	19	9	12	28	58	19	38	1	57	19	37	1	33		
18 Printing and publishing.....	68	1,148	53	57	146	60	832	627	195	10	841	634	197	5	781		
19 Tobacco manufactures.....	36	522	36	17	9	2	458	121	336	1	474	195	348	1	5		
20 Wall plaster.....	5	361	.....	9	45	7	300	262	38	.....	248	217	31	.....	5
21 All other industries.....	142	5,819	112	205	324	194	4,984	3,818	1,143	23	5,240	4,014	1,202	14	2,408		
															6,403		

1 All other industries embrace: Artificial stone, 10; automobiles, including bodies and parts, 3; awnings, tents, and sails, 1; babbit metal and solder, 1; baking powders and yeast, 1; belting and hose, leather, 2; blacking and cleansing and polishing preparations, 2; boots and shoes, including cut stock and findings, 2; boxes, cigar, 1; boxes, fancy and paper, 3; brooms, 3; brushes, 2; butter, cheese, and condensed milk, 4; butter, reworking, 1; canning and preserving, 2; card cutting and designing, 1; cars and general shop construction and repairs by steam-railroad companies, 1; cars and general shop construction and repairs by street-railroad companies, 1; clothing, women's, 2; coffee and spice, roasting and grinding, 2; coffins, burial cases, and undertakers' goods, 2; confectionery, 6; cooperage and wooden goods, not elsewhere specified, 3; electrical machinery, apparatus, and supplies, 1; electroplating, 1; engravers' materials, 1; engraving and diesinking, 1; fancy articles, not elsewhere specified, 4; flavoring extracts, 2; food preparations, 1; fur goods, 2; furnishing goods, men's, 2; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 4; grease

SAGINAW.

1 All industries.....	203	7,090	232	222	445	201	5,980	5,229	729	32	7,546	6,522	989	27	8	14,412
2 Bread and other bakery products.....	9	112	12	1	7	9	83	58	25	.....	83	58	25	.....	.....	76
3 Carriages and wagons and materials.....	5	30	6	.....	.....	.....	24	24	.....	.....	24	24	.....	.....	.....	20
4 Cooperage and wooden goods, not elsewhere specified.....	9	660	14	11	20	3	642	536	87	19	632	528	85	14	5	1,648
5 Flour-mill and gristmill products.....	4	101	3	5	27	8	58	58	.....	.....	66	66	.....	.....	.....	457
6 Foundry and machine-shop products.....	23	871	25	41	72	35	698	693	5	.....	790	784	6	.....	.....	1,674
7 Furniture and refrigerators.....	12	454	8	15	17	27	417	408	6	3	454	444	7	3	.....	806
8 Liquors, malt.....	5	92	4	7	5	2	74	74	.....	.....	70	70	.....	.....	.....	170
9 Lumber and timber products.....	12	783	21	18	34	14	696	695	.....	.....	698	697	.....	.....	.....	2,682
10 Marble and stone work.....	4	27	7	.....	.....	.....	17	17	.....	.....	21	21	.....	.....	.....	80
11 Printing and publishing.....	22	266	21	14	49	18	164	135	27	2	168	138	28	2	.....	411
12 Salt.....	3	15	3	1	.....	.....	10	10	.....	.....	11	11	.....	.....	.....	30
13 Tobacco manufactures.....	27	163	30	3	3	.....	127	89	37	1	133	93	.....	.....	.....	30
14 All other industries.....	68	3,456	78	106	210	82	2,980	2,432	542	6	4,306	3,588	799	1	3	6,268

1 All other industries embrace: Agricultural implements, 1; artificial stone, 1; automobiles, including bodies and parts, 3; awnings, tents, and sails, 1; beet sugar, 1; belting and hose, leather, 1; blacking and cleansing and polishing preparations, 1; boxes, cigar, 1; boxes, fancy and paper, 1; brass and bronze products, 1; brick and tile, 1; canning and preserving, 1; carpets, rag, 1; cars and general shop construction and repairs by steam-railroad companies, 1; cars and general shop construction and repairs by street-railroad companies, 1; clothing, women's, 3; coffee and spice, roasting and grinding, 1; confectionery, 2; copper, tin, and sheet-iron products, 3; corsets, 1; cutlery and tools, not elsewhere specified, 3; electrical machinery, apparatus, and supplies, 3; electroplating, 2; food preparations, 2; gas, illuminating and heating, 1; graphite and

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

1 ADRIAN.....	80	1,466	66	70	217	54	1,059	924	118	17	1,265	1,104	141	18	2	3,211
2 ALPENA.....	58	1,614	67	66	40	19	1,432	1,403	27	2	1,537	1,506	29	.....	.....	10,670
3 ANN ARBOR.....	63	783	67	88	76	29	573	535	38	.....	658	615	43	.....	.....	1,458
4 BATTLE CREEK.....	105	5,281	95	238	586	187	4,175	3,415	752	8	4,519	3,695	813	.....	.....	14,923
5 BAY CITY.....	182	5,357	178	146	222	74	4,737	4,263	441	33	5,356	4,821	496	39	.....	17,872
6 ESCANABA.....	39	804	36	23	20	5	720	595	122	3	791	654	134	.....	.....	1,416
7 FLINT.....	104	7,840	117	90	402	143	7,088	6,775	312	1	8,895	8,502	391	1	1	8,240
8 HOLLAND.....	59	2,183	46	57	96	45	1,940	1,729	186	25	2,149	1,915	206	24	4	2,958
9 IRONWOOD.....	14	229	16	4	8	.....	201	197	4	.....	224	220	4	.....	.....	521
10 ISHPEMING.....	19	92	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11 JACKSON.....	169	5,624	135	212	340	140	4,797	3,766	1,022	9	5,619	4,408	1,198	6	1	73
12 KALAMAZOO.....	193	7,527	162	284	515	333	6,272	4,390	1,844	38	6,625	4,636	1,951	30	8	6,360
13 LANSING.....	169	6,152	142	190	383	152	5,285	5,043	239	3	6,439	6,144	291	4	.....	14,449
14 MANISTEE.....	64	2,365	78	68	66	28	2,125	1,806	306	13	2,146	1,823	310	4	9	6,811
15 MARQUETTE.....	34	601	29	18	48	8	498	489	9	.....	504	495	9	.....	.....	1,500
16 MENOMINEE.....	52	1,930	41	61	98	30	1,700	1,530	148	22	1,904	1,714	165	22	3	4,770
17 MUSKEGON.....	101	5,098	89	117	228	142	4,522	3,871	615	36	4,987	4,270	675	25	17	10,436
18 PONTIAC.....	42	2,009	27	88	93	62	1,739	1,629	106	4	2,164	2,028	131	5	.....	2,854
19 FORT HURON.....	82	1,862	75	71	88	48	1,580	1,485	142	3	1,813	1,647	163	3	.....	3,130
20 SAULT STE. MARIE.....	47	1,125	37	35	37	11	1,005	955	50	.....	1,136	1,079	57	.....	.....	3,239
21 TRAVERSE CITY.....	61	1,403	54	59	45	25	1,220	1,102	117	1	1,611	1,455	154	2	.....	4,231

STATISTICS OF MANUFACTURES.

709

TOTALS FOR ALL INDUSTRIES IN CITIES OF 10,000 BUT LESS THAN 50,000 INHABITANTS: 1909—Continued.

CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES—Continued.

GRAND RAPIDS—Continued.

	Capital.	EXPENSES.									Value of products.	Value added by manufacture.	
		Total.	Services.			Materials.		Miscellaneous.					
			Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.			Other.
12	\$13,321,905	\$10,984,543	\$459,284	\$467,481	\$3,902,780	\$113,496	\$4,823,245	\$28,870	\$104,711	\$12,106	\$1,072,570	\$12,629,524	\$7,692,783
13	136,865	160,410	6,500	3,983	30,314	909	111,622	710	1,130	.....	5,237	178,618	66,087
14	569,520	638,122	11,599	2,674	55,687	11,384	534,068	100	4,108	.....	18,534	704,534	159,082
15	1,434,230	1,493,289	67,780	40,512	342,581	15,673	891,451	3,531	10,808	22,522	98,447	1,666,676	789,568
16	121,008	95,797	700	12,247	33,960	1,798	37,251	.....	885	.....	8,956	107,884	68,535
17	155,620	212,937	11,176	21,135	24,485	1,262	115,953	3,138	547	1,192	34,049	285,185	167,970
18	1,629,397	1,685,903	127,183	169,784	488,658	20,803	586,212	32,013	11,352	59,964	209,934	2,057,475	1,470,460
19	236,350	664,584	17,208	9,096	187,801	743	301,346	4,291	70,050	.....	74,049	725,044	422,955
20	1,032,900	739,425	22,100	66,615	135,165	30,455	195,452	.....	4,993	.....	284,635	865,827	639,910
21	12,638,122	11,411,199	467,035	433,774	2,492,979	382,549	5,855,904	54,127	266,065	131,258	1,334,506	13,226,505	6,988,052

and tallow, 1; hats and caps, other than felt, straw, and wool, 1; hosiery and knit goods, 4; house-furnishing goods, not elsewhere specified, 2; ink, writing, 1; liquors, malt, 3; mattresses and spring beds, 2; mineral and soda waters, 2; mirrors, 2; models and patterns, not including paper patterns, 3; mudclage and paste, 1; musical instruments and materials, not specified, 1; musical instruments, pianos and organs and materials, 2; needles, pins, and hooks and eyes, 1; optical goods, 1; paint and varnish, 1; paper goods, not elsewhere specified, 4; photo-engraving, 3; roofing materials, 2; saws, 2; shipbuilding, including boat building, 2; show cases, 3; slaughtering and meat packing, 1; soap, 1; statutory and art goods, 1; steam packing, 1; stereotyping and electrotyping, 1; stoves and furnaces, including gas and oil stoves, 2; typewriters and supplies, 1; upholstering materials, 2; vinegar and cider, 1; washing machines and clothes wringers, 1; wirework, including wire rope and cable, 2; wood, turned and carved, 8.

SAGINAW.

1	\$26,703,084	\$16,347,777	\$457,153	\$468,645	\$3,184,359	\$373,819	\$10,034,899	\$39,210	\$212,023	\$53,943	\$1,523,926	\$18,833,047	\$8,424,529
2	133,958	301,047	1,500	11,522	41,980	5,442	217,244	3,740	1,213	.....	18,406	327,751	105,065
3	57,300	25,447	.....	.....	13,363	818	8,603	564	640	200	1,259	30,970	21,549
4	982,906	1,048,207	21,580	26,596	207,491	1,110	698,092	958	6,236	.....	86,144	1,205,774	506,572
5	550,607	684,241	6,110	24,084	32,322	5,346	553,057	2,500	1,778	.....	59,034	730,042	172,539
6	2,064,281	1,616,560	93,345	125,425	432,458	29,804	758,459	3,016	15,523	11,430	147,100	1,837,832	1,049,569
7	1,089,660	674,392	25,012	18,377	198,583	7,530	318,649	1,148	5,745	.....	99,343	880,777	554,598
8	526,246	336,069	10,175	57,792	10,175	99,987	2,230	67,475	75,078	.....	393,002	282,743	282,743
9	1,803,565	2,161,472	27,026	34,138	335,225	7,975	1,021,182	800	16,411	40,278	78,436	2,404,187	775,030
10	26,150	36,779	.....	1,756	11,889	1,253	20,281	132	304	.....	1,164	50,463	28,929
11	421,569	353,162	22,520	47,401	99,537	7,598	119,038	9,327	2,769	950	44,022	428,023	301,387
12	29,130	28,299	1,000	600	5,876	3,514	16,874	.....	367	.....	68	43,648	23,260
13	89,372	178,122	2,020	1,900	55,970	321	81,227	2,046	19,107	.....	15,631	202,553	121,005
14	18,928,340	8,903,380	243,380	166,671	1,691,892	292,836	5,522,006	12,749	74,455	1,085	898,336	10,297,125	4,482,283

graphite refining, 1; hand stamps and stencils and brands, 1; hosiery and knit goods, 1; leather goods, 2; leather, tanned, curried, and finished, 1; lime, 1; malt, 1; matches, 1; mineral and soda waters, 2; mirrors, 1; musical instruments and materials, not specified, 1; musical instruments, pianos and organs and materials, 1; optical goods, 1; roofing materials, 1; rubber goods, not elsewhere specified, 1; saws, 1; shipbuilding, including boat building, 1; show cases, 1; slaughtering and meat packing, 3; soap, 1; umbrellas and canes, 1; vinegar and cider, 1; wheelbarrows, 1; window shades and fixtures, 1; wood, turned and carved, 2.

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

1	\$5,086,155	\$5,652,009	\$98,410	\$228,338	\$539,924	\$65,909	\$4,083,973	\$8,302	\$38,432	\$81,247	\$507,474	\$9,085,126	\$1,935,244
2	5,797,827	3,553,759	103,811	46,856	711,474	197,029	2,103,850	5,053	64,697	60,122	260,867	3,963,823	1,662,944
3	1,769,595	1,601,597	54,953	69,940	287,203	69,330	940,674	7,472	17,733	10,927	143,365	1,865,894	855,890
4	19,176,203	16,363,571	562,789	693,407	2,353,532	391,068	6,677,228	22,894	137,929	30,584	5,493,840	20,174,016	13,105,720
5	10,289,063	8,878,339	263,310	203,533	2,118,282	167,784	5,478,888	22,225	164,788	26,195	433,334	10,298,747	4,647,075
6	1,024,433	979,861	40,550	20,966	404,707	23,997	340,337	5,123	30,742	805	112,634	1,074,109	709,775
7	18,085,144	19,645,212	219,173	316,183	4,429,435	205,352	13,765,748	20,691	108,890	6,587	573,153	24,118,007	10,146,907
8	4,524,489	4,158,949	106,841	155,143	935,505	73,908	2,510,608	3,614	32,566	1,024	369,740	4,622,265	2,037,749
9	303,834	347,318	7,620	6,285	87,807	4,377	196,147	1,172	11,860	10,938	21,112	377,416	176,892
10	87,999	106,792	4,920	1,860	37,155	2,315	50,097	2,470	1,892	1,667	4,416	132,374	79,862
11	9,077,525	12,586,571	348,052	370,688	2,492,246	231,199	7,937,276	61,011	68,376	49,746	1,027,977	14,005,671	5,837,196
12	15,394,953	15,900,333	528,440	707,866	3,148,638	456,792	9,048,236	38,572	197,932	907	1,772,950	17,903,560	8,398,532
13	13,130,827	13,465,117	348,423	460,007	2,706,742	224,280	8,577,260	32,093	89,056	17,560	1,009,696	16,567,093	7,765,553
14	3,248,038	2,940,509	126,780	56,661	1,019,168	125,813	1,163,156	3,163	107,835	22,811	315,122	3,344,087	2,055,118
15	1,392,153	1,112,067	40,172	42,288	305,131	22,695	533,425	5,332	33,220	44,589	85,214	1,254,553	698,432
16	5,212,986	3,124,053	124,808	80,423	718,105	82,174	1,574,612	5,018	128,792	101,347	308,774	3,727,596	2,070,810
17	8,336,919	8,357,663	236,604	208,041	2,106,937	215,325	4,722,792	29,711	111,743	7,000	719,510	9,647,823	4,709,706
18	3,820,009	4,923,817	127,941	93,233	1,087,489	64,831	3,175,678	6,236	29,866	4,784	334,409	5,893,961	2,653,452
19	3,888,538	3,233,951	111,447	89,857	790,894	198,666	1,750,841	11,952	64,225	27,134	188,935	3,588,272	1,638,765
20	4,663,273	4,148,305	80,446	36,085	541,914	111,496	3,011,272	5,733	32,500	8,111	320,748	4,618,715	1,495,947
21	1,957,733	1,969,451	92,339	46,648	443,678	23,386	1,159,363	6,340	36,224	19,144	142,329	2,289,150	1,106,401

CHAPTER 5.

MINES AND QUARRIES.

Introduction.—The present chapter contains a complete statement of the statistics of all mining industries, which include all mines, quarries, and wells in the state of Michigan for the year 1909, as shown by the Thirteenth Census.

A brief explanation of the scope of the census of mining industries and of the terms used, in so far as the usage differs from that followed in the census of manufactures, is presented below in order to prevent any misinterpretation of the statistics.

The explanations here given show the usage of the mining census generally, though some of the special rules have obviously no relation to particular states in which the industries referred to do not exist.

Scope of census.—The Thirteenth Census covered all classes of mines, quarries, and petroleum and gas wells that were in operation during any portion of the year 1909, both those which were producing and those whose operations were confined to development work. Mines, quarries, or wells that were idle during the entire year 1909 were omitted from the canvass. The following operations were likewise omitted from the canvass: Prospecting; the digging or dredging of sand and gravel for the construction of roads and for building operations; the production of mineral waters; and the operation of small bituminous coal banks producing less than 1,000 tons annually.

Where the mineral products are not marketed in their crude condition, but are dressed or washed at the mine or quarry, the statistics of mining cover the entire work of obtaining the crude material and its preparation for the market.

Period covered.—The returns cover the calendar year 1909, or the business year which corresponds most nearly to that calendar year. The statistics cover a year's operations, except for enterprises which began or discontinued business during the year.

Number of operators.—As a rule, the unit of enumeration was the "operator." Every individual, firm, or corporation was required to furnish one report for all mines, quarries, or wells which were operated under the same management or for which one set of books of account was kept. Separate reports were obtained for all properties operated in different states, even where they were owned by the same operator. Likewise, where the operations of one individual, firm, or corporation covered more than one class of mines and quarries, such as coal, iron, limestone, etc., a separate report was received for each industry.

Number of mines, quarries, and wells.—This figure represents the total number of mines and quarries in operation or in the course of development at any time during the calendar year 1909, or the business year that corresponds most nearly to that calendar year, and the number of completed petroleum and natural gas wells in operation on December 31, 1909.

In most mining and quarrying industries the number of mines or quarries varies but little from the number of operators.

Expenses of operation and development.—A certain amount of development work is incidental to the operation of every mine. The expenses reported for producing mines include the cost both of operation and of development work which was done in connection with operation.

Wages.—The amount shown as wages includes only the compensation of regular wage earners hired by the day, week, or month, or under the piecework system.

Supplies and materials.—This item includes the cost of lumber and timber used for repairs, mine supports, track ties, etc.; iron and steel for blacksmithing; rails, frogs, sleepers, etc., for tracks and repairs; renewals of tools and machinery and materials for repairs; and supplies, explosives, oil, etc., as well as the cost of fuel and the rent of power. The schedule called only for the cost of such supplies and materials as had been used during the year covered by the report. Accurate figures, however, could be furnished only in those cases where the operators kept an account of supplies and materials used, or had an inventory made of all in stock at the beginning and at the end of the year. Such a system of accounting is far from general among mine operators, and there is reason to believe that in many cases the reported cost of supplies and materials covered all purchased during the year rather than those used during the year. The crude product of some operators was purchased by others for further dressing or refining; the cost of such materials is shown separately in the general table.

Capital.—The census schedule required every operator to state the total amount of capital invested in the enterprise on the last day of the business year reported, as shown by his books. There is, however, a great diversity in the methods of bookkeeping in use by different operators. As a result, the statistics for capital lack uniformity. Some of the figures reported apparently represent capital stock at face value; others include large investments in mineral lands which are not at present being actively mined, but are held in reserve; still others may include expenditures for unproductive mining ventures in no way related to the operations carried on during the census year.

Persons engaged in mining industries.—The statistics of the number of operators and officials, clerks, and wage earners, are based on the returns for December 15, or the nearest representative day. The reported number of wage earners includes overseers and foremen performing work similar to that of the men over whom they have charge; those whose duties are wholly supervisory are classed as superintendents and managers. Because of the common practice of shutting down mines at frequent intervals, it is impossible to ascertain with any satisfactory degree of accuracy the average number of employees—that is, the number who, if continuously employed, would be required to produce the actual output of the year.

Value of products.—Statistics of the value of mineral products were obtained by the Bureau of the Census in cooperation with the United States Geological Survey, but the two bureaus follow different methods in presenting these statistics. The Geological Survey shows separately the value of each mineral product, whereas the Bureau of the Census presents the value of products of each mining industry. The value of products given for a mining industry often includes the value of some products not covered by the industry designation. The crude product of metalliferous mines may include varying combinations of metals, such as gold, silver, copper, lead, zinc, and iron. Similarly, the total value of all products of the granite quarries is not identical with the value of the total output of granite, but may include the value of some marble or other stone quarried in connection with the principal product.

The value of products for 1909 in most cases represents the value of the products marketed during that year, not the value of those mined during that year.

MINING IN MICHIGAN.

Summary.—Statistics for all mining enterprises in the state of Michigan are presented in Table 7, which gives statistics for all industries combined and for producing enterprises separately in all cases where the statistics could be given without disclosing the operations of an individual enterprise. Statistics for nonproducing enterprises are also given separately from producing enterprises.

The total value of the products of the mining enterprises in 1909 amounted to \$67,714,479, which gives Michigan a rank of fourth among the states in the value of products reported. The principal industries were the mining of iron ore, copper ore, bituminous coal, and gypsum, and the quarrying of limestone. The value of the products of these five industries was \$67,524,285, or 99.7 per cent of the total for all products. Of the total for the five industries, the iron ore mines contributed \$32,168,133, the copper ore mines, \$30,165,443; the coal mines, \$3,175,102; gypsum mines, \$1,220,321; and the limestone quarries, \$795,286. Of the minor industries the production of grindstones was the most important.

Character of organization.—Table 1 classifies the producing mining operations of the state under form of organization, distinguishing corporations from individual owners and firms, while Table 2 gives further details for incorporated enterprises distinguished from those which are unincorporated. Out of a total of 83 operators, 68 were corporations. These corporations reported 99.7 per cent of the total value of products and employed 99.3 per cent of all wage earners. In the copper industry all enterprises were conducted by corporations.

INDUSTRY AND CHARACTER OF ORGANIZATION.	PRODUCING ENTERPRISES: 1909						
	Number of operators.	Number of wage earners.	Value of products.		Per cent distribution.		
			Total.	Per operator.	Operators.	Wage earners.	Value of products.
All Industries ..	83	40,397	\$67,714,479	\$815,837	100.0	100.0	100.0
Individual	11	151	27,218	11,565	13.3	0.4	0.2
Firm	4	113	69,013	17,253	4.8	0.3	0.1
Corporation	68	40,133	67,518,248	992,915	81.9	99.3	99.7
Bituminous coal ..	15	3,572	3,175,102	211,673	100.0	100.0	100.0
Individual ¹	4	105	71,391	17,848	26.7	2.9	2.2
Corporation	11	3,467	3,103,711	282,156	73.3	97.1	97.8

¹ Includes 1 firm and 1 cooperative association.

	Incorporated.	Unincorporated.
Number of operators	68	15
Number of mines and quarries	154	19
Number of wells	21	.....
Proprietors and firm members, total .....	.....	118
Number performing manual labor .....	.....	75
Salaried employees:		
Officers of corporations	144	.....
Superintendents and managers	412	6
Clerks and other salaried employees	1,044	12
Wage earners, Dec. 15, 1909, or nearest representative day	40,133	264
Capital	\$119,161,013	\$170,374
Expenses of operation and development	51,650,175	169,663
Salaries—		
Officers of corporations	481,389	.....
Superintendents and managers	766,728	7,442
Clerks and other salaried employees	912,652	5,311
Wages	27,550,028	110,880
Royalties and rent of mines	4,046,640	1,966
Taxes	1,947,983	773
Supplies and miscellaneous expenses	15,944,755	43,291
Value of products	67,518,248	196,231

Size of enterprises.—In Table 3 the producing mining enterprises of the state are classified according to the number of wage earners employed per enterprise or operating unit. Of the total number of wage earners reported, 51 per cent were employed in the 10 enterprises employing over 1,000 wage earners each.

INDUSTRY AND WAGE EARNERS PER ENTERPRISE.	PRODUCING ENTERPRISES: 1909			
	Enterprises.		Wage earners.	
	Number.	Per cent distribution.	Number.	Per cent distribution.
All Industries	124	100.0	40,397	100.0
No wage earners	1	0.8	.....	.....
Contract work	2	1.6	.....	.....
1 to 5	3	2.4	11	(¹)
6 to 20	17	13.7	178	0.4
21 to 50	17	13.7	608	1.5
51 to 100	20	16.1	1,456	3.6
101 to 500	45	36.3	10,615	26.3
501 to 1,000	9	7.3	6,929	17.2
Over 1,000	10	8.1	20,600	51.0
Iron	44	100.0	16,125	100.0
6 to 50	5	11.4	150	0.9
51 to 100	7	15.9	526	3.3
101 to 500	25	56.8	6,081	37.7
Over 500	7	15.9	9,368	58.1
Copper	26	100.0	19,022	100.0
21 to 100	5	19.2	329	1.7
101 to 500	11	42.3	2,593	13.6
501 to 1,000	3	11.5	2,094	11.0
Over 1,000	7	26.0	14,006	73.6
Bituminous coal	17	100.0	3,572	100.0
6 to 20	3	17.6	25	0.7
21 to 100	7	41.2	371	10.4
Over 100	7	41.2	3,176	88.9

¹ Less than one-tenth of 1 per cent.

Persons employed in mining.—While iron ore mining was the leading industry in 1909, when measured by the value of products, copper ore mining ranks first when the number of persons employed is considered. Out of a total of 42,133 persons employed in the producing enterprises, 19,575, or 46.5 per cent, were employed in the copper industry, and 16,908 in the iron industry.

Prevailing hours of labor.—In Table 4 all producing mines and quarries, except those employing no wage earners and those operating exclusively by contract work, have been classified according to the prevailing hours of labor per day in each enterprise or operating unit. Petroleum and natural gas wells are not included in this table, because the lack of regularity in the number of hours worked per day in a large number of enterprises rendered such classification impracticable. The table shows the percentage of the total number of enterprises falling in each group, and also a per cent distribution in which each enterprise has been given a weight according to the total number of wage earners employed December 15, 1909, or the nearest representative day. It should be borne in mind that this latter distribution does not show the exact proportion of the total number of wage earners working the specified number of hours per day, since, in some cases, a part of the employees worked a greater or less number of hours than those prevailing in the enterprise.

The table shows a marked difference in the number of hours persons are employed in the three leading industries. In the iron ore mines, in 96.6 per cent of the enterprises weighted according to the number of wage earners, 10 hours were the prevailing hours of labor, while in copper mining 59.4 per cent and in bituminous coal mining 98.7 per cent of the enterprises were run on an 8-hour basis.

INDUSTRY AND HOURS PER DAY.	PRODUCING ENTERPRISES: 1909		
	Enterprises.		Per cent distribution of enterprises weighted according to number of wage earners.
	Number.	Per cent distribution.	
All industries.....	1 121	100.0	100.0
8 hours and under.....	31	25.6	38.0
9 hours.....	11	9.1	14.0
10 hours.....	78	64.5	47.9
12 hours.....	1	0.8	0.1
Iron.....	46	100.0	100.0
8 hours and under.....	3	6.5	3.4
10 hours.....	43	93.5	96.6
Copper.....	25	100.0	100.0
8 hours and under.....	12	48.0	59.4
9 hours.....	8	32.0	29.3
10 hours.....	5	20.0	11.3
Bituminous coal.....	17	100.0	100.0
8 hours and under.....	16	94.1	98.7
9 hours.....	1	5.9	1.3

¹ Exclusive of petroleum and natural gas, and of 1 copper mine for which number of hours was not reported.

Engines and power.—As shown by Table 5, the aggregate horsepower employed in producing enterprises was 273,861, of which 271,644 was developed by engines and water wheels owned by the enterprises using them, and 2,217 horsepower by electric motors operated by purchased current.

CHARACTER OF POWER.	PRODUCING ENTERPRISES: 1909				
	Total.	Iron.	Copper.	Bituminous coal.	All other.
Primary power:					
Aggregate horsepower.....	273,861	108,427	149,749	7,912	7,773
Owned.....	271,644	108,202	148,565	7,912	6,905
Steam engines—					
Number.....	1,032	1,205	261	94	72
Horsepower.....	265,146	95,017	144,515	7,900	6,714
Gas or gasoline engines—					
Number.....	12	4	1	2	5
Horsepower.....	178	35	50	12	81
Water wheels—					
Number.....	126	24	11	.....	1
Horsepower.....	16,320	12,210	4,000	.....	110
Electric motors operated by purchased current—					
Number.....	66	13	30	.....	23
Horsepower.....	2,217	165	1,184	.....	868
Electric motors run by current generated by enterprise using:					
Number.....	281	149	72	47	13
Horsepower.....	16,780	7,341	6,908	2,162	369

¹ Includes 1 water motor of 4,000 horsepower.

Comparison of mining industries: 1902-1909.—In order to make comparisons between 1909 and 1902 it is necessary to omit from the 1902 figures, as given in the mines and quarries report for that year, statistics for the production of cement; to omit from the 1909 figures, as they appear in other tables in this chapter, statistics for the operation of copper smelters; and to add to the 1909 statistics, figures for the production of lime, which were omitted from the census of mines and quarries in 1909. Such items as are comparable for the two years are presented in Table 6.

	PRODUCING ENTERPRISES.		
	1909	1902	Per cent of increase.
Wages and salaries.....	\$29,344,947	\$21,277,047	37.9
Supplies and materials.....	\$11,888,749	\$8,637,172	37.8
Royalties and rent of mines.....	\$4,048,981	\$2,311,479	75.2
Contract work.....	\$472,605	\$77,047	513.4
Value of products.....	\$64,956,299	\$48,022,962	35.3
Primary horsepower.....	271,891	184,278	47.5

Duplication between manufactures and mining.—In a number of industries some of the operators subjected the products obtained to certain manufacturing processes on the premises before marketing. These enterprises have been included in the statistics both for manufactures and for mining. As a result of this fact the combined value of products for the manufacturing and mining industries in Michigan involves a duplication of \$23,400,628, of which \$22,045,406 represented the value of copper duplicated.

DETAILED STATISTICS FOR MINING INDUSTRIES: 1909.

Table 7	Aggregate.	PRODUCING MINES, QUARRIES, AND WELLS.							Nonproducing mines and quarries. ²
		Total.	Iron.	Copper.	Bituminous coal.	Gypsum.	Limestone.	All other. ¹	
Number of operators.....	97	83	24	7	15	8	20	9	14
Number of mines, quarries, and wells.....	205	194	83	21	28	8	24	30	14
Capital.....	\$130,794,621	\$119,331,987	\$57,158,347	\$49,731,392	\$6,865,150	\$1,215,603	\$2,799,282	\$170,490	\$11,462,634
Expenses of operation and development.....	\$52,775,492	\$51,819,838	\$22,459,011	\$24,459,471	\$2,985,802	\$1,042,636	\$685,326	\$187,592	\$955,654
Services—									
Salaried officers of corporations, superintendents and managers.....	\$1,314,421	\$1,255,559	\$612,929	\$442,720	\$87,445	\$40,126	\$29,287	\$10,220	\$58,892
Clerks and other salaried employees.....	\$953,399	\$917,903	\$441,910	\$325,549	\$37,935	\$55,214	\$16,980	\$1,028	\$35,036
Wage earners.....	\$28,147,326	\$27,660,906	\$10,608,069	\$14,047,665	\$2,267,272	\$260,864	\$332,859	\$78,179	\$486,418
Miscellaneous—									
Supplies.....	\$9,972,231	\$9,800,415	\$3,452,519	\$5,575,206	\$295,251	\$261,301	\$142,441	\$73,697	\$171,816
Fuel and rent of power.....	\$4,271,108	\$4,193,347	\$1,457,460	\$2,544,233	\$30,266	\$70,909	\$78,905	\$11,554	\$77,761
Royalties and rent of mines.....	\$4,050,106	\$4,048,606	\$3,827,852	\$147,372	\$61,555	\$8,141	\$3,686	\$3,686	\$1,500
Taxes.....	\$2,000,314	\$1,948,756	\$949,945	\$950,821	\$14,439	\$9,748	\$10,879	\$1,408	\$31,558
Contract work.....	\$511,673	\$470,205	\$436,148	\$23,832	\$2,203	—	—	—	\$11,468
Rent of offices and other sundry expenses.....	\$1,554,714	\$1,524,079	\$612,179	\$402,053	\$189,676	\$308,474	\$58,112	\$7,090	\$30,635
Value of products.....	\$67,714,479	\$67,714,479	\$32,168,133	\$30,165,443	\$3,175,102	\$1,220,321	\$795,288	\$190,194	.....
Persons engaged in industry.....	42,970	42,133	16,908	19,575	3,782	733	934	178	637
Proprietors and officials.....	719	680	308	156	154	16	33	9	39
Proprietors and firm members.....	118	118	—	—	104	—	1	—	—
Number performing manual labor.....	75	75	—	—	70	—	4	—	—
Salaried officers of corporations.....	167	144	30	79	15	5	9	2	23
Superintendents and managers.....	434	418	278	77	35	11	13	4	16
Clerks and other salaried employees.....	1,113	1,056	475	397	56	82	23	4	57
Wage earners, Dec. 15, 1909, or nearest representative day.....	41,138	40,397	16,125	19,022	3,572	635	878	165	741
Above ground.....	14,427	14,063	4,665	7,409	318	628	878	165	364
Below ground.....	26,711	26,334	11,460	11,613	3,254	7	—	—	377
Men 16 years of age and over.....	41,060	40,319	16,104	18,970	3,572	635	878	165	741
Engineers, firemen, mechanics, etc.....	5,080	4,918	1,705	2,821	209	20	135	18	162
Above ground.....	4,865	4,703	1,544	2,801	186	19	135	18	162
Below ground.....	215	215	161	30	23	—	—	—	—
Miners, miners' helpers, quarrymen, and stonecutters.....	21,338	21,121	7,853	9,700	2,796	132	516	124	217
Above ground.....	853	853	87	—	—	126	516	124	—
Below ground.....	20,485	20,268	7,766	9,700	2,796	6	—	—	217
All other employees.....	14,642	14,280	6,546	6,439	567	483	222	23	352
Above ground.....	8,644	8,442	3,026	4,556	132	483	222	23	262
Below ground.....	5,998	5,838	3,520	1,883	435	—	—	—	160
Boys under 16 years of age.....	78	78	21	52	—	—	—	—	—
Number of wage earners employed on the 15th day of each month:									
January.....	39,006	38,419	14,351	19,166	3,703	734	389	76	587
February.....	38,995	38,409	14,456	19,075	3,644	688	485	61	586
March.....	39,487	38,870	14,557	19,307	3,611	689	567	139	617
April.....	38,980	38,352	14,128	19,220	3,305	793	663	243	628
May.....	39,395	38,721	14,476	19,274	3,112	745	808	246	674
June.....	39,571	38,778	14,656	19,027	3,213	759	879	244	703
July.....	40,185	39,422	15,020	19,342	3,254	721	834	251	703
August.....	40,415	39,617	15,145	19,271	3,320	715	925	241	798
September.....	40,664	39,886	15,494	19,296	3,382	676	898	250	778
October.....	40,635	40,155	15,803	19,150	3,386	751	863	202	780
November.....	40,384	39,606	15,734	18,728	3,414	727	843	160	778
December.....	40,526	39,791	16,052	18,732	3,496	625	730	147	735
Land controlled, acres.....	469,907	452,602	247,656	160,153	25,661	690	6,062	12,380	17,305
Owned.....	413,528	396,323	223,419	159,833	6,222	572	5,240	1,037	17,205
Held under lease.....	56,379	56,279	24,237	30	19,439	118	822	11,343	100
Mineral and oil land.....	137,716	122,488	17,265	67,369	23,135	397	2,342	12,020	15,248
Owned.....	93,393	78,245	4,484	67,369	3,696	279	1,520	917	15,148
Held under lease.....	44,323	44,223	12,741	—	19,439	118	822	11,103	100
Timber land.....	216,520	215,349	162,248	52,327	4	—	770	—	1,171
Other land.....	116,671	114,785	68,203	40,457	2,522	293	2,950	360	886
Primary horsepower.....	278,684	278,881	108,427	149,749	7,912	3,228	3,155	1,390	4,823

¹ Includes operators as follows: Clay, 1; grindstones, 2; peat, 1; petroleum and natural gas, 1; sandstone, 2; traprock, 2.
² Includes operators as follows: Copper, 12; iron, 2.
³ Includes \$1,385,721 which could not be distributed among the several industries. Exclusive of capital which could not be distributed by states because it was reported in one lump sum by operators having mining investments in two or more states.
⁴ In some cases the same operator conducted two or more enterprises producing different kinds of products, all enterprises being managed through one central administrative office. The total office expenses were accordingly apportioned among the several industries in proportion to the total expenses of each and the estimated amounts of such administrative expenses were added to "Sundry expenses" for each industry. In the totals for all enterprises, however, the expenses appear under the proper headings. The amounts included in "Rent of offices and other sundry expenses" for individual industries and properly distributed in the total for all industries are as follows: Salaried officers of corporations, superintendents, and managers, \$32,832; clerks and other salaried employees, \$9,217; and taxes, \$11,456.
⁵ The following numbers of persons, which could not be distributed among the several industries, are included under the proper headings in the totals for all enterprises: Aggregate, 23; salaried officers of corporations, 4; and clerks and other salaried employees, 19.
⁶ In the iron mining industry 13 boys were employed below ground.