

# SUPPLEMENT FOR MONTANA



POPULATION  
AGRICULTURE  
MANUFACTURES  
MINES AND QUARRIES

75309°—18—37

(565)

## CHAPTER 1.

### NUMBER OF INHABITANTS.

**Introduction.**—This chapter gives the population of Montana, 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 Montana in 1910, distributed according to counties and minor civil divisions, and, so far as possible, in comparison with similar figures for 1900 and 1890. In this table the counties are arranged alphabetically, while the primary divisions in each county are given either in numerical or in alphabetical order. 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.

Comparisons of the population of the minor civil divisions in 1910 with that in 1900 and 1890 are possible in only a very few cases. This is caused by the fact that twelve new counties have been organized since 1890 and also because most of the counties were returned in 1890 and in 1900 by divisions other than those by which they were returned in 1910. Such comparisons are, however, made as far as practicable for all the minor civil divisions existing in 1910 which were also in existence at one or both of the earlier censuses, but in the case of most of the counties they are possible only for incorporated places. It will be noted that in the few counties for which a detailed comparison of the population by minor civil divisions has been given the total population shown

for 1900 or 1890 exceeds the aggregate population of the minor civil divisions given in the table. This is due to the fact that some of the minor civil divisions in these counties have gone out of existence since 1900, their territory having been annexed to other divisions or taken to form new divisions.

Table 2 (p. 580) shows the cities and incorporated towns in Montana, alphabetically arranged, with their population in 1910, 1900, and 1890.

The population of Montana, by counties, at each of the last five 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 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, school districts, 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.

**HISTORICAL NOTE.**—This state derives its name from the Latin and Spanish *montana*, signifying "mountainous."

The first white men to visit the region now constituting Montana were two Frenchmen, sons of Sieur de la Verendrye, who entered the southeast corner of the state. Trading posts were established on the Yellowstone and elsewhere about 1800 and at various dates thereafter. Fort Union was built by the American Fur Company in 1823, and Fort Benton by the same company in 1846. Very few settlers came, however, until about 1862, when, attracted by discoveries of gold at Gold Creek and elsewhere, prospectors and miners began to arrive in large numbers.

The area now comprised within the boundaries of Montana, except the comparatively small section west of the Rocky Mountains, was originally a part of the Louisiana country which was ceded by France to Spain in 1763, retroceded to France in 1800, and purchased by the United States in 1803. This area belonged successively to the district of Louisiana (1804-5), the territory of Louisiana (1805-1812), the territory of Missouri (1812-1834), the "Indian country"

(1834-1854), the territory of Nebraska (1854-1861), and the territory of Dakota (1861-1863).

That part of the present state lying west of the Rocky Mountains was originally included in the Oregon region, which was occupied jointly by the United States and Great Britain until 1846, when the latter nation relinquished its claims. This area belonged to the territory of Oregon from 1848 to 1853. From 1853 to 1863 it belonged to Washington territory, with the exception of a small tract lying west of the Rocky Mountains and south of the forty-sixth parallel, which was not added to Washington territory until 1859.

In 1863 the territory of Idaho, including the entire area of the present state of Montana, was organized from portions of Washington, Dakota, and Nebraska territories. In 1864 Montana, with substantially the same boundaries as the present state, was organized as a separate territory.

In 1889, under authority of an enabling act passed by Congress in the same year, Montana adopted a state constitution; and in November of that year it was admitted to the Union, with boundaries as at present.

**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 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 decennial 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 censuses.

### TOTAL POPULATION, INCREASE, AND DISTRIBUTION.

**Population of the state.**—The population of Montana is 376,053. Compared with a population of 243,329 in 1900, this represents an increase during the last decade of 132,724, or 54.5 per cent. During the same period the total population of the United States increased 21 per cent. The rate of growth of the state during the last decade, while rapid,

was slower, nevertheless, than during any preceding decade.

The following table shows the population of Montana at each census from 1870 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.....	376,053	132,724	54.5	21.0
1900.....	243,329	100,405	70.3	20.7
1890.....	142,924	103,765	265.0	25.5
1880.....	39,159	18,564	90.1	30.1
1870.....	20,595			

<sup>1</sup> Includes population (10,765) of Indian reservations specially enumerated.

Montana was organized as a territory in 1864 and appears in the census reports for the first time in 1870. During the 40 years since 1870 its population has increased rapidly, nearly doubling during the first decade, 1870-1880, increasing more than three and one-half times during the second decade, 1880-1890, and more than two and one-half times during the last two decades, 1890-1910.

A comparison of the rates of increase for the state with those for the United States, as given in the preceding table, shows that the increase during each decade has been much more rapid for the state than for the country as a whole. The population of the state in 1910 was slightly more than eighteen times as large as in 1870, while the population of the United States was only about two and two-fifths times as large in 1910 as in 1870.

**Principal cities.**—Montana has 21 cities, of which Butte, the largest, has a population of 39,165, and Great Falls, the second city, a population of 13,948.

Billings, Anaconda, Helena, and Missoula, with 10,031, 10,134, 12,515, and 12,869 inhabitants, respectively, are the other cities in the state having over 10,000 inhabitants. There are also 3 cities having from 5,000 to 10,000, 4 having from 2,500 to 5,000, and 8 having less than 2,500 inhabitants each.

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 six cities having in 1910 over 10,000 inhabitants at each census since their incorporation either as cities or towns, so far as figures are available, together with the increase during each decade.

Of the cities included in this table, Billings shows the highest rate of increase during the last decade, namely, 211.4 per cent, and Anaconda the lowest, 7.2 per cent, while Great Falls shows a decrease of 6.6 per cent. Only one city, Missoula, shows a higher rate of increase during the last decade, 1900-1910, than during the preceding decade 1890-1900.

CITY AND CENSUS YEAR.	Population.	INCREASE <sup>1</sup> OVER PRE- CEDING CENSUS.		CITY AND CENSUS YEAR.	Population.	INCREASE <sup>1</sup> OVER PRE- CEDING CENSUS.	
		Number.	Per cent.			Number.	Per cent.
<b>Anaconda:</b>				<b>Great Falls:</b>			
1910.....	10,134	681	7.2	1910.....	13,948	-982	-6.6
1900.....	9,453	5,478	137.8	1900.....	14,930	10,951	275.2
1890.....	3,975			1890.....	3,979		
<b>Billings:</b>				<b>Helena:</b>			
1910.....	10,031	6,810	211.4	1910.....	12,515	1,745	16.2
1900.....	3,221	2,385	285.3	1900.....	10,770	-3,064	-22.1
1890.....	836			1890.....	13,824	10,210	281.7
<b>Butte:</b>				1880.....	3,624	518	16.7
1910.....	39,165	8,695	28.5	1870.....	3,106		
1900.....	30,470	19,747	184.2	<b>Missoula:</b>			
1890.....	10,723	7,860	218.9	1910.....	12,860	8,503	194.8
1880.....	3,863			1900.....	4,366	940	27.4
				1890.....	3,426		

<sup>1</sup> A minus sign (-) denotes decrease.

**Counties.**—Montana has 28 counties. The population of these counties ranges from 2,942 in Granite County to 56,848 in Silver Bow County.

The following territorial changes have been made in the counties of Montana since 1900: Part of Deer Lodge County was taken in 1901 to form Powell County; part of Flathead County was taken in 1909 to form Lincoln County; part of Missoula County was taken in 1906 to form Sanders County; part of Custer County, including Northern Cheyenne Indian Reservation and part of Crow Indian Reservation were taken in 1901 to form Rosebud County, the remainder of the Indian reservation returned in Yellowstone County; part of Silver Bow County was annexed to Deer Lodge County in 1903.

Owing to the organization since 1900 of four new counties from parts of other counties, as shown above, the comparison of increase or decrease in population is made for only 19 counties and four combinations of counties. The counties which must be combined in order to determine their actual rate of increase are Lincoln with Flathead, Powell with Deer Lodge, Sanders with Missoula, and Rosebud with Custer and Yellowstone. In the case of the first three combinations the population of the new county is added to that of the old county from which it was formed in order to determine the true rate of increase. In the case of the last combination the true rate of increase is computed by combining the population of the Crow Indian Reservation and Yellowstone County with that of Rosebud County. Seventeen counties and the four combinations of counties increased in population during the last decade. The rates of increase for the 17 counties range from 5.1 per cent in Jefferson County to 420.9 per cent in Dawson County, and the absolute increases of the same group of counties range from 271 in Jefferson County to 10,448 in Fergus County. The combined counties of Lincoln and Flathead increased 139.2 per cent, Powell and Deer Lodge 8.6 per cent, Sanders and Missoula 95.6 per cent, and Rosebud, Custer, and Yellowstone 168.8 per cent in population. There were two counties

which decreased in population, Granite and Madison, their rates of decrease being 32 and 6.1 per cent, respectively. The aggregate increase of population from 1900 to 1910 in the 17 counties and the four combinations of counties that showed increases was 134,576; the aggregate decrease of the population in the two counties that showed decreases was 1,852. The difference, 132,724, 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 Montana 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 146,201 square miles. The average number of persons to the square mile in 1910 was 2.6; in 1900 and 1890 it was 1.7 and 1, respectively. The average number per square mile for the United States as a whole in 1910 was 30.9.

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.

Chouteau County, with 15,972 square miles, has the largest area, and Silver Bow County, with 698 square miles, has the smallest area. Silver Bow County, containing Butte city, has the highest density of any county, namely, 81.4 persons per square mile, while Rosebud County has the lowest density, 0.8.

**Minor civil divisions.**—The political divisions into which counties are subdivided are collectively termed "Minor civil divisions." In Montana the counties are divided into 802 primary divisions, comprising 665 school districts, 41 townships, and 96 election precincts. There are also 57 secondary divisions, comprising 21 cities and 36 incorporated towns. The secondary divisions form parts of the districts, townships, or pre-

cinets in which they are located, except in the case of one city which is coextensive with the precinct in which it is located. Besides these minor civil divisions there are 6 Indian reservations in the state, which, though independent of any county organization, are returned under the counties in which they are wholly or partly located. There are also 56 unorganized townships, 11 of which have no population reported, and 1 military reservation.

**Urban and rural population compared.**—The following table presents the population of Montana at the censuses of 1910, 1900, and 1890, respectively, distributed among cities and towns 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.....		376,053		243,920		1 142,024	100.0	100.0	100.0
<b>Urban territory.....</b>	<b>14</b>	<b>133,420</b>	<b>10</b>	<b>84,554</b>	<b>6</b>	<b>38,787</b>	<b>35.5</b>	<b>34.7</b>	<b>27.1</b>
Cities and towns of—									
25,000 inhabitants or more.....	1	30,185	1	30,470			10.4	12.5	
10,000 to 25,000 inhabitants.....	5	50,407	2	25,700	2	24,557	13.5	10.6	17.2
5,000 to 10,000 inhabitants.....	3	18,015	1	9,453			4.8	3.9	
2,500 to 5,000 inhabitants.....	5	18,743	0	18,931	4	14,230	5.0	7.8	10.0
<b>Rural territory.....</b>		<b>242,633</b>		<b>158,775</b>		<b>1 104,137</b>	<b>64.5</b>	<b>65.3</b>	<b>72.9</b>
Cities and towns of less than 2,500 inhabitants.....	43	35,186	16	15,705	14	13,715	9.4	6.5	9.6
Other rural territory.....		207,447		143,070		1 90,422	55.2	58.8	63.3

<sup>1</sup> Includes population (10,765) of Indian reservations specially enumerated.

As shown by the above table, the urban territory of the state in 1910—that is, the cities and incorporated towns of 2,500 inhabitants or more—contained 133,420 inhabitants, or 35.5 per cent of the total population, while 242,633 inhabitants, or 64.5 per cent, lived in rural territory. The urban territory as it existed in 1900—that is, the cities and incorporated towns then having 2,500 inhabitants or more—contained 84,554 inhabitants, or 34.7 per cent of the total population, while 158,775 inhabitants, or 65.3 per cent, lived in rural territory. There has thus been only a very slight increase in the proportion of urban population. 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.

In 1910 Butte city contributed 10.4 per cent of the total population of the state, this being a slight decrease from the proportion of the population of the state in this city in 1900. In 1910 slightly more than one-quarter, or 26.2 per cent, of the total population of the state was in cities of over 10,000 inhabitants each, while in 1900 and 1890 the proportion of the population of the state in cities of over 10,000 inhabitants was 23.1 per cent and 17.2 per cent, respectively.

The 43 cities and incorporated towns of less than 2,500 inhabitants each have an aggregate population of 35,186, or 9.4 per cent of the total population of the state. These places comprise 12 having from 1,000 to 2,500 inhabitants each, with a combined population of 18,835; 15 having from 500 to 1,000 inhabitants each, with a combined population of 10,004; and 16 having less than 500 inhabitants each, with a combined population of 6,347. The population living in unin-

corporated territory represents 55.2 per cent of the total.

The above table shows further that in all incorporated places, including those of less than 2,500 inhabitants, there was in 1910 a population of 168,606, or 44.8 per cent of the population of the state. The population of all incorporated places, as they existed in 1900, was 100,259, or 41.2 per cent of the population of the state.

Table I of Chapter 2 shows that 3 counties and three combinations of counties had a larger proportion and 2 counties and one combination of counties a smaller proportion of urban population in 1910 than in 1900, while 11 counties were wholly rural at both censuses. Three counties which were wholly rural in 1900 were partly urban in 1910.

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 on page 571, the total population in 1910 of the cities and towns which at that time had 2,500 inhabitants or more was 133,420; in 1900 the total population of these same places was 89,476. It may be noted that the latter figure exceeds the total population in 1900 of the cities and towns which at that time had over 2,500 inhabitants each, 84,554 (see table above), by 4,922. The difference is the net result of the passage, since 1900, of certain communities from the rural to the urban class and vice versa.

A comparison of the total population in 1910 of cities and towns 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 49.1 per cent. This represents the rate of growth of urban communities as thus defined. During the same period the population living in the remainder of the state increased 57.7 per cent. There was no large difference, therefore, between rates of increase for urban population and 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 2 counties in Montana in which the population living in rural territory decreased, and 1 in which there was a decrease in the urban population.

In the following table the population of the state as a whole is distributed so as to show, for 1910 and 1900, the population of the city of Butte, and the combined

population of the cities and towns having in 1910 from 2,500 to 25,000 inhabitants, and the population of the remainder of the state.

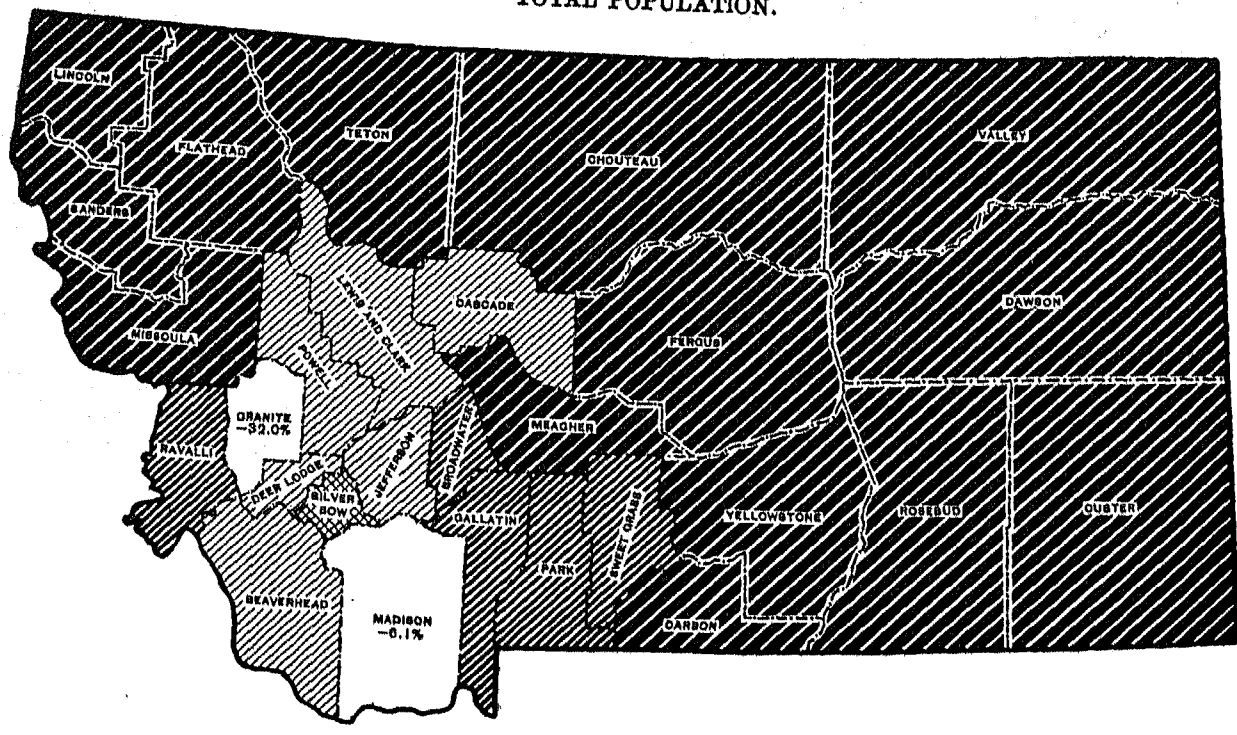
CLASS OF PLACES.	POPULATION.		INCREASE: 1900-1910	
	1910	1900	Number.	Per cent.
The state.....	376,053	243,329	132,724	54.5
Urban territory in 1910.....	133,420	89,476	43,944	49.1
City of Butte.....	39,165	30,470	8,695	28.5
Cities and towns of 2,500 to 25,000 inhabitants in 1910.....	94,255	59,006	35,249	59.7
Remainder of the state.....	242,633	153,853	88,780	57.7

From this table it appears that the city of Butte increased in population during the last decade more than one-half as rapidly as the state as a whole, while the rate of increase for cities and towns from 2,500 to 25,000 inhabitants, and that for the remainder of the state, were larger than the rate of increase for the state as a whole.

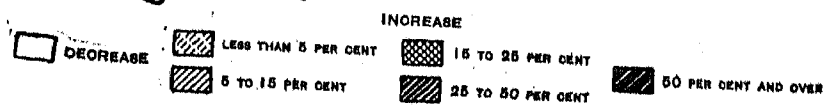
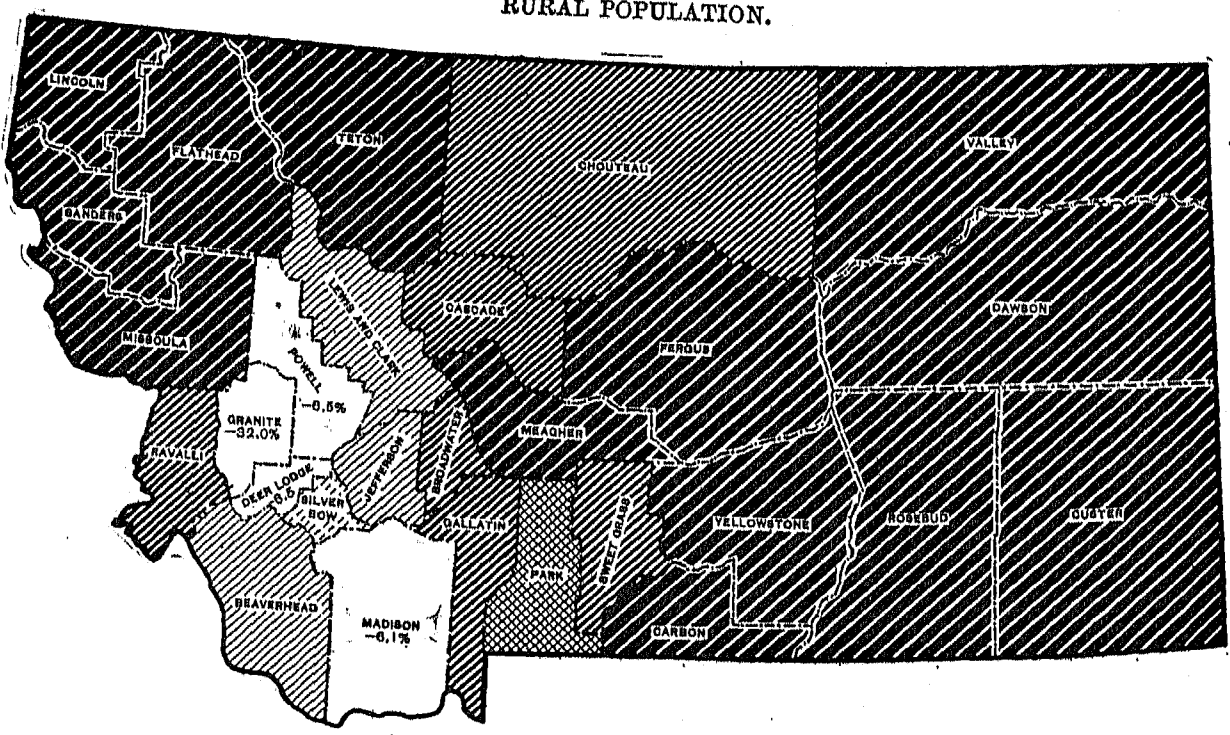
# PER CENT OF INCREASE OR DECREASE OF POPULATION OF MONTANA, BY COUNTIES: 1900-1910.

In case of decrease the per cent is inserted under the county name.

## TOTAL POPULATION.

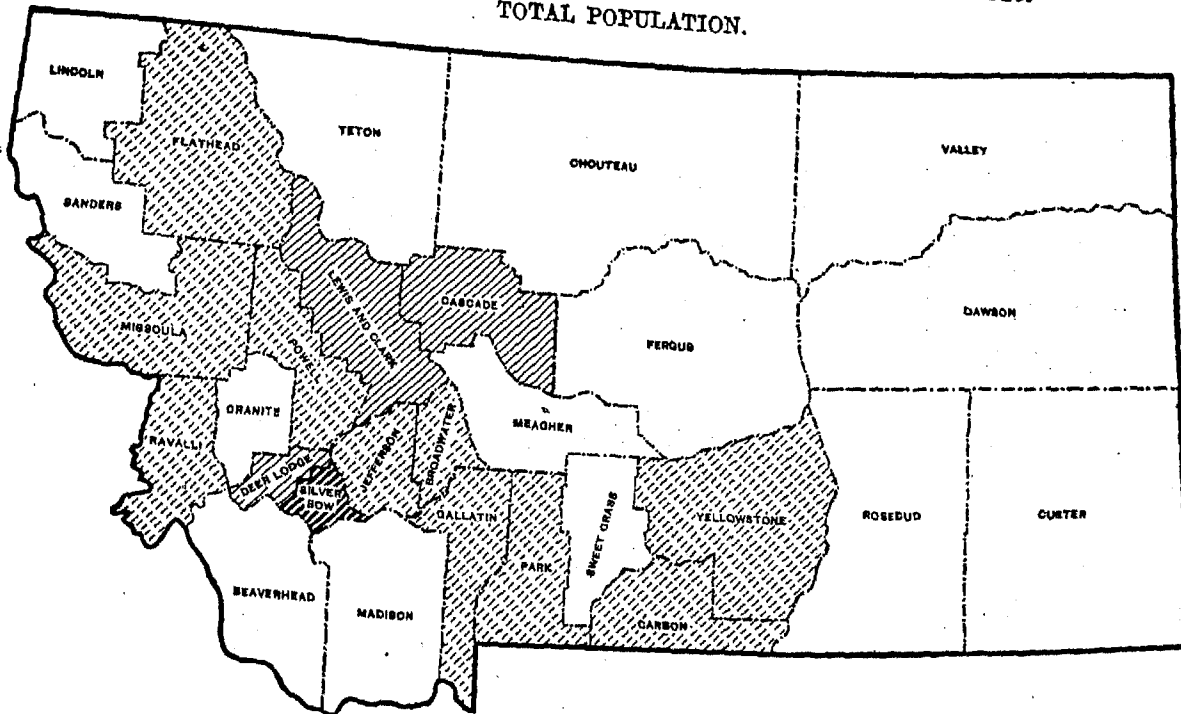


## RURAL POPULATION.

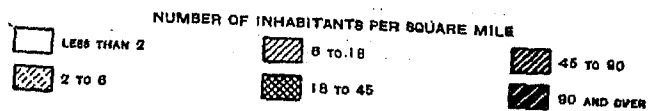
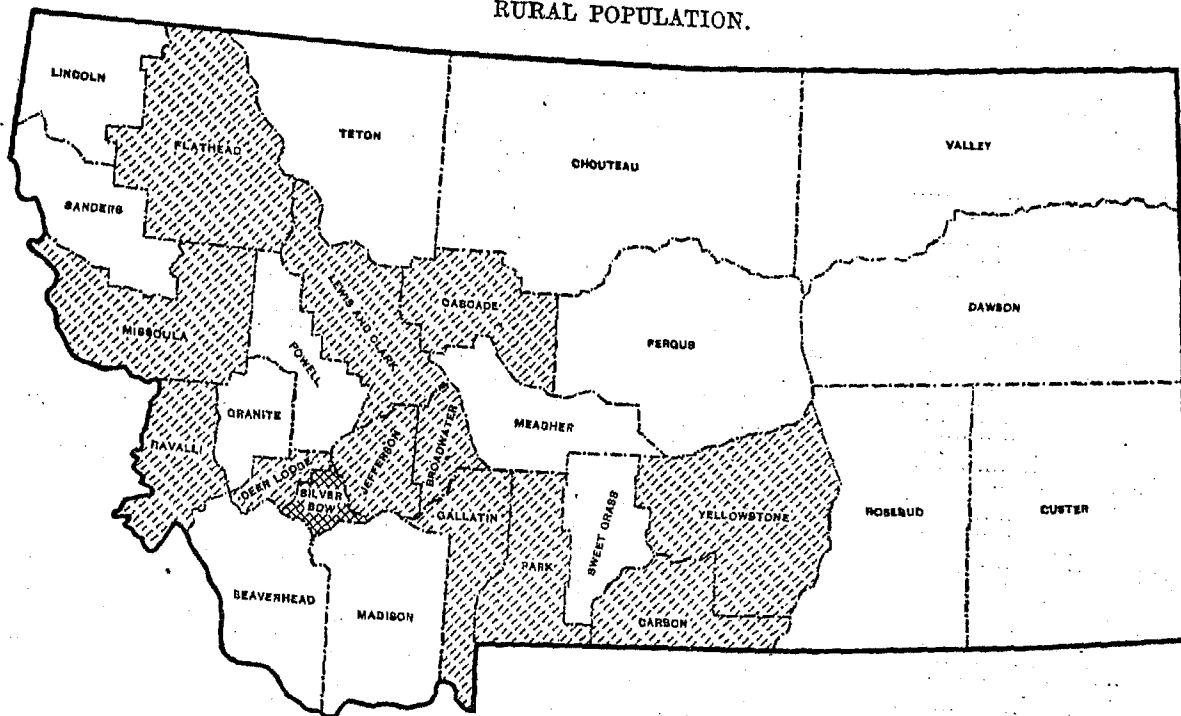


Rural population is defined as that residing outside of incorporated places having 2,500 inhabitants or more.

DENSITY OF POPULATION OF MONTANA, 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.

[The words "district" and "precinct," where used, mean school district and election precinct, respectively. 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
<b>Beaverhead County</b> .....	<b>6,446</b>	<b>15,615</b>	<b>14,655</b>	<b>Carbon County—Continued.</b>			
Argenta township.....	99	106		District 32, Rookvale.....	158		
Bannock township.....	229	418		District 33, Paradise Valley.....	209		
Barretts township.....	89	297		District 34, Silvertip.....	328		
Birch Creek township.....	191	180		District 35, Golden.....	94		
Bishop township.....	180	118		District 36, Morris.....	119		
Blacktail township.....	290	106		District 37, Elbow.....	137		
Bowen township (or Big Hole 15).....	198	141		District 38, Bailey.....	117		
Dell township.....	305	143		District 39, Whitebird.....	180		
Dewey township.....	182	115		District 40, Flaherty Flat.....	104		
Dillon township, including Dillon city.....	2,239	1,721		District 41, Clear Creek.....	127		
Dillon city.....	1,855	1,530	1,018	District 42, West Rosebud.....	102		
Ward 1.....	947			District 43, Tloker.....	100		
Ward 2.....	616			District 44, Mason.....	103		
Ward 3.....	273			District 45, South Willow Creek.....	49		
Glendale township.....	100	260		District 46, Round Butte.....	148		
Hecla township.....	20	185		District 47, Columbus.....	52		
Horse Prairie township.....	444	230		District 48, Tony.....	183		
Jackson township.....	508	323		District 49, Yanoga.....	113		
Lima township.....	340	631		District 50, West.....	62		
Polaris township.....	125	122		District 51, Break.....	62		
Red Rock township.....	409	131		District 52, Absarokee City.....	171		
Wisdom township (or Big Hole 16).....	332	366		District 53, Fryor Mountain.....	91		
<b>Broadwater County</b> .....	<b>3,491</b>	<b>3,641</b>		<b>Cascade County</b> .....	<b>28,833</b>	<b>10,85,777</b>	<b>10,8,755</b>
District 1, Radersburg.....	425			District 1, Great Falls, including Great Falls city.....	17,180		
District 2, Hassel.....	72			Great Falls city.....	15,243	14,930	8,979
District 3, Confederate.....	94			Ward 1.....	5,063		
District 4, Dunk Creek.....	69			Ward 2.....	3,511		
District 5, Canton.....	135			Ward 3.....	3,750		
District 6, Deep Creek.....	101			Ward 4.....	3,385		
District 7, Townsend, including Townsend town.....	897			District 2, Sun River.....	304		
Townsend town.....	759	449	248	District 3, Cascade.....	889		
District 8, Diamond.....	44			District 4, McComber.....	103		
District 9, Missouri Valley.....	74			District 5, Chestnut Valley.....	115		
District 10, Winston.....	127			District 6, Truly.....	100		
District 11, South Round Grove.....	125			District 7, Sand Coulee.....	970		
District 12, Walled Mountain.....	42			District 8, Lower Belt.....	117		
District 13, Crow Creek.....	184			District 9, Little Belt.....	78		
District 14, Beaver Creek.....	93			District 10, Armington.....	415		
District 15, Boston.....	384			District 11, Otter Creek.....	199		
District 16, Mountain Glen.....	90			District 12, Kibby.....	97		
District 17, Pacer.....	80			District 13, Schrammeek Lake.....	69		
District 18, Three Forks.....	134			District 14, Evans.....	109		
District 19, Iron Age.....	94			District 15, Millegan.....	72		
District 20, Glenwood.....	45			District 16, Hay.....	52		
District 21, Lombard.....	155			District 17, Comer.....	170		
District 22, Nave.....	51			District 18, Nason.....	60		
<b>Carbon County</b> .....	<b>13,969</b>	<b>7,533</b>		District 19, Red Butte.....	73		
District 1, Red Lodge, including Red Lodge city.....	5,404			District 20, Upper Otter.....	140		
Red Lodge city.....	4,860	2,153	684	District 21, Houskin.....	192		
Ward 1.....	1,351			District 22, Betts.....	102		
Ward 2.....	1,735			District 23, Monarch.....	139		
Ward 3.....	1,774			District 24, Midcanon.....	21		
District 2, Bostic.....	163			District 25, Ross.....	116		
District 3, Sage Creek.....	180			District 26, Meisenbach.....	80		
District 4, Bridger, including Bridger town.....	671			District 27, Nell Creek.....	72		
Bridger town.....	514			District 28, Bird Creek.....	73		
District 5, Wilsey.....	177			District 29, Belt, including Belt city.....	2,000		
District 6, Clark.....	90			Belt city.....	1,153		
District 7, Joliet, including Joliet town.....	545			District 30, Arrow.....	439		
Joliet town.....	329			District 31, Fleming.....	89		
East ward.....	133			District 32, Hardy.....	52		
West ward.....	211			District 33, Orr.....	107		
District 8, Ellis.....	101			District 34, Black Butte.....	50		
District 9, Jackson.....	119			District 35, Nelhart, including Nelhart town.....	323		
District 10, Volney.....	131			Nelhart town.....	268	859	
District 11, Butcher Creek.....	99			Ward 1.....	62		
District 12, Stillwater.....	65			Ward 2.....	157		
District 13, Excelsior.....	139			Ward 3.....	60		
District 14, Grove Creek.....	54			District 36, Belt Park.....	71		
District 15, Absarokee.....	39			District 38, Barker.....	130		
District 16, Rosebud.....	105			District 39, Helper.....	271		
District 17, Town.....	108			District 40, Gibson.....	35		
District 18, Nye City.....	113			District 41, Swan.....	72		
District 19, Province.....	68			District 42, Boston Coulee.....	69		
District 20, Terrell.....	122			District 43, Big Willow.....	37		
District 21, Draper.....	125			District 44, Soldier Creek.....	63		
District 22, Valley.....	251			District 45, Cooney.....	183		
District 23, Roberts.....	313			District 46, Burlingame.....	80		
District 24, Willow Creek.....	167			District 47, New Century.....	73		
District 25, New Prospect.....	86			District 48, Wilson.....	35		
District 26, Riverview.....	73			District 49, Preston.....	35		
District 27, Sweet Grass.....	80			District 50, Stockett.....	1,600		
District 28, Carbonado.....	160			District 51, Castner Falls.....	100		
District 29, Plain View.....	131			District 52, Kearns.....	151		
District 30, Gebo.....	765			District 53, Hanks.....	43		
District 31, Bear Creek, including Bear Creek town.....	618			District 54, Nelson.....	64		
Bear Creek town.....	302			District 55, Pimperton.....	145		
				District 56, Tiger Butte.....	59		
				Joint district 37, Roosevelt (part of).....	119		
				Total for joint district 37 in Cascade and Chouteau Counties.....	140		

1 County total includes population (22) of Pioneer township, annexed to Wisdom township since 1900.  
 2 No comparison of population can be made; not returned by townships in 1890.  
 3 Name changed from Fox in 1902.  
 4 Pioneer township annexed in 1902.  
 5 No comparison of population can be made; not returned by districts in 1900.

6 Incorporated as a city in 1900.  
 7 Incorporated in 1907.  
 8 Incorporated in 1906.  
 9 Incorporated in 1908.  
 10 No comparison of population can be made; not returned by districts in 1900 and 1890.

STATISTICS OF POPULATION.

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

[The words "district" and "precinct," where used, mean school district and election precinct, respectively. 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
<b>Chouteau County.....</b>	<b>17,191</b>	<b>10,966</b>	<b>4,741</b>	<b>Custer County—Continued.</b>			
District 1, Fort Benton, including Fort Benton town.....	1,143			District 17, Sadie.....	62		
Fort Benton town.....	1,004			District 18, Emerson.....	448		
Ward 1.....	259	1,024	684	District 19, Douglas.....	250		
Ward 2.....	418			District 20, Tatlee.....	137		
Ward 3.....	302			District 21, Bradshaw.....	224		
District 2, Upper Highwood.....	177			District 22, Ridge.....	133		
District 3, South Wagner.....	165			District 23, Boyce.....	250		
District 4, Connolly.....	53			District 24, La Bree.....	331		
District 5, Lower Teton.....	280			District 25, Calabar.....	2		
District 6, Lytle.....	177			District 26, Brandenburg.....	104		
District 7, Lower Marias.....	33			District 27, Capital.....	236		
District 8, Shaokin.....	155			District 28, Stacey.....	200		
District 9, Lower Highwood.....	77			District 29, Fallon.....	531		
District 10, Chinook, including Chinook town.....	1,060			District 30, Knowlton.....	213		
Chinook town <sup>1</sup> .....	780			District 31, Ashland.....	63		
District 11, Big Sandy.....	327						
District 12, Harlem, including Harlem town.....	688			<b>Dawson County.....</b>	<b>12,725</b>	<b>2,443</b>	<b>2,056</b>
Harlem town <sup>2</sup> .....	383			District 1, Glendive, including Glendive city.....	2,600		
District 13, Box Elder.....	201			Glendive city <sup>3</sup> .....	2,428		
District 14, Cleveland.....	314			Ward 1.....	1,093		
District 15, Eagle Creek.....	134			Ward 2.....	1,335		
District 16, Havre, including Havre town.....	3,878			District 2, Belle Prairie.....	257		
Havre town.....	3,084	1,058		District 3, Deer Creek.....	182		
Ward 1.....	634			District 4, Newlon.....	173		
Ward 2.....	1,807			District 5, Sidney, including Sidney town.....	497		
Ward 3.....	1,183			Sidney town <sup>4</sup> .....	345		
District 17, Paradise Valley.....	173			District 6, Wibaux, including Wibaux town.....	1,131		
District 18, Ada.....	76			Wibaux town <sup>5</sup> .....	487		
District 19, Zortman.....	132			District 7, Tokna.....	357		
District 20.....	112			District 8, Hodges.....	353		
District 21, Coburg.....	117			District 9, Bryan's Prairie.....	161		
District 22, Gold Butte.....	286			District 10, Bad Route.....	200		
District 23, Landusky.....	522			District 11, Burne.....	444		
District 24, Lloyd.....	101			District 12 A, Ridgeland.....	78		
District 25, Cypress.....	217			District 12 B.....	339		
District 26, Warrick.....	112			District 13, Fairview.....	102		
District 27, Whitlash.....	232			District 14, Burgess.....	340		
District 28, Buckland.....	50			District 15, Bawden.....	181		
District 29, East Chinook.....	156			District 16, Jordan.....	524		
District 30, Wagner.....	87			District 17, Curran.....	273		
District 31, La Barra.....	78			District 18, Kinsey.....	292		
District 32, Cochrill.....	157			District 19, Leedy.....	98		
District 33, Chester.....	750			District 20, Mosby.....	89		
District 34, Maddux.....	108			District 21, Gossett.....	257		
District 35, Wayne.....	89			District 22, Randall.....	232		
District 36, North Yantio.....	110			District 23, Circle.....	301		
District 37, Madras.....	128			District 24, Four Mile.....	209		
District 38, Reidel.....	83			District 25, German.....	150		
District 39, Judith.....	60			District 26, Glendenning.....	200		
District 40, Beatrice.....	940			District 27, Cohagen.....	95		
District 41, South Yantio.....	46			District 28, Three Buttes.....	441		
District 42, Alma.....	148			District 29, Beaver.....	178		
District 43, Gorman.....	47			District 30, Bloomfield.....	99		
District 44, Clear Creek.....	70			District 31, Hilger.....	91		
District 45, Dodson.....	569			District 32, West Bar.....	257		
District 46, Divide.....	56			District 33, Wyrman.....	166		
District 47, Davey.....	30			District 34, Mount Pleasant.....	91		
District 48, Upper Box Elder.....	98			District 35, Plamey.....	86		
District 1 x.....	502			District 36, Lindsay.....	502		
District 2 x.....	120			District 37, Sandsburn.....	213		
District 3 x.....	10			District 38, Sears.....	178		
Joint district 36 (part of).....	67			District 39.....	65		
Total for joint district 36 in Chouteau and Fergus Counties.....	90			District 40, Yates.....	118		
Joint district 37 (part of).....	21			District 41.....	85		
[For total, see joint district 37, Cascade County.]							
Fort Assiniboine Military Reservation.....	365			<b>Deer Lodge County<sup>6</sup>.....</b>	<b>12,988</b>	<b>17,893</b>	<b>15,155</b>
Fort Belknap Indian Reservation.....	1,194	1,312		District 1, Dry Cottonwood.....	40		
				District 2.....	30		
<b>Custer County<sup>4</sup>.....</b>	<b>14,123</b>	<b>7,891</b>	<b>5,308</b>	District 3, Cable.....	183		
District 1, including Miles City.....	6,240			District 4, Warm Springs.....	365		
Miles City.....	4,687	1,088	950	District 5, Lost Creek.....	164		
Ward 1.....	1,836			District 6, Willow Glen.....	91		
Ward 2.....	1,137			District 7, Modesty.....	110		
Ward 3.....	1,784			District 8, Blue Eyed Nellie.....	277		
District 2, Carlyle.....	171			District 9, Stuart.....	94		
District 3, Kircher.....	145			District 10, Anaconda, including Anaconda city.....	10,579		
District 4, Otter.....	158			Anaconda city <sup>7</sup> .....	10,184	9,458	3,975
District 5, Terry.....	775			Ward 1.....	1,633		
District 6, Slater.....	249			Ward 2.....	1,243		
District 7, Moorhead.....	146			Ward 3.....	923		
District 8, Ismay.....	699			Ward 4.....	1,456		
District 9, Mizpah.....	143			Ward 5.....	2,008		
District 10, Pine Hills.....	78			Ward 6.....	2,891		
District 11, Akada.....	427			District 11, Willow Creek.....	189		
District 12, Baker.....	832			District 12, Fish Trap.....	68		
District 13, Kierzek.....	100			District 13, Ralston.....	212		
District 14, Midland.....	305			District 14, Strickland.....	24		
District 15, Ekalaka.....	294			District 16.....	30		
District 16, Hockett.....	177			District 21, Quinlan.....	17		

<sup>1</sup> No comparison of population can be made; not returned by districts in 1900 and 1890.

<sup>2</sup> Incorporated in 1901.

<sup>3</sup> Incorporated in 1910.

<sup>4</sup> Part, including Northern Cheyenne Indian Reservation and part of Crow Indian Reservation, taken to form Rosebud County in 1901.

<sup>5</sup> Incorporated in 1902.

<sup>6</sup> Part taken to form Powell County in 1901; part of Silver Bow County annexed in 1903.

<sup>7</sup> Part annexed to district 10 in 1904.

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

[The words "district" and "precinct," where used, mean school district and election precinct, respectively. 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
<b>Fergus County</b> .....	<b>17,885</b>	<b>16,937</b>	<b>18,514</b>	<b>Flathead County—Continued.</b>			
District 1, Lewistown, including Lewistown city.....	3,886			KallsPELL township, including KallsPELL city....	3,780	4,486	
<i>Lewistown city</i> <sup>1</sup> .....	3,008	1,098		<i>KallsPELL city</i> .....	5,549	2,522	
<i>Ward 1</i> .....	1,000			<i>Ward 1</i> .....	2,000		
<i>Ward 2</i> .....	1,001			<i>Ward 2</i> .....	1,085		
<i>Ward 3</i> .....	881			<i>Ward 3</i> .....	1,284		
District 2, Old Philbrook.....	132			Whitefish township, <sup>7</sup> including Whitefish town.	1,053		
District 3, Malden.....	131			<i>Whitefish town</i> <sup>8</sup> .....	1,479		
District 4, Old Cottonwood.....	66			<i>Ward 1</i> .....	200		
District 5, Fort Maginnis.....	362			<i>Ward 2</i> .....	340		
District 6, Garnett.....	390			<i>Ward 3</i> .....	470		
District 7, Pine Grove.....	79			Flathead Indian Reservation (part of).....	1,178	13	
District 8, Middle Beaver Creek.....	81			<i>Total for Flathead Indian Reservation in Flathead, Missoula, and Sanders Counties.</i>	5,533	2,142	
District 9, Utica.....	441						
District 10, Trout Creek.....	81			<b>Gallatin County</b> .....	<b>14,079</b>	<b>19,553</b>	<b>16,248</b>
District 11, Warm Springs Creek.....	103			District 1, Logan.....	481		
District 12, Stanford.....	1,176			District 2, Meyersburg.....	23		
District 13, Lower Ross Fork.....	213			District 3, Manhattan.....	570		
District 14, Lower Spring Creek.....	83			District 4, Central Park.....	178		
District 15, Dearfield.....	212			District 5, East Gallatin.....	207		
District 16, Fullerton.....	209			District 6, Lane.....	100		
District 17, Highfield.....	190			District 7, Bozeman, including Bozeman city.....	5,430		
District 18, Upper Cottonwood.....	47			<i>Bozeman city</i> .....	5,107	5,419	2,143
District 19, Upper Beaver Creek.....	93			<i>Ward 1</i> .....	1,110		
District 20, Pleasant Valley.....	391			<i>Ward 2</i> .....	1,430		
District 21, Forest Grove.....	280			<i>Ward 3</i> .....	801		
District 22, Upper Rock Creek.....	70			<i>Ward 4</i> .....	1,094		
District 23, Musselshell.....	72			District 8, Barnhart.....	116		
District 24, Gilt Edge.....	345			District 9, Dry Creek.....	111		
District 25, Careless Creek.....	120			District 10, Wilson Creek.....	111		
District 26, Flatwillow.....	100			District 11, Rea.....	95		
District 27, Grass Range.....	140			District 12, Decker.....	125		
District 28, Nave School.....	160			District 13, Cameron.....	117		
District 29, Wilder.....	180			District 14, Roohambeau.....	60		
District 30, Elso.....	198			District 15, Willow Creek.....	333		
District 31, Lower Beaver Creek.....	95			District 16, Walker.....	74		
District 32, Whelan.....	204			District 17, Reese Creek.....	120		
District 33, Lower Rock Creek.....	128			District 18, Hoffman.....	135		
District 34, Upper Wolf Creek.....	43			District 19, Nelson.....	130		
District 35, Middle Fork Beaver.....	47			District 20, Spring Hill.....	180		
District 36, Kendall.....	912			District 21, Maudlow.....	180		
District 37, Willow Creek.....	123			District 22, Cottonwood.....	113		
District 38, Button Butte.....	40			District 23, Middle Creek.....	62		
District 39, Lower Cottonwood.....	58			District 24, Three Forks, including Three Forks town.....	708		
District 40, Lower Cottonwood.....	394			<i>Three Forks town</i> .....	674		
District 41, Lavina.....	75			District 25, Pass Creek.....	62		
District 42, Pleasant View.....	81			District 26, Mount Zion.....	110		
District 43, Upper Ross Fork.....	644			District 27, Monforton.....	130		
District 44, Moore, including Moore town.....	573			District 28, Lower Madison.....	75		
<i>Moore town</i> <sup>2</sup> .....	271			District 29, Upper Madison.....	101		
District 45, Straw.....	82			District 30, Trebb.....	280		
District 46, High Divide.....	30			District 31, Story Mill.....	99		
District 47, Now Year.....	94			District 32, Laverick.....	123		
District 48, Bear Paw.....	41			District 33, Valley View.....	78		
District 49, Finkbeiner.....	49			District 34, Bos.....	207		
District 50, Michelson.....	102			District 35, Salesville.....	170		
District 51, Backus.....	128			District 36, Riverside.....	40		
District 52, Motheral.....	174			District 37, Fowler.....	101		
District 53, Greene.....	17			District 38, Sedan.....	104		
District 54, Wheeler.....	2,000			District 39, Upper Bridger.....	109		
District 55, Roundup, including Roundup city.....	1,513			District 40, Harper.....	106		
<i>Roundup city</i> <sup>3</sup> .....	614			District 41, Anderson.....	78		
<i>Ward 1</i> .....	550			District 42, Camp Creek.....	24		
<i>Ward 2</i> .....	313			District 43, Reservation.....	187		
<i>Ward 3</i> .....	113			District 44, Belgrade, including Belgrade town.....	677		
District 56, Boston.....	290			<i>Belgrade town</i> <sup>11</sup> .....	601		
District 57, Parcher.....	103			<i>Ward 1</i> .....	233		
District 58, Patterson.....	67			<i>Ward 2</i> .....	273		
District 59, Fishburn.....	61			District 45, Spanish Creek.....	35		
District 60, Jones.....	13			District 46, Durham.....	126		
District 61, South Fork Flatwillow Creek.....	159			District 47, Malmberg.....	61		
District 62, Windham.....	108			District 48, Lower Bridger.....	60		
District 63, Awbery.....	173			District 49, Muir.....	12		
District 64, Melstone.....	54			District 50, Chestnut.....	261		
District 65, Wright.....	95			District 51, Mountain View.....	45		
District 66, Alaska Bench.....	58			District 52, Little Holland.....	67		
District 67, Rogers.....	81			District 53, Smart.....	44		
District 68, Bacon.....	23			District 54, Norris.....	66		
Joint district 36, Knerville (part of).....				District 55, Waterman.....	100		
[For total, see joint district 36, Chouteau County.]				District 56, Storrs.....	60		
<b>Flathead County</b> <sup>6</sup> .....	<b>18,785</b>	<b>69,375</b>		District 57, Foster Creek.....	84		
Columbia township, <sup>7</sup> including Columbia Falls town.....	2,640	1,102		District 58, High Line.....	68		
<i>Columbia Falls town</i> <sup>8</sup> .....	601			District 59, Elk Grove.....	52		
Flathead township.....	2,117	683		District 60, Meadowlark.....	60		
Jeoko township.....	2,100	1,575		District 61, Elk Creek.....	42		
				District 62, Crane.....	53		
				District 63, Crayling.....	164		

<sup>1</sup> No comparison of population can be made; not returned by districts in 1900 and 1890.  
<sup>2</sup> Incorporated as a city in 1901.  
<sup>3</sup> Incorporated in 1910.  
<sup>4</sup> Incorporated as a city in 1910.  
<sup>5</sup> Part taken to form Lincoln County in 1909.  
<sup>6</sup> County total includes population (1,426) of Libby, Tobacco Plains, and Troy townships, taken to form Lincoln County since 1900.

<sup>7</sup> Whitefish township organized from part of Columbia township in 1903.  
<sup>8</sup> Incorporated in 1909.  
<sup>9</sup> Incorporated in 1905.  
<sup>10</sup> No population reported.  
<sup>11</sup> Incorporated in 1906.



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

[The words "district" and "precinct," where used, mean school district and election precinct, respectively. 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
<b>Madison County—Continued.</b>				<b>Park County—Continued.</b>			
Power Canyon precinct.....	31			District 16, Francis.....	94		
Ruby precinct.....	271			District 17, Fridley.....	195		
Rochester precinct.....	102			District 18, Hunters.....	140		
Sheridan precinct, including Sheridan town.....	723			District 19, Pine Creek.....	122		
<i>Sheridan town.....</i>	<i>599</i>	<i>581</i>	<i>807</i>	District 20, Cokedale.....	41		
<i>Ward 1.....</i>	<i>240</i>			District 21, Lot.....	72		
<i>Ward 2.....</i>	<i>159</i>			District 22, Sumner.....	33		
Silver Star precinct.....	229			District 23, Brackett.....	58		
South Boulder precinct.....	285			District 24, Hoffman.....	195		
Twin Bridges precinct, including Twin Bridges town.....	901			District 25, Electric.....	230		
<i>Twin Bridges town<sup>1</sup>.....</i>	<i>491</i>			District 26, Plamer.....	71		
Virginia City precinct, coextensive with Virginia City.....	467			District 27, Conrow.....	28		
<i>Virginia City.....</i>	<i>467</i>	<i>508</i>	<i>675</i>	District 28, Nesbit.....	45		
Washington Bar precinct.....	79			District 29, Jardine.....	82		
Waterloo precinct.....	230			District 30, Mill Creek.....	35		
Wigwam precinct.....	148			District 31, Cottonwood.....	87		
District 25, Puller Springs.....	45			District 32, Porcupine.....	170		
District 29, Blackstaff Deer Creek.....	73			District 33, Gordon.....	54		
District 51, Home Park.....	100			District 34, Bruffey.....	75		
				District 35, Upper Rock Creek.....	75		
				District 36, Muir.....	89		
<b>Meagher County.....</b>	<b>4,190</b>	<b>2,596</b>	<b>14,749</b>	District 37, Meyersburg.....	148		
District 1, Big Elk.....	82			District 38, Valley View.....	42		
District 2, Little Elk.....	195			District 39, Mill Creek Flat.....	96		
District 3, Martinsdale.....	137			District 40, Cutler.....	112		
District 4, Lemrop.....	113			District 41, Clyde Park.....	350		
District 5, Castle.....	43			District 42, Upper Mill Creek.....	49		
District 6, Dorsey.....	222			District 43, Contact.....	7		
District 7, Battle Creek.....	107			District 44, Shields.....	78		
District 8, White Sulphur Springs, including White Sulphur Springs town.....	611			District 45, Urbach.....	59		
<i>White Sulphur Springs town.....</i>	<i>417</i>	<i>448</i>	<i>640</i>	District 46, Blair.....	26		
District 9, Newlan.....	102			District 47, Point of Rocks.....	60		
District 10, Fort Logan.....	215			District 48, Killran.....	54		
District 11, Sheep Creek.....	31			District 49, Mission.....	91		
District 12.....	256			District 50, Middle Rock Creek.....	77		
District 13.....	17			District 51, Hoff.....	68		
District 14, Camas Creek.....	52						
District 15, Two Dot.....	204			<b>Powell County<sup>2</sup>.....</b>	<b>5,904</b>		
District 16, Harlowton, including Harlowton town.....	1,009			Cottonwood township, including Deer Lodge city.....			
<i>Harlowton town<sup>3</sup>.....</i>	<i>770</i>			<i>Deer Lodge city.....</i>	<i>3,300</i>		
<i>Ward 1.....</i>	<i>139</i>			<i>Ward 1.....</i>	<i>2,870</i>	<i>1,584</i>	<i>1,468</i>
<i>Ward 2.....</i>	<i>249</i>			<i>Ward 2.....</i>	<i>488</i>		
<i>Ward 3.....</i>	<i>388</i>			<i>Ward 3.....</i>	<i>550</i>		
District 17, Copper.....	41			Elk township.....	76		
District 18, Dolphine.....	81			Gold Creek township.....	780		
District 19.....	97			Lincoln township.....	448		
District 20, Winnecook.....	238			Monture township.....	493		
District 21, Judith Gap.....	299			Ophir township.....	917		
District 22, Woodward.....	88						
				<b>Ravalli County.....</b>	<b>11,868</b>	<b>7,692</b>	
<b>Missoula County<sup>4</sup>.....</b>	<b>23,596</b>	<b>13,964</b>	<b>14,437</b>	Corvallis township, including Victor town.....	2,709		
Cedar township.....	1,208	1,508	1,546	<i>Victor town.....</i>	<i>374</i>	<i>196</i>	
Fronchtown township.....	1,442	1,249	510	Edwards township.....	1,536		
Hell Gate township, including Missoula city.....	17,810	7,761	5,433	Skalkaho township.....	556		
<i>Missoula city.....</i>	<i>12,889</i>	<i>4,368</i>	<i>3,486</i>	Stevens township, including Stevensville town.....	2,709		
<i>Ward 1.....</i>	<i>2,306</i>			<i>Stevensville town.....</i>	<i>799</i>	<i>548</i>	
<i>Ward 2.....</i>	<i>2,375</i>			Ward township, including Hamilton town.....	4,099		
<i>Ward 3.....</i>	<i>4,253</i>			<i>Hamilton town.....</i>	<i>2,240</i>	<i>1,857</i>	
<i>Ward 4.....</i>	<i>3,755</i>			<i>Ward 1.....</i>	<i>718</i>		
Flathead Indian Reservation <sup>5</sup> (part of) [For total, see Flathead County.]	2,031	2,120		<i>Ward 2.....</i>	<i>844</i>		
Saltose township.....	1,045			<i>Ward 3.....</i>	<i>678</i>		
<b>Park County.....</b>	<b>10,731</b>	<b>7,241</b>	<b>16,861</b>	<b>Rosebud County<sup>10</sup>.....</b>	<b>7,985</b>		
District 1, Miner.....	110			District 1, Decker.....	225		
District 2, Richland.....	84			District 2, Rancher.....	147		
District 3, Ohlmaney Rock.....	100			District 3, Birney.....	145		
District 4, Livingston, including Livingston city.....	5,010			District 4, Forsyth, including Forsyth city.....	1,709		
<i>Livingston city.....</i>	<i>2,859</i>	<i>2,778</i>	<i>2,850</i>	<i>Forsyth city<sup>11</sup>.....</i>	<i>1,528</i>		
<i>Ward 1.....</i>	<i>5,035</i>			District 5, Sabra.....	55		
<i>Ward 2.....</i>	<i>1,753</i>			District 6, Etchetah.....	61		
<i>Ward 3.....</i>	<i>1,816</i>			District 7, Hysam.....	162		
District 5, Biller.....	87			District 8, Lame Deer, including part of Tongue River Northern Cheyenne Indian Reservation.....	600		
District 6, Luce Creek.....	98			<i>Tongue River Northern Cheyenne Indian Reservation (part of).....</i>	<i>544</i>		
District 7, Gardiner.....	346			<i>Total for Tongue River Northern Cheyenne Indian Reservation in districts 8, 17, 18, and D &amp; A.....</i>	<i>1,458</i>	<i>1,454</i>	
District 8, Ohlco.....	109			District 9, Little Porcupine.....	260		
District 9, Cooke.....	69			District 10, Anderson.....	132		
District 10, Shorthill.....	66			District 11, Pleasant Hill.....	62		
District 11, Hawkwood.....	79			District 12, Rosebud.....	370		
District 12, Elton.....	75			District 13, Howard.....	180		
District 13, Aldridge.....	440			District 14, Glenn.....	67		
District 14, Willow Creek.....	121						
District 15, Rock Creek.....	46						

<sup>1</sup> Incorporated in 1902. <sup>2</sup> No comparison of population can be made; not returned by districts in 1900 and 1890. <sup>3</sup> Incorporated in 1908. <sup>4</sup> Part taken to form Sanders County in 1900. <sup>5</sup> County totals include population (1,327 in 1900; 2,075 in 1890) of Jocko, Smead, and Thompson townships, taken to form part of Sanders County since 1900; and population (4,867 in 1890) of Corvallis, Flathead, Skalkaho, and Stevens townships, taken to form Flathead and Ravalli Counties between 1890 and 1900. <sup>6</sup> Saltose township organized from part of Cedar township in 1906. <sup>7</sup> Part taken to form part of Sanders County in 1900. <sup>8</sup> Organized from part of Deer Lodge County in 1901. <sup>9</sup> No comparison of population can be made; not returned by townships in 1900. <sup>10</sup> Organized from part of Custer County, including Northern Cheyenne Indian Reservation and part of Crow Indian Reservation, in 1901. <sup>11</sup> Incorporated as a city in 1908.

# STATISTICS OF POPULATION.

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

[The words "district" and "precinct," where used, mean school district and election precinct, respectively. 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
<b>Rosebud County—Continued.</b>				<b>Sweet Grass County—Continued.</b>			
District 15, Lyndes.....	45			District 6, Nevin.....	111		
District 16, Sanders.....	281			District 7, Howle.....	115		
District 17, Kirby, including part of Tongue River Northern Cheyenne Indian Reservation.	272			District 8, White Beaver.....	98		
Tongue River Northern Cheyenne Indian Reservation (part of).....	208			District 9, Reed.....	151		
District 18, McKay, including part of Tongue River Northern Cheyenne Indian Reservation.	66			District 10, Kent.....	187		
Tongue River Northern Cheyenne Indian Reservation (part of).....	( <sup>1</sup> )			District 11, Upper Deer Creek.....	57		
District 19, Lee.....	142			District 12, Otter Creek.....	62		
District 22, Bascom.....	27			District 13, McLeod.....	44		
District 23, Big Porcupine.....	121			District 14, Boulder.....	80		
District 25, Lock.....	18			District 15, American Fork.....	18		
District 26, Brandenburg.....	107			District 16, Grey Cliff.....	96		
District 28, Butte.....	47			District 17, Lower Deer Creek.....	56		
District 32, Ashland.....	80			District 18, Duck Creek.....	107		
District B x 4.....	( <sup>1</sup> )			District 19, Merrill.....	51		
District C x 4.....	75			District 20, Nye.....	120		
District D x 4, including part of Tongue River Northern Cheyenne Indian Reservation.	731			District 21, Duffy.....	66		
Tongue River Northern Cheyenne Indian Reservation (part of).....	700			District 22, Curtis.....	192		
Crow Indian Reservation <sup>2</sup> (part of).....	1,780			District 23, East Boulder.....	76		
Total for Crow Indian Reservation in Rosebud and Yellowstone Counties.....	2,306	2,680		District 24, Grove Creek.....	11		
				District 25, Wormser.....	78		
<b>Sanders County<sup>3</sup>.....</b>	<b>3,718</b>			District 26, Sanderson.....	43		
Joeko township, including Plains town.....	1,517			District 27, Flanagan.....	112		
Plains town <sup>4</sup> .....	481			District 28, Harrington.....	28		
Ward 1.....	146			District 29, West Boulder.....	87		
Ward 2.....	186			District 30, Morley.....	140		
Ward 3.....	151			District 31, Lower Stillwater.....	13		
Smead township.....	450			District 32, Morris.....	35		
Thompson township, including Thompson Falls town.....	1,422			District 33, Bear Creek.....	20		
Thompson Falls town <sup>5</sup> .....	325			District 34, Columbus.....	17		
Ward 1.....	90			District 35, Contact.....	30		
Ward 2.....	135			District 36, Fish Creek.....	103		
Ward 3.....	108			District 38, Harper.....	67		
Flathead Indian Reservation (part of) [For total, see Flathead County.].....	324			District 39.....	59		
				<b>Teton County.....</b>	<b>8,546</b>	<b>5,080</b>	
<b>Silver Bow County<sup>6</sup>.....</b>	<b>56,848</b>	<b>74,635</b>	<b>733,744</b>	District 1, Choteau.....	1,078		
Precinct 1, including ward 1 and part of ward 3 of Walkerville city.....	1,554			District 2, Dupuyer.....	894		
Walkerville city (part of).....	1,875			District 3, Wilkins.....	160		
Total for Walkerville city, comprising precinct 2 and part of precinct 1.....	2,429	2,681	1,743	District 4, Raymond.....	110		
Ward 1.....	610			District 5, Burton.....	336		
Ward 2.....	755			District 6, Shelby.....	495		
Ward 3.....	1,186			District 7, Farmington.....	286		
Precinct 2, comprising ward 2 and part of ward 3 of Walkerville city.....	1,216			District 8, Gamble.....	91		
Precinct 3.....	1,114			District 10, Conrad, including Conrad town.....	1,565		
Precinct 4.....	1,640			Conrad town <sup>11</sup> .....	888		
Precinct 5, exclusive of part of Butte city.....	1,262			District 11, Fish Lake.....	81		
Precinct 6, exclusive of part of Butte city.....	997			District 12, Bynum.....	275		
Precinct 11.....	816			District 14, Ralston Gap.....	56		
Precinct 24, exclusive of part of Butte city.....	1,243			District 15, Cutbank.....	663		
Precinct 35, exclusive of part of Butte city.....	111			District 16, Bellevue.....	232		
Precinct 36.....	208			District 17, Sweet Grass.....	246		
Precinct 38.....	437			District 18, Valer.....	736		
Precinct 39, exclusive of part of Butte city.....	1,328			District 19, Brady.....	243		
Precinct 40.....	168			Districts 9 and 13, comprising Blackfoot Indian Reservation.....	2,519		
Precinct 41.....	1,173			Blackfoot Indian Reservation.....	2,519	2,250	
Precinct 42.....	57			<b>Valley County.....</b>	<b>18,630</b>	<b>4,355</b>	
Precinct 43.....	2,089			District 1, Glasgow, including Glasgow town and part of Fort Peck Indian Reservation.....	3,256		
Precinct 44.....	208			Fort Peck Indian Reservation (part of).....	667		
Precinct 45, exclusive of part of Butte city.....	1,480			Total for Fort Peck Indian Reservation, comprising district 9 and parts of districts 1, 5, and 17.....	1,922	1,946	
Precinct 46.....	257			Glasgow town <sup>10</sup> .....	1,158		
Precinct 47.....	131			Ward 1.....	549		
Precinct 48.....	69			Ward 2.....	609		
Precinct 49.....	125			District 2, Malta, including Malta town.....	751		
Butte city, <sup>8</sup> comprising precincts 7-10, 12-33, and 37 and parts of 5, 6, 34, 35, 39, and 45.....	39,165	30,470	10,723	Malta town <sup>11</sup> .....	453		
Ward 1.....	2,264			District 3, Milk River.....	292		
Ward 2.....	6,086			District 4, Hinsdale.....	442		
Ward 3.....	4,058			District 5, Pederson, including part of Fort Peck Indian Reservation.....	2,413		
Ward 4.....	3,104			Fort Peck Indian Reservation (part of).....	270		
Ward 5.....	3,897			District 6, Springdale.....	613		
Ward 6.....	4,238			District 7, Hinsdale.....	403		
Ward 7.....	6,714			District 8, Saco.....	405		
Ward 8.....	8,764			District 9, Poplar, comprising part of Fort Peck Indian Reservation.....	1,025		
<b>Sweet Grass County.....</b>	<b>4,039</b>	<b>3,086</b>		District 10, Mondak.....	511		
District 1, including Big Timber town.....	1,183			District 11, Leedy.....	114		
Big Timber town <sup>10</sup> .....	1,088			District 12, Cowan.....	186		
District 2, Swamp Creek.....	27			District 13, Dagmar.....	434		
District 3, Settlement.....	70			District 14, Buggy Creek.....	238		
District 4, Basin.....	69			District 15, Plentywood.....	404		
District 5, Melville.....	170			District 16, Bainville.....	264		
				District 17, Culbertson, including Culbertson town and part of Fort Peck Indian Reservation.....	1,303		
				Culbertson town <sup>11</sup> .....	523		
				Ward 1.....	369		
				Ward 2.....	169		
				Fort Peck Indian Reservation (part of).....	( <sup>1</sup> )		
				District 18, Lakeside.....	436		
				District 19, Antelope.....	140		

<sup>1</sup> No population reported.  
<sup>2</sup> Not returned by counties in 1900.  
<sup>3</sup> Organized from part of Missoula County in 1900.  
<sup>4</sup> Incorporated in 1907.  
<sup>5</sup> Incorporated in 1910.  
<sup>6</sup> Part annexed to Deer Lodge County in 1903.  
<sup>7</sup> No comparison of population can be made; not returned by precincts in 1900 and 1890.

<sup>8</sup> Parts of precincts 6 and 34 annexed in 1902 and parts of precincts 35, 37, and 45 annexed in 1903.  
<sup>9</sup> No comparison of population can be made; not returned by districts in 1900.  
<sup>10</sup> Incorporated in 1902.  
<sup>11</sup> Incorporated in 1909.

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

[The words "district" and "precinct," where used, mean school district and election precinct, respectively. 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
<b>Yellowstone County</b> .....	<b>22,944</b>	<b>6,212</b>	<b>2,065</b>	<b>Yellowstone County—Continued.</b>			
District 1, Junction.....	247			District 10, Tilden.....	87		
District 2, Billings, including Billings city.....	11,174			District 11, Trowin.....	120		
<i>Billings city</i> .....	10,031	5,221	839	District 12, Roundup.....	834		
Ward 1.....	2,501			District 13, Emerson.....	186		
Ward 2.....	3,683			District 14, Rapids.....	101		
Ward 3.....	1,552			District 15, Custer.....	335		
Ward 4.....	2,285			District 16, Valley Center.....	209		
District 3, Newman.....	304			District 17, Hardin.....	591		
District 4, Canyon Creek.....	179			District 18, Hawthorne.....	371		
District 5, Park City.....	903			District 19, Cove.....	132		
District 27, Seventynine town.....				District 20, Belmont.....	178		
District 6, Columbus, including Columbus town.....	1,252			District 21, Broadview.....	100		
<i>Columbus town</i> <sup>a</sup> .....	581			District 22, Allendale.....	205		
District 7, Laurel, including Laurel town.....	1,348			District 23, Elysum.....	429		
<i>Laurel town</i> <sup>c</sup> .....	800			District 24, Huntley.....	1,740		
Ward 1.....	358			District 25, Shiloh.....	232		
Ward 2.....	245			District 26, Sullivan.....	255		
Ward 3.....	245			District 28, Cushman.....	62		
District 8, Elder Grove.....	356			Crow Indian Reservation <sup>b</sup> (part of).....	520		
District 9, Musselshell.....	272			[For total, see Rosebud County.]			

<sup>1</sup> No comparison of population can be made; not returned by districts in 1900 and 1890.  
<sup>2</sup> Not returned separately.

<sup>a</sup> Incorporated in 1907.  
<sup>b</sup> Incorporated in 1908.  
<sup>c</sup> Not returned by counties in 1900.

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

CITY OR TOWN.	County.	1910	1900	1890	CITY OR TOWN.	County.	1910	1900	1890
Anaconda city.....	Deer Lodge.....	10,134	9,453	3,975	Laurel town.....	Yellowstone.....	806		
Bear Creek town.....	Carbon.....	302			Lewistown city.....	Fergus.....	2,092	1,096	
Belgrade town.....	Gallatin.....	551			Libby town.....	Lincoln.....	630		
Belt city.....	Cascade.....	1,158			Livingston city.....	Park.....	5,359	2,778	2,850
Big Timber town.....	Sweet Grass.....	1,022			Malta town.....	Valley.....	433		
Billings city.....	Yellowstone.....	10,031	3,221	836	Miles City.....	Custer.....	4,697	1,938	956
Boxerman city.....	Gallatin.....	5,107	3,410	2,143	Missoula city.....	Missoula.....	12,809	4,306	3,420
Bridger town.....	Carbon.....	514			Moore town.....	Fergus.....	573		
Butte city.....	Silver Bow.....	39,165	30,470	10,723	Nelhart town.....	Cascade.....	208	833	
Chinook town.....	Chouteau.....	780			Phillipsburg city.....	Granite.....	1,109	995	1,068
Columbia Falls town.....	Flathead.....	601			Plains town.....	Sanders.....	481		
Columbus town.....	Yellowstone.....	521			Pony town.....	Madison.....	309		
Conrad town.....	Teton.....	888			Red Lodge city.....	Carbon.....	4,800	2,182	624
Culbertson town.....	Valley.....	528			Roundup city.....	Fergus.....	1,513		
Deer Lodge city.....	Powell.....	2,570	1,324	1,468	Sheridan town.....	Madison.....	899	581	207
Dillon city.....	Beaverhead.....	1,835	1,530	1,012	Sidney town.....	Dawson.....	345		
Eureka town.....	Lincoln.....	603			Stevensville town.....	Ravalli.....	790	346	
Forsyth city.....	Rosebud.....	1,308			Thompson Falls town.....	Sanders.....	325		
Fort Benton town.....	Chouteau.....	1,064	1,024	624	Three Forks town.....	Gallatin.....	674		
Glasgow town.....	Valley.....	1,183			Townsend town.....	Bronxwater.....	759	440	245
Glendive city.....	Dawson.....	2,428			Twin Bridges town.....	Madison.....	401		
Great Falls city.....	Cascade.....	13,043	14,330	3,979	Victor town.....	Ravalli.....	374	130	
Hamilton town.....	Ravalli.....	2,240	1,257		Virginia City.....	Madison.....	407	568	675
Harlow town.....	Chouteau.....	383			Walkerville city.....	Silver Bow.....	2,401	2,021	1,743
Harlowton town.....	Meagher.....	770			White Sulphur Springs town.....	Meagher.....	417	440	640
Havre town.....	Chouteau.....	3,624	1,033		Whitefish town.....	Flathead.....	1,470		
Helena city.....	Lewis and Clark.....	12,515	10,770	13,834	Whitehall town.....	Jefferson.....	417		
Joliet town.....	Carbon.....	359			Wibaux town.....	Dawson.....	437		
Kalspell city.....	Flathead.....	5,549	2,525						

## CHAPTER 2.

### COMPOSITION AND CHARACTERISTICS OF THE POPULATION.

**Introduction.**—The first chapter having given the number of inhabitants of Montana 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 four 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 Butte, the only city of more than 25,000 inhabitants; Table III for cities of 10,000 to 25,000; and Table IV for places of 2,500 to 10,000.

A series of summary tables (numbered 1 to 14) 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 Montana, 162,127, or 43.1 per cent, are native whites of native parentage; 106,809, or 28.4 per cent, are native whites of foreign or mixed parentage; 91,644, or 24.4 per cent, are foreign-born whites; 10,745, or 2.9 per cent, are Indians; 2,870, or 0.7 per cent, are Chinese and Japanese; and 1,834, or 0.5 per cent, are negroes. In 1900 the percentage of native whites of native parentage was 38.2.

In the counties the percentage of foreign-born whites ranges from 12.9 in Gallatin to 35.3 in Silver Bow, the most populous county; it exceeds 25 in 8 of the 28 counties. Silver Bow County also has the highest percentage of native whites of foreign or mixed parentage (39.7), while Rosebud has the lowest (14.2); the proportion exceeds one-fourth in 18 counties. (See maps on page 587.)

Of the urban population, 40.3 per cent are native whites of native parentage; of the rural, 44.7 per cent. The corresponding proportions for native whites of foreign or mixed parentage are 31.5 and 26.7 per cent, respectively. The percentage of foreign-born whites is 26 in the urban population and 23.5 in the rural. The percentage of Chinese and Japanese is 1 in the urban and 0.6 in the rural; of negroes, 1.1 in the urban and 0.2 in the rural. Practically all of the Indians are in rural communities.

**Sex** (Table 2).—In the total population of the state there are 226,872 males and 149,181 females, or 152.1 males to 100 females. In 1900 the ratio was 160.3 to 100. Among native whites the ratio is 132.1 to 100; among foreign-born whites, 238.4 to 100. In the urban population there are 130.9 males to 100 females, and in the rural, 165.4.

**State of birth** (Tables 3 and 4).—Of the total native population—that is, population born in the United States—35.3 per cent were born in Montana and 64.7 per cent outside the state; of the native white population, 66.6 per cent were born outside the state; of the native Indians, 13.5 per cent; and of the native negro, 80.9 per cent. Persons born outside the state constitute approximately the same proportion of the native population in urban as in rural communities.



**Foreign nationalities** (Table 5).—Of the foreign born white population of Montana, persons born in Canada represent 14.7 per cent; Ireland, 10.3; England, 9.8; Germany, 9.5; Austria, 9.1; Norway, 7.8; Italy, 7.2; Sweden, 7; Finland, 4.5; Scotland, 3.7; all other countries, 16.4. Of the total white stock of foreign origin, which includes persons born abroad and also natives having one or both parents born abroad, Canada contributed 14.9 per cent; Ireland, 14.3; Germany, 13.4; England, 10.4; Norway, 7; Austria, 6.5; Sweden, 5.9; Italy, 4; Scotland, 3.5; Finland, 3.3; Denmark, 2.

**Voting and militia ages** (Table 6).—The total number of males 21 years of age and over is 155,017, representing 41.2 per cent of the population. Of such males, 38.5 per cent are native whites of native parentage, 19.2 per cent native whites of foreign or mixed parentage, 38.3 per cent foreign-born whites, 1.8 per cent Indians, 1.7 per cent Chinese and Japanese, and 0.5 per cent negroes. Of the 59,313 foreign-born white males of voting age, 27,635, or 46.6 per cent, are naturalized. Males of militia age—18 to 44—number 123,232.

**Age** (Tables 7, 8, and 12).—Of the total population, 10.2 per cent are under 5 years of age, 17 per cent from 5 to 14 years, inclusive, 19.4 per cent from 15 to 24, 36.4 per cent from 25 to 44, and 16.2 per cent 45 years of age and over. The foreign-born white population comprises comparatively few children, only 4 per cent of this class being under 15 years of age, while 78.8 per cent are 25 years of age and over. Of the native whites of foreign or mixed parentage, only 37.7 per cent are 25 and over, and of the native whites of native parentage, only 47.5 per cent.

The urban population shows a smaller proportion of children than the rural and a larger proportion of persons in the prime of life. Of the urban population, 39.3 per cent are from 25 to 44 years of age, inclusive, and of the rural population, 34.9 per cent.

**School attendance** (Table 9).—The total number of persons of school age—that is, from 6 to 20 years, inclusive—is 93,771, of whom 60,678, or 64.7 per cent, attended school. In addition to these, 936 persons under 6 and 1,141 of 21 and over attended school. For boys from 6 to 20 years, inclusive, the percentage attending school was 62; for girls, 67.7. For children from 6 to 14 years, inclusive, the percentage attending school was 82.7. The percentage for children of this age among native whites of foreign or mixed parentage was 86; among native whites of native parentage, 83.5; among negroes, 83.1; among foreign-born whites, 76.1; and among Indians, 47.2. (See Table I.) In urban communities the percentage of children of that age attending school was 86.6, and in rural, 80.8; for persons from 15 to 20, it was 40 and 35.7, respectively.

**Illiteracy** (Table 10).—There are 14,457 illiterates in the state, representing 4.8 per cent of the total population 10 years of age and over, as compared with

6.1 per cent in 1900. The percentage of illiteracy is 9.4 among foreign-born whites, 0.4 among native whites, 55.8 among Indians, and 7 among negroes.

For all classes combined, the percentage of illiterates is 3.3 in urban communities and 5.6 in rural. For each class separately the percentage is somewhat higher in rural than in urban communities.

For persons from 10 to 20 years, inclusive, whose literacy depends largely upon present school facilities and school attendance, the percentage of illiteracy is 2.3. (See Table I.)

**Marital condition** (Tables 11 and 13).—In the population 15 years of age and over, 52.4 per cent of the males are single and 26.3 per cent of the females. The percentage married is 42.5 for males and 65.1 for females, and the percentage widowed 3 and 7.5, 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 partly to the excess of males in the total population and partly to the fact that women marry younger. Thus 11.3 per cent of the females from 15 to 19 years of age are married, as compared with 0.5 per cent of the males, and 54.7 per cent of the females from 20 to 24 years of age are married, as compared with 12.5 per cent of the males. For those from 25 to 34 years the percentages are 80.4 and 42.5, respectively, and in the next age group, 35 to 44 years, 85.4 and 62.8. 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, 43.9 for males and 73.7 for females; native whites of native parentage, 43.5 and 64.9, respectively; native whites of foreign or mixed parentage, 36.5 and 57; Indians, 64.6 and 69.7; negroes, 43.1 and 57.4.

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 higher in urban communities, but for females it is higher in rural.

**Dwellings and families.**—The total number of dwellings in Montana is 82,811, and the total number of families 86,602, indicating that in comparatively few cases does more than one family occupy a dwelling. (See Table I.) The average number of persons per dwelling is 4.5, and the average number per family, 4.3.



TABLE 7.—AGE, FOR THE STATE.

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

Table with columns: AGE PERIOD, TOTAL POPULATION (1910, 1900, Male, Female), NATIVE WHITE (Native parentage, Foreign or mixed parentage), FOREIGN-BORN WHITE, NEGRO, INDIAN, CHINESE, JAPANESE, AND ALL OTHER. Rows include 'All ages, number', 'All ages, per cent', and age groups from 5 to 65+ years.

TABLE 8.—AGE, FOR URBAN AND RURAL POPULATION.

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

Table with columns: AGE PERIOD, TOTAL (Male, Female), NATIVE WHITE (Male, Female), FOREIGN-BORN WHITE (Male, Female), NEGRO (Male, Female), INDIAN (Male, Female). Rows include 'All ages, number', 'All ages, per cent', and age groups from 5 to 65+ years.

TABLE 9.—SCHOOL ATTENDANCE.

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

Table with columns: AGE PERIOD, TOTAL (Number, Attending school), NATIVE WHITE (Native parentage, Foreign or mixed parentage), FOREIGN-BORN WHITE, NEGRO, INDIAN. Rows include 'THE STATE', 'URBAN POPULATION', and 'RURAL POPULATION' with age groups from 6 to 20 years.



SUPPLEMENT FOR MONTANA.

TABLE 12.—AGE, FOR BUTTE.

AGE PERIOD.	TOTAL.		NATIVE WHITE.		FOREIGN-BORN WHITE.		NEGRO.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
All ages, number.....	22,314	18,851	13,727	12,022	8,173	4,707	142	98
Under 5 years.....	1,780	1,859	1,745	1,812	25	38	5	2
Under 1 year.....	396	375	393	374	1	1	2	1
5 to 9 years.....	1,529	1,537	1,461	1,461	61	67	5	4
10 to 14 years.....	1,326	1,510	1,243	1,421	71	79	8	9
15 to 19 years.....	1,326	1,432	1,197	1,337	110	155	4	9
20 to 24 years.....	2,133	1,077	1,272	1,408	837	503	8	3
25 to 34 years.....	6,980	3,788	3,003	2,312	2,000	1,443	45	27
35 to 44 years.....	4,514	2,742	2,204	1,500	2,195	1,215	39	26
45 to 64 years.....	3,242	1,844	1,431	870	1,073	659	26	15
65 years and over.....	333	295	127	65	198	108	2	2
Age unknown.....	145	17	44	6	97	10	1	1

TABLE 13.—MARITAL CONDITION, FOR BUTTE.

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

CLASS OF POPULATION AND AGE PERIOD.	MALES 15 YEARS OF AGE AND OVER.						FEMALES 15 YEARS OF AGE AND OVER.							
	Total. <sup>1</sup>	Single.		Married.		Wid-owed.	Di-voiced.	Total. <sup>1</sup>	Single.		Married.		Wid-owed.	Di-voiced.
		Num-ber.	Per-cent.	Num-ber.	Per-cent.				Num-ber.	Per-cent.	Num-ber.	Per-cent.		
Total.....	17,679	9,245	52.3	7,784	43.7	489	136	12,145	3,615	29.8	7,117	58.6	1,267	139
15 to 24 years.....	3,450	3,142	90.8	312	0.0	1	3	3,450	2,365	68.4	1,053	30.4	23	17
25 to 44 years.....	10,500	5,158	49.1	5,065	48.2	179	86	6,530	1,130	17.3	4,828	73.9	473	95
45 years and over.....	3,575	873	24.4	2,345	65.6	306	46	2,139	109	5.1	1,234	57.7	768	27
Age unknown.....	145	72	49.7	2	1.4	3	1	17	11	.....	2	.....	3	.....
Native white—Native parentage.....	4,062	2,497	53.0	1,948	41.8	142	51	3,230	1,119	34.0	1,782	55.2	284	44
Native white—Foreign or mixed parentage.....	4,016	2,050	57.0	1,833	39.7	83	40	4,208	1,610	37.5	2,348	54.0	294	42
Foreign-born white.....	8,016	3,908	48.8	3,747	46.7	260	45	4,523	862	19.1	2,933	64.8	677	40
Negro.....	124	67	54.0	54	43.5	8	.....	83	22	.....	45	.....	12	4

<sup>1</sup> Total includes persons whose marital condition is unknown.

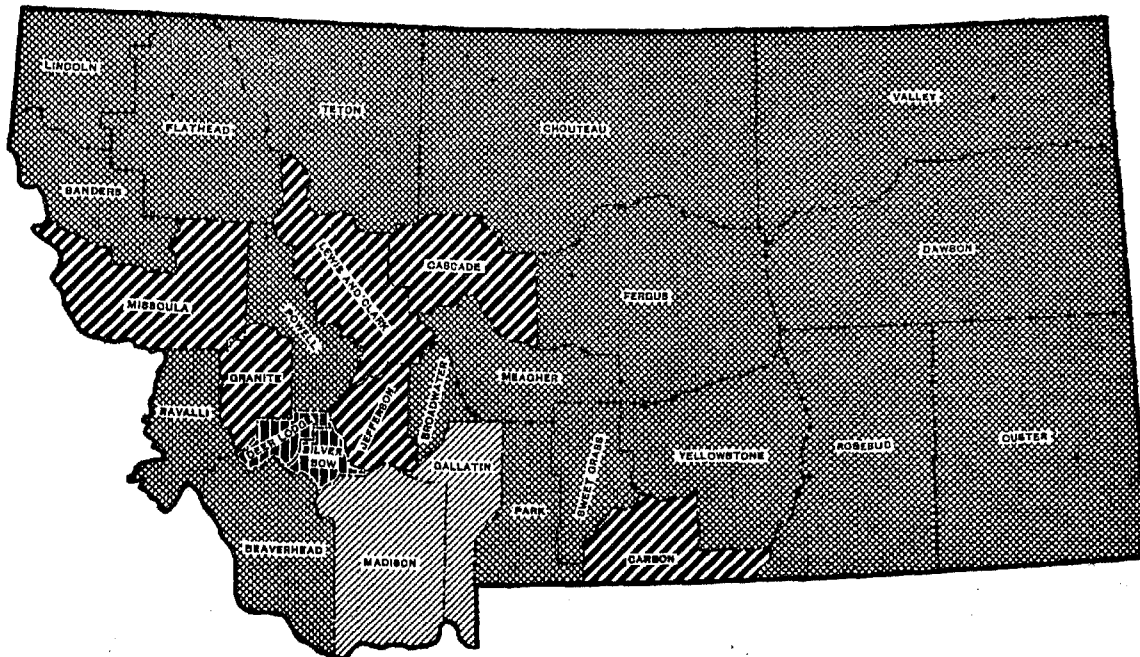
TABLE 14.—INDIAN, CHINESE, AND JAPANESE POPULATION, BY COUNTIES.

COUNTY.	INDIAN.			CHINESE.			JAPANESE.		
	1910	1900	1890	1910	1900	1890	1910	1900	1890
The state.....	10,745	11,343	11,206	1,485	1,739	2,532	1,585	2,441	8
Beaverhead.....	3	1	.....	33	73	92	20	80	1
Broadwater.....	.....	.....	.....	2	15	.....	42	.....	.....
Carbon.....	4	10	.....	.....	2	.....	40	20	.....
Cascade.....	96	443	20	6	5	23	84	24	.....
Chouteau.....	1,200	1,420	190	40	86	42	150	628	.....
Custer.....	1	1,357	159	31	16	18	27	.....	.....
Dawson.....	.....	1	50	14	2	4	8	.....	.....
Deer Lodge.....	6	2	21	20	76	438	11	124	.....
Fergus.....	122	365	88	15	14	0	7	.....	.....
Flathead.....	344	35	.....	61	47	.....	146	303	.....
Gallatin.....	.....	.....	.....	62	55	39	55	1	.....
Granite.....	2	.....	.....	25	71	.....	2	.....	.....
Jefferson.....	.....	.....	7	23	37	46	60	.....	.....
Lewis and Clark.....	105	62	121	328	333	602	45	45	1
Lincoln.....	6	.....	.....	5	.....	.....	57	.....	.....
Madison.....	24	3	11	10	80	155	35	.....	.....
Meagher.....	.....	.....	14	20	0	37	39	.....	.....
Missoula.....	1,107	1,802	165	73	208	405	251	398	.....
Park.....	3	2	7	38	42	23	50	321	.....
Powell.....	10	.....	.....	14	.....	.....	67	.....	.....
Ravalli.....	14	14	.....	21	30	.....	43	31	.....
Rosebud.....	2,758	.....	.....	4	.....	.....	25	.....	.....
Sanders.....	179	.....	.....	38	.....	.....	20	.....	.....
Silver Bow.....	1	14	1	310	391	584	75	63	4
Sweet Grass.....	28	74	.....	14	18	.....	11	.....	.....
Teton.....	2,489	2,060	.....	3	17	.....	24	60	.....
Valley.....	1,774	1,793	.....	10	.....	.....	22	307	.....
Yellowstone.....	462	13	.....	50	90	16	148	11	.....

<sup>1</sup> Includes 1,857 Indians on Crow Indian Reservation, not returned by counties in 1900, returned in 1910 in Rosebud and Yellowstone Counties.  
<sup>2</sup> Includes 2,287 Indians on Crow Indian Reservation, not returned by counties in 1890, returned in 1910 in Rosebud and Yellowstone Counties, and 8,059 Indians specially enumerated in 1890, not distributed by counties.  
<sup>3</sup> Includes 4 Japanese on Crow Indian Reservation, not returned by counties in 1900, returned in 1910 in Rosebud and Yellowstone Counties.

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

PER CENT OF FOREIGN-BORN WHITE IN TOTAL POPULATION.



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

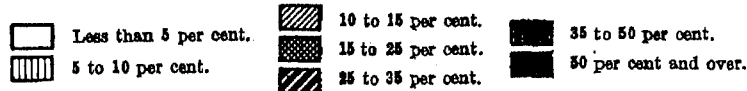
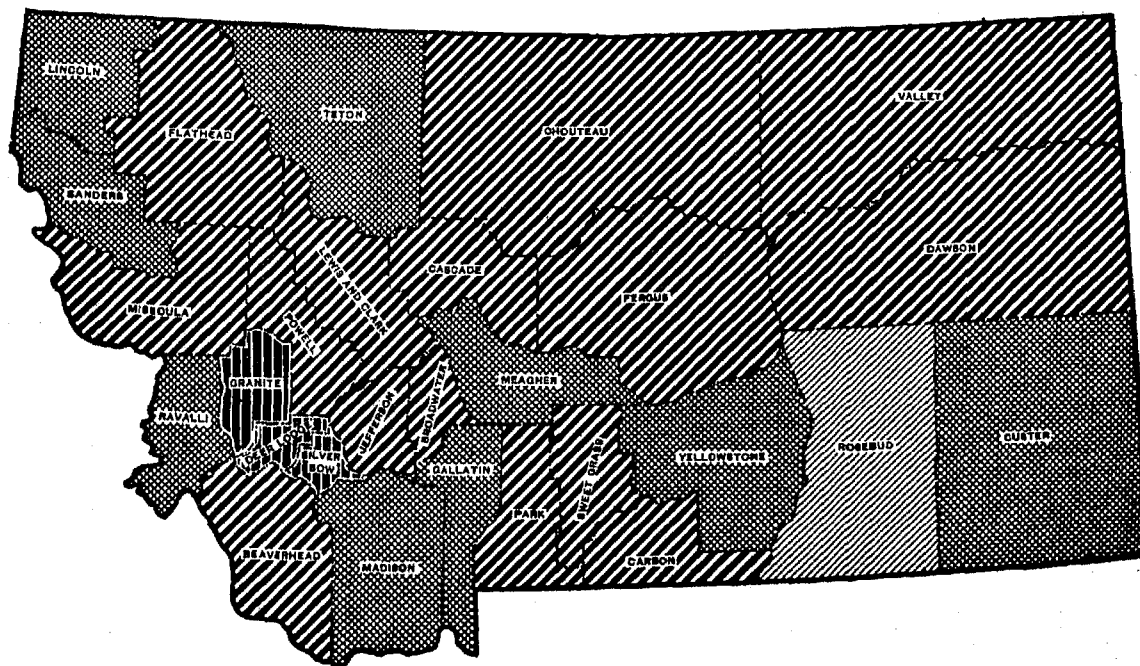








TABLE I.—COMPOSITION AND CHARACTERISTICS OF THE

SUBJECT.	Fergus. <sup>1</sup>	Flathead. <sup>1</sup>	Gallatin. <sup>1</sup>	Granite. <sup>1</sup>	Jefferson. <sup>1</sup>	Lewis and Clark. <sup>1</sup>	Lincoln. <sup>1</sup>	Madison.	Meagher. <sup>1</sup>	Missoula. <sup>1</sup>
<b>POPULATION</b>										
Total population, 1910	17,385	218,785	14,079	2,942	5,601	21,853	23,638	7,229	4,190	23,596
1900	9,937	20,875	9,553	4,328	5,830	19,171	(*)	7,095	2,526	13,964
1890	3,514		6,240		6,026	10,145		4,092	4,740	14,427
1880			3,643		2,464	6,521		3,915	2,743	2,537
1870			1,578		1,531	5,040		2,034	1,387	2,564
Increase, 1900-1910	10,448	20,410	4,526	-1,386	271	2,682	23,638	-400	1,664	9,632
Per cent of increase	105.6	100.4	47.4	-32.0	5.1	14.0	(*)	-5.1	65.9	69.0
Increase, 1890-1900	3,423	10,302	3,307	4,328	-600	26		3,003	-2,223	2,592
Per cent of increase	97.4		52.9		-11.5	0.1		64.0	-46.8	18.0
Land area (square miles)	9,078	6,070	2,513	1,037	1,650	3,405	3,530	4,581	3,766	4,243
Population per square mile, 1910	1.9	3.1	5.0	1.8	3.4	6.3	1.0	1.6	1.1	5.6
Rural population per square mile, 1910	1.0	2.2	3.0	1.8	3.4	2.7	1.0	1.6	1.1	2.5
<b>URBAN AND RURAL TERRITORY.</b>										
Urban, 1910—Places of 2,500 or more in 1910	2,092	5,540	5,107			12,515	(*)			12,860
Same places in 1900	1,096	2,526	3,410			10,770	(*)			4,366
Per cent of increase, 1900-1910	173.0	119.7	40.4			16.2	(*)			194.8
Rural, 1910—Remainder of county in 1910	14,303	13,236	3,972	2,942	5,601	9,338	23,638	7,229	4,190	10,727
Same territory in 1900	5,841	5,423	6,134	4,328	5,330	8,401	11,420	7,095	2,526	8,271
Per cent of increase, 1900-1910	146.4	144.1	46.3	-32.0	5.1	11.2	155.1	-6.1	65.9	29.7
Urban, 1900—Places of 2,500 or more in 1900		2,526	3,410			10,770	(*)			4,366
Rural, 1900—Remainder of county in 1900	6,937	6,840	6,134	4,328	5,330	8,401	(*)	7,095	2,526	9,698
Per cent in places of 2,500 or more, 1910	17.2	29.5	30.3			57.3	(*)			54.5
Per cent in places of 2,500 or more, 1900		26.0	35.8			56.2	(*)			31.3
<b>COLOR AND NATIVITY</b>										
White	17,177	18,207	13,012	2,903	5,505	20,033	3,500	7,133	4,101	22,032
Number in 1900	9,528	8,954	7,492	4,263	5,553	13,418		7,584	3,493	11,503
Number in 1890	3,400		6,164		5,004	13,189		4,513	4,608	13,543
Negro	64	27	40	10	12	430	1	27	30	133
Number in 1900	50	59	55	4	15	313		23	24	54
Number in 1890	17		43		0	299		15	30	514
Black	58	20	35	10	5	150	1	15	23	78
Mulatto	6	1	14		7	280		12	7	55
Ind., Chi., Jap., and all other (see Tables 1 and 14)	144	551	118	20	84	400	68	60	59	1,431
Native white—Native parentage	9,338	9,677	9,305	1,108	2,360	8,484	1,041	4,370	2,107	10,105
Number in 1900	3,519	4,422	4,370	1,597	2,150	7,003		4,451	1,223	6,073
Native white—Foreign or mixed parentage	4,525	4,035	2,785	1,044	1,614	6,497	833	1,739	1,007	5,913
Number in 1900	1,887	2,000	1,899	1,543	1,370	6,347		1,089	881	5,480
Native white—Foreign parentage	2,637	2,888	1,025	622	986	4,245	468	873	612	3,407
Native white—Mixed parentage	1,888	2,047	1,160	422	528	2,252	365	866	395	2,506
Foreign-born white	3,314	3,505	1,822	761	1,031	5,552	795	1,018	987	6,014
Number in 1900	1,322	1,372	1,203	1,503	1,723	5,098		1,184	649	4,943
<b>PER CENT OF TOTAL POPULATION.</b>										
Native white—Native parentage	53.7	51.5	66.1	37.7	42.1	38.8	53.4	60.5	50.3	42.8
Per cent in 1900	50.7	47.2	65.6	39.5	40.0	38.6		57.0	48.4	36.5
Native white—Foreign or mixed parentage	26.0	26.3	10.8	35.5	27.0	26.7	22.0	24.1	24.0	25.1
Per cent in 1900	24.5	28.4	10.0	35.8	25.7	25.1		25.6	24.0	24.9
Foreign-born white	19.1	19.1	12.0	25.5	20.1	27.2	21.0	14.1	23.0	25.5
Per cent in 1900	19.1	20.0	13.5	30.2	25.0	26.4		15.4	25.7	21.1
<b>FOREIGN NATIONALITIES</b>										
<b>FOREIGN-BORN WHITE: Born in—</b>										
Austria	373	371	62	43	102	801	33	27	33	244
Bulgaria	168	64	13	12	9	314	69	8	110	142
Canada—French	100	124	22	30	67	146	55	37	18	631
Canada—Other	440	636	255	138	105	500	147	161	101	844
Denmark	45	102	48	6	23	107	7	42	15	95
England	311	220	140	66	108	406	33	162	64	268
Finland	68	15	10	46	104	87	5	14	20	186
France	20	14	14	3	0	47	5	10	3	42
Germany	319	428	245	80	127	625	91	160	80	480
Greece	30	13	88	0	160	78	40	17	11	279
Holland	55	22	300	1	4	11	1	2	7	32
Hungary	180	0	37		11	164	21	20	2	76
Ireland	163	175	111	61	120	418	42	67	40	280
Italy	94	242	67	50	121	233	35	34	15	773
Norway	242	535	84	24	118	330	68	33	217	451
Russia	74	89	22	4	10	112	17	6	1	64
Scotland	200	112	77	0	42	170	19	32	70	95
Sweden	138	349	136	101	172	599	50	57	37	702
Switzerland	81	34	42	9	41	64	3	30	10	60
Turkey	45	7	8	0	16	19	14	15	47	81
Wales	46	10	15	9	7	29	5	15	4	27
Other foreign countries	42	25	20	23	17	205	18	21	64	92
<b>NATIVE WHITE: Both parents born in—</b>										
Austria	250	68	30	1	37	210	6	17	9	50
Canada—French	121	93	24	3	10	98	30	20	10	425
Canada—Other	187	240	122	36	43	205	58	39	50	275
Denmark	22	60	20	4	12	40	6	26	16	39
England	190	151	131	67	90	334	15	110	47	176
Germany	430	624	318	90	155	1,148	116	226	131	646
Holland	21	34	178		1	2	6	1	5	20
Hungary	70		2		3	37		9		5
Ireland	314	300	237	112	202	657	60	130	73	509
Italy	15	15	1	10	17	19	2	4		11
Norway	160	443	56	10	58	208	20	0	104	180
Russia	23	24	6		2	30	10	13		21
Scotland	143	65	63	9	21	70	11	13	22	53
Sweden	117	157	84	83	87	345	30	38	27	329
Switzerland	72	36	21	2	14	32	2	9	20	30
Wales	35	13	30	8	3	23	4	8	6	31
All others of foreign parentage	443	493	802	139	222	700	77	186	86	598

<sup>1</sup> For changes in boundaries, etc., see page 506.  
<sup>2</sup> For combined figures for Flathead and Lincoln Counties, see Note 3 on page 506.  
<sup>3</sup> For combined figures for Missoula and Sanders Counties, see Note 4 on page 506.

STATISTICS OF POPULATION.

POPULATION FOR THE STATE AND FOR COUNTIES—Continued.

SUBJECT.	Fergus. <sup>1</sup>	Flathead. <sup>1</sup>	Gallatin. <sup>1</sup>	Granite. <sup>1</sup>	Jefferson. <sup>1</sup>	Lewis and Clark. <sup>1</sup>	Lincoln. <sup>1</sup>	Madison.	Meagher. <sup>1</sup>	Missoula. <sup>1</sup>
<b>SEX</b>										
Total... Male.....	10,465	11,207	7,981	1,847	3,665	13,522	2,340	4,274	2,731	14,640
Female.....	6,920	7,578	6,098	1,095	1,986	8,331	1,288	2,955	1,459	8,956
White... Male.....	10,348	10,812	7,836	1,821	3,574	12,842	2,275	4,196	2,659	13,685
Female.....	6,829	7,395	6,076	1,082	1,931	8,091	1,294	2,937	1,442	8,347
Negro... Male.....	30	17	27	2	7	250	1	16	13	76
Female.....	34	10	22	8	5	180	.....	11	17	57
<b>MALES OF VOTING AGE</b>										
Total number.....	7,129	7,530	5,140	1,252	2,706	9,969	1,641	2,766	2,060	10,476
Number in 1900.....	8,112	3,893	3,159	1,836	2,754	7,319	.....	3,250	1,327	6,804
Native white—Native parentage.....	3,440	3,349	2,980	300	896	3,598	688	1,465	873	3,817
Number in 1900.....	1,456	1,640	1,825	523	807	2,450	.....	1,663	673	1,359
Native white—Foreign or mixed parentage.....	1,470	1,483	900	308	459	1,809	314	1,556	391	1,769
Number in 1900.....	1,600	795	608	408	488	1,330	.....	667	269	1,979
Native white—Foreign parentage.....	972	978	556	196	342	1,275	189	319	258	1,177
Native white—Mixed parentage.....	498	510	344	112	147	533	125	237	133	592
Foreign-born white.....	2,129	2,400	1,127	533	1,232	3,979	577	681	721	4,246
Number in 1900.....	931	1,166	768	891	1,395	2,970	.....	814	469	1,955
Negro.....	25	14	18	2	7	206	1	13	12	56
Number in 1900.....	12	31	11	.....	8	154	.....	10	7	35
Indian, Chinese, Japanese, and all other.....	56	279	115	19	82	377	61	51	58	583
<b>PER CENT OF TOTAL.</b>										
Native white—Native parentage.....	48.4	44.5	58.0	31.2	33.1	36.1	41.9	53.0	42.6	36.4
Native white—Foreign or mixed parentage.....	20.6	19.3	17.5	24.6	18.1	18.1	19.1	20.1	19.0	16.9
Foreign-born white.....	29.9	31.9	21.9	42.6	45.5	39.9	35.2	24.6	35.0	40.5
<b>CITIZENSHIP OF FOREIGN-BORN WHITE.</b>										
Naturalized.....	920	1,137	495	344	636	1,780	175	443	241	1,743
Having first papers.....	326	290	66	35	83	200	66	82	88	401
Alien.....	511	761	299	113	392	1,470	243	118	344	1,777
Unknown.....	372	212	266	41	121	529	93	38	48	325
<b>ILLITERACY</b>										
<b>ILLITERATE MALES OF VOTING AGE.</b>										
Total number illiterate.....	347	147	82	46	73	1,014	70	59	178	616
Per cent illiterate.....	4.9	2.0	1.6	3.7	2.7	10.2	4.3	2.1	8.6	5.9
Per cent in 1900.....	4.0	2.9	2.5	2.5	3.3	.....	.....	2.4	1.0	13.9
Native white, number illiterate.....	27	15	19	5	7	17	7	12	7	36
Per cent illiterate.....	0.5	0.3	0.5	0.7	0.5	0.3	0.7	0.6	0.6	0.6
Foreign-born white, number illiterate.....	294	86	49	34	42	890	61	41	141	339
Per cent illiterate.....	13.8	3.6	4.3	6.4	3.4	20.9	10.6	6.0	19.6	8.0
Negro, number illiterate.....	2	.....	2	1	.....	16	.....	4	3	3
Per cent illiterate.....	.....	.....	.....	.....	.....	7.8	.....	.....	.....	.....
<b>PERSONS 10 YEARS OLD AND OVER.</b>										
Total number.....	13,722	15,177	11,333	2,410	4,678	18,878	2,926	5,717	3,549	19,878
Number illiterate.....	533	258	130	70	81	1,168	90	94	244	961
Per cent illiterate.....	3.9	1.7	1.1	2.9	1.7	6.2	3.1	1.6	6.9	4.9
Native white, number.....	10,359	11,175	9,404	1,629	2,970	12,167	2,074	4,626	2,485	12,509
Number illiterate.....	53	28	43	9	9	32	12	23	10	65
Per cent illiterate.....	0.5	0.3	0.5	0.6	0.3	0.3	0.6	0.5	0.4	0.5
Foreign-born white, number.....	3,197	3,520	1,789	748	1,613	5,884	786	1,007	976	5,931
Number illiterate.....	423	119	71	49	48	950	75	59	202	451
Per cent illiterate.....	13.2	3.4	4.0	6.6	3.0	16.1	9.5	5.9	20.7	7.6
Negro, number.....	58	24	42	8	11	376	1	19	29	111
Number illiterate.....	7	.....	4	2	.....	21	.....	4	5	4
Per cent illiterate.....	.....	.....	.....	.....	.....	5.6	.....	.....	.....	3.6
<b>PERSONS 10 TO 20 YEARS, INCLUSIVE.</b>										
Total number.....	2,904	3,579	2,870	576	923	3,967	601	1,385	624	4,036
Number illiterate.....	60	28	20	12	3	85	8	8	45	79
Per cent illiterate.....	2.1	0.8	0.7	2.1	0.3	2.1	1.3	0.6	7.2	2.0
<b>SCHOOL AGE AND ATTENDANCE</b>										
Total number 6 to 20 years, inclusive.....	4,202	4,984	3,911	791	1,284	5,226	848	1,964	852	5,492
Number attending school.....	2,584	3,624	2,652	603	932	3,167	558	1,492	467	3,640
Per cent attending school.....	61.5	72.7	67.8	76.2	72.6	60.6	65.8	76.0	54.3	66.3
Number 6 to 9 years.....	1,298	1,405	1,041	215	361	1,259	247	579	228	1,456
Number attending school.....	885	1,220	794	186	303	982	200	476	156	1,119
Number 10 to 14 years.....	1,282	1,573	1,226	234	427	1,533	251	675	235	1,647
Number attending school.....	1,123	1,517	1,150	229	418	1,338	241	645	196	1,570
Number 15 to 17 years.....	722	971	771	187	241	1,098	156	337	154	1,041
Number attending school.....	423	602	511	138	166	613	99	271	90	689
Number 18 to 20 years.....	900	1,035	873	155	255	1,336	194	373	235	1,348
Number attending school.....	153	195	197	50	45	234	18	99	25	282
<b>PERSONS 6 TO 14 YEARS, INCLUSIVE.</b>										
Total number.....	2,580	2,978	2,267	449	788	2,792	498	1,254	463	3,103
Number attending school.....	2,008	2,737	1,944	415	721	2,320	441	1,122	352	2,689
Per cent attending school.....	77.8	91.9	85.8	92.4	91.5	83.1	88.6	89.5	76.0	86.7
Native white—Native parentage, number.....	1,550	1,753	1,706	203	421	1,227	328	901	296	1,600
Number attending school.....	1,204	1,617	1,486	185	386	1,031	290	806	222	1,439
Per cent attending school.....	77.7	92.2	87.1	91.1	91.7	84.0	88.4	89.5	75.0	89.9
Native white—Foreign or mixed parentage, number.....	883	1,046	504	239	345	1,404	154	337	154	1,144
Number attending school.....	707	973	417	226	316	1,164	137	304	124	1,033
Per cent attending school.....	80.1	92.9	82.7	94.6	91.6	82.9	89.0	90.2	80.5	90.3
Foreign-born white, number.....	119	88	53	4	22	77	16	9	12	94
Number attending school.....	86	82	37	4	19	63	14	8	5	71
Per cent attending school.....	72.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Negro, number.....	2	2	3	.....	.....	38	.....	3	1	15
Number attending school.....	2	2	3	.....	.....	30	.....	3	1	12
Per cent attending school.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>DWELLINGS AND FAMILIES</b>										
Dwellings, number.....	4,321	4,221	3,083	885	1,489	4,262	914	1,876	1,012	4,921
Families, number.....	4,439	4,326	3,171	892	1,513	4,672	929	1,901	1,037	5,282

<sup>1</sup> See Note 5 on page 596.

<sup>2</sup> 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.	Park. <sup>1</sup>	Powell. <sup>1</sup>	Ravall. <sup>1</sup>	Rosebud. <sup>1</sup>	Sanders. <sup>1</sup>	Silver Bow. <sup>1</sup>	Sweet Grass. <sup>1</sup>	Teton. <sup>1</sup>	Valley. <sup>1</sup>	Yellowstone. <sup>1</sup>
<b>POPULATION</b>										
Total population, 1910.....	10,731	25,904	11,666	7,985	3,713	56,848	4,029	9,546	13,430	22,944
1900.....	7,841	(2)	7,822	(3)	(4)	47,035	3,086	5,080	4,355	6,212
1890.....	0,881					23,744				2,066
1870.....										
Increase, 1900-1910.....	3,390	25,904	3,844	7,985	3,713	9,213	043	4,466	9,275	16,732
Per cent of increase.....	46.2	(2)	49.1	(3)	(4)	19.3	80.6	87.9	213.0	269.3
Increase, 1890-1900.....	460		7,822			23,801	3,086	2,824	2,400	4,147
Per cent of increase.....	6.7		100.0			100.0				200.8
Land area (square miles).....	2,075	2,550	2,447	9,663	2,850	608	2,918	7,581	13,515	5,729
Population per square mile, 1910.....	4.0	2.3	4.8	0.8	1.3	81.4	1.4	1.3	1.0	4.0
Rural population per square mile, 1910.....	2.0	1.3	4.8	0.8	1.3	25.3	1.4	1.3	1.0	2.3
<b>URBAN AND RURAL TERRITORY.</b>										
Urban, 1910—Places of 2,500 or more in 1910.....	5,359	2,570		(5)	(4)	39,105				10,081
Same places in 1900.....	2,778	1,324		(5)	(4)	30,470				3,221
Per cent of increase, 1900-1910.....	92.0	94.1				28.5				211.4
Rural, 1910—Remainder of county in 1910.....	5,372	3,334	11,600	7,985	3,713	17,083	4,029	9,540	13,630	12,913
Same territory in 1900.....	4,563	3,094	7,822	(6)	(4)	17,105	3,086	5,080	4,355	(7)
Per cent of increase, 1900-1910.....	17.7	9.0	49.1	(6)	(4)	3.0	30.6	87.9	213.0	(7)
Urban, 1900—Places of 2,500 or more in 1900.....	2,778	(2)		(5)	(4)	33,091				3,221
Rural, 1900—Remainder of county in 1900.....	4,563	(2)	7,822	(6)	(4)	14,544	3,086	5,080	4,355	2,991
Per cent in places of 2,500 or more, 1910.....	49.9	43.5		(6)	(4)	68.9				43.7
Per cent in places of 2,500 or more, 1900.....	37.8	(2)		(6)	(4)	60.5				51.9
<b>COLOR AND NATIVITY</b>										
White.....	10,018	5,770	11,574	5,180	3,451	56,103	3,977	7,023	11,809	22,117
Number in 1900.....	6,991		7,750			46,005	2,086	2,031	2,253	6,001
Number in 1890.....	6,580					22,000				4,038
Negro.....	21	43	13	18	10	260	1	7	15	167
Number in 1900.....	15		17			202	6	6	2	97
Number in 1890.....	31					186				14
Black.....	14	34	11	18	10	185		7	15	158
Mulatto.....	7	9	2		3	75	1			9
Ind., Chi., Jap., and all other (see Tables 1 and 14).....	92	91	70	2,787	243	305	51	2,510	1,808	600
Native white—Native parentage.....	5,738	2,657	7,341	2,838	1,057	13,607	1,040	3,351	5,268	12,209
Number in 1900.....	3,804		5,054			11,525	1,450	1,550	1,104	3,537
Native white—Foreign or mixed parentage.....	2,879	1,817	2,302	1,184	778	22,551	1,050	2,112	3,713	5,244
Number in 1900.....	2,015		2,021			18,548	534	703	641	1,422
Native white—Foreign parentage.....	1,748	1,005	1,251	702	433	16,084	672	1,203	2,380	3,230
Native white—Mixed parentage.....	1,131	812	1,111	432	345	6,467	378	849	1,327	2,014
Foreign-born white.....	2,001	1,290	1,871	1,208	710	20,075	687	1,800	2,828	4,064
Number in 1900.....	1,742		1,655			17,252	690	805	608	2,022
<b>PER CENT OF TOTAL POPULATION.</b>										
Native white—Native parentage.....	53.5	45.0	62.9	35.5	28.1	23.9	48.2	35.1	38.7	53.2
Per cent in 1900.....	45.6		64.6		10.0	29.8	47.2	35.2	35.4	38.9
Native white—Foreign or mixed parentage.....	26.8	30.8	20.2	14.2	21.0	30.7	20.1	22.1	27.2	22.9
Per cent in 1900.....	27.4		20.7			38.5	27.0	15.7	14.7	25.9
Foreign-born white.....	18.6	22.0	16.0	15.1	19.3	35.3	24.5	16.3	20.7	20.3
Per cent in 1900.....	23.7		13.5			52.2	22.6	15.8	11.7	16.8
<b>FOREIGN NATIONALITIES</b>										
<b>FOREIGN-BORN WHITE: Born in—</b>										
Austria.....	392	62	66	24	7	1,874	0	20	187	265
Bulgaria.....	4	10	103	16	1	18	8	15	7	67
Canada—French.....	15	99	60	1	08	680	11	87	84	30
Canada—Other.....	238	104	381	84	03	1,025	06	286	505	378
Denmark.....	38	86	27	14	12	140	17	84	425	85
England.....	216	82	158	65	36	4,124	57	111	127	280
Finland.....	7	56	148	5	8	1,810	1	0	11	34
France.....	17	18	9	7	2	116	6	25	37	35
Germany.....	267	190	184	109	70	1,048	56	155	287	645
Greece.....	67	10	1	67	44	129	7	6	22	204
Holland.....	1	4	10	20	2	10	17	148	6	250
Hungary.....	9	13	20	18		08	2	11	19	129
Ireland.....	91	138	132	54	27	4,863	40	63	82	178
Italy.....	216	50	37	272	201	987	156	78	220	452
Norway.....	188	86	84	153	02	385	422	282	488	323
Russia.....	2	15	30	34	3	236	0	40	57	671
Scotland.....	96	30	37	121	14	358	00	117	60	262
Sweden.....	158	96	170	97	51	827	37	63	128	221
Switzerland.....	15	14	40	4	6	168		12	17	54
Turkey.....	7	8	2	12	2	07	1	2		22
Wales.....	38	20	3	13	4	367	1	9	12	25
Other foreign countries.....	19	33	73	18	7	457	7	22	46	50
<b>NATIVE WHITE: Both parents born in—</b>										
Austria.....	180	12	0	15		990	4	3	23	116
Canada—French.....	14	41	44	3	53	395	6	17	35	22
Canada—Other.....	107	43	170	86	87	701	17	123	149	148
Denmark.....	30	96	18	14	0	60	15	20	354	47
England.....	147	70	98	30	24	2,525	34	44	79	171
Germany.....	358	182	244	148	84	1,428	84	210	490	747
Holland.....	9	3	12	7	4	14	25	120	17	171
Hungary.....	2	0	1	3		36		8	7	81
Ireland.....	178	188	217	105	45	5,605	70	120	133	367
Italy.....	83	1	10	26		534	1		11	46
Norway.....	90	52	43	66	39	240	268	305	489	283
Russia.....	1	9	4	13	1	120	2	25	25	324
Scotland.....	85	16	30	25	11	171	21	28	49	97
Sweden.....	135	59	78	57	14	430	28	48	149	169
Switzerland.....	8	16	17	12	6	67	1	0	15	26
Turkey.....	43	37	4	10	3	250		7	6	3
Wales.....	43	37	4	10	3	250		7	6	3
All others of foreign parentage.....	278	174	234	138	103	2,600	100	170	355	448

<sup>1</sup> For changes in boundaries, etc., see page 596. <sup>2</sup> For combined figures for Deer Lodge and Powell Counties, see Note 2 on page 596.  
<sup>3</sup> For combined figures for Custer, Rosebud, and Yellowstone Counties, see Note 1 on page 596.  
<sup>4</sup> For combined figures for Missoula and Sanders Counties, see Note 4 on page 596.

# STATISTICS OF POPULATION.

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## POPULATION FOR THE STATE AND FOR COUNTIES—Continued.

SUBJECT.	Park. <sup>1</sup>	Powell. <sup>1</sup>	Ravalli. <sup>1</sup>	Rosebud. <sup>1</sup>	Sanders. <sup>1</sup>	Silver Bow. <sup>1</sup>	Sweet Grass. <sup>1</sup>	Teton. <sup>1</sup>	Valley. <sup>1</sup>	Yellow-stone. <sup>1</sup>
<b>SEX</b>										
Total... Male.....	6,350	3,853	7,113	4,740	2,308	32,597	2,513	5,694	8,101	13,654
Female.....	4,381	2,081	4,553	3,245	1,405	24,251	1,516	3,852	5,529	8,280
White... Male.....	6,249	3,727	7,030	3,335	2,139	32,071	2,480	4,419	7,169	13,143
Female.....	4,369	2,043	4,544	1,845	1,312	24,122	1,497	2,604	4,640	8,974
Negro... Male.....	13	36	7	10	11	155	1	7	13	96
Female.....	8	7	6	8	8	105			2	71
<b>MALES OF VOTING AGE</b>										
Total number.....	4,244	2,812	4,661	3,194	1,542	22,362	1,671	3,755	5,292	9,373
Number in 1900.....	3,177		2,332			20,047	1,273	2,178	1,792	2,733
Native white—Native parentage.....	2,054	1,197	2,431	1,116	648	4,920	670	1,417	1,852	4,494
Number in 1900.....	1,266		1,532			4,411	549	688	605	1,431
Native white—Foreign or mixed parentage.....	380	504	795	398	264	4,825	301	712	1,215	1,603
Number in 1900.....	521		617			4,634	229	338	236	569
Native white—Foreign parentage.....	555	362	484	240	163	3,677	197	481	847	1,033
Native white—Mixed parentage.....	325	202	311	152	101	1,148	104	231	368	570
Foreign-born white.....	1,216	931	1,368	874	500	12,147	670	1,021	1,735	2,894
Number in 1900.....	1,103		721			10,602	468	630	320	644
Negro.....	9	36	6	6	8	127	1	7	11	79
Number in 1900.....	8		9			116	5	4	2	43
Indian, Chinese, Japanese, and all other.....	85	84	61	800	122	343	20	598	479	303
<b>PER CENT OF TOTAL.</b>										
Native white—Native parentage.....	48.4	42.6	52.2	34.9	42.0	22.0	40.6	37.7	35.0	47.9
Native white—Foreign or mixed parentage.....	20.7	20.1	17.1	12.5	17.1	21.6	18.0	19.0	23.0	17.1
Foreign-born white.....	28.7	33.1	29.3	27.4	32.4	54.3	40.1	27.2	32.8	30.9
<b>CITIZENSHIP OF FOREIGN-BORN WHITE.</b>										
Naturalized.....	630	582	625	225	221	7,320	282	481	632	837
Having first papers.....	103	79	162	99	22	1,201	94	158	331	414
Alien.....	322	219	488	274	135	2,597	218	182	253	923
Unknown.....	161	51	93	276	72	1,029	76	200	519	670
<b>ILLITERACY</b>										
<b>ILLITERATE MALES OF VOTING AGE.</b>										
Total number illiterate.....	244	79	159	670	259	595	101	442	484	490
Per cent illiterate.....	5.7	2.8	3.4	21.0	16.8	2.7	6.0	11.8	9.1	5.2
Per cent in 1900.....	5.1		2.2			4.4	5.4	14.9	26.7	1.9
Native white, number illiterate.....	12	6	21	9	4	19	2	4	10	25
Per cent illiterate.....	0.4	0.3	0.7	0.6	0.4	0.2	0.2	0.2	0.3	0.4
Foreign-born white, number illiterate.....	229	45	115	91	165	481	98	46	222	337
Per cent illiterate.....	18.3	4.8	8.4	10.4	33.0	4.0	14.6	4.5	12.8	11.6
Negro, number illiterate.....		11			2	3			1	4
Per cent illiterate.....						2.4				
<b>PERSONS 10 YEARS OLD AND OVER.</b>										
Total number.....	8,577	4,949	9,360	6,474	3,011	46,212	3,264	7,397	10,522	18,428
Number illiterate.....	366	107	193	1,518	383	1,118	140	1,150	925	749
Per cent illiterate.....	4.3	2.2	2.1	23.4	12.7	2.4	4.3	15.5	8.8	4.1
Native white, number.....	6,502	3,533	7,443	3,057	2,080	25,886	2,253	4,128	6,529	13,326
Number illiterate.....	25	15	33	12	5	50	10	6	21	49
Per cent illiterate.....	0.4	0.4	0.4	0.4	0.2	0.2	0.4	0.1	0.3	0.4
Foreign-born white, number.....	1,964	1,282	1,850	1,185	704	19,707	971	1,503	2,666	4,412
Number illiterate.....	337	61	136	113	224	959	126	55	295	475
Per cent illiterate.....	17.2	4.8	7.4	9.5	31.8	4.9	13.0	3.7	11.1	10.8
Negro, number.....	20	43	13	12	16	243	1	7	13	15
Number illiterate.....		11			4	10			1	12
Per cent illiterate.....						4.1				7.7
<b>PERSONS 10 TO 20 YEARS, INCLUSIVE.</b>										
Total number.....	1,919	1,019	2,316	1,509	682	9,846	812	1,665	2,279	3,913
Number illiterate.....	40	11	13	153	68	56	19	281	72	49
Per cent illiterate.....	2.1	1.1	0.6	10.1	10.0	0.6	2.3	16.9	3.2	1.3
<b>SCHOOL AGE AND ATTENDANCE</b>										
Total number 6 to 20 years, inclusive.....	2,663	1,399	3,210	2,077	956	13,909	1,088	2,453	3,374	5,558
Number attending school.....	1,568	941	2,235	1,220	665	9,943	734	1,178	1,891	3,336
Per cent attending school.....	58.9	67.7	69.6	58.7	69.6	71.5	67.5	47.9	56.0	60.0
Number 6 to 9 years.....	744	370	894	568	274	4,063	276	788	1,095	1,645
Number attending school.....	451	295	715	338	229	3,503	212	403	648	1,147
Number 10 to 14 years.....	839	440	1,005	640	325	4,531	345	801	1,100	1,827
Number attending school.....	709	424	907	535	305	4,359	323	512	875	1,510
Number 15 to 17 years.....	452	265	621	385	174	2,512	212	395	556	962
Number attending school.....	263	172	443	257	108	1,599	145	200	278	529
Number 18 to 20 years.....	628	308	690	478	183	2,803	255	468	623	1,124
Number attending school.....	85	50	110	90	23	482	54	61	90	150
<b>PERSONS 6 TO 14 YEARS, INCLUSIVE.</b>										
Total number.....	1,583	816	1,899	1,214	599	8,594	621	1,580	2,195	3,472
Number attending school.....	1,220	719	1,082	873	534	7,862	535	915	1,523	2,657
Per cent attending school.....	77.1	88.1	88.6	71.9	89.1	91.5	86.2	57.6	69.4	76.5
Native white—Native parentage, number.....	959	386	1,359	452	386	2,252	349	499	934	2,059
Number attending school.....	753	341	1,201	382	346	2,050	302	408	691	1,562
Per cent attending school.....	78.5	88.3	88.4	84.5	89.6	91.0	86.5	81.8	74.0	75.9
Native white—Foreign or mixed parentage, number.....	569	409	508	229	171	5,812	244	412	739	979
Number attending school.....	425	360	451	194	167	5,339	213	343	494	781
Per cent attending school.....	74.7	88.0	88.8	84.7	97.7	91.9	87.3	83.3	66.8	79.8
Foreign-born white, number.....	53	21	24	29	15	494	17	52	172	334
Number attending school.....	40	18	22	13	13	440	12	34	93	234
Per cent attending school.....						89.1			54.1	70.1
Negro, number.....	1		1	6	1	24			1	15
Number attending school.....	1		1	5	1	22				10
Per cent attending school.....										
<b>DWELLINGS AND FAMILIES</b>										
Dwellings, number.....	2,540	1,200	2,317	2,116	930	11,070	869	2,368	3,733	5,289
Families, number.....	2,581	1,245	2,409	2,180	931	12,352	880	2,406	3,788	5,519

<sup>1</sup> See Note 5 on page 596.

<sup>2</sup> Comparable figures not available; for combined figures, see Note 1 on page 596.

<sup>3</sup> 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 POPULATION OF BUTTE.

SUBJECT.	Butte. <sup>1</sup>	SUBJECT.	Butte. <sup>1</sup>
<b>POPULATION</b>		<b>MALES OF VOTING AGE</b>	
Total population, 1910.....	39,165	Total number.....	18,037
1900.....	30,470	Number in 1900.....	15,387
1890.....	10,723	Native white—Native parentage.....	4,170
1880.....	3,303	Number in 1900.....	5,046
Increase, 1900-1910.....	8,695	Native white—Foreign or mixed parentage.....	3,677
Per cent of increase.....	28.5	Number in 1900.....	5,560
Increase, 1890-1900.....	10,747	Native white—Foreign parentage.....	2,772
Per cent of increase.....	184.2	Native white—Mixed parentage.....	905
<b>COLOR AND NATIVITY</b>		Foreign-born white.....	7,825
White.....	38,029	Number in 1900.....	6,003
Number in 1900.....	20,950	Negro.....	117
Number in 1890.....	10,160	Number in 1900.....	110
Negro.....	240	Indian, Chinese, and Japanese.....	248
Number in 1900.....	243	<b>PER CENT OF TOTAL.</b>	
Number in 1890.....	150	Native white—Native parentage.....	26.0
Black.....	107	Native white—Foreign or mixed parentage.....	22.9
Mulatto.....	73	Foreign-born white.....	48.8
Indian.....	1	<b>CITIZENSHIP OF FOREIGN-BORN WHITE.</b>	
Chinese.....	281	Naturalized.....	4,662
Japanese.....	14	Having first papers.....	786
Native white—Native parentage.....	11,143	Alien.....	1,657
Number in 1900.....	8,881	Unknown.....	720
Native white—Foreign or mixed parentage.....	14,600	<b>ILLITERACY</b>	
Number in 1900.....	11,077	<b>ILLITERATE MALES OF VOTING AGE.</b>	
Native white—Foreign parentage.....	10,007	Total number illiterate.....	288
Native white—Mixed parentage.....	4,500	Per cent illiterate.....	1.6
Foreign-born white.....	12,880	Per cent in 1900.....	2.6
Number in 1900.....	8,934	Native white, number illiterate.....	14
<b>PER CENT OF TOTAL POPULATION.</b>		Per cent illiterate.....	0.2
Native white—Native parentage.....	28.5	Foreign-born white, number illiterate.....	221
Per cent in 1900.....	29.5	Per cent illiterate.....	2.8
Native white—Foreign or mixed parentage.....	37.3	Negro, number illiterate.....	3
Per cent in 1900.....	36.2	Per cent illiterate.....	2.6
Foreign-born white.....	32.9	<b>PERSONS 10 YEARS OLD AND OVER.</b>	
Per cent in 1900.....	38.6	Total number.....	32,660
<b>SEX</b>		Number illiterate.....	547
Total.....	22,314	Per cent illiterate.....	1.7
Male.....	16,851	Native white, number.....	19,470
Female.....	5,463	Number illiterate.....	84
White.....	21,000	Per cent illiterate.....	0.2
Male.....	16,720	Foreign-born white, number.....	12,689
Female.....	4,280	Number illiterate.....	409
Negro.....	142	Per cent illiterate.....	3.7
Female.....	98	Negro, number.....	224
<b>FOREIGN NATIONALITIES</b>		Number illiterate.....	10
<b>FOREIGN-BORN WHITE: Born in—</b>		Per cent illiterate.....	4.5
Australia.....	27	<b>PERSONS 10 TO 20 YEARS, INCLUSIVE.</b>	
Austria.....	955	Total number.....	6,309
Belgium.....	27	Number illiterate.....	28
Canada—French.....	441	Per cent illiterate.....	0.4
Canada—Other.....	1,579	<b>SCHOOL AGE AND ATTENDANCE</b>	
Denmark.....	109	Total number 6 to 20 years, inclusive.....	8,761
England.....	2,181	Number attending school.....	6,187
Finland.....	1,013	Per cent attending school.....	70.6
France.....	97	Number 6 to 9 years.....	2,462
Germany.....	858	Number attending school.....	2,080
Greece.....	74	Number 10 to 14 years.....	2,336
Hungary.....	40	Number attending school.....	2,088
Ireland.....	3,196	Number 15 to 17 years.....	1,593
Italy.....	151	Number attending school.....	1,050
Montenegro.....	129	Number 18 to 20 years.....	1,880
Norway.....	309	Number attending school.....	349
Russia.....	226	<b>PERSONS 6 TO 14 YEARS, INCLUSIVE.</b>	
Scotland.....	287	Total number.....	5,288
Servia.....	56	Number attending school.....	4,788
Sweden.....	630	Per cent attending school.....	90.5
Switzerland.....	80	Native white—Native parentage, number.....	1,734
Turkey.....	96	Number attending school.....	1,679
Wales.....	203	Per cent attending school.....	91.1
Other foreign countries.....	116	Native white—Foreign or mixed parentage, number.....	3,261
<b>NATIVE WHITE: Both parents born in—</b>		Number attending school.....	2,049
Austria.....	350	Per cent attending school.....	90.4
Canada—French.....	310	Foreign-born white, number.....	258
Canada—Other.....	586	Number attending school.....	228
Denmark.....	43	Per cent attending school.....	88.4
England.....	1,232	Negro, number.....	23
France.....	39	Number attending school.....	21
Germany.....	1,230	<b>DWELLINGS AND FAMILIES</b>	
Ireland.....	3,306	Dwellings, number.....	7,476
Italy.....	65	Families, number.....	8,566
Norway.....	186		
Russia.....	118		
Scotland.....	110		
Sweden.....	310		
Switzerland.....	89		
Wales.....	189		
All others of foreign parentage.....	1,867		

<sup>1</sup> For changes in boundaries, etc., see page 596.

<sup>2</sup> 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.

<sup>3</sup> Per cent not shown where base is less than 100.

STATISTICS OF POPULATION.

TABLE III.—COMPOSITION AND CHARACTERISTICS OF THE POPULATION FOR CITIES OF 10,000 TO 25,000.

SUBJECT.	TOTAL, CITIES NAMED.	Anaconda. <sup>1</sup>	Billings.	Great Falls.	Helena.	Missoula.
<b>COLOR AND NATIVITY</b>						
Total population, 1910.....	59,497	10,124	10,031	13,948	12,515	12,869
1900.....	42,740	9,453	3,221	14,930	10,770	4,366
Native white—Native parentage.....	24,596	2,342	5,735	5,234	4,995	6,290
Native white—Foreign or mixed parentage.....	18,601	4,075	2,214	4,821	4,160	3,331
Foreign-born white.....	14,673	3,579	1,835	3,662	2,600	2,997
Negro.....	924	124	144	116	420	120
Indian, Chinese, Japanese, and all other.....	703	14	103	115	340	131
<b>FOREIGN NATIONALITIES</b>						
<b>FOREIGN-BORN WHITE: Born in—</b>						
Austria.....	1,360	665	122	323	127	123
Canada—French.....	555	163	17	91	80	204
Canada—Other.....	1,969	309	200	654	338	468
Denmark.....	219	17	44	44	55	59
England.....	1,046	195	102	319	283	147
Finland.....	92	18	16	12	20	26
France.....	113	16	12	28	38	21
Germany.....	1,795	153	280	465	609	288
Greece.....	448	.....	121	69	13	245
Holland.....	100	8	67	13	5	7
Hungary.....	366	87	103	107	33	36
Ireland.....	1,747	1,072	99	214	206	156
Italy.....	916	85	137	207	18	369
Norway.....	940	174	108	280	180	198
Russia.....	272	23	84	71	72	22
Scotland.....	522	105	95	183	88	51
Sweden.....	1,610	334	117	426	338	395
Switzerland.....	167	27	21	49	39	31
Wales.....	106	36	8	37	14	11
Other foreign countries.....	430	92	82	72	44	140
<b>NATIVE WHITE: Both parents born in—</b>						
Austria.....	769	398	45	235	57	34
Canada—French.....	357	96	11	44	63	143
Canada—Other.....	730	139	77	254	117	143
Denmark.....	90	11	14	20	27	18
England.....	736	140	64	198	232	102
Germany.....	2,479	220	343	700	837	379
Hungary.....	183	100	31	43	4	5
Ireland.....	2,257	1,076	189	332	361	299
Italy.....	98	25	30	34	5	4
Norway.....	580	77	85	221	103	94
Russia.....	148	10	65	33	26	14
Scotland.....	274	45	40	101	54	34
Sweden.....	1,129	235	85	376	217	216
Switzerland.....	86	10	18	19	18	21
Wales.....	101	30	9	30	13	19
All others of foreign parentage <sup>2</sup> .....	1,921	347	230	481	516	347
<b>SEX</b>						
Total.. Male.....	33,393	5,735	5,862	7,719	6,651	7,425
Female.....	26,104	4,399	4,169	6,229	5,864	5,443
White.. Male.....	32,210	5,647	5,682	7,561	6,080	7,240
Female.....	25,660	4,349	4,102	6,156	5,675	5,378
Negro.. Male.....	525	74	82	59	242	68
Female.....	399	50	62	57	178	52
<b>MALES OF VOTING AGE</b>						
Total number.....	22,815	3,674	4,250	5,030	4,562	5,299
Native white—Native parentage.....	8,764	748	2,256	1,873	1,671	2,216
Native white—Foreign or mixed parentage.....	4,359	662	679	1,063	1,022	903
Foreign-born white.....	8,654	2,187	1,157	1,943	1,347	2,020
Negro.....	417	63	67	41	198	48
<b>CITIZENSHIP OF FOREIGN-BORN WHITE.</b>						
Naturalized.....	4,453	1,351	430	1,018	869	785
Having first papers.....	761	243	96	216	76	130
Alien.....	2,284	475	475	360	81	893
Unknown.....	1,156	118	156	349	321	212
<b>ILLITERACY</b>						
Total number 10 years old and over.....	48,980	7,834	8,398	11,178	10,732	10,838
Number illiterate.....	1,585	361	230	680	178	186
Native white 10 years old and over.....	33,112	4,213	6,379	7,424	7,452	7,644
Number illiterate.....	66	5	9	20	8	24
Foreign-born white 10 years old and over.....	14,377	3,497	1,781	3,553	2,575	2,971
Number illiterate.....	1,208	353	191	539	30	95
Negro 10 years old and over.....	814	110	136	103	367	98
Number illiterate.....	40	2	9	7	18	4
Illiterate males of voting age.....	1,041	218	169	401	146	107
<b>SCHOOL AGE AND ATTENDANCE</b>						
Total number 6 to 20 years, inclusive.....	14,780	2,692	2,209	3,669	3,215	2,985
Number attending school.....	9,895	2,069	1,244	2,443	2,069	2,080
<b>PERSONS 6 TO 14 YEARS, INCLUSIVE.</b>						
Total number.....	8,666	1,776	1,324	2,247	1,694	1,625
Number attending school.....	7,483	1,630	984	1,887	1,482	1,480
Native white—Native parentage, number.....	3,881	437	837	765	765	971
Number attending school.....	3,285	408	613	702	674	888
Native white—Foreign or mixed parentage, number.....	4,301	1,233	390	1,229	850	599
Number attending school.....	3,791	1,124	307	1,069	744	547
Foreign-born white, number.....	377	95	84	124	38	36
Number attending school.....	310	87	55	106	31	31
Negro, number.....	87	11	12	11	38	15
Number attending school.....	72	11	9	10	30	12
<b>DWELLINGS AND FAMILIES</b>						
Dwellings, number.....	11,872	2,168	1,956	2,544	2,725	2,479
Families, number.....	12,973	2,299	2,083	2,679	3,117	2,795

<sup>1</sup> For changes in boundaries, etc., see page 596.

<sup>2</sup> 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 IV.—COMPOSITION AND CHARACTERISTICS OF THE POPULATION FOR PLACES OF 2,500 TO 10,000.

SUBJECT.	TOTAL PLACES NAMED.	Bozeman.	Deer Lodge.	Havro.	Kallispoll.	Lewis-town.	Living-ston.	Miles City.	Red Lodge.
<b>SEX, COLOR, AND NATIVITY</b>									
Total population, 1910.....	34,758	5,107	3,570	3,624	5,549	2,992	5,359	4,697	4,860
1900.....	16,260	3,410	1,324	1,033	2,526	1,090	2,778	1,938	2,123
Males.....	19,041	2,628	1,728	2,448	2,884	1,501	2,064	2,740	2,958
Females.....	14,817	2,470	842	1,176	2,665	1,401	2,395	1,957	1,902
Native white—Native parentage.....	18,035	3,554	1,308	1,557	3,220	1,726	2,857	2,517	1,236
Native white—Foreign or mixed parentage.....	8,894	927	631	860	1,467	700	1,560	1,200	1,520
Foreign-born white.....	7,103	531	467	1,041	709	411	903	852	2,099
Negro.....	291	37	39	35	23	54	16	81	5
Indian, Chinese, Japanese, and all other.....	435	57	65	131	50	11	74	47	.....
<b>MALES OF VOTING AGE</b>									
Total number.....	13,808	1,717	1,369	1,881	1,830	1,077	2,003	1,973	1,858
Native white—Native parentage.....	6,417	1,046	717	715	977	577	983	977	425
Native white—Foreign or mixed parentage.....	2,470	276	226	204	303	240	448	367	217
Foreign-born white.....	4,404	323	332	757	408	210	400	555	1,314
Naturalized.....	1,776	145	225	188	250	123	260	190	420
Negro.....	181	15	33	0	11	22	6	33	2
<b>ILLITERACY</b>									
Total number 10 years old and over.....	33,368	4,365	2,339	3,072	4,438	2,470	4,385	3,919	3,480
Number illiterate.....	1,516	29	41	24	12	25	149	258	280
Native white 10 years old and over.....	20,784	3,643	1,873	1,011	3,598	2,013	3,315	2,961	1,685
Number illiterate.....	58	5	6	4	3	2	8	8	22
Foreign-born white 10 years old and over.....	6,900	525	462	1,011	773	398	881	840	2,010
Number illiterate.....	1,374	9	17	10	9	16	140	207	957
Negro 10 years old and over.....	260	35	39	27	20	48	15	71	5
Number illiterate.....	35	3	11	1	.....	4	.....	15	1
Illiterate males of voting age.....	1,068	18	28	13	6	13	88	236	666
<b>SCHOOL AGE AND ATTENDANCE</b>									
Total number 6 to 20 years, inclusive.....	8,392	1,408	481	706	1,533	764	1,249	1,065	1,186
Number attending school.....	5,481	1,031	331	321	1,147	539	698	687	787
<b>PERSONS 6 TO 14 YEARS, INCLUSIVE.</b>									
Native white, number.....	4,674	805	263	366	876	410	679	584	682
Number attending school.....	3,807	713	238	213	809	378	488	491	570
Foreign-born white, number.....	218	6	8	26	27	10	33	14	94
Number attending school.....	175	2	7	15	25	7	22	14	83
Negro, number.....	20	1	.....	7	2	2	.....	8	.....
Number attending school.....	13	1	.....	3	2	2	.....	5	.....
<b>DWELLINGS AND FAMILIES</b>									
Dwellings, number.....	6,890	1,101	405	475	1,242	655	1,205	866	880
Families, number.....	7,273	1,232	445	503	1,293	696	1,228	883	993

NOTES REGARDING CHANGES IN BOUNDARIES, ETC.

COUNTIES.

**BROADWATER.**—Organized from parts of Jefferson and Meagher in 1897.  
**CARBON.**—Organized from parts of Park and Yellowstone in 1895.  
**CASCADE.**—Organized from parts of Chouteau, Lewis and Clark, and Meagher in 1887 and part of Meagher annexed between 1890 and 1900.  
**CHOUTEAU.**—Parts taken to form Teton in 1893 and part of Cascade in 1887.  
**CUSTER.**—Name changed from Bighorn in 1877; part taken to form part of Yellowstone in 1881, and part, including Northern Cheyenne Indian Reservation and part of Crow Indian Reservation, taken to form Rosebud in 1901. (See also Note 1.)  
**DAWSON.**—Part taken to form Valley in 1893.  
**DEER LODGE.**—Parts taken to form Silver Bow in 1881, Granite in 1893, and Powell in 1901, and parts annexed to Flathead and Lewis and Clark between 1890 and 1900; part of Silver Bow annexed in 1903. (See also Note 2.)  
**FERGUS.**—Organized from part of Meagher in 1885.  
**FLATHEAD.**—Organized from part of Missoula in 1893 and part of Deer Lodge annexed between 1890 and 1900; part taken to form Lincoln in 1909. (See also Note 3.)  
**GALLATIN.**—Parts taken to form Park in 1887 and part of Yellowstone in 1881.  
**GRANITE.**—Organized from part of Deer Lodge in 1893.  
**JEFFERSON.**—Part taken to form part of Broadwater in 1897.  
**LEWIS AND CLARK.**—Part taken to form part of Cascade in 1887; parts of Deer Lodge and Meagher annexed between 1890 and 1900.  
**LINCOLN.**—Organized from part of Flathead in 1909. (See also Note 3.)  
**MEAGHER.**—Parts taken to form Fergus in 1885, part of Cascade in 1887, part of Sweet Grass in 1895, and part of Broadwater in 1897; parts annexed to Cascade and Lewis and Clark between 1890 and 1900.  
**MISSOULA.**—Parts taken to form Flathead and Ravalli in 1893 and Sanders in 1906. (See also Note 4.)  
**PARK.**—Organized from part of Gallatin in 1887; parts taken to form parts of Carbon and Sweet Grass in 1895.  
**POWELL.**—Organized from part of Deer Lodge in 1901. (See also Note 2.)  
**RAVALLI.**—Organized from part of Missoula in 1893.  
**ROSEBUD.**—Organized from part of Custer County, including Northern Cheyenne Indian Reservation and part of Crow Indian Reservation, in 1901. (See also Note 1.)  
**SANDERS.**—Organized from part of Missoula in 1906. (See also Note 4.)  
**SILVER BOW.**—Organized from part of Deer Lodge in 1881; part annexed to Deer Lodge in 1903.  
**SWEET GRASS.**—Organized from parts of Meagher, Park, and Yellowstone in 1895.

**TETON.**—Organized from part of Chouteau in 1893.  
**VALLEY.**—Organized from part of Dawson in 1893.  
**YELLOWSTONE.**—Organized from parts of Custer and Gallatin in 1881; parts taken to form parts of Carbon and Sweet Grass in 1895. (See also Note 1.)

**NOTE 1.—Custer, Rosebud, and Yellowstone Counties combined.**—Total population: 1910, 45,052; 1900, including population (2,600) of Crow Indian Reservation, 10,763; increase, 1900-1910, 28,289; per cent of increase, 103.3. Urban population—1910, 14,728; same places in 1900, 5,159; per cent of increase, 185.5. Rural population—1910, 30,324; same territory in 1900, including population (2,600) of Crow Indian Reservation, 11,604; per cent of increase, 161.3. Urban population—1900, 3,221; rural population—1900, including population (2,600) of Crow Indian Reservation, 13,542. Per cent in places of 2,500 or more in 1910, 32.7. Per cent in places of 2,500 or more in 1900, 19.2.

**NOTE 2.—Deer Lodge and Powell Counties combined.**—Total population: 1910, 18,392; 1900, 17,393; increase, 1900-1910, 1,499; per cent of increase, 8.6. Urban population—1910, 12,704; same places in 1900, 10,777; per cent of increase, 17.9. Rural population—1910, 6,188; same territory in 1900, 6,616; per cent of decrease, 6.5. Urban population—1900, 9,453; rural population—1900, 7,940. Per cent in places of 2,500 or more in 1910, 67.2. Per cent in places of 2,500 or more in 1900, 64.3.

**NOTE 3.—Flathead and Lincoln Counties combined.**—Total population: 1910, 22,423; 1900, 9,375; increase, 1900-1910, 13,048; per cent of increase, 139.2. Urban population—1910, 5,549; same places in 1900, 2,526; per cent of increase, 119.7. Rural population—1910, 16,874; same territory in 1900, 6,849; per cent of increase, 146.4. Urban population—1900, 2,526; rural population—1900, 6,840. Per cent in places of 2,500 or more in 1910, 24.7. Per cent in places of 2,500 or more in 1900, 26.9.

**NOTE 4.—Missoula and Sanders Counties combined.**—Total population: 1910, 27,300; 1900, 13,954; increase, 1900-1910, 13,346; per cent of increase, 95.6. Urban population—1910, 12,860; same places in 1900, 4,366; per cent of increase, 194.8. Rural population—1910, 14,440; same territory in 1900, 9,588; per cent of increase, 50.4. Urban population—1900, 4,366; rural population—1900, 9,598. Per cent in places of 2,500 or more in 1910, 47.1. Per cent in places of 2,500 or more in 1900, 31.3.

**NOTE 5.**—In computing this increase the population of Indian reservations in 1900 has been deducted from the total population of the county in order to make that total comparable with the total for 1890, which does not include the population of Indian reservations. The population thus deducted in the several counties was as follows: Chouteau, 1,312; Custer, 1,464; Flathead, 13; Missoula, 2,129; Teton, 2,266; and Valley, 1,946.

**CITIES.**

**ANACONDA.**—Part annexed to school district 10 in 1904.  
**BURTON.**—Parts of election precincts 6 and 34 annexed in 1902 and parts of precincts 35, 37, and 45 annexed in 1908.

## CHAPTER 3.

# STATISTICS OF AGRICULTURE FOR THE STATE AND ITS COUNTIES.

**Introduction.**—This chapter presents a complete statement of the statistics of agriculture for Montana 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.

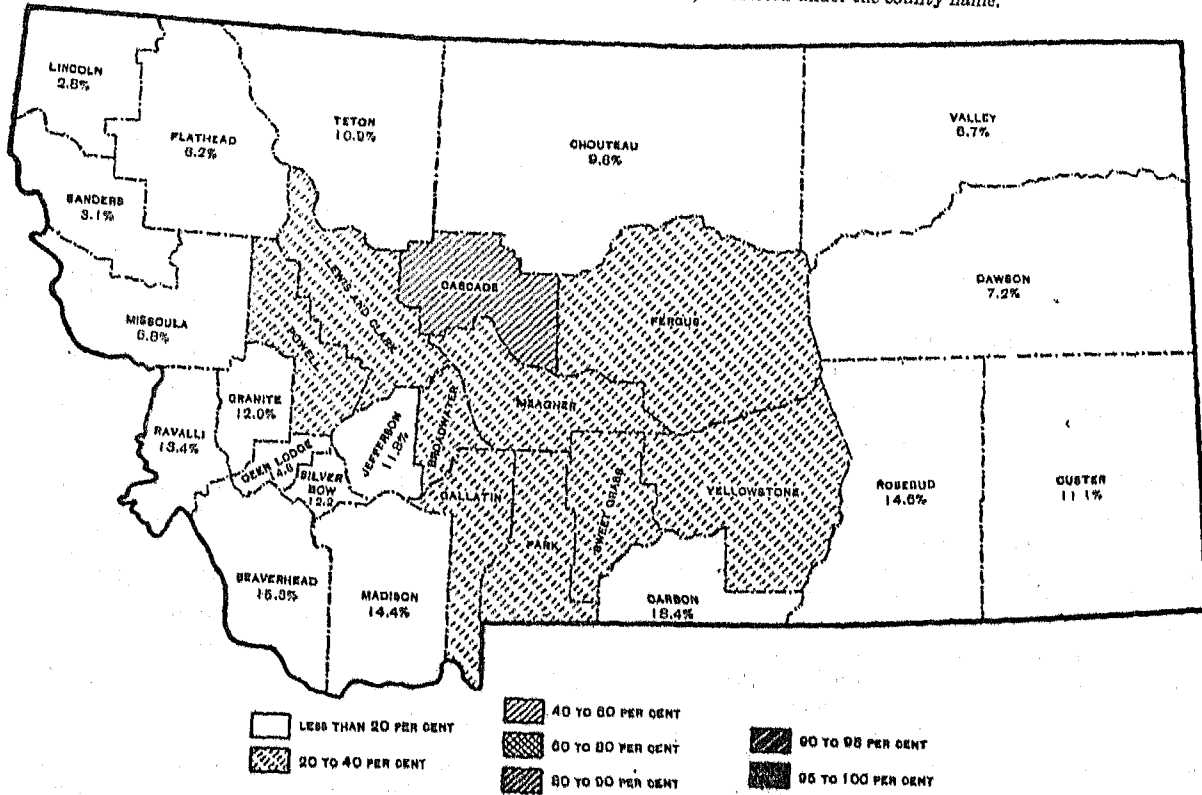


PER CENT OF LAND AREA IN FARMS, AND AVERAGE VALUE OF FARM LAND PER ACRE, IN MONTANA,  
BY COUNTIES: 1910.

PER CENT OF LAND AREA IN FARMS.

[Per cent for the state, 14.5.]

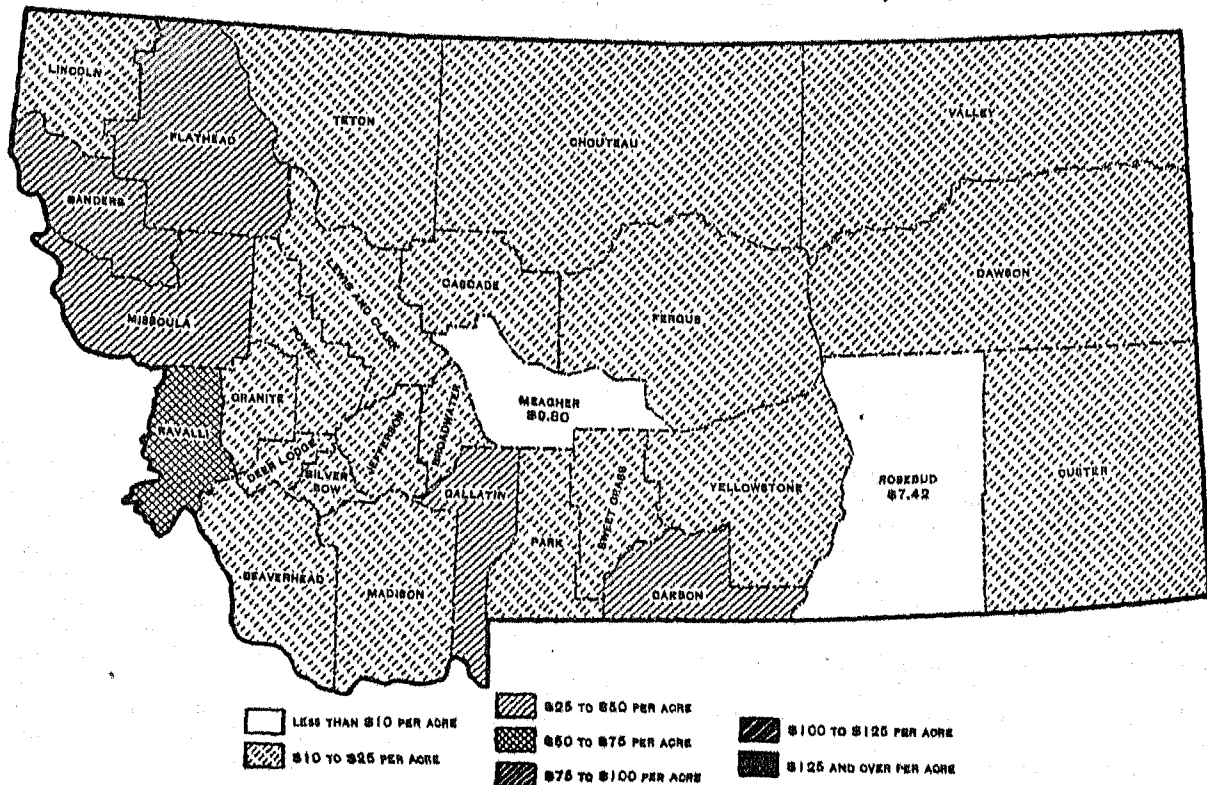
The per cent of land area in farms, when less than 20, is inserted under the county name.



AVERAGE VALUE OF FARM LAND PER ACRE.

[Average for the state, \$10.74.]

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



## FARMS AND FARM PROPERTY.

Montana ranks third in land area and fortieth in population among the states and territories of continental United States. The eastern three-fifths of the state of Montana lies within the Great Plains region and is bounded to the west by the ranges of the Rocky Mountains, which occupy the greater part of the remainder of the state. No portion of Montana lies at an altitude less than 1,000 feet above sea level; one-half of the state is included between the altitudes of 1,500 and 3,000; and practically all of the lands available for agricultural purposes have an elevation of less than 4,000 feet. The eastern portion of Montana consists of a high-ridged plateau forming the eastern slope of the Rocky Mountains. Across this plateau the Missouri River and its principal tributaries have cut broad valleys and deep gorges. The extreme northern portion of the plateau along the Canadian boundary line has been feebly glaciated, giving rise to soils not unlike those of northwestern North Dakota. The surface of the southeastern portion of the state consists of upland soils formed by the disintegration of underlying rock and by the partial weathering of extensive deposits of sandy and gravelly loams which have been brought down from the mountain region to the west. Within the mountainous western portion of the state there are numerous broad-bottomed stream valleys whose soils consist of dark-colored alluvial silts and sandy loams along the stream, and of sandy and gravelly terraces and bench lands bordering the stream valleys.

The alluvial bottom lands in all portions of the state are devoted to intensive agriculture through the irrigation of the soils lying at such levels as may be reached by the irrigation canals. The higher bench lands and a considerable proportion of the elevated plateau country are used for dry-land farming, chiefly for the production of the cereal grains; while all of the rougher portions of the state excepting the most rugged mountainous areas are used for grazing purposes. In the extreme eastern portion of the state a small area of plateau country has been so severely eroded that it is known as the Bad Lands, and this portion is nonagricultural, though permitting grazing to a limited extent. Practically all of the intensive agriculture of the state is confined to the irrigated valleys, while dry farming and grazing constitute the chief agricultural industries of the higher plains and the lower mountain slopes.

A considerable amount of land lying principally in the valleys in the mountainous region, which occupies the southwestern and central parts of the state, is under irrigation. The plains are devoted more

largely to dry farming and to the range cattle industry. In nearly all sections of the state, however, by means of intensive cultivation and summer fallowing, grain can be grown without irrigation. A small section in the northwestern corner of the state receives sufficient rainfall to be classed as humid.

The two maps on the opposite page show, for the different counties, the proportion of the total land area which is in farms, and the average value of farm land per acre. Of the state's entire land area one-seventh is in farms, and as shown by the first map, the proportion is highest in the south central part of the state, where a group of counties have from 20 to 40 per cent of their total land area in farms, and one county, Cascade, has from 40 to 60 (46.2) per cent of its land in farms. The remaining counties, constituting about three-quarters (74.4 per cent) of the state's total area, are in the less than 20 per cent class.

The average value per acre of farm land for the whole state is \$16.74, and, as shown by the second map, in a majority of the counties the value of land without buildings averages between \$10 and \$25 per acre, only two counties averaging less than \$10. In three western and two southern counties the average value is \$25 to \$50, while in one western county, Ravalli, the average reaches \$73.50.

Progress during the decade 1900 to 1910.—Between 1900 and 1910 there was an increase of 132,724, or 54.5 per cent, in the population of the state. The number of farms almost doubled, increasing 12,844, or 96.1 per cent. The total farm acreage increased only 1,701,149, or 14.4 per cent. The small gain in acreage is due largely to the fact that in 1900 the Crow Indian Reservation of 3,500,000 acres was leased by a corporation for grazing purposes and was included as a farm. Less than one-fifth of this reservation was reported as farm land in 1910. Excluding this "farm" for 1900, the increase was 5,201,149 acres, or 62.3 per cent. The acreage of improved land in farms increased more rapidly than any of the above items, having more than doubled during the decade.

Farm property, which includes land, buildings, implements and machinery, and live stock (domestic animals, poultry, and bees), has increased in value during the decade about \$230,000,000, or 195.1 per cent. This increase is made up of increases of \$174,111,000 in the value of land, of \$15,489,000 in the value of buildings, and of \$40,369,000 in the value of farm equipment, which includes implements and machinery and live stock, of which over four-fifths rep-

resents the gain 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 \$8,815, while 10 years later it was \$13,269.

The average value of land rose from \$4.45 per acre in 1900 to \$16.74 in 1910, this advance being accompanied by increases in the average value per farm of buildings and of implements and machinery.

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. <sup>1</sup>	
			Amount.	Per cent.
Population.....	376,053	243,329	132,724	54.5
Number of all farms.....	26,214	13,370	12,844	96.1
Approximate land area of the state.....acres..	93,568,640	93,568,640		
Land in farms.....acres..	13,545,603	<sup>2</sup> 11,844,454	<sup>2</sup> 1,701,149	<sup>2</sup> 14.4
Improved land in farms.....acres..	3,640,309	<sup>3</sup> 8,344,454	<sup>3</sup> 5,201,149	<sup>3</sup> 62.3
Average acres per farm.....	516.7	<sup>2</sup> 1,736,701	<sup>2</sup> 1,003,608	<sup>2</sup> 109.6
		<sup>3</sup> 1,725,720	<sup>3</sup> 1,914,589	<sup>3</sup> 110.9
		<sup>2</sup> 885.9	<sup>2</sup> -369.2	<sup>2</sup> -41.7
Value of farm property:				
Total.....	\$347,828,770	<sup>2</sup> \$117,859,823	<sup>2</sup> \$229,968,947	<sup>2</sup> 195.1
		<sup>3</sup> 110,225,423	<sup>3</sup> 237,603,347	<sup>3</sup> 215.6
Land.....	226,771,302	<sup>2</sup> 52,660,560	<sup>2</sup> 174,110,742	<sup>2</sup> 330.6
Buildings.....	24,854,628	<sup>3</sup> 45,685,560	<sup>3</sup> 181,085,742	<sup>3</sup> 396.4
Implements and machinery.....	10,539,653	<sup>2</sup> 9,365,530	<sup>2</sup> 15,489,098	<sup>2</sup> 165.4
Domestic animals, poultry, and bees.....	85,663,187	<sup>3</sup> 9,340,530	<sup>3</sup> 15,514,098	<sup>3</sup> 166.1
		<sup>2</sup> 3,671,900	<sup>2</sup> 6,867,753	<sup>2</sup> 187.0
		<sup>3</sup> 3,371,900	<sup>3</sup> 7,167,753	<sup>3</sup> 212.6
		<sup>2</sup> 52,161,833	<sup>2</sup> 33,501,354	<sup>2</sup> 64.2
		<sup>3</sup> 51,827,433	<sup>3</sup> 33,835,754	<sup>3</sup> 65.3
Average value of all property per farm.....	\$13,269	<sup>2</sup> \$8,815	<sup>2</sup> \$4,454	<sup>2</sup> 50.5
Average value of land per acre.....	\$16.74	<sup>2</sup> \$4.45	<sup>2</sup> \$12.29	<sup>2</sup> 276.2

<sup>1</sup> A minus sign (-) denotes decrease.

<sup>2</sup> Includes Crow Indian Reservation.

<sup>3</sup> Excludes Crow Indian Reservation.

NOTE.—Ranges or ranches using the public domain for grazing purposes but not owning or leasing land were counted as farms in 1910 and 1900. They were included as owned or managed, free from mortgage, and under 3 acres in size. The counting of these ranges as farms affects all totals, averages, and percentages in which the number of farms is a factor. In 1910 there were 220 such ranges included as farms.

**Irrigation.**—Of the 26,214 farms in the state, 8,970, or over one-third, were reported as irrigated in 1909. The acreage irrigated in 1909 was 1,679,084 acres, or about 45 per cent of the improved land in farms. The area to which enterprises existing in 1910 were capable of supplying water was 2,205,155 acres, and the total acreage included in irrigation projects, completed or under construction in 1910, was 3,515,602 acres.

**Population, number of farms, and farm acreage: 1870 to 1910.**—The next table presents, for the state as a whole for each census from 1870 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.

In the 40 years since 1870 the population of the state has increased by 355,458, or about eighteen times, and each decade except 1890 to 1900 has shown a larger absolute increase than the preceding decade.

There has been a rapid increase in the number of farms since the organization of the territory (1864), and especially since 1880. The greatest relative increase occurred between 1880 and 1890, but the greatest ab-

solute increase was in the last decade, when the number almost doubled, increasing from 13,370 to 26,214.

CENSUS YEAR.	Population.	FARMS.		LAND IN FARMS.			Per cent of land area in farms.	Per cent of farm land improved.
		Num-ber.	Per cent of in-crease.	All land.		Improved land (acres).		
				Acres.	Per cent of in-crease.			
1910.....	376,053	26,214	96.1	13,545,603	14.4	3,640,309	14.5	28.9
1900.....	243,329	13,370	138.6	11,844,454	1503.0	1,736,701	12.7	14.7
1890.....	142,924	5,003	208.9	1,004,107	384.2	918,617	2.1	46.6
1880.....	30,169	1,519	78.5	405,083	190.7	202,611	0.4	64.7
1870 <sup>2</sup> .....	20,595	851	.....	130,537	.....	84,074	0.1	60.7

<sup>1</sup> Includes Crow Indian Reservation. (See first table.)

<sup>2</sup> No data prior to 1870. Organized as a territory in 1864.

The land surface of Montana is approximately 93,568,640 acres. Of this area, 13,545,603 acres, or 14.5 per cent, are included in farms. Of this farm acreage, 3,640,309 acres, or 26.9 per cent, are reported as improved land, representing 3.9 per cent of the total land area of the state. The total acreage of farm land increased about 1,700,000 acres, or 14.4 per cent, during the last decade. The reported acreage of improved land more than doubled from 1900 to 1910, so that the percentage of farm land improved has risen.

These percentages are, however, as already explained, greatly affected by the classification of the Crow Indian Reservation as a farm in 1900.

Since 1870 both the total farm acreage and the improved land in farms have increased rapidly. The proportion of the total land area of the state which was occupied by farms increased from 0.1 per cent in 1870 to 14.5 per cent in 1910. The proportion which improved land formed of the total land area in farms increased slightly from 1870 to 1880, and then decreased rapidly during the next two decades from 64.7 per cent in 1880 to 14.7 per cent in 1900. This was due to the inclusion in the total farm acreage of much grazing land, some of which, at least, had been previously used for grazing as free public range. At the census of 1910, 26.9 per cent of the farm acreage is reported as improved.

**Values of farm property: 1870 to 1910.**—The agricultural changes in Montana since 1870, 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.....	\$347,828,770	195.1	\$251,625,930	305.7	\$10,539,053	187.0	\$85,663,187	64.2
1900 <sup>1</sup> .....	117,859,823	98.0	62,026,090	143.1	3,871,900	170.8	52,161,833	56.8
1890.....	60,185,102	369.6	25,512,340	688.7	1,356,010	238.0	23,266,752	262.8
1880.....	12,800,249	494.4	3,234,504	454.5	401,185	244.8	29,170,554	530.3
1870 <sup>2,4</sup> .....	2,184,059	.....	833,355	.....	110,350	.....	1,454,954	.....

<sup>1</sup> Includes Crow Indian Reservation. (See first table.)  
<sup>2</sup> Includes estimated value of range animals.  
<sup>3</sup> No data prior to 1870. Organized as a territory in 1864.  
<sup>4</sup> Computed gold values, being 80 per cent of the currency values reported.

The total wealth in the form of farm property is nearly \$348,000,000, of which 72.3 per cent is represented by land and buildings, 3 per cent by implements and machinery, and 24.6 per cent by live stock. The total value of farm property almost trebled between 1900 and 1910, increasing by about \$230,000,000. Of the total increase in value \$189,600,000 was in land and buildings, \$6,868,000 in implements and machinery, and \$33,501,000 in live stock. The absolute gain in total value of farm property was nearly four times as great, and the percentage gain over twice as great in the decade from 1900 to 1910 as during the decade immediately preceding, but the percentage gain during each of the decades between 1870 and 1890 was much greater than during either of the last two decades, as might be expected in a territory newly opened to settlement.

**Average acreage and values per farm: 1870 to 1910.**—The changes which have taken place during the past 40 years in the average acreage of Montana 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 next table.

One striking characteristic of Montana is the great area of semiarid land utilized for grazing purposes only, or left unutilized. Upon this land are located many very large farms or ranches, frequently exceeding 100,000 acres in extent. These large holdings give a high average number of acres per farm. Moreover, at the time of the census of 1900, the Crow Indian Reservation of 3,500,000 acres, leased by a corporation for grazing purposes and included as a farm, added 261.8 acres to the average size. Farms other than those used almost exclusively for grazing are not, on an average, unusually large.

CENSUS YEAR.	Average acres per farm.	AVERAGE VALUE PER FARM. <sup>1</sup>				Average value of land and buildings per acre.
		All farm property.	Land and buildings.	Implements and machinery.	Domestic animals, poultry, and bees.	
1910.....	516.7	\$13,269	\$9,599	\$402	\$3,268	\$18.58
1900 <sup>2</sup> .....	885.9	8,815	4,639	275	3,901	5.24
1890.....	350.6	10,733	4,553	242	5,937	12.99
1880.....	267.1	8,431	2,129	264	6,037	7.97
1870 <sup>3,4</sup> .....	164.0	2,532	685	137	1,710	4.18

<sup>1</sup> Averages are based on "all farms" in state.  
<sup>2</sup> Includes Crow Indian Reservation. (See first table.)  
<sup>3</sup> Includes estimated value of range animals.  
<sup>4</sup> No data prior to 1870. Organized as a territory in 1864.  
<sup>5</sup> Computed gold values, being 80 per cent of the currency values reported.

During the 30 years, 1870 to 1900, the average size of Montana farms increased greatly. In 1900 the average size, 624.1 acres, exclusive of the Crow Indian Reservation, was nearly four times as great as in 1870. The increase had been continuous, averaging over 15 acres a year for the 30 years, but was considerably greater in the decade 1890 to 1900.

The average size has decreased from 624.1 acres (excluding the Crow Indian Reservation) in 1900 to 516.7 acres in 1910. This decrease, averaging 107.4 acres per farm, or 17.2 per cent, in the average size, is an index of the increase in number of homesteads and of irrigated farms, which in most cases are of moderate size.

During the 40 years since 1870 implements and machinery have about trebled in value per farm, almost one-half of the increase taking place during the last decade. Between 1870 and 1880 the value of live stock per farm more than trebled. Since that time it has decreased during each decade. These changes are consequent upon the increasing use of land for crops and upon the relative decline in importance of the range grazing business.

The average value of a Montana farm, including its equipment, is \$13,269, of which \$9,599 represents value of land and buildings, \$3,268 value of live stock, and \$402 value of implements and machinery. The value per farm of all farm property is nearly five and one-half times as great as it was 40 years ago. The average value of land and buildings per acre, which declined in the decade 1890 to 1900 from \$12.99 to \$5.24, has risen in the last decade to \$18.58, which is

three and one-half times the average value of 10 years ago. This gain is greater than that recorded for any previous decade.

**Farm tenure: 1880 to 1910.**—The total number of farms increased 12,844 during the last decade; the number operated by owners and managers increasing 11,730 and the number operated by tenants 1,114.

The proportion of tenants in Montana has been low, a condition characteristic of newly settled sections of the United States. In 1880 and in 1890 about five out of every one hundred farms were operated by tenants, and, although the proportion in 1900 and 1910 was approximately nine in one hundred, it was still far below, being in fact less than one-fourth, the proportion for the country as a whole. The great majority of the farms of the state have been acquired by their owners or operators from the Government or from private corporations in the form of homesteads, Carey Act entries, desert-land entries, or entries on irrigated lands. Most of these have been acquired at a small price, or on long-time credit, which has made it possible for farmers of small means to become owners. This fact probably accounts in the main for the small proportion of tenants.

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.....	26,214	13,370	5,003	1,510
<b>Farms operated by owners and managers.</b>	<b>23,870</b>	<b>12,140</b>	<b>5,333</b>	<b>1,430</b>
Farms consisting of owned land only.....	21,525	10,471	(1)	(1)
Farms consisting of owned and hired land.	1,840	1,100	(1)	(1)
Farms operated by managers.....	605	470	(1)	(1)
<b>Farms operated by tenants.....</b>	<b>2,344</b>	<b>1,230</b>	<b>270</b>	<b>80</b>
Share tenants.....	952			
Share-cash tenants <sup>1</sup> .....	51	600	140	63
Cash tenants.....	790			
Tenure not specified <sup>2</sup> .....	551	624	124	17
<b>Per cent of farms operated by—</b>				
Owners and managers.....	91.1	90.8	95.2	94.7
Tenants.....	8.9	9.2	4.8	5.3
Share and share-cash.....	3.8	4.5	2.6	4.1
Cash and nonspecified.....	5.1	4.7	2.2	1.1

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

Notwithstanding the fact of a low percentage of tenancy, the actual number of farms operated by tenants has increased during each decade of the 30 years covered by the table from 80 in 1880 to 2,344 in 1910. Of these rented farms the proportion rented for cash (including nonspecified) increased in each decade, but the proportion rented in whole or in part for a share of the crop decreased in 1890 and 1910, compared with the preceding decades.

The next 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 <sup>1</sup>	1910	1900 <sup>1</sup>	1910	1900 <sup>1</sup>
Total.....	13,545,603	11,844,454	3,640,309	1,736,701	\$251,625,930	\$62,028,090
Owners.....	10,040,902	5,631,184	2,894,823	1,392,302	196,511,859	42,015,310
Managers.....	1,420,000	5,351,005	357,840	192,536	26,293,008	14,388,590
Tenants.....	1,474,711	862,265	387,646	151,863	28,821,063	5,622,190

<sup>1</sup> Includes Crow Indian Reservation. (See first table.)

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 <sup>1</sup>	1910	1900 <sup>1</sup>	1910	1900 <sup>1</sup>
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Owners.....	80.1	87.2	78.0	47.5	79.5	80.2	78.1	67.7
Managers.....	1.0	3.0	10.6	45.2	9.8	11.1	10.4	23.2
Tenants.....	8.9	0.2	10.0	7.3	10.6	8.7	11.5	9.1

<sup>1</sup> Includes Crow Indian Reservation. (See first table.)

It will be seen that, in 1910, 78.6 per cent of all land in farms was in farms operated by their owners (including part owners), 10.6 per cent in farms operated by managers, and 10.9 per cent in farms operated by tenants, the percentage for owners and for tenants being higher and that for managers decidedly lower than in 1900.

As shown by the next table, the average size of farms operated by managers in 1910 (2,831.7 acres) was about four and one-half times as great as that of farms operated by tenants (629.1 acres), which was in turn considerably larger than that of farms operated by owners (455.4 acres). The average size of farms of each class decreased between 1900 and 1910, the greatest decrease being for the farms operated by managers. In 1910 the percentage of farm land improved was highest for farms operated by owners, and lowest for those 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.		IMPROVED.		Per farm.		Per acre.	
	1910	1900 <sup>1</sup>	1910	1900 <sup>1</sup>	1910	1900 <sup>1</sup>	1910	1900 <sup>1</sup>	1910	1900 <sup>1</sup>
Total.....	516.7	885.9	133.9	139.9	26.9	14.7	\$9,599	\$4,639	\$18.58	\$5.24
Owners.....	455.4	482.9	123.9	110.4	27.2	24.7	8,411	3,603	18.47	7.46
Managers.....	2,831.7	11,171.2	708.6	402.0	25.0	3.0	62,065	30,039	18.39	2.59
Tenants.....	629.1	701.0	105.4	123.5	26.3	17.0	12,296	4,571	19.54	6.52

<sup>1</sup> Includes Crow Indian Reservation. (See first table.)

**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 popula-

tion 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, however, 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. <sup>1</sup>		OWNED FARM HOMES.		OWNED FARM HOMES. <sup>2</sup>	
	1910		1900		1890	
	Number.	Per cent. <sup>3</sup>	Number.	Per cent. <sup>3</sup>	Number.	Per cent.
<b>Total</b> .....	<b>23,365</b>		<b>11,904</b>		<b>5,578</b>	
Free from mortgage.....	18,014	78.9	9,858	86.0	4,709	84.4
Mortgaged.....	4,820	21.1	1,608	14.0	869	15.6
Unknown.....	531		498			

<sup>1</sup> Includes all farms owned in whole or in part by the operator.  
<sup>2</sup> The 437 "owned farm homes" for which no reports were secured were distributed between "free from mortgage" and "mortgaged" in 1890.  
<sup>3</sup> 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 23,365. Of this number, 18,014 were reported as free from mortgage; 4,820 were reported as mortgaged; and for 531 no report relative to mortgage indebtedness was obtained. The number of mortgaged farms constituted 21.1 per cent of the total number of owned farms, exclusive of those for which no mortgage report was obtained. The percentage mortgaged decreased from 15.6 in 1890 to 14 in 1900, and increased during the next decade to 21.1. 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 is clearly shown, however, that the number of owned farms both free of mortgage and mortgaged increased rapidly from 1890 to 1900 and also from 1900 to 1910.

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 4,820 farms reported as mortgaged, 4,242 are wholly owned by the farmers, and for 3,990 of these the amount of mortgage debt is reported. Only these last-mentioned farms are included under 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 <sup>1</sup>	1890 <sup>2</sup>	Amount.	Per cent.
Number.....	3,990	869		
Value—Land and buildings.....	\$44,615,154	\$4,837,335		
Amount of mortgage debt.....	\$10,741,280	\$1,548,816		
Per cent of debt to value.....	24.1	31.7		
Average value per farm.....	\$11,182	\$5,624	\$5,558	98.8
Average debt per farm.....	\$2,692	\$1,782	\$910	51.1
Average equity per farm.....	\$8,490	\$3,842	\$4,648	121.0

<sup>1</sup> Includes only farms consisting wholly of owned land and reporting value of farm and amount of debt.  
<sup>2</sup> 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 20 years from \$1,782 to \$2,692, or 51.1 per cent, while the average value of such farms rose from \$5,624 to \$11,182, or 98.8 per cent. Thus the owner's equity increased on the average from \$3,842 to \$8,490, or 121 per cent. As a result of the greater relative increase in farm value than in farm debt, the mortgage indebtedness, which was 31.7 per cent of the value of the mortgaged farm in 1890, had decreased to 24.1 per cent of this value in 1910.

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

SIZE GROUP.	NUMBER OF FARMS.		INCREASE. <sup>1</sup>		PER CENT OF TOTAL.	
	1910	1900	Number.	Per cent.	1910	1900
<b>Total</b> .....	<b>26,214</b>	<b>13,370</b>	<b>12,844</b>	<b>96.1</b>	<b>100.0</b>	<b>100.0</b>
Under 3 acres.....	274	417	-143	-34.3	1.0	3.1
3 to 9 acres.....	229	118	111	94.1	0.9	0.9
10 to 19 acres.....	252	118	134	113.6	1.0	0.9
20 to 49 acres.....	956	399	557	139.6	3.6	3.0
50 to 99 acres.....	1,260	563	697	123.8	4.8	4.2
100 to 174 acres.....	10,552	5,613	4,939	88.0	40.3	42.0
175 to 259 acres.....	1,566	878	688	78.4	6.0	6.5
260 to 499 acres.....	6,773	2,718	4,055	149.2	25.8	20.3
500 to 999 acres.....	2,353	1,257	1,096	87.2	9.0	9.4
1,000 acres and over...	1,999	1,289	710	55.1	7.6	9.6

<sup>1</sup> A minus sign (—) denotes decrease.

About two-fifths of all farms in Montana are in the group between 100 and 174 acres in size, which includes the quarter-section farms, while about one-fourth are in the group between 260 and 499 acres, which includes the half-section farms.

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 "260 to 499 acres" group, which contains about two and a half times as many farms as it did 10 years ago, and now comprises 25.8 per cent of the total number as compared with 20.3 per cent in 1900. The greatest absolute gain occurred in the "100 to 174 acres" group, which increased 4,939, or 88 per cent. This class, however, lost slightly in the proportion of the total number of farms which it embraces. The number of places "under 3 acres" reported as farms is only about two-thirds as great as 10 years ago. This decrease may be due to a different interpretation by the enumerators as to what to include as a farm, or may represent an actual decrease in that type of farm.

The following table shows the acreage, improved acreage, and 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 755), and also the farms of between 175 and 499 acres (numbering 8,339):

SIZE GROUP.	ALL LAND IN FARMS (ACRES).		IMPROVED LAND IN FARMS (ACRES).		VALUE OF LAND AND BUILDINGS.	
	1910	1900 <sup>1</sup>	1910	1900 <sup>1</sup>	1910	1900 <sup>1</sup>
	<b>Total</b> .....	<b>13,545,808</b>	<b>11,844,454</b>	<b>3,640,809</b>	<b>1,786,701</b>	<b>\$251,625,980</b>
Under 20 acres....	4,382	3,644	3,842	1,944	1,017,013	394,160
20 to 49 acres....	33,602	16,251	21,300	8,842	3,402,310	637,030
50 to 99 acres....	90,034	43,470	55,045	21,089	6,799,281	1,083,040
100 to 174 acres....	1,048,834	882,023	614,340	332,047	43,134,660	9,041,370
175 to 499 acres....	2,008,520	1,157,455	923,004	404,706	64,052,439	13,499,300
500 to 999 acres....	1,054,257	900,121	599,093	285,145	38,615,276	8,364,870
1,000 acres and over	7,430,908	8,841,484	1,422,317	622,820	93,645,051	28,206,720

<sup>1</sup> Includes Crow Indian Reservation. (See first table.)

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
<b>Total</b> .....	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Under 20 acres....	2.9	4.9	( <sup>1</sup> )	( <sup>1</sup> )	0.1	0.1	0.3	0.9
20 to 49 acres....	3.6	3.0	0.2	0.1	0.6	0.5	1.4	0.9
50 to 99 acres....	4.8	4.2	0.7	0.4	1.5	1.2	2.7	1.7
100 to 174 acres....	40.3	42.0	12.2	7.4	10.9	19.1	17.1	16.0
175 to 499 acres....	31.8	26.9	19.7	9.8	25.4	26.8	25.5	21.3
500 to 999 acres....	9.0	9.4	12.2	7.6	16.5	16.4	15.3	13.5
1,000 acres and over....	7.6	9.6	54.0	74.6	30.1	35.9	37.2	45.5

<sup>1</sup> Less than one-tenth of 1 per cent.

Of the total farm acreage of the state in 1910, 54.9 per cent was in farms of 1,000 acres and over, this being from the standpoint of aggregate acreage the most important size group, although it comprised only 7.6 per cent of the total number of farms. Between 1900 and 1910 there was an increase in the proportion of the total acreage which was in farms of every size group under 1,000 acres, and a decided decrease in the proportion in farms of 1,000 acres and over.

In general, as shown by the table below, the percentage of farm land improved diminishes as the 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 <sup>1</sup>	1910	1900 <sup>1</sup>	1910	1900 <sup>1</sup>
<b>Total</b> .....	<b>36.9</b>	<b>14.7</b>	<b>\$9,599</b>	<b>\$4,659</b>	<b>\$15.58</b>	<b>\$5.24</b>
Under 20 acres....	87.7	53.3	2,530	904	437.47	108.17
20 to 49 acres....	63.0	51.3	3,022	1,347	102.86	33.08
50 to 99 acres....	37.0	49.0	5,390	1,024	70.80	24.91
100 to 174 acres....	37.3	37.6	4,088	1,771	26.18	11.27
175 to 499 acres....	34.0	40.2	7,081	3,754	24.00	11.66
500 to 999 acres....	30.2	31.7	10,411	6,685	23.34	9.29
1,000 acres and over....	10.1	7.0	40,846	21,882	12.60	3.19

<sup>1</sup> Includes Crow Indian Reservation. (See first table.)

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-tribution.				Own-ers.	Ten-ants.	Man-agers.
<b>Total</b> .....	<b>26,214</b>	<b>100.0</b>	<b>23,365</b>	<b>2,344</b>	<b>505</b>	<b>89.1</b>	<b>8.9</b>	<b>1.9</b>
Native white.....	18,165	69.3	16,085	1,771	400	88.0	9.7	2.3
Foreign-born white..	6,863	26.1	6,213	547	93	90.7	8.0	1.4
Negro and other non-white.....	1,196	4.6	1,167	26	3	97.0	2.2	0.8

Over two-thirds of the Montana farmers were native whites and more than one-fourth foreign-born whites. Only 1,196, or 4.6 per cent of all farmers, were non-whites, 1,146 being Indians; 29, negroes; 17, Chinese; and 4, Japanese. Of the native whites, 9.7 per cent were tenants and 2.3 per cent managers, as compared with 8 per cent and 1.4 per cent, respectively, among the foreign-born whites and 2.2 per cent and 0.3 per cent among the nonwhite farmers.

Of the total of 6,853 foreign-born white farmers in Montana in 1910, 1,320 were born in Canada, 1,146 in Germany, 854 in Norway, 616 in England, 535 in Sweden, 456 in Ireland, 375 in Denmark, 339 in Scotland, 289 in Austria, and 186 in Holland. Other European countries were represented by a total of 727 farmers, and non-European countries, other than Canada, by 10.

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 the total number of farms enumerated, 23,690, or 90.4 per cent, report domestic animals of some kind, the number without any domestic animals being 2,524.

Of all the farms in the state, 71.9 per cent report cattle, 64 per cent report "dairy cows," and 34 per cent report "other cows." The number of other cows is, however, nearly five times as great as that of dairy cows. The average number of dairy cows per farm reporting is less than 5, while the average number of other cows per farm reporting that class is about 42. The number of all cows increased materially during the decade.

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 187,533 to 82,626, and the average value decreasing from \$11.89 to \$9.60.

Horses are reported by 87.3 per cent of all the farms in the state; 36.2 per cent report colts born in 1909, and 17.3 per cent report spring colts, indicating that Montana is a horse raising state.

One farm out of every twenty-five reports mules and mule colts, and the number of this class of animals is only 1.3 per cent of the number of horses and colts. The average values of mules of the different age groups are considerably higher than those of horses of the corresponding age groups.

Sheep and lambs are reported from 2,252 farms, or 8.6 per cent of all the farms in the state. Of these 2,252 farms, 45.7 per cent report spring lambs, the number of the latter being equal to 12.9 per cent of the number of ewes. This decidedly small proportion is doubtless due to the early date of enumeration. Ewes are reported from all but 179 of the farms reporting sheep, and for the farms reporting the average is about 1,569 ewes per farm. The farms reporting rams and wethers show an average of 1,084 per farm.

Of all farms, 34.9 per cent report swine, the average number being 11 per farm reporting. The average

value of the swine reported as "hogs and pigs born before January 1, 1910," is \$12.79, which is more than twice the average value of a mature sheep.

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.....	23,690	90.4	.....	\$34,999,659	.....
<b>Cattle</b> .....	18,854	71.9	943,147	27,474,122	\$29.13
Dairy cows (cows and heifers kept for milk, born before Jan. 1, 1909).....	16,774	64.0	77,527	3,407,090	43.95
Other cows (cows and heifers not kept for milk, born before Jan. 1, 1909).....	8,925	34.0	372,798	11,259,752	30.20
Heifers born in 1909.....	10,088	38.5	100,784	1,965,734	19.50
Calves born after Jan. 1, 1910.....	10,590	40.4	82,626	793,113	9.60
Steers and bulls born in 1909.....	6,794	25.9	90,433	1,979,119	21.88
Steers and bulls born before Jan. 1, 1909.....	4,935	18.8	170,267	6,422,049	37.72
Unclassified cattle.....	495	1.9	48,712	1,647,265	33.82
<b>Horses</b> .....	22,883	87.3	315,956	27,115,764	85.82
Mares, stallions, and geldings born before Jan. 1, 1909.....	22,199	84.7	251,134	24,411,464	97.20
Colts born in 1909.....	9,478	36.2	41,491	1,785,979	43.04
Colts born after Jan. 1, 1910.....	4,544	17.3	11,717	295,478	25.22
Unclassified horses.....	553	2.1	11,614	622,843	53.63
<b>Mules</b> .....	1,058	4.0	4,174	445,278	106.68
Mules born before Jan. 1, 1909.....	894	3.4	3,021	380,307	125.89
Mule colts born in 1909.....	246	0.9	1,023	61,206	59.83
Mule colts born after Jan. 1, 1910.....	65	0.2	130	3,765	28.96
<b>Asses and burros</b> .....	106	0.4	160	55,181	344.88
<b>Swine</b> .....	9,160	34.9	99,261	858,829	8.65
Hogs and pigs born before Jan. 1, 1910.....	8,584	32.7	56,342	720,365	12.79
Pigs born after Jan. 1, 1910.....	3,600	13.7	42,919	138,464	3.23
<b>Sheep</b> .....	2,252	8.6	5,380,746	29,028,069	5.39
Ewes born before Jan. 1, 1910.....	2,073	7.9	3,251,686	18,690,188	5.75
Rams and wethers born before Jan. 1, 1910.....	1,576	6.0	1,708,149	9,347,063	5.47
Lambs born after Jan. 1, 1910.....	1,029	3.9	420,911	990,818	2.35
<b>Goats</b> .....	176	0.7	5,045	22,416	4.44

**Poultry on farms: 1910 and 1900.**—The increase in the number of fowls on Montana farms during the last decade amounts to 73.7 per cent, while the value has increased from \$297,000 to \$628,000, or 111.7 per cent. The number of farms reporting poultry increased from 9,830 to 17,629, or 79.3 per cent, so that the average number of fowls per farm reporting decreased from 57 to 55. 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.

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.	Per cent of all farms.			
<b>Total</b> .....	17, 629	67. 3	966, 090	\$628, 436	556, 679
Chickens.....	17, 695	67. 1	922, 540	505, 337	531, 774
Turkeys.....	3, 481	13. 3	16, 475	37, 804	12, 697
Ducks.....	1, 030	6. 2	8, 243	7, 353	9, 639
Geese.....	1, 692	6. 1	7, 013	14, 105	3, 629
Citron fowls.....	217	0. 8	633	579	(1)
Pigeons.....	695	2. 3	11, 736	2, 851	(2)
Poufowls.....	18	0. 1	50	317	(2)

<sup>1</sup> Included with chickens.<sup>2</sup> Not reported.

**Bees on farms: 1910 and 1900.**—The number of farms reporting bees has increased from 234 in 1900 to 795 in 1910, or 239.7 per cent. The number of colonies of bees increased from 1,801 to 6,313, or 250.5 per cent, and their value increased from \$8,139 to \$32,112, or 294.5 per cent. The average value of bees per farm reporting was \$34.78 in 1900 and \$40.39 in 1910. Three farms in every hundred 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, but it may be noted that in cities and villages a comparatively small proportion of the animals of each class are in the younger age groups.

As would be expected, horses are by far the most important class of domestic animals not on farms,

#### 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 16,774, but only 10,543 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

when value is considered, but the number of sheep is greater than the number of horses.

KIND.	Number of in- clu- sures reporting.	ANIMALS.		
		Number.	Value.	Average value.
<b>Total</b> .....	7, 800		\$3, 474, 331	
All cattle.....	3, 234	11, 200	400, 723	\$35. 78
Dairy cows.....	3, 117	5, 405	263, 750	48. 26
Horses.....	6, 469	24, 366	2, 833, 066	116. 81
Mules.....	84	491	72, 500	147. 78
Asses and burros.....	14	22	8, 155	370. 68
Pigs.....	271	2, 538	30, 379	11. 97
Sheep.....	43	33, 570	128, 146	3. 82
Goats.....	32	60	402	6. 70

#### 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.
<b>Total</b> .....		\$88, 478, 000		\$84, 000, 659		\$3, 474, 331
All cattle.....	654, 347	27, 874, 845	948, 147	27, 474, 122	11, 200	400, 723
Dairy cows.....	82, 092	3, 670, 840	77, 627	3, 407, 030	5, 405	263, 750
Horses.....	340, 322	20, 940, 730	315, 950	27, 115, 764	24, 366	2, 833, 066
Mules.....	4, 065	517, 838	4, 174	445, 278	491	72, 500
Asses and burros.....	182	63, 336	169	65, 181	22	8, 155
Pigs.....	101, 700	889, 208	99, 201	868, 829	2, 538	30, 379
Sheep.....	5, 414, 325	20, 150, 215	5, 380, 740	20, 028, 069	33, 579	128, 146
Goats.....	8, 105	22, 818	8, 045	22, 410	60	402

The total value of all domestic animals in the state in 1910 was \$88,474,000, of which the value of animals not on farms constituted 3.9 per cent.

the case as regards the quantity of milk produced. The number of farms which made any report of milk produced during 1909 was 9,631 (slightly less than the total number reporting dairy products), and the number of dairy cows on such farms on April 15, 1910, was 49,765. The amount of milk reported was 16,982,000 gallons. Assuming that there were the same number of cows in 1909 as in 1910, this would represent an average of 341 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.

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 and cream sold as such and sold as butter fat and the reported value of butter and cheese made, whether for home consumption or for sale. The total thus obtained for 1909 is \$2,094,000, which may be defined as the total value of dairy products exclusive of milk and cream used on the farm producing.

Only about one-fifth of the milk reported as produced by Montana farmers in 1909 was sold as such. The butter made on farms in 1909 was valued at \$812,000.

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.	
	Num-ber.	Per cent of all farms.			Total.	Average per unit.
Dairy cows on farms April 15, 1910	16,774	64.0	77,527	Head		
On farms reporting dairy products in 1909	10,543	40.2	56,892	Head		
On farms reporting milk produced in 1909	9,631	36.7	49,765	Head		
Specified dairy products, 1909:						
Milk reported			16,982,145	Gals.		
Butter made	8,438	32.2	2,820,574	Lbs.	\$811,792	\$0.29
Cheese made	52	0.2	49,988	Lbs.	8,195	0.16
Milk sold	681	2.6	3,584,689	Gals.	832,391	0.23
Cream sold	563	2.1	274,979	Gals.	248,397	0.90
Butter fat sold	567	2.2	652,097	Lbs.	192,819	0.30
Butter sold	3,615	13.8	1,234,263	Lbs.	365,916	0.30
Cheese sold	22	0.1	44,571	Lbs.	7,170	0.16
Total receipts from sales, 1909					1,646,693	
Total value of milk, cream, and butter fat sold and butter and cheese made, 1909					2,093,594	
Specified dairy products, 1899:						
Butter made	6,338	47.4	2,454,072	Lbs.		
Cheese made	68	0.5	80,924	Lbs.		
Butter sold			1,204,339	Lbs.	291,907	0.24
Cheese sold			21,532	Lbs.	3,437	0.16

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 increase between 1899 and 1909 in the amount of butter made, and also an increase in the production of cheese, which, however, is still unimportant.

**Wool: 1909 and 1899.**—The next table gives statistics as to the production of wool on farms, the figures being partly based on estimates.<sup>1</sup>

The total number of sheep of shearing age in Montana on April 15, 1910, was 4,960,000, representing an

<sup>1</sup> Farmers should be able in general to report the production of wool more accurately than that of dairy products. There were, however, 1,059 farmers who reported the possession of 1,180,820 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.

increase of 17.7 per cent as compared with the number on June 1, 1900 (4,215,000). The approximate production of wool during 1909 was 4,725,000 fleeces, weighing 37,669,000 pounds, and valued at \$8,224,000. Of these totals about one-fifth represents estimates. The number of fleeces produced in 1909 was 8.7 per cent greater than in 1899. The average weight per fleece in 1909 was 8 pounds, as compared with 7 pounds in 1899, and the average value per pound was 22 cents, as compared with 17 cents in 1899.

	Number of farms reporting.	Sheep of shearing age.	WOOL PRODUCED.		
			Fleeces (number).	Weight (pounds).	Value.
Sheep of shearing age on farms April 15, 1910	2,136	4,959,835			
Wool produced, as reported, 1909	1,127		3,727,031	29,683,836	\$6,469,608
On farms reporting sheep April 15, 1910	1,077	3,779,015	3,599,896	28,700,921	6,265,872
On other farms	50		127,135	982,915	203,736
Total production of wool (partly estimated):					
1909			4,724,747	37,669,031	8,223,754
1899			4,348,568	30,437,829	5,136,658
Increase, 1899 to 1909			376,179	7,231,202	3,087,096
Per cent of increase			8.7	23.8	60.1

**Goat hair and mohair: 1909 and 1899.**—Although 176 farmers reported 5,045 goats and kids on their farms April 15, 1910, only 38 reported the production of goat hair or mohair during 1909. These farmers reported 2,357 fleeces, weighing 8,328 pounds and valued at \$2,056. 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	17,629	966,690		
On farms reporting eggs produced in 1909	12,077	767,268		
On other farms	5,552	199,422		
Eggs produced, as reported, 1909	12,256		Dozens. 4,706,178	\$1,282,572
Total production of eggs (partly estimated):				
1909			6,004,051	1,610,766
1899			3,002,890	631,143
Increase, 1899 to 1909			3,001,161	979,623
Per cent of increase			99.9	155.2
Eggs sold, as reported, 1909	7,470		2,116,624	584,953
Fowls on farms April 15, 1910:				
On farms reporting poultry raised in 1909	11,655	753,446		
On other farms	5,974	213,244		
Poultry raised, as reported, 1909	11,940		No. of fowls. 1,116,690	621,539
Total poultry raised (partly estimated):				
1909			1,432,741	797,450
1899				398,457
Increase, 1899 to 1909				398,993
Per cent of increase				100.1
Fowls sold, as reported, 1909	5,854		371,847	237,050

The total number of fowls on Montana farms on April 15, 1910, was 967,000. Of the 17,629 farms reporting fowls, 5,552 did not report any eggs produced in 1909, and 5,974 did not report any poultry raised in 1909. The production of eggs actually reported for the year 1909 was 4,706,000 dozens, valued at \$1,263,000. According to the Twelfth Census reports the production of eggs in 1899 was 3,003,000 dozens, the value being \$631,000. 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 reported 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 6,004,000 dozens, valued at \$1,611,000. The total production of poultry in 1909, including estimates made on the same basis as for eggs, was 1,433,000 fowls, valued at \$797,000.

**Honey and wax: 1909.**—Although, as noted elsewhere, 795 farms reported 6,313 colonies of bees on hand April 15, 1910, 317 of these farms, with 1,144 colonies on hand April 15, 1910, made no report of honey or wax produced in 1909. The actual returns show the production of 163,510 pounds of honey, valued at \$21,802, and 394 pounds of wax, valued at \$133; the true totals are doubtless somewhat above these figures.

**Sale or slaughter of domestic animals on farms: 1909 and 1899.**—The total value of domestic animals sold during 1909 was \$20,347,000, and that of animals slaughtered on farms \$1,262,000, making an aggregate of \$21,609,000. 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-half of the total value of

animals sold, and the value of sheep sold represented about one-third of the total.

The following statement presents statistics relating to the sale or slaughter of domestic animals by Montana farmers during the year 1909, with certain items for 1899:

	FARMS REPORTING.		Number of animals.	VALUE.	
	Number.	Per cent of all farms.		Total.	Average.
<b>1909—All domestic animals:</b>					
Sold.....				\$20,346,048	
Slaughtered.....				1,262,161	
<b>Calves:</b>					
Sold.....	1,687	6.4	18,380	207,364	\$11.28
Slaughtered.....	1,454	5.5	8,748	89,264	10.20
<b>Other cattle:</b>					
Sold.....	6,275	23.9	272,006	10,052,311	36.82
Slaughtered.....	4,133	15.8	19,755	202,161	31.39
<b>Horses:</b>					
Sold.....	3,821	14.6	31,037	2,081,077	66.38
<b>Mules:</b>					
Sold.....	174	0.7	950	89,388	90.08
<b>Asses and burros:</b>					
Sold.....	4	(1)	6	8,575	595.83
<b>Swine:</b>					
Sold.....	2,205	8.4	37,471	364,535	9.78
Slaughtered.....	5,104	19.5	33,143	493,007	14.88
<b>Sheep:</b>					
Sold.....	711	2.7	1,543,632	6,048,003	4.50
Slaughtered.....	426	1.6	13,785	59,487	4.32
<b>Goats:</b>					
Sold.....	13	(1)	1,160	2,735	2.36
Slaughtered.....	11	(1)	62	232	4.46
<b>1899—All domestic animals:</b>					
Sold.....				9,176,830	
Slaughtered.....				906,816	

<sup>1</sup> Less than one-tenth of 1 per cent.

<sup>2</sup> Schedules called for receipts from sales of animals raised on the farms reporting.

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 1909, which amounted, respectively, to \$9,177,000 and \$907,000. 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.

## CROPS.

**Summary: 1909 and 1899.**—The next table summarizes the census data relative to all of the 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 \$29,715,000. Of this amount, 95.8 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, forest products, and the like. The combined acreage of crops for which acreage was reported was 1,848,113, representing 50.8 per cent of the total improved land in farms (3,640,309 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 was not reported.

The general character of Montana agriculture is indicated by the fact that about two-fifths (41.2 per

cent) of the total value of crops in 1909 was contributed by the cereals, and about two-fifths more (41.5 per cent) by hay and forage. The remainder, representing 17.3 per cent of the total, consisted mostly of potatoes and other vegetables, grains and seeds, other than cereals, fruits, forest products, and sugar crops.

The total value of crops in 1909 was 177.9 per cent greater than in 1899. This increase was clearly due in part to higher prices. There was an increase of 61.3 per cent in the total acreage of crops for which acreage was reported; there were increases in the acreage of every crop, the greatest absolute increase being that in the acreage of cereals.

	ACRES.				PER CENT OF IMPROVED LAND OCCUPIED.		VALUE OF PRODUCTS.					
	1909	1899	Increase.		1909	1899	1909	1899	Increase. <sup>1</sup>		Per cent of total.	
			Amount.	Per cent.					Amount.	Per cent.	1909	1899
All crops.....							\$29,714,563	\$10,692,515	\$19,022,048	177.9	100.0	100.0
<b>Crops with acreage reports.....</b>	<b>1,848,113</b>	<b>1,146,093</b>	<b>702,020</b>	<b>61.3</b>	<b>50.8</b>	<b>66.0</b>	<b>28,459,747</b>	<b>10,449,769</b>	<b>18,009,978</b>	<b>172.4</b>	<b>95.8</b>	<b>97.7</b>
Cereals.....	635,807	254,231	381,576	150.1	17.5	14.6	12,251,345	3,267,728	8,983,619	274.9	41.2	30.6
Other grains and seeds.....	39,173	1,629	37,544	2,304.7	1.1	0.1	723,213	35,762	687,451	1,922.3	2.4	0.3
Hay and forage.....	1,135,376	875,712	259,664	29.7	31.2	50.4	12,344,606	5,974,850	6,369,756	106.6	41.5	55.9
Tobacco.....	8	1	2	( <sup>2</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	55	60	-5	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Sugar crops.....	8,821	2	8,819	( <sup>2</sup> )	0.2	( <sup>3</sup> )	547,173	70	547,103	( <sup>2</sup> )	1.8	( <sup>2</sup> )
Potatoes.....	20,710	9,613	11,097	115.4	0.6	0.6	1,298,830	661,163	637,667	96.4	4.4	6.2
Other vegetables.....	7,300	4,272	3,028	70.9	0.2	0.2	928,906	378,792	550,114	145.2	3.1	3.5
Flowers and plants and nursery products.....	361	79	282	( <sup>2</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	279,023	51,455	227,573	442.3	0.9	0.5
Small fruits.....	562	554	8	1.4	( <sup>2</sup> )	( <sup>3</sup> )	86,586	79,891	6,695	8.4	0.3	0.7
<b>Crops with no acreage reports.....</b>							<b>1,254,818</b>	<b>242,746</b>	<b>1,012,070</b>	<b>416.9</b>	<b>4.2</b>	<b>2.3</b>
Seeds.....							96,863	3,682	93,181	2,530.7	2.0	( <sup>2</sup> )
Fruits.....							609,095	4,59,587	549,508	.922.2	0.3	0.6
Maple sirup.....							12		12	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Forest products of farms.....							541,800	176,134	365,666	207.6	1.8	1.6
Miscellaneous.....							7,046	3,343	3,703	110.8	( <sup>2</sup> )	( <sup>2</sup> )

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

<sup>3</sup> Less than one-tenth of 1 per cent.  
<sup>4</sup> Includes value of raisins and other dried fruits, wine, elder, vinegar, etc.

General farm crops, minor grains and seeds, and sundry minor crops: 1879 to 1909.—The leading crops of the state, in the order of their importance as judged by value, are hay and forage, \$12,345,000; oats, \$6,148,000; wheat, \$5,329,000; and potatoes, \$1,299,000.

In both acreage and value the most important crop is hay and forage, the value of this crop being slightly greater than that of all cereals combined, while the acreage is nearly twice as great. Oats have an acreage nearly one-third as great as that of hay and forage, and a value nearly half as great. Wheat is not greatly below oats in either acreage or value, and together in acreage, in quantity, and in value, they constitute about nine-tenths of all cereals grown.

Among the hay and forage crops, "wild, salt, or prairie grasses" ranks first in both acreage and value. Alfalfa, with an acreage less than two-fifths as great as the wild grasses, has a reported value about nine-tenths as great.

Of the "other grains and seeds" the only one of consequence is flaxseed. The production of potatoes is also important. The acreage of flaxseed is nearly double that of potatoes, while the value of potatoes is nearly double that of flaxseed. Flaxseed has an important acreage, greater than that of barley, yet in 1899 practically no flaxseed was grown.

The next table presents statistics for 1909 regarding cereals, other grains and seeds, hay and forage, potatoes, and tobacco.

CROP.	Farms reporting.	Acres harvested.	QUANTITY.		Value.
			Amount.	Unit.	
<b>Cereals, total</b> .....		<b>635,807</b>	<b>21,239,157</b>	Bu...	<b>\$12,261,345</b>
Corn.....	1,637	9,514	274,103	Bu...	185,307
Oats.....	10,450	333,195	13,805,735	Bu...	6,148,021
Wheat, total.....	8,164	258,377	6,251,045	Bu...	5,320,389
Common winter.....	2,806	127,000	3,212,700	Bu...	2,688,702
Common spring.....	5,359	117,050	2,755,532	Bu...	2,414,181
Durum or macaroni.....	627	12,827	283,704	Bu...	226,410
Emmer and spelt.....	175	1,308	39,830	Bu...	24,043
Barley.....	2,207	27,242	753,208	Bu...	478,811
Buckwheat.....	15	84	1,809	Bu...	1,528
Rye.....	305	6,034	111,214	Bu...	82,069
Kafir corn and milo maize.....	3	53	1,253	Bu...	917
<b>Other grains and seeds with acreage report, total</b> .....		<b>39,173</b>	<b>472,112</b>	Bu...	<b>723,213</b>
Dry edible beans.....	140	342	2,958	Bu...	8,511
Dry peas.....	180	1,184	21,670	Bu...	37,757
Flaxseed.....	1,208	37,047	447,484	Bu...	670,945
<b>Seeds with no acreage report, total</b> .....					<b>96,863</b>
Timothy seed.....	28	(1)	2,456	Bu...	5,038
Clover seed.....	7	(1)	80	Bu...	795
Alfalfa seed.....	102	(1)	10,370	Bu...	88,375
Millet seed.....	15	(1)	880	Bu...	1,496
Other tame grass seed.....	1	(1)	200	Bu...	400
Flower and garden seeds.....	6	(1)			700
<b>Hay and forage, total</b> .....	<b>14,993</b>	<b>1,135,376</b>	<b>1,608,656</b>	Tons.	<b>12,344,006</b>
Timothy alone.....	3,564	117,888	171,030	Tons.	1,504,398
Timothy and clover mixed.....	2,223	90,841	153,039	Tons.	1,457,117
Clover alone.....	437	11,575	24,094	Tons.	176,507
Alfalfa.....	5,582	224,220	599,747	Tons.	3,703,059
Millet or Hungarian grass.....	168	3,160	4,742	Tons.	37,701
Other tame or cultivated grasses.....	814	55,061	73,915	Tons.	541,018
Wild, salt, or prairie grasses.....	6,461	584,732	589,860	Tons.	4,131,324
Grains cut green.....	3,185	45,892	70,330	Tons.	592,351
Coarse forage.....	127	1,138	1,719	Tons.	14,102
Root forage.....	60	263	1,174	Tons.	7,029
Potatoes.....	11,248	20,710	3,240,006	Bu...	1,208,830
Tobacco.....	2	3	150	Lbs..	55

<sup>1</sup> 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.

The increases 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.	Hay and forage.	Potatoes.
1909.....	6,514	333,195	258,377	27,242	1,135,376	20,710
1899.....	3,301	133,938	92,132	22,848	875,712	9,613
1889.....	1,019	52,768	18,006	4,052	300,033	4,204
1879.....	197	24,691	17,665	1,323	50,801	(1)

<sup>1</sup> Not reported.

The acreage of oats has more than doubled during each decade since 1879. During the three decades covered by the table, the acreage of wheat has increased from 17,665 to 258,377, the increase during the last decade being 180.4 per cent. The acreage of barley is more than twenty times as great as it was in 1879, the greatest gain having been made between 1889 and 1899.

The acreage of hay and forage almost quadrupled in the 20 years from 1889 to 1909, the absolute and percentage gain, however, being greater between 1889 and 1899 than during the last 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 the 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 <sup>1</sup>	AVERAGE YIELD PER ACRE.	AVERAGE VALUE PER ACRE.
	1909	1899	1909	1899			
Corn.....	6.2	4.0	0.3	0.2	188.2	28.8 Bu.	\$19.48
Oats.....	39.9	34.3	9.2	7.7	148.8	41.4 Bu.	18.45
Wheat.....	31.1	27.5	7.1	5.3	180.4	24.2 Bu.	20.63
Barley.....	8.6	6.7	0.7	1.3	19.2	27.6 Bu.	17.58
Flaxseed.....	4.0	0.1	1.0	(2)	.....	11.0 Bu.	17.98
Dry peas.....	0.7	1.7	(2)	0.1	-21.7	18.3 Bu.	31.89
Hay and forage.....	57.2	70.7	31.2	50.4	29.7	1.49 Tons.	10.87
Potatoes.....	42.9	48.8	0.6	0.6	115.4	156.5 Bu.	62.72

<sup>1</sup> A minus sign (-) denotes decrease.

<sup>2</sup> Less than one-tenth of 1 per cent.

The eight crops included in the above table cover about 50 per cent of the improved land of the state. Hay and forage occupies 31.2 per cent of the total acreage of improved land in 1909, as compared with 50.4 per cent in 1899. Oats and wheat, however, have increased materially, and flaxseed very greatly, in the proportion of improved land occupied.

Out of every hundred farms, 57 report hay and forage, 43 report potatoes, 40 report oats, 31 report wheat, only about 9 report barley, and 6 report corn. These percentages are larger than 10 years ago in the case of oats, wheat, flaxseed, barley, and corn; they are smaller in the case of hay and forage, potatoes, and dry peas.

The average value per acre of all cereals combined is \$19.27, wheat and corn being above this average, barley and oats below it. The average value per acre of hay and forage is little more than half that of the combined cereals, while the average value per acre of potatoes is over three times as great as that of the combined cereals.

The leading counties of the state in the number of acres of oats harvested are Gallatin, Fergus, Dawson, and Cascade, these four counties reporting over one-third of the acreage for the state. The leading wheat-growing counties are Fergus, Gallatin, Cascade, and Flathead, nearly three-fifths of the acreage of this crop being reported from these counties. The hay and forage acreage is somewhat more generally distributed over the state.

Vegetables, flowers and plants, and nursery products: 1909 and 1899.—The next table 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.	
	Number.	Per cent of all farms.	1909	1899	1909	1899
Vegetables, other than potatoes and sweet potatoes and yams, total.....	1 0,994	38.1	7,300	4,272	\$928,906	\$378,792
Farms reporting a product of \$500 or over.....	203	0.8	1,046	.....	236,593	.....
All other farms.....	9,791	37.4	6,254	.....	692,313	.....
Flowers and plants, total.....	25	0.1	20	17	104,601	33,630
Farms reporting a product of \$250 or over.....	17	0.1	.....	.....	104,192	.....
All other farms.....	8	( <sup>2</sup> )	.....	.....	409	.....
Nursery products, total.....	28	0.1	341	62	174,427	17,825
Farms reporting a product of \$250 or over.....	12	( <sup>2</sup> )	.....	.....	172,591	.....
All other farms.....	16	0.1	.....	.....	1,836	.....

<sup>1</sup> Does not include 3,816 farms which reported that they had vegetable gardens, but gave no information as to their products.  
<sup>2</sup> Less than one-tenth of 1 per cent.

In 1909 the total acreage of potatoes and other vegetables was 28,010 and their value \$2,227,736. Excluding potatoes (so far as reported separately<sup>1</sup>), the acreage of vegetables was 7,300 and their value \$929,000, both acreage and value being decidedly greater than in 1899. The table distinguishes between farms which make the raising of vegetables a business of some 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, only 203 farms in the first class, representing about one-seventh of the total acreage of vegetables and about one-fourth of the total value, the average acreage of vegetables per farm for these farms being 5.2 and the average value of product per acre \$226.19.

The raising of flowers and plants and of nursery products is also of some importance in Montana, for, while only 361 acres were devoted to them in 1909, the output was valued at \$279,028. 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.**—Strawberries are by far the most important of the small fruits raised in Montana, with raspberries and loganberries and currants ranking, respectively, second and third. The total acreage of small fruits in 1909 was 562 and in 1899, 554, an increase of 1.4 per cent. The production in 1909 was 767,000 quarts, as compared with 1,034,000 quarts in 1899, while the value was \$86,586 in 1909, as compared with \$79,891 in 1899.

The following table shows data with regard to small fruits on farms:

<sup>1</sup> It is probable that some of the potatoes raised in farm gardens were not reported separately by farmers, but were included in their returns for vegetables.

CROP.	Number of farms reporting: 1909	ACRES.		Quantity (quarts): 1909	Value: 1909
		1909	1899		
<b>Small fruits, total.....</b>		<b>562</b>	<b>554</b>	<b>766,781</b>	<b>\$86,586<sup>1</sup></b>
Strawberries.....	619	265	281	406,038	46,870
Blackberries and dewberries.....	129	34	18	36,321	4,020
Raspberries and loganberries.....	361	113	80	165,473	19,732
Currants.....	654	115	120	123,031	12,195
Gooseberries.....	350	35	51	35,896	3,765
Cranberries.....	1	( <sup>1</sup> )	.....	32	4
Other berries.....	.....	.....	4	.....	.....

<sup>1</sup> Less than 1 acre.

**Orchard fruits, grapes, and nuts: 1909 and 1899.**—The following 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.

CROP.	TREES OR VINES OF BEARING AGE: 1910		TREES OR VINES NOT OF BEARING AGE: 1910		PRODUCT.		
	Farms reporting.	Number.	Farms reporting.	Number.	Quantity. <sup>1</sup>	Value.	1899
							Quantity. <sup>1</sup>
<b>Orchard fruits, total.....</b>		<b>749,104</b>		<b>1,363,798</b>	<b>591,088</b>	<b>\$609,078</b>	<b>45,192</b>
Apples.....	3,167	696,753	3,633	1,308,060	567,054	568,938	43,939
Peaches and nectarines.....	49	538	117	3,386	128	235	17
Pears.....	586	10,297	683	12,806	7,543	12,008	24
Plums and prunes.....	948	21,140	1,072	15,001	8,777	11,642	373
Cherries.....	1,013	19,938	1,197	24,237	7,497	17,985	807
Apricots.....	36	410	60	245	88	269	1
Quinces.....	5	28	12	54	1	1	( <sup>2</sup> )
Mulberries.....	.....	.....	1	3	.....	.....	( <sup>2</sup> )
Unclassified.....	.....	.....	.....	.....	.....	.....	31
<b>Grapes.....</b>	<b>13</b>	<b>986</b>	<b>49</b>	<b>1,121</b>	<b>370</b>	<b>17</b>	<b>1,330</b>
<b>Nuts.....</b>	<b>123</b>	<b>4272</b>	<b>.....</b>	<b>.....</b>	<b>.....</b>	<b>.....</b>	<b>.....</b>

<sup>1</sup> Expressed in bushels for orchard fruits and pounds for grapes.

<sup>2</sup> Included with "unclassified."

<sup>3</sup> Consists of products not separately named by the enumerator, but grouped under the designation "all other."

<sup>4</sup> Includes hazelnuts, black walnuts, almonds, hickory nuts, butternuts, chestnuts, and filberts.

The total quantity of orchard fruits produced in 1909 was 591,000 bushels, valued at \$609,000, apples contributing more than 95 per cent of this quantity. The production of grapes and of nuts in this state is unimportant.

The production of all orchard fruits in 1909 was more than 12 times as great in quantity as that in 1899, and the total value of orchard fruits increased from \$59,414 in 1899 to \$609,078 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.

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.	Per cent of all farms.	Unit.	1909	1899
cider.....	120	0.5	Gals....	22,314	2,142
Vinegar.....	77	0.3	Gals....	10,108	1,038
Wine and grape juice.....	13	(1)	Gals....	368	676
Dried fruits.....	12	(1)	Lbs....	435	.....

<sup>1</sup> Less than one-tenth of 1 per cent.

**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 2,719 farms in Montana (10.4 per cent of all farms in the state) which reported forest products in 1909, the total value of such products being \$541,800, as compared with \$176,134 in 1899, an increase of 207.6 per cent. Of the value in 1909, \$213,206 was reported as that of products used or to be used on the farms themselves, \$269,205 as that of products sold or for sale, and \$59,389 as the amount received for standing timber.

**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		1899	INCREASE.	
	Farms reporting.			Amount.	Per cent.
	Number.	Per cent of all farms.	Amount.		
Labor.....	12,482	47.6	\$10,030,477	\$5,077,340	115.3
Feed.....	8,080	30.0	1,741,071	(1)	.....
Fertilizer.....	80	0.3	12,323	3,040	212.8

<sup>1</sup> Not reported at the census of 1906.

Practically half of the farmers hire labor, and the average amount expended by the farmers hiring is \$876. Almost a quarter of the amount reported as expended for labor is in the form of rent and board. During the decade the total expenditure for labor considerably more than doubled. At prior censuses no tabulation was made of the number of farmers reporting expenditures for labor.

About one farmer out of every three reports some expenditure for feed, but only about one out of every

It should be noted that forest products not produced on farms are not included in this report.

**Sugar crops: 1909 and 1899.**—The table below shows data with regard to maple trees and their products, and for sugar beets and sorghum cane. The total value of sugar beets produced in 1909 was \$547,000, while in 1899 there was no production of sugar beets reported.

PRODUCT.	FARMS REPORTING.		Acres.	PRODUCT.		
	Number.	Per cent of all farms.		Amount.	Unit.	Value.
Maple syrup made, 1909 <sup>1</sup> .....	1	( <sup>2</sup> )	.....	12	Gals....	\$12
Sugar beets, 1909 <sup>3</sup> .....	360	1.4	8,804	100,434	Tons....	546,832
Sorghum cane:						
Total, 1909 <sup>4</sup> .....						346
Cane grown.....	0	( <sup>2</sup> )	17	87	Tons....	.....
Syrup made.....	0	( <sup>2</sup> )	.....	223	Gals....	166
Total, 1899.....						70
Cane grown.....	1	( <sup>2</sup> )	2	14	Tons....	.....
Syrup made.....				100	Gals....	70

<sup>1</sup> 30 trees were reported.

<sup>2</sup> Less than one-tenth of 1 per cent.

<sup>3</sup> Includes beets used as root forage.

<sup>4</sup> Includes cane used as coarse forage.

**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 128 farmers in Montana sold, during 1909, 2,406 tons of straw, for which they received \$6,913.

three hundred purchases fertilizer. The total amount reported as paid for fertilizer has more than trebled since 1899, and averages \$138.46 per farm for the 89 farms reporting.

**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.	Per cent of all farms.	Amount.	Unit.	
<b>Total</b> .....					\$3,943,518
Corn.....	125	0.5	15,789	Bu.....	10,698
Oats.....	3,441	13.1	3,905,534	Bu.....	1,841,235
Barley.....	430	1.7	203,880	Bu.....	127,847
Hay and coarse forage.....	3,184	12.1	231,309	Tons....	1,022,738

While the total amount expended by Montana farmers for the purchase of feed in 1909 was \$1,741,000, the total receipts from the sale of feed by those reporting sales amounted to \$3,943,000.

## COUNTY TABLES.

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

Table 1 shows the population, number of farms, land and farm area, value of farm property, and number and value of domestic animals and of poultry and bees, as of April 15, 1910. Comparative data for June 1, 1900, are given in italics for certain items.

Table 2 gives the number of farms, the farm acreage, and the value of farm property operated by owners, tenants, and managers, collected as of April 15, 1910. Statistics of farm mortgages are included in this table. (See explanation in text.) Comparative data for June 1, 1900, are given in italics for certain items.

Table 3 gives statistics pertaining to the products of live stock on farms (dairy products, poultry and eggs, honey and wax, and wool and mohair); also the number and value of domestic animals sold or slaughtered on farms for the year 1909.

Table 4 shows the total value of farm crops and the principal classes thereof, together with the acreage (or

trees of bearing age) and production of the principal crops for the year 1909.

Table 5 gives statistics relating to selected farm expenses for 1909 and also shows the receipts from the sale of feedable crops.

Table 6 shows the number and value of domestic animals in barns and inclosures not on farms, by classes, together with the number of dairy cows and mature horses and mules, on April 15, 1910.

*Change of boundaries.*—In comparing the data secured in 1910 with that of 1900, the following changes in county boundaries should be considered: Lincoln County was organized from a part of Flathead County in 1909; Powell County was organized from a part of Deer Lodge County in 1901; Rosebud County was organized from parts of Custer County and Crow Indian Reservation in 1901; Sanders County was organized from a part of Missoula County in 1906; and a part of Silver Bow County was annexed to Deer Lodge County in 1903. Through a relocation of the boundary line between Idaho and Montana, 272,000 acres which were in Idaho in 1900 are now in Beaverhead, Gallatin, and Madison Counties.









# STATISTICS OF AGRICULTURE.

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**TABLE 2.—NUMBER, ACREAGE, AND VALUE OF FARMS CLASSIFIED BY TENURE; COLOR AND NATIVITY OF FARMERS; AND MORTGAGE DEBT, BY COUNTIES: APRIL 15, 1910.**

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

	THE STATE.	Beaver-head.	Broad-water.	Carbon.	Cascade.	Chouteau. <sup>1</sup>	Custer. <sup>2</sup>
<b>FARMS OPERATED BY OWNERS</b>							
1	Number of farms.....	23,365	456	329	1,046	1,310	1,735
2	Number of farms in 1900.....	<i>11,061</i>	<i>460</i>	<i>191</i>	<i>813</i>	<i>1,023</i>	<i>716</i>
3	Per cent of all farms.....	89.1	85.1	84.4	82.8	87.8	95.4
4	Per cent of all farms in 1900.....	<i>87.2</i>	<i>88.9</i>	<i>86.0</i>	<i>83.3</i>	<i>89.9</i>	<i>94.0</i>
5	Land in farms..... acres.....	10,640,902	324,248	133,298	223,716	732,340	897,819
6	Improved land in farms..... acres.....	2,894,823	194,592	89,401	94,590	164,109	212,399
7	Value of land and buildings..... dollars.....	196,611,859	6,021,007	2,884,108	7,944,794	11,503,657	12,305,359
<b>Degree of ownership:</b>							
8	Farms consisting of owned land only.....	21,525	439	304	969	1,207	1,618
9	Farms consisting of owned and hired land.....	1,840	17	25	77	112	117
<b>Color and nativity of owners:</b>							
10	Native white.....	15,985	305	236	731	742	1,120
11	Foreign-born white.....	6,213	151	93	315	567	432
12	Negro and other nonwhite.....	1,167				10	183
<b>FARMS OPERATED BY TENANTS</b>							
13	Number of farms.....	2,344	55	53	186	146	48
14	Number of farms in 1900.....	<i>1,230</i>	<i>43</i>	<i>29</i>	<i>53</i>	<i>76</i>	<i>5</i>
15	Per cent of all farms.....	8.9	10.3	13.6	14.7	9.7	2.6
16	Per cent of all farms in 1900.....	<i>9.2</i>	<i>8.3</i>	<i>13.1</i>	<i>6.1</i>	<i>6.6</i>	<i>0.7</i>
17	Land in farms..... acres.....	1,474,711	43,196	26,898	39,615	105,555	25,847
18	Improved land in farms..... acres.....	387,646	25,565	11,291	22,438	23,097	5,449
19	Value of land and buildings..... dollars.....	28,821,063	1,056,695	587,050	2,011,620	1,634,176	401,950
<b>Form of tenancy:</b>							
20	Share tenants.....	952	19	24	81	61	20
21	Share-cash tenants.....	51	3		8	6	2
22	Cash tenants.....	790		27	62	43	21
23	Tenure not specified.....	551	1	2	35	36	5
<b>Color and nativity of tenants:</b>							
24	Native white.....	1,771	38	41	144	87	37
25	Foreign-born white.....	547	15	12	40	59	10
26	Negro and other nonwhite.....	26	2		2		1
<b>FARMS OPERATED BY MANAGERS</b>							
27	Number of farms.....	505	25	8	32	37	35
28	Number of farms in 1900.....	<i>479</i>	<i>25</i>	<i>2</i>	<i>5</i>	<i>40</i>	<i>41</i>
29	Land in farms..... acres.....	1,429,690	93,871	23,691	23,118	163,639	77,455
30	Improved land in farms..... acres.....	357,840	55,373	8,085	3,381	33,134	30,082
31	Value of land and buildings..... dollars.....	29,293,008	1,520,630	268,000	427,400	2,338,225	1,040,790
<b>MORTGAGE DEBT REPORTS:</b>							
<b>For all farms operated by owners:</b>							
32	Number free from mortgage debt.....	18,014	336	275	667	804	1,557
33	Number with mortgage debt.....	4,820	116	53	365	495	157
34	Number with no mortgage report.....	581	4	1	14	20	21
<b>For farms consisting of owned land only:</b>							
35	Number reporting debt and amount.....	3,990	106	44	304	433	125
36	Value of their land and buildings..... dollars.....	44,615,154	1,525,060	558,490	2,583,000	3,885,862	1,619,828
37	Amount of mortgage debt..... dollars.....	10,741,280	456,431	133,450	679,897	865,704	294,436
38	Per cent of value of land and buildings.....	24.1	29.9	23.9	26.3	22.3	18.2

<sup>1</sup> Agricultural data for Indians on reservations in 1900 shown separately in last column of table.      <sup>2</sup> Change of boundary. (See explanation at close of text.)  
<sup>3</sup> No mortgage reports were secured for farms operated by tenants and managers. (See explanation in text.)

**TABLE 3.—LIVE STOCK PRODUCTS, AND DOMESTIC ANIMALS SOLD OR SLAUGHTERED ON FARMS, BY COUNTIES: 1909.**

<b>LIVE STOCK PRODUCTS</b>							
<b>Dairy Products</b>							
1	Dairy cows on farms reporting dairy products.....	number..	56,892	1,608	935	3,284	5,048
2	Dairy cows on farms reporting milk produced.....	number..	49,765	1,541	828	2,718	4,075
3	Milk—Produced.....	gallons..	16,982,145	487,100	293,506	798,814	1,236,108
4	Sold.....	gallons..	3,584,689	35,032	15,075	41,524	224,896
5	Cream sold.....	gallons..	274,979	4,061	11,589	13,152	40,130
6	Butter fat sold.....	pounds..	652,097	2,833	54,534	77,371	122,598
7	Butter—Produced.....	pounds..	2,820,574	94,696	26,636	193,343	174,660
8	Sold.....	pounds..	1,234,293	28,203	6,594	89,138	80,877
9	Cheese—Produced.....	pounds..	49,988	500	200	275	1,170
10	Sold.....	pounds..	44,571	300		125	940
11	Value of dairy products, excluding home use of milk and cream.....	dollars..	2,093,594	41,176	37,491	94,201	170,345
12	Receipts from sale of dairy products.....	dollars..	1,646,693	21,541	31,548	65,684	143,566
<b>Poultry Products</b>							
13	Poultry—Raised.....	number..	1,116,690	22,765	24,662	80,791	96,048
14	Sold.....	number..	371,847	6,421	8,892	29,128	31,080
15	Eggs—Produced.....	dozens..	4,706,178	129,128	78,375	332,561	372,412
16	Sold.....	dozens..	2,116,624	31,193	40,937	189,465	189,610
17	Value of poultry and eggs produced.....	dollars..	1,884,111	47,351	37,761	128,902	154,667
18	Receipts from sale of poultry and eggs.....	dollars..	822,003	12,264	18,852	69,871	72,660
<b>Honey and Wax</b>							
19	Honey produced.....	pounds..	163,510		2,722	25,247	257
20	Wax produced.....	pounds..	394		13		4
21	Value of honey and wax produced.....	dollars..	21,935		534	2,890	53
<b>Wool, Mohair, and Goat Hair</b>							
22	Wool, fleeces shorn.....	number..	3,727,031	131,467	34,399	66,909	88,650
23	Mohair and goat hair, fleeces shorn.....	number..	2,357	5	39	501	42
24	Value of wool and mohair produced.....	dollars..	6,471,064	198,252	67,852	118,042	133,698
<b>DOMESTIC ANIMALS SOLD OR SLAUGHTERED</b>							
25	Calves—Sold or slaughtered.....	number..	27,137	2,577	918	1,165	2,719
26	Other cattle—Sold or slaughtered.....	number..	292,751	28,734	6,429	17,622	17,574
27	Horses, mules, and asses and burros—Sold.....	number..	31,993	1,584	664	852	877
28	Pigs—Sold or slaughtered.....	number..	70,614	1,468	2,371	3,595	4,526
29	Sheep and goats—Sold or slaughtered.....	number..	1,558,628	79,560	25,591	60,418	34,478
30	Receipts from sale of animals.....	dollars..	20,348,948	1,777,048	321,956	1,044,797	835,693
31	Value of animals slaughtered.....	dollars..	1,292,151	58,754	37,290	48,016	136,547

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

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

Table with 10 columns representing counties (Dawson, Deer Lodge, Fergus, Flathead, Gallatin, Granite, Jefferson, Lewis and Clark, Lincoln) and rows detailing farm statistics such as number of farms, acreage, value of land, and mortgage debt reports.

1 Change of boundary. (See explanation at close of text.)

2 Agricultural data for Indians on reservations in 1900 shown separately in last column of table.

TABLE 3.—LIVE STOCK PRODUCTS, AND DOMESTIC ANIMALS

Table with 10 columns representing counties and rows detailing live stock products (Dairy, Poultry, Honey and Wax, Wool, etc.) and domestic animals (Calves, Horses, Swine, etc.), including production volumes and values.



SUPPLEMENT FOR MONTANA.

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

Table with 10 columns: The State, Beaver-head, Broad-water, Carbon, Casade, Chouteau, Custer, Dawson. Rows include 'VALUE OF ALL CROPS', 'SELECTED CROPS (acres and quantity)', and 'FRUITS'.

TABLE 5.—SELECTED FARM EXPENSES

Table with 10 columns: Labor, Fertilizer, Feed, Receipts from sale of feedable crops. Rows include 'Labor', 'Fertilizer', 'Feed', and 'Receipts from sale of feedable crops'.







Irrigation districts, cooperative enterprises, and individual and partnership enterprises are all controlled by the water users. These supply about 91 per cent of the acreage irrigated. United States Reclamation Service and Carey Act enterprises, which are to be turned over to the water users, supply about 1 per cent of the acreage irrigated. Thus only about 8 per cent of the irrigated land is supplied by enterprises which are not either controlled by the water users or to be turned over to them ultimately.

Acreage irrigated, classified by source of water supply.—The table following shows the distribution of the acreage irrigated in 1909 according to the source of water supply.

From this table it is apparent that up to the present time there has been little development of any source

other than streams. Irrigation from reservoirs is practiced principally in the counties of the plains, where for large parts of the land a water supply from streams is not available, and the storage of storm waters offers the only means of irrigation.

SOURCE OF WATER SUPPLY.	ACREAGE IRRIGATED IN 1909.	
	Amount.	Per cent distribution.
All sources.....	1,679,084	100.0
Streams.....	1,632,619	97.2
Lakes.....	5,622	0.3
Wells.....	262	( <sup>1</sup> )
Springs.....	17,967	1.1
Reservoirs.....	22,614	1.3

<sup>1</sup> Less than one-tenth of 1 per cent.

IRRIGATION WORKS.

The table following summarizes the data collected relating to works for supplying water for irrigation in 1910 and 1900. Since only a few of the items reported in 1910 were reported in 1900, there is little opportunity for comparisons between the two censuses. As was noted in the discussion of farms and acreage irrigated, the census of 1900 made no report as to irrigation on Indian reservations in Montana; but the percentages of increase for the items given are not materially affected by the difference between the two censuses in this respect.

Assuming that the enterprises in operation in 1909 were identical with those reported in 1910, the average number of acres irrigated per enterprise was 303.4 and the acreage irrigated per mile of main ditch was 129.3, a decrease of 10.3 acres compared with 1899, or 7.4 per cent.

There has been as yet but little utilization of underground water. The table shows but 15 flowing wells and 10 wells pumped for irrigation, which watered only 262 acres altogether in 1909. The flowing wells are in

Carbon, Custer, Missoula, and Teton Counties, and the pumped wells in Broadwater, Dawson, Gallatin, Lincoln, Rosebud, and Sanders Counties.

The water pumped for irrigation is for the most part taken from streams. The plants are located principally in the plains, 106 of the 125 plants reported being in the counties of that section.

IRRIGATION WORKS.	CENSUS OF—		INCREASE.	
	1910	1900	Amount.	Per cent.
Independent enterprises.....number..	5,534	2,902	2,632	90.7
Ditches, total length.....miles..	18,934	( <sup>1</sup> )	.....	.....
Main ditches.....number..	6,673	2,902	3,771	129.9
Length.....miles..	12,990	6,812	6,178	90.7
Capacity.....cu. ft. per second..	83,849	( <sup>1</sup> )	.....	.....
Lateral ditches.....number..	8,307	( <sup>1</sup> )	.....	.....
Length.....miles..	5,944	( <sup>1</sup> )	.....	.....
Reservoirs.....number..	827	( <sup>1</sup> )	.....	.....
Capacity.....acre-feet..	580,261	( <sup>1</sup> )	.....	.....
Flowing wells.....number..	15	( <sup>1</sup> )	.....	.....
Capacity.....gals. per minute..	22,185	( <sup>1</sup> )	.....	.....
Pumped wells.....number..	10	( <sup>1</sup> )	.....	.....
Capacity.....gals. per minute..	5,263	( <sup>1</sup> )	.....	.....
Pumping plants.....number..	125	( <sup>1</sup> )	.....	.....
Engine capacity.....horsepower..	3,511	( <sup>1</sup> )	.....	.....
Pump capacity.....gals. per minute..	281,199	( <sup>1</sup> )	.....	.....

<sup>1</sup> Not reported.

COST OF CONSTRUCTION, OPERATION, AND MAINTENANCE.

The table following shows the total cost of irrigation enterprises up to July 1, 1910, including construction of works and acquisition of rights, but not operation and maintenance, with the average cost per acre, based on the acreage the enterprises were capable of irrigating in 1910; the estimated final cost of enterprises completed and enterprises now under construction, with the average cost per acre, based on the acreage included in projects; and the total cost and average cost per acre of operation and maintenance in 1909. Similar data from the census of 1900, so far as available, are included for comparison.

The cost of operation and maintenance is not reported for individual and partnership enterprises, for the reason that farmers whose land is irrigated by such systems generally clean their own ditches at odd times without keeping any record of the time spent. In the case of larger enterprises this cost represents a

cash outlay by the farmers, while in the case of many of the smaller cooperative enterprises the cost is worked out by the farmers.

	CENSUS OF—		INCREASE.	
	1910	1900	Amount.	Per cent.
Cost of irrigation enterprises.....	\$22,970,958	\$4,683,073	\$18,287,885	390.5
Average per acre.....	\$10.42	\$4.92	( <sup>6</sup> )	( <sup>6</sup> )
Estimated final cost of existing enterprises.....	\$32,382,077	( <sup>6</sup> )	.....	.....
Average per acre included in projects.....	\$9.21	( <sup>6</sup> )	.....	.....
Operation and maintenance:				
Acreage for which cost is reported.....	\$94,507	( <sup>6</sup> )	.....	.....
Total cost reported.....	\$340,662	( <sup>6</sup> )	.....	.....
Average cost per acre.....	\$0.89	\$0.28	\$0.61	217.9

<sup>1</sup> Reported July 1, 1910.  
<sup>2</sup> Cost of systems operated in 1899.  
<sup>3</sup> Based on acreage enterprises were capable of irrigating in 1910.  
<sup>4</sup> Based on acreage irrigated in 1899.  
<sup>5</sup> Figures not comparable. (See explanation in text.)  
<sup>6</sup> Not reported.

## CHAPTER 4.

# STATISTICS OF IRRIGATION FOR THE STATE AND ITS COUNTIES.

**Introduction.**—This chapter presents the larger part of the statistics of irrigation for Montana obtained in connection with the Thirteenth Census. The statistics of the number of farms and acreage irrigated, cost of operation and maintenance, and irrigated crops are for the calendar year 1909; those of irrigation works, cost of enterprises, acreage enterprises were capable of irrigating in 1910, and acreage included in projects are of the date July 1, 1910.

These statistics have been collected under the law of February 25, 1910, which contained the following clause relating to irrigation:

Inquiries shall also be made as to the location and character of irrigation enterprises, quantity of land irrigated in the arid region of the United States and in each state and county in that section under state and Federal laws; the price at which these lands, including water rights, are obtainable; the character and value of crops produced on irrigated lands, the amount of water used per acre for said irrigation, and whether it was obtainable from national, state, or private works; the location of the various projects and methods of construction, with facts as to their physical condition; the amount of capital invested in such irrigation works.

The information called for by this law which could be supplied by farm operators was obtained on supplemental schedules by the regular census enumerators as a part of the agricultural census. The remaining data, which were supplied by the owners or officials of irrigation enterprises, were obtained on special schedules by special agents. The data relating to number of farms irrigated and irrigated crops are taken from the supplemental schedules, while all data relating to acreage irrigated and to irrigation works and their construction and operation are taken from the special schedules.

In accordance with the law, the data collected have been classified primarily by the state and Federal laws by virtue of which the land was brought under irrigation. The results are presented in detail at the end of this chapter and summarized in text tables.

Such of the terms used as are not self-explanatory are defined below.

**Farms irrigated.**—The number of "farms irrigated" is the number of farms on which irrigation is practiced and is equivalent to the term "number of irrigators" used in previous census reports.

**Types of enterprise.**—The types of enterprise under which the lands irrigated in 1909 are classified are as follows:

*United States Reclamation Service enterprises*, which operate under the Federal law of June 17, 1902, providing for the construction

of irrigation works with the receipts from the sale of public lands.

*United States Indian Service enterprises*, which operate under various acts of Congress providing for the construction by that service of works for the irrigation of land in Indian reservations.

*Carey Act enterprises*, which operate under the Federal law of August 18, 1894, granting to each of the states in the arid region 1,000,000 acres of land on condition that the state provide for its irrigation, and under amendments to that law granting additional areas to Idaho and Wyoming.

*Irrigation districts*, which are public corporations that operate under state laws providing for their organization and management, and empowering them to issue bonds and levy and collect taxes with the object of obtaining funds for the purchase or construction, and for the operation and maintenance of irrigation works.

*Cooperative enterprises*, which are controlled by the water users under some organized form of cooperation. The most common form of organization is the stock company, the stock of which is owned by the water users.

*Commercial enterprises*, which supply water for compensation to parties who own no interest in the works. Persons obtaining water from such enterprises are usually required to pay for the right to receive water, and to pay, in addition, annual charges based in some instances on the acreage irrigated and in others on the quantity of water received.

*Individual and partnership enterprises*, which belong to individual farmers or to neighboring farmers, who control them without formal organization. It is not always possible to distinguish between partnership and cooperative enterprises, but as the difference is slight this is unimportant.

**Source of water supply.**—Of the terms used in the classification according to source of water supply, none requires explanation except "reservoirs." The only reservoirs which are treated as independent sources of supply are those filled by collecting storm water or from watercourses that are ordinarily dry. When reservoirs are filled from streams or wells, the primary source is considered the source of supply.

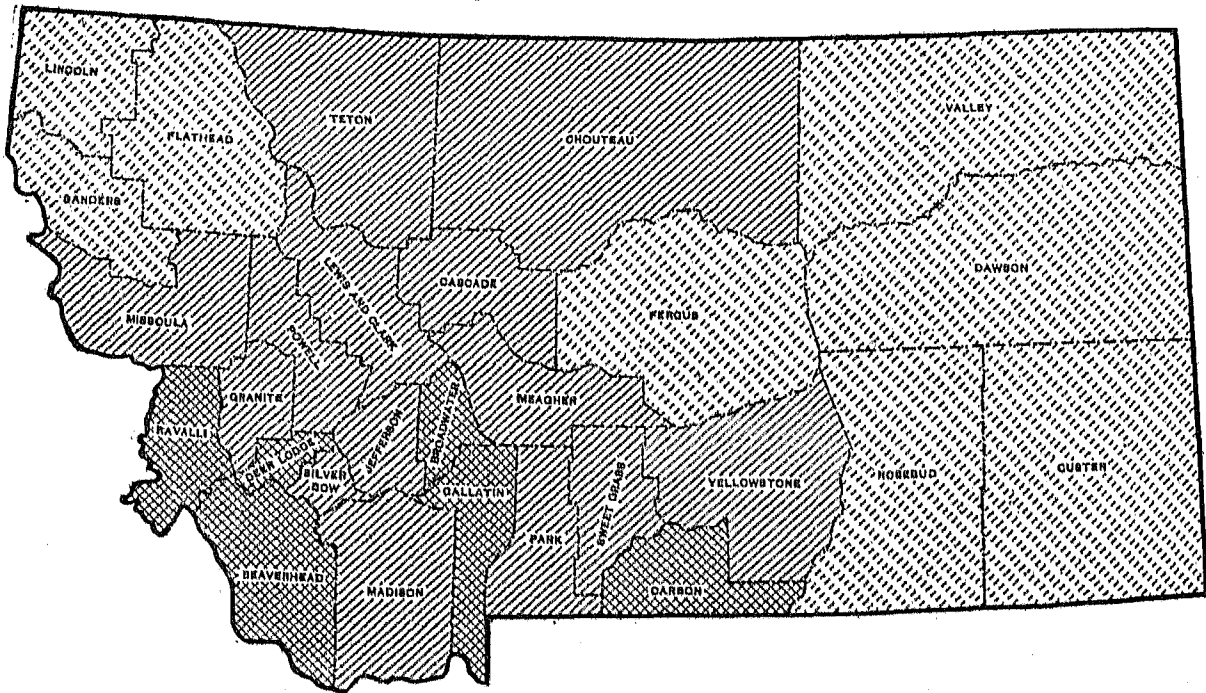
**Acre-foot.**—The "acre-foot," used to express the capacity of reservoirs, is the volume of water required to cover 1 acre to a depth of 1 foot, or 43,560 cubic feet.

**Cost.**—The cost of irrigation enterprises is that given by the owners. For the larger works the cost given is taken, in most cases, from the books of account and represents the actual cost. In the case of most of the private and partnership and many of the cooperative enterprises, however, the works were built by their owners without records of money or labor expended, and the cost given represents the owners' estimates. The cost reported for 1910 includes the cost of construction and of acquiring rights. The latter usually consists of filing fees only. In some instances it includes the purchase price of rights, but these cases are so rare that they are unimportant. The cost reported for 1899 is designated "cost of construction," but probably includes the cost of acquiring rights, as in 1910. The average cost per acre is based on the acreage enterprises were capable of irrigating in 1910 and the cost to July 1, 1910.

PER CENT OF TOTAL LAND AREA IRRIGATED, AND PER CENT OF NUMBER OF FARMS IRRIGATED,  
IN MONTANA, BY COUNTIES: 1909.

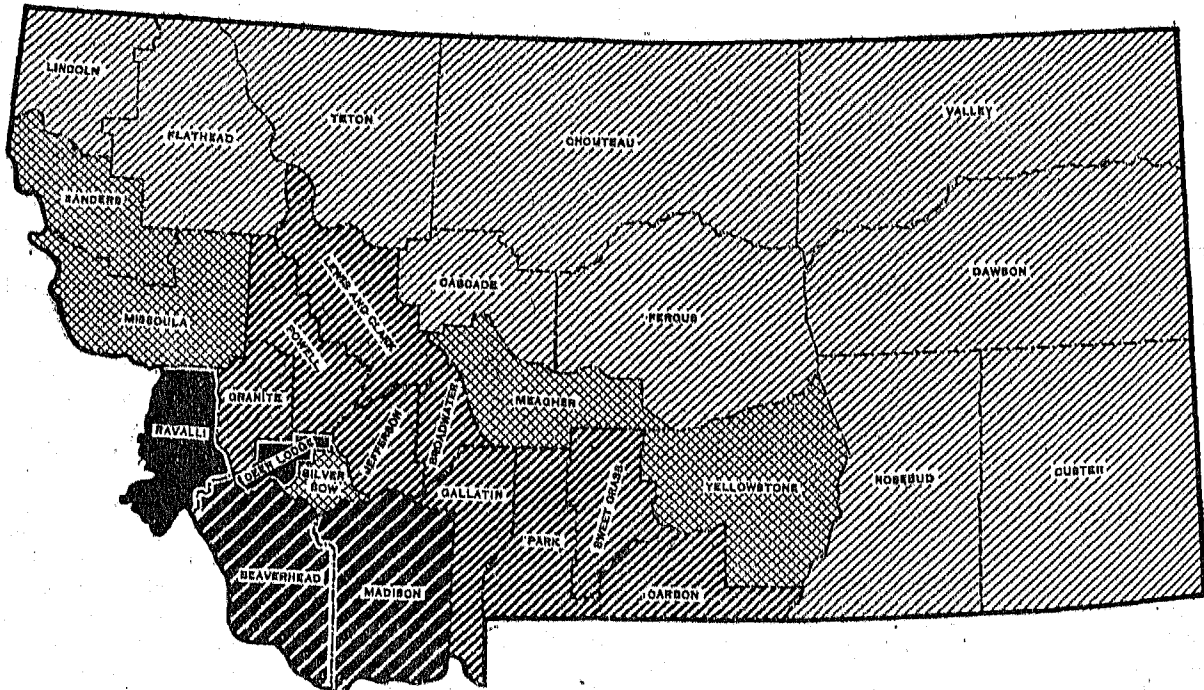
PER CENT OF TOTAL LAND AREA IRRIGATED.

[Per cent for the state, 1.8.]



PER CENT OF NUMBER OF FARMS IRRIGATED.

[Per cent for the state, 34.2.]



FARMS AND ACREAGE IRRIGATED.

Topographically Montana is divided into two approximately equal parts, of which the western lies in the Rocky Mountains and the eastern in the Great Plains. Throughout the state the rainfall is sufficient in most seasons for the maturing of grain crops without irrigation, the normal annual precipitation ranging from about 15 inches at the eastern boundary to about 20 inches at the western boundary, and a still higher figure in the northwest corner.

Irrigation is practiced throughout the state, but about 75 per cent of the acreage reported irrigated in 1909 lies in the valleys of the western or mountainous section. The eastern division is devoted principally to grazing and dry farming. The location of the irrigated lands of the state is indicated in a general way by the maps on the opposite page, which show the class in which each county falls with reference to the percentage which the irrigated land is of the total land area and the percentage which irrigated farms are of all farms.

The following table shows for the state as a whole the number of farms and acreage irrigated, in comparison with the total number of farms, the total land area, the total land in farms, the total acreage of improved land in farms, and the areas not yet irrigated for which water has been or is being made available. Comparative data for the census of 1900 are included as far as possible. In the irrigation report for 1900 the figures for farms and acreage irrigated in Montana did not include statistics for Indian reservations, and therefore a discrepancy is involved in comparisons of these items with the totals for farms and acreage in 1900, as shown in this table and in comparisons with the statistics for farms and acreage irrigated in 1909. Since, however, irrigated farms and land on reservations formed only small proportions of the totals for the state in 1909, comparisons are but little affected by the omission in the Twelfth Census report:

	CENSUS OF—		INCREASE. <sup>1</sup>	
	1910	1900	Amount.	Percent.
Number of all farms.....	<sup>2</sup> 28, 214	<sup>3</sup> 13, 370	12, 844	96. 1
Approximate land area of the state..... acres..	93, 568, 640	93, 296, 640	272, 000	0. 3
Land in farms.....	<sup>2</sup> 13, 545, 603	<sup>3</sup> 11, 844, 454	1, 701, 149	14. 4
Improved land in farms..... acres..	<sup>2</sup> 3, 640, 309	<sup>3</sup> 1, 736, 701	1, 903, 608	109. 6
Number of farms irrigated.....	<sup>4</sup> 8, 970	<sup>5</sup> 8, 043	927	11. 5
Acreage irrigated.....	<sup>4</sup> 1, 679, 084	<sup>5</sup> 951, 154	727, 930	76. 5
Acreage enterprises were capable of irrigating.....	<sup>6</sup> 2, 205, 155	(?)	.....	.....
Acreage included in projects.....	<sup>8</sup> 3, 515, 602	(?)	.....	.....
Percentage irrigated of—				
Number of all farms.....	34. 2	60. 2	-26. 0	.....
Approximate land area of the state.....	1. 8	1. 0	0. 8	.....
Land in farms.....	12. 4	8. 0	4. 4	.....
Improved land in farms.....	46. 1	54. 8	-8. 7	.....
Excess of acreage enterprises were capable of irrigating in 1910 over acreage irrigated in 1909.....	526, 071	.....	.....	.....
Excess of acreage included in projects over acreage irrigated in 1909.....	1, 836, 518	.....	.....	.....

<sup>1</sup> A minus sign (—) denotes decrease.  
<sup>2</sup> April 15.

<sup>3</sup> June 1.  
<sup>4</sup> In 1909.

<sup>5</sup> In 1899, exclusive of Indian reservations.  
<sup>6</sup> In 1910.

<sup>7</sup> Not reported.  
<sup>8</sup> Reported July 1, 1910.

Number of farms irrigated.—The number of farms irrigated is made up of the number reported on the supplemental schedules by the regular enumerators, together with an estimate of the number of farms covered by enterprises which were reported by special agents but not by the regular enumerators. This estimate was based upon the average acreage irrigated per farm shown by the supplemental schedules. The fact that six counties, of which three suffered a loss of territory between the last two censuses, show considerable decreases in the number of farms irrigated accompanied by increases in the acreage irrigated, suggests that the figures for 1909 and 1899 are not wholly comparable.

According to the figures presented in the table, irrigation was practiced on slightly more than one-

third (34.2 per cent) of the farms in the state in 1909. In 1899 the proportion of irrigated farms was much higher (60.2 per cent), while in 1889 it was still higher (66.1 per cent). In both decades the number of unirrigated farms increased at a higher rate than the number of irrigated farms, but this development of farming without irrigation was much more rapid in the later decade.

Of the 28 counties of the state, 13 report more than half their farms irrigated, 3 between 40 and 50 per cent, 1 between 30 and 40 per cent, 1 between 20 and 30 per cent, 5 between 10 and 20 per cent, and 5 less than 10 per cent. The counties having more than 50 per cent of their farms irrigated are in the southwestern part of the state, while those having low percentages form a large group covering

the eastern, northern, and central parts. Deer Lodge County shows the largest percentage, 99.4, and Ravalli the next largest, 92.4 per cent.

From 1899 to 1909 the increase in the number of farms irrigated was 11.5 per cent for the entire state. Of the 16 counties which did not change in area during that period, 11 show increases, varying greatly in degree, while 5 show decreases. Of the latter group of counties Cascade, Chouteau, and Fergus are in the "dry-farm" section, and Lewis and Clark County shows a decrease in the number of unirrigated farms as well as a decrease in the number of irrigated farms.

**Acreage irrigated.**—The acreage irrigated is taken from the special schedules filled out by agents from information obtained from owners or officials of irrigation enterprises and, in some instances, from public records. The acreage thus obtained is considerably larger than the irrigated acreage reported on the supplemental schedules filled out by the farm enumerators. This difference is due in a measure to the fact that the special agents found enterprises which were not reported on any schedules returned by the enumerators, indicating that the acreage reported on the supplemental schedules is short to some extent. On the other hand, there is a natural tendency for the officials of irrigation enterprises to report as irrigated the entire area of farms of which only a part is irrigated. In some sections, furthermore, farms are so situated as to receive water from more than one ditch, and may be reported as irrigated by each, which causes duplication. It has been impossible to eliminate this duplication or to determine its extent. Owing to the causes last enumerated, it is probable that the acreage reported irrigated is excessive, but the extent of this excess can not be determined. It is believed, however, that this does not exceed 10 per cent for the state of Montana.

The total acreage reported as irrigated in 1909 was 1,679,084 acres, against 951,154 acres in 1899 and 350,582 acres in 1889. The percentage of increase from 1889 to 1899 was 171.3, while from 1899 to 1909 it was 76.5. The absolute increase during the latter decade was the larger, however—727,930 acres, against 600,572 acres between 1889 and 1899.

In the acreage irrigated the percentage of increase between 1899 and 1909 was considerably higher than in the number of farms irrigated, the acreage irrigated per farm increasing from 118 in 1899 to 187 in 1909. During the same period the average size of farms in the state decreased from 886 to 517 acres, which change, considered in connection with the increase in the acreage irrigated per farm, indicates that farmers are irrigating larger parts of their holdings than formerly.

The percentage of the total land area of the state irrigated increased from 1 in 1899 to 1.8 in 1909, while the percentage of all land in farms which was under irrigation increased from 8 in 1899 to 12.4 in 1909. As a result of the rapid development of dry farming in recent years, however, there was a decrease in the percentage of the total improved land in farms which was under irrigation from 54.8 in 1899 to 46.1 in 1909.

In both 1909 and 1899 the county for which the largest acreage of irrigated land was reported was Beaverhead, the areas being 221,716 acres and 138,022 acres, respectively. Five other counties each report over 100,000 acres irrigated in 1909, while three more report over 90,000 acres irrigated in that year.

The counties in which irrigated land forms the highest percentage of the total land area are Gallatin and Carbon, the proportion in the former being 7.9 per cent and that in the latter 7.8 per cent.

**Acreage included in projects.**—The foregoing table shows that in 1910 existing enterprises were ready to supply water to 2,205,155 acres, or 526,071 acres more than were irrigated in 1909. It is probable that, after allowance is made for an increase in the area irrigated in 1910 over that in 1909, there remained at the close of 1910 under ditch but not irrigated considerably more than half as much land as was brought under irrigation in the 10 years from 1899 to 1909. The acreage included in projects exceeds the acreage irrigated in 1909 by 1,836,518 acres, which is more than twice the acreage brought under irrigation in the last decade and somewhat more than the total area irrigated in 1909. This acreage represents the area which will be available for the extension of irrigation in the next few years upon the completion of existing enterprises and without new undertakings. It indicates in a general way the area available for settlement, although much of this unirrigated land is in farms already settled.

**Acreage irrigated, classified by character of enterprise.**—The following table gives the distribution of the acreage irrigated in 1909 according to the character of the enterprise controlling the irrigation works:

CHARACTER OF ENTERPRISE.	ACREAGE IRRIGATED IN 1909.	
	Amount.	Per cent distribution.
<b>All classes.....</b>	<b>1,679,084</b>	<b>100.0</b>
U. S. Reclamation Service.....	14,077	0.8
U. S. Indian Service.....	67,417	4.0
Carey Act enterprises.....	9,048	0.6
Irrigation districts.....	412	( <sup>1</sup> )
Cooperative enterprises.....	393,026	19.9
Commercial enterprises.....	62,544	3.7
Individual and partnership enterprises.....	1,191,000	70.9

<sup>1</sup> Less than one-tenth of 1 per cent.

Irrigation districts, cooperative enterprises, and individual and partnership enterprises are all controlled by the water users. These supply about 91 per cent of the acreage irrigated. United States Reclamation Service and Carey Act enterprises, which are to be turned over to the water users, supply about 1 per cent of the acreage irrigated. Thus only about 8 per cent of the irrigated land is supplied by enterprises which are not either controlled by the water users or to be turned over to them ultimately.

Acreage irrigated, classified by source of water supply.—The table following shows the distribution of the acreage irrigated in 1909 according to the source of water supply.

From this table it is apparent that up to the present time there has been little development of any source

other than streams. Irrigation from reservoirs is practiced principally in the counties of the plains, where for large parts of the land a water supply from streams is not available, and the storage of storm waters offers the only means of irrigation.

SOURCE OF WATER SUPPLY.	ACREAGE IRRIGATED IN 1909.	
	Amount.	Per cent distribution.
All sources.....	1,679,084	100.0
Streams.....	1,632,619	97.2
Lakes.....	5,622	0.3
Wells.....	262	( <sup>1</sup> )
Springs.....	17,967	1.1
Reservoirs.....	22,614	1.3

<sup>1</sup> Less than one-tenth of 1 per cent.

IRRIGATION WORKS.

The table following summarizes the data collected relating to works for supplying water for irrigation in 1910 and 1900. Since only a few of the items reported in 1910 were reported in 1900, there is little opportunity for comparisons between the two censuses. As was noted in the discussion of farms and acreage irrigated, the census of 1900 made no report as to irrigation on Indian reservations in Montana; but the percentages of increase for the items given are not materially affected by the difference between the two censuses in this respect.

Assuming that the enterprises in operation in 1909 were identical with those reported in 1910, the average number of acres irrigated per enterprise was 303.4 and the acreage irrigated per mile of main ditch was 129.3, a decrease of 10.3 acres compared with 1899, or 7.4 per cent.

There has been as yet but little utilization of underground water. The table shows but 15 flowing wells and 10 wells pumped for irrigation, which watered only 262 acres altogether in 1909. The flowing wells are in

Carbon, Custer, Missoula, and Teton Counties, and the pumped wells in Broadwater, Dawson, Gallatin, Lincoln, Rosebud, and Sanders Counties.

The water pumped for irrigation is for the most part taken from streams. The plants are located principally in the plains, 106 of the 125 plants reported being in the counties of that section.

IRRIGATION WORKS.	CENSUS OF—		INCREASE.	
	1910	1900	Amount.	Per cent.
Independent enterprises.....number..	5,534	2,902	2,632	90.7
Ditches, total length.....miles..	18,934	( <sup>1</sup> )	.....	.....
Main ditches.....number..	6,673	2,902	3,771	129.9
Length.....miles..	12,990	6,812	6,178	90.7
Capacity.....cu. ft. per second..	83,849	( <sup>1</sup> )	.....	.....
Lateral ditches.....number..	8,307	( <sup>1</sup> )	.....	.....
Length.....miles..	5,944	( <sup>1</sup> )	.....	.....
Reservoirs.....number..	827	( <sup>1</sup> )	.....	.....
Capacity.....acre-feet..	580,261	( <sup>1</sup> )	.....	.....
Flowing wells.....number..	15	( <sup>1</sup> )	.....	.....
Capacity.....gals. per minute..	22,185	( <sup>1</sup> )	.....	.....
Pumped wells.....number..	10	( <sup>1</sup> )	.....	.....
Capacity.....gals. per minute..	5,263	( <sup>1</sup> )	.....	.....
Pumping plants.....number..	125	( <sup>1</sup> )	.....	.....
Engine capacity.....horsepower..	3,511	( <sup>1</sup> )	.....	.....
Pump capacity.....gals. per minute..	281,199	( <sup>1</sup> )	.....	.....

<sup>1</sup> Not reported.

COST OF CONSTRUCTION, OPERATION, AND MAINTENANCE.

The table following shows the total cost of irrigation enterprises up to July 1, 1910, including construction of works and acquisition of rights, but not operation and maintenance, with the average cost per acre, based on the acreage the enterprises were capable of irrigating in 1910; the estimated final cost of enterprises completed and enterprises now under construction, with the average cost per acre, based on the acreage included in projects; and the total cost and average cost per acre of operation and maintenance in 1909. Similar data from the census of 1900, so far as available, are included for comparison.

The cost of operation and maintenance is not reported for individual and partnership enterprises, for the reason that farmers whose land is irrigated by such systems generally clean their own ditches at odd times without keeping any record of the time spent. In the case of larger enterprises this cost represents a

cash outlay by the farmers, while in the case of many of the smaller cooperative enterprises the cost is worked out by the farmers.

	CENSUS OF—		INCREASE.	
	1910	1900	Amount.	Per cent.
Cost of irrigation enterprises.....	\$22,970,958	\$4,683,073	\$18,287,885	390.5
Average per acre.....	\$10.42	\$4.92	( <sup>6</sup> )	( <sup>6</sup> )
Estimated final cost of existing enterprises.....	\$32,382,077	( <sup>6</sup> )	.....	.....
Average per acre included in projects.....	\$9.21	( <sup>6</sup> )	.....	.....
Operation and maintenance:				
Acreage for which cost is reported.....	\$94,507	( <sup>6</sup> )	.....	.....
Total cost reported.....	\$349,662	( <sup>6</sup> )	.....	.....
Average cost per acre.....	\$0.89	\$0.28	\$0.61	217.9

<sup>1</sup> Reported July 1, 1910.  
<sup>2</sup> Cost of systems operated in 1899.  
<sup>3</sup> Based on acreage enterprises were capable of irrigating in 1910.  
<sup>4</sup> Based on acreage irrigated in 1899.  
<sup>5</sup> Figures not comparable. (See explanation in text.)  
<sup>6</sup> Not reported.

As previously stated, the census of 1900 made no report as to irrigation on Indian reservations; but the average costs for that year and the percentages of increase in cost for the 10 years following are not materially affected by this shortage.

The cost of irrigation systems shows the largest increase of any item included in the census of irrigation, 390.5 per cent. The average cost per acre can not be compared for the two censuses, because the average cost per acre shown for the census of 1900 is based on the acreage irrigated in 1899 instead of the acreage under ditch, as in 1910, the latter acreage not being reported in 1900. If computed on the basis of the acreage irrigated in 1909, the average cost in 1910 would be \$13.68, representing an increase of 178 per cent over the figure for the average cost at the census of 1900. The year 1899 was near the close of the period of private and cooperative construction, when most of the works were built by the water users themselves with little or no expenditure of money, and near the beginning of the present period of large-scale construction by corporations and the Federal Government. This later construction is not only on a larger scale but also more difficult and of a better type. Largely as a result of these influences the average cost per acre of irrigation has greatly increased. A num-

ber of large enterprises are under construction, and on these large expenditures have been made, while but little land is irrigated as yet. This condition tends to make the average cost shown higher than the true average. The average based on the estimated final cost and the acreage included in projects, \$9.21 per acre, probably more truly represents the average cost per acre of irrigation in Montana.

The county showing the lowest average cost per acre enterprises were capable of irrigating in 1910, \$2.70, is Granite. The highest average cost per acre, \$60.33, is in Dawson County, where the unusual cost is due to the large expenditures made on works which were nearly complete July 1, 1910, but on that date were ready to supply water to only a part of the land to be irrigated ultimately. The estimated final cost per acre included in projects for Dawson County, \$43.24, is likewise the highest reported for the counties of the state.

The acreage for which cost of operation and maintenance in 1909 is reported is 23.5 per cent of the total acreage reported as irrigated in 1909, and 80.8 per cent of the acreage reported as irrigated by other than individual and partnership enterprises. It can be said, therefore, to represent fairly the average annual expense for all but individual and partnership enterprises.

CROPS.

As previously stated, the data relating to irrigated crops are taken from supplemental schedules filled out by the regular census enumerators. Since the special agents found enterprises which the enumerators had not reported, it is evident that the information relating to irrigated crops is incomplete to some extent.

It shows, however, the relative importance of the different irrigated crops, and is sufficiently complete to give reliable averages of yields.

The following table shows the acreage, yield, and value of the principal crops reported as grown under irrigation, in comparison with totals for the same crops reported for the entire state:

CROP.	ACREAGE.			UNIT.	YIELD.		VALUE.	
	Total for state.	Irrigated.			Total for state.	On irrigated land.	Total for state.	For irrigated land.
		Number.	Per cent of total.					
<b>Cereals:</b>								
Corn.....	9,514	1,040	17.2	Bushels.....	274,103	51,488	\$185,307	\$38,613
Oats.....	833,195	150,058	47.9	Bushels.....	13,805,785	6,065,254	6,148,021	3,273,203
Wheat.....	268,377	45,598	17.6	Bushels.....	6,251,045	1,230,137	5,320,389	1,064,794
Emmer and spelt.....	1,308	141	10.8	Bushels.....	39,830	4,600	24,043	3,037
Barley.....	27,242	0,271	34.0	Bushels.....	783,268	273,827	478,811	189,932
Rye.....	0,084	807	14.4	Bushels.....	111,214	15,438	82,600	10,955
<b>Other grains and seeds:</b>								
Alfalfa seed.....	3,605	1,527	41.3	Bushels.....	10,370	4,817	88,375	36,007
Dry peas.....	1,184	951	80.3	Bushels.....	21,070	10,900	37,757	31,324
<b>Hay and forage:</b>								
Timothy alone.....	117,888	48,868	41.5	Tons.....	171,030	70,230	1,504,308	736,041
Timothy and clover mixed.....	90,541	60,437	66.3	Tons.....	150,039	102,060	1,467,117	952,113
Clover alone.....	11,575	8,433	72.9	Tons.....	24,004	17,350	176,567	126,659
Alfalfa.....	224,220	183,264	81.7	Tons.....	500,747	514,803	3,703,050	3,188,913
Other tame or cultivated grasses <sup>1</sup> .....	50,121	22,105	37.5	Tons.....	78,057	37,424	578,710	318,494
Wild, salt, or prairie grasses.....	584,732	320,570	56.4	Tons.....	580,800	330,821	4,131,324	2,392,486
Grains cut green.....	45,982	5,988	13.0	Tons.....	70,330	10,418	592,351	81,697
Coarse forage.....	1,138	110	10.5	Tons.....	1,710	738	14,102	5,026
<b>Sundry crops:</b>								
Potatoes.....	20,710	11,137	53.8	Bushels.....	3,240,000	1,038,677	1,208,880	755,968
Sugar beets.....	8,804	7,551	85.8	Tons.....	109,434	91,500	540,832	461,208
Orchard fruits and grapes.....	( <sup>2</sup> )	8,020	.....	.....	.....	.....	609,095	466,033
Small fruits.....	502	204	47.0	.....	.....	.....	86,586	89,474

<sup>1</sup> Includes millet or Hungarian grass,

<sup>2</sup> Agricultural report gives number of trees and not acres.



While small quantities of other crops are grown both on irrigated and unirrigated land, the leading crops of the state, as well as the leading crops grown under irrigation, are represented in the table. In the reports of the agricultural census the acreages of seed crops are not usually given, but since the growing of these crops, especially alfalfa seed, is coming to be an important industry in the irrigated sections of the country, the total acreages and the acreages grown under irrigation are presented in the preceding table.

**Acreage.**—Of the entire acreage of the crops for which totals are presented in the table, slightly more than one-half is irrigated, but the proportion irrigated varies widely for the different crops.

The cereals are very generally grown without irrigation, the irrigated acreage given in the table being 34.2 per cent of the total acreage shown for these crops. The highest percentage of acreage irrigated shown for any cereal, 47.9, is reported for oats, and the next highest, 34, for barley. The proportions for wheat and corn are, respectively, 17.6 and 17.2 per cent.

The hay and forage crops are more generally irrigated than the cereals, the irrigated acreage being 58 per cent of the total reported for these crops. In the case of four of the eight hay and forage crops included in the table, more than half of the total acreage is irrigated. The irrigated alfalfa acreage forms 81.7 per cent of the entire acreage in that crop, and the irrigated acreage devoted to clover alone forms 72.9 per cent of the total land in clover. For timothy and clover mixed and for wild, salt, or prairie grasses the corresponding percentages are 66.8 and 56.4, respectively.

Of the entire acreage in potatoes, 53.8 per cent is irrigated, and of that in small fruits, 47 per cent. The sugar beet area in Montana is for the most part irrigated, the percentage being 85.8. The relative importance of the irrigated orchard acreage can not be determined, because the total acreage of orchards in the state is not reported, but it will be observed that more than three-fourths of the value of all orchard fruits produced in the state is that of products grown on irrigated land.

Of the crops shown in the table, "wild, salt, or prairie grasses" have the largest irrigated acreage, representing 36.4 per cent of the total irrigated acreage of the crops given. Alfalfa is next with 20.2 per cent of this total, and is followed by oats, with 17.6 per cent, and timothy and clover mixed, with 6.7 per cent. No other single crop covers as much as 6 per cent of the total acreage of irrigated crops presented in the table.

While most of the crops irrigated are well distributed geographically, there is a tendency toward the concentration of certain crops in particular localities. This is shown by the statement following, which gives the counties having the largest acreages of the principal irrigated crops, with the proportions which they contain of the total irrigated acreages of these crops in the state.

*Corn.*—Yellowstone County, 34.7 per cent; Rosebud, 20.7 per cent; Custer, 16.8 per cent.

*Oats.*—Gallatin County, 19 per cent; Carbon, 9.8 per cent; Beaverhead, 9.6 per cent.

*Wheat.*—Carbon County, 16.2 per cent; Gallatin, 14.9 per cent; Yellowstone, 13.6 per cent.

*Barley.*—Gallatin County, 31.7 per cent; Carbon, 13.3 per cent; Park, 7.4 per cent.

*Alfalfa seed.*—Rosebud County, 28.7 per cent; Carbon, 25.9 per cent; Chouteau, 24.9 per cent.

*Timothy alone.*—Park County, 10.3 per cent; Gallatin, 10 per cent; Beaverhead, 9.7 per cent.

*Timothy and clover mixed.*—Ravalli County, 26.1 per cent; Park, 11.4 per cent; Powell, 10.3 per cent.

*Clover alone.*—Gallatin County, 75.1 per cent; Carbon, 7.7 per cent; Ravalli, 6.1 per cent.

*Alfalfa.*—Carbon County, 14.1 per cent; Sweet Grass, 11.7 per cent; Yellowstone, 10.7 per cent.

*Wild, salt, or prairie grasses.*—Beaverhead County, 36.1 per cent; Meagher, 10.5 per cent; Chouteau, 8.3 per cent.

*Potatoes.*—Ravalli County, 19.6 per cent; Yellowstone, 12.5 per cent; Madison, 9 per cent.

*Sugar beets.*—Yellowstone County, 57.2 per cent; Carbon, 41.9 per cent.

*Orchard fruits.*—Ravalli County, 63.8 per cent; Carbon, 11.5 per cent; Missoula, 10.7 per cent.

*Small fruits.*—Ravalli County, 28.8 per cent; Gallatin, 14.8 per cent; Yellowstone, 14 per cent.

Of the acreage of orchards not bearing that was irrigated in 1909, 3,942 acres, 67 per cent was in Ravalli County, 14.2 per cent in Yellowstone County, and 12.1 per cent in Carbon County.

**Yield.**—In the following table the average yields per acre of crops extensively grown, both with and without irrigation, are shown. The yields on unirrigated land are obtained by subtracting the totals for irrigated crops from the totals for the state.

CROP.	AVERAGE YIELD PER ACRE.		
	On unirrigated land.	On irrigated land.	
		Amount.	Per cent of excess over yield on unirrigated land. <sup>1</sup>
Corn.....bushels..	28.3	31.4	11.0
Oats.....bushels..	39.4	43.6	10.7
Wheat.....bushels..	23.6	27.1	14.8
Barley.....bushels..	26.7	29.5	10.5
Timothy alone.....tons.	1.37	1.56	13.9
Timothy and clover mixed.....tons.	1.77	1.70	-4.0
Clover alone.....tons.	2.15	2.06	-4.2
Alfalfa.....tons.	2.07	2.81	35.7
Wild, salt, or prairie grasses.....tons.	0.98	1.03	5.1
Potatoes.....bushels..	136.0	174.1	28.0

<sup>1</sup> A minus sign (-) indicates that the yield on irrigated land is less than that on unirrigated land.

For all the crops given in the table, except timothy and clover mixed and clover alone, there were greater average yields in 1909 on irrigated than on unirrigated land. The relative excess is greatest in the

case of alfalfa and next greatest in the case of potatoes.

Among the cereals the excess of the average yield under irrigation over that without irrigation ranges between 10 and 15 per cent. In the case of three of the hay and forage crops the average yield on irrigated land was greater than that on unirrigated land, the excess being 35.7, 13.9, and 5.1 per cent, respectively, while for two a greater average yield on unirrigated land is reported.

In considering these comparisons it should be borne

in mind that they are not comparisons of yields on irrigated and on unirrigated land in the same localities, but of yields under irrigation in localities where crops can not be grown to advantage without it with yields in localities where irrigation is not necessary. They do not indicate, therefore, the relative advantages of farming with and without irrigation in a given community, but rather give one factor for determining the relative advantages of farming where irrigation is necessary and where it is not necessary for the successful growing of crops.

#### COUNTY TABLE.

The next table gives in detail, by counties, the data summarized above, except those relating to crops. For purposes of comparison the total number of farms in the state, the approximate land area of the state, the total land in farms, and the improved land in farms have been included in the table. The approximate land area of the state includes 115,840 acres in Yellowstone National Park not included elsewhere.

Certain enterprises extend into more than one county, and in the case of some of these enterprises the reports do not segregate the data by counties. In such cases a distribution has been made according to the best estimates possible from all the information in the possession of the bureau. It is believed that these estimates are approximately correct.

Attention is again directed to the fact that the totals for 1899 and 1900 do not include data for Indian reservations, no report on irrigation on reservations in Montana having been made by the Twelfth Census. Since the figures for the present census show that but a small percentage of the irrigation operations in the state were conducted on reservations, it is believed that this

shortage in the earlier figures is not of material consequence as concerns comparisons with the returns of the Thirteenth Census. For this reason the percentages of increase have been computed without attempt to estimate totals for Indian Service irrigation in 1899 and 1900 or without elimination from the 1909 and 1910 totals of the figures for irrigation on reservations as presented in this report.

*Change of boundaries.*—In comparing the data secured in 1910 with those of 1900, the following changes in county boundaries should be considered: Lincoln County was organized from a part of Flathead County in 1909; Powell County was organized from a part of Deer Lodge County in 1901; Rosebud County was organized from parts of Custer County and Crow Indian Reservation in 1901; Sanders County was organized from a part of Missoula County in 1906; and a part of Silver Bow County was annexed to Deer Lodge County in 1903. Through a relocation of the boundary line between Idaho and Montana 272,000 acres which were in Idaho in 1900 are now in Beaverhead, Gallatin, and Madison Counties, Mont.



ACREAGE IRRIGATED, EXTENT AND COST OF IRRIGATION ENTERPRISES, AND COST OF OPERATION AND MAINTENANCE, BY COUNTIES: 1909 AND 1910—Continued.

[Comparative data for 1899 in italics.]

Table with columns for counties: Fergus, Flathead, Gallatin, Granite, Jefferson, Lewis and Clark, Lincoln, Madison, Meagher, and Missoula. Rows include: Number of all farms in 1910, Land and Farm Area, Acreage Irrigated and Included in Projects (classified by character of enterprise), Acreage Irrigated (classified by source of water supply), Irrigation Enterprises, and Cost (cost of enterprises up to July 1, 1910, and operation and maintenance).

1 Change of boundary. (See explanation at close of text.)

2 Decrease.

ACREAGE IRRIGATED, EXTENT AND COST OF IRRIGATION ENTERPRISES, AND COST OF OPERATION AND MAINTENANCE, BY COUNTIES: 1909 AND 1910—Continued.

[Comparative data for 1899 in italics.]

	Park.	Powell.	Ravall.	Rosebud.	Sanders.	Silver Bow.	Sweet Grass.	Teton.	Valley.	Yellow-stones.
1										
2	730	377	1,055	961	211	230	473	1,187	1,946	1,812
3	463	278	975	179	62	84	332	179	179	800
4	63.4	73.7	92.4	18.6	29.4	36.5	70.2	15.1	9.2	44.2
5	415	(1)	304	(1)	(1)	161	326	176	50	285
6	11.6		21.3				1.8	2.3	268.0	180.7
<b>LAND AND FARM AREA</b>										
7	1,712,000	1,637,760	1,566,080	6,184,320	1,829,760	446,720	1,867,520	4,851,840	8,649,600	3,666,560
8	523,317	370,984	209,206	900,810	55,917	54,592	457,715	530,714	576,130	1,215,046
9	110,902	69,350	106,693	53,857	12,421	16,547	107,563	217,052	165,043	240,288
10	78,722	51,373	93,441	33,271	3,101	7,385	58,963	99,711	52,320	97,420
11	4.6	3.1	6.0	0.5	0.2	1.7	3.2	2.1	0.6	2.7
12	15.0	13.8	44.7	3.7	5.5	13.5	12.9	18.8	9.1	8.0
13	71.0	74.1	87.6	61.8	25.0	44.6	54.8	45.9	31.7	40.5
14	69,017	(1)	67,249	(1)	(1)	10,049	37,494	50,784	8,878	35,304
15	163.1		38.9				57.3	223.9	429.7	175.5
16	90,862	60,643	118,984	64,452	4,101	8,640	82,978	140,444	64,261	182,888
	149,533	81,960	202,290	92,217	9,812	10,059	142,178	362,186	203,256	220,206
<b>ACREAGE IRRIGATED AND INCLUDED IN PROJECTS</b>										
<b>CLASSIFIED BY CHARACTER OF ENTERPRISE.</b>										
17	U. S. Reclamation Service, irrigated in 1909									
18	Enterprises were capable of irrigating in 1910									
19	Included in projects									
20	U. S. Indian Service, irrigated in 1909									
21	Enterprises were capable of irrigating in 1910									
22	Included in projects									
23	Cary Act enterprises, irrigated in 1909									
24	Enterprises were capable of irrigating in 1910									
25	Included in projects									
26	Irrigation districts, irrigated in 1909									
27	Enterprises were capable of irrigating in 1910									
28	Included in projects									
29	Cooperative enterprises, irrigated in 1909									
30	Enterprises were capable of irrigating in 1910									
31	Included in projects									
32	Commercial enterprises, irrigated in 1909									
33	Enterprises were capable of irrigating in 1910									
34	Included in projects									
35	Individual and partnership enterprises, irrigated in 1909									
36	Enterprises were capable of irrigating in 1910									
37	Included in projects									
<b>ACREAGE IRRIGATED</b>										
<b>CLASSIFIED BY SOURCE OF WATER SUPPLY.</b>										
38	Supplied from streams									
39	By gravity									
40	By pumping									
41	Supplied from lakes									
42	By gravity									
43	By pumping									
44	Supplied from wells									
45	Flowing									
46	By pumping									
47	Supplied from springs									
48	Supplied from reservoirs									
49	Total acreage supplied by pumping									
<b>IRRIGATION ENTERPRISES</b>										
50	Independent enterprises									
51	Number in 1899									
52	Per cent of increase, 1899-1910									
53	Main ditches									
54	Number in 1899									
55	Per cent of increase, 1899-1910									
56	Length									
57	Length in 1899									
58	Per cent of increase, 1899-1910									
59	Capacity									
60	Laterals									
61	Length									
62	Reservoirs									
63	Capacity									
64	Flowing wells									
65	Capacity									
66	Pumped wells									
67	Capacity									
68	Pumping plants									
69	Engine capacity									
70	Pump capacity									
<b>COST</b>										
71	Cost of enterprises up to July 1, 1910									
72	Cost in 1899									
73	Per cent of increase, 1899-1910									
74	Average cost per acre enterprises were capable of irrigating in 1910									
75	Average cost per acre irrigated in 1899									
76	Estimated final cost of existing enterprises									
77	Average per acre included in projects									
<b>OPERATION AND MAINTENANCE</b>										
78	Acreage for which cost is reported									
79	Total cost reported									
80	Average per acre for which cost is reported									
81	Average cost per acre in 1899									
82	Per cent of increase, 1899-1909									

\* Not reported by counties.

## CHAPTER 5.

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

**Introduction.**—This chapter gives the statistics of manufactures for the state of Montana 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 for the state. It also gives the same items for all industries combined for every city, except Great Falls, having in 1910 a population of over 10,000.

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 all industries combined for each city having from 10,000 to 50,000 inhabitants, with the exception of Great Falls, omitted to avoid disclosure of individual operations.

**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 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.**—Montana, with a land area of 146,201 square miles, ranks third in size among the states of the Union. Its population in 1910 was 376,053, as compared with 243,329 in 1900 and 142,924 in 1890. It ranked fortieth among the 49 states and territories of continental United States as regards population in 1910 and forty-third in 1900. Thirty-five and five-tenths per cent of the entire population of the state resides in incorporated cities and towns having populations of 2,500 inhabitants or over, as against 34.7 per cent in 1900.

The state has six cities each having a population of over 10,000: Butte, with a population of 39,165; Great Falls, with 13,948; Missoula, with 12,869; Helena, with 12,515; Anaconda, with 10,134; and Billings, with 10,031. The density of population, which is only 2.6 persons per square mile, shows the state to be but sparsely settled. The corresponding figure for 1900 was 1.7 persons.

Eastern Montana is a high plateau devoted mainly to stock raising, is very sparsely settled, with no large cities and with very limited railway facilities. The

western part of the state is mountainous, more largely a mining and manufacturing community, with several cities of commercial importance, and has better transportation facilities than the eastern section of the state. There are no navigable rivers of great importance in the state, but several mountain streams are important because of the development of their water power and their use in irrigation.

**Importance and growth of manufactures.**—Although Montana is not relatively important as a manufacturing community, at the last two censuses the manufactures of the state have shown, on the whole, considerable increase. The industries of the state are those to which its natural resources give rise, the principal ones being mining, agriculture, and stock raising. Its principal manufacturing industries are those supplementary to its mining interests.

The following table gives the most important figures relative to all classes of manufactures combined for the state as returned at the censuses of 1909, 1904, and 1899, together with the percentages of increase from census to census:

	NUMBER OR AMOUNT.			PER CENT OF INCREASE. <sup>1</sup>	
	1909	1904	1899	1904-1909	1899-1904
Number of establishments.....	677	332	395	77.2	-3.3
Persons engaged in manufactures.....	13,694	10,196	( <sup>2</sup> )	34.3	.....
Proprietors and firm members.....	659	334	( <sup>2</sup> )	97.3	.....
Salaried employees.....	1,380	905	508	52.5	78.1
Wage earners (average number).....	11,655	8,957	9,854	30.1	-9.1
Primary horsepower.....	90,402	46,736	43,679	93.4	7.0
Capital.....	\$44,588,000	\$52,590,000	\$38,225,000	-15.2	37.6
Expenses.....	66,830,000	55,140,000	39,817,000	21.2	38.5
Services.....	12,955,000	10,158,000	8,163,000	27.5	24.4
Salaries.....	2,054,000	1,506,000	786,000	36.4	91.6
Wages.....	10,901,000	8,652,000	7,377,000	26.0	17.3
Materials.....	49,180,000	40,930,000	30,068,000	20.2	36.1
Miscellaneous.....	4,695,000	4,052,000	1,586,000	15.8	155.5
Value of products.....	73,272,000	66,415,000	52,745,000	10.3	25.9
Value added by manufacture (value of products less cost of materials).....	24,092,000	25,485,000	22,677,000	-5.5	12.4

<sup>1</sup> A minus sign (-) denotes decrease.

<sup>2</sup> Figures not available.

In 1909 the state of Montana had 677 manufacturing establishments, which gave employment to an average of 13,694 persons during the year and paid out \$12,955,000 in salaries and wages. Of the persons employed, 11,655 were wage earners. These establishments turned out products to the value of \$73,272,000, to produce which materials costing \$49,180,000 were consumed. The value added by manufacture was thus \$24,092,000, 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 Montana as a whole showed considerable growth during both the five year periods 1899-1904 and 1904-1909. During the later period the number of establishments increased 77.2 per cent and the average number of wage earners



30.1 per cent, but while the value of products increased 10.3 per cent the value added by manufacture decreased 5.5 per cent. The decrease in value added by manufacture is accounted for largely by conditions in the copper smelting and refining industry. In this industry the establishments are generally operated as departments of the mining companies which produce

the ore, and hence the cost of materials charged against them by the mining companies is often a matter of bookkeeping and has varied greatly in its relation to the value of products at the last three censuses.

The relative importance and growth of the leading manufacturing industries of the state are shown in the following table:

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. <sup>1</sup>			
		Average number.	Percent distribution.	Amount.	Percent distribution.	Amount.	Percent distribution.	Value of products.		Value added by manufacture.	
								1904-1909	1899-1904	1904-1909	1899-1904
All industries.....	677	11,655	100.0	\$73,272,000	100.0	\$24,092,000	100.0	10.3	25.9	-5.5	12.4
Lumber and timber products.....	155	3,106	26.6	6,334,000	8.6	4,460,000	18.5	102.9	2.5	67.6	31.4
Cars and general shop construction and repairs by steam-railroad companies.....	12	1,913	16.4	2,811,000	3.8	1,725,000	7.2	78.3	108.5	91.2	99.1
Liquors, malt.....	21	240	2.1	2,440,000	3.3	1,838,000	7.6	40.9	35.7	47.6	38.3
Flour-mill and gristmill products.....	12	105	0.9	2,175,000	3.0	482,000	2.0	8.6	113.8	17.3	152.1
Printing and publishing.....	135	691	5.9	2,111,000	2.9	1,708,000	7.1	42.0	51.6	44.7	49.9
Slaughtering and meat packing.....	9	105	0.9	2,054,000	2.8	273,000	1.1				
Bread and other bakery products.....	71	214	1.8	1,098,000	1.5	478,000	2.0	48.1	77.0	23.5	80.8
Foundry and machine-shop products.....	14	316	2.7	986,000	1.3	605,000	2.5	13.1	-27.2	18.9	-33.3
Brick and tile.....	21	189	1.6	371,000	0.5	288,000	1.2	107.3	33.6	104.3	35.6
Tobacco manufactures.....	53	91	0.8	320,000	0.4	188,000	0.8	18.1	55.7	13.3	59.6
Marble and stone work.....	21	78	0.7	230,000	0.3	173,000	0.7				
Leather goods.....	16	36	0.3	192,000	0.3	108,000	0.4				
Copper, tin, and sheet-iron products.....	9	31	0.3	137,000	0.2	72,000	0.3	101.5		166.7	
All other industries.....	128	4,534	38.9	52,015,000	71.0	11,685,000	48.5				

<sup>1</sup> Percentages are based on figures in Table I; a minus sign (-) denotes decrease. Where the percentages are omitted, comparable figures can not be given.

The most important industries listed in this table, in which they are arranged in the order of the value of products, call for brief consideration. It should be stated in this connection that statistics for copper smelting and refining, by far the most important manufacturing industry in the state, can not be shown, because to do so would tend to disclose the operations of individual establishments. The industries for which figures are shown in this table, with possibly one exception, have apparently been established to meet the local demand for their products.

*Lumber and timber products.*—This is the most important manufacturing industry for which figures are shown. In 1909 it gave employment to an average of 3,106 wage earners, or 26.6 per cent of the total number for all industries, and its products amounted to \$6,334,000, forming 8.6 per cent of the total. The statistics showing number of wage earners, amount paid in wages, and value of products all indicate a considerable growth of the industry. The classification includes the operation of timber plants, sawmills, and planing mills, most of which are in the wooded rural regions of the state.

*Cars and general shop construction and repairs by steam railroad companies.*—This industry embraces the work done in the car shops operated by steam-railroad

companies and does not include minor repairs made at the roundhouses. The operations consist almost exclusively of repairs to rolling stock and equipment. In 1909 the industry gave employment to an average of 1,913 wage earners, or 16.4 per cent of the total for the state, and the value of its products, \$2,811,000, formed 3.8 per cent of the total for the state.

*Liquors, malt.*—This industry shows a steady growth in value of products and value added by manufacture for the last two census periods. The percentage of increase in value of products for the five-year period 1904-1909 was 40.9; that for the five-year period 1899-1904 was 35.7. The corresponding increases in value added by manufacture were 47.6 per cent and 38.3 per cent, respectively.

*Flour-mill and gristmill products.*—Between 1899 and 1904 this industry grew rapidly both in value of products and value added by manufacture; but the growth was largely arrested in the period 1904-1909, and the percentages of increase in value of products and value added by manufacture were small. Because of the comparatively simple processes involved and the extent to which these processes are carried on by machinery, the value added by manufacture is small compared with the gross value of products.

Measured by value added by manufacture these specified industries show certain changes in their relative rank when measured by value of products. Malt liquors becomes second in order of importance instead of steam-railroad repair shops, which in turn becomes third, and printing and publishing takes the place of the flour-mill and gristmill industry, which falls to sixth place.

A comparison of the rates of increase for the seven leading specified industries shows that steam-railroad repair shops increased at a greater rate from 1904 to 1909 in value added by manufacture than any other, namely, 91.2 per cent, while lumber and timber products showed the greatest increase for the same period in value of products, namely, 102.9 per cent. Brick and tile, and copper, tin, and sheet-iron products, industries of minor importance, also showed marked increases both in gross value of products and in value added by manufacture.

Each of the 13 industries for which the figures are given showed increases in value of products and in value added by manufacture from 1899 to 1904 and from 1904 to 1909, with the exception of foundry and machine-shop products, which industry showed decreases in both items for the former period.

In addition to the 13 industries presented separately there were 13 industries which had a value of product in 1909 in excess of \$100,000. They are included with all other industries, because in some instances if they were shown separately the operations of individual establishments would be disclosed; in others, 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 industries of similar character; while for others, comparable statistics for the different census years can not be presented without disclosing the operations of individual establishments or on account of changes in classification. These industries are: Artificial stone; beet sugar; butter, cheese, and condensed milk; coffee and spice, roasting and grinding; coke; confectionery; gas, illuminating and heating; malt; mineral and soda waters; pottery, terra-cotta, and fire-clay products; smelting and refining, copper; smelting and refining, lead; and soap. Statistics for 1909 for 3 of these industries—artificial stone; butter, cheese, and condensed milk; and gas—are presented in Table II.

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.....	13,694	13,387	307
Proprietors and officials.....	1,143	1,126	17
Proprietors and firm members.....	659	645	14
Salaried officers of corporations.....	89	88	1
Superintendents and managers.....	395	393	2
Clerks.....	896	796	100
Wage earners (average number).....	11,655	11,465	190
16 years of age and over.....	11,625	11,436	189
Under 16 years of age.....	30	29	1

The average number of persons engaged in manufactures during 1909 was 13,694, of whom 11,655 were wage earners. Of the remainder, 1,143 were proprietors and officials and 896 were clerks. Corresponding figures for individual industries will be found in Table II.

The following 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 seven important industries individually.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries.....	13,694	8.3	6.5	85.1
Bread and other bakery products.....	324	25.6	8.3	66.0
Cars and general shop construction and repairs by steam-railroad companies....	2,084	3.0	5.2	91.8
Flour-mill and gristmill products.....	152	12.5	18.4	69.1
Foundry and machine-shop products.....	372	8.1	7.0	84.9
Liquors, malt.....	349	17.2	12.3	70.5
Lumber and timber products.....	3,452	7.4	2.7	90.0
Printing and publishing.....	1,046	16.1	17.9	66.1
All other industries.....	5,915	7.9	6.5	85.6

Of the total number of persons engaged in all manufacturing industries, 8.3 per cent were proprietors and officials, 6.5 per cent clerks, and 85.1 per cent wage earners. In the bakery industry the majority of the establishments are small and the work is done to a large extent by the proprietors or their immediate representatives, so that the proportion of persons engaged in the industry falling in the class of proprietors and officials is very much higher than for most other industries or for all industries combined. Similar conditions prevailed to some extent in the manu-

facture of malt liquors, in printing and publishing, and in the manufacture of flour-mill and gristmill products, in which industries the percentages of proprietors and officials were 17.2, 16.1, and 12.5, respectively. The railroad repair-shop industry shows the smallest percentage of proprietors and officials, this being due partly to the fact that the establishments in this industry were under corporate ownership, and so reported no proprietors; and partly to the fact that the officials of the railroad companies are not as a rule assigned to this particular branch of the work.

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 the 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 total number employed for the year is also given in each case.

INDUSTRY.	WAGE EARNERS.			
	Average number. <sup>1</sup>	Per cent of total.		
		16 years of age and over.		Under 16 years of age.
		Male.	Female.	
All industries .....	11,655	98.1	1.6	0.3
Bread and other bakery products.....	214	72.0	28.0	.....
Cars and general shop construction and repairs by steam-railroad companies.....	1,913	99.8	.....	0.2
Flour-mill and gristmill products.....	105	99.0	1.0	.....
Foundry and machine-shop products.....	316	100.0	.....	.....
Liquors, malt.....	246	100.0	.....	.....
Lumber and timber products.....	3,100	99.6	0.2	0.2
Printing and publishing.....	991	88.9	9.6	1.5
All other industries.....	5,064	98.7	1.1	0.2

<sup>1</sup> For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see Introduction.

For all industries combined, 98.1 per cent of the average number of wage earners were males 16 years of age and over; 1.6 per cent females 16 years of age and over; and but three-tenths of 1 per cent persons under the age of 16. The largest proportion of women, 28 per cent, was employed in bakeries; while the largest percentage of children, 1.5 per cent, was employed in the printing and publishing industry.

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 next table makes this comparison according to occupational status.

CLASS.	PERSONS ENGAGED IN MANUFACTURES.				Per cent of increase, 1904-1909.
	1909		1904		
	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total.....	13,694	100.0	10,196	100.0	34.8
Proprietors and firm members.....	659	4.8	334	3.3	97.3
Salaried employees.....	1,389	10.1	905	8.9	52.5
Wage earners (average number).....	11,655	85.1	8,957	87.8	30.1

Comparable figures are not obtainable for 1899. The table shows increases in the percentages of distribution of proprietors and firm members and salaried employees, and a decrease in the proportion of wage earners. The increased percentage of proprietors is due to the increase in the number of small establishments under individual and firm ownership.

The following 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.....	11,655	100.0	8,957	100.0	9,854	100.0
16 years of age and over:						
Male.....	11,430	98.1	8,755	97.7	9,662	98.1
Female.....	189	1.6	143	1.6	86	0.9
Under 16 years of age.....	30	0.3	59	0.7	100	1.1

This table indicates that for all industries combined there has been a decrease during the 10 years in the employment of children under 16 years of age. There has not been much change in the proportion of male and female wage earners; the proportion of women increased slightly from 1899 to 1904, but remained unchanged during the latter five-year period. In 1909, as in 1899, males 16 years of age and over formed 98.1 per cent of all wage earners, as compared with 97.7 in 1904.

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 lumber and timber 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 one month. In Table II, page 650, is shown, for practically

all of the important industries in the state, the largest number and also the smallest number of wage earners reported for any month. The figures are for the 15th day, or the nearest representative day, of the month.

The wage earners for the lumber industry are divided in the table in such a manner as to show separately the number engaged in the mills and in the logging operations.

MONTH.	WAGE EARNERS.									
	All industries.		Lumber and timber products.						All other industries.	
			Total.		In mills.		In logging operations.			
	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.
January.....	10,873	82.8	2,904	77.0	900	41.4	2,004	99.7	7,969	85.0
February.....	10,772	82.1	2,839	75.2	1,005	46.2	1,834	91.2	7,933	84.6
March.....	10,900	83.0	2,723	72.2	1,260	58.0	1,463	72.7	8,177	87.2
April.....	10,874	82.8	2,673	70.8	1,941	89.3	732	36.4	8,201	87.5
May.....	11,292	86.0	2,989	79.2	2,173	100.0	816	40.6	8,203	88.6
June.....	11,195	85.3	2,885	78.5	2,015	92.7	870	43.3	8,310	88.7
July.....	11,550	88.0	2,791	74.0	1,984	91.3	807	40.1	8,759	93.5
August.....	11,841	90.2	3,188	84.5	2,039	93.8	1,149	57.1	8,653	92.3
September.....	12,435	94.7	3,399	90.1	2,036	93.7	1,363	67.8	9,036	96.4
October.....	13,127	100.0	3,755	99.5	2,070	95.3	1,685	83.8	9,372	100.0
November.....	12,996	99.0	3,773	100.0	1,812	83.4	1,961	97.5	9,223	98.4
December.....	12,003	91.4	3,348	88.7	1,337	61.5	2,011	100.0	8,655	92.3

The lumber and timber industry is to a considerable extent a seasonal industry, especially when separated into logging and milling operations. This industry reports the second largest average number of wage earners of any industry in the state, and its totals, therefore, affect considerably the totals for all industries combined. From 2,673 wage earners in April, the month of least activity, the average number increased to 3,773 in November, the month in which the greatest number was employed. The manufacture of brick and tile and beet sugar are other seasonal industries of the state, which, however, did not employ sufficient numbers of wage earners to influence greatly the

movement of the total employment for all industries. For all industries combined, employment was fairly regular, although there was a general increase from April to October.

Prevailing hours of labor.—In the following table wage earners have been classified according to 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.

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.....	11,655	1,607	154	3,285	4,195	1,968	429	12	14
Bread and other bakery products.....	214	44	.....	39	11	98	.....	8	9
Brick and tile.....	189	131	.....	33	4	21	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	1,913	.....	148	1,333	105	74	253	.....	.....
Flour-mill and gristmill products.....	105	59	.....	36	.....	10	.....	.....	.....
Foundry and machine-shop products.....	316	275	.....	37	4	.....	.....	.....	.....
Liquors, malt.....	246	199	.....	3	41	2	1	.....	.....
Lumber and timber products.....	3,106	38	.....	1,551	9	1,367	141	.....	.....
Marble and stone work.....	78	77	.....	.....	.....	1	.....	.....	.....
Printing and publishing.....	691	339	5	177	164	6	.....	.....	.....
Slaughtering and meat packing.....	105	23	.....	.....	.....	82	.....	.....	.....
Tobacco manufactures.....	91	90	.....	.....	.....	1	.....	.....	.....
All other industries.....	4,601	332	1	76	3,857	304	22	4	5

For the great majority of wage earners employed in the manufacturing industries of Montana the hours of labor range from 54 to 60 a week, inclusive, or from 9 to 10 a day; 15.1 per cent of the total being

employed where less than 9 hours a day prevail and only 3.8 per cent where more than 10 hours a day prevail.

**Location of establishments.**—A tabular statement separating manufactures in the larger cities from those of outside districts can not be shown because comparable statistics are available for Butte and Helena only, and to show the statistics for Great Falls for 1909 would disclose the operations of individual establishments. (See Introduction.) General statistics of cities, except those for Great Falls, are shown in Table I.

In 1909 only 9.2 per cent of the total value of products for the state and only 15.7 per cent of the average number of wage earners were reported from the five cities having over 10,000 inhabitants, for which totals are shown. During the 10-year period, however, the manufactures of these cities gained on those of the rural districts in every respect.

Great Falls, with its large copper smelters, is the only one of the six cities in which is located a distinctive industry of importance. The industries of most prominence in the other cities are bread and other bakery products, malt liquors, printing and publishing, and slaughtering and meat packing. The statistics of prior censuses show that the rate of growth of manufactures in Butte, as measured by the percentage of increase in value of products, was greater in the five-year period 1904-1909, than in the earlier period, 1899-1904, while in Helena the greater growth was in the earlier years.

**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.

The most important distinction shown is that between corporate and all other forms of ownership. In 1909, 30 per cent of the total number of manufacturing establishments were under corporate ownership. In 1904 the corresponding figure was 30.9 per cent. As measured by value of products and value added by manufacture, corporations show decreases of 2 per cent and 5.6 per cent, respectively, for the five-year period 1904-1909.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
<b>ALL INDUSTRIES:</b>				
1909.....	677	11,655	\$73,271,793	\$24,081,554
1904.....	382	8,957	66,415,452	26,485,392
Individual:				
1909.....	352	1,108	3,265,067	2,106,309
1904.....	204	710	1,892,491	1,137,764
Firm:				
1909.....	112	404	1,424,052	904,781
1904.....	57	370	1,150,688	639,133
Corporation:				
1909.....	203	10,041	68,458,197	21,059,121
1904.....	118	7,877	63,369,703	23,705,925
Other:				
1909.....	10	12	124,477	21,343
1904.....	3	.....	2,570	2,570
Per cent of total:				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
Individual:				
1909.....	52.0	9.5	4.5	8.7
1904.....	53.4	7.9	2.8	4.5
Firm:				
1909.....	16.5	4.2	1.9	3.8
1904.....	14.9	4.1	1.7	2.5
Corporation:				
1909.....	30.0	86.2	93.4	87.4
1904.....	30.9	87.9	95.4	93.0
Other:				
1909.....	1.5	0.1	0.2	0.1
1904.....	0.8	.....	( <sup>1</sup> )	( <sup>1</sup> )
<b>Bread and other bakery products, 1909.....</b>				
Individual.....	71	214	\$1,095,838	\$476,328
Firm.....	54	99	533,985	203,796
Corporation.....	13	17	128,181	58,608
.....	4	98	425,672	155,924
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	76.1	46.3	49.2	55.1
Firm.....	18.3	7.0	11.7	12.3
Corporation.....	5.6	45.8	39.1	32.6
<b>Liquors, malt, 1909.....</b>				
Individual <sup>1</sup> .....	21	246	\$2,439,532	\$1,337,472
Corporation.....	5	19	110,070	84,850
.....	16	227	2,329,756	1,752,622
Per cent of total.....	100.0	100.0	100.0	100.0
Individual <sup>2</sup> .....	23.8	7.7	4.8	4.6
Corporation.....	76.2	92.3	95.2	95.4
<b>Lumber and timber products, 1909.....</b>				
Individual.....	155	3,106	\$6,333,778	\$4,468,833
Firm.....	85	449	793,138	589,597
Corporation.....	35	324	626,625	497,950
.....	35	2,333	4,914,015	3,881,346
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	54.8	14.5	12.5	13.2
Firm.....	22.0	10.4	9.9	11.1
Corporation.....	22.6	75.1	77.6	75.7
<b>Printing and publishing, 1909.....</b>				
Individual.....	135	691	\$2,111,329	\$1,708,569
Firm.....	78	191	537,093	435,760
Corporation.....	16	82	104,087	85,907
.....	41	468	1,469,449	1,186,912
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	57.8	27.6	25.5	25.5
Firm.....	11.8	4.0	4.9	5.0
Corporation.....	30.4	67.7	69.6	69.5

<sup>1</sup> Less than one-tenth of 1 per cent.

<sup>2</sup> Includes the group "Firm," to avoid disclosure of individual operations.

<sup>3</sup> Includes the group "Other," to avoid disclosure of individual operations.

**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 following 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 im-

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portant 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 certain important industries figures are given for 1909 only.

Of the 677 establishments reported in 1909, only 6, or nine-tenths of 1 per cent, each had a value of products exceeding \$1,000,000. These establishments, however, employed an average of 4,130 wage earners, or 35.4 per cent of the total number in all establishments, and reported 68.1 per cent of the total value of products and 45.5 per cent of the total value added by manufacture.

The very small establishments—that is, those having a value of products of less than \$5,000—although constituting 38.6 per cent of the total number of establishments, produced only nine-tenths of 1 per cent of the total value of products. Most of the manufacturing was carried on in establishments which reported a product valued at not less than \$100,000.

During the five years the average value of products per establishment decreased from \$173,862 to \$108,230, the value added by manufacture from \$66,716 to \$35,586, and the average number of wage earners from 23 to 17. These decreases are undoubtedly caused to a great extent by the large increase in the number of establishments employing but few wage earners and having small value of products. The table shows further that the baking and printing and publishing industries in Montana are conducted chiefly in the smaller establishments, while the lumber and timber industry is conducted mainly in larger establishments.

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 seven important industries individually, and gives not only the number of establishments falling in each group but also the average number of wage earners employed.

The per cent distribution of the number of establishments is not shown in this table. Of the 677 establishments reported for all industries, 13.6 per cent employed no wage earners; 61.2 per cent, 1 to 5; 14.6 per cent, 6 to 20; and 5.5 per cent, 21 to 50. The most numerous single group consists of the 414 establishments employing from 1 to 5 wage earners; the next being the group of 99 establishments employing from 6 to 20 wage earners. There were 10 establishments that employed over 250 wage earners, 3 of which employed over 500 each.

Of the total number of wage earners, 50.5 per cent were in establishments employing over 250 wage earners. The single group having the largest number of employees was the group comprising the establishments employing from 251 to 500 wage earners. This group employed 2,363 wage earners, or 20.3 per cent of the total. Most of the railroad repair shops are comparatively large establishments.

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
<b>ALL INDUSTRIES:</b>				
1909.....	677	11,655	\$73,271,793	\$24,091,554
1904.....	382	8,957	66,416,452	25,485,392
<b>Less than \$5,000:</b>				
1909.....	261	227	649,143	457,008
1904.....	124	106	325,145	228,101
<b>\$5,000 and less than \$20,000:</b>				
1909.....	236	754	2,437,212	1,535,233
1904.....	162	556	1,571,629	1,036,951
<b>\$20,000 and less than \$100,000:</b>				
1909.....	118	1,708	5,092,318	3,108,691
1904.....	66	1,354	3,246,226	2,066,633
<b>\$100,000 and less than \$1,000,000:</b>				
1909.....	56	4,836	15,221,904	8,024,645
1904.....	34	3,096	8,726,954	5,089,845
<b>\$1,000,000 and over:</b>				
1909.....	6	4,130	49,871,216	10,965,927
1904.....	6	3,845	52,545,498	17,083,862
<b>Per cent of total:</b>				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
<b>Less than \$5,000:</b>				
1909.....	38.6	1.9	0.9	1.9
1904.....	32.5	1.2	0.5	0.9
<b>\$5,000 and less than \$20,000:</b>				
1909.....	34.9	6.5	3.3	6.4
1904.....	39.8	6.2	2.4	4.1
<b>\$20,000 and less than \$100,000:</b>				
1909.....	17.4	14.7	6.9	12.9
1904.....	17.3	15.1	4.9	8.1
<b>\$100,000 and less than \$1,000,000:</b>				
1909.....	8.3	41.5	20.8	33.3
1904.....	8.9	34.6	13.1	20.0
<b>\$1,000,000 and over:</b>				
1909.....	0.9	35.4	68.1	45.5
1904.....	1.6	42.9	79.1	67.0
<b>Average per establishment:</b>				
1909.....	17	17	\$108,230	\$35,586
1904.....	23	23	173,862	66,716
<b>Bread and other bakery products, 1909.....</b>	71	214	\$1,095,838	\$478,328
Less than \$5,000.....	21	4	43,689	24,017
\$5,000 and less than \$20,000.....	40	80	430,862	197,949
\$20,000 and less than \$100,000 <sup>1</sup> .....	10	130	616,287	256,360
<b>Per cent of total.....</b>	100.0	100.0	100.0	100.0
Less than \$5,000.....	29.6	1.9	4.4	5.0
\$5,000 and less than \$20,000.....	56.3	37.4	39.3	41.4
\$20,000 and less than \$100,000 <sup>1</sup> .....	14.1	60.7	56.2	53.6
<b>Average per establishment.....</b>	17	3	\$15,434	\$6,737
<b>Liquors, malt, 1909.....</b>	21	248	\$2,439,832	\$1,837,472
\$5,000 and less than \$20,000 <sup>2</sup> .....	6	13	61,986	45,658
\$20,000 and less than \$100,000.....	6	52	410,314	305,925
\$100,000 and less than \$1,000,000.....	9	181	1,967,532	1,485,889
<b>Per cent of total.....</b>	100.0	100.0	100.0	100.0
\$5,000 and less than \$20,000 <sup>2</sup> .....	28.6	5.3	2.5	2.5
\$20,000 and less than \$100,000.....	28.6	21.1	16.8	16.6
\$100,000 and less than \$1,000,000.....	42.9	73.6	80.6	80.9
<b>Average per establishment.....</b>	12	12	\$116,182	\$87,499
<b>Lumber and timber products, 1909.....</b>	155	3,106	\$6,333,778	\$4,468,893
Less than \$5,000.....	65	89	144,414	111,005
\$5,000 and less than \$20,000.....	46	231	470,598	323,737
\$20,000 and less than \$100,000.....	32	682	1,288,400	908,078
\$100,000 and less than \$1,000,000 <sup>3</sup> .....	12	2,104	4,470,366	3,129,073
<b>Per cent of total.....</b>	100.0	100.0	100.0	100.0
Less than \$5,000.....	41.9	2.9	2.3	2.5
\$5,000 and less than \$20,000.....	29.7	7.4	7.4	7.2
\$20,000 and less than \$100,000.....	20.6	22.0	19.7	20.3
\$100,000 and less than \$1,000,000 <sup>3</sup> .....	7.7	67.7	70.6	70.0
<b>Average per establishment.....</b>	20	20	\$40,863	\$28,832
<b>Printing and publishing, 1909.....</b>	135	691	\$2,111,229	\$1,708,569
Less than \$5,000.....	71	68	203,431	104,437
\$5,000 and less than \$20,000.....	45	149	442,454	348,045
\$20,000 and less than \$100,000.....	15	242	740,338	613,436
\$100,000 and less than \$1,000,000.....	4	232	724,976	582,651
<b>Per cent of total.....</b>	100.0	100.0	100.0	100.0
Less than \$5,000.....	52.6	9.8	9.6	9.0
\$5,000 and less than \$20,000.....	33.3	21.6	21.0	20.4
\$20,000 and less than \$100,000.....	11.1	35.0	35.1	35.9
\$100,000 and less than \$1,000,000.....	3.0	33.6	34.3	34.1
<b>Average per establishment.....</b>	8	8	\$15,639	\$12,656

<sup>1</sup> Includes the group "\$100,000 and less than \$1,000,000."  
<sup>2</sup> Includes the group "Less than \$5,000."  
<sup>3</sup> Includes the group "\$1,000,000 and over."

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.....	677	92	414	99	37	15	10	7	2	1
Bread and other bakery products.....	71	13	43	4		1				
Cars and general shop construction and repairs by steam-railroad companies.....	12				1	4	4	3		
Flour-mill and gristmill products.....	12		7	3	2					
Foundry and machine-shop products.....	14		7	3	3		1			
Liquors, malt.....	21		5	10	3					
Lumber and timber products.....	155	5	91	35	12	5	4	2	1	
Printing and publishing.....	135	24	92	11	5	3				
All other industries.....	257	45	161	33	11	2	1	2	1	1
AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	11,655		900	1,100	1,104	1,182	1,491	2,363	1,514	2,001
Bread and other bakery products.....	214		102	36		70				
Cars and general shop construction and repairs by steam-railroad companies.....	1,913				21	301	528	1,063		
Flour-mill and gristmill products.....	105		16	41	48					
Foundry and machine-shop products.....	318		22	37	99		155			
Liquors, malt.....	248		21	151	74					
Lumber and timber products.....	3,109		190	376	376	470	603	527	550	
Printing and publishing.....	691		207	101	178	205				
All other industries.....	5,064		342	358	308	121	197	773	964	2,001
PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	100.0		7.7	9.4	9.5	10.1	12.8	20.3	13.0	17.2
Bread and other bakery products.....	100.0		47.7	16.8		35.5				
Cars and general shop construction and repairs by steam-railroad companies.....	100.0				1.1	15.7	27.6	55.6		
Flour-mill and gristmill products.....	100.0		15.2	39.0	45.7					
Foundry and machine-shop products.....	100.0		7.0	11.7	31.3		50.0			
Liquors, malt.....	100.0		8.5	61.4	30.1					
Lumber and timber products.....	100.0		6.1	12.1	12.1	15.4	19.6	17.0	17.7	
Printing and publishing.....	100.0		30.0	14.6	25.8	29.7				
All other industries.....	100.0		6.8	7.1	6.1	2.4	3.0	15.3	19.0	39.5

**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 following table shows, in percentages, for 1909, 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.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries.....	3.1	16.3	73.6	7.0
Bread and other bakery products.....	3.0	18.3	68.5	10.3
Cars and general shop construction and repairs by steam-railroad companies.....	5.9	54.7	38.6	0.8
Flour-mill and gristmill products.....	2.7	5.3	84.9	7.1
Foundry and machine-shop products.....	7.6	41.9	45.1	5.4
Liquors, malt.....	12.0	19.2	32.3	36.4
Lumber and timber products.....	5.0	40.9	34.9	19.2
Printing and publishing.....	16.8	39.1	23.0	21.1
All other industries.....	1.9	10.7	82.9	4.5

This table shows that, for all industries combined, 73.6 per cent of the total expense was incurred for materials, 19.4 per cent for services—that is, salaries and wages—and but 7 per cent for other purposes. As

would be expected, these proportions vary greatly in the different industries. The large percentage shown for miscellaneous expenses for malt liquors is explained by the fact that this item includes internal-revenue taxes.

**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.

As shown in the table, the amount of primary power used increased from 43,679 horsepower in 1899 to 90,402 in 1909. The greatest increase, both absolute and relative, was in electric power rented, of which 26,879 horsepower was reported in 1909, an increase of 1,259 horsepower over 1899. Steam was still the dominant power in 1909, although the proportion which this formed of the total decreased from 73.3 per cent in 1899 to 54.9 per cent in 1909. The use of electric motors for the purpose of applying the power generated within the establishments showed a considerable increase from 1899 to 1904, but a large decrease from 1904 to 1909, the horsepower of such motors increasing from 1,988 in 1899 to 4,081 in 1904 and decreasing to 797 in 1909. The cause of the decrease lies in the fact that some of the large manufacturing establishments, particularly those engaged in the smelting and refining of copper, which formerly operated electric motors by power generated within their own establishments, used rented power in 1909, as is indi-

cated by the extraordinary growth in the amount of rented electric power. In 1909 water power formed 15.1 per cent of the total of the primary power shown.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.			PER CENT DISTRIBUTION OF HORSEPOWER.		
	1909	1904	1899 <sup>1</sup>	1909	1904	1899 <sup>1</sup>	1909	1904	1899
Primary power, total.....	1,291	277	480	90,402	46,736	43,679	100.0	100.0	100.0
Owned.....	503	277	480	63,523	42,830	42,420	70.3	91.6	97.1
Steam.....	412	203	421	49,654	32,356	32,008	54.9	69.2	73.3
Gas.....	54	19	19	223	74	85	0.2	0.2	0.2
Water wheels.....	26	38	40	13,883	10,284	9,717	15.0	21.9	22.2
Water motors.....	11	17	( <sup>2</sup> )	63	61	( <sup>2</sup> )	0.1	0.1	( <sup>2</sup> )
Other.....					85	610		0.2	1.4
Rented.....	788	( <sup>2</sup> )	( <sup>2</sup> )	26,879	3,906	1,259	29.7	8.3	2.9
Electric.....	788	( <sup>2</sup> )	( <sup>2</sup> )	26,504	3,898	1,196	29.3	8.3	2.7
Other.....				375	8	63	0.4	( <sup>2</sup> )	0.1
Electric motors	834	100	78	27,301	7,979	3,184	100.0	100.0	100.0
Run by current generated by establishment.....	46	100	78	797	4,081	1,988	2.9	51.1	62.4
Run by rented power.....	788	( <sup>2</sup> )	( <sup>2</sup> )	26,504	3,898	1,196	97.1	48.9	37.6

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

Fuel.—Closely related to the question of kind of power employed is that of the fuel used in generating this power, or otherwise 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.	An-thra-cite coal (tons).	Bitumi-nous coal (tons).	Coke (tons).	Wood (cords).	Oil, includ-ing gaso-line (bars-rels).	Gas (1,000 feet).
All industries.....	435	624,624	265,279	14,509	2,976	2,807
Bread and other bakery products.....	217	1,604	271	1,409	40	188
Cars and general shop construction and repairs by steam-railroad companies.....		51,584	145		334	
Flour-mill and gristmill products.....		2,217		1,240		
Foundry and machine-shop products.....	6	3,412	1,705	232	12	
Liquors, malt.....		18,976	217	1,405	7	
Lumber and timber products.....		1,817		300	6	
Printing and publishing.....	195	640		254	264	1,677
All other industries.....	17	544,374	262,941	9,669	2,313	942

NOTE.—In addition, there were 403 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 value of materials and products which do not appear on the general schedule. Certain data of this character for three important industries in Montana are here presented.

Lumber and timber products.—Measured by value of products, the lumber and timber industry is second in importance among the industries of the state.

The kind and quantity of several of the chief products of the sawmill branch of the industry for 1909 and 1899 are given below.

PRODUCT.	QUANTITY.	1909		1899	
		1909	1899	1909	1899
Rough lumber.....	M feet b. m.	308,582	255,685		
Lath.....	thousands..	35,430	14,231		
Shingles.....	thousands..	625	6,880		

From 1899 to 1909 the output of rough lumber increased in quantity 20.7 per cent, and that of lath 149 per cent, while that of shingles showed a decrease of 92.4 per cent. Of the 1909 cut of 308,582,000 feet board measure, all was softwood except 510,000 feet of cottonwood. Most of the timber milled was western pine and larch; in the production of the latter Montana is the leading state. There were eight mills in the state in 1909 which produced from 5,000,000 to 15,000,000 feet each, and three which reported a pro-

duction of over 15,000,000 feet. In that year 39 mills were reported idle.

Slaughtering and meat packing.—This classification includes wholesale slaughtering and meat-packing establishments, and those engaged in the manufacturing of sausage only. To avoid disclosure of individual operations, statistics for 1904 are not shown. The following table gives the kinds, quantities, and values of products for 1909 and 1899:

PRODUCT.	1909	1899 <sup>1</sup>
Total value.....	\$2,053,609	\$852,347
Beef, fresh:		
Pounds.....	12,253,541	6,904,346
Value.....	\$1,042,864	\$513,798
Veal, fresh:		
Pounds.....	1,815,825	614,475
Value.....	\$175,253	\$56,185
Mutton, fresh:		
Pounds.....	2,365,440	970,661
Value.....	\$240,720	\$83,506
Pork, fresh:		
Pounds.....	2,171,894	1,035,139
Value.....	\$246,118	\$73,412
Sausage, fresh or cured.....	\$36,969	\$3,000
Lard:		
Pounds.....	145,319	50,000
Value.....	\$21,122	\$3,000
Tallow, oleo stock, and stearine:		
Pounds.....	874,310	( <sup>2</sup> )
Value.....	\$38,773	( <sup>2</sup> )
Hides:		
Number.....	31,022	14,389
Pounds.....	1,505,935	671,700
Value.....	\$149,772	\$60,008
Pelts:		
Number.....	48,615	( <sup>2</sup> )
Value.....	\$48,663	( <sup>2</sup> )
All other products.....	\$52,352	\$59,438

<sup>1</sup> Figures do not agree with those published in 1899, because it was necessary to revise the totals in order to omit retail establishments.  
<sup>2</sup> Figures not available.



From 1899 to 1904 there was a decrease in total value of products, so that the percentage of increase during the last five years was greater than 140.9 per cent, as shown for the decade.

Practically all of the products were sold as fresh meat, with but a very small proportion of the meat or by-products undergoing further preparation. The quantities of pork, mutton, and veal more than doubled, while beef increased 80.1 per cent during the 10 years.

**Printing and publishing.**—As shown by the following table, this industry has increased steadily in the number of publications and aggregate circulation per issue from 1904 to 1909 and from 1899 to 1904:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
<b>Total</b> .....	<b>139</b>	<b>101</b>	<b>95</b>	<b>246,798</b>	<b>197,643</b>	<b>127,148</b>
Daily.....	17	12	11	70,203	58,669	42,164
Sunday.....	7	5	6	48,088	34,111	(9)
Semiweekly.....	8	7	4	13,180	11,200	9,380
Weekly.....	101	69	70	92,027	75,463	62,109
Monthly.....	5	5	3	13,800	7,700	8,495
All other classes.....	1	3	1	9,500	10,500	7,000

<sup>1</sup> Included in circulation of dailies.

**Laundries.**—Statistics for steam laundries are not included in the general tables or in the totals for manufacturing industries. In 1909 there were 26 such establishments in the state of Montana.

The following statement summarizes the statistics:

Number of establishments.....	26
Persons engaged in the industry.....	723
Proprietors and firm members.....	24
Salaried employees.....	47
Wage earners (average number).....	652
Primary horsepower.....	851
Capital.....	\$677,089
Expenses.....	764,904
Services.....	522,008
Materials.....	154,428
Miscellaneous.....	88,468
Amount received for work done.....	935,260

Eleven of the 26 establishments were under corporate ownership, 8 under individual ownership, and 7 under firm ownership. One establishment had receipts for the year's business amounting to between \$100,000 and \$1,000,000, 18 had receipts of between \$20,000 and \$100,000, and 7 receipts of less than \$20,000 each.

The number of wage earners employed each month and the per cent which this number represented of the greatest number employed in any month were as follows:

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	606	85.4	July.....	697	98.2
February.....	597	84.1	August.....	710	100.0
March.....	610	85.9	September.....	698	96.3
April.....	631	88.9	October.....	667	93.9
May.....	629	88.6	November.....	654	92.1
June.....	663	93.4	December.....	660	93.0

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

KIND.	Number of engines or motors.	Horsepower.
<b>Primary power, total</b> .....		<b>851</b>
Owned—Steam.....	19	639
Rented—Electric.....	51	212

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

KIND.	Unit.	Quantity.
Anthracite coal.....	Tons.....	326
Bituminous coal.....	Tons.....	9,979
Wood.....	Cords.....	1,309
Oil.....	Barrels.....	46
Gas.....	1,000 feet.....	2,906

**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 summary:

	Custom sawmills.	Custom gristmills.
Number of establishments.....	14	2
Persons engaged in the industry.....	43	4
Proprietors and firm members.....	19	3
Wage earners (average number).....	24	1
Primary horsepower.....	534	42
Capital.....	\$32,600	\$11,600
Expenses.....	13,356	13,849
Services.....	8,741	535
Materials.....	670	113,130
Miscellaneous.....	3,945	55
Value of products.....	24,249	114,175

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

STATISTICS OF MANUFACTURES.

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TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899.  
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

INDUSTRY AND 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).							
Expressed in thousands.													
STATE—All industries.....	1909	677	13,694	659	1,380	11,655	90,402	\$44,583	\$2,054	\$10,901	\$49,180	\$73,272	\$24,082
	1904	382	10,196	384	905	8,957	46,736	52,590	1,506	8,652	40,930	66,415	25,484
	1899	395			508	9,854	43,679	38,225	786	7,377	30,068	52,745	22,677
Bread and other bakery products.....	1909	71	324	80	30	214	109	1,145	27	165	618	1,096	478
	1904	45	234	51	22	161	84	466	24	102	353	740	287
	1899	27	150	31	23	96		291	15	56	202	416	214
Brick and tile.....	1909	21	230	24	17	189	1,135	519	24	166	83	371	288
	1904	14	118	13	8	97	589	240	13	77	38	179	141
	1899	23	160	27	9	124	248	107	4	69	30	134	104
Cars and general shop construction and repairs by steam-railroad companies.....	1909	12	2,084		171	1,913	2,670	2,912	165	1,538	1,086	2,811	1,725
	1904	10	1,115		76	1,039	1,661	1,055	98	799	670	1,572	902
	1899	7	670		49	621	396	525	50	398	201	754	453
Copper, tin, and sheet-iron products.....	1909	9	48	11	6	31	5	64	6	35	65	137	72
	1904	3	14	2	1	11		11	(?)	13	20	47	27
	1899												
Flour-mill and gristmill products.....	1909	12	152	2	45	105	2,313	2,559	53	105	1,693	2,175	482
	1904	12	109	6	36	67	1,455	991	47	57	1,592	2,003	411
	1899	13			25	61		688	26	50	774	937	183
Foundry and machine-shop products.....	1909	14	372	12	44	316	741	994	65	354	281	986	605
	1904	10	402	11	39	352	841	690	57	326	263	872	509
	1899	10	582	7	25	550		906	42	510	429	1,196	799
Leather goods.....	1909	16	63	16	11	36	10	220	9	39	84	192	108
	1904	8	34	6		28	2	73		27	56	113	57
	1899												
Liquors, malt.....	1909	21	349	9	94	246	2,472	3,040	223	359	602	2,440	1,838
	1904	23	322	13	59	250	1,714	2,175	133	285	487	1,722	1,245
	1899	21	249	22	34	193	1,038	1,204	68	169	376	1,276	900
Lumber and timber products.....	1909	155	3,452	170	178	3,106	14,337	8,544	265	2,185	1,865	6,334	4,469
	1904	47	2,408	45	145	2,218	7,612	4,846	198	1,512	454	3,121	2,067
	1899	91		62		2,357	4,131	2,377	72	1,214	1,014	3,044	2,090
Marble and stone work.....	1909	21	110	20	12	78	123	246	18	102	57	230	178
	1904	6	24	8		16	18	24		14	16	51	35
	1899												
Printing and publishing.....	1909	135	1,046	110	245	691	679	1,651	294	685	403	2,111	1,708
	1904	92	691	81	129	481	462	1,024	182	542	307	1,487	1,180
	1899	89	659	80	94	485		771	139	334	194	981	787
Slaughtering and meat packing.....	1909	9	162	3	54	105	316	483	65	92	1,781	2,054	273
	1904												
	1899	3		6	34	55		198	12	31	746	852	106
Tobacco manufactures.....	1909	53	202	110	1	91		121		85	132	320	188
	1904	44	142	46	1	95		71	1	66	105	271	186
	1899	30	105	33		72		69		48	70	174	104
All other industries.....	1909	128	5,100	92	474	4,534	65,492	22,090	840	4,991	40,330	52,015	11,685
	1904	68	4,583	52	389	4,142	32,298	40,924	743	4,832	36,469	54,227	17,758
	1899	81		181		5,261		31,091	358	4,498	25,932	42,979	17,047

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

Anaconda.....	1909	13	151	10	44	97	253	\$489	\$77	\$134	\$157	\$591	\$434
	1904												
	1899												
Billings.....	1909	37	294	32	36	226	661	951	52	229	765	1,243	478
	1899												
	1904												
Butte.....	1909	66	867	58	147	662	1,217	1,999	200	649	920	2,464	1,544
	1904	54	614	47	89	478		1,267	150	509	568	1,760	1,192
	1899	56			58	411		1,130	66	396	777	1,515	729
Helena.....	1909	44	550	33	97	420	788	1,981	121	362	493	1,303	810
	1904	34	440	29	62	349		1,112	86	260	428	1,163	735
	1899	27			50	264		817	62	172	336	776	440
Missoula.....	1909	26	529	20	81	423	594	913	81	403	402	1,171	769
	1904												
	1899												

<sup>1</sup> Less than \$500.

<sup>2</sup> Figures can not be shown without disclosing individual operations.

<sup>3</sup> Excluding statistics for one establishment, to avoid disclosure of individual operations.

<sup>4</sup> Excluding statistics for two establishments, to avoid disclosure of individual operations.

<sup>5</sup> Figures not available.

<sup>6</sup> Figures do not agree with those published in 1904, because it was necessary to revise the totals 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, superintendents, and managers.	Clerks.		Wage earners.			Total.	16 and over.		Under 16.				
					Male.	Female.	Average number.	Number.			Male.	Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1 All industries.....	677	13,694	659	484	796	100	11,655	Oct 13,127	Fe 10,772	(1)	(1)	(1)	(1)	(1)	80,402		
2 Artificial stone.....	16	113	23	2	3	1	84	Oct 126	Ja 28	70	60	1			56		
3 Bread and other bakery products.....	71	324	80	8	14	13	214	Dec 223	Fe 201	233	108	65			109		
4 Brick and tile.....	21	230	24	12	5		180	Jy 386	Fe 19	206	265	1			1,136		
5 Butter, cheese, and condensed milk.....	20	43	4	6	3	1	20	Je 30	Ja 27	32	27	5			235		
6 Carriages and wagons and materials.....	4	34	2	2	2		28	Je 34	Fe 23	24	24				19		
7 Cars and general shop construction and repairs by steam-railroad companies.....	12	2,084		63	104	4	1,013	No 2,303	Ap 1,597	2,204	2,260		5		2,676		
8 Cars and general shop construction and repairs by street-railroad companies.....	4	24		3			21	De 24	Ja 19	24	24				79		
9 Copper, tin, and sheet-iron products.....	0	48	11	5		1	31	Oct 40	Ja 20	36	36				5		
10 Flour-mill and gristmill products.....	12	152	2	17	20	8	105	De 120	Jy 95	122	121	1			2,312		
11 Foundry and machine-shop products.....	14	372	12	19	24	2	316	Oct 336	Jy 278	329	329				741		
12 Gas, illuminating and heating.....	5	63		8	5	2	48	Jy 42	Fe 36	50	50				129		
13 Leather goods.....	16	68	16	6	5		36	Je 40	Ja 32	34	34				10		
14 Liquors, malt.....	21	340	9	51	42	1	240	Jy 203	Fe 230	236	236				2,472		
15 Lumber and timber products.....	155	3,452	170	84	88	4	3,100	No 3,773	Ap 2,673	4,473	4,467	7	9		14,337		
16 Marble and stone work.....	21	110	20	5	6	1	78	Je 103	Ja 26	100	100				123		
17 Patent medicines and compounds, and druggists' preparations.....	5	14	1	3	3	1	6	De 8	Je 6	8	6	1	1		5		
18 Printing and publishing.....	135	1,040	110	58	160	27	691	De 718	Ja 667	717	637	68	11	1	679		
19 Slaughtering and meat packing.....	9	162	3	13	37	4	105	No 113	Mh 97	104	100	4			316		
20 Tobacco manufactures.....	53	202	110	1			91	Ja 2 95	Ap 2 88	100	90	3	7				
21 All other industries.....	74	4,809	62	124	275	30	4,318								64,939		

<sup>1</sup> No figures given for reasons explained in the Introduction.

<sup>2</sup> Same number reported for one or more other months.

<sup>3</sup> All other industries embrace—

Awainigs, tents, and sails.....	2	Coffee and spice, roasting and grinding.....	2	Food preparations.....	4
Beet sugar.....	1	Coffins, burial cases, and undertakers' goods.....	1	Fur goods.....	1
Brooms.....	2	Coke.....	1	Hand stamps and stencils and brands.....	1
Carpets, rug.....	1	Confectionery.....	10	Hats and caps, other than felt, straw, and wool.....	1
Chemicals.....	1	Dairymen's, poultryers', and apiarists' supplies.....	1	Jewelry.....	1

TABLE III.—DETAIL STATEMENT FOR CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES, CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

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.								
1 ANACONDA.....	13	151	10	12	30	2	97	88	8	1	101	91	9	1	258		
2 BILLINGS.....	37	294	32	10	15	2	226	212	10	4	224	210	10	4	661		
3 BUTTE.....	66	867	58	42	70	29	662	599	58	5	633	572	56	4	1,217		
4 HELENA.....	44	550	33	33	54	10	420	300	60		413	354	59		788		
5 MISSOULA.....	20	529	20	11	60	4	428	428			431	431			694		

# STATISTICS OF MANUFACTURES.

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THE STATE, BY INDUSTRIES: 1909.

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.		
1 \$44,588,368	\$66,829,595	\$1,092,444	\$981,578	\$10,901,452	\$3,712,840	\$45,467,399	\$1,672,057	\$635,087	\$322,110	\$2,064,628	\$73,271,798	\$24,091,554
2 131,855	193,784	2,550	2,475	71,265	740	111,581	120	450	-----	4,573	223,500	111,179
3 1,144,650	901,708	6,785	20,051	164,924	21,682	595,828	20,372	3,908	-----	68,218	1,045,538	478,228
4 518,544	298,313	18,508	5,000	165,728	62,491	20,905	600	2,054	-----	23,027	370,574	287,178
5 178,656	401,957	6,660	2,712	23,798	3,565	350,608	3,990	804	-----	9,820	418,920	64,747
6 67,653	68,932	2,400	2,200	31,514	1,483	27,504	960	1,053	-----	1,818	78,669	49,682
7 2,912,134	2,810,494	88,462	76,548	1,538,121	120,392	965,229	-----	11,127	-----	10,615	2,810,521	1,724,900
8 95,585	48,807	3,020	-----	29,905	1,724	11,774	-----	380	-----	2,004	48,807	35,309
9 63,534	114,982	5,635	200	35,375	591	64,811	2,428	2,312	-----	3,630	136,995	71,593
10 2,558,734	1,993,682	26,650	26,608	105,410	25,850	1,667,490	-----	14,272	-----	127,402	2,175,236	481,896
11 993,757	846,147	29,683	34,852	384,364	36,853	344,643	1,584	5,335	-----	38,933	956,036	604,640
12 1,041,030	153,086	7,825	5,495	41,183	60,317	16,425	-----	5,474	1,107	15,260	189,912	113,170
13 219,784	146,220	6,800	2,600	39,076	965	83,117	8,999	1,358	-----	3,305	192,016	107,934
14 3,040,409	1,863,068	174,918	48,265	358,508	84,080	518,280	-----	290,602	-----	388,415	2,429,832	1,837,472
15 8,543,743	5,342,549	160,942	104,326	2,185,300	14,776	1,850,109	3,104	73,584	259,666	660,742	6,333,778	4,466,893
16 245,555	192,795	9,000	8,775	101,763	4,656	52,467	890	1,088	-----	14,156	229,809	172,686
17 33,308	37,576	2,940	5,723	4,503	251	14,928	1,020	208	600	7,403	46,598	31,419
18 1,650,672	1,751,203	123,010	170,690	684,914	29,568	373,092	44,889	12,120	29,730	283,190	2,111,229	1,708,569
19 482,955	2,012,975	25,640	39,591	91,658	13,785	1,767,250	19,010	3,965	-----	52,076	2,053,609	272,574
20 121,196	252,081	360	-----	85,328	900	130,691	7,985	16,638	-----	11,079	320,301	188,710
21 20,544,614	47,399,176	390,656	405,467	4,788,815	3,228,171	36,500,767	1,557,006	188,325	1,007	338,962	51,009,613	11,280,676

\* All other industries embrace—Continued.

Lime.....	5	Pottery, terra-cotta, and fire-clay products.....	1	Soap.....	1
Liquors, distilled.....	1	Signs and advertising novelties.....	1	Umbrellas and canes.....	2
Malt.....	1	Smelting and refining, copper.....	4	Wall plaster.....	1
Mattresses and spring beds.....	2	Smelting and refining, lead.....	1	Wirework, including wire rope and cable.....	2
Mineral and soda waters.....	22				

AND TOTALS FOR ALL INDUSTRIES IN CITIES OF 10,000 BUT LESS THAN 50,000 INHABITANTS: 1909.

## CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

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.		
1 \$489,381	\$512,639	\$37,600	\$39,458	\$133,595	\$7,799	\$149,474	\$1,380	\$25,453	-----	\$117,880	\$591,032	\$433,759
2 950,501	1,177,725	34,830	17,530	229,378	23,218	741,431	31,110	27,245	\$5,400	67,583	1,243,185	478,536
3 1,899,366	2,082,558	89,550	110,757	648,712	89,624	830,347	48,320	63,514	3,609	198,125	2,463,780	1,543,809
4 1,980,526	1,175,574	65,203	55,341	362,483	52,105	440,722	11,952	18,043	18,701	151,024	1,302,725	809,898
5 912,570	1,024,394	34,525	46,798	402,553	37,062	365,254	5,823	32,703	-----	99,676	1,171,436	769,120

## CHAPTER 6.

### 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 Montana 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 an 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 MONTANA.

**Summary.**—Statistics for all mining enterprises, including reports of smelters, concentrating mills, and cyaniding plants operated in connection with gold and silver and copper mines, in the state of Montana, are presented in Table 7. This table 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 gross value of the products of all mines and quarries in Montana in 1909 was \$54,991,961. Deducting from this amount, \$6,559,820, the value of the copper ore marketed by some operators and used as material by others, leaves \$48,432,141 as the net value of the products. Of this amount, the copper industry, including the copper ore sold as such and the copper products of the mills operated in connection with the mines, contributed \$39,400,697, or 81.4 per cent. In the operations of "All other" industries, which includes the production of clay, granite, gypsum, lead and zinc, and precious stones, the expenses of operation and development exceeded the value of the products. This was due in part to unprofitable mining ventures and in part to expenditures for development work resulting in permanent improvements to the mining properties.

**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 373 operators, 94, or 25.2 per cent, were corporations. These corporations reported 97.5 per cent of the total value of products and employed 94.4 per cent of all wage earners. In the copper mining industry the 13 incorporated companies reported 99.6 per cent of the total value of products.

	Incorporated.	Unincorporated.
Number of operators.....	103	270
Number of mines and quarries.....	195	348
Proprietors and firm members, total.....		504
Number performing manual labor.....		355
Salaried employees:		
Officers of corporations.....	51	
Superintendents and managers.....	195	19
Clerks and other salaried employees.....	510	9
Wage earners, Dec. 15, 1909, or nearest representative day.....	19,350	1,147
Capital.....	\$140,914,107	\$4,221,403
Expenses of operation and development.....	45,250,978	1,269,567
Salaries—		
Officers of corporations.....	124,225	
Superintendents and managers.....	571,550	22,321
Clerks and other salaried employees.....	634,046	9,831
Wages.....	20,561,848	799,558
Royalties and rent of mines.....	1,704,457	118,418
Taxes.....	447,468	5,918
Supplies and miscellaneous expenses.....	14,596,964	313,021
Cost of ore purchased.....	6,559,820	
Value of products.....	53,603,187	1,388,774

**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.

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.
<b>All industries.....</b>	<b>373</b>	<b>20,503</b>	<b>\$54,991,961</b>	<b>\$147,432</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Individual.....	135	594	761,942	5,644	38.2	2.9	1.4
Firm.....	144	553	626,832	4,353	38.6	2.7	1.1
Corporation.....	94	19,356	53,603,187	570,247	25.2	94.4	97.5
<b>Copper.....</b>	<b>35</b>	<b>13,697</b>	<b>45,960,517</b>	<b>1,313,158</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Individual.....	12	34	136,870	11,406	34.3	0.6	0.3
Firm.....	10	14	63,548	6,355	28.6	0.1	0.1
Corporation.....	13	13,599	45,760,099	3,520,008	37.1	99.3	99.6
<b>Gold and silver, Deep mines.....</b>	<b>192</b>	<b>1,584</b>	<b>3,092,328</b>	<b>15,637</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Individual.....	59	235	195,984	3,373	30.7	14.8	6.6
Firm.....	93	253	327,371	3,520	48.4	16.0	10.9
Corporation.....	40	1,096	2,475,973	61,899	20.8	69.2	82.5
<b>Bituminous coal.....</b>	<b>48</b>	<b>4,612</b>	<b>5,117,444</b>	<b>106,613</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Individual.....	12	122	194,400	16,200	25.0	2.6	3.8
Firm.....	12	168	144,290	12,024	25.0	3.6	2.8
Corporation.....	24	4,322	4,778,754	199,115	50.0	93.7	93.4

INDUSTRY AND WAGE EARNERS PER ENTERPRISE.	PRODUCING ENTERPRISES: 1909			
	Enterprises.		Wage earners.	
	Number.	Per cent distribution.	Number.	Per cent distribution.
<b>All industries.....</b>	<b>382</b>	<b>100.0</b>	<b>20,503</b>	<b>100.0</b>
No wage earners.....	95	24.9		
Contract work.....	8	2.1		
1 to 5.....	154	40.3	373	1.8
6 to 20.....	60	15.7	632	3.3
21 to 50.....	23	6.0	780	3.8
51 to 100.....	15	3.9	1,045	5.1
101 to 500.....	17	4.5	4,046	19.7
501 to 1,000.....	4	1.0	2,659	13.1
Over 1,000.....	6	1.6	10,384	53.1
<b>Copper.....</b>	<b>41</b>	<b>100.0</b>	<b>13,697</b>	<b>100.0</b>
No wage earners.....	2	4.9		
Contract work.....	1	2.4		
1 to 20.....	20	48.8	113	0.8
21 to 100.....	6	14.6	339	2.5
101 to 500.....	4	9.8	1,441	10.5
501 to 1,000.....	3	7.3	2,037	15.1
Over 1,000.....	5	12.2	9,737	71.1
<b>Gold and silver, Deep mines.....</b>	<b>192</b>	<b>100.0</b>	<b>1,584</b>	<b>100.0</b>
No wage earners.....	61	31.8		
Contract work.....	4	2.1		
1 to 5.....	82	42.7	181	11.4
6 to 20.....	28	14.6	298	18.8
21 to 50.....	9	4.7	283	17.9
51 to 100.....	5	2.6	405	25.6
Over 100.....	3	1.6	417	26.3
<b>Bituminous coal.....</b>	<b>51</b>	<b>100.0</b>	<b>4,612</b>	<b>100.0</b>
1 to 5.....	15	29.4	43	0.9
6 to 20.....	15	29.4	171	3.7
21 to 50.....	3	5.9	104	2.3
51 to 100.....	6	11.8	353	7.2
Over 100.....	12	23.5	3,961	85.9

The greatest degree of concentration is noted in the copper industry, where 9,737, or 71.1 per cent, of the 13,697 wage earners employed in this industry were reported by the five enterprises employing over 1,000 wage earners each. In gold and silver mining, 61 enterprises were conducted by the proprietors without the aid of hired labor. The average number employed per enterprise in this industry was only 8, while in the copper industry the average was 342.

**Prevailing hours of labor.**—In Table 4 all producing enterprises, except those employing no wage earners and those operated exclusively by contract work, have been classified according to the prevailing hours of labor per day in each enterprise or operating unit. 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 generally prevailing in the enterprise.

The eight-hour day generally prevailed in all mining industries in the state. For all industries combined 90.6 per cent of the enterprises, employing 99 per cent of the wage earners, reported the eight-hour day. In the copper and coal industries all enterprises and in gold and silver, deep mines, all but three, reported a day of eight hours.

Table 4

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.....	1 278	100.0	100.0
8 hours and under.....	252	90.6	99.0
9 hours.....	7	2.5	0.2
10 hours.....	19	6.8	0.8

<sup>1</sup> Exclusive of 1 limestone quarry for which number of hours was not reported.

**Engines and power.**—As shown by Table 5, the aggregate horsepower employed in all producing enterprises was 174,389, of which 148,242 horsepower, or 85 per cent, was employed in the production of copper.

Table 5

CHARACTER OF POWER.	PRODUCING ENTERPRISES: 1909				
	Total.	Copper.	Gold and silver, deep mines.	Bituminous coal.	All other.
<b>Primary power:</b>					
Aggregate horsepower....	174,389	148,242	6,712	16,173	3,262
Owned.....	134,812	111,471	5,840	16,069	1,432
Steam engines—					
Number.....	311	118	63	109	21
Horsepower.....	120,009	98,727	3,906	16,066	1,310
Gas or gasoline engines—					
Number.....	16	3	11	1	1
Horsepower.....	190	44	141	3	2
Water wheels—					
Number.....	129	10	113		6
Horsepower.....	14,613	12,700	1,793		120
Electric motors operated by purchased current—					
Number.....	517	444	27	6	40
Horsepower.....	39,577	36,771	872	104	1,830
Electric motors run by current generated by enterprise using:					
Number.....	126	2	28	86	10
Horsepower.....	4,376	23	1,052	2,801	500

<sup>1</sup> Includes 1 water motor of 20 horsepower.

**Comparison of mining industries: 1902-1909.**—In order to make comparisons between 1909 and 1902, it is necessary to omit from the 1909 figures, as they appear in other tables in this chapter, statistics for the manufacture of coke at bituminous coal mines and 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.

Table 6

	PRODUCING ENTERPRISES.		
	1909	1902	Per cent of increase.
Wages and salaries.....	\$18,547,901	\$12,724,627	45.8
Supplies and materials.....	\$7,951,621	\$5,007,102	58.8
Royalties and rent of mines.....	\$292,471	\$231,774	26.2
Contract work.....	\$292,902	\$64,636	353.2
Value of products.....	\$36,892,896	\$28,265,085	30.5
Primary horsepower.....	118,518	61,862	91.6

<sup>1</sup> Exclusive of amount paid to miners compensated by a share of the product, which is included under "Contract work," in Table 7.

**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 Montana involves a duplication of \$41,989,544.

## DETAILED STATISTICS FOR MINING INDUSTRIES: 1909.

Table 7	Aggregate.	PRODUCING MINES AND QUARRIES.								Non-producing mines, quarries, and wells. <sup>1</sup>
		Total.	Copper.	Gold and silver, deep mines.	Placer gold.	Bituminous coal.	Limestone.	Sandstone.	All other. <sup>1</sup>	
Number of operators.....	638	373	35	192	73	48	8	11	6	263
Number of mines, quarries, and wells.....	1,299	543	86	237	118	65	12	12	13	756
Capital <sup>2</sup> .....	\$165,776,919	\$145,135,510	\$91,195,350	\$30,420,376	\$8,340,877	\$8,546,343	\$349,000	\$80,550	\$6,203,014	\$20,641,499
<b>Expenses of operation and development</b>	<b>\$48,026,349</b>	<b>\$46,520,545</b>	<b>\$38,073,609</b>	<b>\$2,996,123</b>	<b>\$403,284</b>	<b>\$4,584,674</b>	<b>\$114,811</b>	<b>\$73,871</b>	<b>\$274,173</b>	<b>\$1,505,804</b>
Services—										
Salaried officers of corporations, superintendents, and managers.....	\$821,369	\$718,596	\$408,275	\$101,037	\$17,288	\$117,661		\$360	\$13,975	102,773
Clerks and other salaried employees.....	\$701,846	\$694,477	\$542,448	\$37,715	\$7,975	\$97,493	\$1,020	\$1,800	\$5,120	\$7,369
Wage earners.....	\$22,166,735	\$21,361,406	\$15,804,631	\$1,653,826	\$152,145	\$3,479,894	\$88,451	\$53,567	\$128,892	\$805,329
Miscellaneous—										
Supplies.....	\$10,195,775	\$9,837,503	\$8,535,133	\$617,010	\$53,495	\$539,837	\$18,552	\$8,130	\$65,346	\$358,272
Cost of ore purchased.....	\$6,559,820	\$6,559,820	\$6,559,820							
Fuel and rent of power.....	\$3,874,085	\$3,828,050	\$3,199,989	\$209,012	\$65,172	\$125,967	\$1,994	\$3,500	\$22,416	\$46,035
Royalties and rent of mines.....	\$1,823,391	\$1,822,875	\$1,591,782	\$132,249	\$514	\$96,151		\$460	\$1,719	\$516
Taxes.....	\$456,191	\$453,486	\$395,577	\$17,309	\$4,088	\$33,718	\$423	\$514	\$57	\$2,805
Contract work.....	\$503,731	\$304,499	\$264,887	\$109,981	\$18,976			\$240		\$109,232
Rent of offices and other sundry expenses.....	\$1,123,406	\$1,049,933	\$711,067	\$117,984	\$82,731	\$93,538	\$3,471	\$5,300	\$35,842	\$73,473
<b>Value of products.....</b>	<b>\$54,991,961</b>	<b>\$54,991,961</b>	<b>\$45,960,517</b>	<b>\$3,002,328</b>	<b>\$502,653</b>	<b>\$5,117,444</b>	<b>\$154,064</b>	<b>\$74,593</b>	<b>\$180,362</b>	
<b>Persons engaged in mining industry.....</b>	<b>23,271</b>	<b>21,791</b>	<b>14,251</b>	<b>1,969</b>	<b>367</b>	<b>4,793</b>	<b>136</b>	<b>98</b>	<b>177</b>	<b>1,480</b>
Proprietors and officials.....	1,126	769	164	360	114	93	10	14	14	357
Proprietors and firm members.....	776	504	30	303	102	41	10	13	5	272
Number performing manual labor.....	532	355	15	224	77	28	3	5	3	177
Salaried officers of corporations.....	80	51	15	14	1	14				23
Superintendents and managers.....	270	214	119	49	11	38		1	2	56
Clerks and other salaried employees.....	531	519	390	25	6	88	2		7	12
Wage earners, Dec. 15, 1909, or nearest representative day.....	21,614	20,503	13,697	1,584	247	4,612	124	83	156	1,111
Above ground.....	7,269	6,972	4,913	564	240	938	124	83	110	297
Below ground.....	14,345	13,531	8,784	1,020	7	3,674			46	814
Men 16 years of age and over.....	21,608	20,503	13,697	1,584	247	4,612	124	83	156	1,105
Engineers, firemen, mechanics, etc.	2,040	1,890	1,160	192	32	463	13	9	21	150
Above ground.....	1,805	1,666	1,028	168	32	341	13	9	21	139
Below ground.....	235	224	78	24		122				11
Miners, miners' helpers, quarrymen, and stonecutters.....	14,199	13,325	8,780	1,067	140	3,096	98	64	80	874
Above ground.....	702	624	183	112	133		98	64	34	78
Below ground.....	13,497	12,701	8,597	955	7	3,096			46	796
All other employees.....	5,369	5,288	3,757	325	75	1,053	13	10	56	81
Above ground.....	4,756	4,682	3,648	284	75	597	13	10	55	74
Below ground.....	613	606	109	41		456				7
Boys under 16 years of age (all above ground) <sup>6</sup> .....	6									6
<b>Number of wage earners employed on the 15th of each month:</b>										
January.....	18,770	18,320	12,911	1,006	72	4,095	78	39	119	450
February.....	18,849	18,292	13,000	1,082	67	3,905	81	46	111	557
March.....	19,222	18,614	13,159	1,139	94	3,940	104	53	125	608
April.....	19,290	18,587	13,214	1,140	133	3,828	88	39	145	705
May.....	19,529	18,819	13,170	1,232	176	3,950	102	39	150	710
June.....	19,243	18,520	12,921	1,279	168	3,842	103	52	155	723
July.....	19,582	18,843	13,236	1,353	180	3,741	121	50	162	739
August.....	19,406	18,588	12,898	1,404	149	3,828	106	51	152	815
September.....	20,090	19,157	13,141	1,457	131	4,088	117	68	155	849
October.....	20,946	20,069	13,793	1,540	118	4,261	106	68	148	877
November.....	21,207	20,349	13,921	1,445	122	4,498	152	66	145	858
December.....	18,793	17,999	11,691	1,287	122	4,594	115	46	144	794
<b>Land controlled, acres.....</b>	<b>187,940</b>	<b>119,642</b>	<b>34,628</b>	<b>14,015</b>	<b>13,490</b>	<b>54,335</b>	<b>1,993</b>	<b>504</b>	<b>677</b>	<b>38,298</b>
Owned.....	138,051	104,494	34,362	10,216	12,844	44,698	1,973	334	607	39,537
Held under lease.....	19,859	15,148	266	3,799	646	10,237	20	170	10	4,711
Mineral and oil land.....	120,899	85,018	4,842	14,015	13,300	49,825	1,993	364	677	35,835
Owned.....	101,040	69,868	4,576	10,216	12,654	39,588	1,973	194	607	31,172
Held under lease.....	19,859	15,148	266	3,799	646	10,237	20	170	10	4,711
Timber land.....	5,680	3,980	2,080			1,880				1,720
Other land.....	31,361	30,666	27,796		190			140		695
<b>Primary horsepower.....</b>	<b>179,452</b>	<b>174,389</b>	<b>148,242</b>	<b>6,712</b>	<b>2,260</b>	<b>16,173</b>	<b>461</b>	<b>77</b>	<b>464</b>	<b>5,063</b>

<sup>1</sup> Includes operators, as follows: Clay, 1; granite, 2; gypsum, 1; lead and zinc, 1; precious stones, 1.

<sup>2</sup> Includes operators, as follows: Bituminous coal, 1; gold and silver, deep mines, 250; graphite, 1; limestone, 1; petroleum and natural gas, 1; placer gold, 11.

<sup>3</sup> 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.