STATISTICS OF AGRICULTURE.

AGRICULTURE BY IRRIGATION.

STATISTICS OF FISHERIES.

DEPARTMENT OF THE INTERIOR, CENSUS OFFICE.

ROBERT P. PORTER,
Superintendent.
Appointed April 20, 1889; resigned July 31, 1803.

CARROLL D. WRIGHT,
Commissioner of Labor in charge.
Appointed October 5, 1893.

REPORT

ON THE

STATISTICS OF AGRICULTURE

IN

THE UNITED STATES

AT THE

ELEVENTH CENSUS: 1890.



WASHINGTON, D. C.: GOVERNMENT PRINTING OFFICE. 1895.

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,

CENSUS OFFICE,

WASHINGTON, D. C., September 29, 1894.

SIR.

I have the honor to transmit herewith the report on the Statistics of Agriculture. The division of agriculture has been under the charge of different officers at various times. Mr. John Hyde was originally in charge as special agent, with whom Mr. Mortimer Whitehead was associated as special agent in charge of a portion of the work for a time. Mr. James H. Wardle had the entire direction for a period as special agent, and Mr. James M. Rusk and Mr. William H. Olcott were successively chiefs of division.

The tables have been prepared mainly under the direct supervision of Mr. William H. Olcott. Most of the text has been prepared by Mr. John Hyde, special agent; the portion pertaining to horticulture was prepared by Mr. J. H. Hale, special agent; that on viticulture by Mr. H. Gardner, special agent.

I am, very respectfully, your obedient servant,

CARROLL D. WRIGHT,

Commissioner of Labor in charge.

Hon. Hoke Smith, Secretary of the Interior.

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STATISTICS OF AGRICULTURE.

BY JOHN HYDE.

The statistics of agriculture were obtained for the census of 1890, as for previous censuses, upon special schedules carried by the enumerators, by farm to farm visitation, and from the farmers.

There is very little change in the scope of the agricultural investigations since the census of 1880. The orchard products, cotton seed, and horticulture appear in this report, for the first time at any census.

In the Eleventh Census, as in previous censuses, it was necessary to take the productions of agriculture for the year preceding the year in which the population was enumerated. Comparisons with the population and live stock are based upon the same relative figures in all those reports. The production of 1889 being the nearest known crop to the census of June 1, 1890, all averages and percentages appearing in this report showing the relation of the productions of the country to the population or to the live stock are based upon the production of 1889, and the returns of population or live stock on June 1, 1890.

The total values of all farm products, as given in this report, are the aggregations of the values furnished, either to the enumerators or directly to the Census Office, by the producers themselves, but being to a large extent estimates, as stated in the tables, they are doubtless affected by that well-known tendency of farmers to underestimate the values and in some cases also the quantities of such of their products as are consumed wholly or in large part upon the farm. Such total values, therefore, must be taken only as estimates, and with the understanding that they are considered too low. In the few cases in which the values of particular crops are given, and such crops are money crops, there is no reason to think that the figures published are open to the criticism above stated.

As in 1870 and 1880, the enumeration of the farms of the United States in 1890 was limited to holdings of 3 acres or upward, except where produce to the value of \$500 had been sold from the farm during the census year. The statistics of 1890 are therefore strictly comparable with those of 1880, except that the generally lower prices of agricultural products prevailing in 1889, as compared with 1879, may have excluded from the returns in 1890 holdings included in those of 1880. Too much importance, however, should not be attached to this fact, as the effect of lower prices may have been partially if not wholly offset by a more intensive system of cultivation.

The total number of farms enumerated in 1890 was 4,564,641, as compared with a total of 4,008,907 in 1880, an increase of 555,734, or 13.86 per cent. This is a smaller increase, and a considerably smaller percentage of increase, than in any of the three preceding decennial periods, as shown in the following table:

YEARS.	Total number of farms.	Increase.	Percentage of increase.		
1890	4, 564, 641	555, 734	13, 86		
1880	4,008,907	1, 348, 923	50, 71		
1870	2,059,985	015,908	30, 13		
1860	2, 044, 077	505,004	41,08		
1850	1,449,073				

Ever since the census of 1850, if not from a still earlier period, it has been in the North Central division of states, a division embracing the main portions of the upper and central Mississippi valleys, that the greatest additions have been made to the number of farms. This division contained 1,125,078 farms in 1870, 1,697,968 in 1880, and 1,923,822 in 1890, the increase from 1880 to 1890 being 225,854, or 13,30 per cent. Nearly one half of the increase in the latter decade was reported from Nebraska and the Dakotas, there being an increase of 50,221 in Nebraska and of 60,334 in North and South Dakota. Kansas, Minnesota, and Missouri each show an increase of between 20,000 and 30,000, Michigan, Iowa, and Wisconsin each of between 10,000 and 20,000, and Ohio and Indiana each of under 10,000. Illinois, the state which, notwithstanding the changes of the period under consideration, still leads in total area of improved land, total value of farms, and total value of farm products, shows a decrease of 15,060 in the number of its farms. This decrease was not confined to any particular section of the state, 75 counties showing a decrease amounting to 19,483 and 27 counties an increase aggregating 4,423. Although the average size of farms in this state in 1890 was 127 acres as compared with 124 acres in 1880, it is not among the smaller-sized farms alone that the process of consolidation or extinction has been going on, there being a decrease of 17,087 in the number containing under 100 acres each, an increase of 3,122 in the number containing from 100 to 500 acres each, and a decrease of 1,095 in those containing 500 acres or upward.

The next largest increase in the number of farms is in the South Central division, which contained 510,998 farms in 1870, 886,648 in 1880, and 1,086,772 in 1890, the increase from 1880 to 1890 being 200,124, or 22.57 per cent, as compared with an increase of 375,650, or 73.51 per cent, from 1870 to 1880. Although the addition to the number of farms in this group of states between 1880 and 1890 was little more than one-half of what it was during the preceding decade, every state in the division shows an increase, most of them considerable. Texas has added 53,942 to the number of farms it contained in 1880, and the numbers reported from Mississippi, Arkansas, Alabama, and Louisiana are, respectively, 42,546, 30,327, 21,908, and 21,002 in excess of the numbers reported in 1880. In Texas there is so large an increase, both relative and absolute, in the total area in farms that the average size has increased from 208 acres in 1880 to 225 acres in 1890. There was a considerable increase, as will be shown hereafter, in the total farm area of Arkansas, and an increase of noteworthy proportions in Mississippi, Louisiana, and Alabama. In every state in this group, however, except Texas, there has been a decrease in the average size of farms, such decrease being especially marked in Mississippi and in Louisiana, being from 156 to 122 acres in the former state and from 171 to 138 acres in the latter. In Mississippi 18,059 farms containing from 10 to 20 acres each were reported in 1890 as compared with 11,936 so reported in 1880, and 48,355 as containing from 20 to 50 acres each in 1890 as compared with 26,836 so reported in 1880. At the same time the number of farms exceeding 500 acres each had fallen from 5,769 to 5,196. This may be due to reporting certain large plantations in one case as single farms and reporting their various subdivisions in the other case as separate holdings.

In the South Atlantic division there is a considerable increase in the total number of farms, aggregating 105,171, or 16.32 per cent, as compared with an increase of 270,327, or 72.26 per cent, in the preceding decade. While there has been an increase in every state in the division (the District of Columbia, which is included in this division, alone showing a decrease), it is in Georgia and North and South Carolina that the largest additions have been made to the number of farms reported in 1880, the increase in Georgia being 32,445, in South Carolina 21,144, and in North Carolina 20,750. In each of these 3 states there has been a marked decrease in the average size of farms, such average falling from 188 to 147 acres in Georgia, from 143 to 115 acres in South Carolina, and from 142 to 127 acres in North Carolina. Florida and West Virginia have added 10,790 and 10,099, respectively, to the number of their farms, with a marked decrease, especially in Florida, in the average size. The fact that the total area in farms in this division was somewhat less in 1890 than in 1880 proves that the increase in the number of farms was due to the subdivision of former holdings, except as it may have been affected by differences in the methods of enumeration.

The Western division, which contained 48,212 farms in 1870 and 83,723 in 1880, has increased its number to 145,878 in 1890, the increase from 1880 to 1890 being 62,155, or 74.24 per cent. This is the only division in which the increase in the number of farms from 1880 to 1890 was greater than from 1870 to 1880. Although large numbers of new farms have been opened up in the arid region, especially where there is a more or less abundant supply of water for irrigation, it is mainly in the 3 Pacific states that the increase in the number of farms has taken place in this division. California reports 16,960, Washington 11,527, and Oregon 9,313 more farms in 1890 than in 1880, and in each case the increase in number is accompanied by a large increase in total farm area. The additions to the farms of Colorado numbered 11,883, and that state added a larger amount of land to its area in farms than any other state or territory in the division, California excepted. Much of the increase in Colorado was in the plains region stretching eastward from the foothills of the Rocky mountains, where the conditions under which agricultural operations are carried on are almost identical with those obtaining in the adjoining portions of Nebraska and Kansas. No state or territory other than the states mentioned increased the number of its farms by as many as 5,000 during the decade ending with 1890. Idaho came the nearest to doing so, followed by Montana and Wyoming; in Utah the total increase was only 1,065 and in Arizona still smaller; both New Mexico and Nevada show a decrease.

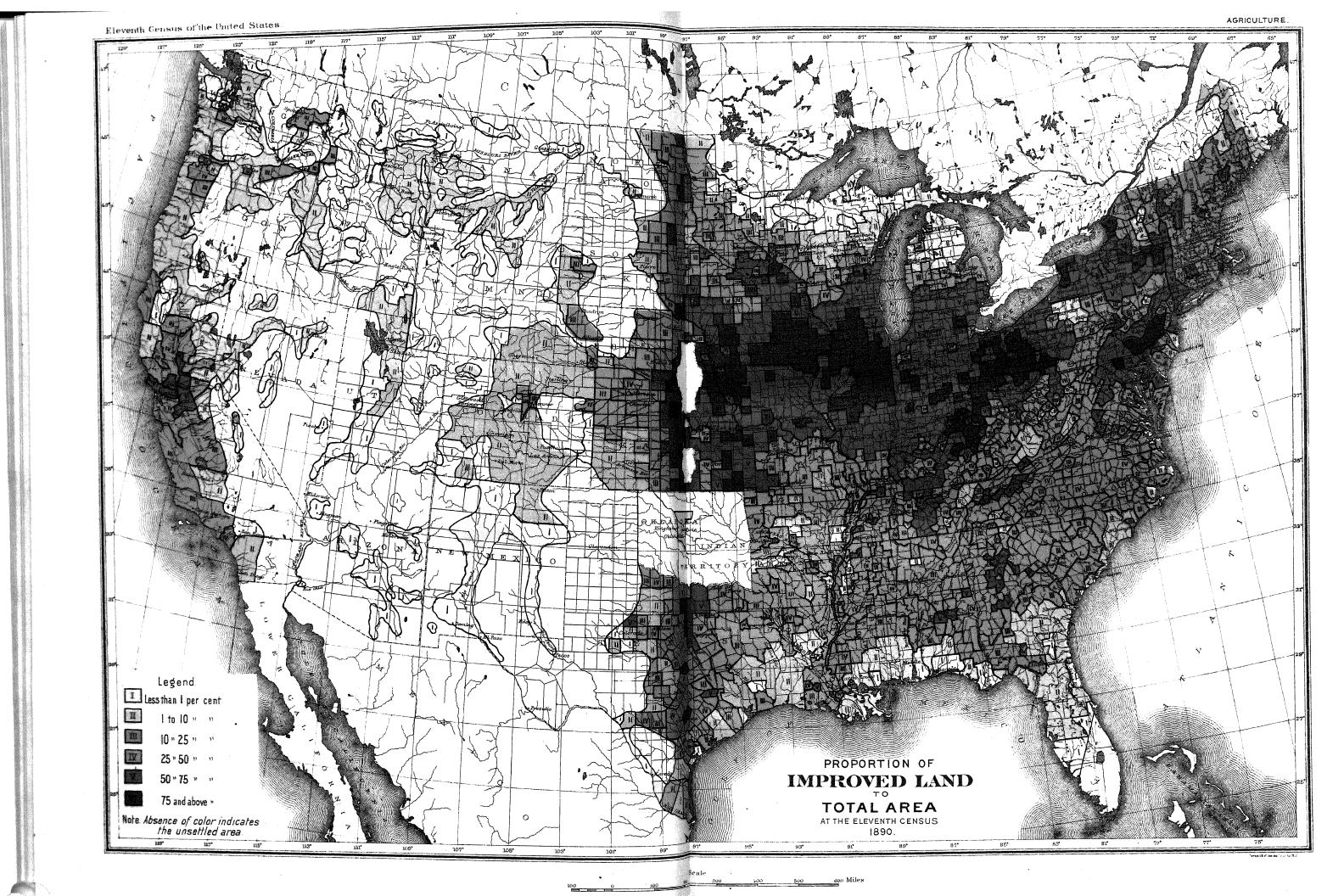
In the North Atlantic division, which includes the 6 New England states, New York, New Jersey, and Pennsylvania, every state shows a smaller number of farms in 1890 than in 1880, and in every case is the reduction accompanied by a decrease in the total farm area. Although by far the largest decrease, 14,835, is reported from New York, the percentage of decrease in that state is less than that in the other states in the division, with the exception of Pennsylvania and Maine. In Massachusetts, Rhode Island, Connecticut, and New Jersey the decrease in the number of farms exceeded 10 per cent. The total decrease in the division is 37,570, or 5.40 per cent, as compared with an increase of 94,544, or 15.72 per cent, from 1870 to 1880.

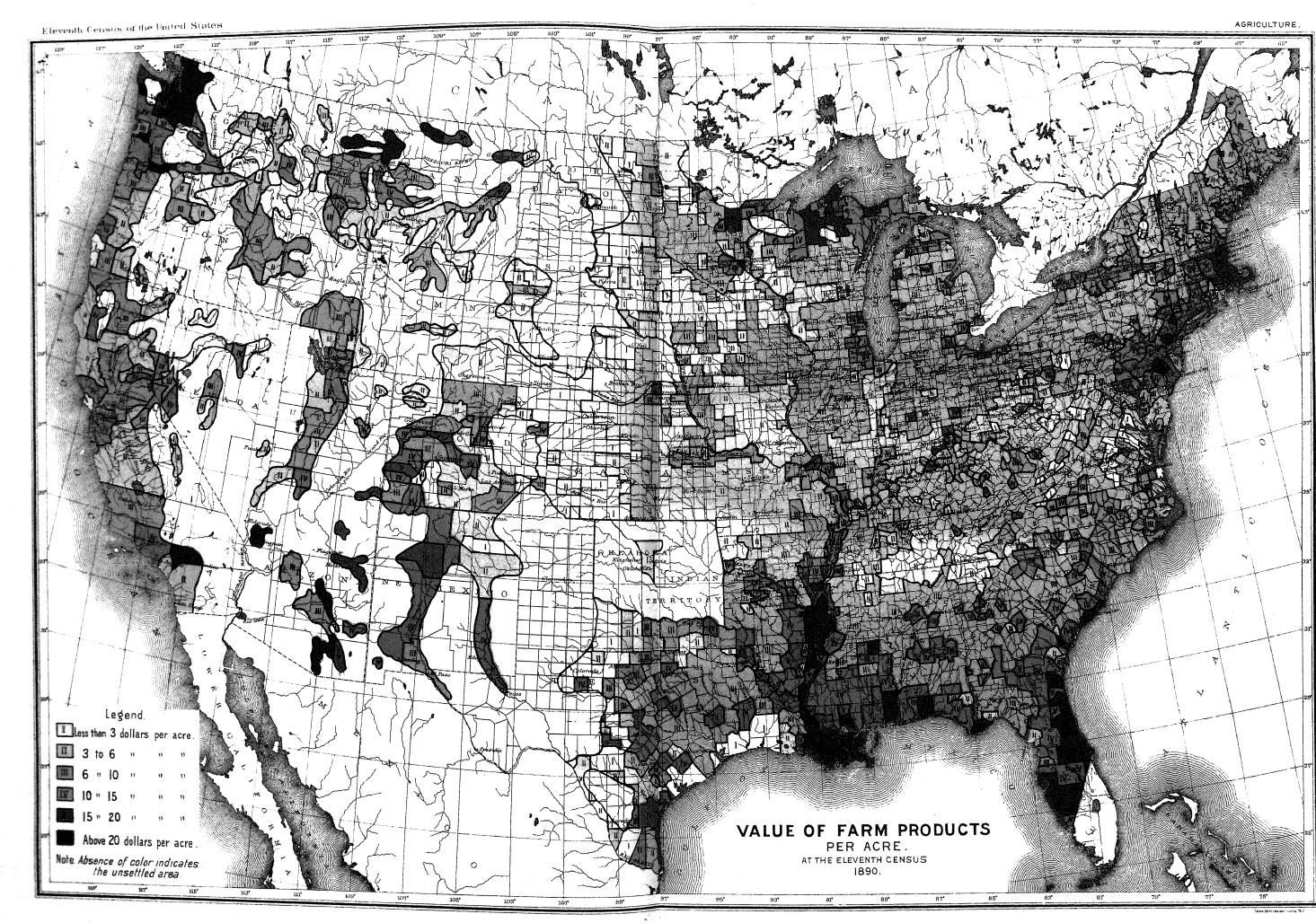
With regard to the total number of farms reported from the different states and territories, Ohio is well in the lead with 251,430, followed by Illinois, Missouri, Texas, New York, Pennsylvania, and Iowa in the order named, each with upward of 200,000 of agricultural holdings. The other extreme is found in the District of Columbia, with 382 farms. Arizona has 1,426 and Nevada 1,277 farms.

Although the District of Columbia requires mention with states and territories, its land area is so small that its agricultural aggregates do not affect the general results in the country.

Oklahoma was not organized till May 2, 1890, but in Greer county, claimed by Texas, as well as upon lands opened for settlement in 1889, crops were reported at the census.

The territory of Alaska has no agricultural returns.





FARMS.

LAND IN FARMS.

The total area of land in farms in the United States on June 1, 1890, was 623,218,619 acres, as compared with a total of 536,081,835 acres on June 1, 1880, an increase of 87,136,784 acres, or 16.25 per cent.

During the same period the total area of improved land increased from 284,771,042 acres to 357,616,755 acres, an increase of 72,845,713 acres, or 25.58 per cent; the area of unimproved land increased from 251,310,793 acres to 265,601,864 acres, an increase of 14,291,071 acres, or 5.69 per cent.

The percentage of the total land surface of the country in farms on June 1, 1890, was 32.79, as compared with 28.20 on June 1, 1880; the percentage of the total farm area that remained unimproved in 1890 was 42.62, as compared with 46.88 in 1880.

The largest addition to the land in farms was made in the North Central division, where there has been the largest increase in the number of farms. Here close upon 50,000,000 acres have been added to the total area and over 47,000,000 acres to the area improved. As regards the total area in farms, Ohio, Indiana, and Illinois each shows a decrease. In the Dakotas the increase was over 15,000,000 acres, in Nebraska over 11,000,000 acres, in Kansas over 8,000,000 acres, in Minnesota and in Iowa over 5,000,000 acres; Missouri, Wisconsin, and Michigan report a considerable addition. In the area of improved land only Illinois shows a decrease, while over 11,000,000 acres have been added to the improved acreage in Kansas, over 10,000,000 acres in the Dakotas, over 9,000,000 acres in Nebraska, over 5,000,000 acres in Iowa, and nearly 4,000,000 acres in Minnesota.

The South Central division has an increase in the total area in farms and in improved land. To the farm area of Texas there were added during the decade more than 15,000,000 acres, and its area of improved land in 1890 was more than 8,000,000 acres greater than in 1880. Nearly 3,000,000 acres were added to the total farm area of Arkansas and nearly 2,000,000 acres to the total area of its improved land. There was a slight decrease in the total farm area in Kentucky and Tennessee, accompanied by an increase in the total improved acreage.

In the Western division California added nearly 5,000,000 acres, Colorado over 3,000,000 acres, Oregon and Washington over 2,500,000 acres each, and Montana, Wyoming, Arizona, and Nevada over 1,000,000 acres each to the total farm areas they respectively contained in 1880, the total increase in the division being over 21,000,000 acres. While there has been a considerable addition, nearly 7,500,000 acres, to the improved land in the division, such addition has not kept pace with the additions to the total farm area.

In the North Atlantic division there is a decrease of more than 5,000,000 acres in the total area of farms and over 4,000,000 acres in the area of improved land, every state in the division showing a decrease as regards both farm area generally and area improved.

In the South Atlantic division there is a decrease in the total area in farms, but considering the division as a unit such decrease is inconsiderable, and it is accompanied by an increase of over 5,500,000 acres in the area improved. The states of Delaware, Maryland, Virginia, South Carolina, and Georgia, together with the District of Columbia, show a diminished total area in farms, while West Virginia, North Carolina, and Florida show an increase, in no case exceeding 400,000 acres. Throughout the entire division, except in the District of Columbia, where the city of Washington is gradually encroaching upon the agricultural lands, there is a notable increase in the improved acreage. In North Carolina and Georgia this increase amounts to over 1,300,000 acres each, and in South Carolina to over 1,100,000 acres.

TENURE OF FARMS.

Of the 4,564,641 farms in the United States in 1890, 3,269,728, or 71.63 per cent, were cultivated by owners. In 1880, of the 4,008,907 farms, 2,984,306, or 74.44 per cent, were cultivated by owners.

The per cent of farms cultivated by owners in the North Atlantic division in 1890 was 81.60 as compared with 84.01 per cent in 1880; in the South Atlantic division it was 61.51 per cent as compared with 63.88 per cent in 1880; in the North Central division, 76.62 per cent as compared with 79.52 per cent in 1880; in the South Central division, 61.55 per cent as compared with 63.79 per cent in 1880, and in the Western division, 87.91 per cent as compared with 86.01 per cent in 1880; this last being the only division where the per cent of farms cultivated by owners was larger in 1890 than in 1880.

The table on the following page shows for each state and territory the percentage of the whole number of farms of the several classes of farms according to tenure for 1880 and 1890.

COMPARATIVE STATEMENT OF PERCENTAGES OF FARMS CULTIVATED BY OWNERS, RENTED FOR FIXED MONEY VALUE, AND RENTED FOR SHARES OF PRODUCTS: 1880 AND 1890.

STATES AND TERRITORIES.		CULTIVATED BY OWNERS.		XED MONEY	RENTED FOR SHARRS OF PRODUCTS.		
		1880	1890	1880	1890	1880	
The United States.	71. 63	74. 44	9,96	8.04	18. 41	17. 6	
orth Atlantic division	81, 60	84. 01	7. 91	7.04	10. 49	8. 9	
			1	2,53	2, 25	1.7	
Maine	94, 56	95, 68	3. 19 4. 50	3.84	8. 47	4.2	
New Hampshire	92. 03 85. 40	91, 88 86, 60	7.06	6.09	7, 54	7, 8	
Massachusetts	90.70	91, 82	6.70	5.97	2, 60	2.2	
Rhode Island	81. 27	80, 12	16.58	15.91	2, 15	3. 9	
rocticut	88, 46	89. 78	7.98	6.28	8.56	3. (
New York	79.78	83, 46	8.72	7.52	11, 50	0.0	
Now Jersey	72.80	75. 40	11.19	10.52	16.01	14, (
Penusylvania	76, 68	78, 78	8. 53	7.98	14.79	13. 9	
outh Atlantic division	61, 51	63. 88	12.82	11.63	25. 67	24,	
Delaware	53.07	57. 62	6, 69	5.84	40. 24	36,	
Maryland	69, 01	69. 05	7.95	9.57	23, 04	21.	
District of Columbia	63.35	61.84	84, 29	34. 48	2. 36	8.	
Virginia	73, 13	70.48	9.39	11.30	17. 48	18.	
West Virginia	82, 25	80. 85	5.88	6.85	11.87	12.	
North Carolina	65. 86	66, 55	5.93	5.48	28. 21	27.	
South Carolina	44.72	49.69	27.75	23.41	27.53	26.	
Georgia	40.46	55. 15	17.19	18.89	36. 35	81.	
Florida	76. 37	69. 11	11,50	15.14	12.13	15	
orth Central division	76, 62	70. 52	7, 66	5. 23	15.72	15	
Ohio	77, 12	80, 73	7, 53	6.00	15, 35	18	
Indiana	74.63	76, 27	5.52	4.42	19.85	19	
Illinois	66, 00	68. 62	12.12	8,06	21.88	23	
Michigan	80,00	89. 99	4,76	8. 26	9. 24	6	
Wisconsin	88.58	90, 95	4.92	2.77	6, 50	. 0	
Minnesota	87.07	90. 85	2, 93	1.35	10.00	3	
Iowa	71.91	76, 17	12. 35	4. 54	15.74	19	
Missouri		72.69	9.88	9, 21	16.90	18	
North Dakota		(a)	1.95	(a)	4, 98	(a)	
South Dakota		(a)	2.58	(a)	10, 58	(a)	
Dakota territory	1	96. 11		0.41	• • • • • • • • • • • • • • • • • • • •	[
Nebraska		81.98	7.87	3, 07	16.85	14	
Kansas	71.77	83, 65	6, 06	3. 20	22.17	18	
outh Central division	61, 55	63. 79	13, 98	11.85	24. 47	2	
Kentucky	- 75, 05	73, 55	8. 10	10.11	16. 85	1	
Tennessee		65, 47	11. 33	11.63	19.51	2:	
Alabama		53. 15	24. 68	16, 85	23. 89	8	
Mississippi	47.16	56, 22	21.04	17.14	81.80	2	
Louisiana		64, 78	16.95	13.81	27. 43	2	
Toxas		62.41	8.80	6.94	83.07	8	
OkiahomaArkansas		69, 09	0. 15	10.50	0, 59 18, 90	2	
Westorn division			₩ •				
Western division Montana	L	94, 73	5.00	5. 45 1. 12	7. 00		
Wyoming	95.78	97. 16	1, 95	1.09	2. 01		
Colorado	88, 75	87. 04	3. 57	3, 66	7.08		
New Mexico		91, 93	0.74	0.43	8.77		
Arizona		86, 83	3, 58	5.48	4. 35	1	
Utah		95. 42	1.15	0, 63	4, 01		
Nevada		90, 31	3, 92	4.49	8.60		
Idaho		95. 28	1.05	1.70	8, 57	*	
Washington		92, 79	3,00	3.20	5.46		
** ***********************************	21,00		il .		li .		
Oregon	87. 44	85. 95	4.24	4.57	8. 32		