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THE DEVELOPMENT OF AGRICULTURE
IN
MINNESOTA

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CHAPTER I

INTRODUCTION.

This investigation is an attempt to trace the development of agriculture in Minnesota by means of a series of maps representing the production of the most important crops and the increase in rural population from 1860 to the present time as indicated by the federal census reports.

At this time the most that can be shown is the extent to which these crops have been produced in the state, the localization of the industry and the direction and rapidity of its movement throughout the state, leaving out of consideration for the time several important factors which must necessarily be included in order to complete the subject, such as the dairy and live-stock industries, the geology and soil of the state and the development of transportation facilities, which for lack of time have been on-

ly incidentally considered.

The base maps are presumed to be correct but especially in the case of the earlier maps, there were many instances in which the census reports, the state maps, and the laws of Minnesota establishing ^{county} boundaries did not agree. In the map of 1860 Pipestone and Rock counties were transposed owing evidently to a mistake of the legislature when the counties were established in 1858, but (1) this was corrected in 1862. Lac Qui Parle county was originally located north of the Minnesota River but when Chippewa county was formed in 1868 it was made to include (2) all of the territory which had been known as Lac Qui Parle county, and yet the census report of 1870 recognized both Chippewa and Lac Qui Parle counties although the present county bearing that name was not established until 1871. (3)

According to a later report Swift county was formed out of part of Lac Qui Parle county in 1870 while in reality it was formed out of the northern part of Chippewa county. (4) Traverse county as established in 1868 was made (5)

to overlap Bigstone county so that several townships might

(1) Map of Minnesota, 1860. J.S. Sewall and C.W. Iddings.

(2) Special Laws of Minnesota, 1862 C 30.

(3) Laws of Minnesota, 1858 C 113, S.1.

(4) XII Census, 1890. Population, Pt. 1, p. 25.

(5) Laws of Minnesota. 1870 C 90.

(6) Laws of Minnesota, 1868 C 109.

have belonged to either leaving the other with a smaller area than the constitution permitted. Several attempts were made to establish a Lincoln county before the present county bearing that name was formed and this gave rise to several mistakes in the early maps. The statistics of agricultural products have been taken entirely from the federal census reports because of the disagreement between the government figures and those prepared by the state commissioner of statistics.

CHAPTER II
(1)
RURAL POPULATION.

*1860.....	153,225
1870.....	368,962
1880.....	635,498
1890.....	867,498
1900.....	1,153,294
1910.....	1,225,414

The rural population of the state according to the census of 1860 was about 153,000, mostly located south and east of Hennepin county, although already spreading to the northwest as is shown by the population in Wright and Stearns counties. At this time there was not a mile of railroad in the state and agriculture was only possible where there was easy access to navigation on the St. Croix River, on the Mississippi from St. Paul and on the Minnesota from Mankato. Corn, wheat, oats and potatoes were grown in about equal proportions although Hennepin, Houston, Mower, Freeborn and Waseca counties raised more corn than of the other crops.

(1) Outside of incorporated places of 2500 or more inhabitants.

* Plates 1 to 6

(1)
The first railroad in the state was built in 1862 between St. Paul, the head of navigation on the Mississippi, and St. Anthony, a distance of ten miles. By 1871 there were nearly 1,600 miles of road in operation, due partly to the natural development of railroad systems throughout the country and partly to the demand for transportation facilities to the great wheat country in the northwest. In answer to this demand the St. Paul and Pacific Railroad Company had by 1870 constructed a road from St. Paul to Benson in Swift County, a distance of 134 miles, and from St. Paul to Sauk Rapids in Benton County. The line from St. Paul to Duluth was completed in 1870 and from Duluth to Moorhead in 1871.

In southern Minnesota the Saint Paul and Chicago reached Hastings in 1869, The Winona and St. Peter was built to Janesville, the Southern Minnesota through Houston County to Lanesboro in Fillmore County, the St. Paul and Sioux City almost to St. James in Watonwan County and the Minnesota Central through Austin to the Iowa line.

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- (1) Report of Railroad Commissioner, 1872, p. 7.
 - (2) Report of Railroad Commissioner, 1871, p. 9.
 - (3) Report of Railroad Commissioner, 1872, p. 8.
 - (4) Ibid, p. 14.
 - (5) Ibid, p. 19.
 - (6) Ibid, p. 9.
 - (7) Ibid, p. 10.
 - (8) Ibid, p. 13.
 - (9) Ibid, p. 13.
 - (10) Ibid, p. 17.

On account of this development of transportation facilities the rural population more than doubled by 1870 and spread rapidly into the northwestern counties and western counties. Production increased most rapidly in wheat and oats, especially in the newly settled counties although the greatest increase in all crops was in the southeast.

The railroad mileage increased to 2,941 miles in 1879⁽¹⁾ and to 5,042 miles in 1888.⁽²⁾ The main line of the St. Paul and Pacific was completed to Breckenridge in 1871 and from Breckenridge to St. Vincent soon after.⁽³⁾ The St. Vincent extension from St. Cloud reached Alexandria by 1879 and the Hastings and Dakota Railroad reached Montevideo the same year.⁽⁴⁾ Railroad extensions had also been made in the southwest through Redwood, Lyon and Yellow Medicine counties and across the entire southern boundary of the state.⁽⁵⁾

From 1880 to 1900 the rural population of the state increased rapidly throughout the western counties, most especially in the Red River and western Minnesota River valleys which became the greatest wheat producing sections

(1) Minnesota Legislative Manual, 1889, p. 422.
(2) Ibid.
(3) Report of Railroad Commissioner, 1872, p. 8.
(4) Minnesota Legislative Manual, 1879, p. Map.
(5) Ibid.
(6) Ibid.
(7) Ibid.

(1)
in the state. In 1910 the rural population had increased
very little as the increase in the northwest did not much
more than make up for the falling off in the southern part
of the state.

(1) XIII Census Bulletin. Population, Minnesota, p.4.

CHAPTER III
THE PRODUCTION OF WHEAT.

In the production of cereals, Minnesota ranked 24th. in 1859, 12th. in 1869, 13th. in 1879, 8th. in 1889, and 8th. in 1899. ⁽¹⁾ Up to 1909 there has been a consistent increase in the average of all cereals except wheat which had a smaller acreage, ^{namely} 3,276,911 acres, in 1909 than it had in 1889 when 3,372,627 acres were cultivated.

In 1859 there were produced in the United States ⁽²⁾ 173,104,924 bushels of wheat, of which Minnesota produced ⁽³⁾ 2,186,999 bushels, ranking 17th. as compared to the other states. The state here appears in the census for the first time as a wheat state as ten years before it had produced only 1,401 bushels. The Eighth Census report on agriculture was issued in 1864 and it was complained at this time that the means of transportation had not kept ⁽⁴⁾ pace with the increased production of wheat, that it was impossible to get the grain to the eastern markets as it would cost five times as much to get a bushel of wheat

(1) XII Census, 1900. Vol. VI. Agr. Pt. II, p. 64.

(2) VIII Census, 1860. Agr. P. xxix.

(3) Ibid, p. xxx.

(4) Ibid, p. xli.

from Iowa to New York as the farmer could obtain for it. Agricultural conditions in the west were beginning to improve however as the following table of shipments of wheat from Chicago between 1838 and 1863 will show:

(1)

Shipments of Wheat from Chicago.

1838.....	78 bushels.
1839.....	3,678 "
1840.....	10,000 "
1841.....	40,000 "
1842.....	586,000 "
1845.....	1,000,000 "
1847.....	2,000,000 "
1854.....	2,744,000 "
1855.....	7,110,270 "
1856.....	9,419,365 "
1857.....	10,783,292 "
1858.....	10,759,359 "
1860.....	16,054,379 "
1861.....	22,913,830 "
1862.....	22,902,765 "
1863.....	17,925,336 "

Production of Wheat According to the Census Reports
1859 to 1909 and the yield in five leading
counties:

	acres	bushels
1859	No Report	2,186,993
1869	" "	18,866,073
1879	3,044,670	34,601,030
1889	3,372,627	52,300,247
1899	6,560,707	95,278,660
1909	3,276,911	57,094,412

(1) VIII Census, 1860, Agr. p. xlii.

1859:-

	Acres	Bushels
Fillmore		391,350
Olmstead	No	232,469
Dakota	Acreage	173,652
Winona	Reported.	166,950
Goodhue		152,348

1869:-

	Acres	Bushels
Olmstead		
Goodhue	No	2,117,074
Fillmore	Acreage	1,815,603
Wabasha	Reported.	1,688,035
Dakota		1,480,293
		1,435,874

1879:-

Goodhue	199,142	2,415,891
Olmstead	152,204	1,656,286
Fillmore	165,904	1,626,387
Wabasha	118,935	1,461,674
Mower	138,023	1,370,160

1889:-

Polk	237,429	3,013,361
Otter Tail	160,153	2,623,583
Stearns	131,656	1,992,246
Renville	132,281	1,956,002
Lac Qui Parle	106,889	1,639,868

1899:-

	Acres	Bushels
Polk	305,807	4,128,620
Otter Tail	241,169	3,941,120
Renville	225,178	3,698,160
Lac Qui Parle	218,420	3,219,230
Stearns	192,515	3,002,230

1909:-

Renville	125,802	2,758,325
Polk	164,229	2,621,256
Otter Tail	166,023	2,436,207
Stearns	116,052	2,180,607
Lac Qui Parle	104,421	1,725,859

* In 1859, 1869 and 1879 the counties producing the greatest amount of wheat were all in the southeastern part of the state, Fillmore, Olmstead and Goodhue appearing each time among the five leading counties and Dakota and Wabasha each appearing twice. Fillmore and Olmstead Counties led in production in 1859, the area of most extensive production including the country in and around these counties and extending up through Hennepin and Washington Counties; very little being grown west of Rice, Dodge and Fillmore. The northern limit was Stearns County with 60,000 bushels. Olmstead took the lead in 1869 and the

Plates 7-12-17

area extended as far as Blue Earth and Fairbault with a slight yield in Brown, Watonwan and Martin, beginning to extend westward along the Minnesota River. In the northwest there was a fairly heavy yield in Stearns County and production had extended over into Douglas and Otter Tail Counties. From this time on the cultivation of wheat in the northwest developed rapidly and by 1879 all of the western counties except Kittson and Marshall were producers, a very large proportion of the yield coming from the Red River valley.

* In 1889, 1899, and 1909 the counties growing the most wheat were all found in the western and northwestern part of the state. Polk, Otter Tail, Stearns, Renville and Lac Qui Parle were in the lead in 1889 and the same five counties, but in different order, appeared as the foremost wheat producers in 1899 and 1909. The southeast which had formerly been the most productive wheat country had a comparatively light yield in 1889, the area producing the greatest amount of wheat being then in the Minnesota River and Red River valleys and in Blue Earth, Brown, Fairbault and neighboring counties. The heaviest production was in

Plates 23-29-35

(1)
and around Nicollet and Lac Qui Parle Counties. In 1899
Minnesota took the lead of all the states with a production
of 95,278,660 bushels, about 14.5% of the entire wheat crop
of the United States. More than four-fifths of the farms
were producing wheat. Although comparatively light in the
southeast there was a heavier yield than ten years before,
the greatest increase however was in the southern Red River
valley and the western Minnesota River valley, ---in Trav-
erse, Bigstone, Lac Qui Parle and Yellow Medicine Counties.

(2)
In 1909 there were but 57,094,412 bushels produced in
the state or very little more than in 1889. Except for a
slight increase in the northwestern counties the falling
off has been quite general as is shown by a comparison of
the five counties growing the most wheat in 1899 and 1909.
Polk county produced 4,128,620 bushels in 1899 and only
2,621,256 in 1909, Renville 3,698,160 in 1899 and 2,758,525
in 1909, Lac Qui Parle 3,219,230 in 1899 and 1,725,859 in 1909.
The total for the five counties was about 18,000,000 bush-
els in 1899 and less than 12,000,000 bushels in 1909.

The most consistent producers of wheat since 1859 have

(1) XII Census, 1900. Vol. II. Agr. Pt. 1. p. 31.

Ibid, p. 92.

(2) XIII Census, 1910, Bulletin, Agr.: Minnesota, p. 9.

been the counties in the south central part of the state, Nicol-
let, Blue Earth and the adjacent counties.

CHAPTER IV
 THE PRODUCTION OF OATS, CORN, BARLEY
 FLAXSEED AND POTATOES

*
 Production of Oats According to the Census
 Reports from 1859 to 1909 and the Yield in
 Five Leading Counties:-

1859:-	Acres	Bushels
1859	None reported.	2,176,002
1869	" "	10,678,261
1879	617,469	23,382,158
1889	1,579,258	49,958,791
1899	2,201,325	74,054,150
1909	2,977,208	93,897,717
1859:-		
Fillmore	No	295,000
Dakota	Acreage	270,211
Olmstead	Reported.	222,393
Winona		145,830
Washington		143,466
1869:-		
Olmstead	No	996,364
Fillmore	Acreage	976,281
Goodhue	Reported.	825,301
Wabasha		669,410
Dakota		634,806

* Plates 8-13-18-24-30-36

1879:-	Acres	Bushels
Fillmore	36,681	1,370,309
Goodhue	29,794	1,275,772
Olmstead	28,377	1,093,924
Mower	27,443	1,044,943
Winona	19,947	795,624

1889:-

Fillmore	69,259	2,750,757
Dakota	75,755	2,534,796
Mower	62,313	2,433,849
Goodhue	59,266	2,348,374
Olmstead	47,297	1,936,364

1899:-

Mower	114,452	4,188,380
Dakota	99,398	3,348,030
Fillmore	87,179	3,011,400
Olmstead	59,063	2,089,320
Martin	60,921	1,879,310

1909:-

Martin	105,977	3,155,585
Mower	100,730	3,020,317
Polk	96,774	2,747,228
Stearns	72,695	2,694,415
Nobles	89,972	2,537,176

In 1859 the state produced 2,176,072 bushels of oats,
 a great gain over the yield of ten years before, only
 (1)
 30,582 bushels. From 1859 through 1899 the five counties

(1) VIII Census, 1860, Agr. p. lxiv.
 Ibid, p. lxv.

producing the greatest amount of oats were all found in the southeastern section of the state and in 1909 Mower County ranked second. There was little oats grown in the southwest before 1879 but by 1899 several of the counties, Pipestone, Rock, and Nobles ^{came to the front, and in 1909 Nobles County} ~~began to~~, produced the fifth largest yield in the state.

Oats followed closely after wheat as that crop spread to the northwest. It reached Stearns County and Morrison County in 1859, Otter Tail in 1869, Marshall County in 1879 and the northwestern corner of the state in 1889. In 1909 the heaviest production was in the southwest and middle west in and around Lac Qui Parle County, and quite uniformly heavy throughout the Red River valley.

The most consistent production of oats has been in the southeastern and southern counties. LeSueur County has been uniformly light and Lincoln and Waseca Counties have not produced as heavily as the surrounding counties. Mower and Dakota Counties on the map of 1900* show up so much more heavily than the surrounding counties that it seemed at first that the figures must be wrong but the apparent error

* Plate 30

may be explained by the fact that in these counties there was an exceptionally high acreage of oats per farm, 99,398 acres in Dakota^{County} and 114,452 acres in Mower^{County. This was}, about twice as great as the acreage in other counties with the exception of Fillmore which had 87,179 acres under cultivation. (1)

*
Production of Corn According to the Census Reports 1859 to 1909 and the Yield in Five

Leading Counties:-

	<u>Acres</u>	<u>Bushels</u>
1859	None reported.	2,941,952
1869	" "	4,743,117
1879	438,737	14,831,741
1889	901,690	24,696,446
1899	1,441,580	47,256,920
1909	2,004,068	67,897,051

1859:-

Fillmore	No	433,895
Hennepin	Acreage	222,684
Olmstead	Reported.	206,991
Rice		168,092
LeSueur		162,511

1869:-

Fillmore	No	389,956
Olmstead	Acreage	340,223
Wabasha	Reported.	312,697
Winona		273,447
LeSueur		264,288

(1) Figures obtained from E.C. Durand, Director of Census.

*Plates 10-15-20-26-32-38

1879:-	<u>Acres.</u>	<u>Bushels.</u>
Fillmore	27,724	970,818
Houston	22,692	822,763
Fairbault	21,277	753,330
Blue Earth	21,636	689,835
LeSueur	15,035	595,588

1889:-		
Fillmore	54,247	1,759,139
Blue Earth	42,319	1,286,275
Houston	35,445	1,191,986
Goodhue	35,824	1,018,182
Olmstead	34,491	1,012,075

1899:-		
Fillmore	63,073	2,530,050
Blue Earth	44,214	1,697,760
Martin	53,191	1,685,860
Nobles	57,445	1,675,130
Fairbault	43,356	1,625,670

1909:-		
Martin	79,370	2,936,289
Blue Earth	67,157	2,532,182
Fairbault	66,798	2,481,412
Redwood	66,313	2,397,090
Jackson	66,636	2,303,976

From 16,725 bushels in 1849 the corn crop increased
(1)
in 1859 to nearly three million bushels, almost a third
greater than the yield of wheat and oats. Practically

(1) VIII Census, 1860, Agr. p. xlv. i.

all of this was raised south and east of Hennepin County and not until after 1869 was there much raised outside of this area. Stearns County produced about 40,000 bushels in 1859 and about 80,000 bushels in 1869. By 1879 there was corn produced in Becker County and in 1909 Kittson County, in the extreme northwestern part of the state, produced about 30,000 bushels. The cultivation of corn in the northwestern counties began much later than was the case with wheat and oats and comparatively little has ever been produced in the Red River valley.

In 1859 the yield was heavy in Fillmore County and the surrounding counties and also in and around Hennepin, Dakota, Rice and LeSueur. These same general areas produced the most also in 1869, 1879 and 1889, including in 1879 and 1889 Blue Earth and Fairbault ^{Counties} as heavy producers. Rock County in the southwest appeared for the first time in 1889 as the centre of another area of heavy production.

In 1889 Minnesota ranked 21st. in acreage of corn and (1)
20th. in production and in 1899, 13th. in production. (2)

The yield in 1899 and 1909 was quite general throughout

(1) XI Census, 1890, Agr. & Fish., p. 11.

(2) XII Census, 1900, Vol. VI. Agr. Pt. II., p. 78.

the southern part of the state and heaviest in 1899 in the southeastern, south central and southwestern counties and in 1909 in the south central and southwestern counties, the southeast having fallen off to a certain extent, and the southwest and south central having gained. There was a very noticeable increase also in the western Minnesota River valley.

By far the greater part of the corn crop has been grown south of the Minnesota River. Sherburne, Wright, Hennepin, McLeod, Sibley, Nicollet and Washington Counties have however always had a moderately heavy yield especially since 1869. In 1909 Rock, Watonwan and Martin Counties had a large acreage per farm in corn.

*

Production of Barley According to the Census
Reports from 1859 to 1909 and the Yield in
Five Leading Counties:-

	<u>Aores</u>	<u>Bushels</u>
1859	None reported.	109,668
1869	" "	1,032,024
1879	116,020	2,972,965
1889	358,510	9,100,683
1899	877,845	24,314,240
1909	1,573,761	34,927,773

* Plates 9-14-19-25-31-37

1859:-

	<u>Acres.</u>	<u>Bushels.</u>
Washington	No	19,646
Fillmore	acreage	16,104
Rice	reported.	12,208
Olmstead		9,932
Winona		9,329

1869:-

Olmstead	No	114,056
Fillmore	acreage	108,335
Goodhue	reported.	81,878
Wabasha		80,125
Winona		64,311

1879:-

		344,962
Olmstead	12,603	324,059
Goodhue	11,062	282,962
Wabasha	10,343	257,342
Mower	9,382	176,037
Fillmore	6,684	

1889:-

Goodhue	44,923	1,330,951
Olmstead	36,154	1,152,809
Winona	33,075	1,067,797
Wabasha	34,146	990,512
Fillmore	17,254	551,927

1899:-

Olmstead	70,932	2,032,280
Goodhue	72,492	1,909,230
Wabasha	69,183	1,902,250
Winona	57,875	1,532,950
Rock	49,788	1,405,780

1909:-

	<u>Acres</u>	<u>Bushels</u>
Goodhue	80,924	1,889,142
Wabasha	67,990	1,682,961
Winona	65,280	1,559,815
Olmstead	63,428	1,379,796
Fillmore	53,171	1,352,663

(1)

The state produced but 109,668 bushels of barley in 1859, ranking 15th. More than half of this was grown in four counties in the southeastern part of the state, Washington, Fillmore, Rice and Olmstead. The crop of 1869 amounted to 1,032,024 bushels produced mainly in Olmstead, Fillmore and the surrounding counties. The production in other counties was very light and cultivation extended to the northwest as far as Stearns County where about 20,000 bushels were grown.

(2)

In 1879 and 1889 the crop amounted to 2,972,965 bush-

(3)

els and 9,100,683 bushels respectively and was produced

(1) VIII Census, 1860, Agr. p. lxviii.

(2) XII Census, 1900. Vol. VI., Agr. Pt. II., p. 72.

(3) Ibid.

mainly in the southeast, ---Goodhue, Wabasha, Dodge, Olmstead, Mower, Fillmore and Winona Counties growing more than half of the entire crop in 1879 and nearly two-thirds of the entire crop in 1889. ^{*1} All ^{*2} of the southern counties produced barley in 1879 and all of the western counties in 1889. All of the counties, along the southern boundary of the state, except Houston County, had comparatively heavy yields in 1889. In 1899 and 1909 the same counties in the southeast were the heaviest producers, but in 1899 there was another heavy area in and around Rock County, and in 1909 both the southwest and west were producing a large proportion of the crop.

(1)

In 1889 Minnesota ranked 4th. in the production of barley and 2nd. in 1899. ⁽²⁾ Three-fourths of the entire yield of the United States in 1899 came from four states, California, Minnesota, Wisconsin and Iowa. California produced one-fourth of the entire yield and Minnesota, Wisconsin and Iowa together one-half.

***3**

Production of Flaxseed According to the Census Reports 1859 to 1909 and the Yield in Five

Leading Counties:-

(1) XI Census, 1890. Agr. & Fish., p. 21.

(2) XII Census, 1900, Vol. VI. Agr., Pt. II., p. 43.

*1 Plate 19 *2 Plate 25 *3 Plates 22-28-34-40

	<u>Acres</u>	<u>Bushels</u>
1859	None reported.	118
1869	" "	18,635
1879	" "	98,689
1889	303,635	2,721,987
1899	566,801	5,895,479
1909	358,426	3,277,238

1859:-

Nicollet		29
Steele	No	21
Rice	Acreage Reported.	15
Olmstead		7
Dodge		6
Fillmore		6

1869:-

Hennepin		6,504
Dakota	No	6,263
Carver	Acreage	2,714
Meeker	Reported.	1,325
Dodge		401

1879:-

Blue Earth	XXXXXX	24,014
Nobles	No	18,188
Fairbault	XXXXXX	17,044
Rock	Reported	10,688
Jackson	XXXXXX	8,738

1889:-

Mower	30,244	312,108
Watsonwan	16,740	172,094
Blue Earth	14,137	167,506
Jackson	20,980	163,450
Nobles	21,223	153,848

1899:-	<u>Acres</u>	<u>Bushels</u>
Clay	44,662	424,580
Wilkin	26,899	227,080
Grant	23,238	215,510
Olmstead	14,922	186,270
Mower	15,998	182,550

1909:-	<u>Acres</u>	<u>Bushels</u>
Polk	24,500	198,503
Mower	14,798	155,871
Marshall	17,009	141,744
Lac Qui Parle	12,578	128,913
Pope	11,465	116,013

There were but 566,867 bushels of flaxseed produced in the United States in 1859⁽¹⁾ and only 118 bushels in Minnesota. In 1869 the state produced 18,635 bushels, almost all of which came from Hennepin, Dakota, Carver, Meeker and Dodge Counties, and in 1879, 98,689 bushels most of which was produced in Blue Earth, Nobles, Fairbault, Rock and Jackson Counties, in the central and southwestern part of the state. ⁽²⁾

In 1889 and 1899 both the southeastern and southwestern parts of the state produced flaxseed and in 1899 also the western part all through the Red River valley but especially from Clay County southward. Almost six million ⁽³⁾

(1) VIII Census. Agr., 1860. p. xell.

(2) IX Census. 1870. Indus. & Wealth. p. 183.

(3) XII Census, 1900. Vol. VI. Agr., Pt. II., P. 438.

bushels were raised in the state in 1899, and Mower County produced the largest amount of 756 flax-producing Counties in the United States, 312,108 bushels, the state ranking second in acreage and first in the production of seed.

In 1909 the heaviest production was in the Red River valley and in the southeast. Only a little over three million bushels were produced and the falling off was general throughout the state.

Up to 1889 practically all of the flaxseed was grown south of the Minnesota River, in the southeast and the southwest. The middle western part of the state produced a large share of the yield in 1899 but much less in 1909.

*

Production of Potatoes According to the Census Reports from 1859 to 1909 and the Yield in Five Leading Counties:-

	<u>Acres</u>	<u>Bushels</u>
1859	None reported.	2,565,485
1869	" "	1,943,063
1879	" "	5,184,676
1889	105,880	11,155,707
1899	146,659	14,643,327
1909	223,692	26,802,948

(1) XI Census. 1890. Agr. & Fish. p.62,65.

* Plates 11-16-21-27-33-39

1859:-

	<u>Acres</u>	<u>Bushels</u>
Blue Earth		543,223
Hennepin	No	179,539
Dakota	Acreage	138,436
Le Sueur	Reported.	124,198
Fillmore		115,560

1869:-

Olmstead		126,668
Stearns	No	120,865
Hennepin	Acreage	98,863
Wabasha	Reported.	97,700
Dakota		93,387

1879:-

Hennepin		316,872
Dakota	No	239,481
Olmstead	Acreage	188,091
Stearns	Reported.	184,307
Winona		183,705

1889:-

Hennepin	9,522	1,018,203
Chisago	3,697	612,397
Dakota	4,766	598,257
Isanti	3,683	530,143
Washington	3,324	431,908

1899:-

Isanti	13,283	1,425,233
Chisago	10,536	1,164,922
Hennepin	9,567	904,359
Anoka	6,803	716,904
Dakota	4,207	404,170

1909:-

	<u>Acres</u>	<u>Bushels</u>
Hennepin	17,471	2,438,132
Isanti	16,798	2,150,573
Chisago	12,284	1,874,597
Clay	19,674	1,790,460
Anoka	10,756	1,255,880

According to the census figures, Minnesota raised more potatoes in 1859 than it did ten years later; ⁽¹⁾ 2,565,485

bushels in 1859 and 1,943,063 in 1869. ⁽²⁾ Blue Earth County

was reported with a yield of 543,223 ⁽³⁾ or more than a fifth of the entire crop. The figures are evidently wrong judg-

ing by the production in other counties and in Blue Earth since that time. Leaving Blue Earth out of consideration the heaviest production was in Hennepin, Dakota, LeSueur and Fillmore Counties and potatoes were grown throughout the southeast and as far north as Morrison County.

The leading Counties in 1869 were Olmstead, Stearns, Hennepin, Wabasha and Dakota and in 1879 Hennepin, Dakota, Olmstead, Stearns, and Winona, the production in other counties being fairly uniform especially throughout the southeast. In 1869 Wilkin and Otter Tail each produced about 10,000 bushels and Jackson County in the southwest also about 10,000

(1) VIII Census of U.S., 1860. Agr. p. lxxix.

(2) XII Census. 1900. Vol. VI. Agr. Pt. II. p. 329.

(3) VIII Census of U.S. 1860. Agr. p. 81.

* Plate 11

bushels. By 1879 production had extended north through Polk County and throughout the southern section of the state.

From 1889 through 1909 the counties of Isanti, Chisago, Hennepin, Ramsey, Washington and Dakota have constituted the great potato-growing district of the state, although Washington and Dakota have not kept pace with the other members of the group since 1899. Sherburne County had a comparatively heavy yield in 1909 and Clay County, the only heavy producer in the west, ranked fourth in 1909 with 1,790,460 Bushels.

CHAPTER V

SUMMARY

The eastern part of the section of the state south of the Minnesota River and Mississippi River was in 1859 the most thickly populated part of the state and naturally also the most productive, and on account of the poor transportation facilities only the portion near the rivers was thickly settled. With the exception of a large yield of potatoes reported for Blue Earth County, and which was evidently a mistake in figures, none of the counties specialized in any particular crop. Fillmore and Olmstead Counties stand out as very heavy producers while Houston County, although not unfavorably located as far as transportation was concerned, was comparatively light. In 1869 population had begun to spread westward but west of Brown County the country was still sparsely settled. Crops were much heavier than ten years before, the production of wheat had increased more rapidly than of oats and corn, but otherwise there was not much change.

Population had spread by 1879 throughout this section of the state but remained the heaviest in the east. Wheat was raised most heavily in Goodhue, Wabasha, Dodge, Olmstead, and the neighboring counties, corn the most heavily in LeSueur, Blue Earth, Fairbault, Fillmore and Houston Counties and the yield of oats was uniformly heavy in the east except in Scott, LeSueur, and Houston Counties. Barley was grown principally in Goodhue, Wabasha, Olmstead and Mower Counties and potatoes quite uniformly throughout the east. Blue Earth, Fairbault and Nobles each produced about 20,000 Bushels of flax and Watonwan, Jackson and Rock each about 10,000 bushels.

In the west Lac Qui Parle, Yellow Medecine, Lyon and Rock Counties had good crops of wheat and oats, oats were also grown in Jackson, Martin and Watonwan Counties to a considerable extent and Rock, Nobles and Martin Counties were fairly heavy producers of corn.

In 1889 the portion of this section chiefly devoted to wheat was in and around Blue Earth and Fairbault Counties. Wabasha, Olmstead, Winona, Fillmore and Houston Counties were

heavy producers of both oats and corn. Dakota, Dodge, Olmstead, Mower, Fillmore and Houston Counties produced but little wheat, raising mostly oats and corn. LeSueur County raised mostly wheat and corn.

Barley was mostly produced in Goodhue, Wabasha, Olmstead and Winona Counties and neighboring Counties. Flax was grown in Dodge and Mower Counties and in the southwest. Potatoes were produced most heavily in Dakota County and fairly so throughout the southeast.

With the exception of Dakota County, the production of wheat in 1899 was along the Minnesota River and down through Fairbault County. In the east where little wheat was grown there was the greatest production of oats and barley. Corn and potatoes were grown quite uniformly throughout the section. Barley was raised to a considerable extent in and around Rock County besides being produced heavily in the east, but not to any great extent in those counties producing a large amount of wheat. Very little flax was produced in Scott and LeSueur Counties but in other Counties throughout the section the yield was quite uniform.

In 1909 the section produced much less wheat than ten years before. The yield was fairly heavy along the Minnesota River, in Fairbault County. Rice, Waseca, Steele, Freeborn, and Goodhue Counties in the east and Lincoln County in the west had comparatively good crops. Oats were produced most heavily in the southeast and southwest where little wheat was grown and also quite heavily throughout the wheat-producing area except in the east in LeSueur and Waseca Counties while which belonged to the corn-producing area of the central portion of this section including Blue Earth, Watonwan, Martin and Fairbault Counties as the heaviest producers. Rock County also had a large yield of corn and with the exception of Lincoln and Goodhue Counties the production was heavy throughout the section. Barley was grown principally in Goodhue, Wabasha, Olmstead, Winona and neighboring counties and in the western part of the section and the same area were the leading producers of flaxseed. Very little flax was grown in Houston County. The potato crop was especially heavy in Dakota, Winona, Mower and Rock Counties and quite uniformly so throughout the section. Lincoln County produced principally oats and barley but was somewhat light even in oats.

It had a rather light yield of corn, 523,670 bushels, and produced 467,078 bushels of wheat, which was somewhat greater than the yield in most of the neighboring counties.

In the section east of the Mississippi River the most densely populated area ^{in 1854} extended through Washington, Ramsey, Anoka and Chisago Counties. Washington County produced wheat, oats, corn and potatoes, Ramsey County principally oats, corn and potatoes. With the exception of light crops in Chisago County and along the river there was little produced in other parts of this section. In 1869 and 1879 Washington and Ramsey Counties produced large crops of wheat, oats and corn. Ramsey County became in 1879 a heavy producer of potatoes and Isanti, Chisago and Anoka Counties had fairly good yields of all crops. Barley was grown principally in Washington and Chisago Counties in 1879, and St. Louis and Carlton Counties produced each about 20,000 bushels of potatoes.

From 1879 to 1909 the counties along the Mississippi River produced largely wheat, ^{and} oats, and some corn. Isanti, Chisago, Anoka, Ramsey and Washington Counties became the greatest potato-growing area in the state. North of Isanti

County and east of Crow Wing and Morrison Counties the principal crop has been potatoes; although some oats and corn have been grown. Washington County has produced regularly good crops of wheat, corn, potatoes and barley.

In the section west of the Mississippi River and north of the Minnesota River the population was in 1859 located principally in Hennepin and Carver Counties, as far up the Mississippi River as Stearns County and up the Minnesota to Nicollet County. Settlement spread rapidly up the Minnesota River and through the Red River valley and by 1879 the section was well settled as far north as Polk County.

Hennepin County produced comparatively heavy yields of all of the crops considered in 1859 and 1869. It has always produced comparatively large yields of corn and oats and since 1879 has been one of the greatest potato producers. Some wheat has always been produced in the county but rather light yields as compared to the other counties since 1879. Throughout the Minnesota and Red River valleys the section has produced mainly wheat and oats and, in the southern part, large crops of corn. There has been very little

corn grown north of Otter Tail County. Potatoes have been produced throughout the section, and since 1899 there has been an exceptionally heavy yield in Clay County. Barley has been grown throughout the Minnesota and Red River valleys since 1889. Flaxseed was produced along the Minnesota River in 1889, in both the Minnesota and Red River valleys in 1899, and in 1909 in the Red River Valley as far north as Clay County there was a heavy yield.

Throughout the northern section of the state from Beltrami and Cass Counties eastward there has been very slight production of any of the crops considered with the exception of potatoes, fairly large crops of which have been produced since 1899 in this section.

Among the counties which have appeared most often as the leading producers of the crops considered, Fillmore, and Olmstead have appeared each twenty-one times and Dakota and Goodhue Counties twelve times each. Fillmore has ranked first *nine* times, once in wheat, three times in oats, and five times in corn. Olmstead County has ranked first six times, once in wheat, once in oats, three times in barley and once in potatoes.

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PORTS	WHEAT	OATS	CORN	BARLEY	POTATOES	TOTALS
	Bushels	Bushels	Bushels	Bushels	Bushels	Bushels
Pt. Douglas	6,000	6,000				12,000
Hastings	49,477	59,400			3,000	111,877
Pine Bend	3,000	1,000				4,000
Newport		1,500				1,500
Red Wing	30,000†					30,000
Lake City	18,000				3,400	21,400
Wabasha	4,800	10,000			2,000	16,800
Reed's Landing	3,000	3,000			1,000	9,000
Minneiska	12,000†					12,000
Mt. Vernon	3,000†					3,000
Winona	177,000	35,000		9,000	6,000	227,000
La Crosse	15,000	1,000	2,000		2,000	20,000
Hokah	3,000					3,000
Brownsville	32,000	4,000		1,000		37,000
Lake Superior					1,000	1,000
Totals	369,625	177,500*	40,376*	10,000	123,400	720,901‡

In spite of the fact that, as previously noted, agriculture in Minnesota began in the Cottage Grove district, and the first considerable wheat shipments are stated to have come from the Minnesota Valley, wheat first became the leading crop in the southeastern section, along the Mississippi and adjacent to older wheat-raising districts, and spread thence toward the north and west. Thus, in 1859, as appears from the preceding table, Winona and the other ports in that vicinity showed the largest wheat shipments, while from St. Paul but little, and from Minneapolis no wheat at all, was shipped. There is also contemporary testimony to the effect that the leading primary wheat market was at first Rochester, then Red Wing, and finally (by 1871) Minneapolis, indicating a similar shifting of the principal area of wheat-farming.⁴⁷

Flour manufacture kept pace with, or even outran, the wheat crop. The first custom gristmill at St. Anthony dated from 1851, though it was not adapted to wheat till the following year. About the same time similar mills began to appear in the new cession west of the Mississippi. The first merchant mill at St. Anthony was built in 1854. For several years thereafter the local supply of wheat was inadequate and some had to be brought either 100 miles by wagon from Wisconsin, or up the river from Iowa and Illinois. The mill, nevertheless, proved profitable because of the large local demand, the lower freight charges on wheat than on flour, and the cheapness of power. As late as 1857, flour appears still to have been imported;⁴⁸ but in 1858, before wheat exports had fairly begun, the mill at St. Anthony made the first recorded shipment of flour to eastern markets,⁴⁹ and in the exports of 1859 there is a record of 114 barrels of flour shipped by way of La Crosse and Prairie du Chien, 100 of these going to Boston at a freight rate of \$2.25 per hundred⁵⁰ (Note 1, Table 5). Concerning the first shipment, it is reported by one of those concerned: "It was not considered that Minnesota flour would be accepted as genuine, and to make it genuine it was branded Muskingum Mills, Troy, Ohio. . . . Within about three months after the first shipment the quality of the flour . . . was so very much better than the . . . flour of Ohio that we were compelled to change the brand. Since that time it has dated from Minnesota."⁵¹

Up to 1840 the economic basis of Minnesota had been the fur trade. By 1850 lumbering, though still in its infancy, was fast becoming the leading industry. The close of the decade 1850-1860 saw the new state an agricultural community firmly planted upon the soil.

The full extent of the economic revolution accomplished in the preceding decade appears in the census of 1860. In no respect is the change more strikingly shown than in the number and distribution of the population, compared to 1850 (Fig. 40).

In 1860 there were sixty-four counties in place of nine; three towns (St. Paul, St. Anthony, and Minneapolis) each having over 2,500 population, while another (Stillwater) had 2,380 inhabitants; and the total population was 172,023 east of the Red River, against 6,077 in 1850 for the entire territory.

The distribution of the population shows clearly the influence of transportation routes, settlement being densest along the navigable portions of the Mississippi, Minnesota, and St. Croix, and varying inversely with the distance from these streams. Actually, the population was mostly gathered within from thirty to sixty miles (roughly a two days' drive) of the rivers, but the use of the county as the unit of tabulation renders it impossible to differentiate the areas of denser settlement within the

*First Annual Report of Commissioner of Statistics, 1860, 155. The totals listed in the commissioner's report are 164,500 for oats and 41,376 for corn, while the correct figures of the items are 177,500 and 40,376 respectively. While it is impossible to tell where the errors occurred, the county items are here accepted as correct and new totals calculated, in order to make the total balance.

†All grains, but principally wheat.
⁴⁷Hill, J. J., *History of Agriculture in Minnesota* (Minn. Hist. Soc. Coll. VIII, 282).
⁴⁸Hill, J. J., *History of Agriculture in Minnesota* (Minn. Hist. Soc. Coll. VIII, 282).
⁴⁹First Annual Report of Commissioner of Statistics for 1860, 121.
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⁵¹Pillsbury, C. A., *American Flour* (Depew, *One Hundred Years of American Commerce*, I, 25).
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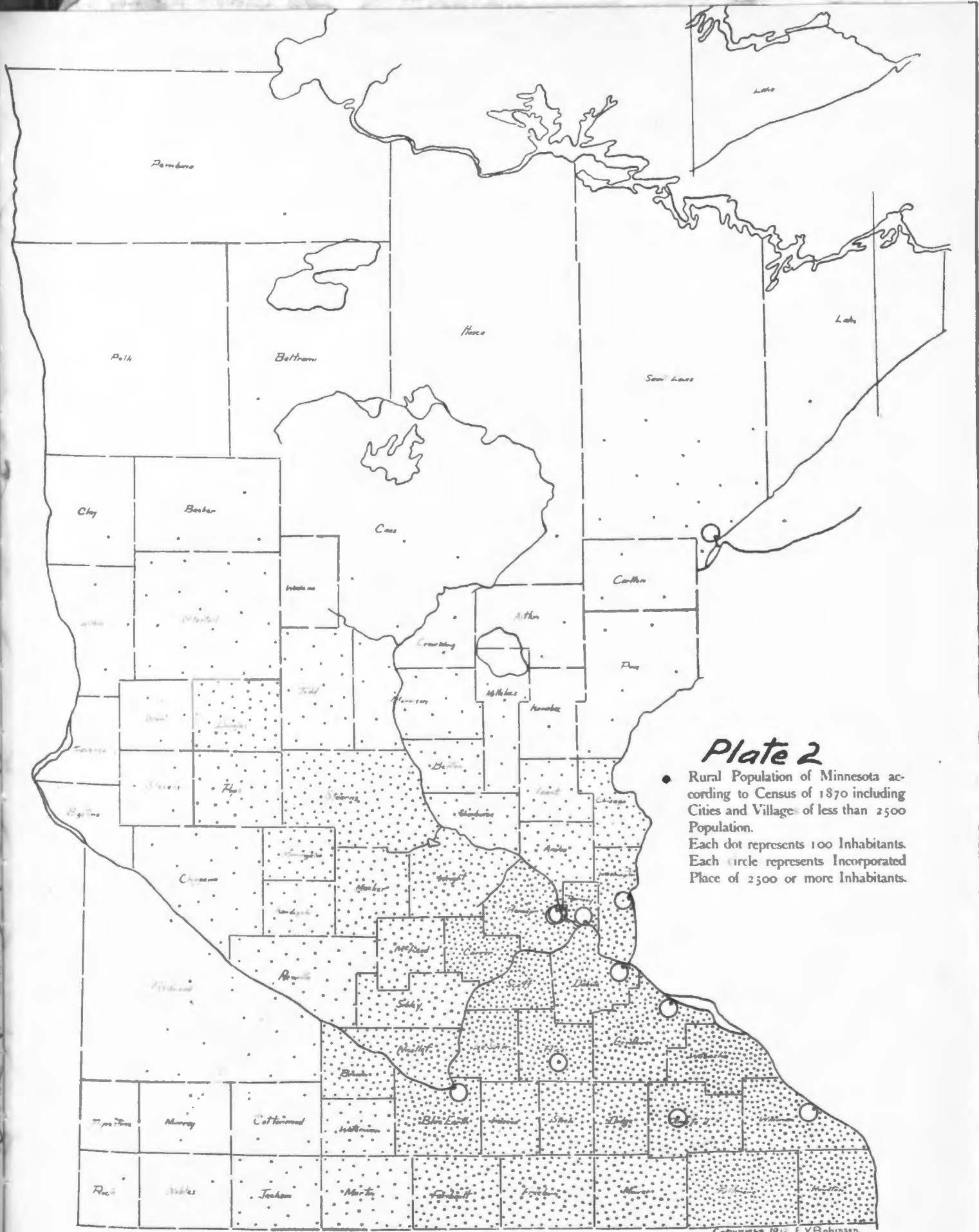
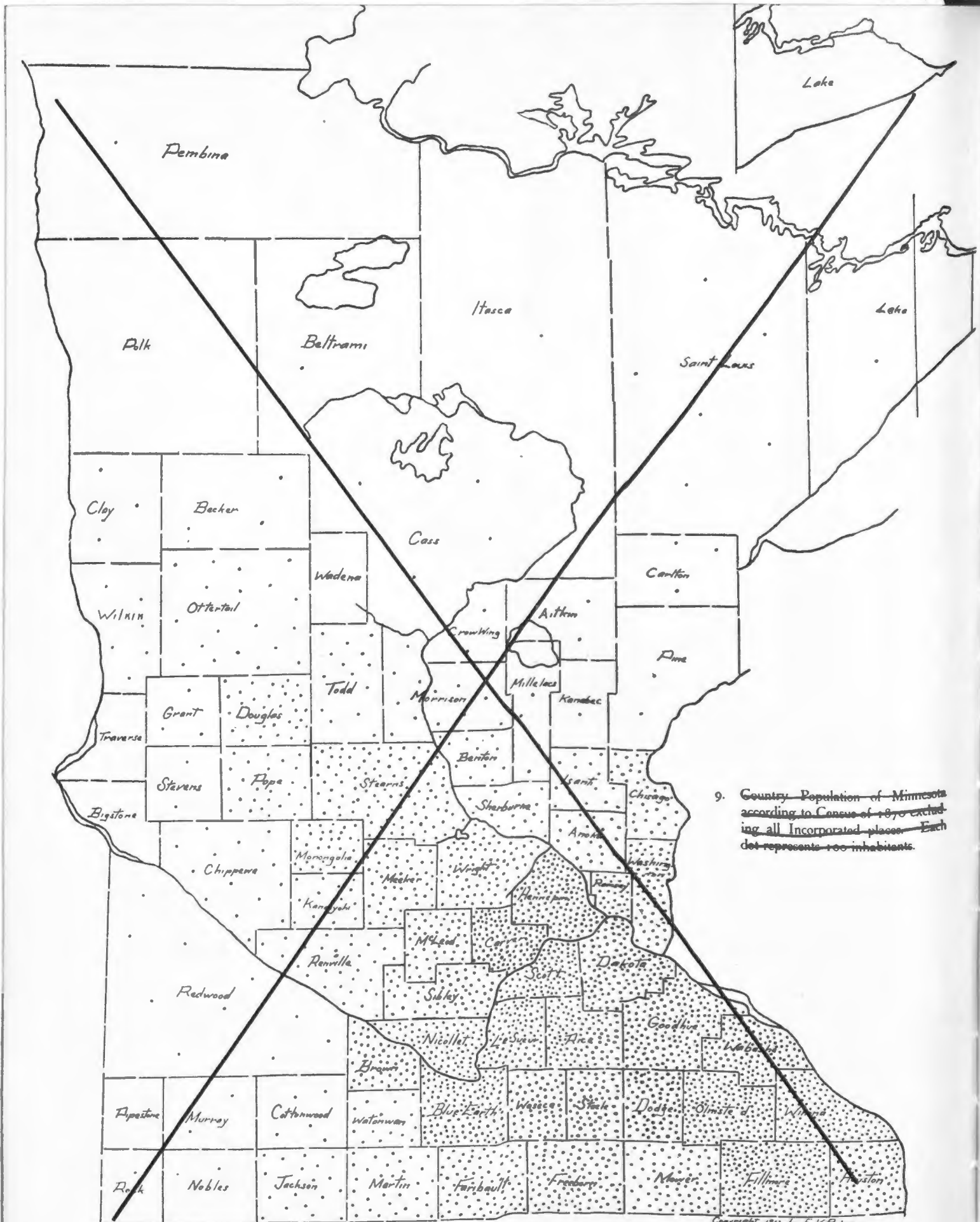


Plate 2

- Rural Population of Minnesota according to Census of 1870 including Cities and Villages of less than 2500 Population.
- Each dot represents 100 Inhabitants.
- Each circle represents Incorporated Place of 2500 or more Inhabitants.

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9. Country Population of Minnesota according to Census of 1870 excluding all Incorporated places. Each dot represents 100 inhabitants.

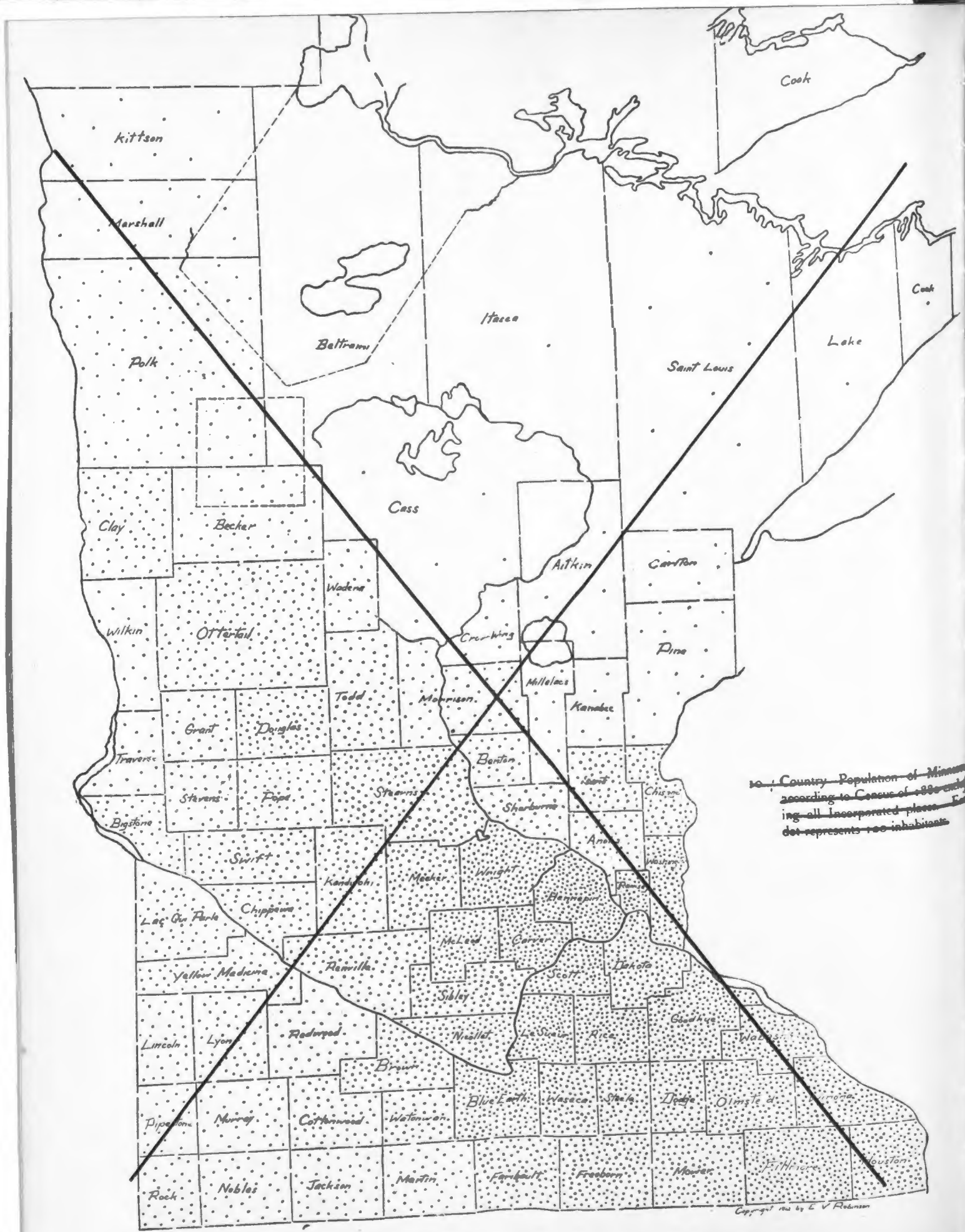
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Figure 58. Country population of Minnesota in 1870. (Based on Table XI)



Plate 3

• Rural Population of Minnesota according to Census of 1880 including Cities and Villages of less than 2,500 Population.
 Each dot represents 100 Inhabitants.
 Each circle represents Incorporated Place of 2,500 or more Inhabitants.



Country Population of Minnesota according to Census of 1880 including all incorporated places. Each dot represents 100 inhabitants.

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Figure 81. Population outside of incorporated places in 1880. (Based on Table XI)

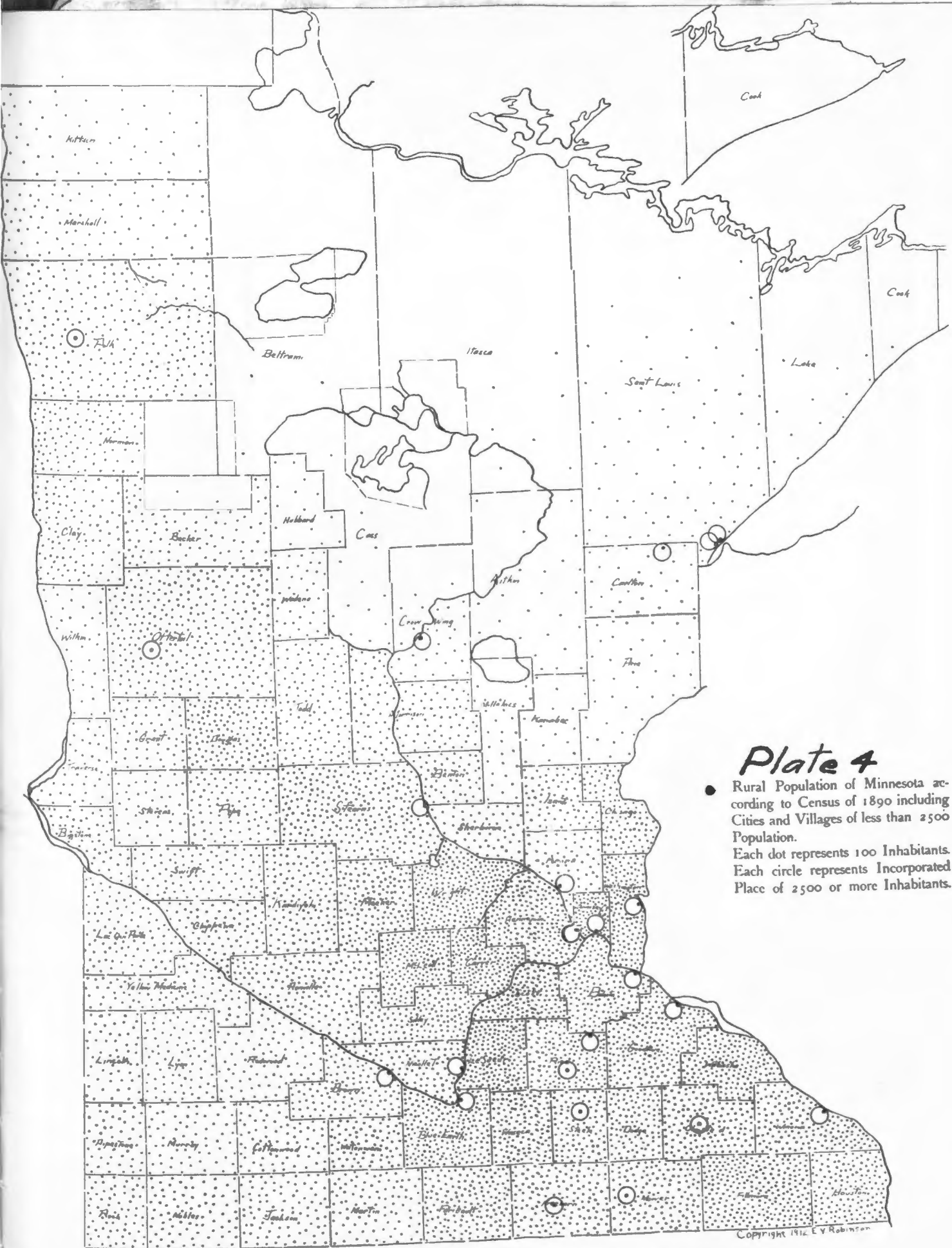


Plate 4

- Rural Population of Minnesota according to Census of 1890 including Cities and Villages of less than 2500 Population.
- Each dot represents 100 Inhabitants.
- Each circle represents Incorporated Place of 2500 or more Inhabitants.

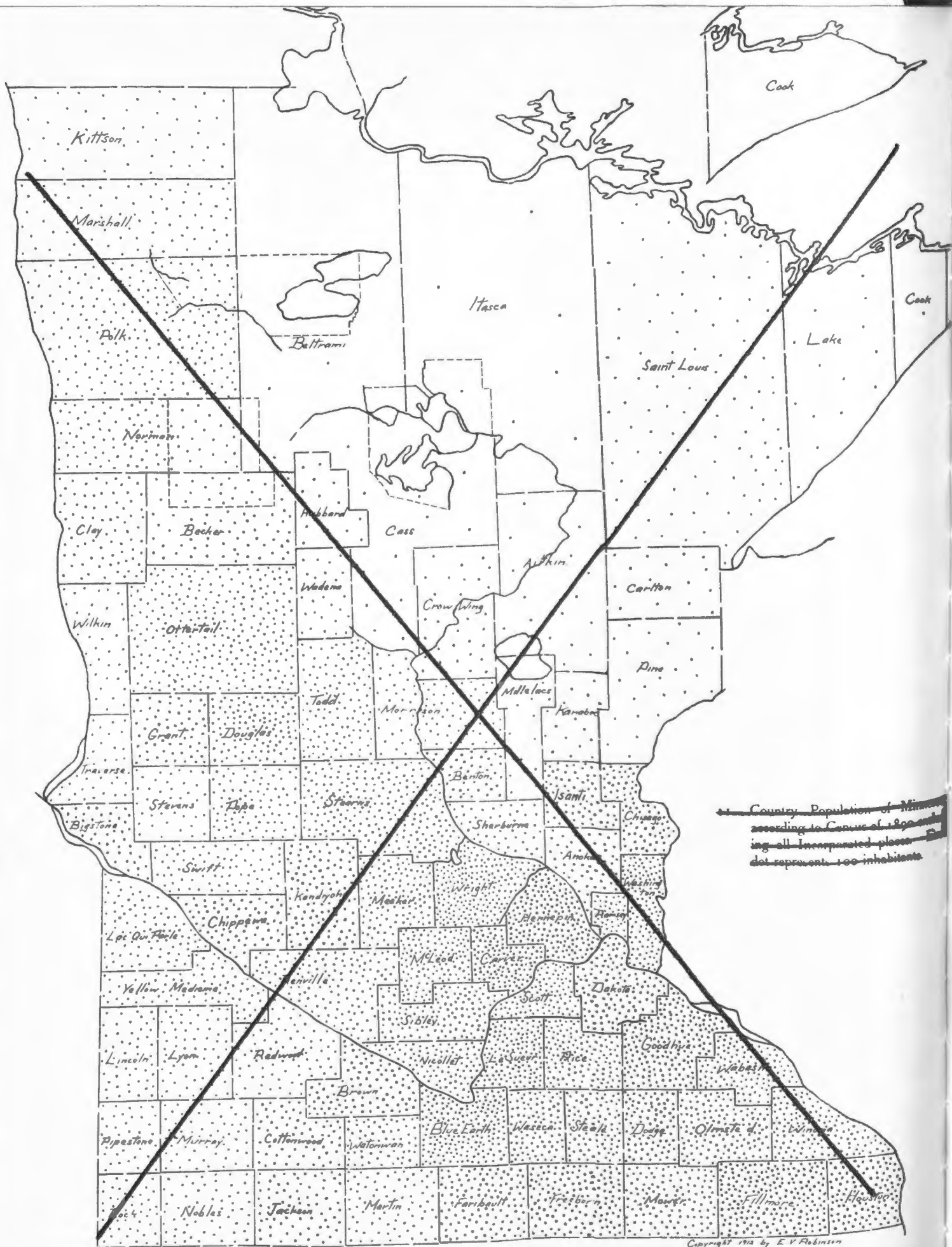


Figure 108. Country population in 1890. (Based on Table VII)

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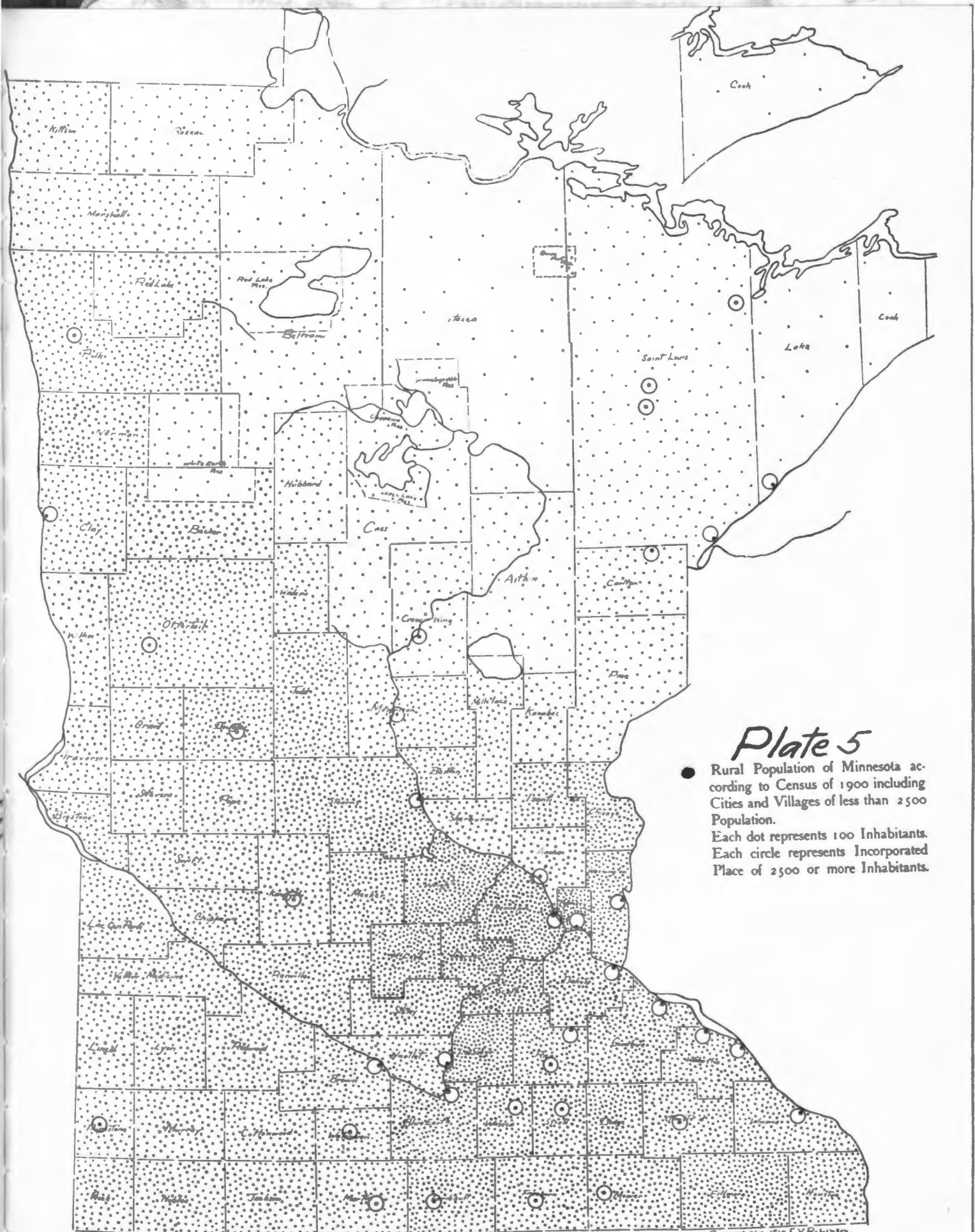


Plate 5

● Rural Population of Minnesota according to Census of 1900 including Cities and Villages of less than 2500 Population.
 Each dot represents 100 Inhabitants.
 Each circle represents Incorporated Place of 2500 or more Inhabitants.

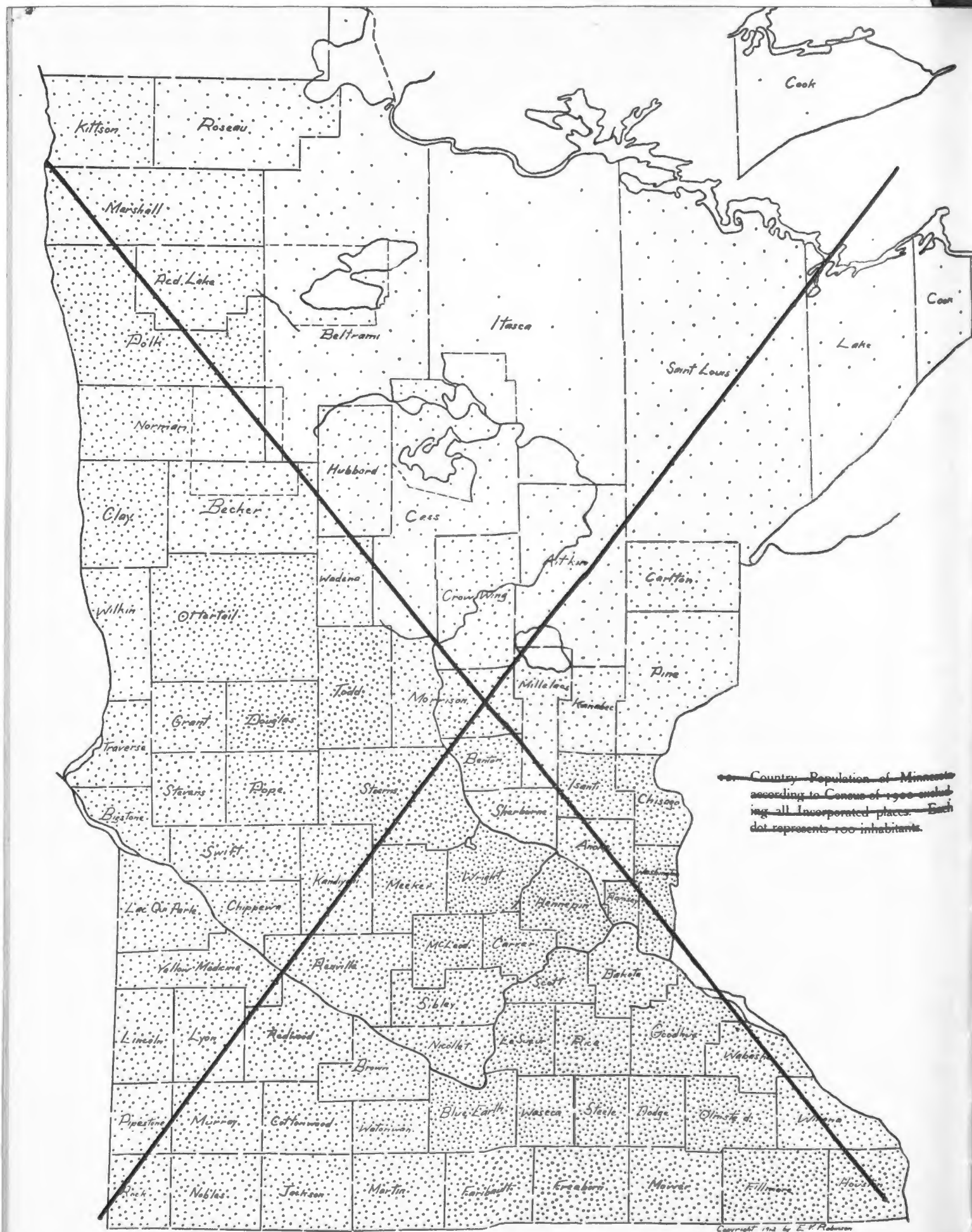


Figure 156. Population outside incorporated places at census of 1900. (Based on Table XI)

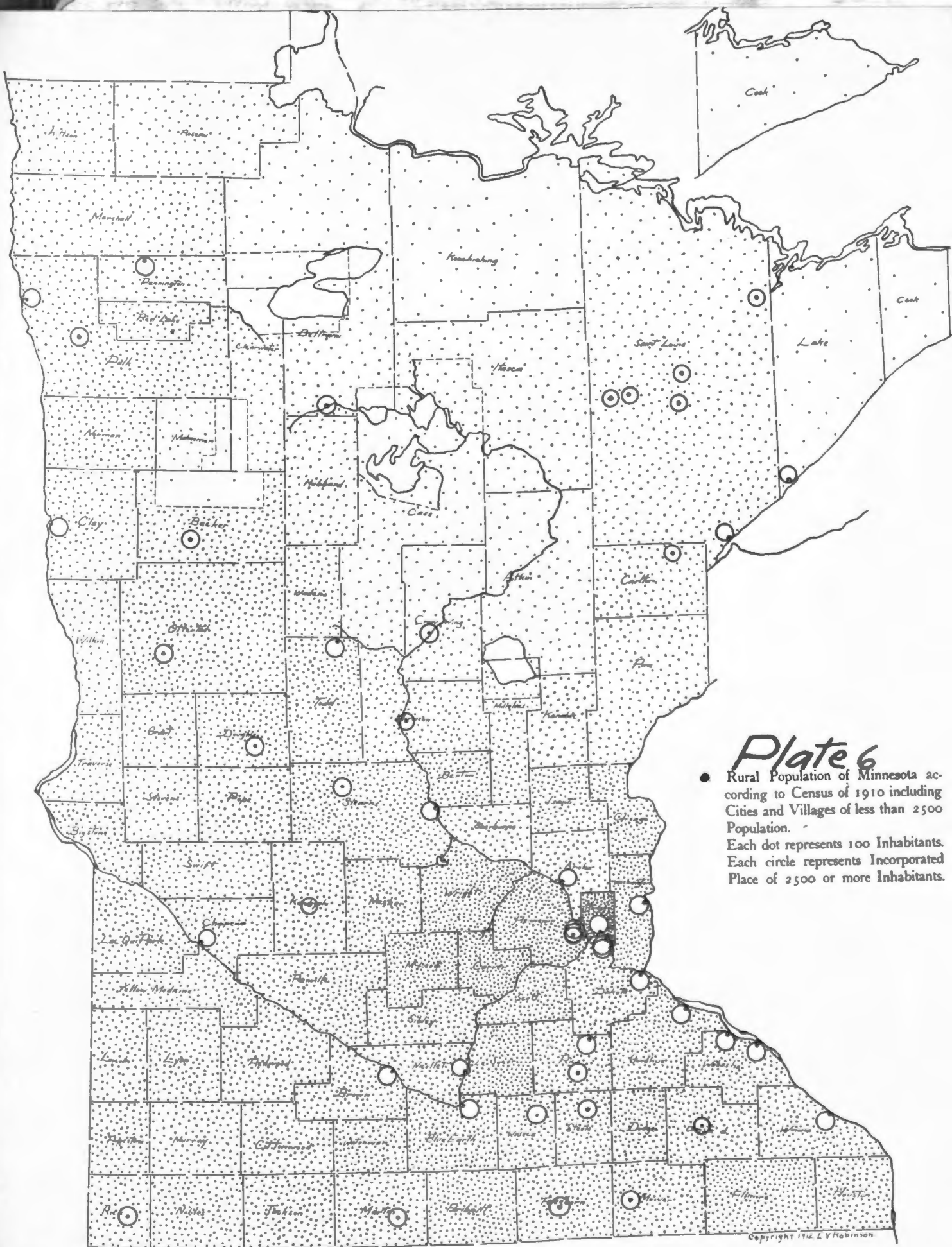


Plate 6

• Rural Population of Minnesota according to Census of 1910 including Cities and Villages of less than 2500 Population.
 Each dot represents 100 Inhabitants.
 Each circle represents Incorporated Place of 2500 or more Inhabitants.

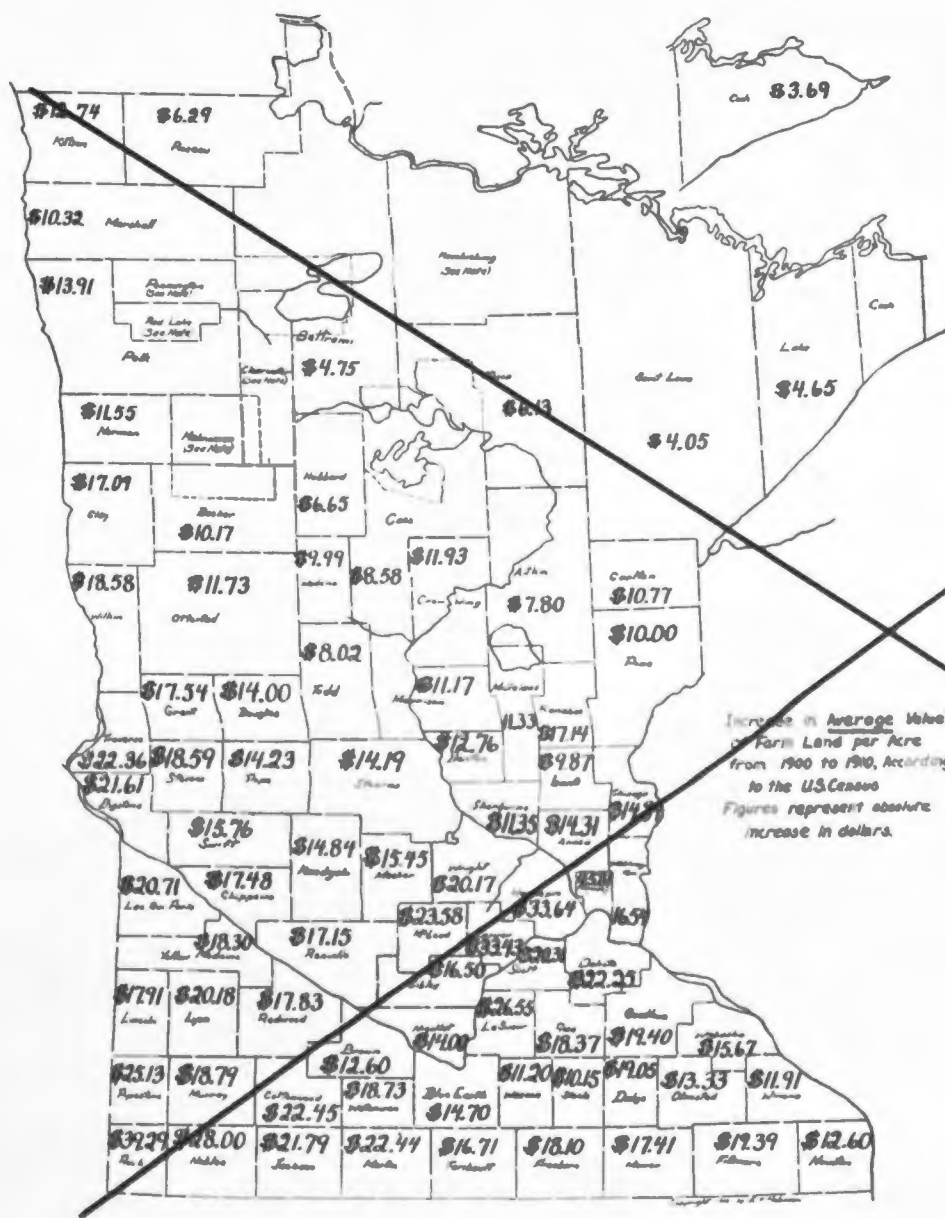


Figure 193. Increase in average value of farm land per acre, 1900-1910.47.

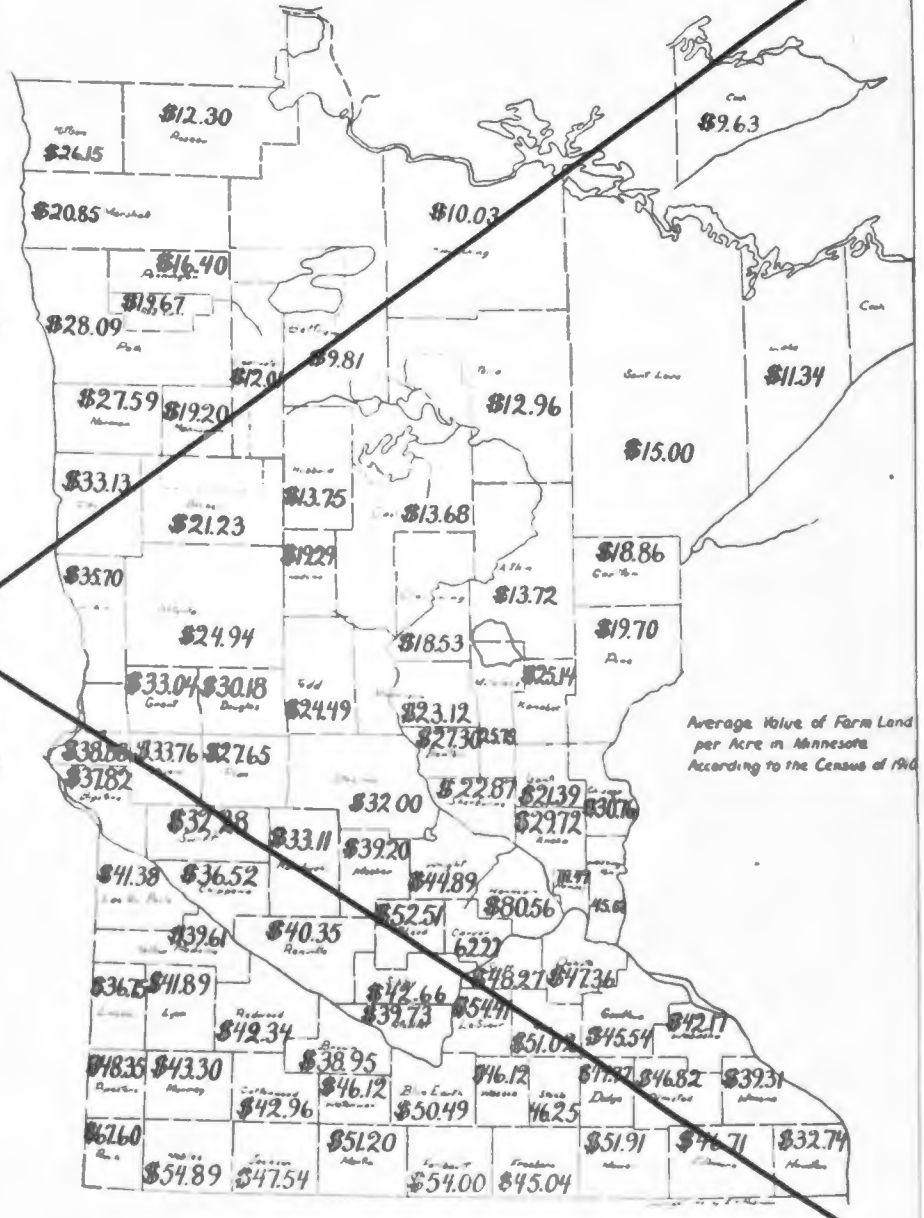


Figure 194. Average value of farm land per acre according to census of 1910. (Average for state, \$36.82)

Counties left blank were founded or had their boundaries changed during the decade, so that a fair comparison is not possible.



Plate 7

● Production of Wheat in Minnesota according to Census of 1860
 Each dot represents 10,000 Bushels.

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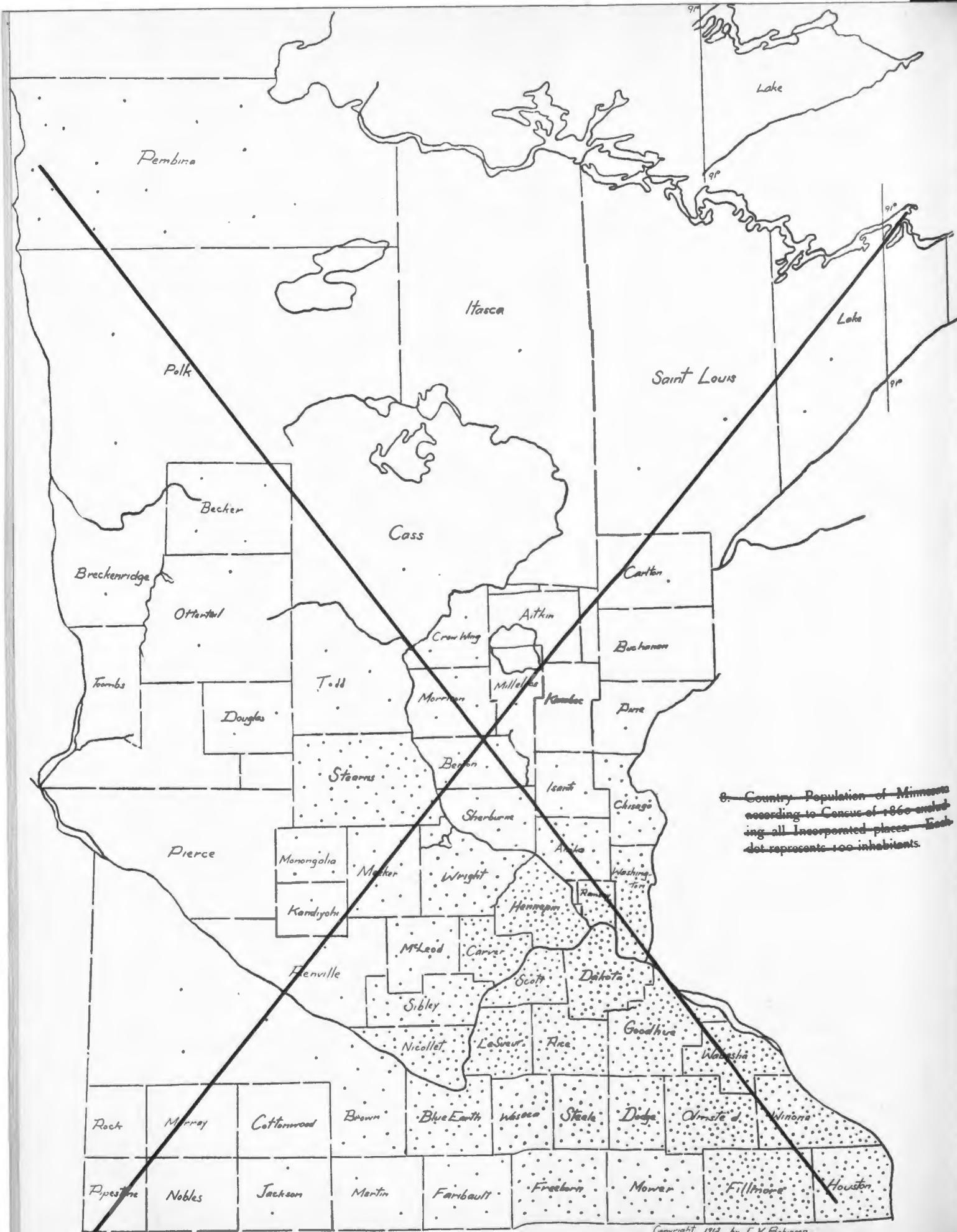


Figure 41. Population outside of incorporated places in 1860. (Based on Table VI)



Plate 8

● Production of Oats in Minnesota according to Census of 1860. Each dot represents 10,000 Bushels.

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Production of oats in Minnesota in 1859 according to the census of 1860.

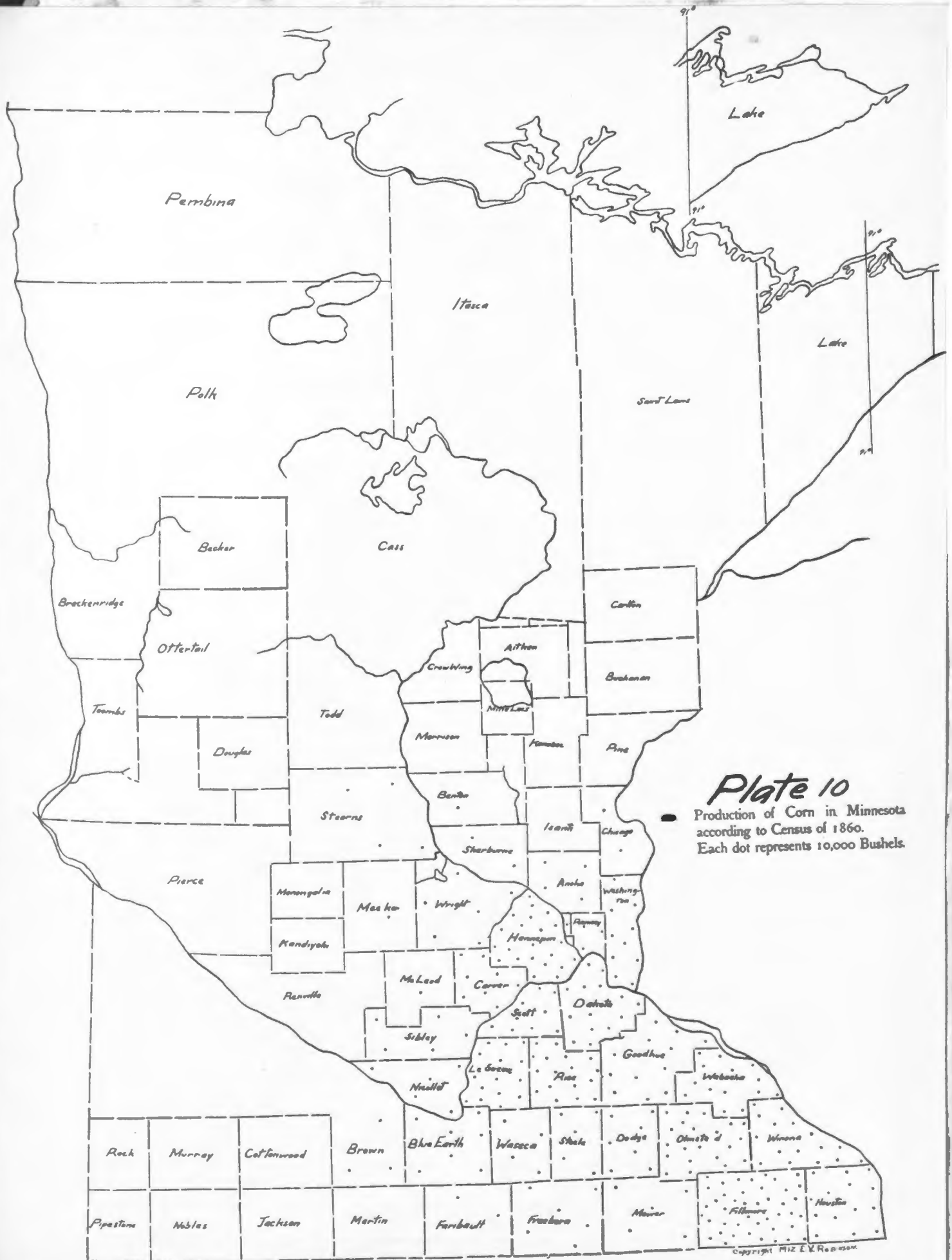
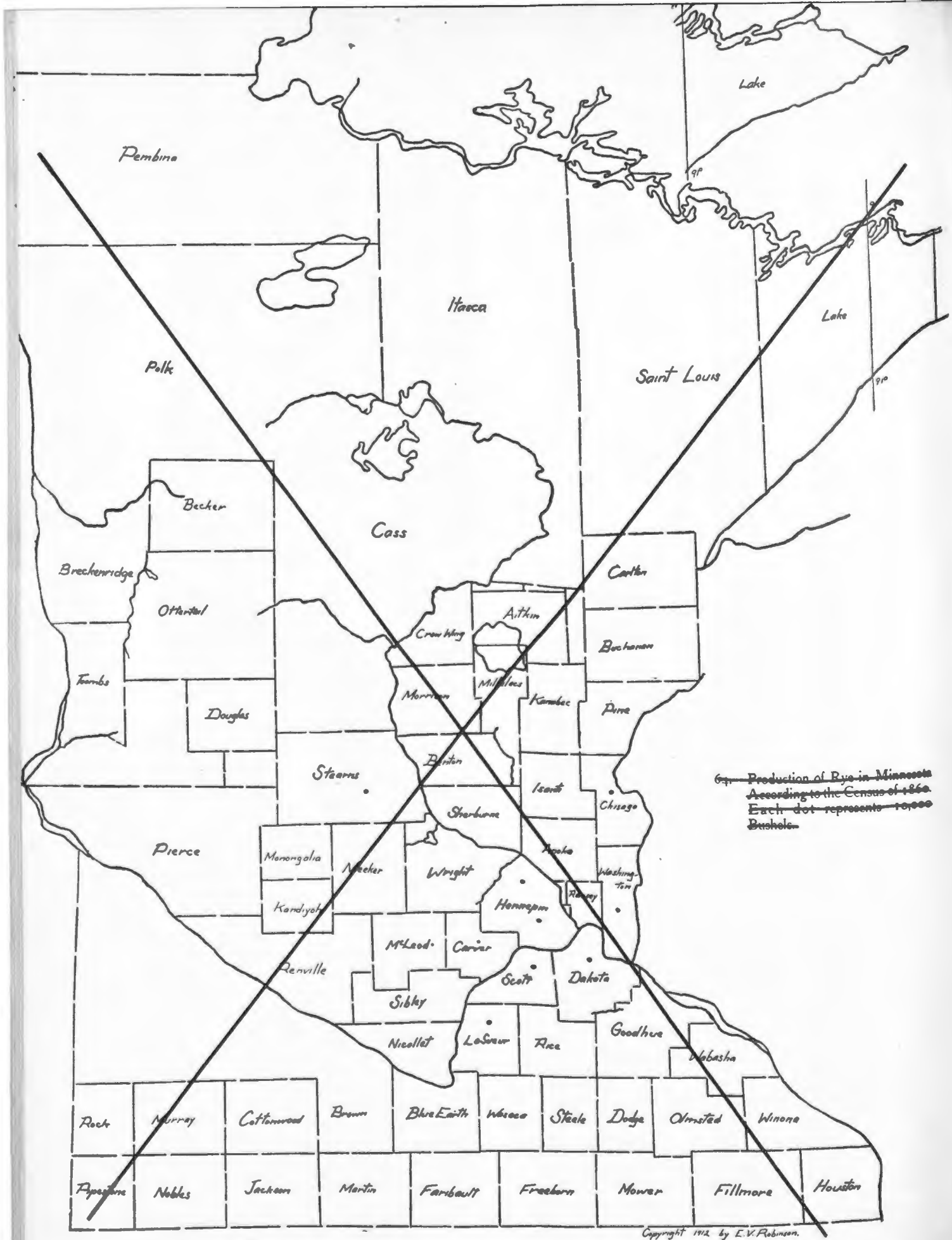


Plate 10

Production of Corn in Minnesota according to Census of 1860. Each dot represents 10,000 Bushels.



67. Production of Rye in Minnesota According to the Census of 1860. Each dot represents 10,000 Bushels.

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Figure 45. Production of rye in 1860 according to the census of 1860 (Based on Table XVII)



Plate 11
 ● Production of Potatoes in Minnesota
 according to Census of 1860.
 Each dot represents 10,000 Bushels.

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Production of potatoes in Minnesota in 1859 according to the census of 1860.

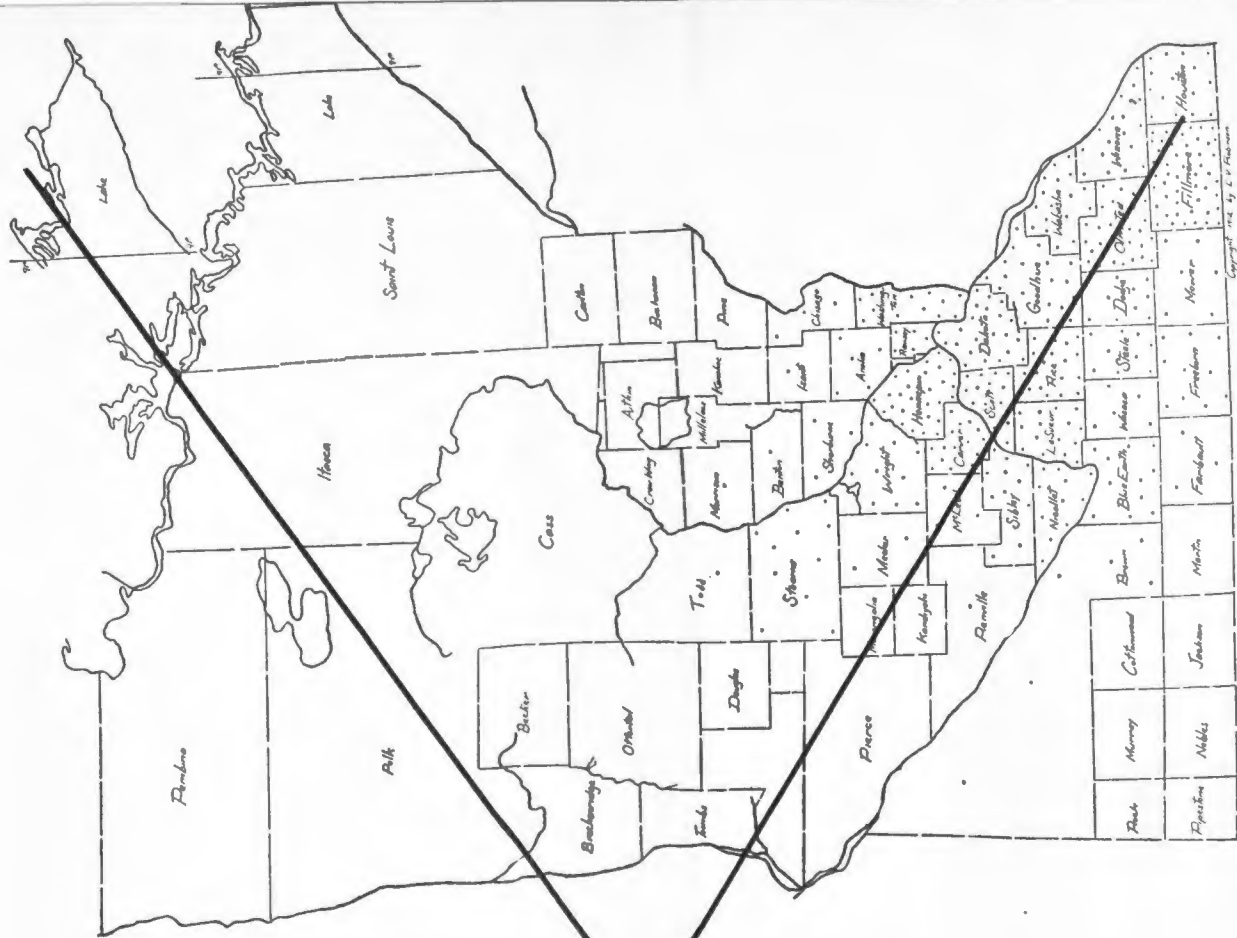


Figure 49. Distribution of dairy cows according to the census of 1960. Each dot represents 100 milk cows or major fraction thereof.

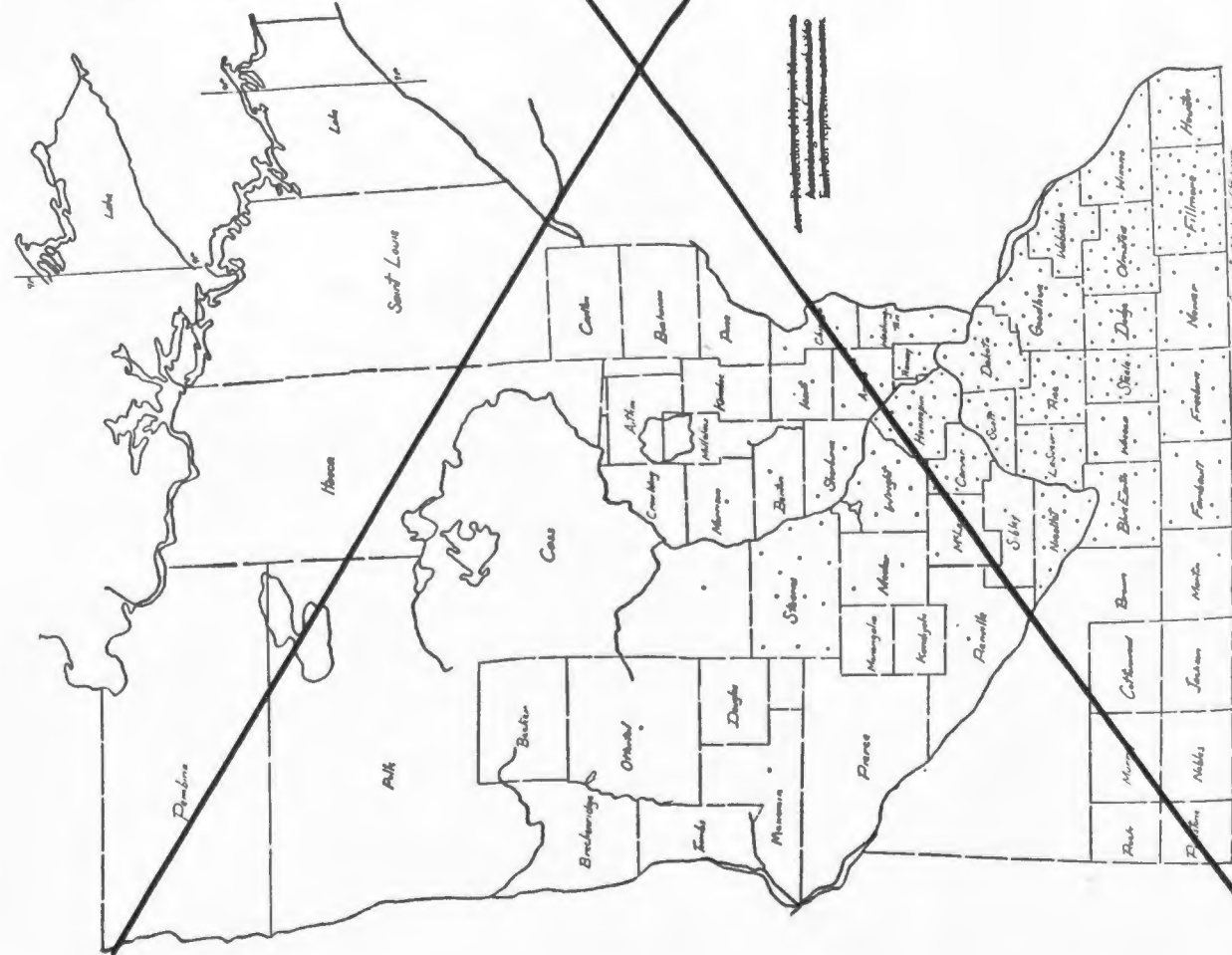


Figure 48. Production of hay in Minnesota in 1950 according to the census of 1950. (Based on Table XVIII)



Plate 12

Production of Wheat in Minnesota according to Census of 1870. Each dot represents 10,000 Bushels.

Production of wheat in 1869 according to census of 1870.

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Plate 13
 Production of Oats in Minnesota
 according to Census of 1870.
 Each dot represents 10,000 Bushels.

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13
in Minnesota
of 1870.
10,000 Bushels.



Plate 14

● Production of Barley in Minnesota according to Census of 1870. Each dot represents 10,000 Bushels.

Production of barley in 1869 according to the census of 1870.

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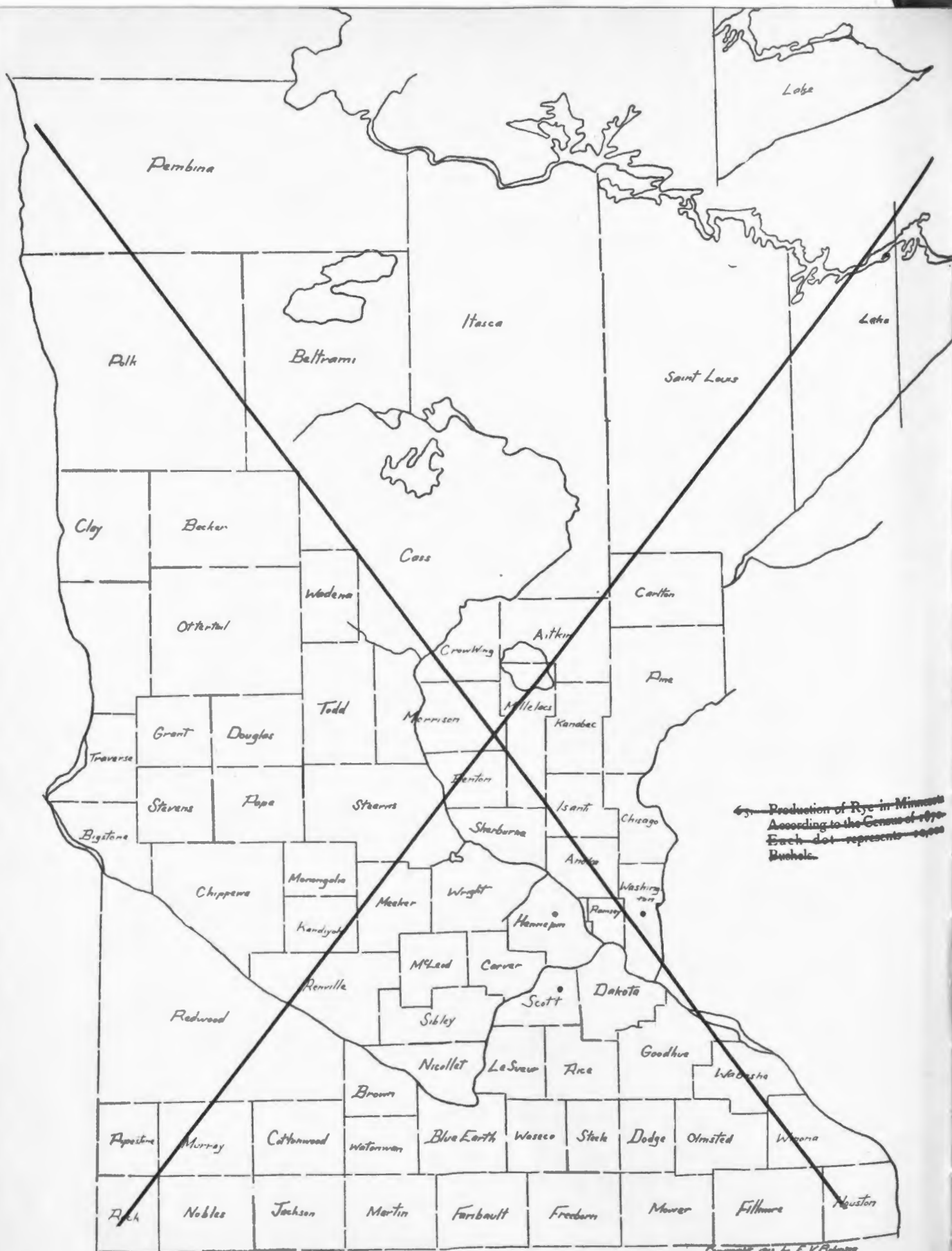


Figure 62. Production of rye in 1869 according to the census of 1870. (Based on Table XVII)

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Plate 16
 Production of Potatoes in Minnesota
 according to Census of 1870.
 Each dot represents 10,000 Bushels.

Production of potatoes in 1869 according to the census of 1870.

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Figure 84. Production of wheat in 1879 according to census of 1880.



Figure 85. Acreage of oats in 1870 according to census of 1880. (Based on Table 111.)

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Plate 18
 • Production of Oats in Minnesota according to Census of 1880. Each dot represents 10,000 Bushels.

Production of oats in 1879 according to the census of 1880.

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Figure 87. Average of barley in 1870 according to the census of 1880. (Based on Table XVI.)

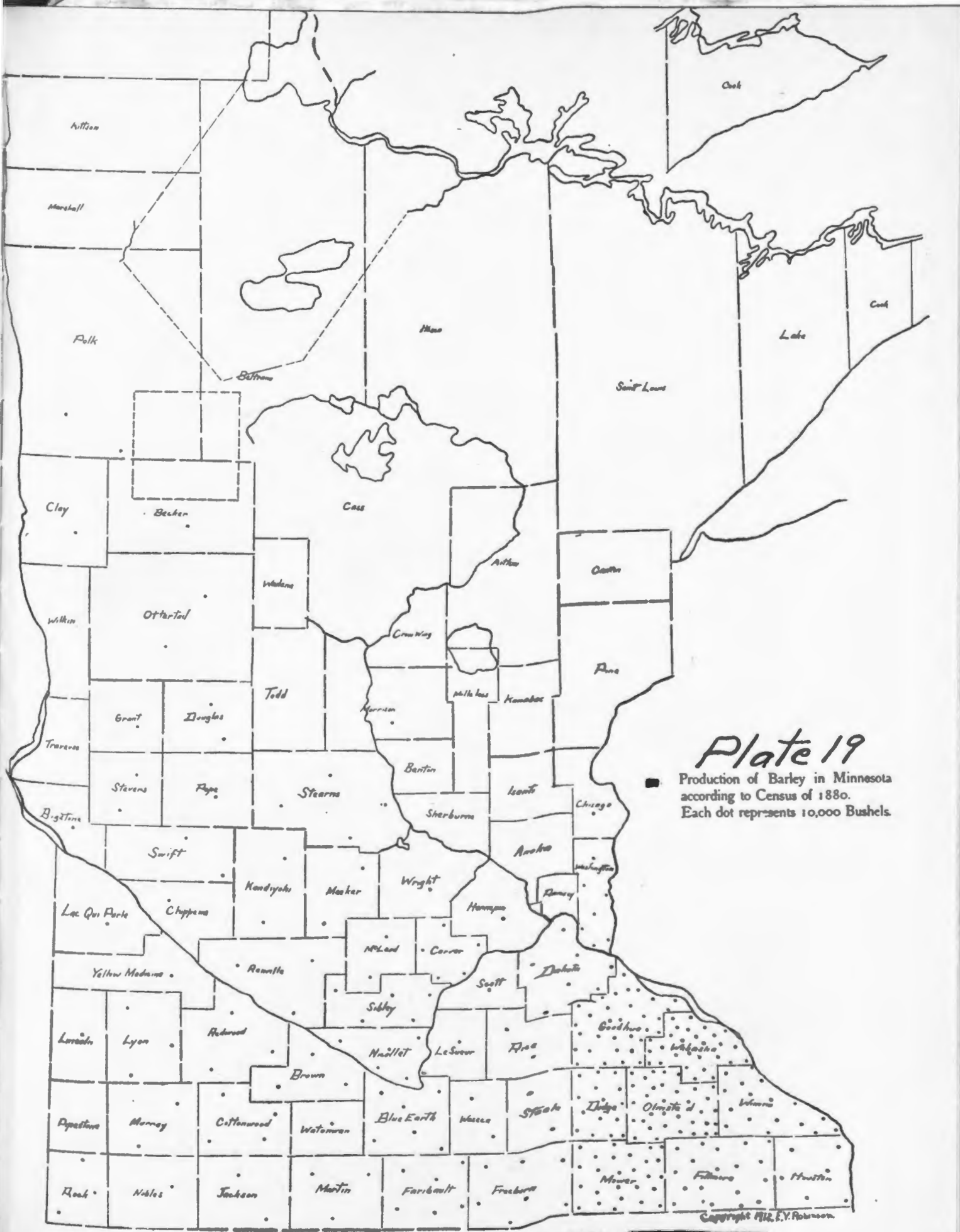


Plate 19

Production of Barley in Minnesota according to Census of 1880. Each dot represents 10,000 Bushels.

Figure 88. Production of barley in 1879 according to the census of 1880.

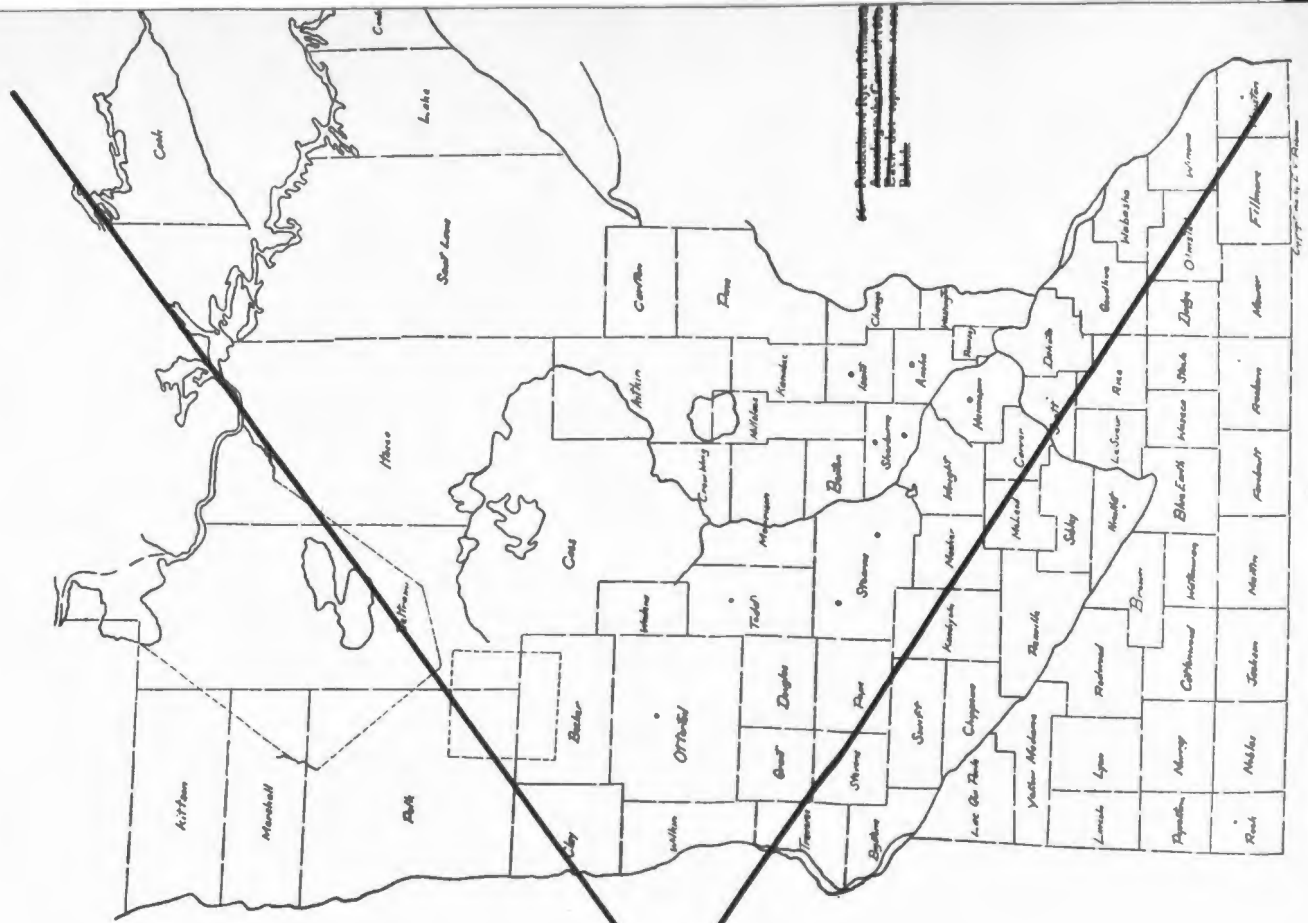


Figure 98. Production of rye in 1870 according to the census of 1880.
 (Based on Table XVII)

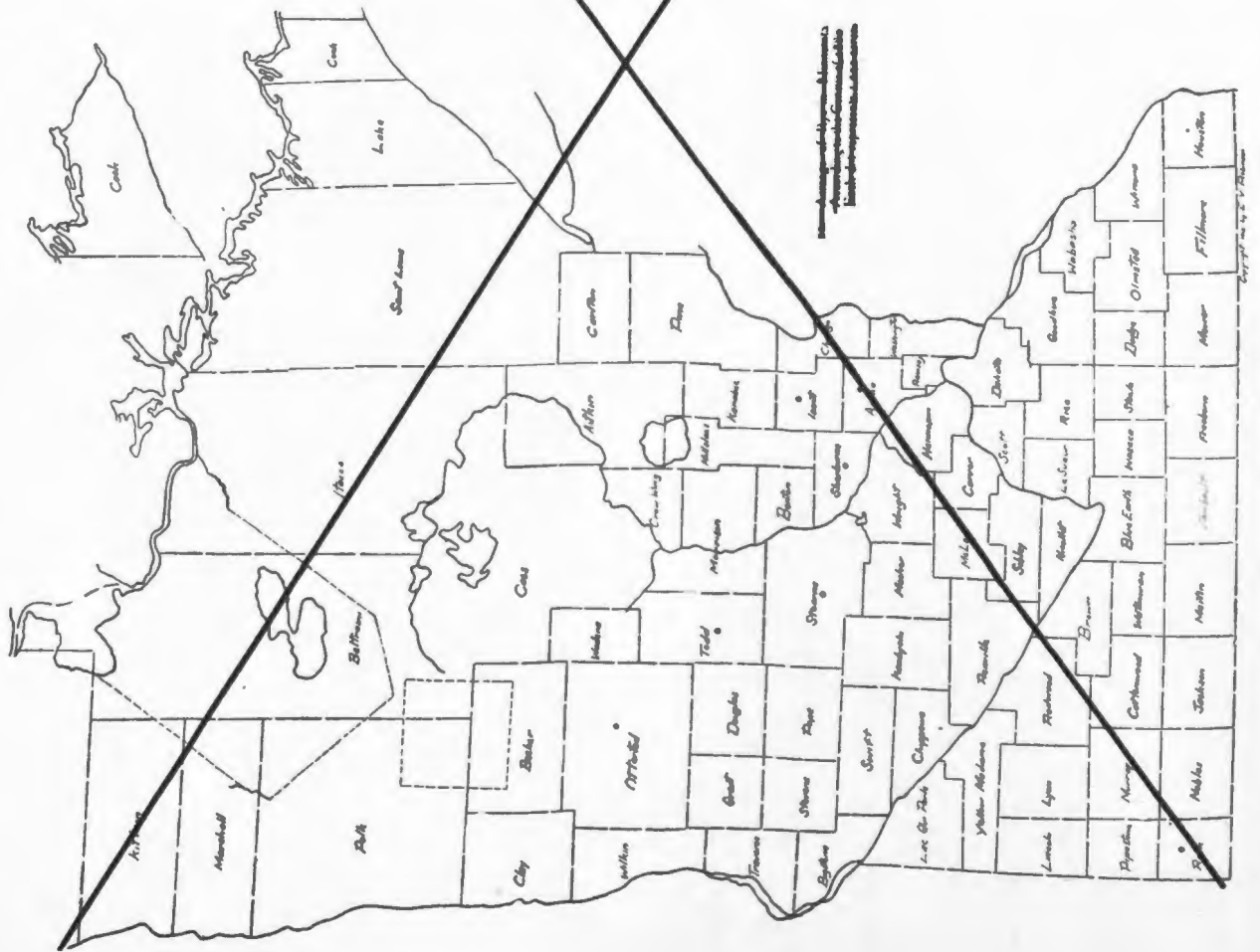


Figure 89. Average of rye in 1879 according to census of 1880.
 (Based on Table XVII)

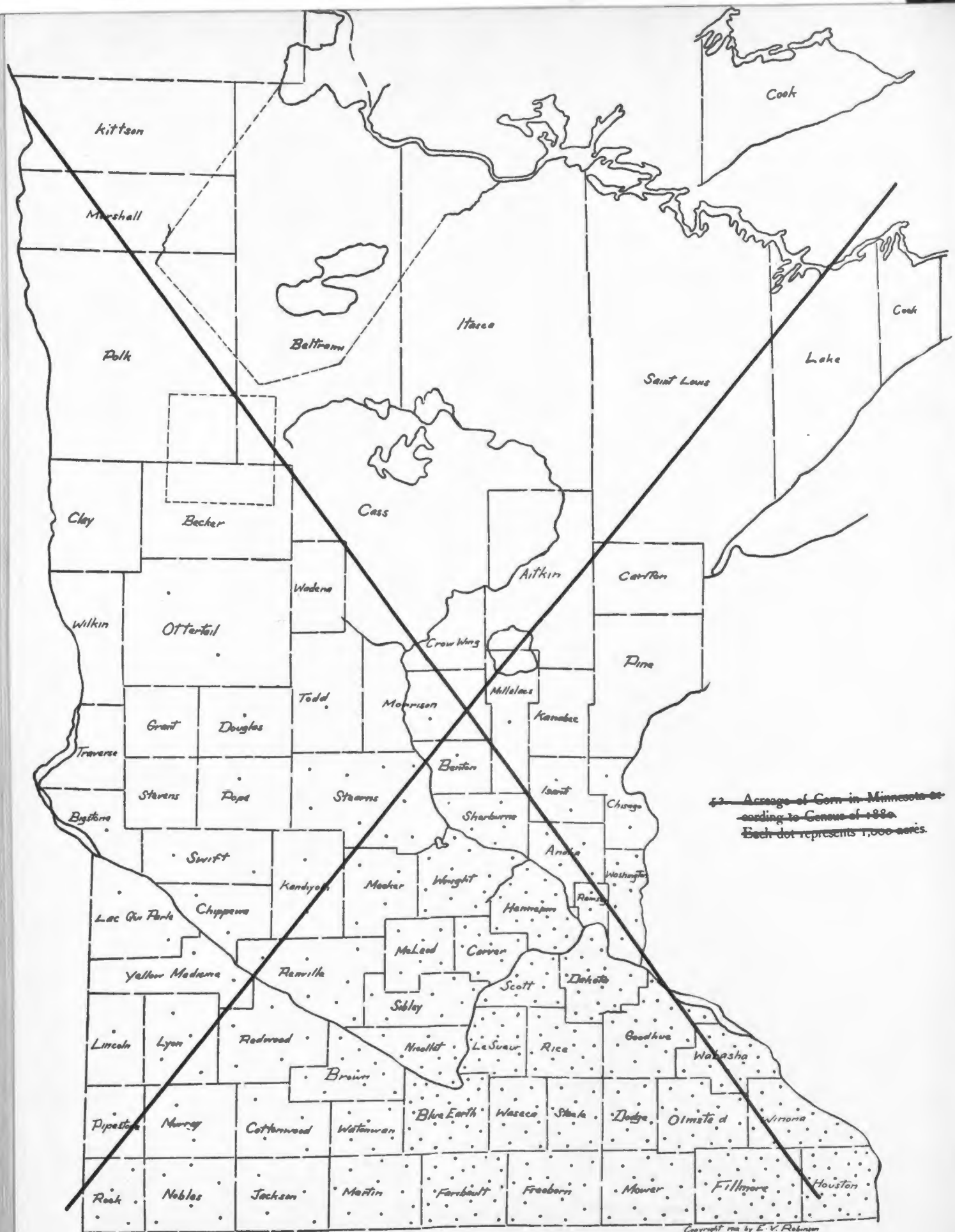


Figure 91. Acreage of corn in 1879 according to the census of 1880. (Based on Table XV)



Plate 21

Production of Potatoes in Minnesota according to Census of 1880. Each dot represents 10,000 Bushels.

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Production of potatoes in 1879 according to census of 1880.

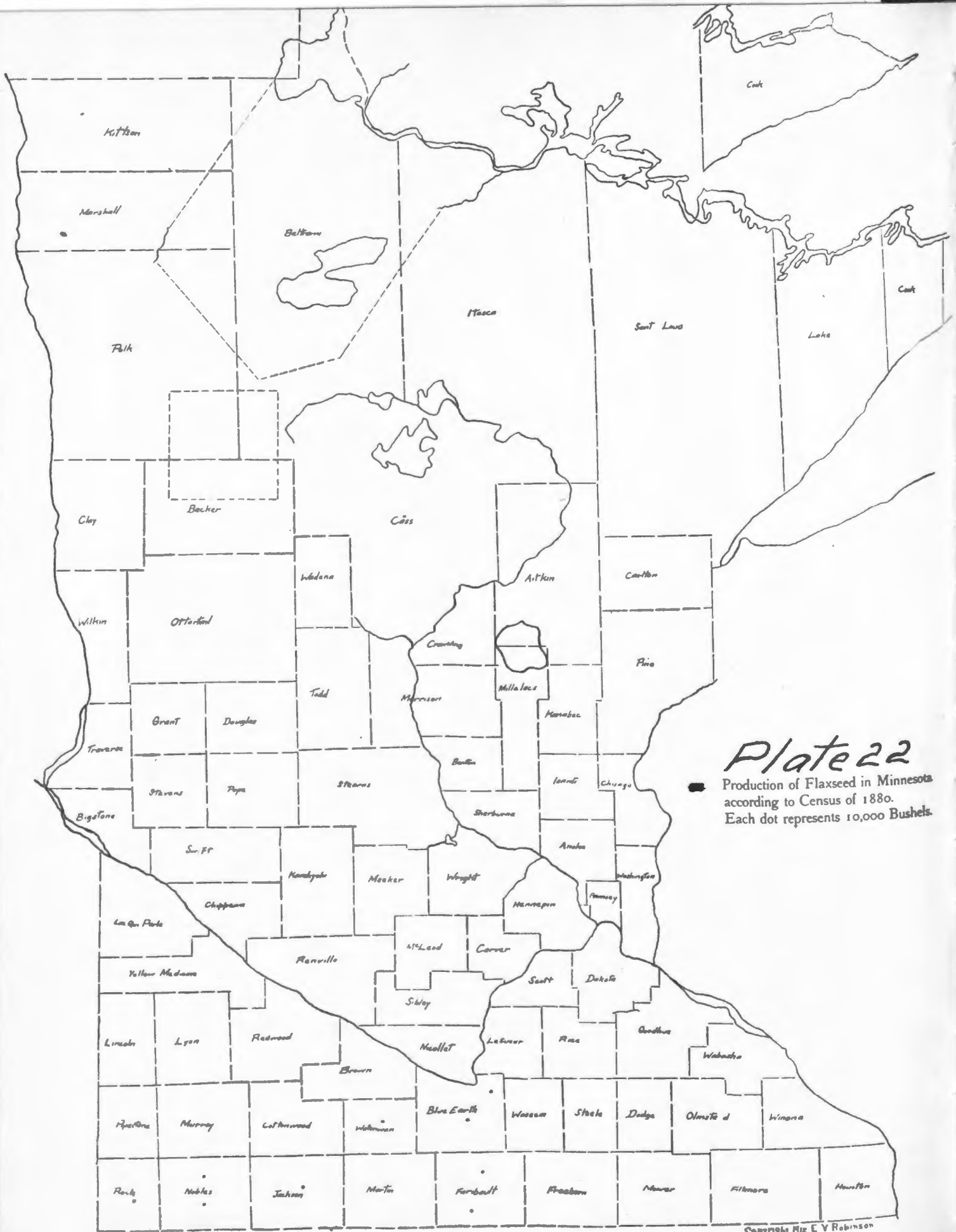


Plate 22
 Production of Flaxseed in Minnesota
 according to Census of 1880.
 Each dot represents 10,000 Bushels.

Production of flaxseed in 1879 according to census of 1880.

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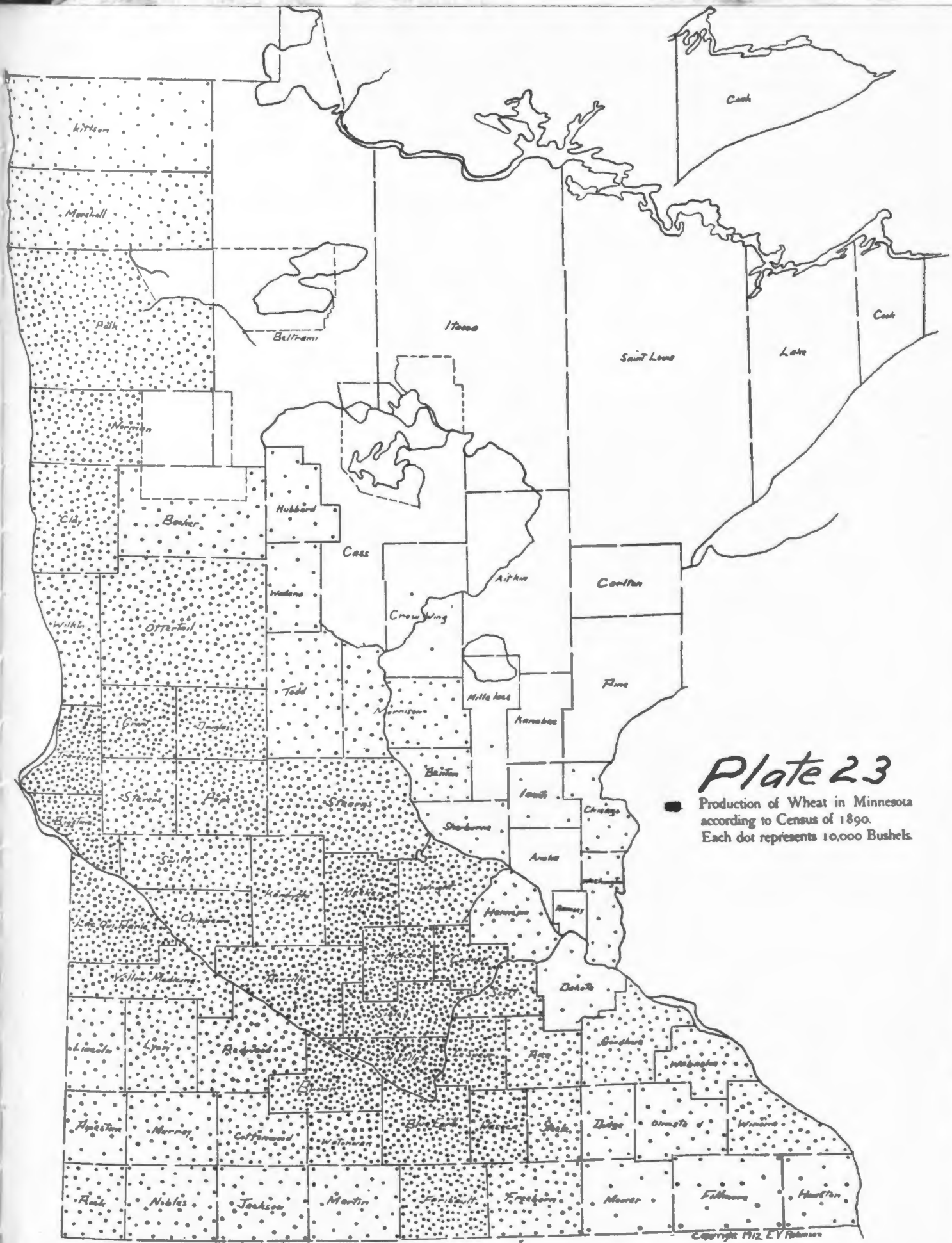


Plate 23

■ Production of Wheat in Minnesota according to Census of 1890. Each dot represents 10,000 Bushels.

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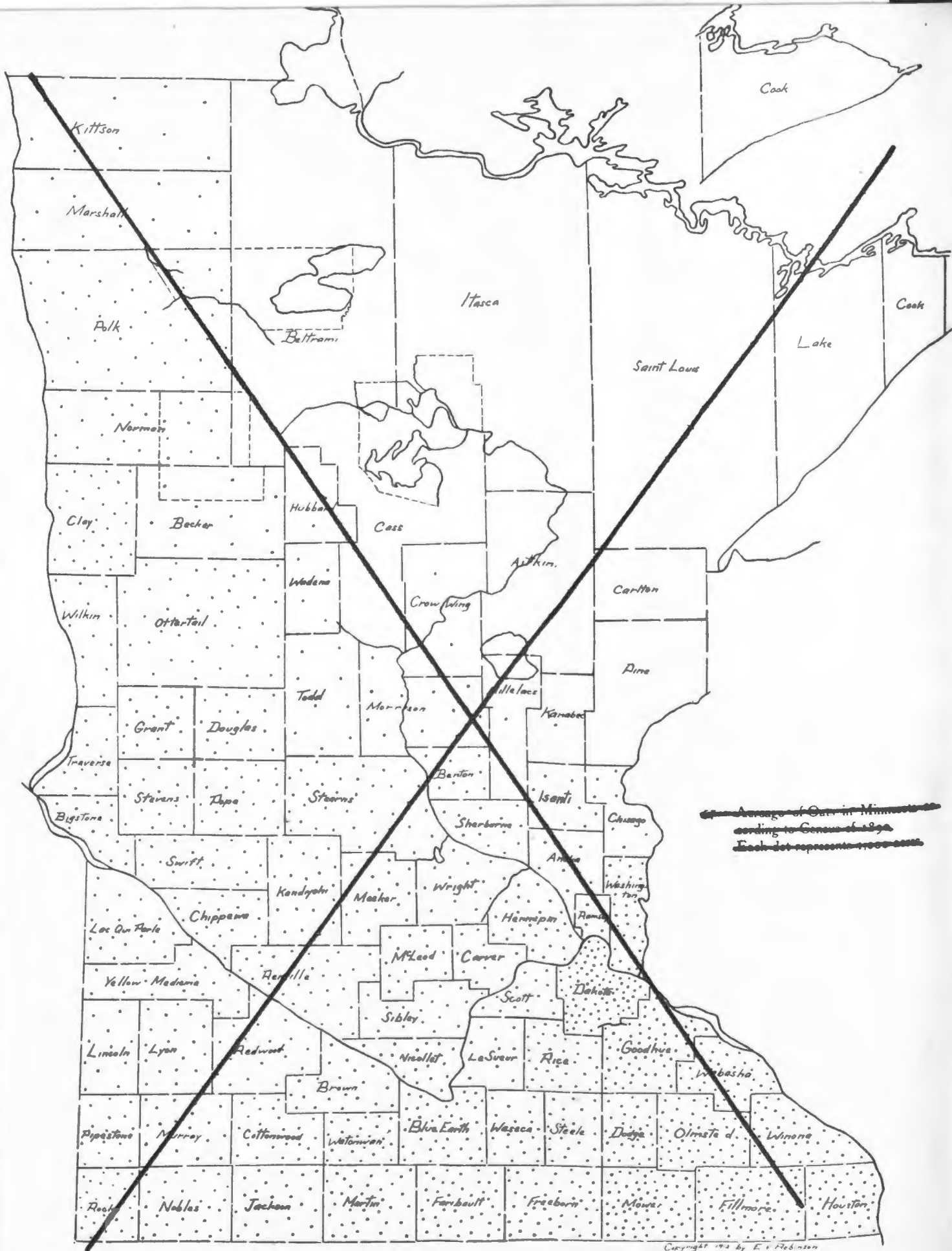


Figure 112. Average of oats in 1889 according to census of 1890. (Based on Table KEV)

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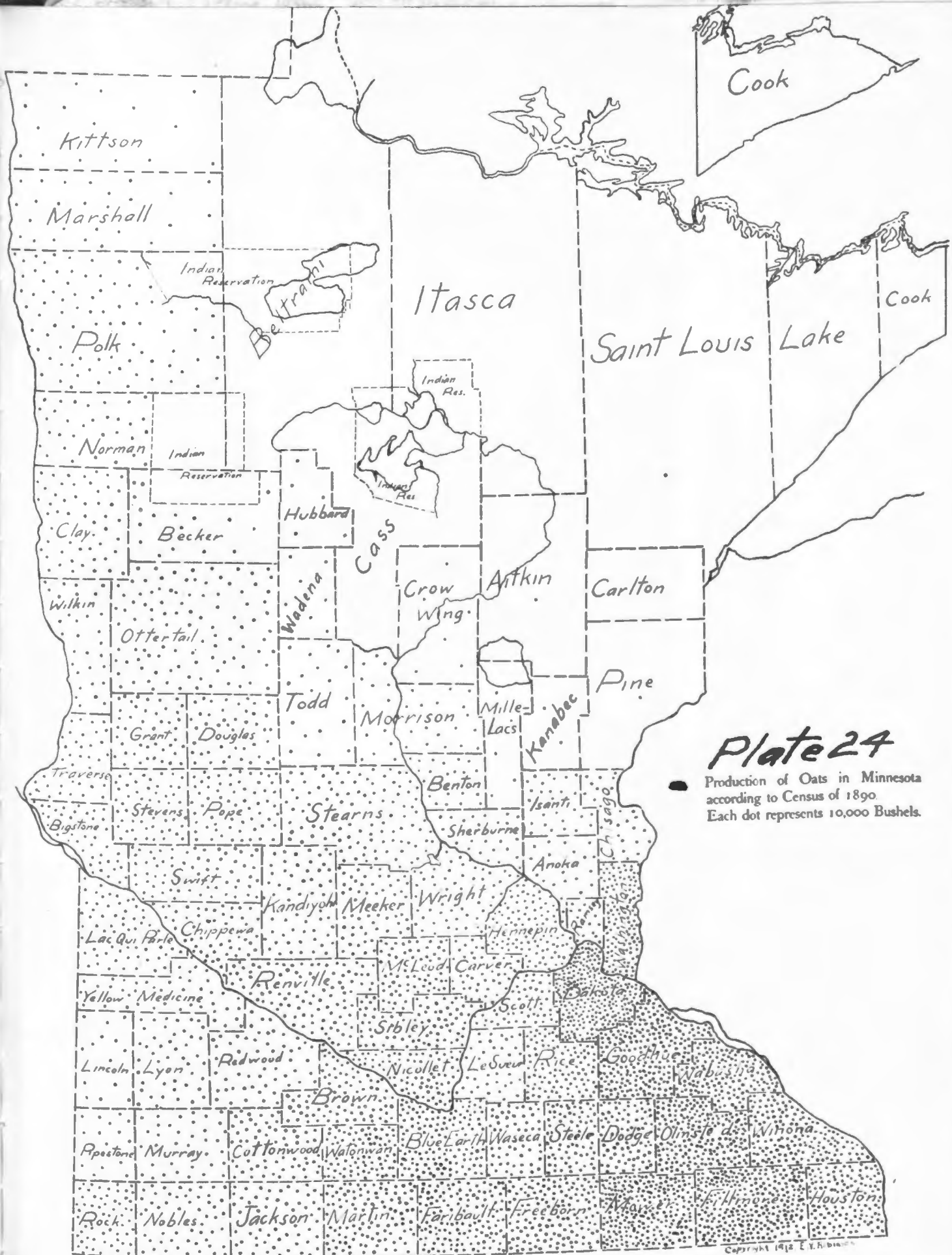


Plate 24

Production of Oats in Minnesota according to Census of 1890. Each dot represents 10,000 Bushels.

Production of oats in 1889 according to the census of 1890.

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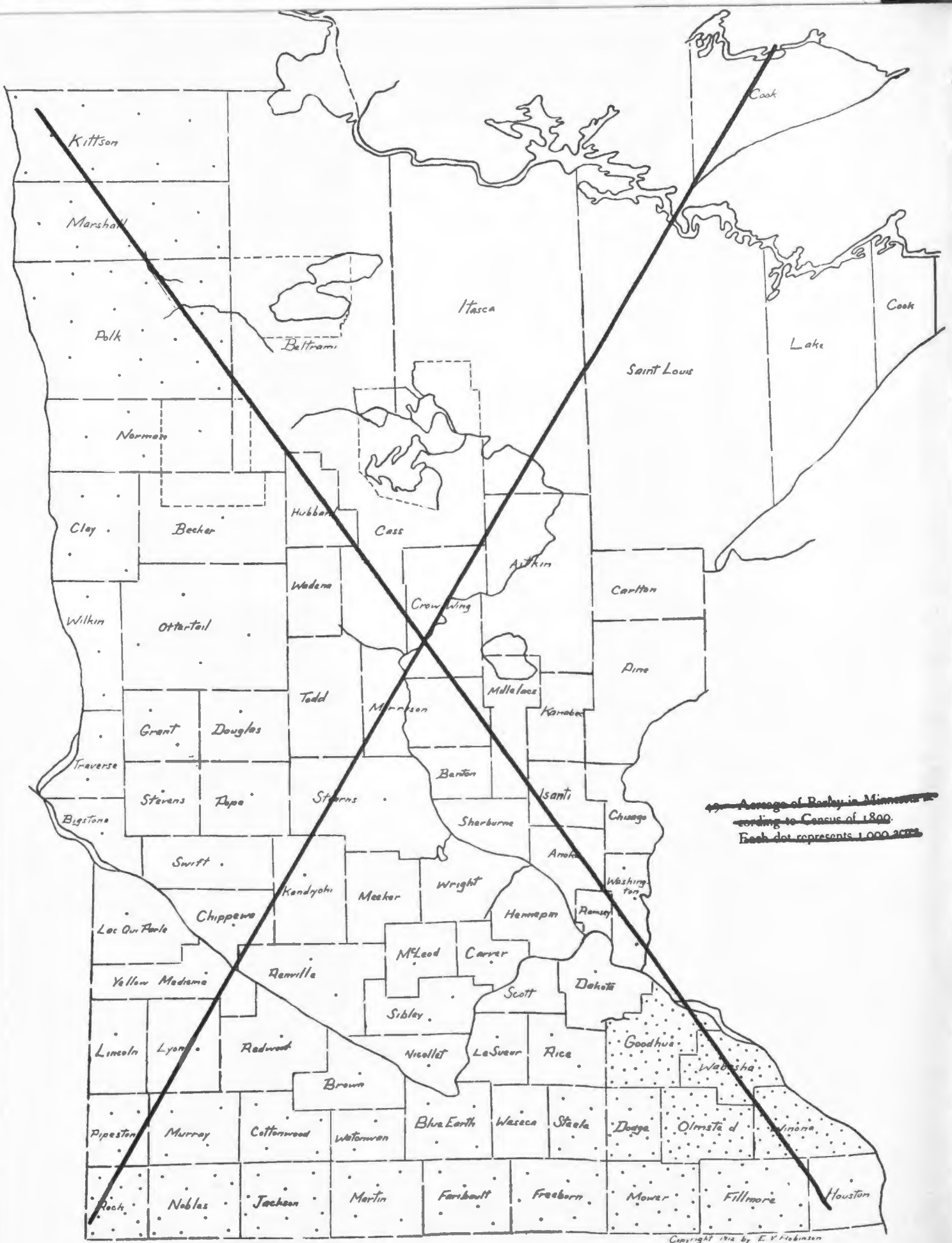


Figure 114. Average of barley in 1880 according to census of 1880. (Based on Louis Y. Y. Y.)

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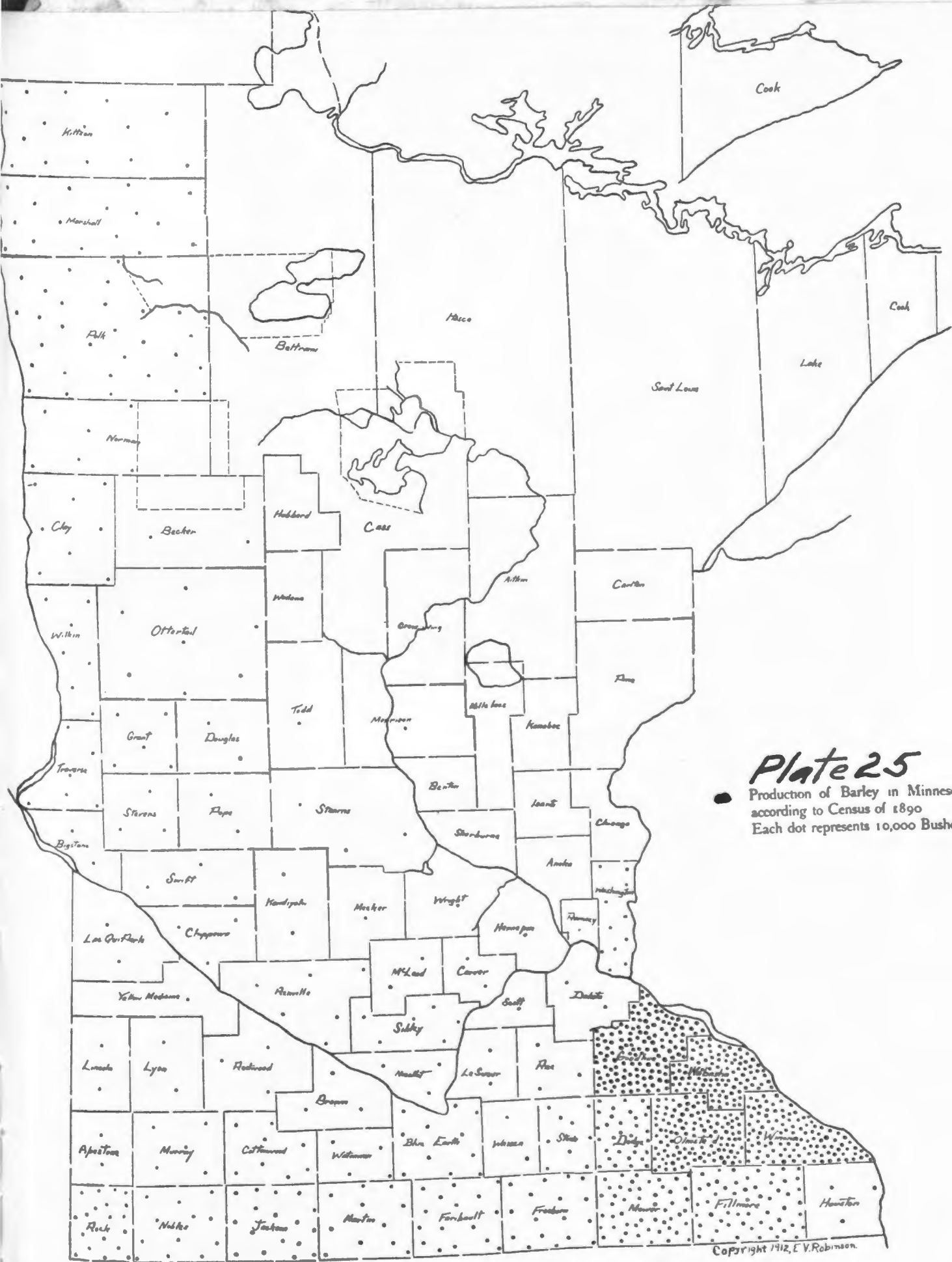


Plate 25

Production of Barley in Minnesota according to Census of 1890
 Each dot represents 10,000 Bushels.

Production of barley in 1889 according to census of 1890.

Copyright 1912, E. V. Robinson.

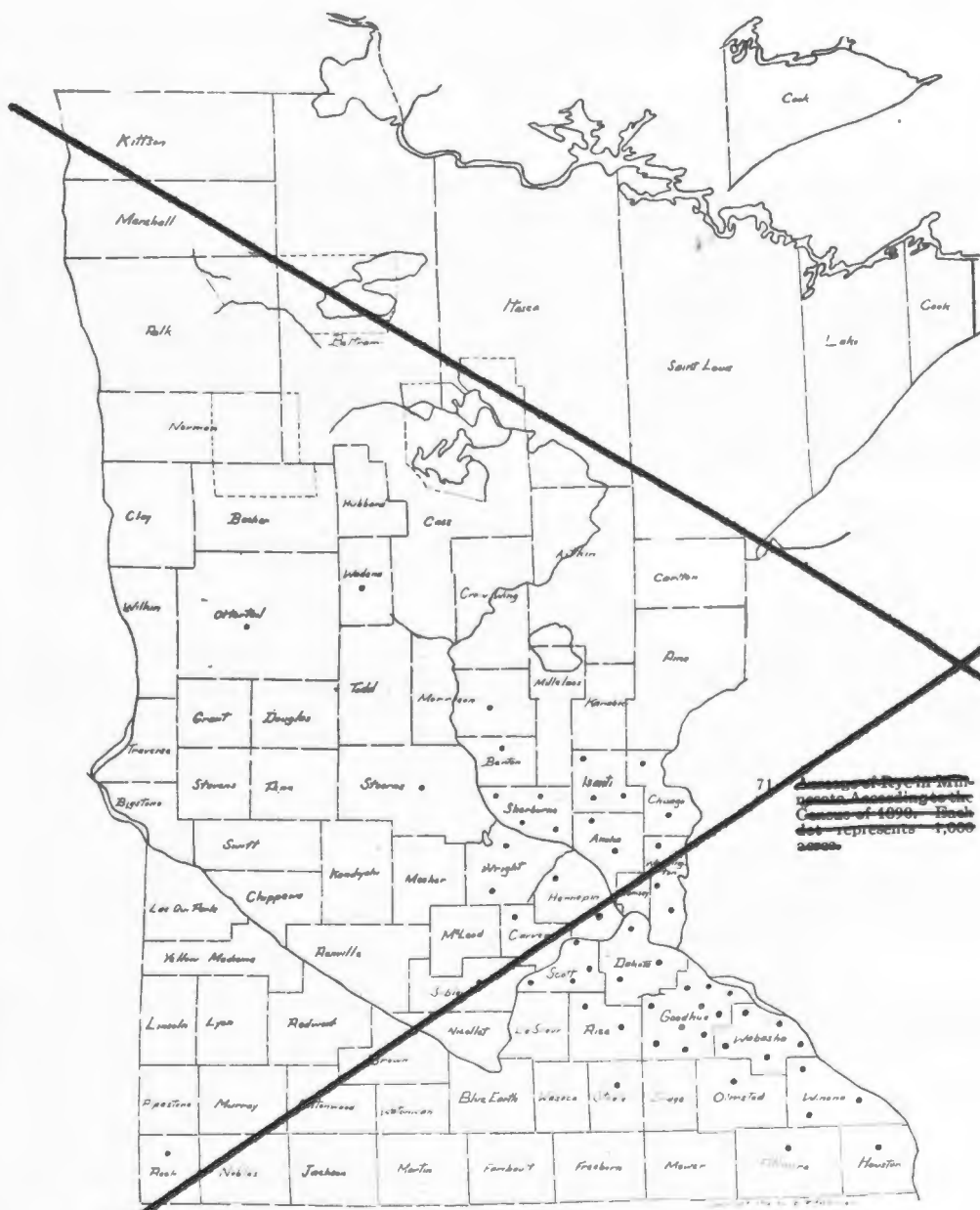


Figure 116. Average of eye in 1890 according to census of 1890. (Based on Table XVII)

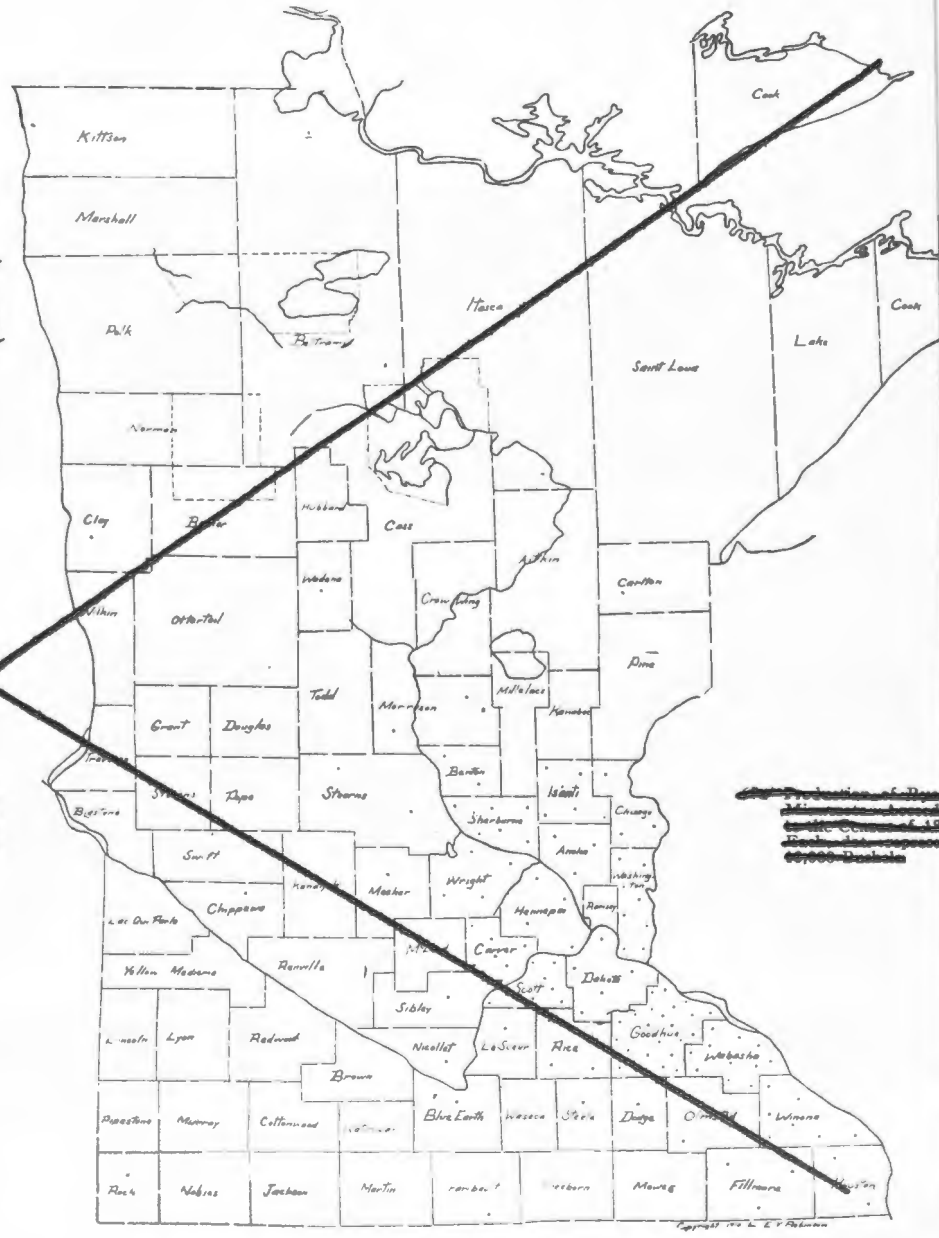


Figure 117. Production of eye in 1890 according to census of 1890. (Based on Table XVII)

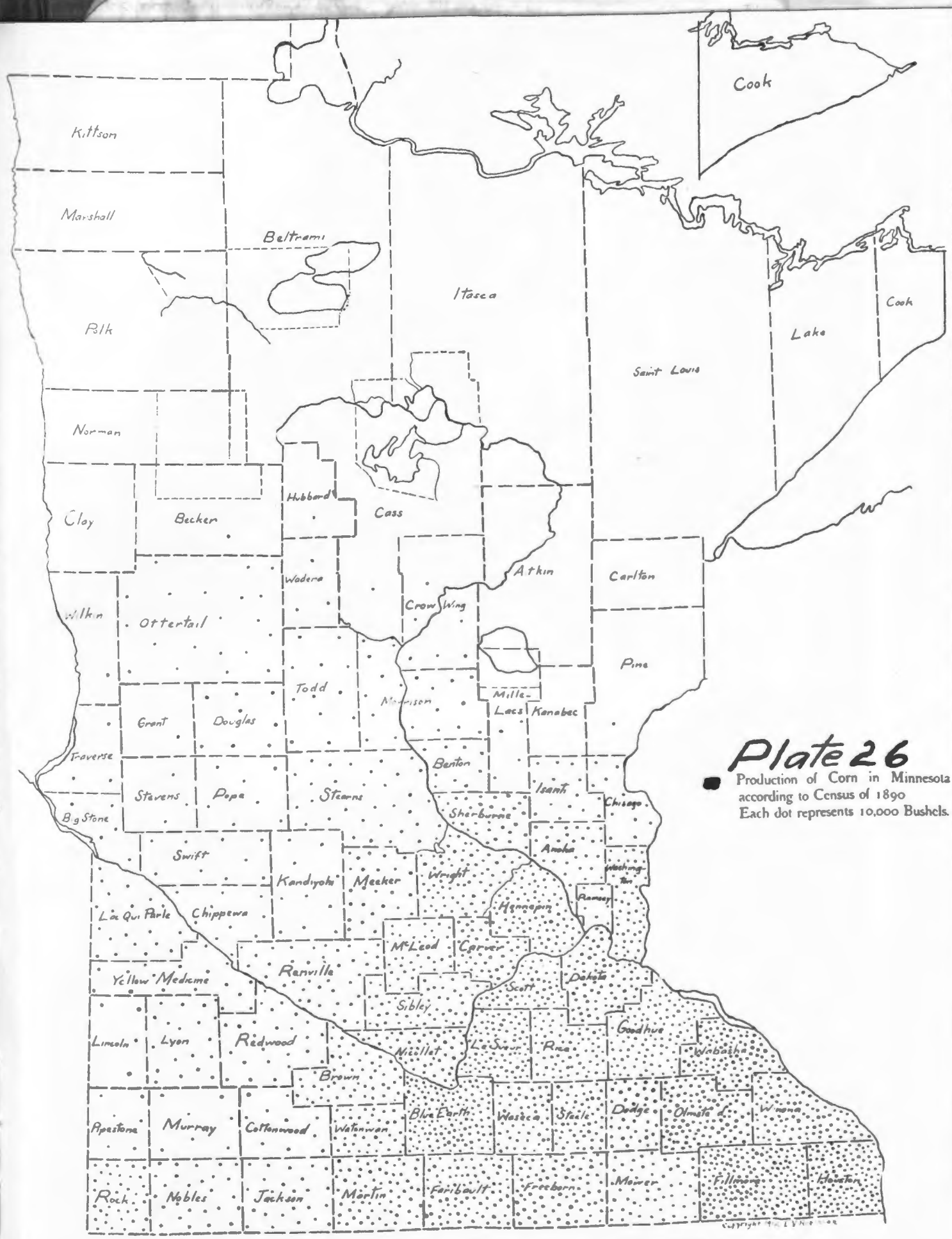
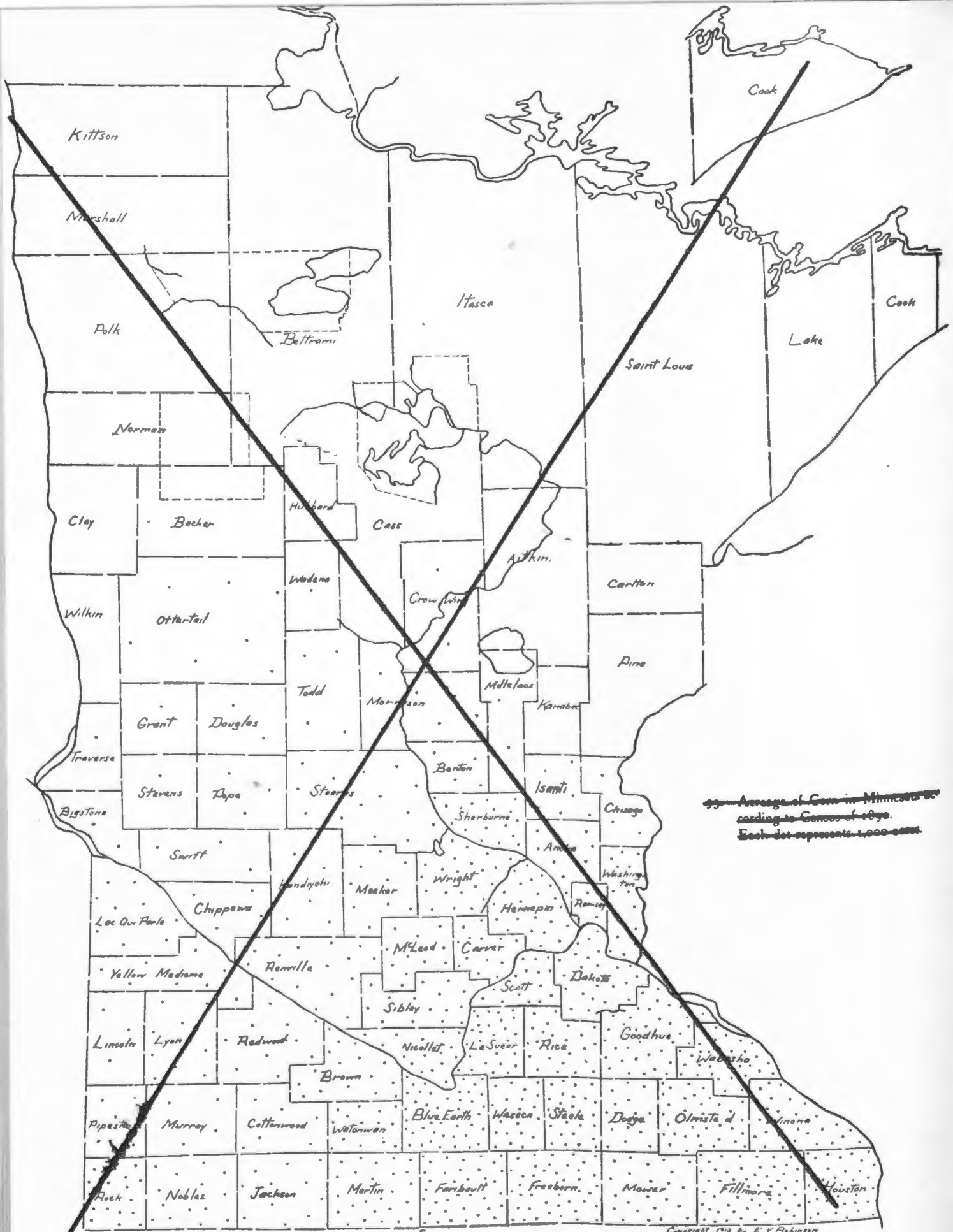


Plate 26

Production of Corn in Minnesota according to Census of 1890
 Each dot represents 10,000 Bushels.



Average of Corn in Minnesota according to Census of 1890. Each dot represents 1,000 acres.

Figure 118. Average of corn in 1889 according to the census of 1890. (Based on Table IV)

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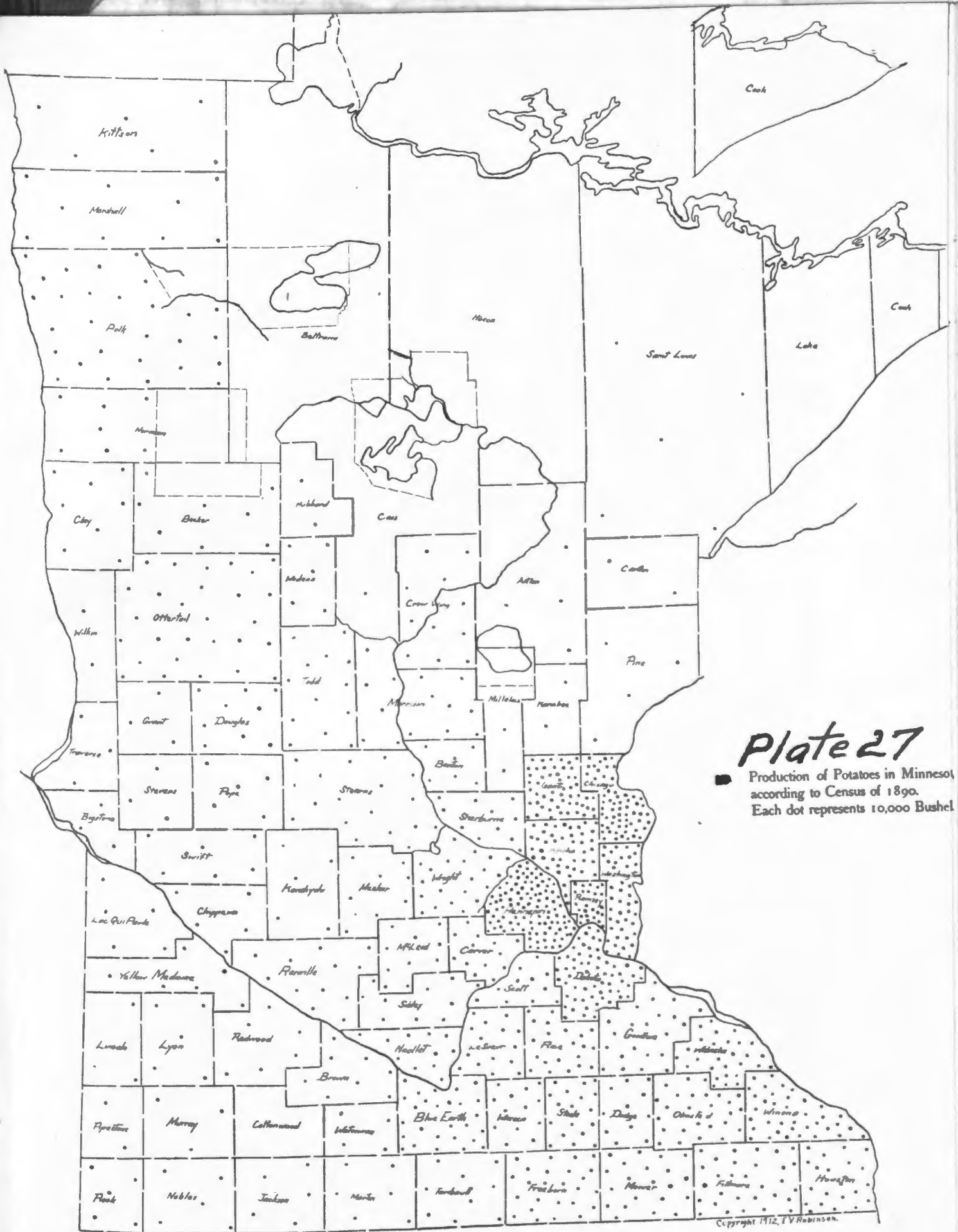
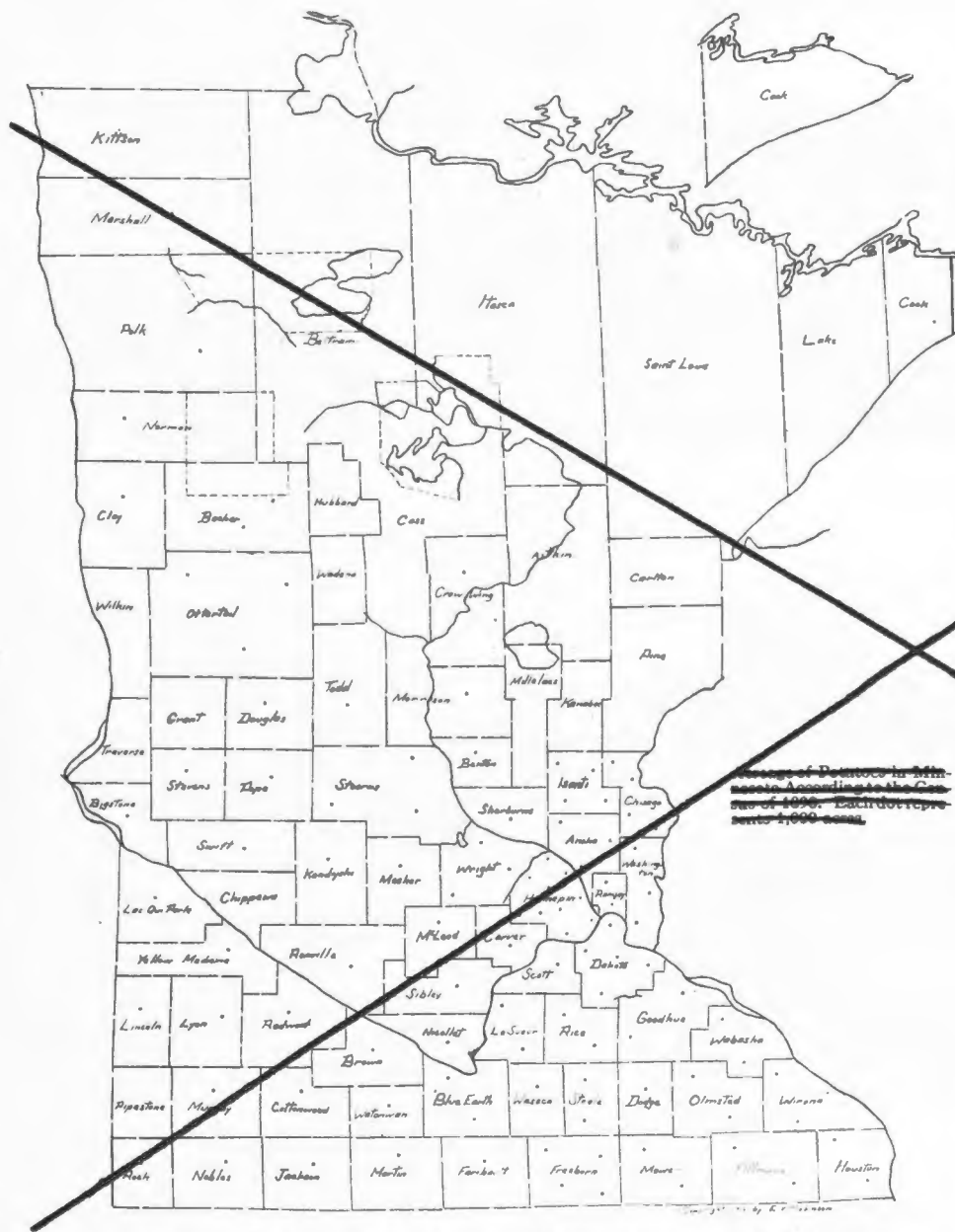
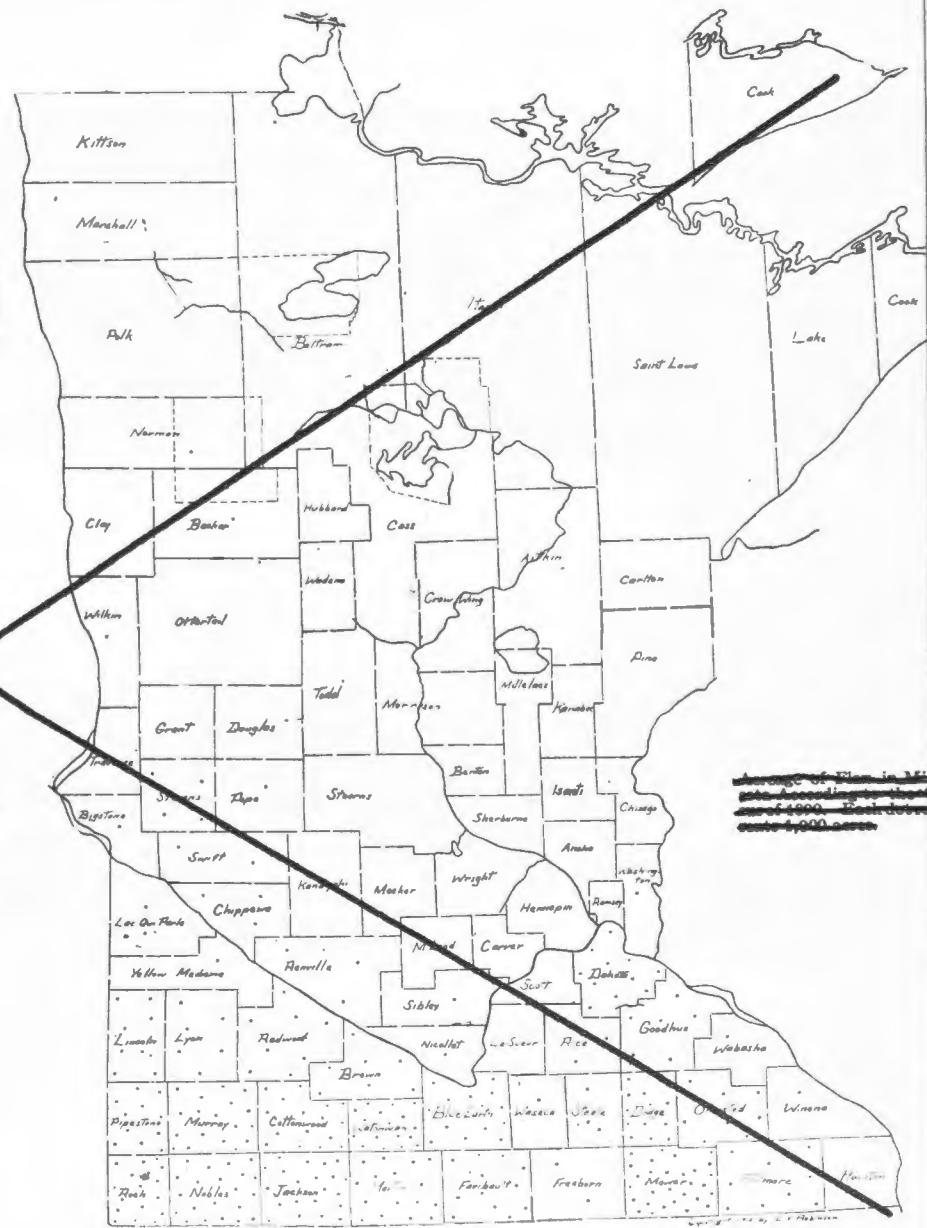


Plate 27

Production of Potatoes in Minnesota according to Census of 1890. Each dot represents 10,000 Bushel.



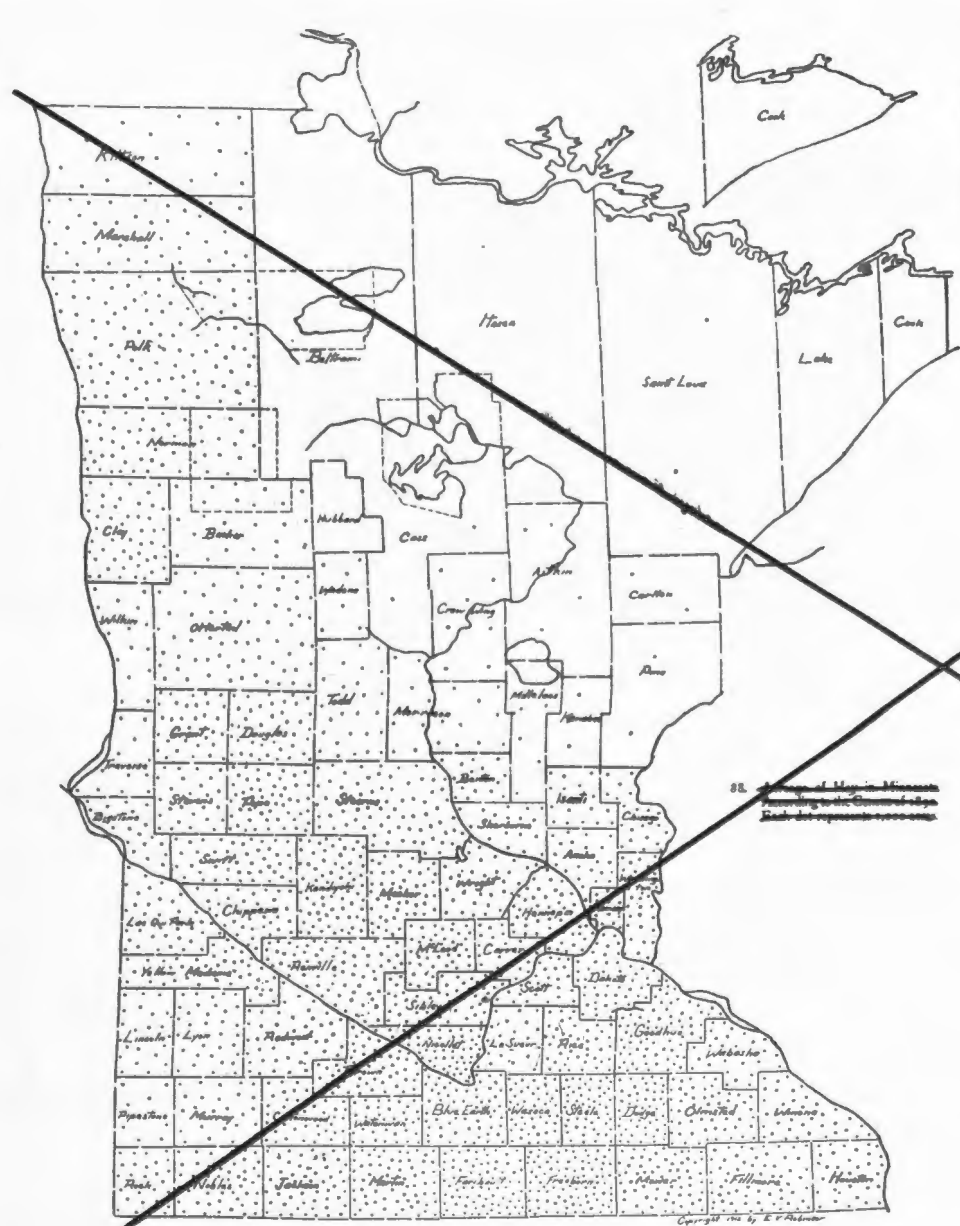
~~Figure 120. Acreage of potatoes in 1890 according to census of 1890.
(Based on Table XVIII)~~



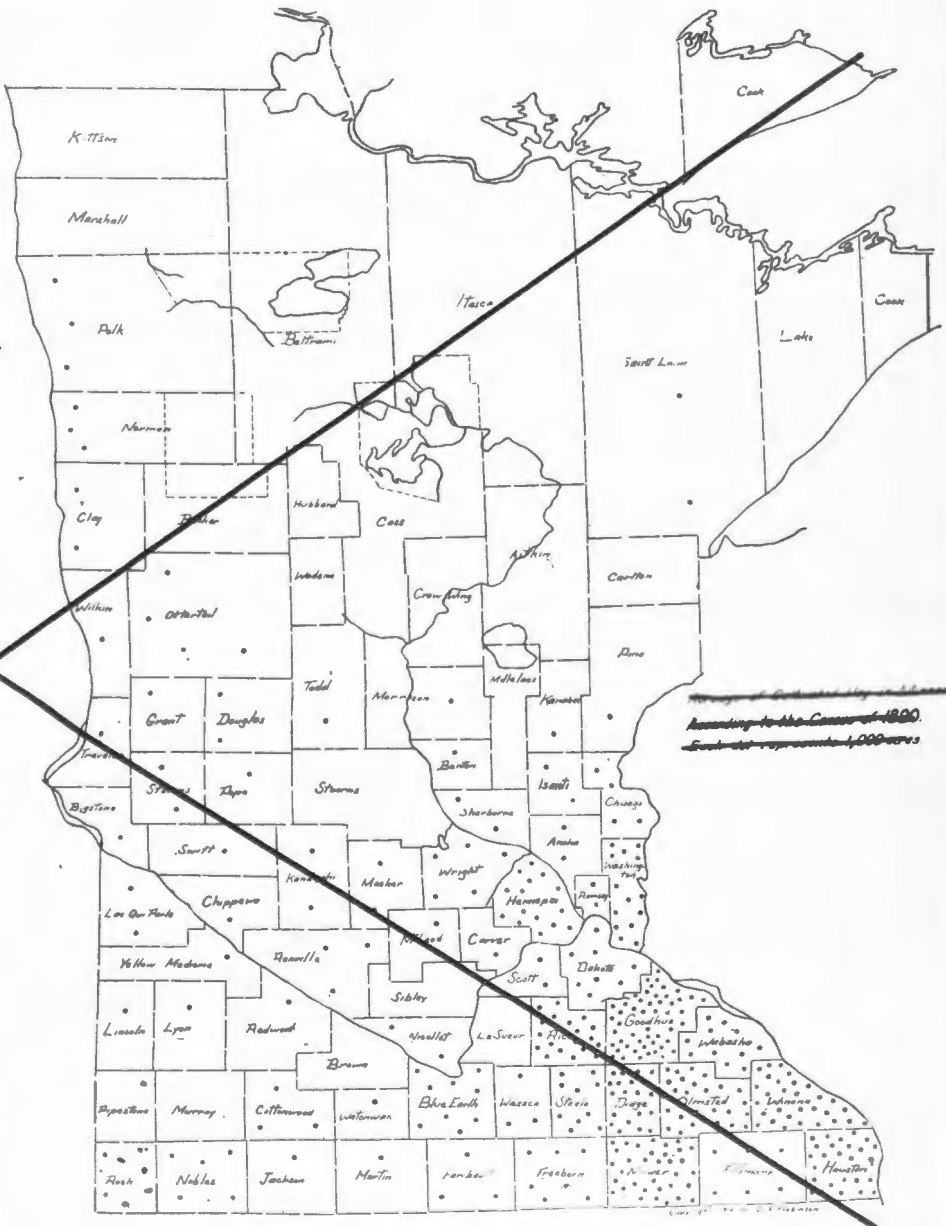
~~Figure 121. Acreage of flax in 1890 according to the census of 1890.
(Based on Table XIX)~~



Production of flaxseed in 1889 according to the census of 1890.



~~Figure 124. Acreage of wild and cultivated hay in 1880 according to the census of 1890.~~



~~Figure 125. Acreage of cultivated hay in 1889 according to the census of 1890.~~

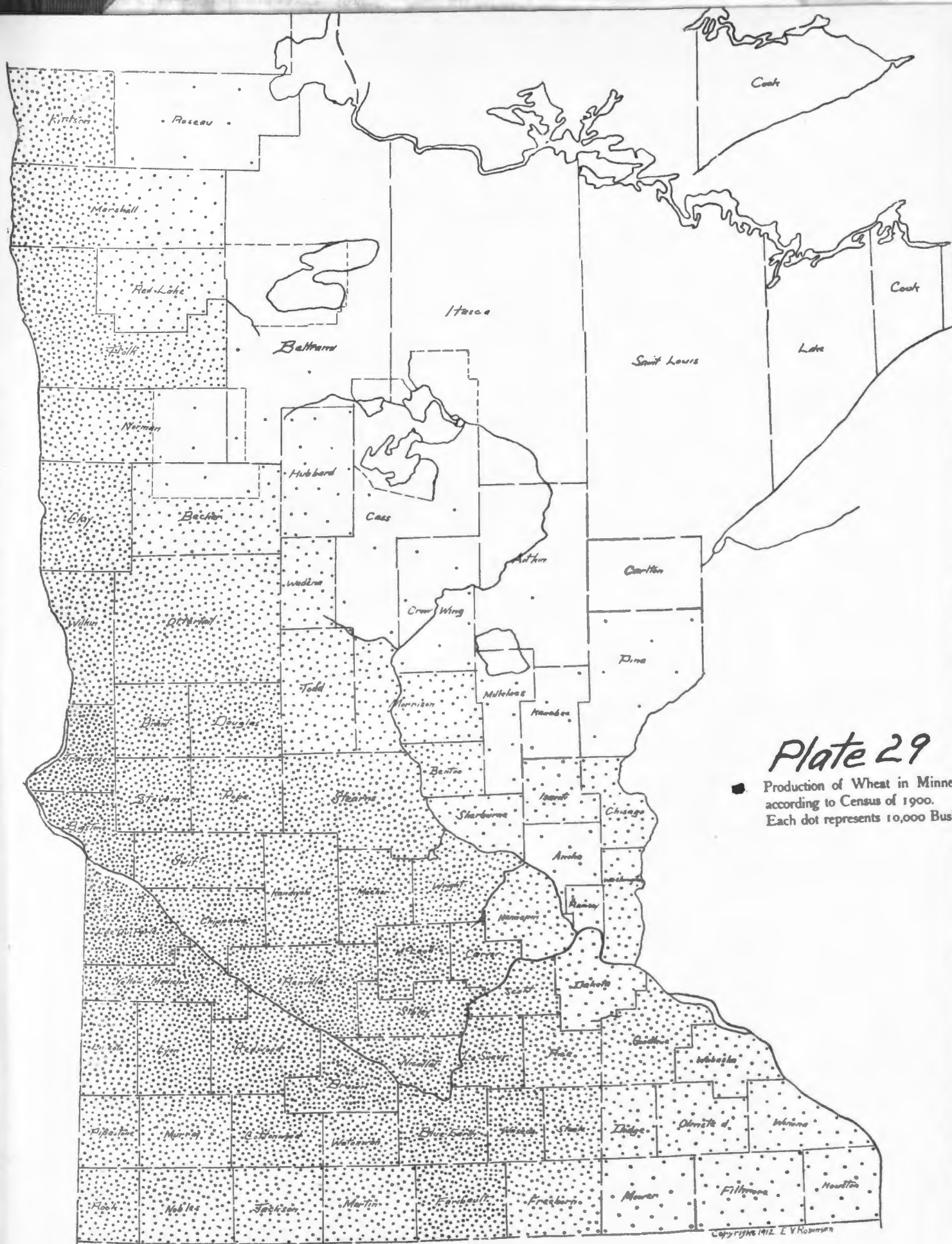
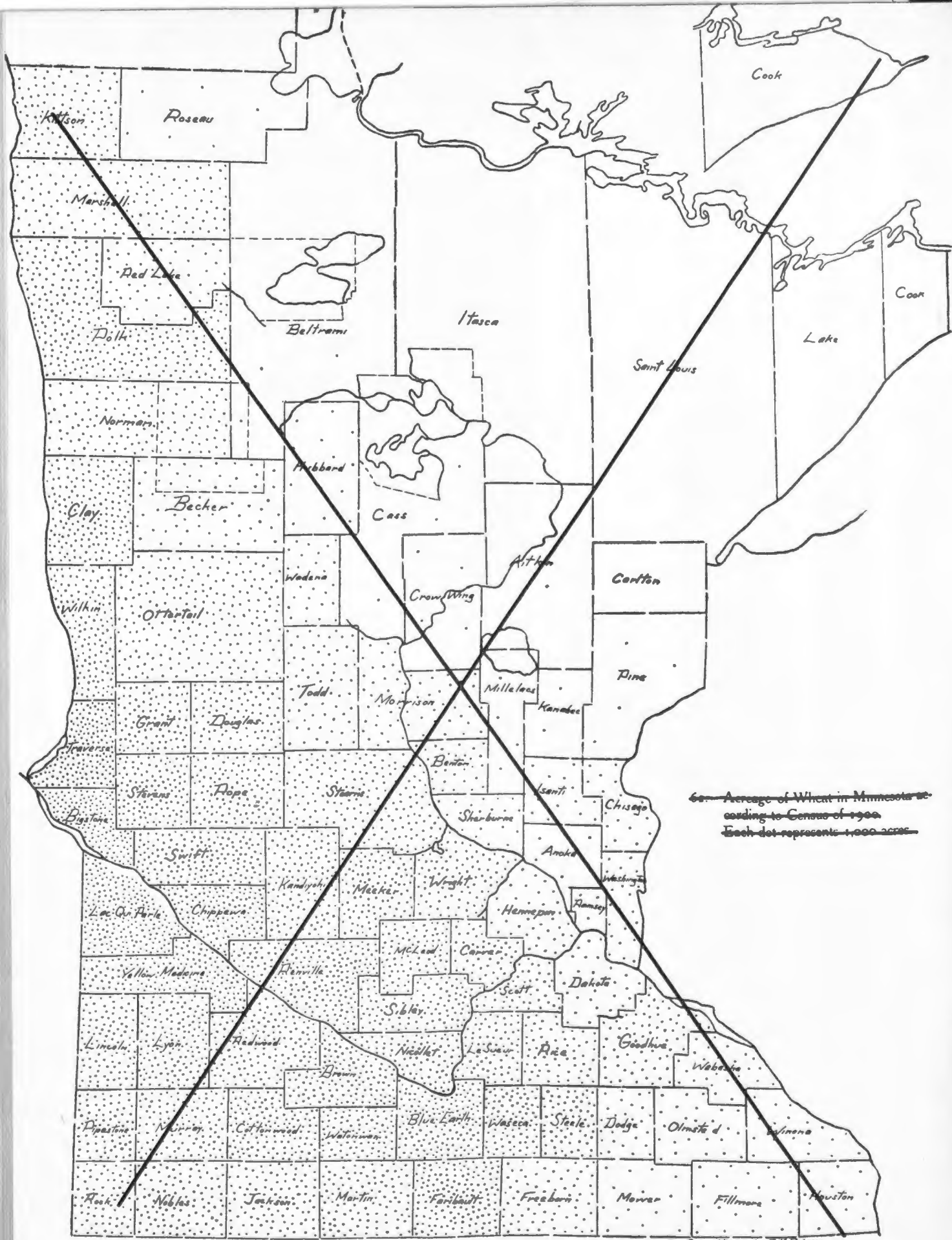


Plate 29

■ Production of Wheat in Minne
according to Census of 1900.
Each dot represents 10,000 Bush

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~~60. Acreage of Wheat in Minnesota according to Census of 1900. Each dot represents 1,000 acres.~~

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Figure 135. Acreage of wheat in 1900 according to census of 1900. (Based on Table XIII)

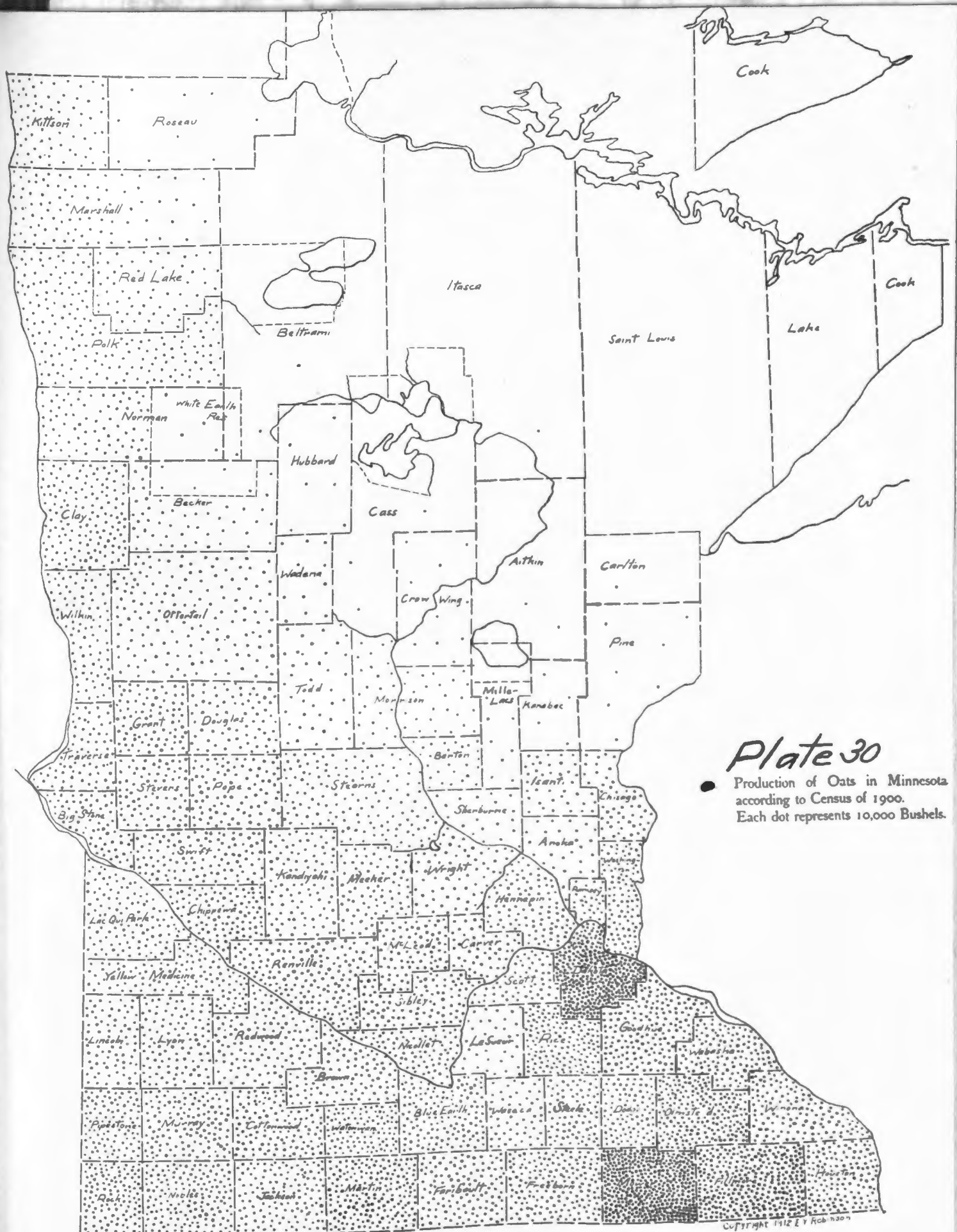
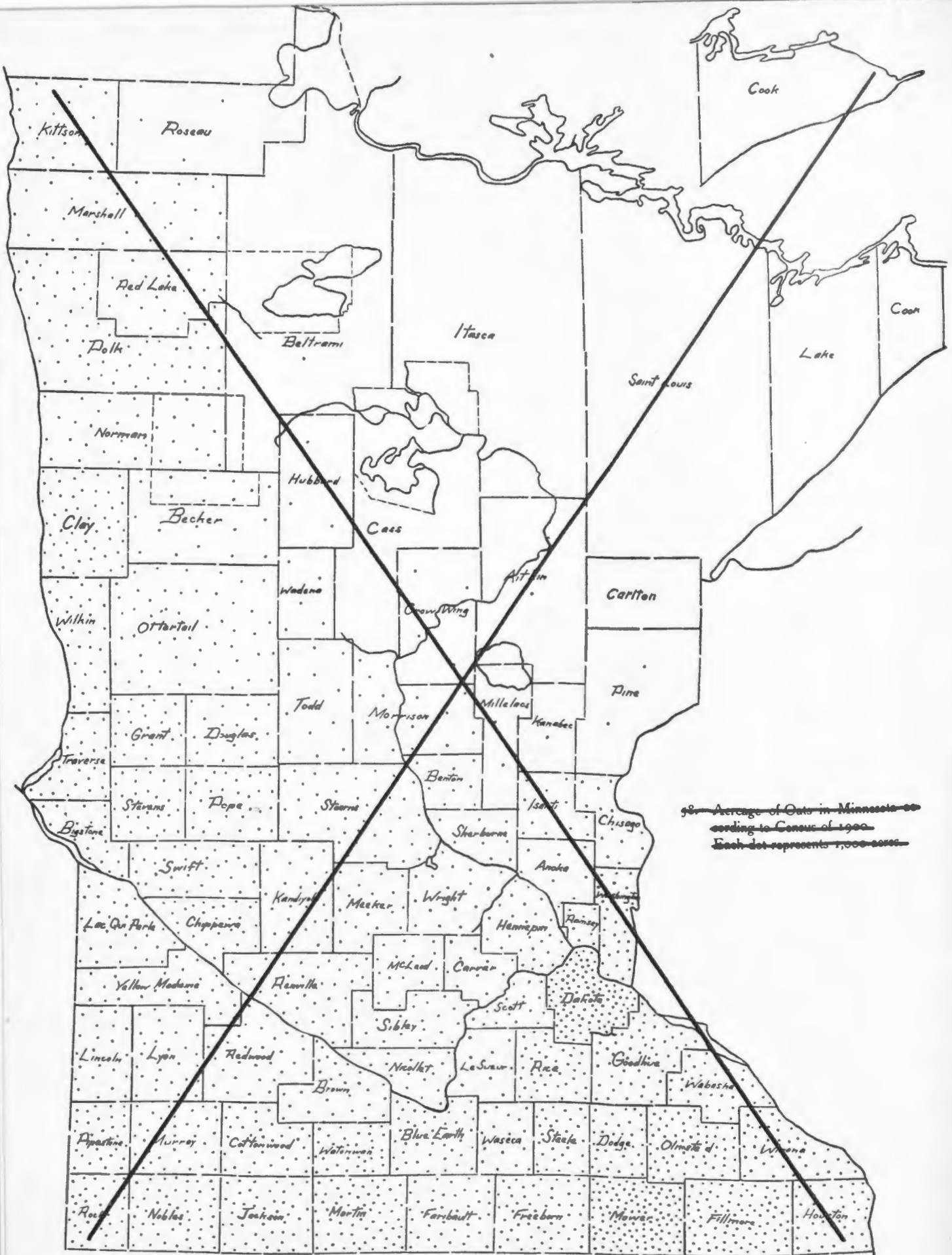


Plate 30

Production of Oats in Minnesota according to Census of 1900. Each dot represents 10,000 Bushels.

Production of oats in 1899 according to census of 1900.

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Average of Oats in Minnesota according to Census of 1900. Each dot represents 1,000 acres.

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Figure 137. Average of oats in 1899 according to census of 1900. (Based on Table XIV)

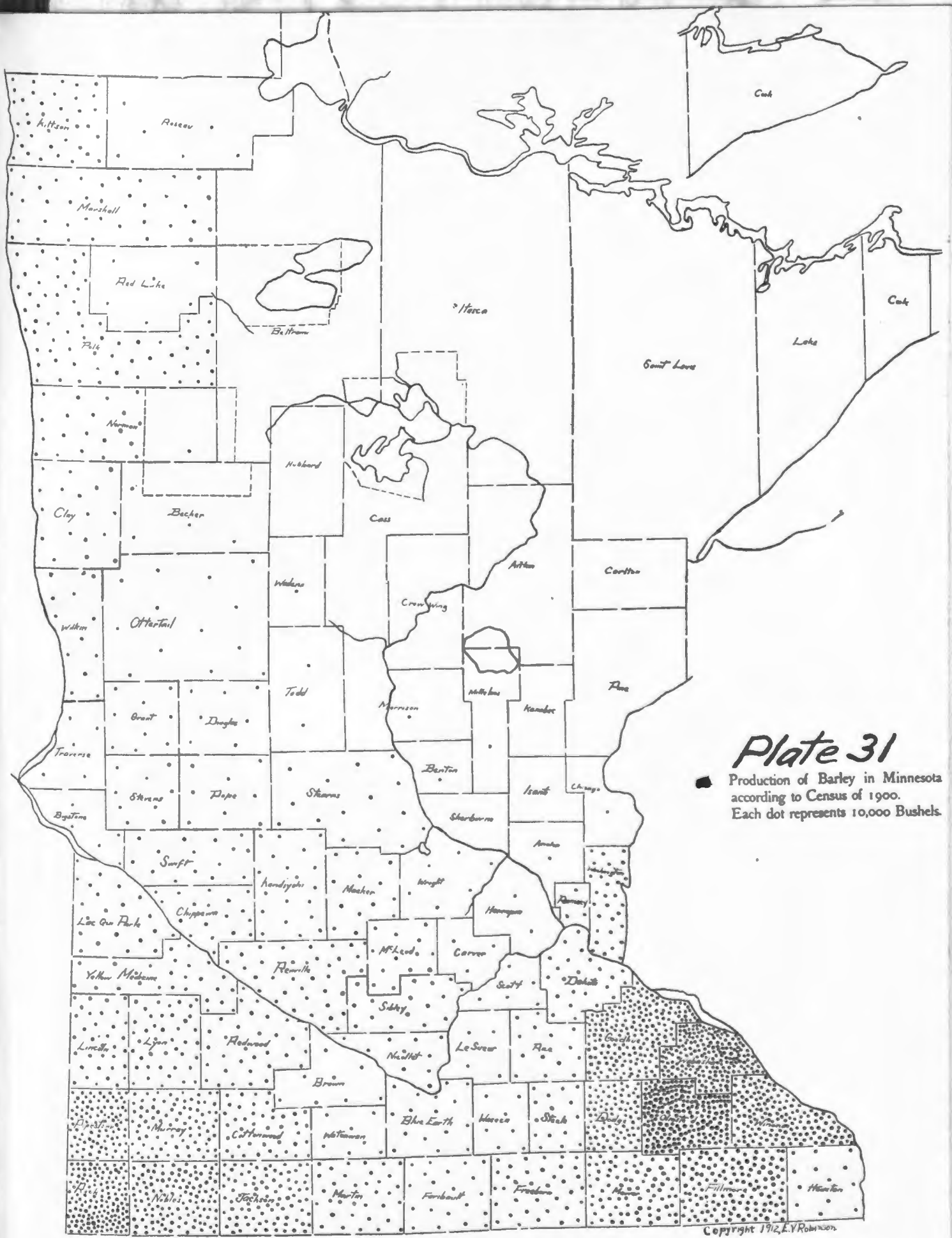


Plate 31

Production of Barley in Minnesota according to Census of 1900. Each dot represents 10,000 Bushels.

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Production of barley in 1899 according to census of 1900.

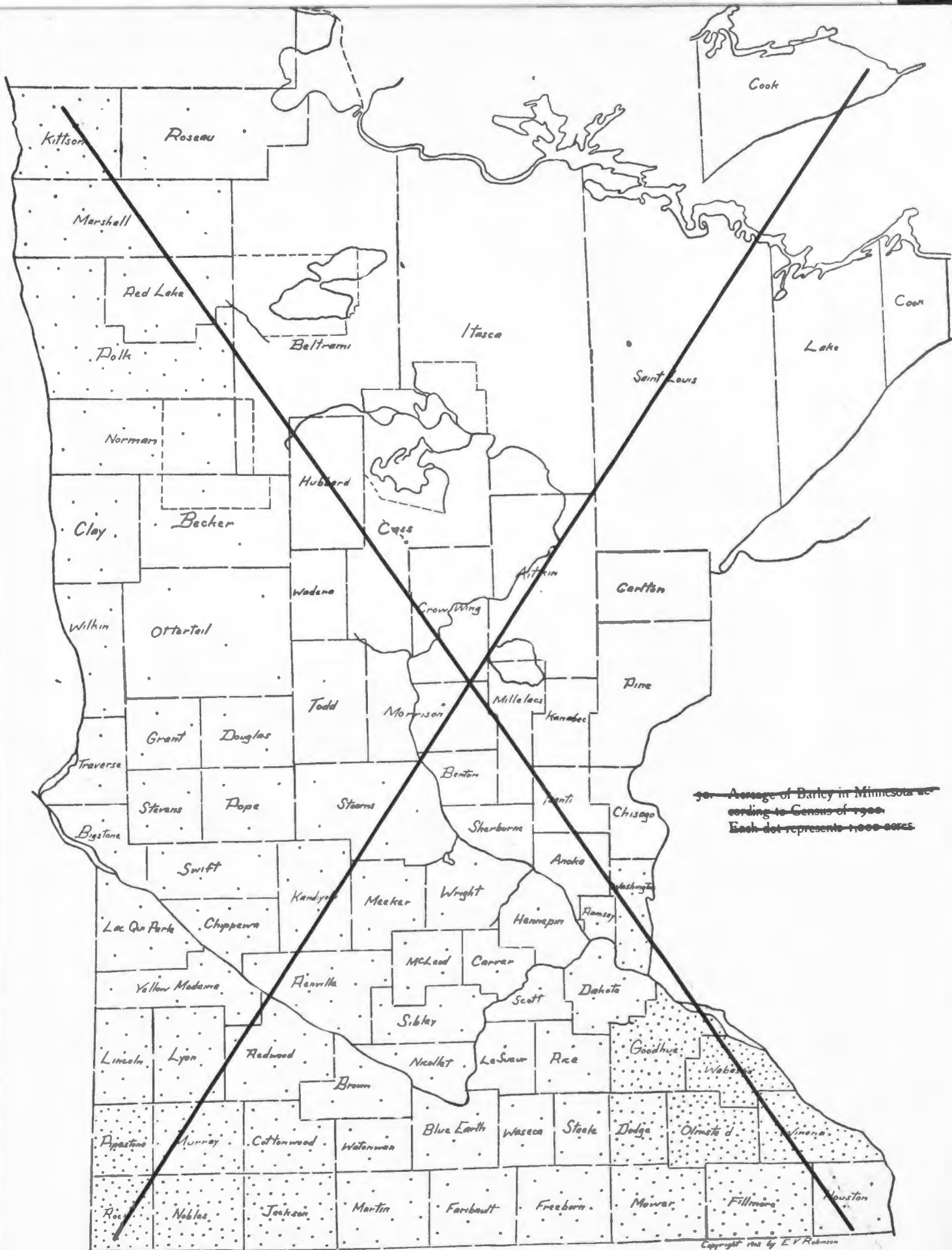


Figure 130. Average of barley in 1899 according to the census of 1900. (Based on Table XVI.)



Plate 32

Production of Corn in Minnesota according to Census of 1900. Each dot represents 10,000 Bushels.

Production of corn in 1899 according to the census of 1900.



Plate 33

● Production of Potatoes in Minnesota according to Census of 1900. Each dot represents 10,000 Bushels

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Production of potatoes in 1899 according to the census of 1900.

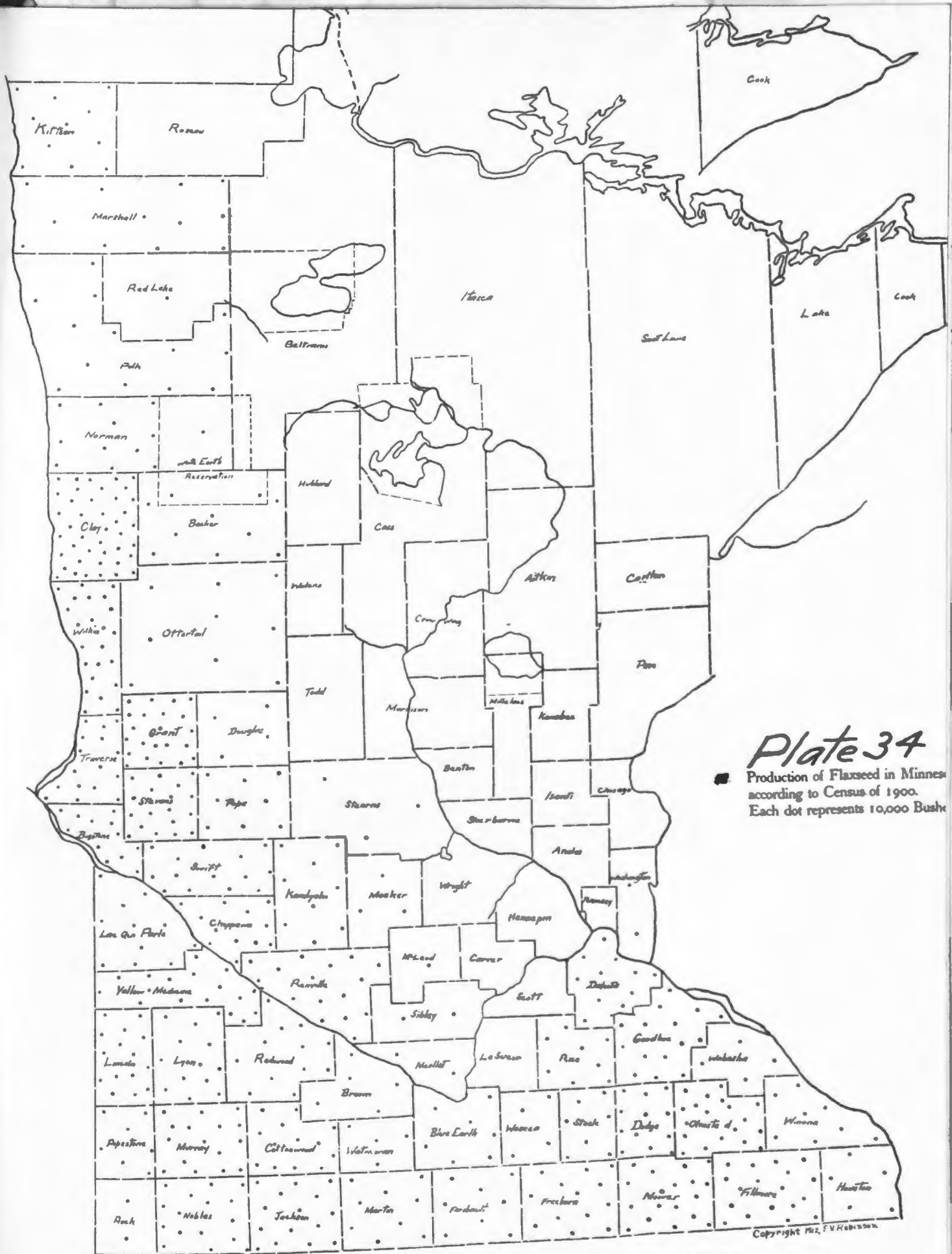


Plate 34

Production of Flaxseed in Minnesota according to Census of 1900. Each dot represents 10,000 Bushels

Production of flaxseed in 1899 according to the census of 1900.

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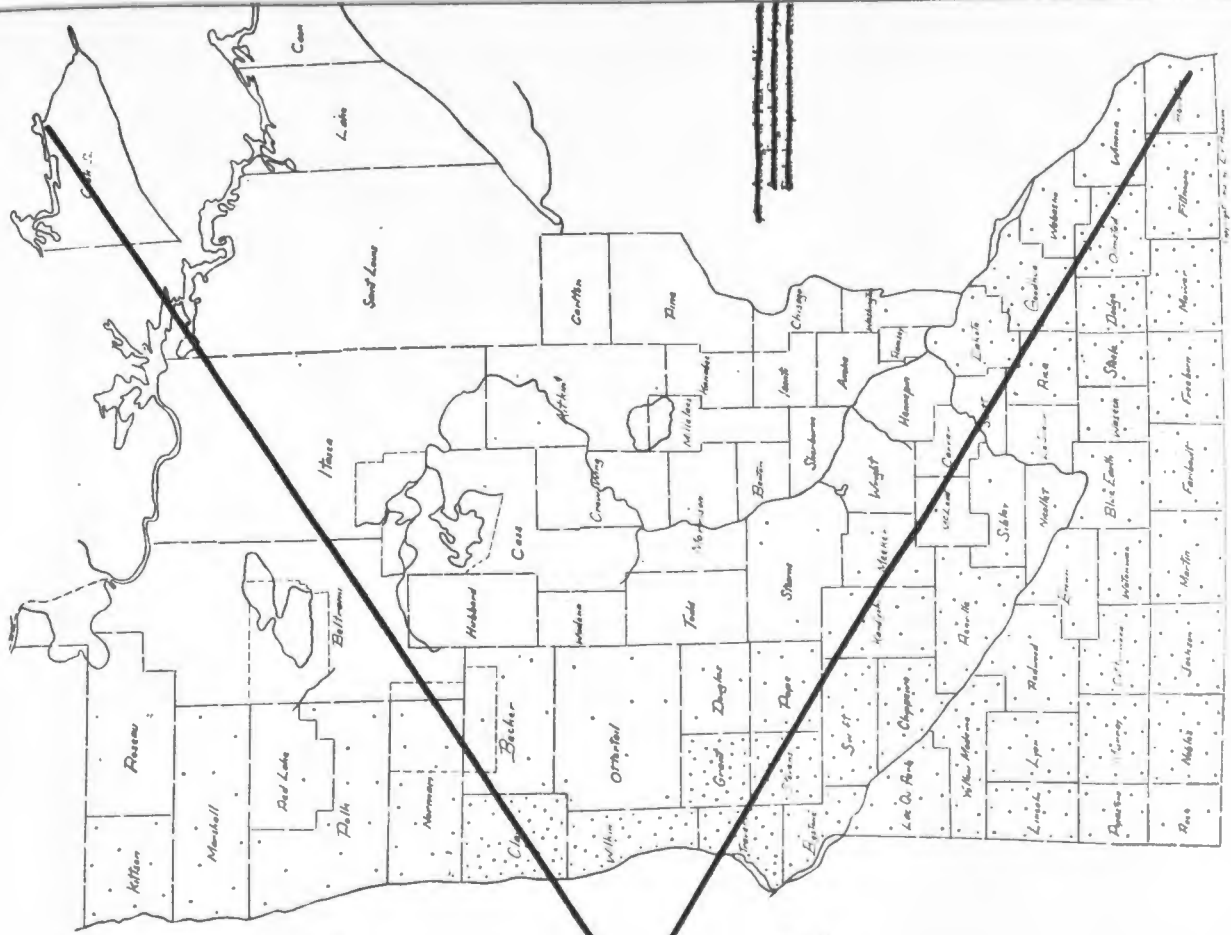


Figure 147. Average of acres in 1899 according to census of 1900.
(Based on Table XIX.)

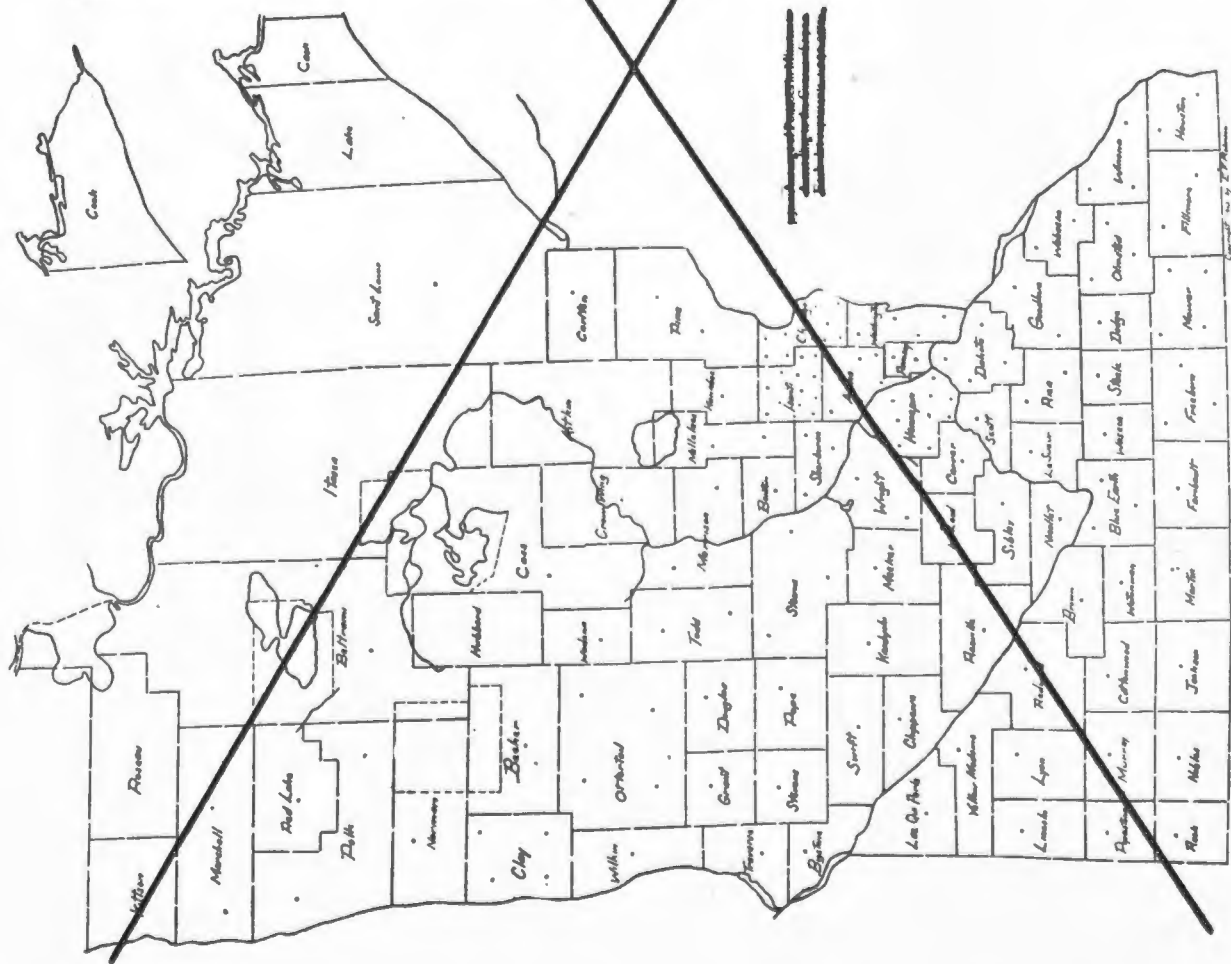


Figure 146. Average of potatoes in 1900 according to the census of 1900.
(Based on Table XVIII.)



Plate 36

Production of Oats in Minnesota according to Census of 1910. Each dot represents 10,000 Bushels.

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Production of oats in 1909 according to census of 1910.

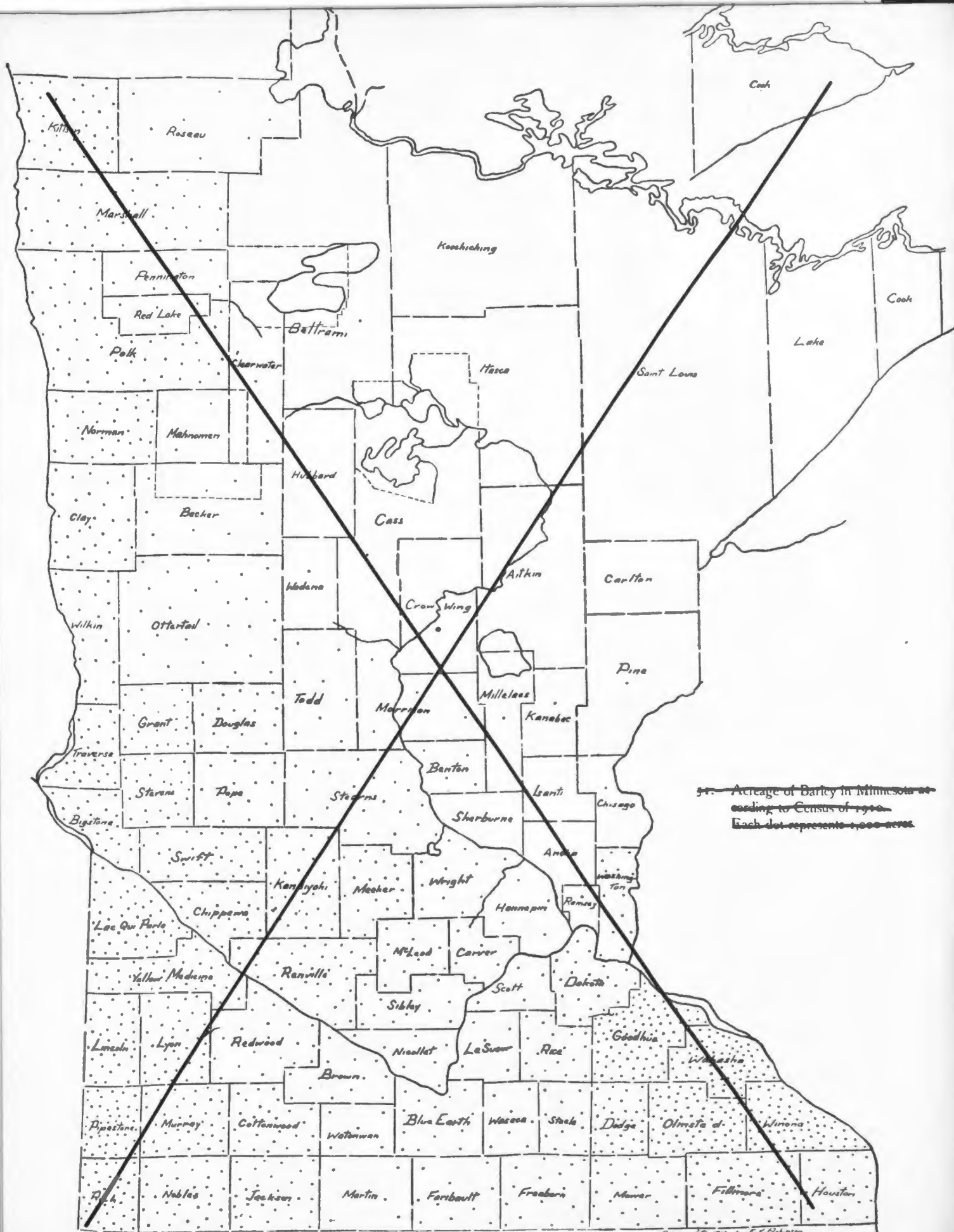


Figure 160. Acreage of barley in 1909 according to census of 1910. (Based on Table XVI)

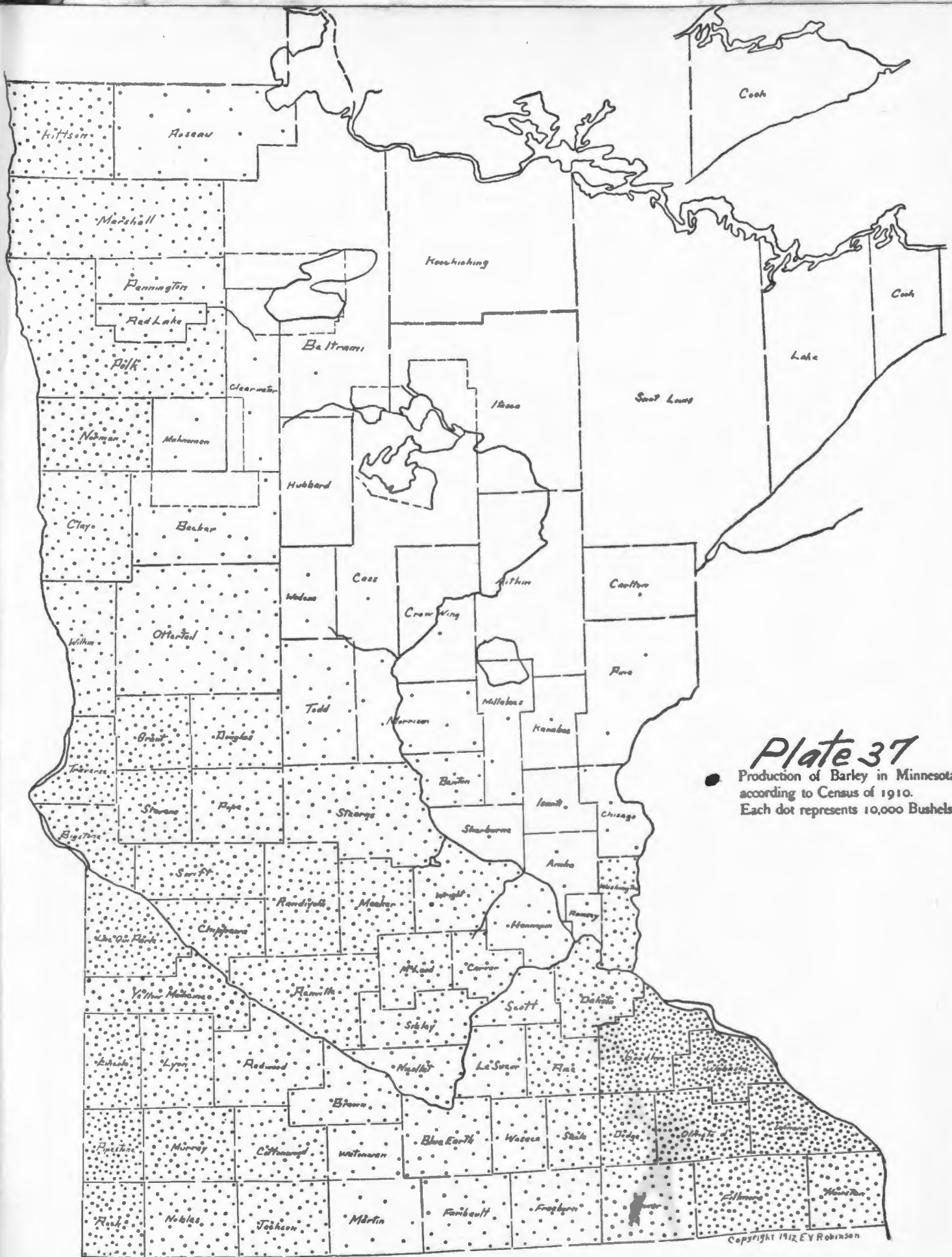


Plate 37

Production of Barley in Minnesota according to Census of 1910. Each dot represents 10,000 Bushels.

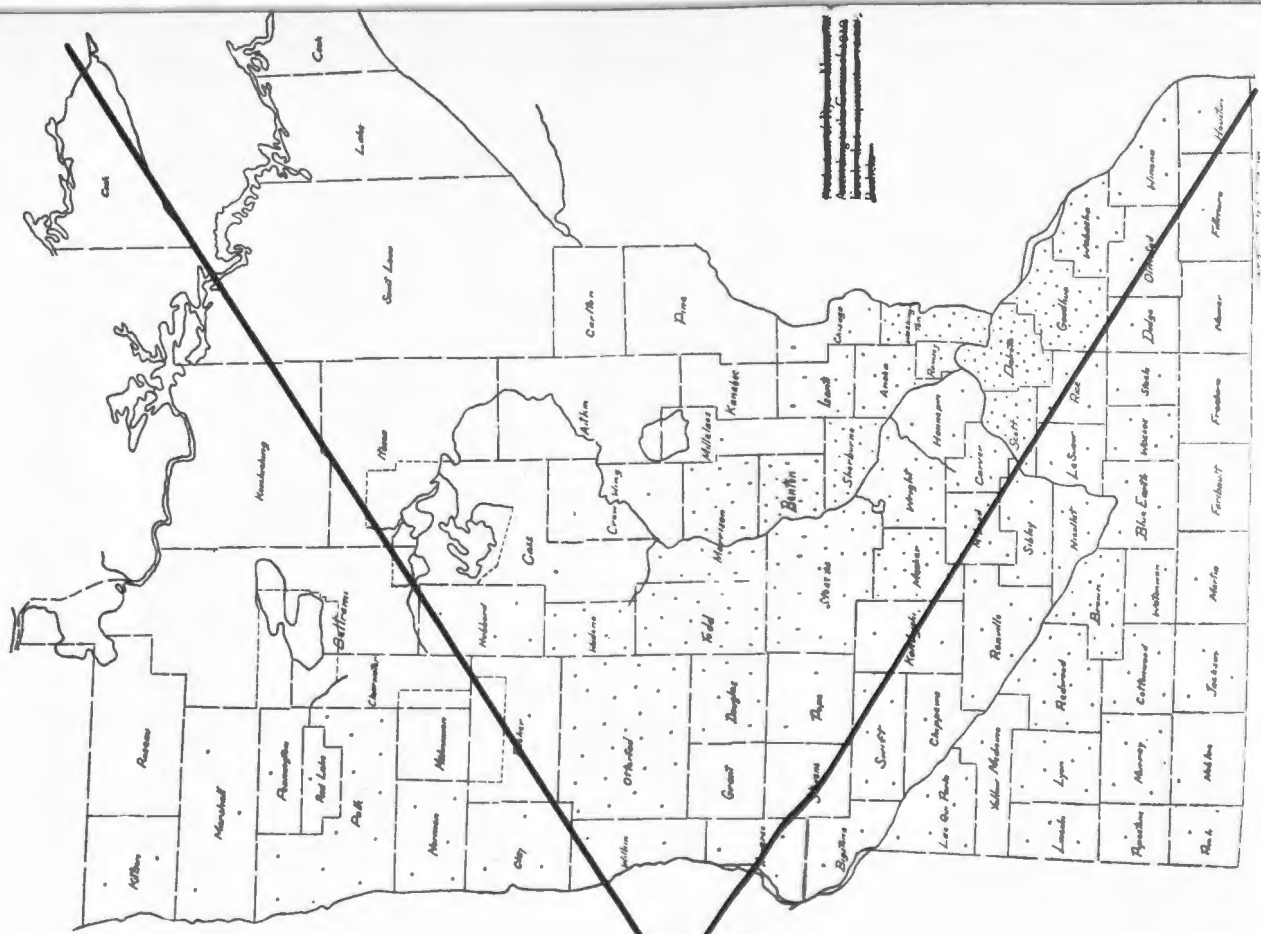


Figure 169. Production of rye in 1909 according to the census of 1910.
(Based on Table XVII)

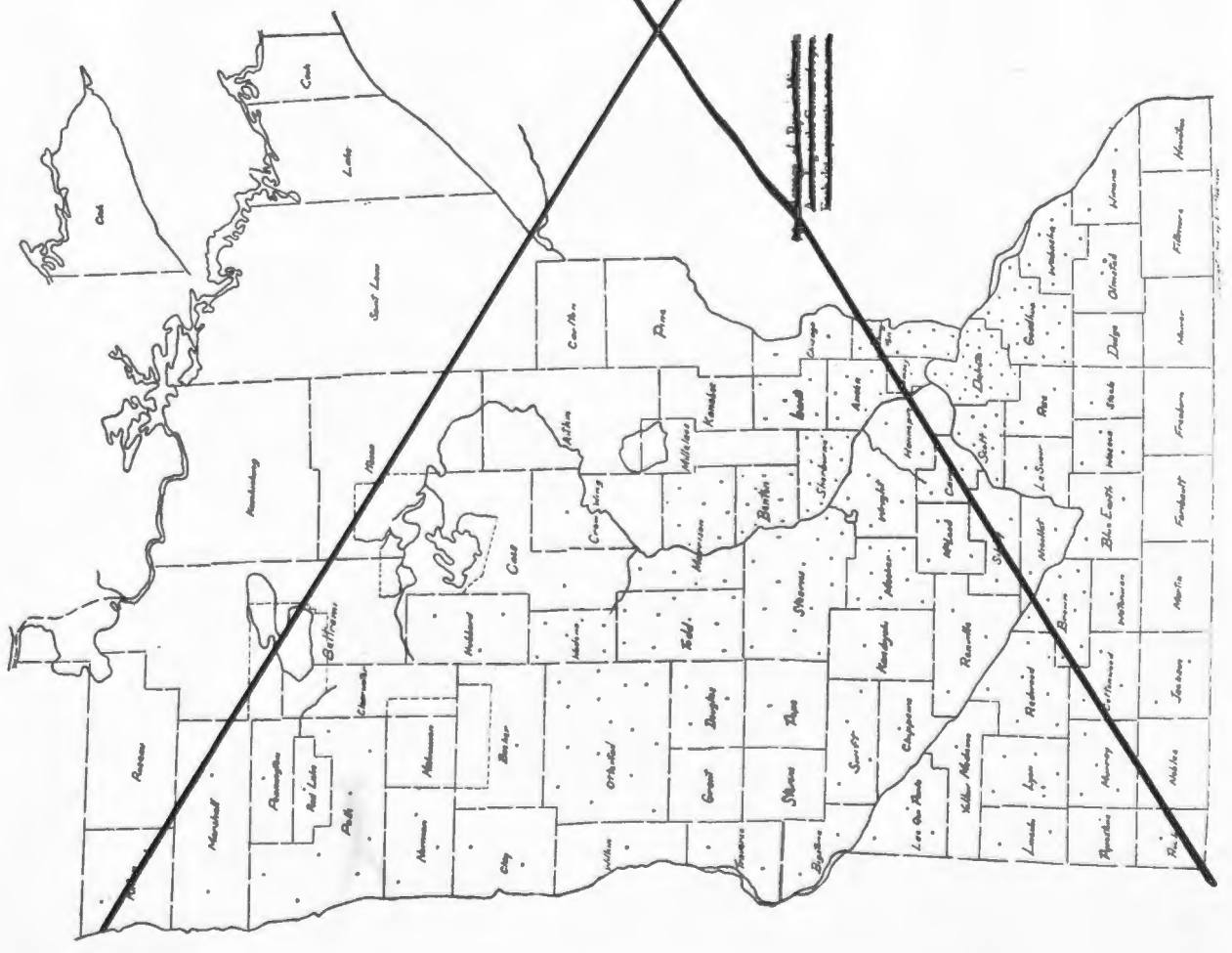


Figure 168. Average of rye in 1909 according to census of 1910.
(Based on Table XVII)

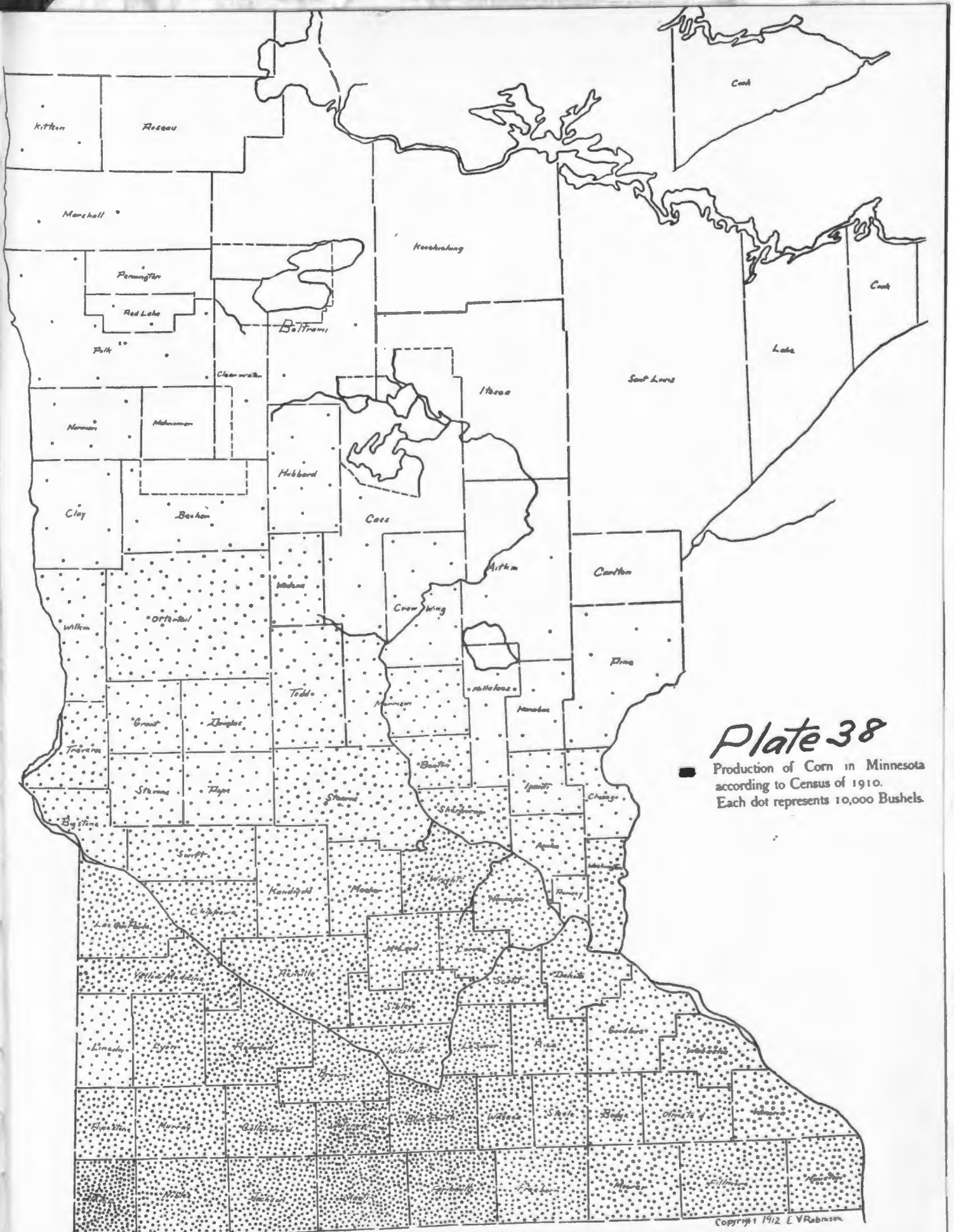


Plate 38

■ Production of Corn in Minnesota according to Census of 1910. Each dot represents 10,000 Bushels.

Production of corn in 1909 according to census of 1910.

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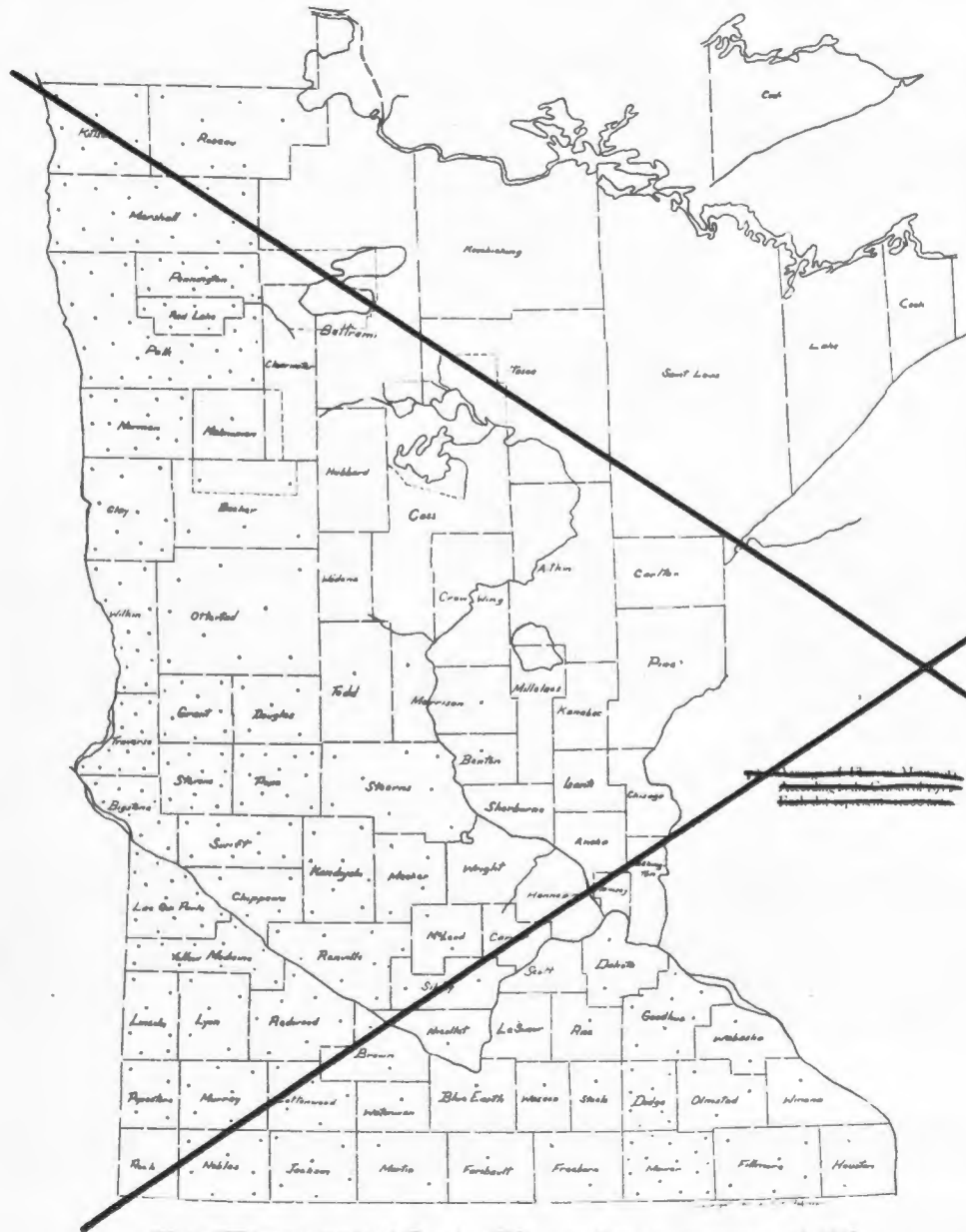


Figure 174. Average of flax in 1909 according to the census of 1910.
(Based on Table XIX)



Figure 175. Average of potatoes in 1909 according to the census of 1910.
(Based on Table XVIII)

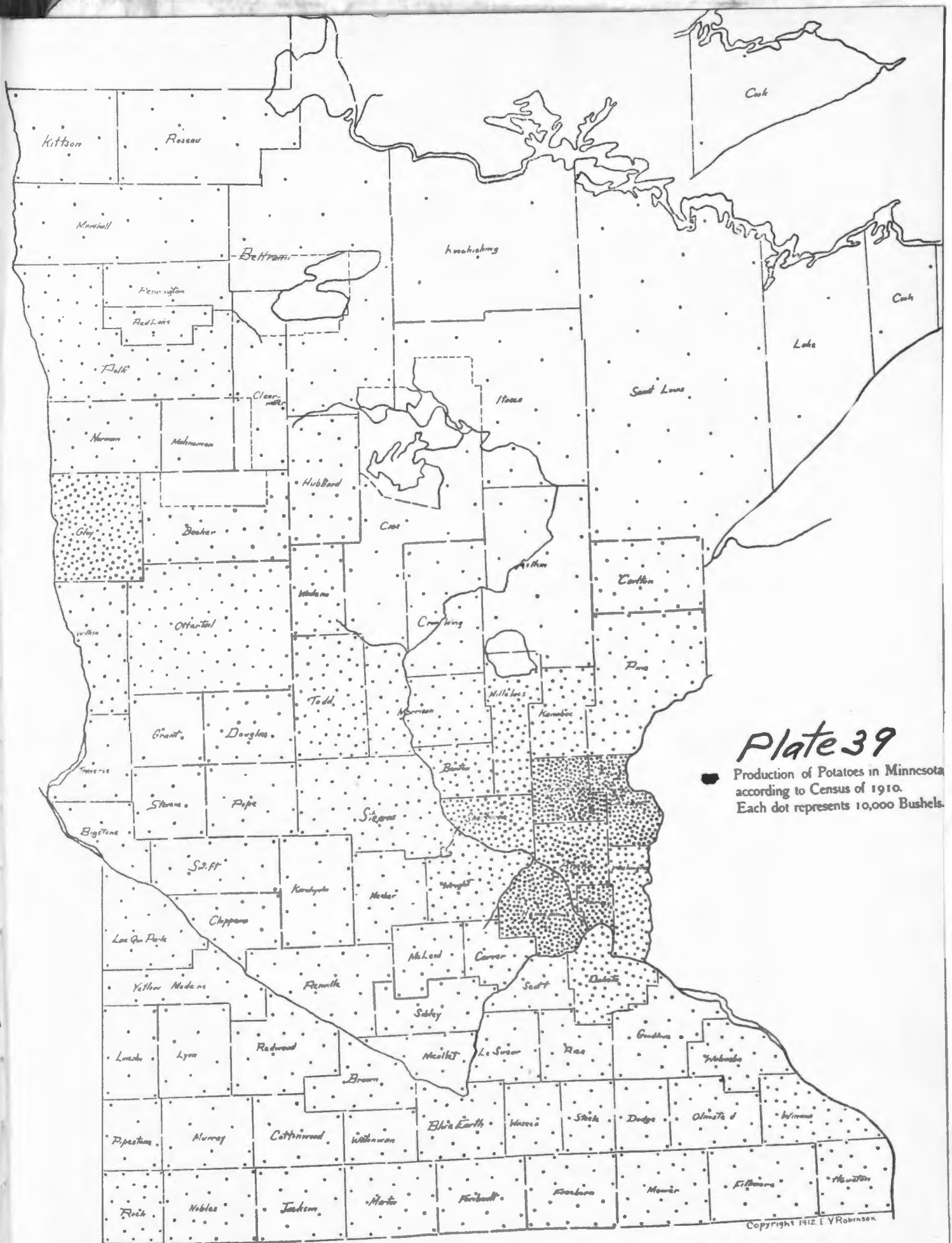


Plate 39

Production of Potatoes in Minnesota according to Census of 1910. Each dot represents 10,000 Bushels.



Plate 40

Production of Flaxseed in Minnesota according to Census of 1910. Each dot represents 10,000 Bushels.