

FOREIGN GRAIN TRADE OF THE
UNITED STATES
1835-1860

The foreign grain trade of the United States, between 1835 and 1860, symbolized the agricultural conquest of the interior lowlands of the Great Lakes. Rapidly migrating people, improved farm machinery, canals and railroads — all parts of the area's development — created the surplus of grain which was available for export. The South had specialized in cotton and tobacco. The East was undergoing industrialization. The Old Northwest became the new source of the grain supply.

The grain trade, however, never reached more than 35 per cent of the total export trade, and that peak occurred during the British famine of 1847. Moreover, the grain exported was never more than one-twentieth of the total amount of grain grown. Most of the grain was consumed at home by hungry railroad builders, the industrial East, or the incoming pioneers. The outlet for the grain was New Orleans until 1846, when a shift to the Erie Canal-New York route occurred.

The foreign grain trade, such as it was, increased rapidly as the conquest of the Old Northwest went forward. During the ten years from 1833 to 1843 grain exports showed an increase of 8 per cent over the previous decade. During the decade from 1843 to 1853 this increase was 170 per cent, while the increase for 1853 to 1860 was 158 per cent. By 1860 grain had surpassed tobacco in export value, vied with manufactures, and yielded only to cotton. Flour was the most profitable of all exported breadstuffs. The West

Indies, Brazil, and Anglo-Saxon countries were the principal buyers.

During the period from 1835 to 1860, grain was a vital factor in winning European recognition. While it is said that the American grain trade began in 1846 with the repeal of the English Corn Laws, our position as a permanent source of supply for Europe's constant demands for breadstuffs was not definitely established until 1856. Famines, crop shortages, and wars had, hitherto, made a fluctuating demand upon our grain industry. By 1856 the demand had, apparently, settled to a permanent basis, due to Europe's inability to grow the grain normally needed.

Incidental to this world position as a grain producer was the building of trade liaisons and economic dependencies. The Old Northwest depended upon the East for its manufactures, for which it paid with money from its West Indian or European grain trade. The East depended upon the West for its breadstuffs. In furtherance of the export trade, a demand grew up during this period for a direct connection between Europe and the Northwest by way of the St. Lawrence River, but this came to nothing.

The foreign grain trade had a peculiar significance in the development of the interior lowlands of the Great Lakes. It furnished both the incentive and the liquid capital for opening the region. Grain was the pioneer's capital. In order to take advantage of the foreign trade and high prices, the farmers demanded railroads. These in turn became an end instead of a means because they proved so profitable.

This built up what came to be a vicious circle of speculation in railroads, wheat land, and wheat. For the grain trade, until 1856, was but a spasmodic force of "peaks" and "lows". Railroad speculation, land grabbing under the Preëmption Act, and most of the grain industry

was based upon the gamble of possible high prices. So the grain trade became a form of speculation with a direct relation to the Panic of 1857.

The foreign grain trade was an important element in speculation primarily because it was the determining force in the process of fixing grain prices. By 1846 it had become evident that the export trade, although it never amounted to one-twentieth of the wheat raised, determined the standard of grain prices in the United States.

SOURCE OF THE EXPORTABLE GRAIN SURPLUS

The American foreign grain trade from 1835 to 1860 might well be termed the index of the agricultural conquest of the interior lowlands of the Great Lakes. To trace its rise and progress would be to present an almost complete record of the development of our entire continent. For it is impossible to disassociate from such a study the factors of devitalized soils of the Atlantic coast areas, grain diseases, suitable grain lands of the upper Mississippi River system, and transportation routes. In his study of the grain trade no one should overlook such items as the export centers, canals, railroads, tariffs, Corn Laws, famines, wars, and general human needs. But in our special study we are necessarily limited to the region north of the Ohio River.

There must be a source of an exportable surplus of grain before any foreign grain trade can arise. Until the close of the War of 1812, the grain exported from the United States was grown primarily in the Atlantic States.¹ Yields gradually decreased as the fertility of the soil diminished and plant diseases swept over the crops. By 1845 the average yield of wheat per acre in eastern New York was only eight

¹ Schmidt's *The Westward Movement of the Wheat Growing Industry in the United States* in THE IOWA JOURNAL OF HISTORY AND POLITICS, Vol. XVIII, pp. 396, 397.

bushels, and its cultivation had been almost abandoned. In the Mohawk-Hudson district the yield of wheat for the same year was nine and three-fifths bushels per acre. As a result, New York land could not produce wheat for less than fifty-six and one-quarter cents per bushel while Wisconsin could produce it for forty-four cents.² This gives us some clue as to why the scene of this agricultural conquest was laid in the Valley of the Mississippi.

Moreover the need to seek new sources of a grain supply was increased by immigration and the increasing population. The East was changing rapidly to manufacturing pursuits. The result was that the States which had hitherto been exporting wheat and other grain now became importers.³ A new source of supply was sought in the West.

Already in 1844, it was foretold that the States north of the Ohio River, "which are the most prolific, and can produce at least cost, will monopolize the market."⁴ This declaration is emphasized in innumerable articles which prove we are correct in assuming that the source of supply for the foreign grain trade was the interior lowlands of the Great Lakes.⁵ One article boasts that fifteen of the eighty-seven counties of Ohio "raised more corn in 1846 than the entire amount exported to Europe in 1846-7, with the famine of Ireland and half of Europe to make the demand!"⁶

² Thompson's *The Rise and Decline of the Wheat Growing Industry in Wisconsin* (Bulletin of the University of Wisconsin, No. 292, Economic and Political Science Series, Vol. V, No. 3), pp. 126, 127.

³ Schmidt's *The Westward Movement of the Wheat Growing Industry in the United States* in *THE IOWA JOURNAL OF HISTORY AND POLITICS*, Vol. XVIII, p. 397.

⁴ *Monthly Commercial Chronicle* in *Hunt's Merchants' Magazine*, Vol. X, p. 75.

⁵ Lanman's *Agricultural Commerce of the United States* in *Hunt's Merchants' Magazine*, Vol. V, pp. 201-220; Semple's *American History and Its Geographic Conditions*, p. 356.

⁶ *Resources of the Great West* in *De Bow's Review*, Vol. III, p. 583.

The penetration of population into this area was the first step in rendering the fertile area productive of an exportable surplus. During the decade preceding 1840, settlement had extended across Indiana, Illinois, Michigan, and Wisconsin, even into Iowa. Between 1840 and 1850 the wheat producing States of Iowa and Wisconsin had been admitted to the Union and the Territory of Minnesota had been created. By 1860 Minnesota had become a State. The St. Paul settlements had spread like Jonah's gourd, in all directions. The Territories of Kansas, Nebraska, Utah, and Washington had been organized and California and Oregon were admitted as States.⁷ The United States had occupied the breadth of the continent.

But the ordinary pioneer raised very little wheat, for there was no market for it. He grew only enough for his immediate supply. Wheat bread was used only on Sundays.⁸ The cost of transporting grain was prohibitive of exportation. Previous to the construction of the Erie Canal, the cost of transporting a ton of merchandise from the city of New York to the city of Buffalo was \$100. The time required was 20 days.⁹ The need for better transportation facilities led to the building of the Erie Canal, completed in 1825, and this at once became an important outlet for western grain.¹⁰ An epidemic of canal building followed.

Before 1850 the internal commerce of the country was conducted almost entirely through water lines — natural and artificial — and over ordinary highways. By 1860,

⁷ *Tenth Census of the United States*, 1880, Population, pp. XVI-XVIII.

⁸ Good-Knight's *Wheat Raising in Pioneer Missouri* in *The Missouri Historical Review*, Vol. XVI, pp. 502-505.

⁹ Poor's *Manual of the Railroads of the United States*, 1868-1869, pp. 12, 13.

¹⁰ Schmidt's *The Westward Movement of the Wheat Growing Industry in the United States* in *THE IOWA JOURNAL OF HISTORY AND POLITICS*, Vol. XVIII, p. 399.

eight trunk line railroads served as outlets for the products of the interior.¹¹ Prior to the operation of canals and railroads, land transportation at one cent per hundred-weight per mile was prohibitive. The transportation of flour, worth five dollars per barrel in the market, for three hundred miles cost more than its value.¹² So transportation routes must be considered in our survey of the source of the grain trade. "As fast as our people have moved westward in their triumphal march across the continent, the railway which they have taken with them has given a high commercial value to whatever they produce, no matter how far distant from the points of consumption."¹³

But the two factors — population and transportation — did not produce grain by any magical touch. In 1835, Ohio was the only western State exporting grain eastward by way of the Erie Canal. Chicago made its first grain shipment of 78 bushels over the Great Lakes in 1838. By 1840, the wheat growing industry had definitely entered the Mississippi Valley. At that time the center of wheat production was approximately on the western boundary line of Pennsylvania. By 1850 it had moved westward to a point some fifty-seven miles northeast of Columbus, Ohio. Ten years later the center of wheat production had moved to a point eighteen miles north by east of Indianapolis, Indiana.¹⁴

By 1855 Chicago was boasting the largest primary grain

¹¹ Bogart and Thompson's *Readings in the Economic History of the United States*, pp. 404, 405.

¹² Kettell's *Eighty Years' Progress* (1869), p. 15, quoted in Bogart and Thompson's *Readings in the Economic History of the United States*.

¹³ Bogart and Thompson's *Readings in the Economic History of the United States*, p. 390; Poor's *Manual of the Railroads of the United States, 1868-1869*, pp. 12, 13.

¹⁴ Schmidt's *The Westward Movement of the Wheat Growing Industry in the United States* in THE IOWA JOURNAL OF HISTORY AND POLITICS, Vol. XVIII, pp. 399-402.

depot in the world.¹⁵ In 1860, Illinois moved to first rank in the production of corn and wheat, and Illinois flour began to find its way into European markets.¹⁶

The following table is taken from the *Census of 1860*:

BUSHEL OF WHEAT AND CORN PRODUCED PER CAPITA BY
GEOGRAPHIC SECTIONS¹⁷

| | Wheat | | | Corn | | |
|-----------------------|-------|-------|-------|-------|-------|------|
| | 1840 | 1850 | 1860 | 1840 | 1850 | 1860 |
| New England | 0.465 | 0.345 | 3.02 | 3.70 | 2.90 | |
| Middle States | 5.33 | 3.69 | 7.79 | 9.11 | 9.04 | |
| Southern States | 2.42 | 3.50 | 33.13 | 32.76 | 30.83 | |
| Western States | 7.22 | 10.00 | 35.33 | 44.14 | 45.27 | |
| Pacific States | 3.09 | 13.87 | — | 2.18 | 2.55 | |
| U. S. and Territories | 4.33 | 5.50 | 22.11 | 26.04 | 26.12 | |

If we assume an even distribution of wheat consumption throughout the country, it appears that only the West had an exportable surplus: the East and South were dependent on other localities for their wheat. It is estimated that the South purchased an average of ten million bushels of wheat annually from the North in the decade ending with 1860.¹⁸ The leading wheat-producing States in 1850 were Pennsylvania, Ohio, New York, Virginia, and Illinois; in 1860 the five leading States in order of production were Illinois, Indiana, Wisconsin, Ohio, and Virginia.¹⁹

¹⁵ "The Greatest Grain Port in the World" in *Hunt's Merchants' Magazine*, Vol. XXXII, p. 240.

¹⁶ Schmidt and Ross's *Readings in the Economic History of American Agriculture*, p. 254; Cole's *The Era of the Civil War* (Centennial History of Illinois, Vol. III), pp. 75, 76.

¹⁷ *Eighth Census of the United States*, 1860, Agriculture, pp. xxxi, l, lxiii, cxxix. The statistics vary somewhat in the various tables given in this census report.

¹⁸ Schmidt's *The Internal Grain Trade of the United States, 1850-1860*, in *THE IOWA JOURNAL OF HISTORY AND POLITICS*, Vol. XVIII, p. 106.

¹⁹ *Eighth Census of the United States*, 1860, Agriculture, p. xxix.

STATES IN ORDER OF WHEAT PRODUCTION IN 1860

| | <i>Bushels</i> | | <i>Bushels</i> |
|-------------------|----------------|-------------------|----------------|
| 1 Illinois | 23,837,023 | 18 New Jersey | 1,763,218 |
| 2 Indiana | 16,848,267 | 19 Texas | 1,478,345 |
| 3 Wisconsin | 15,657,458 | 20 South Carolina | 1,285,631 |
| 4 Ohio | 15,119,047 | 21 Alabama | 1,218,444 |
| 5 Virginia | 13,130,977 | 22 Arkansas | 957,601 |
| 6 Pennsylvania | 13,042,165 | 23 Delaware | 912,941 |
| 7 New York | 8,681,105 | 24 Oregon | 826,776 |
| 8 Iowa | 8,449,403 | 25 Mississippi | 587,925 |
| 9 Michigan | 8,336,368 | 26 Vermont | 437,037 |
| 10 Kentucky | 7,394,809 | 27 New Hampshire | 238,965 |
| 11 Maryland | 6,103,480 | 28 Maine | 233,876 |
| 12 California | 5,928,470 | 29 Kansas | 194,173 |
| 13 Tennessee | 5,459,268 | 30 Massachusetts | 119,783 |
| 14 North Carolina | 4,743,706 | 31 Connecticut | 52,401 |
| 15 Missouri | 4,227,506 | 32 Louisiana | 32,808 |
| 16 Georgia | 2,544,913 | 33 Florida | 2,808 |
| 17 Minnesota | 2,186,993 | 34 Rhode Island | 1,131 |

The sources of grain with which the United States had to compete in the foreign export trade were Poland, Russia, Denmark, Germany, and the Black Sea basin.²⁰ By 1853 England had come to depend upon the granaries of America and the Baltic in times of dearth. Yet we learn that one, Jacobs, was deputed in the early 1820's to examine the probable supply of wheat which England might obtain from the continent. He showed that the surplus wheat in all Europe was not more than 30,000,000 bushels per year, of which not more than one-fifth could be imported with advantage into England. In the years when Europe was short a larger demand fell upon the United States.²¹ How the United States was able to meet that demand is explained in the portion of this paper devoted to the export trade.

²⁰ *Home and Foreign Grain Market in De Bow's Review*, Vol. I, p. 40.

²¹ *The Corn Trade of Great Britain and the United States in De Bow's Review*, Vol. XVI, pp. 411, 412.

There was another source of grain export which is of historical interest if not of economic significance. According to Captain Charles Wilkes, California was exporting grain as early as 1840. T. O. Larkin estimated California's wheat exports of 1846 at 10,000 fanegas annually.²² This exportation was, of course, curtailed during the gold-rush period. But California began to export wheat, flour, rye, and oats again in considerable amounts in the year 1856.²³ Meanwhile Oregon Territory had begun exporting grain as early as 1839 when the Hudson's Bay Company secured an agreement with the traders of Kamchatka to supply their posts in that region with 8000 bushels of wheat annually.²⁴ The exportations from these areas, however, were of no great economic value.

EXPORT CENTERS OF GRAIN TRADE

A significant shift in the location of the centers of the export trade from the mouth of the Mississippi River to the outlet of the Hudson River occurred during the years 1835 to 1860. The mere fact, in the first place, that there were centers of grain export was important. We have already surveyed the area of production and the advance of population and transportation, showing the periodic developments. The greatest significance in the shift of location of the export centers lies in the building up of New York instead of New Orleans, for the grain trade was a powerful stimulus in the emergence of New York as the leading commercial center as it outdistanced its old rivals — Boston, Philadelphia, Baltimore, and New Orleans. Why did this remote harbor with a vast, intervening area of lakes, land,

²² Davis's *California Breadstuffs* in *The Journal of Political Economy*, Vol. II, p. 522.

²³ *Eighth Census of the United States*, 1860, Agriculture, pp. clviii, clix.

²⁴ Gilbert's *Trade and Currency in Early Oregon* (Thesis, Columbia University, 1907), p. 41.

mountains, and poor roads become the export center of the interior lowlands? Why did not the opportunities for river transportation down the Mississippi River retain the trade for New Orleans?

The answer is that the cheap water transportation did at first attract the western trade to New Orleans, which became by 1834 the leading export city of the entire United States.²⁵ The East had ceased to export grain, for it was becoming a manufacturing area. "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 preventing eastward shipments by the means then available for the cost of transportation made it impossible to ship wheat overland more than 150 miles."²⁶ As a result, grain was shipped down the Ohio and Mississippi rivers to the gulf ports and from there exported to Europe.

Some rates of transportation on canals, railroads, and boats, found in *Hunt's Merchants' Magazine* for the year 1841, show conclusively why New Orleans was at first the center of grain export. A chief engineer on the James River and Kanawha Canal and Railroad compiled the following rates for *Hunt's Magazine*. The cost of freight on canals, exclusive of tolls, was 1½¢ for one ton per mile; on railroads, 2½¢; on "McAdam" roads, from 10 to 15¢; on common turnpikes, from 15 to 20¢; on lake steamboats, from 2 to 4¢; and on river steamboats, from ½ to 1½¢.²⁷

All this pointed to a promising future for New Orleans.

²⁵ Way's *The Commerce of the Lower Mississippi in the Period 1830-1860* in the *Proceedings of the Mississippi Valley Historical Association*, Vol. X, p. 59.

²⁶ Schmidt's *The Westward Movement of the Wheat Growing Industry in the United States* in *THE IOWA JOURNAL OF HISTORY AND POLITICS*, Vol. XVIII, p. 398.

²⁷ *Cost of Transportation on Canadian Railroads* in *Hunt's Merchants' Magazine*, Vol. V, p. 284.

Local enthusiasm arose for direct steamship connection with European ports. During the summer of 1836 this engrossed the attention of the *New Orleans Bee*. So we see that as the agricultural center of America, in so far as grain was concerned, moved westward, New Orleans grew into a grain port of size and importance. In 1830, twenty-six million dollars worth of produce was received there. By 1841, the amount had increased to fifty million dollars. "Twice as much of the trade of the west in 1843 went from the country via New Orleans as by any other routes."²⁸ But even in 1843, the rival cities of New York, Philadelphia, and Baltimore were attempting to secure the trade.

Just when the actual shift of trade from New Orleans to New York occurred is hard to say. By 1846, Buffalo had passed New Orleans in its receipts of wheat and flour. During the next year, New York was the leading export center of all breadstuffs to the famine stricken British Isles. While New York exported 162,000 bushels of wheat and 2,343,000 bushels of corn to the islands, New Orleans exported 16,000 bushels of wheat and 1,376,000 (in round numbers) bushels of corn.²⁹ The compiled results for the year 1846-1847 show New York leading in the export of flour, meal, wheat, and corn. New Orleans was next in importance, followed by Philadelphia, Baltimore, and Boston.³⁰ By 1850, a division line had been so drawn across

²⁸ Winston's *Notes on the Economic History of New Orleans, 1803-1836*, in *The Mississippi Valley Historical Review*, Vol. XI, p. 205; Galpin's *The Grain Trade of New Orleans, 1804-1814*, in *The Mississippi Valley Historical Review*, Vol. XIV, pp. 506, 507; Way's *The Mississippi Valley and Internal Improvements, 1825-1840*, in the *Proceedings of the Mississippi Valley Historical Association*, Vol. IV, p. 162; Cotterill's *Southern Railroads and Western Trade, 1840-1850*, in *The Mississippi Valley Historical Review*, Vol. III, p. 428.

²⁹ *Export of Breadstuffs in 1847-8* in *Hunt's Merchants' Magazine*, Vol. XIX, p. 423.

³⁰ *The Grain and Flour Trade* in *De Bow's Review*, Vol. IV, pp. 159-163.

Ohio that breadstuffs went toward the lakes while beef, lard, pork, and corn continued to go down the river.³¹

It is surprising that New York had taken the lead so early. For during the famine of 1847 only the Erie Canal and the railroad lines now forming the New York Central Railroad made through communication with the Great Lakes. Until 1850 the law forbade the railroads to carry freight. The Ohio canals at Toledo and Cleveland were the sole carriers for the interior lowlands opening onto the Great Lakes.³² It is not, however, surprising that New York should become the leading export center during the fifties, for the New York Central (1850), Erie (1851), Pennsylvania (1852), Baltimore and Ohio (1853), and numerous branches directly or indirectly connected New York with the interior lowlands.³³

By 1847 New Orleans and the entire country had apparently accepted the idea that New York was to be the export center. Here is an excerpt from *De Bow's Review* that is worth quoting. It appeared in the January issue for 1847.

The supineness with which we of the South have hitherto looked upon the efforts of our Northern brethren to draw away from our port so large a part already of the produce of the great Valley of the Mississippi, should be stopped at once. . . . We have so far given away to the idea that New-York is to be *the great city*, that even the Hon. R. J. Walker, Secretary of the Treasury of the United States, in his recent Report just delivered to Congress, uses the following language:

"Under such a system of reciprocal interchange of commodities with all the world, the great city of New-York would become (what

³¹ Way's *The Commerce of the Lower Mississippi in the Period 1830-1860* in the *Proceedings of the Mississippi Valley Historical Association*, Vol. X, p. 63.

³² Bogart and Thompson's *Readings in the Economic History of the United States*, p. 440.

³³ Schmidt's *The Internal Grain Trade of the United States, 1850-1860*, in THE IOWA JOURNAL OF HISTORY AND POLITICS, Vol. XVIII, p. 119.

she is now for the States of this Union), the great mart for the commerce of the various nations of the earth."³⁴

A glance at the statistics of wheat and flour exported from New Orleans from 1856 to 1860 reveals the decline in the trade at that port.

| <i>Year ending June 30</i> | <i>Flour bbl.</i> | <i>Wheat bu.</i> |
|----------------------------|-------------------|------------------|
| 1856 | 251,501 | 1,096,733 |
| 1857 | 428,436 | 1,353,480 |
| 1858 | 474,906 | 596,442 |
| 1859 | 133,193 | 107,031 |
| 1860 | 80,541 | 2,189 |

By 1860 New Orleans was no longer of any importance as an exporting center for the grain and flour of the West destined for Europe.³⁵

We may ask why the city of New York which was practically cut off from the trade of its own State in the early 1820's was, by 1860, drawing from districts two thousand miles distant vast supplies of grain for distribution throughout all the eastern States and for its foreign trade. In the first place the development of canals and railroads made the interior lowlands available to the eastern markets. In the second place, grain exporters chose the eastern routes because of certain disadvantages of the southern river route. There was the risk of damage to flour shipped during the summer months, the uncertainty of river navigation, to say nothing of the slowness of river transportation. Moreover, New York offered superior trade advantages as an importing point and New Orleans had become more engrossed in cotton, sugar, and tobacco.³⁶

³⁴ *Contests for the Trade of the Mississippi Valley* in *De Bow's Review*, Vol. III, p. 107.

³⁵ Schmidt's *The Internal Grain Trade of the United States, 1850-1860*, in *THE IOWA JOURNAL OF HISTORY AND POLITICS*, Vol. XVIII, p. 111; *Eighth Census of the United States, 1860*, Agriculture, p. clvi.

³⁶ *Contests for the Trade of the Mississippi Valley* in *De Bow's Review*, Vol. III, p. 103.

THE GRAIN TRADE³⁷

The centers of trade along the seaboard deserve notice either as points of grain consumption or distribution. They drew the golden harvests of the interior lowlands as if to a magnetized sieve, where all currents converged for measurement and analysis. The comparison was furthered by the realization that the magnetic pull of the sieve varied as the forces of demand and supply fluctuated. Our concern is primarily with foreign demand and the means of supplying that demand.

The foreign commerce of the United States, generally, had a remarkable growth during the forty-five years prior to the Civil War. The gross tonnage of its ocean fleet rose from 854,000 to 2,379,000 tons.³⁸ Leigh Hunt vividly characterized the United States in the first half of the nineteenth century when he wrote, "I can never think of America, without seeing a gigantic counter stretched all along the seaboard."³⁹ Western grain and provisions became items of real importance for the first time in the foreign trade during the fifteen years before the Civil War. It has been suggested that one may date the creation of a world market for grain from the year 1846 when Great Britain became a large importer.

Relatively small quantities of grain were exported prior to 1860. In 1850, only 7,500,000 bushels of wheat out of a total harvest of 100,500,000 bushels were exported. In 1860 Illinois alone produced 115,174,000 bushels of wheat, while only 15,448,000 bushels were exported to foreign

³⁷ This chapter on the grain trade is a survey of the statistical results compiled annually by the Treasury Department, on the trade conditions of the United States.

³⁸ Johnson's *History of Domestic and Foreign Commerce of the United States*, Vol. II, p. 51.

³⁹ Rhodes's *History of the United States from the Compromise of 1850*, Vol. III, p. 18.

countries.⁴⁰ This meant that the domestic market for grains increased much faster than the foreign market.

The actual flow of grain swelled with torrential spurts as the supplies of the inland lowlands became available. The total value of breadstuffs shipped abroad during the decade ending in 1840 was \$72,982,235 which mounted to \$170,288,107 in the decade ending in 1850. This was almost doubled during the next decade, reaching the figure \$315,350,517.⁴¹ This flow of breadstuffs exports, however, was but one item in the export trade and a very insignificant item in the total.

A comparison of the value of exports for the years 1836 to 1860 reveals some interesting facts.

VALUE OF GRAIN EXPORTS COMPARED TO EXPORTS OF
OTHER PRODUCTS

| | <i>Cotton</i> | <i>Grain</i> | <i>Manufactures</i> | <i>Tobacco</i> |
|------|---------------|--------------|---------------------|----------------|
| 1836 | \$ | \$ 7,431,199 | \$ 8,262,958 | \$ |
| 1837 | 63,240,102 | 8,820,542 | 7,835,757 | 14,658,919 |
| 1838 | 61,556,811 | 6,764,664 | 8,483,321 | 7,392,029 |
| 1839 | 61,238,982 | 11,004,855 | 10,927,529 | 9,832,934 |
| 1840 | 63,870,307 | 15,587,657 | 11,847,840 | 9,883,957 |
| 1841 | 54,330,341 | 12,377,282 | 13,523,072 | 12,576,703 |
| 1842 | 47,593,464 | 11,903,652 | 10,940,611 | 9,540,755 |
| 1843 | 49,119,806 | 6,955,908 | 7,462,155 | 10,919,602 |
| 1844 | 54,063,501 | 11,239,437 | 10,617,556 | 8,397,255 |
| 1845 | 51,739,643 | 9,810,508 | 12,479,725 | 7,469,819 |
| 1846 | 42,767,341 | 19,329,585 | 12,439,218 | 8,478,270 |
| 1847 | 53,415,848 | 57,070,356 | 11,613,260 | 7,242,086 |
| 1848 | 61,998,294 | 25,185,647 | 14,474,892 | 7,551,122 |
| 1849 | 66,396,967 | 25,642,363 | 12,206,731 | 5,804,207 |
| 1850 | 71,984,616 | 15,371,756 | 17,243,130 | 9,951,023 |
| 1851 | 112,315,000 | 16,877,000 | 32,206,547 | 9,219,251 |

⁴⁰ Lippincott's *Economic Development of the United States* (2nd Edition), p. 441; *Eighth Census of the United States*, 1860, Agriculture, p. cxliv.

⁴¹ Evans's *Exports, Domestic, from the United States to All Countries, 1789-1883*, in *House Miscellaneous Documents*, 48th Congress, 1st Session, Vol. XXIV, Doc. No. 49, Part 2, pp. 21, 23, 113, 115.

VALUE OF GRAIN EXPORTS COMPARED TO EXPORTS OF
OTHER PRODUCTS

| | <i>Cotton</i> | <i>Grain</i> | <i>Manufactures</i> | <i>Tobacco</i> |
|------|---------------|--------------|---------------------|--------------------------|
| 1852 | 87,965,732 | 19,882,588 | 56,300,768 | 10,031,283 |
| 1853 | 109,456,464 | 23,793,388 | 46,148,465 | 11,319,319 |
| 1854 | 93,596,220 | 51,190,680 | 26,179,503 | 10,016,046 |
| 1855 | 88,143,844 | 23,651,362 | 28,027,180 | 14,712,468 |
| 1856 | 128,382,351 | 59,390,906 | 30,129,258 | 12,129,258 |
| 1857 | 131,575,859 | 58,333,176 | 30,139,666 | 20,260,772 |
| 1858 | 131,386,661 | 35,924,848 | 30,242,996 | 17,009,767 |
| 1859 | 161,434,923 | 24,046,752 | 33,757,660 | 21,074,038 |
| 1860 | 191,206,555 | 27,590,298 | 39,574,398 | 15,806,555 ⁴² |

Cotton was foremost in the total value of exports from year to year throughout the period. At various times the export value of grain exceeded the export values of either manufactured products or tobacco or both. At other times the value of exported manufactures exceeded that of grain. Between 1836 and 1860 the value of grain exports was exceeded by the value of tobacco exports for 1837, 1838, 1841, and 1843 only.

An examination of the tables on the following pages will serve to certify these variations in the flow of grains, either in the form of grain or milled products. In the first place, the total value of wheat exported was less than that of flour. The proportion of grain to flour shipped rose, however, toward the end of the period.

TOTAL EXPORT OF WHEAT 1836-1860⁴³

| | <i>Bushels of Wheat</i> | <i>Value</i> | <i>Barrels of Flour</i> | <i>Value</i> |
|------|-----------------------------|--------------|-----------------------------|--------------|
| 1836 | 2,062 | \$ 2,062 | 505,400 | \$ 3,572,599 |
| 1837 | 17,303 | 27,206 | 318,719 | 2,987,269 |

⁴² The following observations were made from a compilation of statistics found in *Treasury Reports on Commerce and Navigation*.

⁴³ Evans's *Exports, Domestic, from the United States to All Countries, 1789-1883*, in *House Miscellaneous Documents*, 48th Congress, 1st Session, Vol. XXIV, Doc. No. 49, Part 2, pp. 23, 115, 116. The fiscal year ended on June 30.

TOTAL EXPORT OF WHEAT 1836-1860

| | <i>Bushels of</i> | <i>Value</i> | <i>Barrels of</i> | <i>Value</i> |
|--------|-------------------|--------------|-------------------|--------------|
| | <i>Wheat</i> | | <i>Flour</i> | |
| 1838 | 6,291 | 8,125 | 448,161 | 3,603,299 |
| 1839 | 96,325 | 144,191 | 923,151 | 6,925,170 |
| 1840 | 1,720,860 | 1,635,483 | 1,897,501 | 10,143,615 |
| Decade | 2,456,986 | 2,554,432 | 9,334,896 | 56,579,601 |
| 1841 | 868,585 | 822,881 | 1,515,817 | 7,759,646 |
| 1842 | 817,958 | 916,616 | 1,283,602 | 7,375,356 |
| 1843 | 311,685 | 264,109 | 841,474 | 3,763,073 |
| 1844 | 558,917 | 500,400 | 1,438,574 | 6,759,488 |
| 1845 | 389,716 | 336,779 | 1,195,230 | 5,398,593 |
| 1846 | 1,613,795 | 1,681,975 | 2,289,476 | 11,668,669 |
| 1847 | 4,399,951 | 6,049,350 | 4,382,496 | 26,133,811 |
| 1848 | 2,034,704 | 2,669,175 | 2,119,393 | 13,194,109 |
| 1849 | 1,527,534 | 1,756,848 | 2,108,013 | 11,280,582 |
| 1850 | 608,661 | 643,745 | 1,385,448 | 7,098,570 |
| Decade | 13,131,506 | 15,641,878 | 18,559,523 | 100,431,897 |
| 1851 | 1,026,725 | 1,025,732 | 2,202,335 | 10,524,331 |
| 1852 | 2,694,540 | 2,555,209 | 2,799,339 | 11,869,143 |
| 1853 | 3,890,141 | 4,354,403 | 2,920,918 | 14,783,394 |
| 1854 | 8,036,665 | 12,420,172 | 4,022,386 | 27,701,444 |
| 1855 | 798,884 | 1,329,246 | 1,204,540 | 10,896,908 |
| 1856 | 8,154,877 | 15,115,661 | 3,510,626 | 29,275,148 |
| 1857 | 14,570,331 | 22,240,857 | 3,712,053 | 25,882,316 |
| 1858 | 8,926,196 | 9,061,504 | 3,512,169 | 19,328,884 |
| 1859 | 3,002,016 | 2,849,192 | 2,431,824 | 14,433,591 |
| 1860 | 4,155,153 | 4,076,704 | 2,611,596 | 15,448,507 |
| Decade | 55,255,528 | 75,028,680 | 28,927,786 | 180,143,666 |

The total export value of corn was less during the decade, 1830-1840, but far greater after 1840 than the value of meal. As a matter of fact, the export value of meal decreased during the decade from 1850 to 1860. The remaining grains — rye, oats, and smaller kinds — were exported in relatively insignificant quantities. The total export value of corn was greater than that for wheat during the decades 1830-1840 and 1840-1850. The reverse situation was true during the next decade. Flour, of course, was the

leading export. Even meal exports exceeded wheat during the decade of the thirties. The more outstanding relationships existing in the flow of grain through the export centers may be observed by glancing over the detailed tables in this article.

TOTAL EXPORT OF CORN⁴⁴

| | <i>Bushels</i> | <i>Value</i> | <i>Barrels of Meal</i> | <i>Value</i> |
|--------|----------------|--------------|----------------------------|--------------|
| 1836 | 124,791 | \$ 103,702 | 140,917 | \$ 621,560 |
| 1837 | 151,276 | 147,982 | 159,435 | 763,652 |
| 1838 | 172,321 | 141,992 | 171,843 | 722,399 |
| 1839 | 162,306 | 141,095 | 165,672 | 658,421 |
| 1840 | 574,279 | 338,333 | 206,063 | 705,183 |
| Decade | 3,753,919 | 2,677,815 | 1,661,313 | 6,202,292 |
| 1841 | 535,727 | 312,954 | 232,284 | 682,457 |
| 1842 | 600,308 | 345,150 | 209,199 | 617,817 |
| 1843 | 672,608 | 281,749 | 174,354 | 454,166 |
| 1844 | 825,282 | 404,008 | 247,882 | 641,029 |
| 1845 | 840,184 | 411,741 | 269,030 | 641,552 |
| 1846 | 1,826,068 | 1,186,663 | 298,790 | 945,081 |
| 1847 | 16,326,050 | 14,395,212 | 948,060 | 4,301,334 |
| 1848 | 5,817,634 | 3,837,483 | 582,339 | 1,807,601 |
| 1849 | 13,257,309 | 7,966,369 | 405,169 | 1,169,625 |
| 1850 | 6,595,092 | 3,892,193 | 259,442 | 760,611 |
| Decade | 47,296,262 | 33,033,522 | 3,626,549 | 12,021,273 |
| 1851 | 3,426,811 | 1,762,549 | 203,622 | 622,866 |
| 1852 | 2,627,075 | 1,540,225 | 181,105 | 574,380 |
| 1853 | 2,274,909 | 1,374,077 | 212,118 | 709,974 |
| 1854 | 7,768,816 | 6,074,277 | 257,403 | 1,002,976 |
| 1855 | 7,807,585 | 6,961,571 | 267,208 | 1,237,122 |
| 1856 | 10,292,280 | 7,622,565 | 293,607 | 1,175,688 |
| 1857 | 7,505,318 | 5,184,666 | 267,504 | 957,791 |
| 1858 | 4,766,145 | 3,259,039 | 237,637 | 877,692 |
| 1859 | 1,719,998 | 1,323,103 | 258,885 | 994,269 |
| 1860 | 3,314,155 | 2,399,808 | 233,709 | 912,075 |
| Decade | 51,503,092 | 37,501,880 | 2,412,798 | 9,064,833 |

⁴⁴ Evans's *Exports, Domestic, from the United States to All Countries, 1789-1883*, in *House Miscellaneous Documents*, 48th Congress, 1st Session, Vol. XXIV, Doc. No. 49, Part 2, pp. 21, 113.

These tables show that the years 1847 and 1857 were peak years, with slight variations, in the trade of both products. The years of small export business were 1845, 1850, 1853, and 1859. Wheat showed more consistent and increasing pulsations of export. Should we say they came with the regularity of a surf, rising, ever rising? Our sea this time was the interior lowlands of the Great Lakes with its billowing grain stands. The years 1840, 1847, 1854, 1857, and 1861 were years of large export trade in wheat.

On the other hand, the exports of corn ricocheted about in wild fashion. The peak year for corn was 1847. The years 1849 and 1856 were lesser peaks. Little corn was exported before 1847, yet as we have already shown the total export of corn for the twenty years from 1830 to 1850 was greater than that for wheat. The years 1848, 1853, and 1859 show a low exportation of corn. At the close of the period of study — 1860 — an increase in corn exportation is to be noted.

MARKET VALUES OF CORN, CORN MEAL, WHEAT, AND FLOUR⁴⁵

| | <i>Corn</i> | <i>Corn Meal</i> | <i>Wheat</i> | <i>Flour</i> |
|------|-------------|------------------|--------------|--------------|
| | <i>Bu.</i> | <i>Bbl.</i> | <i>Bu.</i> | <i>Bbl.</i> |
| 1836 | 83.1¢ | \$4.41 | \$1.00 | \$7.06 |
| 1837 | 97.8 | 4.79 | 1.57 | 9.37 |
| 1838 | 82.3 | 4.20 | 1.29 | 8.04 |
| 1839 | 86.9 | 3.97 | 1.50 | 7.50 |
| 1840 | 58.9 | 3.42 | .95 | 5.35 |
| 1841 | 58.4 | 2.94 | .95 | 5.12 |
| 1842 | 57.5 | 2.95 | 1.12 | 5.75 |
| 1843 | 41.9 | 2.61 | .85 | 4.47 |
| 1844 | 49.0 | 2.59 | .90 | 4.70 |
| 1845 | 49.0 | 2.38 | .86 | 4.52 |
| 1846 | 64.1 | 3.16 | 1.04 | 5.09 |
| 1847 | 88.2 | 4.53 | 1.37 | 5.96 |

⁴⁵ Evans's *Exports, Domestic, from the United States to All Countries, 1789-1883*, in *House Miscellaneous Documents*, 48th Congress, 1st Session, Vol. XXIV, Doc. No. 49, Pt. 2, pp. 21, 23, 113, 115.

MARKET VALUE OF CORN, CORN MEAL, WHEAT, AND FLOUR

| | <i>Corn</i> <i>Bu.</i> | <i>Corn Meal</i> <i>Bbl.</i> | <i>Wheat</i> <i>Bu.</i> | <i>Flour</i> <i>Bbl.</i> |
|------|---------------------------|---------------------------------|----------------------------|-----------------------------|
| 1848 | 66.0¢ | \$3.10 | \$1.31 | \$6.22 |
| 1849 | 60.1 | 2.89 | 1.14 | 5.35 |
| 1850 | 59.0 | 2.93 | 1.06 | 5.12 |
| 1851 | 51.4 | 3.06 | 1.00 | 4.78 |
| 1852 | 58.6 | 3.17 | .95 | 4.24 |
| 1853 | 60.4 | 3.35 | 1.12 | 5.06 |
| 1854 | 78.2 | 3.90 | 1.55 | 6.89 |
| 1855 | 89.2 | 4.63 | 1.66 | 9.04 |
| 1856 | 74.1 | 4.00 | 1.85 | 8.34 |
| 1857 | 69.1 | 3.58 | 1.53 | 6.97 |
| 1858 | 68.4 | 3.69 | 1.02 | 5.50 |
| 1859 | 76.9 | 3.84 | .95 | 5.93 |
| 1860 | 72.4 | 3.90 | .98 | 5.92 |

Prices of breadstuffs evidenced a general rise over the entire period. A glance at the tables on the preceding pages shows there was an average rise in the price of wheat per bushel. This is not true for corn, which dropped in value. It is worth noting, also, that there is not, necessarily, any connection between the total amount of corn or wheat exported and the price per bushel. In the case of wheat, however, there were rises in price during the peak years of export, in 1847 and 1854 but not in 1840 and 1857, while the price of wheat was high when export was less during the years 1837, 1839, and 1842.

Corn shows a gradual drop in price until 1845, while the price rose immediately in accord with the increase in export. But until then, the exportation of corn had gradually increased. During this period corn never quite regained its high-water price at 97 cents in 1837. The significances of the fluctuations and their relationships are to be discussed in the next section.

The gradual demand of Europe for more bread, founded on the constant change going on in the direction of indus-

trialization had come to affect the grain trade of the United States during this period. This fact was noted by a writer of *Hunt's Merchants' Magazine* in the year 1859. He said:

The change of industry in Europe is in a continual diversion from agriculture to the arts. . . . The natural result follows — *relatively* less crops. The great countries of Europe, which used formerly to produce a surplus of agricultural products, now scarcely produce enough for their own consumption, in ordinary seasons, and never in bad years. The most conspicuous of these nations is Great Britain, which *imports* every year; but sixty years ago, exported grain. France is about balanced; in good seasons exporting, and in bad ones, importing. On the whole, Southern Europe about maintains its own, while Russia and Poland are exporting countries.⁴⁶

The observation was close to the truth. Statistics available today complete the picture. England and the British-American Colonies, including Canada, were the leading importers of wheat from the United States. Scotland's first importation of wheat during this period amounted to \$6. The British West Indies, England, and Ireland were the areas to which most of our corn was shipped. The West Indies took most of our corn meal. Brazil led in the importation of American flour for eight years. England imported most of our flour, with the British-American Colonies vying for honors. Most of the rye exported from the United States was imported by Australia, British West Indies, Canada, Belgium, or England. This means that the various countries mentioned led in the importation of the respective products and not that each imported more than all the other countries together.

The rather unusual importations of flour to be noted are: China (1839), Argentina (1839), Mexico (1845), Philippines (1843), Australia (1843), and Africa (1837). The areas to which flour was shipped included Turkey, China,

⁴⁶ *Breadstuffs in Europe* in *Hunt's Merchants' Magazine*, Vol. XLI, p. 127.

Argentina, Canada, Scandinavia, Africa, Sicily, Sardinia, and Tuscany. The Anglo-Saxon race on the whole was the greatest consumer of wheat flour.

FACTORS OF THE GRAIN TRADE

The forces which drew the golden flood from the interior lowlands to the exporting centers of the seaport cities have been described as magnetic pulls which acted upon the grain. Of these the most important were foreign demand and local conditions. These fluctuated in their force with the varying circumstances of famines and good harvests in Europe, trade agreements, domestic laws such as the Corn Laws of England, processes of industrialization, and improvements in transportation, cultivation, and harvesting. Definite relationships have been found between the fluctuations noted in the trade and the factors to be discussed now. The fundamental outline of this chapter is based upon *Niles' Weekly Register* from 1836 to 1848 and *Hunt's Merchants' Magazine* from 1848 to 1860.

The grain trade of the United States entered a new stage in 1835. In the first place the source of supply for the export trade had shifted to the Great Lakes region and was therefore necessarily connected with the accompanying problems of production and marketing. Secondly, our position in the trade of the world had changed markedly after 1815. It is with the first consideration that a potent relationship will be shown between the total foreign grain trade and trade or commerce in general.

In the previous chapter it was noted that the current of grain through the sieve to foreign markets was but a drop in the bucket compared with domestic consumption. The problems of production and marketing in the newly conquered areas of the Great Lakes explain this. If an agricultural nation is to carry on any considerable commerce

with the outside world it must necessarily export farm products. But the grain products of this region were so remote that the cost of transportation to the seaboard was greater than the value of the produce. For even the crops on the fertile lands of western New York had gone begging until the Erie Canal was constructed and the inhabitants had been able to purchase few manufactured or foreign articles. Because of poor transportation facilities it seems remarkable that "the farmer had any produce left to exchange for these foreign goods . . . when we consider that in parts of Ohio he must give four bushels of wheat for a yard of domestic cassinet and twenty for a pair of boots."⁴⁷

Now it is true that, in the United States in general, the railroad was needed to develop the agricultural districts; but the high rates made the early railroads of little practical use for freight. Moreover there were only 20,000 miles of railroad in operation in the entire country by 1860, although these few miles did force the competing means of transportation to be more efficient.⁴⁸

As a matter of fact the construction of the railroads actually curtailed the exportation of grain for a time because of the increase of food consumption by the road builders. As Thos. P. Kettell wrote in 1869, "The speculators and road builders, who ate up the produce of that area, during the process of road construction, have vanished, and the whole is now offered by a hundred channels to the best bidders of Europe."⁴⁹

⁴⁷ Day's *A History of Commerce*, pp. 507, 508; Sterns's *The Foreign Trade of the United States from 1820 to 1840* in *The Journal of Political Economy*, Vol. VIII, p. 41.

⁴⁸ Day's *A History of Commerce*, pp. 511, 541.

⁴⁹ Kettell's *Eighty Years' Progress* (1869), pp. 156-159, quoted in Bogart and Thompson's *Readings in the Economic History of the United States*, p. 416.

While 1200 steamboats were employed upon the waters of the West by 1848, there were, as we have seen, factors that prevented the use of the river route in grain exporting. This left the canals to attempt the transportation to the sea of what surplus of grain there was, with the result that in "the years of large demand heretofore the means of transportation did not exist."⁵⁰

The Federal government had disposed of sufficient land to produce an exportable surplus of grain, overlooking the lack of transportation. Farms totaling 68,655,203 acres had been sold in the twenty years preceding 1860. Nearly 43,000,000 acres of land were taken up in the lowlands of the Great Lakes.⁵¹ Moreover, sufficient population had come in to cultivate this land. Between 1820 and 1840, the population of the States north of the Ohio and east of the Mississippi River had increased as a whole over 360 per cent. In 1850 there were some 8.9 persons per square mile in the States of Indiana, Illinois, Michigan, Wisconsin, Iowa, and Minnesota. By 1860 this had mounted to 16.08.⁵² Immigrants and migrating eastern farmers were eagerly advancing upon the fertile soils of these new areas.

These rapidly multiplying farmer groups were aided in their conquest of the interior lowlands by the improved machinery of this new age. Two factories established in Pittsburgh made plows for the prairie soil of the West and as early as 1836 were turning out plows at the rate of

⁵⁰ Day's *A History of Commerce*, p. 518; *Hunt's Merchants' Magazine*, Vol. XLIII, pp. 405-408.

⁵¹ Bogart and Thompson's *Readings in the Economic History of the United States*, p. 415; Schmidt and Ross's *Readings in the Economic History of American Agriculture*, p. 147; Clark's *The Westward Movement in the Upper Mississippi Valley during the Fifties* in the *Proceedings of the Mississippi Valley Historical Association*, Vol. VII, p. 148.

⁵² Semple's *American History and its Geographic Conditions*, p. 156; Bogart and Thompson's *Readings in the Economic History of the United States*, p. 550.

34,000 per year. Moreover, as the period of our study opened, the conveniences of reapers were known, for Obed Hussey had produced one in 1833, followed by Cyrus McCormick the next year.⁵³ So we have the source of a grain supply, the population, and tools to work it. Why was not more grain exported?

We have already said the transportation factor was inhibitive, almost prohibitive. Now the expansion of population, necessary as it was to the development of the country, proved in its early stages to contribute comparatively little to the growth of foreign commerce. The railroads and immigrants "produced such a demand for food at the door of the growers as to leave but little surplus to send East, and the quantities that did go abroad could be spared only at very high prices."⁵⁴ The immigrants who arrived between 1820 and 1860 were consumers of grain first and farmers secondarily.⁵⁵ Clive Day in his *History of Commerce* declares that whereas the average share of each inhabitant in foreign trade was over \$30 in 1800, it was a little over \$20 in 1860 and ranged between \$10 and \$15 through much of the intervening period.⁵⁶ Thus the conquest of the grain growing regions of the Great Lakes region actually reduced the total foreign grain trade in comparison with the total export of the country.

In the second place, the foreign grain trade of the United States had entered a new stage due to conditions in the world outside. Prior to 1815, American prosperity had been due largely to European wars. With the return of

⁵³ Flint's *A Hundred Years Progress in the Report of the United States Commissioner of Agriculture*, 1872, pp. 282-287.

⁵⁴ Bogart and Thompson's *Readings in the Economic History of the United States*, p. 439; *Hunt's Merchants' Magazine*, Vol. XLIII, pp. 405-408.

⁵⁵ *Preliminary Report of the Eighth Census of the United States*, 1860, pp. 13, 14, 16.

⁵⁶ Day's *A History of Commerce*, p. 501.

peace, the states of Europe escaped from their commercial dependence upon the United States and our exports of breadstuffs and provisions declined as Europe returned to the policy of protecting the domestic food supply and our merchants had to face not only active competition but also the adverse legislation of other countries.

Certain steps were, however, made during the period from 1835 to 1860 and even earlier to remove the international barriers of trade. In 1857 Smith Homans characterized the situation as follows: "The period 1812 to 1854 has been celebrated by an approach to a more liberal internationality, and a reciprocity something else than in name. The progress in the last ten years, has been most strongly marked toward that ultimatum."⁵⁷ The West India trade was opened to the United States by Great Britain in 1830. This paved the way for our market there. Shipping arrangements were made with Norway and Sweden, Brazil, Martinique, and Guadeloupe in 1828, with Prussia in 1829, with Great Britain and Canada in 1830, with Austria-Hungary in 1831, with Spain, Mexico, and Russia in 1832, with Mecklenburg-Schwerin in 1834, and with Portugal, Madeira, the Azores, Tuscany, and Venezuela in 1836.⁵⁸ Our tariff schedules varied a great deal from 1832 to 1860, but on the whole the compromise tariff of 1833 and the Walker tariff of 1846, further reduced in 1857, made for lower rates. Too much must not be taken for granted, however, concerning the effect of the tariff on trade. One writer said of it: "Even in the growth of international trade, where some direct point of connection might be found, we cannot measure the effect of low duties; for international trade was

⁵⁷ Bogart and Thompson's *Readings in the Economic History of the United States*, p. 419, quoting from Homans's *An Historical and Statistical Account of the Foreign Commerce of the United States* (1857), pp. 61-63.

⁵⁸ Johnson's *History of the Domestic and Foreign Commerce of the United States*, Vol. II, p. 41.

growing between all countries under the influence of cheapened transportation and the stimulus of the great gold discoveries."⁵⁹

Two other matters of minor significance deserve attention as factors affecting the general flow of grain. The export of cotton, for example, took precedence over all other exports. That this actually inhibited the export of grain is the contention of W. P. Sterns who wrote: "The steadily increasing European demand for cotton . . . had a disastrous effect on the market for northern farm and factory products in the South. The cotton ships on their return from Europe carried freight at the very lowest rates in preference to sailing in ballast. This enabled the French farmer . . . to meet the American producer in successful competition in the New Orleans market."⁶⁰ A second minor hindrance to the export grain trade was also given by Sterns who thought the American farmers who advanced into the interior lowlands "undoubtedly gave a part of their time to supplying the demands of the market, but it would seem that they depended for most of their expenditures upon the more exciting occupation of 'buying land cheap and selling dear.'"⁶¹

The factors which influenced the foreign grain trade as it actually existed during the period from 1835 to 1860 will be taken up next. While but a small per cent of the whole, that trade made a significant beginning. The number of bushels of wheat and corn exported from the United States from year to year is given in the tables on pages 42-44.

The year 1835 to 1836 contributed little grain to foreign

⁵⁹ Taussig's *The Tariff History of the United States* (8th Edition), p. 122.

⁶⁰ Schmidt and Ross's *Readings in the Economic History of American Agriculture*, p. 218; Sterns's *The Foreign Trade of the United States from 1820 to 1840* in *The Journal of Political Economy*, Vol. VIII, pp. 41, 42.

⁶¹ Schmidt and Ross's *Readings in the Economic History of American Agriculture*, p. 218.

trade. In fact, the April, March, and June issues of *Niles' Weekly Register* are replete with notices of actual importations of grain. For example, on April 2, 1836, we find this item: "The brig Ark has arrived at the port of New York from London, has on board 1,788 bags wheat, 600 bags oats and 2,750 barrels flour!"⁶² In the fall of 1836 *Niles' Register* contained the following prophecy: "Should the corn crop be cut off in the northernmost states, as it is now very liable to be by the early appearance of frost, the extraordinary phenomenon will probably occur, of the greatest grain-growing country in the world becoming dependant upon foreign countries for a portion of its bread." In fact it was reported that in 1835 the value of imported breadstuffs was \$311,116.⁶³ Favorable wheat crops in Ireland and England and short crops here created the very inauspicious foreign grain trade shown in the table for the year 1836. The same factors produced the high prices of grain noted for the years 1836-1840 in the table for grain prices on page 45.

In the spring of 1837, *Niles' Register* had the following item: "In the city of New York, within a few days past, 5,000 bushels good white German wheat have been sold at 215 cents a bushel. A cargo of 15,000 bushels, very prime, of the crop of 1836, is held at 250 cents. 5,000 bushels rye on the spot sold at the high price of 170 cents per bushel for distillation."⁶⁴ About 1,369,300 bushels of wheat were imported during the period, from October, 1835, to April, 1837.⁶⁵ The month of June, 1837, however, gave promise of abundant crops in the fall, but, in fact, the deliveries up the Erie Canal in August fell off, a loss of \$1,760,000 to the

⁶² *Niles' Weekly Register*, Vol. L, p. 74.

⁶³ *Niles' Weekly Register*, Vol. LI, p. 17.

⁶⁴ *Niles' Weekly Register*, Vol. LI, p. 384.

⁶⁵ *Niles' Weekly Register*, Vol. LII, p. 147.

West.⁶⁶ December prices remained firm so the foreign wheat was imported at a profit.⁶⁷

The Panic of 1837 was not the result of abnormal foreign trade conditions, but when the business reaction came, a set-back in imports and exports occurred. It was several years before the effects of the panic were erased and even then there was little to stimulate trade.⁶⁸ In the spring of 1838, flour and grain supplies were abundant, but the low prices caused farmers to withhold their crops and hence there was an apparent shortage.⁶⁹ Corn was a little ahead of wheat in the foreign trade.

In July, 1838, Niles declared, "The wheat harvest . . . is on the whole one of the richest that ever was gathered." He hoped we would find a market in South America or the West Indies.⁷⁰ As a matter of fact, most of our rye, oats, meal, and corn went to the West Indies. Brazil and other South American countries were taking quantities of our flour and we had been shipping wheat to the British-American Colonies and the West Indies.⁷¹ In November, 1839, it was reported that the harvests in England had turned out very poor because of their immaturity. In Ireland they were the worst of all on account of the rainy, cold weather. The Baltic Sea harvest was ordinary. The Black Sea area had been hit by a drought.⁷² England's grain stock was consumed. The result can be seen in the export figures for 1840.

In September, 1840, Niles reported the fall harvest in

⁶⁶ *Niles' Weekly Register*, Vol. LII, pp. 257, 370.

⁶⁷ *Niles' National Register*, Vol. LIII, p. 240.

⁶⁸ Johnson's *History of Domestic and Foreign Commerce of the United States*, Vol. II, pp. 44, 45.

⁶⁹ *Niles' National Register*, Vol. LIV, p. 2.

⁷⁰ *Niles' National Register*, Vol. LVI, p. 338.

⁷¹ See U. S. Treasury reports on commerce and navigation, 1836-1860.

⁷² *Niles' National Register*, Vol. LVII, p. 162.

England good.⁷³ The grain trade now entered upon a five-year period of little activity, but certain factors arising during that time merit attention. The fanning mill, introduced about 1840, helped farmers to market grain.⁷⁴

In early May, 1841, predictions of the repeal of the Corn Laws of England were made.⁷⁵ These laws, adopted in 1828, worked to benefit the owners of land. A sliding scale of duty on breadstuffs was so placed as to protect domestic grain growers. For example, when the price was 62 shillings and under 63 shillings per quarter, the duty was 1£, 4s., 8d.; when the price was from 70 to 71 shillings per quarter, the duty was 10s., 8d. The duty on flour was fifty per cent higher than that on grain. The net result of the act was reported as follows in *Hunt's Merchants' Magazine* for December, 1841: "the only tendency of the corn laws is to swell the rents and incomes of the owners of land. . . . When England has a short supply of corn, and is forced to have recourse to other countries, she does not find on hand a surplus ready for her purpose. She is not a regular customer."⁷⁶

Another account of the Corn Laws read as follows: "Notwithstanding the immense increase of production of grain, owing to the oppression of the corn laws to the poor, there is more suffering for the want of bread in Great Britain and Ireland, than in any other part of Europe. . . . The present duty in England on American flour is about \$2.70 per barrel, which amounts to a prohibition."⁷⁷ The

⁷³ *Niles' National Register*, Vol. LIX, p. 48.

⁷⁴ Schmidt and Ross's *Readings in the Economic History of American Agriculture*, p. 264.

⁷⁵ *Niles' National Register*, Vol. LX, p. 225.

⁷⁶ Whiton's *The British Corn Laws* in *Hunt's Merchants' Magazine*, Vol. V, pp. 520, 521.

⁷⁷ *Exports of Flour and Wheat, from 1790-1838*, in *Hunt's Merchants' Magazine*, Vol. IV, pp. 573, 574.

article in the June, 1841, number of *Hunt's Magazine* explained the unfavorable trade balance of the United States from 1790 to 1840, as due to the Corn Laws.

The year 1841 was one of poor harvests and bad times in Great Britain and many were driven to poor relief.⁷⁸ In June, 1841, all the manufacturing and commercial towns of England were holding large meetings in opposition to the Corn Laws. In September, heavy rains in Europe were threatening the crops and causing a rise in prices. In the fall of 1841, the potato crop failed in Ireland.⁷⁹

The year 1842 saw attempts of the Canadians to control the wheat and flour trade of the west. Sir Robert Peel's bill which levied a duty on wheat and flour exported into Canada from the United States ended attempts to evade the Corn Laws.⁸⁰ This led to the letter of Dr. John S. Bartlett of New York, editor of the *Albion*, to Lord Ashburton. He argued that the United States should be permitted to supply England with breadstuffs by way of Canada for several reasons: (1) the St. Lawrence River was the natural outlet for bulky articles from North America; (2) wheat by this route might enter England under superior rate advantages; (3) when the Welland Canal and the St. Lawrence should become available, Quebec would be the normal outlet; (4) Great Britain could afford to reduce rates in order to stimulate the trade, for by this means a market in the United States would be created. An additional export to Great Britain, Dr. Bartlett also pointed out, would be another bond uniting the two countries and would tend to dissipate the clouds that then overshadowed the pacific relations of England and America.⁸¹ Perhaps this explains the large

⁷⁸ Day's *History of Commerce*, p. 369.

⁷⁹ Niles' *National Register*, Vol. LX, p. 242, Vol. LXI, pp. 16, 81, 257.

⁸⁰ Niles' *National Register*, Vol. LXII, p. 176.

⁸¹ *The Fame of Indian Corn* in *De Bow's Review*, Vol. IV, pp. 238, 239.

shipments of corn during the famine. Extensive debates raged in Congress over the desire to ship grain to England, via Canada.⁸²

Perhaps these memorials had their effect. At all events, British statesmen by 1842 saw that the demands of English working people for food had outgrown the ability of the islands to supply it on terms which could be paid by the laborers. So they removed the prohibition on the import of cattle and provisions and reduced the duty on grain.⁸³ The wisdom of this policy became apparent during the famine of 1846. The duty on wheat at Liverpool, in July, 1842, was only 8 shillings per quarter, but wheat was scarce in the New York market in October, and the exports showed the effect of the reduced tariff.⁸⁴

Another factor entered the grain trade during the period from 1840 to 1845. Lord Palmerston had ordered his representatives in various countries to make a survey of the available grain supplies. Statistics from the survey of 1840 were compiled for use in the Senate of the United States in the Leavitt's memorial, published in July, 1842. This showed that the entire amount of grain available from St. Petersburg, Liebau, Odessa, Warsaw, Stockholm, Dantzie, Konigsburg, Stettin, Memel, Elsinore, Hamburg, Palermo, Antwerp, and Rotterdam could not exceed 18,000,000 bushels — the approximate surplus of Ohio. The memorial further showed that whereas St. Petersburg could lay wheat down at Liverpool for 93½ cents per bushel, St. Louis could do the same for 85 cents, if the Corn Laws were removed. This raised some enthusiasm for a greater foreign market. In May, 1843, Daniel Webster

⁸² *The English Market by Way of Canada* in the *Prairie Farmer*, Vol. III, p. 135.

⁸³ Bogart and Thompson's *Readings in the Economic History of the United States*, p. 415.

⁸⁴ *Niles' National Register*, Vol. LXII, p. 368, Vol. LXIII, p. 128.

urged the reduction of English rates to avert a great depression in the grain growing States of the West. He cited the trade with Brazil to prove the desirability of reciprocity.⁸⁵

In spite of these influences, the favorable weather and crops in England, the determination of Sir Robert Peel to maintain the Corn Laws, the slow progress of the Corn Law League during 1844, and abundance of breadstuffs in all parts of the world prevented any immediate action to increase our foreign grain trade.⁸⁶ During the year 1845 increased attention to the home market appeared. In a May issue of *Niles' Register* appeared this statement: "The wheat growers owe the increased price of their staple to the increase of the home market, and to nothing else . . . of twenty-six states, only seven raise a surplus of wheat, viz: Pennsylvania, Maryland, Virginia, Ohio, Indiana, Illinois and Michigan." To argue for the British market would be "realizing the fortunes of the dog, who grasped at the shadow and lost the substance. . . . To speak more gravely, (though the task is difficult when we see in fancy rising the 'indefinite increasing' millions of British youth, all with their innocent mouths wide open for a loaf of American bread, do these free traders imagine that the people of England have got no wheat?" The paper went on to explain that the annual exports from the United States to all countries of the world were but one-twenty-second part of the crop of 1843 and even if the Corn Laws had been repealed, the American farmer could not supply the English market until he had reduced his wants to the level of the Russian serfs. Our principal customers from abroad were Great Britain, Brazil, and Cuba, the writer

⁸⁵ *Niles' National Register*, Vol. LXIV, pp. 211, 221, Vol. LXV, p. 344.

⁸⁶ *Niles' National Register*, Vol. LXIV, p. 176, Vol. LXV, p. 402, Vol. LXVI, pp. 366, 444.

declared. Massachusetts purchased from other States twice as much grain as Great Britain did, and New Jersey purchased twice as much as Brazil.⁸⁷

The irresistible forces of nature swept all resistance to free trade away. In the fall of 1845, heavy rains ruined the English grain crops. Starving millions were forced to pay double the usual price on small loaves of bread.⁸⁸ The Anti-Corn Law League was elated over the prospect of a repeal of the law. In October, 1845, floods destroyed the wheat fields of northern Europe. Late in 1845, Lord John Russell issued an article favoring the repeal of the Corn Laws. In the spring of 1846, Lord Ashburton made a speech on the question and declared that Great Britain could not expect supplies of grain from the United States, pointing out that American grain growers had not been shipping to Great Britain via Canada in spite of its low duty of four shillings. Similar sentiment was evidenced in *Niles' Register* in March. The United States was then operating under the conservative, protective tariff of 1842.⁸⁹

Even in America there was opposition to any concessions in return for the repeal of the Corn Laws. Representative Charles Hudson, of Massachusetts, made a speech in the House of Representatives, on February 26, 1846, directed against making tariff reductions to secure the repeal of the Corn Laws. He said, in part: "We see Sir Robert Peel and Sir Robert Walker [Secretary of the Treasury] in what the gentleman from S. Carolina (Mr. Rhett) calls 'a disastrous conjunction,' to bring about this result . . . the greater part of our wheat is consumed at home".⁹⁰

⁸⁷ *Niles' National Register*, Vol. LXVIII, pp. 163, 182.

⁸⁸ *Niles' National Register*, Vol. LXIX, p. 32.

⁸⁹ *Niles' National Register*, Vol. LXIX, pp. 81, 257, Vol. LXX, pp. 25, 48; Garrison's *Westward Extension*, pp. 180, 182.

⁹⁰ *Niles' National Register*, Vol. LXX, pp. 122, 123.

But the Great Famine had begun. At the close of July, 1846, the price of flour in New York was \$4.00 per barrel and in May, 1847, it reached \$9.12 per barrel. England had become a manufacturing country by 1846 and could not produce enough breadstuffs.⁹¹ The Corn Laws were repealed. This was a momentous year in American foreign grain trade and with it began the sudden rise in total shipments.

It has been said that one may perhaps date the creation of a world market for grain from the year 1846, when Great Britain became a large importer.⁹² In Europe there was a deficit in the Low Countries, a failure in France and in all southern Europe. Rye failed throughout all northern Europe.⁹³ Corn came into demand and the House of Barings employed Messrs. Grinnell, Minturn and Co. of New York to purchase corn for them.⁹⁴ The American crop was unusually luxuriant, but, in spite of this, it seems that one of the most drastic famines of the times could draw from the United States only forty-four million bushels of wheat.⁹⁵ There were a number of reasons for this.

The Erie Canal was then the sole channel of transportation from the West and it was so overburdened with business that it cost \$1.25 to transport a barrel of flour from Buffalo to Albany.⁹⁶ Railroad construction had been inactive since 1846.⁹⁷ By October, *Niles' Register* reported that the quantity of wheat imported into England was not

⁹¹ *Hunt's Merchants' Magazine*, Vol. XLIII, pp. 405 ff.; *Day's History of Commerce*, pp. 369, 370.

⁹² Schmidt and Ross's *Readings in the Economic History of American Agriculture*, p. 232.

⁹³ *Niles' National Register*, Vol. LXXI, p. 53.

⁹⁴ *Niles' National Register*, Vol. LXX, p. 25.

⁹⁵ *Hunt's Merchants' Magazine*, Vol. XLIII, p. 405.

⁹⁶ *Hunt's Merchants' Magazine*, Vol. XLIII, p. 406.

⁹⁷ Johnson's *History of Domestic and Foreign Commerce of the United States*, Vol. II, p. 45.

much greater in 1846 than in 1845 but the import of corn was nearly six times as great. The corn we shipped, however, represented only 3 per cent of our crop.⁹⁸ Yet our exports of wheat and corn to England constituted only about a third of her imports of these commodities in 1847.⁹⁹

Not only England, but France, Belgium, and Holland suspended their navigation acts to permit vessels to bring in food.¹⁰⁰ The Mexican trade declined rapidly, for the Mexican War was under way.¹⁰¹ *Niles' Register* reported in June, 1847, that Germany, Prussia, Belgium, France, England, and Ireland would all require breadstuffs until their harvests, and the United States was the principal granary from which it must be drawn.¹⁰² The capacity of the United States to deliver was, however, almost destroyed by the insufficiency of the means of transportation. In May, 1847, *Niles' Register* foretold a slump in the grain trade for 1848.¹⁰³

The grain exports did indeed show a rapid decline in the year 1848. In July, 1847, *Niles' Register* reported accounts of an abundant harvest. Farmers were caught in the whirl of high prices, buying during the high prices of May and June and then, in July, the price bottom dropped out.¹⁰⁴ France began exporting wheat in 1848.¹⁰⁵ This contributed to the temporary decline.

⁹⁸ *Niles' National Register*, Vol. LXXI, p. 125; Bogart and Thompson's *Readings in the Economic History of the United States*, p. 440.

⁹⁹ *Hunt's Merchants' Magazine*, Vol. XLIII, p. 404.

¹⁰⁰ *Commercial Chronicle and Review in Hunt's Merchants' Magazine*, Vol. XXII, p. 322.

¹⁰¹ Johnson's *History of Domestic and Foreign Commerce of the United States*, Vol. II, p. 46.

¹⁰² *Niles' National Register*, Vol. LXXII, p. 228.

¹⁰³ *Niles' National Register*, Vol. LXXII, pp. 180, 181.

¹⁰⁴ *Niles' National Register*, Vol. LXXII, p. 320.

¹⁰⁵ *Hunt's Merchants' Magazine*, Vol. XLIII, p. 405.

In 1849 *Hunt's Merchants' Magazine* declared that the aspect of foreign markets was such as again to give a stimulus to the farm produce of the Mississippi Valley.¹⁰⁶ The forces which were acting on the grain trade were, however, artificial and only temporary in their effects. The trade had not assumed any permanent basis and a gradual drop in prices and in the total export of breadstuffs set in and lasted until the Crimean War.¹⁰⁷

Emory R. Johnson declared that the discovery of gold in California in 1848 and in Australia in 1851 enlarged the purchasing demand of grain in foreign countries. Moreover, he declared, the rapid construction of railroads, stimulated by the abundance of money, general business prosperity, and the opening of the West, particularly the Mississippi Valley, did much to increase the grain trade.¹⁰⁸ The statistics compiled and reproduced herein do not, however, show that. The price of grain was down and if the farmers could have disposed of their grain, they would not and did not do so.¹⁰⁹

By 1851, some factors were setting to work to bring an upswing in the grain trade. A drouth followed upon a crop failure in southern Illinois the preceding year. The general crop failures following 1848 had caused farmers to take interest in new fields.¹¹⁰ Too, the failure of a portion of the rye crop and the appearance of a potato disease in central Europe had created an export demand for rye. The

¹⁰⁶ *Hunt's Merchants' Magazine*, Vol. XIX, p. 410.

¹⁰⁷ Cole's *The Era of the Civil War* (Centennial History of Illinois, Vol. III), p. 77.

¹⁰⁸ Johnson's *History of Domestic and Foreign Commerce of the United States*, Vol. II, pp. 46, 47.

¹⁰⁹ *Commercial Chronicle and Review* in *Hunt's Merchants' Magazine*, Vol. XXV, p. 596.

¹¹⁰ *Chicago; her Commerce and Railroads* in the *Daily Democratic Press*, 1853, p. 3.

French crop also failed in 1852 and from then through the Russian war, France was again a large importer of grain.¹¹¹

The upswing beginning in 1853 caught the farmer ill-prepared for the sudden awakening which came with the failures of all varieties of wheat from 1847 to 1853, but the year 1853 brought large crops and good prices.¹¹² In 1854 our harvest failed and little grain could be spared even at the high prices abroad. News of the Crimean War arrived in 1854 to help force up the price of all grain. The price of wheat rose from 31 cents to \$1.70 per bushel between May, 1854, and May, 1855.¹¹³ Europe's shortage of 1852, the decrees of 1853 opening markets, and the demands of the Crimean War increased the demand for our breadstuffs in Europe by leaps and bounds.¹¹⁴ The crop of 1855 was a bumper, equal to the demands, and railway facilities were now at hand. But the farmers were reluctant to sell their wheat; they preferred to hold it for higher prices.¹¹⁵

The prospects of an increased trade for 1856 were foretold by *Hunt's Magazine* in October, 1855. Germany's yield was far below the average; so also was the crop in France. There was a deficit in Great Britain. But in the American Northwest the yield was enormous. "The great business of the next year [1856], after cotton, is to be in breadstuffs."¹¹⁶ The forecast proved true; 1857 was another

¹¹¹ *Wheat Trade — Foreign Demand* in *Hunt's Merchants' Magazine*, Vol. XLIII, p. 405.

¹¹² Schmidt and Ross's *Readings in the Economic History of American Agriculture*, p. 265; *Chicago; her Commerce and Railroads* in the *Daily Democratic Press*, 1854, p. 58.

¹¹³ Cole's *The Era of the Civil War*, p. 383 ff.

¹¹⁴ *Commercial Chronicle and Review* in *Hunt's Merchants' Magazine*, Vol. XXX, p. 94.

¹¹⁵ *Chicago; her Commerce and Railroads* in the *Daily Democratic Press*, 1853, p. 7.

¹¹⁶ *Commercial Chronicle and Review* in *Hunt's Merchants' Magazine*, Vol. XXXIII, p. 460.

peak year. Agents of foreign governments appeared in American markets to purchase grain.¹¹⁷

The yield in the United States was above the average, while the downward tendency in prices accompanying the prospect of peace in Europe was checked by news from Europe. Heavy rains had damaged the English crop of 1856. The scarcity of labor had curtailed France's supply, and though the Black Sea was again open, the unusual throng attracted there by the war had consumed the stock of grain, so that this region did not compete in the world markets. Spain's supply was limited. It was evident that Spain, France, and England had to depend upon this country for their grain imports. Our commercial chroniclers were duly thankful. "The trade in breadstuffs for export from the United States is steadily growing in importance, and will not henceforth be confined to years of European famine. . . . We ought to be the most grateful people under the sun, for our prosperity is unexampled".¹¹⁸

The optimism was short-lived; the Panic of 1857 set in, and exports took a drop until 1859. In 1857, speculators had begun to talk of short grain crops, and their selfish comments were fulfilled, for the crops of 1858 were poor, due to sudden and severe frost.¹¹⁹ Moreover, the price of wheat dropped. The foreign markets were well supplied locally. France had again become a large exporter and had again established the prohibitive, sliding scale upon imports which had been removed in 1853.¹²⁰ In January,

¹¹⁷ *Chicago; her Commerce and Railroads* in the *Daily Democratic Press*, 1856, p. 6.

¹¹⁸ *Hunt's Merchants' Magazine*, Vol. XXXIV, p. 463, Vol. XXXV, pp. 327, 597.

¹¹⁹ Rhodes's *History of the United States from the Compromise of 1850*, Vol. III, pp. 6, 56.

¹²⁰ *Statistics of Trade and Commerce* in *Hunt's Merchants' Magazine*, Vol. XLI, p. 351.

Hunt's Magazine contained the following observation: "It will be seen that there is a falling off in the shipments of almost every article of domestic produce. . . . The decrease is most strongly remarked in breadstuffs and provisions. Of course, one reason why breadstuffs have not been shipped more freely has been the comparative plenty of foreign harvests; but another prominent cause is the disarrangement of foreign and domestic exchanges and the great difficulty in moving produce."¹²¹ Wheat prices in America ruled low throughout 1858 due to the abundant crop of 1857, the lack of any demand, and the scarcity of money.¹²²

The bottom of this lag in the foreign grain trade was struck in 1859, and in June, 1859, *Hunt's Magazine* reported: "The good crops of Europe, and low prices of food there, have prevented the usual exports of breadstuffs." In November, the American trade was in such a state that "breadstuffs have ceased to figure in the account [export trade] to any extent."¹²³ After the peak of 1857 a reaction set in equal to that after 1847. Prices had risen on false reports. In June it was discovered that supplies were abundant and a rapid fall of prices occurred.¹²⁴ A low was hit for wheat prices in 1859, though corn held up well.

Heavy rainfall occurred in 1859, producing wheat crops that far outran domestic consumption. At the same time, the harvests of Europe again failed.¹²⁵ The upswing of

¹²¹ *Hunt's Merchants' Magazine*, Vol. XXXVIII, p. 80.

¹²² Catlin's *First Annual Statement of the Trade and Commerce of Chicago*, 1858, in the *Report of the Chicago Board of Trade*, 1859, p. 18.

¹²³ *Hunt's Merchants' Magazine*, Vol. XL, p. 709, Vol. XLI, p. 579.

¹²⁴ *Wheat Trade — Foreign Demand* in *Hunt's Merchants' Magazine*, Vol. XLIII, p. 403.

¹²⁵ *Wheat Trade — Foreign Demand* in *Hunt's Merchants' Magazine*, Vol. XLIII, pp. 405ff.; Coman's *Economic Beginnings of the Far West*, Vol. II, p. 301.

another peak period of grain exportation had begun, which ended during our period of survey in the middle of its ascent. What occurred during the Civil War is another study.

This completes the compass of this survey of the forces which made up the magnetic pulls on the surplus of grain of the interior lowlands of the Great Lakes. Definite relationships were shown between the "peaks" and "lows" of the grain trade figures for the period. The significance of England as a determining factor in our foreign grain trade was most marked. Peaks of increasing magnitude and lows at recurring cycles of about four years may be noticed. The price peaks consistently related themselves to foreign demand; while the lows were due to other factors than mere absence of foreign demand.

SIGNIFICANCE OF THE GRAIN TRADE

The foreign grain trade from 1835 to 1860 had certain significances in the agricultural conquest of the interior lowlands of the Great Lakes. In the first place the trade was of considerable importance as a colonizing motive. The vision of billowing fields of merchantable grain beckoned the pioneer to the lands lying between the lakes and the Ohio River. This vision had succeeded those of the fur traders' trap lines, possible mineral wealth, and trade with the Indians. The migrations which advanced down the Valley of the Ohio moved forward from one plot of tilled soil to make another.¹²⁶

The harvests which encouraged migration were primarily those of corn and wheat. Indian corn has been described as almost the sole instrument of settling the western country. "It is this sure and abundant crop which, with little

¹²⁶ *Commercial Chronicle and Review in Hunt's Merchants' Magazine*, Vol. XXXVII, p. 70.

labor, gives the pioneer of the wilderness fodder for horses, cattle, and swine, food for the family, material for bedding, and surplus for sale."¹²⁷ A writer in the *Prairie Farmer* proclaimed the values of wheat as a colonizing force in equally glowing terms: "the wheat crop is the great crop of the Northwest for exchange purposes. It pays debts, buys groceries, clothing, lands, and answers more emphatically the purposes of trade than any other crop."¹²⁸

It was natural that these crops should be cultivated for there was a scarcity of labor and capital; land was cheap; and grain was usually a cash crop. Land could be had at \$1.25 an acre under the act of 1841 and the first ploughing could be made, even when men and teams were hired, at \$2.25 per acre. The soil could be counted on to produce from fifty to a hundred bushels of corn and at least twenty bushels of wheat per acre. The invention and introduction of improved farm machinery constituted another important factor in the extension of the wheat-raising area. Finally, the growth of the domestic markets in the rapidly developing manufacturing centers of the East and the expansion of the foreign markets, especially in England after 1846, developed a strong demand for wheat which was reflected in good prices, all of which stimulated specialization in wheat farming.¹²⁹

Thus as the population increased and continued into the Old Northwest, beyond markets, a demand for avenues of

¹²⁷ *Commercial Chronicle and Review* in *Hunt's Merchants' Magazine*, Vol. XLIII, p. 411.

¹²⁸ Thompson's *The Rise and Decline of the Wheat Growing Industry in Wisconsin* (Bulletin of the University of Wisconsin, No. 292), pp. 23-25, quoting from the *Prairie Farmer*, Vol. X, p. 52.

¹²⁹ Thompson's *The Rise and Decline of the Wheat Growing Industry in Wisconsin* (Bulletin of the University of Wisconsin, No. 292), pp. 23-25; Coman's *Economic Beginnings of the Far West*, Vol. II, p. 340; Schmidt's *The Westward Movement of the Wheat Growing Industry in the United States* in *THE IOWA JOURNAL OF HISTORY AND POLITICS*, Vol. XVIII, pp. 402 ff.

communication were opened and the era of canals and railroads began. These were, in themselves, vast colonizing forces. Cheap and easy transportation was demanded by the farmers, after the failure of the home market forced them to look for an outside market. They favored land grants to the railroads so long as they aided them in their marketing and to obtain the railroads they often rashly loaned their credit. Reciprocally, if the wheat farmer depended upon the railroads in the early period of the wheat industry, it is no less true that the early railroads were dependent upon the wheat farmer.¹³⁰

The position of the foreign demand in this colonizing movement is difficult to measure. Although not important in actual volume, it was, as we shall see in a moment, a determining factor in the price of grain throughout the United States. The editor of the *Census of 1860* was so enthusiastic as to say: "As the production of the United States increased, new and more extensive markets were thrown open — illustrating a grand design of Providence in thus developing a New World to feed the rapidly increasing populations of the Old without this European demand for the grain produced in the United States, the same inducements for opening up the fertile lands of the western States would not have existed. Capitalists would not have been encouraged to construct our immense canals, and lines of railroads, nor to have built our fleets of grain-carrying vessels".¹³¹

In the second place, the grain trade had a certain significance as a force which encouraged speculation. This may

¹³⁰ Merk's *Economic History of Wisconsin During the Civil War Decade*, p. 239; Stephenson's *The Political History of the Public Lands from 1840 to 1862*, p. 97; Thompson's *The Rise and Decline of the Wheat Growing Industry in Wisconsin* (Bulletin of the University of Wisconsin, No. 292), pp. 19, 156.

¹³¹ *Eighth Census of the United States, 1860, Agriculture*, p. cxxxvi.

have been a very vital reason for the fluctuating nature of the grain trade and one of the causes of the Panic of 1857. The first, the normal desire for railroads in order to get to a market, proved to be so useful and profitable that railroads became an end instead of a means. They were no longer constructed to facilitate the cultivation of the soil, but for purposes of local speculation. Even wheat was cultivated for speculative purposes. The entire scheme accentuated the natural tendency to that undesirable, economic instability which characterized the frontier region.¹³²

Other factors entered to exaggerate the speculative spirit. The influx of gold had so cheapened its relative value as to raise the nominal prices of all necessaries. In 1857, *Hunt's Merchants' Magazine* felt free to say: "Everybody has been seized with the desire to acquire a fortune without bending the back. . . . If it were not for the tide of immigration from the Old World, we should soon be without laborers, so vulgar does Young America hold it to cultivate the soil. There must be a reaction from this contempt for the toil in the field before the resources of this country shall be evenly developed, and its trade and commerce be no longer subject to these violent fluctuations."¹³³

More encouragement to speculation was given by boom prices which came with the temporary credits obtained through exports to foreign countries. For example, *De Bow's Review* declared the exports of 1847 would swell the credits of the agricultural States to nearly \$50,000,000 more than those the preceding year.¹³⁴ The effect of great

¹³² *Commercial Chronicle and Review* in *Hunt's Merchants' Magazine*, Vol. XXXVII, p. 70; Thompson's *The Rise and Decline of the Wheat Growing Industry in Wisconsin* (Bulletin of the University of Wisconsin, No. 292), pp. 123, 138.

¹³³ *Hunt's Merchants' Magazine*, Vol. XXXVII, p. 70.

¹³⁴ *Breadstuffs Exported from the United States* in *De Bow's Review*, Vol. IV, p. 91.

sales of 1855 was reported as giving more freedom from embarrassment and general independence than ever existed before in the history of the West.¹³⁵ The effect of these booms was electric. There was no longer any thought of quitting the wheat industry. New crusades for wheat lands began. Prairie land which had once been blacklisted became so much in demand that it would sell at almost any price and on any terms. Benjamin H. Hibbard declared that one man of Dane County, Wisconsin, paid twenty dollars per acre for an eighty, with interest at 12 per cent and 13 per cent commission, making it 25 per cent for the first year. It "was under these conditions that the prairie was finally settled. . . . The new impulse to wheat was sadly brief, but it was sufficiently long to bring with it evils which were long-lived. Prominent among these was the craze for horses to take the place of oxen. . . . The purchase of a team was in many instances the first act of a little play in which bankruptcy was the last."¹³⁶

Hunt's Merchants' Magazine contributed another comment in September, 1857, which indicates the relationship between the wheat boom and the Panic of 1857: "Wheat and corn have sold at such high rates during the brief failure of the crops in the old country, that the value of farming lands have been run up above their fair average. . . . Our young men have gone out to the Mississippi, leaving their farms in the older States, because grain was wanted for export at a price which paid far better as a whole than the cultivation of ordinary farm produce for a local market nearer home. . . . When wheat will not bring one dollar a bushel at Chicago, good farming land in Connecticut is cheaper at \$30 per acre, than the prairie fields in Iowa at

¹³⁵ Chicago; her Commerce and Railroads in the *Daily Democratic Press*, 1856, p. 7.

¹³⁶ Hibbard's *The History of Agriculture in Dane County Wisconsin* (Bulletin of the University of Wisconsin, No. 101), p. 130.

their late nominal rate."¹³⁷ It is quite clear that the grain trade had a tendency to encourage speculation in wheat, wheat lands, and railroading which in turn caused fluctuations in the grain trade. The same factors worked to produce the Panic of 1857 under the general head of speculation.

Another result of this grain trade was the building up of trade liaisons and economic dependencies. Before 1840 the amount of wheat raised was insignificant and most of it was used near the place where it was grown. The question of markets did not become important for some years. As an exportable surplus grew it found its way down the Mississippi River to the West Indies. So, prior to 1850, a triangular trade grew up from the West to the Indies and back to the East. The East-West trade moved to the West in the form of manufactured articles. The West paid for these articles from the West Indian grain trade, which was favorable.¹³⁸ After 1850, the western produce was sent East to be exchanged for manufactures or shipped abroad for sale. The result of those trade liaisons was the building up of economic dependences. The United States was building up an empire of its own with sections which took the place of kingdoms. A territorial division of labor was developed, with the East manufacturing more and more, the West devoted to breadstuffs, and the South raising cotton and tobacco.¹³⁹

Transportation was a necessary tie-up to perfect these economic dependencies. Railroads came into being. The

¹³⁷ *Commercial Chronicle and Review* in *Hunt's Merchants' Magazine and Review*, Vol. XXXVII, pp. 326, 327.

¹³⁸ Schmidt's *The Internal Grain Trade of the United States, 1850-1860*, in *THE IOWA JOURNAL OF HISTORY AND POLITICS*, Vol. XVIII, pp. 96, 97; Seaman's *Essay on Progress of Nations* (1852), p. 390, quoted in Bogart and Thompson's *Readings in the Economic History of the United States*, p. 422.

¹³⁹ Turner's *Rise of the New West*, p. 297.

excitement over railroad building was reflected in England and Europe and resulted in a large shift of capital to the Old Northwest, and this in turn increased the price of wheat. Steamboats and ship-building sprang into being as a result of the high prices obtained in the famine years. The high freights stimulated the building of registered and coasting vessels and greatly increased the lake tonnage. Returns show the latter increased 50 per cent and the building of registered vessels for ocean service was in as large a ratio.¹⁴⁰

The foreign grain trade had a fourth significance in its relation to the agricultural conquest of the interior lowlands in the promotion of commercial enterprises. The Superintendent of the United States Census of 1860 said: "The grain merchant has been in all countries, but more particularly in this, the pioneer of commerce, whether we refer to the ocean or to the inland trade, and not till he was established could other commercial adventurers find a foothold. The commercial history of the United States is based mainly on breadstuffs — staples always marketable at some quotation wherever the human family dwells."¹⁴¹ Whether industry migrates in the wake of expanding grain lands or not, *Niles' Register* in 1845 was advising the development of the grain industry and looking upon the area of the Great Lakes today, we notice that a great industrial region has been developed.

Another significance of the grain trade, which led to the stabilization of farming as an industry in the interior lowlands, was the gradual recognition of our foreign grain trade, by Spain, France, and England as necessary to their food supply. This recognition had been established by

¹⁴⁰ Kettell's *Eighty Years' Progress* (1869), p. 156, quoted in Bogart and Thompson's *Readings in the Economic History of the United States*, pp. 413, 414; *Hunt's Merchants' Magazine*, Vol. XLIII, pp. 405 ff.

¹⁴¹ *Eighth Census of the United States, 1860, Agriculture*, pp. cxxxv, cxxxvi.

1856.¹⁴² The increase of population in Great Britain and the continent of Europe beyond the capacity of the country to produce food had given the bread question an importance paramount to all others with the European statesmen and it would, it was prophesied, have a powerful influence on our agriculture.¹⁴³ As we shall see presently, prices of grains were largely influenced by the European market. Bearing in mind the tendency to gamble with the price of wheat and its production, because of the fluctuations in prices, it became necessary to stabilize the European demand in order to place the production of wheat in America on a firm basis.

As a side issue of our relationship in the world grain markets there grew up during this period a demand for a St. Lawrence waterway giving Chicago direct connection with the Atlantic Ocean and Europe. In 1856, the first direct shipment of grain from Chicago to Liverpool was made in the schooner "Dean Richmond". Up to 1860, only three or four grain-bearing boats had made the attempt. The chief obstacle was the unsuitability of light-draught schooners for ocean travel, while the want of a return cargo made such ventures inadvisable. Then grew up the many schemes to open the Great Lakes to ocean commerce by constructing a ship canal from Lake Huron to Lake Ontario and another from Lake Huron to the St. Lawrence River. At that time, the fear of New York that such ship canals would damage the canal interests of the State put a quietus on such schemings of the grain interests.¹⁴⁴

In conclusion, the foreign grain trade had a very definite bearing on the price of grain obtained by the pioneers who

¹⁴² *Niles' National Register*, Vol. LXVIII, p. 182; *Hunt's Merchants' Magazine*, Vol. XXXV, p. 597.

¹⁴³ Bogart and Thompson's *Readings in the Economic History of the United States*, p. 444.

¹⁴⁴ *Eighth Census of the United States*, 1860, Agriculture, pp. cliii, cliv.

were opening the new fields. Prior to 1840, the export of grain did not determine the home market price, but by 1845, grain prices immediately responded to the European demand. Excerpts from the *Chicago Democrat* read as follows: (September 10, 1845) — "The news by the English steamer now due is looked for with much anxiety by holders who have bought at present high prices, as it will give a decided tone to our market." (September 24, 1845) — "Wheat in consequence of the news by the Cambria, which represents a failure of the potato crop, has advanced in the Eastern markets." The work of James E. Boyle on *Chicago Wheat Prices for Eighty-one Years* shows the very close relationship between the world market and Chicago prices of the years from 1842 on.¹⁴⁵

Niles wrote in 1846: "It must be borne in mind, that the selling price of the whole of the grain produced in this country, is regulated almost entirely by what we can obtain for the small portion that we succeed in finding a foreign market for,—and which never amounts to one-twentieth of what we raise!"¹⁴⁶ Since the price trend was generally upward for all grains, in spite of more favorable conditions for production and a constantly growing supply, the explanation must have been on the demand side of the equation.¹⁴⁷ It was the foreign demand, fluctuating as it was during most of the period 1835 to 1860, that raised the prices of our grain.¹⁴⁸ Of some significance in that general price rise was the increased production of gold.¹⁴⁹

¹⁴⁵ *Hunt's Merchants' Magazine*, Vol. X, p. 271; Boyle's *Chicago Wheat Prices for Eighty One Years*, pp. 5, 16.

¹⁴⁶ *Niles' National Register*, Vol. LXIX, p. 69.

¹⁴⁷ Sterns's *The Foreign Trade of the United States from 1820 to 1840 in The Journal of Political Economy*, Vol. IV, p. 489.

¹⁴⁸ *Hunt's Merchants' Magazine*, Vol. XXXIX, p. 423.

¹⁴⁹ *Result of the Increased Production of Gold Upon Prices in De Bow's Review*, Vol. XIII, p. 75.

When prices were low and fluctuating, it was not clear whether farmers in the middle States could profitably underdrain, manure, and cultivate the land. By 1860 the increased level of prices had removed the doubt and farming in the grain belt of the Great Lakes Basin had dropped most of its speculative features. The agricultural conquest of the interior lowlands had lost its feverish nature and settled down to the serious business of feeding a nation soon to be rent by civil war and contributing food to the British Isles soon to be visited by another food shortage.

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