THE WESTWARD MOVEMENT OF THE WHEAT GROWING INDUSTRY IN THE UNITED STATES¹

Agriculture was the primary industry of the Colonial period. With the establishment of permanent settlements in America and the accompanying need for food the colonists usually first planted fields of maize according to the methods taught them by the Indians in order that they might have an adequate supply for the ensuing winter. While these crops were still growing, new land was cleared and made ready for the next year's seeding. Gradually other crops were introduced, principally the cereals, which proved most adaptable to the climate and seasons of the new world. Among these products, wheat was soon widely and extensively grown, because of its importance as a food product and because of the demand for it, both in the domestic and foreign markets.

The wheat growing industry was at first confined to New England and the Middle Atlantic Colonies and chiefly to the latter section for there the yields were better than those secured in New England. In New York, the yields sometimes amounted to from thirty to forty bushels an acre, while a product of from twenty to thirty bushels an acre was quite usual. Similar yields were secured in Pennsylvania and New Jersey.²

¹ The writer is indebted to Mr. B. B. Hickenlooper of Blockton, Iowa, a graduate student in the Department of History at the Iowa State College of Agriculture and Mechanic Arts during the summer of 1920, for assistance in the preparation of this paper.

² Bogart and Thompson's Readings in the Economic History of the United States, p. 32.

As the population increased, however, a greater area was devoted to the raising of wheat, thus creating a surplus for which there was a growing foreign demand. Wheat therefore became the most important export crop of the Middle Atlantic Colonies. The chief foreign markets were Spain and Portugal, although considerable quantities of wheat were also shipped to the West Indies.³ By 1729 the wheat exports from Pennsylvania amounted to 74,800 bushels, while the flour exports amounted to 35,438 barrels.⁴ At the close of the Colonial period wheat formed one of the chief articles entering into the foreign commerce of the American Colonies.

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During the early national period, extending from the Revolution to the close of the War of 1812, the wheat exported from the United States was grown chiefly in the Atlantic States. The quality of the wheat produced was good. The milling industry, established in the Colonial period, had been rapidly developed; but these States soon reached the high tide in wheat production, for wheat farming had gradually decreased the fertility of the soil with the result that the yields declined. Moreover, as population and immigration increased, the movement westward was begun on an unprecedented scale. The frontier line was extended to the Mississippi Valley, entering Ohio and the immediately adjoining States beyond. In the New England States there remained an increasing population which was changing rapidly from agricultural to manufacturing pursuits. The result was that the States which had hitherto been exporting wheat and other grains now became dependent on the West for an adequate supply of breadstuffs.5

³ Eighth Census of the United States, 1860, Agriculture, p. exl.

⁴ Eighth Census of the United States, 1860, Agriculture, p. exl.

⁵ See Turner's Rise of the New West, Chs. II, III (The American Nation Series, Vol. XIV).

The most serious problem now confronting the nation was that of transportation. The westward movement of population and cereal production continued but transportation facilities eastward were inadequate. Agricultural products possessed relatively low value and great bulk, thus practically preventing eastward shipments by the means then available for the cost of transportation made it impossible to ship wheat overland more than 150 miles. Tucker of Virginia stated in 1818, that even in the tidewater country where he lived it cost one bushel of wheat to send two to market. This was almost prohibitive, hence wheat growing was restricted very largely to the regions readily accessible to markets by the waterways of the country.

Grain shipments for the Eastern States were therefore sent down the Ohio and Mississippi rivers — the natural outlet for the agricultural products of the West — to the Gulf ports. They were then reshipped to the Atlantic Coast States or to Europe. On the other hand, manufactured articles destined for the West were shipped over the Pennsylvania Turnpike and the Old National Road, for these products possessed relatively high value and less bulk than the products of agriculture and thus could bear transportation charges, though the rates were high. The South received increasing quantities of wheat and other food products from the West while its manufactured products were supplied by the North Atlantic States. The South thus came to depend more and more on its exports of cotton and tobacco with which it paid its indebtedness to the West and East respectively for the necessities supplied by them. In this manner

⁶ McMaster's History of the People of the United States, Vol. III, pp. 463, 464.

⁷ Turner's Rise of the New West, p. 100 (The American Nation Series, Vol. XIV).

there was developed the triangular system of internal trade which characterized the period from 1815 to the Civil War.8

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This urgent need for better transportation facilities soon led to the building of the Erie Canal which was completed in 1825 and at once became an important outlet for western grain. But this did not immediately affect the region west of Ohio. In 1835 Ohio was the only western State exporting grain eastward by way of the Erie Canal. In that year Ohio exported by way of this route 1,355,000 bushels of wheat and 86,000 barrels of flour. Michigan followed next, exporting in 1843 by way of the Great Lakes and Erie Canal 106,000 bushels of wheat and 263,000 barrels of flour. The first grain shipment eastward from the west-

TABLE I

TEN LEADING WHEAT PRODUCING STATES IN 1839 11			
STATES	Bushels	PER CENT OF THE ENTIRE WHEAT CROP	
Ohio	16,571,661	20	
Pennsylvania	13,213,077	16	
New York	12,286,418	14	
Virginia	10,109,716	12	
Kentucky	4,803,152	6	
Tennessee	4,569,692	5	
Indiana	4,049,375	5	
Maryland	3,345,783	4	
Illinois	3,335,393	4	
Michigan	2,157,108	3	

8 See the writer's article on The Internal Grain Trade of the United States, 1850-1860, in The Iowa Journal of History and Politics, Vol. XVIII, pp. 94-124.

9 Eighth Census of the United States, 1860, Agriculture, p. exlvi.

10 Eighth Census of the United States, 1860, Agriculture, p. cxlvi.

11 These statistics are taken from a table in Brewer's Report on the Cereal Production of the United States, p. 62, in the Tenth Census of the United States, 1880, Vol. III. See also Twelfth Census of the United States, 1900, Vol. VI, p. 92.

ern shore of Lake Michigan was made in 1838 when Chicago shipped 78 bushels of wheat.¹²

By 1840 the wheat growing industry had definitely entered the Mississippi Valley. This is shown by Table I which gives the ten leading wheat producing States in 1839, ranked in order of their importance, and includes the number of bushels of wheat and the per cent of the entire crop produced by each. Ohio had by this time advanced to first place in wheat production; while Pennsylvania, New York, and Virginia followed in due order. Kentucky and Tennessee were next in the list, with Indiana, Illinois, and Michigan already coming into prominence. Maryland still produced enough wheat to be considered among the first ten.

During the forties wheat growing continued to move westward, as shown by Table II which gives the ten leading wheat producing States in 1849. This table shows that while Ohio, Pennsylvania, New York, and Virginia still retained the lead in production, Pennsylvania now ranked

TABLE II

STATES	Bushels	PER CENT OF THE ENTIRE WHEAT CROP	
Pennsylvania	15,367,691	15.3	
Ohio	14,487,351	14.4	
New York	13,121,498	13.1	
Virginia	11,212,616	11.2	
Illinois	9,414,575	9.4	
Indiana	6,214,458	6.2	
Michigan	4,925,888	4.9	
Maryland	4,494,680	4.5	
Wisconsin	4,286,131	4.3	
Missouri	2,981,652	3.0	

¹² Eighth Census of the United States, 1860, Agriculture, p. exlvii.

¹³ These statistics are taken from a table in the Twelfth Census of the United States, 1900, Vol. VI, p. 92.

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first, while Ohio which was first in 1839 was reduced to second place. New York and Virginia followed in corresponding order. Of the States comprising the first ten in 1839 two were eliminated by 1849 - Kentucky and Tennessee which had held fifth and sixth places, respectively. Illinois rose from ninth place in 1839 to fifth place in 1849 and Indiana passed from seventh to sixth place; while Michigan, which ten years before was tenth in order of production, advanced to the seventh place, previously held by Indiana. Maryland still retained eighth place. Wisconsin and Missouri by 1849 produced enough wheat to be ranked ninth and tenth, respectively. This shows the tendency of wheat production to advance steadily northwestward. Of further significance in arriving at this conclusion is the fact that whereas the center of wheat production in 1840 was about the western boundary line of Pennsylvania, by 1850 it had moved westward to a point fifty-seven miles eastnortheast of Columbus, Ohio.14

TABLE III

STATES	Bushels	PER CENT OF THE ENTIRE WHEAT CROI	
Illinois	23,837,023	13.8	
Indiana Wisconsin Ohio	16,848,267 15,657,458 15,119,047	9.7	
		9.1	
		8.7	
Virginia	13,130,977	7.6	
Pennsylvania	13,042,165	7.5 5.0	
New York	8,681,105		
Iowa	8,449,403	4.9	
Michigan	8,336,368	4.8	
Kentucky	7,394,809	4.3	

14 Twelfth Census of the United States, 1900, Vol. VI, p. 32.

¹⁵ These statistics are taken from a table in the Twelfth Census of the United States, 1900, Vol. VI, p. 92.

The next decade witnessed a rapid movement of population into the North Central States and the extension of the wheat producing area, as shown by Table III. It will be seen by this table that Illinois had now pushed to the head of the list and that Indiana and Wisconsin occupied second and third places, respectively, while Ohio had been reduced from second to fourth place. Pennsylvania dropped from first to sixth place, New York from third to seventh, and Virginia from fourth to fifth place. Pennsylvania, New York, and Virginia thus gave place to Illinois, Wisconsin, and Ohio, respectively, these States, together with Indiana, constituting the four leading wheat growing States. Iowa came in to replace Maryland which dropped out and Pennsylvania took the place of Indiana which now became, as shown before, one of the first four. Kentucky again entered the list and assumed tenth place in rank, replacing Missouri which was eliminated. By 1860 the center of wheat production had moved westward to a point eighteen miles north by east of Indianapolis, Indiana. 16

Several factors made possible the rapid extension of wheat farming into this region. One of these was the development of transportation facilities. In 1850 there were 9021 miles of railroad in the country, only one-ninth of which extended into the trans-Allegheny West. The success of the Illinois Central Railroad, completed to Galena by 1850, greatly stimulated railway building in the fifties. By 1860 there were 30,626 miles of railroad in the United States. The North Central States had more than one-third of this mileage, while the North Atlantic States claimed second place. Ohio ranked first with 2946 miles and Illinois second with 2790. Indiana had more than 2000 miles, while Pennsylvania and New York both exceeded that figure. By 1860 railroads had penetrated every State east of

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16 Twelfth Census of the United States, 1900, Vol. VI, p. 32.

the Mississippi River and the States immediately west of the river, particularly in the North Central region, which were just beginning a period of rapid railway development. In the North Atlantic States, also, railways were improved and extended to connect with the western roads, so that improved means of communication between all parts of the country were being rapidly developed.¹⁷

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The new and improved facilities for the transportation of agricultural products were instrumental in stimulating wheat production in Ohio, Indiana, Illinois, and the immediately adjoining States to the west and north. Regions were now opened up to wheat growing which heretofore had been unable to give attention to this product owing to the comparative lack of transportation facilities and the high cost of sending the wheat to market.

Another factor favoring the extension of wheat farming was the increasingly liberal land policy of the government. The preëmption system with the squatter's right of first purchase at the \$1.25 an acre minimum had a stimulating effect on the westward movement and caused great numbers of people to emigrate to the new lands. By 1860 the total area of land disposed of by the Government under various acts to individuals and to the States amounted to 394,089,000 acres, the greater portion of which lay in the public land States east of the Mississippi River and in the first tier of States west of the Mississippi. 18

The invention and introduction of improved farm machinery constituted another important factor in the extension of the wheat raising area. Among these inventions was the reaper which could cut from ten to twelve acres of grain in a day, whereas one man with the aid of the grain-cradle could cut only an acre and a half or two acres in the

¹⁷ Statistical Abstract of the United States, 1893, p. 272.

¹⁸ Annual Report of the General Land Office of the United States, 1860, p. 25.

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same length of time.¹⁹ During the fifties improved implements and machinery began to be brought into general use. By 1860 the total value of farm machinery in the United States amounted to \$246,118,000.²⁰

Finally, the growth of the domestic markets in the rapidly developing manufacturing centers of the East and the expansion of foreign markets, especially in England after the repeal of the Corn Laws in 1846, developed a strong demand for wheat which was reflected in good prices, all of which stimulated specialization in wheat farming.²¹

These are the forces which hastened the rapid movement of the wheat growing industry into the North Central region, which, with its favorable soil and climate, was soon to become the great wheat emporium of the world. The effect of these forces did not, however, become apparent until after 1860 when a revolution in agriculture took place,²² one of the significant features of which was the further extension of wheat farming and increased specialization in that industry.

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The influence of these factors on the westward movement of wheat production is shown in Table IV which gives the ten leading wheat growing States in 1869. This shows that wheat production had now become firmly established in the North Central States. Illinois still retained first place,

¹⁹ See Casson's The Romance of the Reaper; and Thwaites's Cyrus Hall McCormick and the Reaper in the Proceedings of the State Historical Society of Wisconsin, 1909, pp. 234-259.

²⁰ Twelfth Census of the United States, 1900, Vol. V, p. 698.

²¹ See, for example, Thompson's Rise and Decline of the Wheat Growing Industry in Wisconsin, Pt. I, Ch. I, Pt. II, Chs. I, II (Bulletin of the University of Wisconsin, Economics and Political Science Series, Vol. V, No. 3, 1909). See also Hibbard's History of Agriculture in Dane County, Wisconsin, Pt. I, Ch. VI (Bulletin of the University of Wisconsin, Economics and Political Science Series, Vol. I, No. 2, 1904).

²² See the writer's article on Some Significant Aspects of the Agrarian Revolution in the United States in the present issue of The Iowa Journal of History and Politics.

TABLE IV

STATES		PER CENT OF THE	
	Bushels	ENTIRE WHEAT CROP	
Illinois	30,128,405	10.5	
Iowa	29,435,692	10.2	
Ohio	27,882,159	9.7	
Indiana	27,747,222	9.6	
Wisconsin	25,606,344	8.9	
Pennsylvania	19,672,967	6.8	
Minnesota	18,866,073	6.6	
California	16,676,702	5.8	
Michigan	16,265,773	5.6	
Missouri	14,315,926	5.0	

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while Iowa advanced from eighth to second place, thus superseding Indiana which dropped to fourth place. Ohio rose from fourth to third place; while Wisconsin dropped from third to fifth place, replacing Virginia which together with New York and Kentucky were eliminated from the first ten. Michigan and Pennsylvania still held the same rank as before; while two States west of the Mississippi, Minnesota and California, took their place for the first time as leaders in wheat production. Thus, by 1870, all the eastern States except Pennsylvania had fallen below the rank of tenth, being replaced by the North Central States of Indiana, Wisconsin, Minnesota, Iowa, and by the extreme western State of California. In further evidence of the westward march of wheat it is shown that in 1839 no State west of the Mississippi was classed among the first ten; in 1849 Missouri ranked tenth and was the only one in this region; in 1859 Michigan and Iowa became competitors; and by 1869 four States west of the Mississippi had risen to positions among the first ten. All of the foremost wheat

²³ These statistics are taken from a table in the Twelfth Census of the United States, 1900, Vol. VI, p. 92.

producing States except Pennsylvania and California were within the Mississippi Valley. Moreover, the center of wheat production had by 1870 moved to a point eighty-two miles northeast of Springfield, Illinois.²⁴

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By 1880 other western States came into prominence as wheat growing States, while several of the older States dropped out of the list of the first ten as shown by Table V.

TABLE V

STATES	Bushels	PER CENT OF THE ENTIRE WHEAT CROI	
Illinois	51,110,502	11.1	
Indiana	47,284,853	10.3	
Ohio	46,014,869	10.0	
Michigan	35,532,543	7.7	
Minnesota	34,601,030	7.5	
Iowa .	31,154,205	6.8	
California	29,017,707	6.3	
Missouri	24,966,627	5.4	
Wisconsin	24,884,689	5.4	
Pennsylvania	19,462,405	4.2	

It will be noted, in comparing the first ten wheat producing States in 1879 with those of 1869, that Illinois still retained first place; while Indiana replaced Iowa as second and Iowa took the place formerly held by Pennsylvania which now dropped to tenth place. Ohio retained third place; while Michigan advanced from ninth to fourth place. Pennsylvania was reduced from sixth to tenth place, and Minnesota, California, and Missouri stepped up in the ranks of the first ten, occupying fifth, seventh, and eighth places, respectively. The number of Atlantic States included in the list of the first ten was therefore reduced from three in 1859 to one in

²⁴ Twelfth Census of the United States, 1900, Vol. VI, p. 32.

²⁵ These statistics are taken from a table in the Twelfth Census of the United States, 1900, Vol. VI, p. 92.

1879 and that State occupied tenth place. And whereas but one State west of the Mississippi River was included in the leading ten in 1859, by 1879 four trans-Mississippi States had entered the ranks of this group. The center of wheat production, furthermore, had by 1880 moved to a point sixty-nine miles northwest of Springfield, Illinois.²⁶

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It will also be noted that there was a very marked increase in the number of bushels of wheat produced in the States composing "the big ten". This is explained largely by the extension of the area devoted to wheat farming, especially in the newer States. Wheat farming is particularly well adapted to frontier conditions where there is usually a scarcity of labor. It is, moreover, an extensive type of agriculture. The specialization of wheat growing in the first ten wheat producing States in 1879 was also favored by the following forces: the importance of wheat as an article of commerce; the liberal land policy with free homesteads after 1862; the popularization of improved farm machinery, including the twine-binder which came into use near the close of the seventies; the tremendous influx of European immigration which set in on an unprecedented scale after the Civil War to supply the labor forces needed to recruit agriculture, industry, and commerce; the rapid extension and development of a network of railway transportation facilities; and the great and growing demand for western grain, particularly wheat, to supply the East, the South, and Europe, which were becoming more and more dependent on the virgin West for foodstuffs. By 1879 the North Central States had become the great surplus cereal producing region of the world.

During the succeeding two decades the influences which have been noted became further marked. The westward march of wheat continued, leaving the older settled regions

²⁶ Twelfth Census of the United States, 1900, Vol. VI, p. 32.

confronted with the necessity of introducing a more diversified as well as a more intensified system of farming, such as prevails to-day, for example, in the State of Iowa.

By 1889 the Northwest began to assert its claim to leadership in the production of wheat as shown by Table VI. The rapid advance of Minnesota, in the production of wheat

Table VI

	D C		
STATES	Bushels	PER CENT OF THE ENTIRE WHEAT CROI	
Minnesota	52,300,247	11.2	
California	40,869,337	8.7	
Illinois	37,389,444	8.0	
Indiana	37,318,798	8.0	
Ohio	35,559,208	7.6	
Kansas	30,399,871	6.5	
Missouri	30,113,821	6.4	
North Dakota	26,403,365	5.6	
Michigan	24,771,171	5.3	
Pennsylvania	21,595,499	4.6	

from fifth place in 1879 to first place in 1889 and the fact that Pennsylvania, still remaining at the bottom of the list, was the only eastern State to rank among the first ten, shows to what a great extent wheat was becoming a western product. California forged ahead from seventh to second place, thus bringing the Pacific Coast to the front as a wheat producing region. Illinois dropped from first to third place, Indiana from second to fourth place, and Ohio from third to fifth place. Wisconsin dropped out altogether, its place being taken by Michigan which dropped to ninth place. Kansas replaced Iowa, and North Dakota entered the list ranking eighth. Thus by 1890 the

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²⁷ These statistics are taken from a table in the Twelfth Census of the United States, 1900, Vol. VI, p. 92.

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Northwest, as represented by Minnesota and North Dakota, was beginning to assert its claim as the great wheat producing area of the country. Meanwhile, the center of wheat production had moved westward to a point one hundred and thirty-eight miles south by east of Des Moines, Iowa.²⁸

TABLE VII

STATES	Bushels	PER CENT OF THE ENTIRE WHEAT CROI	
Minnesota	95,278,660	14.5	
North Dakota	59,888,810	9.1	
Ohio	50,376,800	7.6	
South Dakota	41,889,380	6.4	
Kansas	38,778,450	5.9	
California	36,534,407	5.5	
Indiana	34,986,280	5.3	
Nebraska	24,924,520	3.8	
Missouri	23,072,768	3.5	
Iowa	22,769,440	3.5	

By the end of the century the wheat belt had moved definitely into the western group of the North Central States, as shown by Table VII which gives the first ten wheat producing States for 1899. Minnesota retained first place and Illinois dropped out altogether. North Dakota ranked second, thus taking the place of California, now reduced to sixth place, while Indiana dropped from fourth to seventh place. Ohio recaptured third place while South Dakota entered the list taking the place of Indiana. Kansas came up to fifth place which had previously been held by Ohio. Nebraska was added, taking eighth place. Missouri was reduced to ninth place, while Iowa again produced enough

²⁸ Twelfth Census of the United States, 1900, Vol. VI, p. 32.

²⁹ These statistics are taken from a table in the Twelfth Census of the United States, 1900, Vol. VI, p. 92.

wheat to be included in the list, ranking tenth. Wisconsin and Pennsylvania dropped out altogether.

By 1900 the North Atlantic group of States were no longer represented in the list of the first ten wheat producing States and only two States — Ohio and Indiana — in the East North Central group remained in the list. Four new States of the West North Central group had been added — the two Dakotas, Kansas, and Nebraska — thus giving this region seven of the ten leading wheat producing States, with California making a total of eight out of the first ten in the region beyond the Mississippi River. The center of wheat production had now moved to a point seventy miles west of Des Moines.³⁰

The following decade witnessed a further extension of the wheat belt due to the continued operation of the forces already described. Table VIII gives the first ten wheat producing States for 1909. In comparing the wheat production of 1909 with that of 1899 it is found that North Dakota advanced from second to first place, thus crowding

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TABLE VIII

STATES	Bushels	PER CENT OF THE ENTIRE WHEAT CROP	
North Dakota	116,781,886	17.0	
Kansas	77,577,115	9.9	
Minnesota	57,094,412	8.3	
Nebraska	47,685,745	6.9	
South Dakota	47,059,590	6.9	
Washington	40,920,390	5.9	
Illinois	37,830,732	5.5	
Indiana	33,935,972	4.9	
Ohio	30,663,704	4.5	
Missouri	29,837,429	4.3	

³⁰ Twelfth Census of the United States, 1900, Vol. VI, p. 32.

These statistics are taken from a table in the Thirteenth Census of the United States, 1910, Vol. V, pp. 590, 591.

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out Minnesota which, however, still held a high place as third in the list. Kansas rose from fifth to second place while Ohio dropped from third to ninth place. Nebraska rose from eighth to fourth place, taking the place of South Dakota which dropped to fifth. Washington entered the list occupying sixth place, superseding California which dropped out altogether. Illinois reëntered the list as seventh, while Indiana dropped from seventh to eighth place. Missouri dropped from ninth to tenth place and Iowa was eliminated altogether.

A study of the preceding tables shows the tendency of the wheat growing industry to become concentrated in the West North Central States, or what James J. Hill termed "The Great Northwest". Only three States east of the Mississippi remained in the list of the first ten wheat producing States and not one of these showed a material increase in wheat production. While Iowa dropped out of the list altogether, Missouri showed a substantial increase. North Dakota, South Dakota, and Nebraska, however, showed an increased production of wheat nearly double that returned by the United States census of 1900, and the entry of Washington emphasized the importance of the Pacific Coast as a wheat producing region.

Finally, the relative importance of the nine geographic divisions of the country in the production of wheat for the years 1899 and 1909 is shown by Table IX. This shows that in 1909 the seven West North Central States — Minnesota, North Dakota, South Dakota, Kansas, Nebraska, Iowa, and Missouri — produced 384,092,000 bushels of wheat; while the five East North Central States — Ohio, Indiana, Illinois, Wisconsin, and Michigan — produced 121,098,000 bushels, or less than one-third of that produced by the West North Central group. Moreover, the first group showed an increase of 77,490,000 bushels of wheat or 25.3 per cent over the amount returned by the census of 1900; while the second

group showed a decrease of 3,601,000 bushels or 10.1 per cent less than the returns of 1900. All other divisions record a lower production for 1909 than for 1899, except the Mountain States, which include Montana, Wyoming, Idaho, Nevada, Utah, Colorado, Oregon, and New Mexico.

TABLE IX

	1899	1909	PER CENT OF
Division	BUSHELS	BUSHELS	INCREASE
West North Central	306,602,028	384,092,121	25.3
East North Central	134,698,890	121,097,675	-10.1
Pacific	72,230,570	59,580,347	-17.5
Middle Atlantic	32,947,945	29,717,833	-9.8
Mountain	18,084,360	29,654,968	64.0
South Atlantic	31,902,857	26,650,768	-16.5
West South Central	35,046,935	17,096,127	-51.2
East South Central	26,854,542	15,374,422	-42.7
New England	166,125	114,998	-30.8

It will therefore be seen from the foregoing considerations that the North Central States during the first decade of the present century, as in the late decades of the nineteenth century, far outstripped the remaining sections of the country in the production of wheat. This further points to the conclusion that for many years to come the Missouri-Mississippi River system is destined to remain the home of the wheat growing industry in the United States. Meanwhile, the westward movement of the wheat growing industry has brought the Canadian Northwest to the front as a worthy competitor.

Louis Bernard Schmidt

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AGRICULTURE AND MECHANIC ARTS
AMES IOWA

32 These statistics are taken from a table in the Thirteenth Census of the United States, 1910, Vol. V, p. 590. The minus sign before the per cent indicates decrease.

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