MISSOURI WORKHORSE:

THE BOATS, BUSINESS, AND BACKS OF ST. CHARLES, MISSOURI

A Thesis

Presented to

the Faculty of the Department of History

East Carolina University

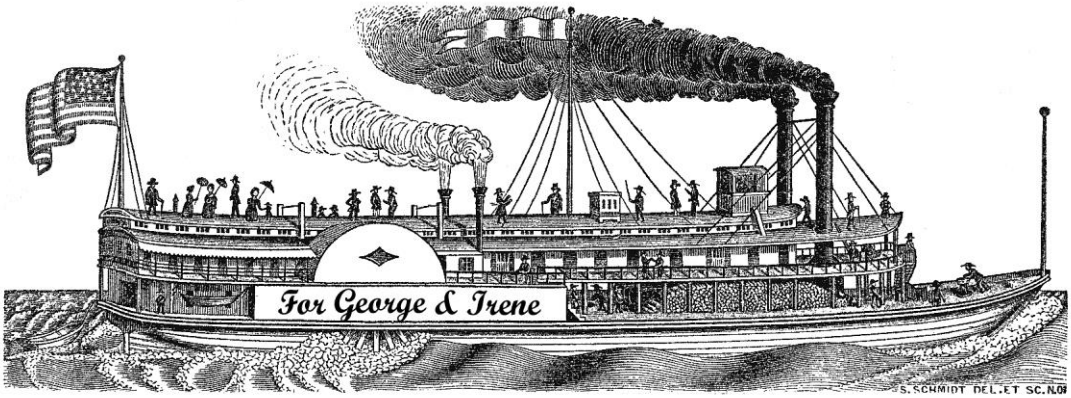
In Partial Fulfillment

of the Requirements for the Degree

Masters of Arts in History

by Christopher F. Valvano

September 2007


For George & Irene
S. SCHMIDT DEL. ET SC. N.O.

CONTENTS

Appendix Page

ILLUSTRATIONS

LIST OF MAPS

LIST OF TABLES

ACKNOWLEDGMENTS

I am greatly indebted to several people and organizations for their help in writing the following thesis. Although the challenge of completing this final task towards my Master's degree was never simple, it was made much more so by the help of my committee, peers, and family. Perhaps it is the high quality of their advice and friendship that makes thanking them my most difficult challenge.

In summer 2003, I collected nearly all the original source documents during a four-week research trip to St. Charles, Missouri. Funding for my trip came from two sources: The Greater Saint Charles Convention and Visitors Bureau, and the Sons and Daughters of Pioneer Rivermen who administer the J. Mack Gamble Fund. I cannot express enough thanks to either organization for making possible my first independent research endeavor. I hope they find their investment well served.

While in Missouri, I relied on the expertise of archivists and librarians at the Saint Charles County Historical Society, the Missouri Historical Society, the Western Historical Manuscripts Collection, and the St. Charles City-County Public Library–Kathryn Linnemann branch. At each place, I found people with a deep passion for history and with a friendly patience to answer all my questions. They made Missouri's past both accessible and a delight to study. I would likely to personally thank Carolyn Roth of the Saint Charles County Historical Society for continually offering her precious time and vast knowledge of the town's records. Her work keeps the memory of St.

Charles's forefathers and mothers alive, and she is truly one the town's favorite daughters.

Each of my committee members provided an incredible amount of advice, encouragement, and motivation. My director, Larry Babits pushed me harder than I ever expected. He expects only good work and because of this he gets the best work out his students. I am truly indebted to him for his motivation and commitment. Will Lass is a professor emeritus of history with Minnesota State University–Mankato. His expertise and comments greatly improved the accuracy of my work and expanded my understanding of the nineteenth-century Missouri Valley. Don Parkerson's comments were equally valuable and his assistance is much appreciated. Carl Swanson's remarkable knowledge of colonial history was absolutely invaluable. Besides being a master educator of the colonial era, Carl is brilliantly skilled at teaching the mechanics of constructing sound arguments vital to the sophisticate craft of history. He is a doctor in the fullest sense of the word.

When I began writing my thesis Annalies Corbin served as my director. Towards the end of the process, the PAST Foundation needed her full attention and she made the difficult decision to retire from her professorial position at East Carolina University. Her move gave me the opportunity to have two of the best directors ECU has to offer. It also made me appreciate her guidance in a new light because her commitment to my education remained unaffected.

Nearly everything I learned at ECU seems to be rooted in Annalies's mentorship. She gave me my first research assistantship scouring nineteenth-century newspapers for

details of steamboats wrecked in the Missouri River. She taught me how to navigate the bureaucratic web of the National Archives as well as the broken bits of shipwrecks beneath the waves. Of all the countless lessons Annalies taught me, in and out the classroom, I find myself continually returning to the lessons she taught me through her example. In the past few years, I have taught archaeological methods in several field schools. Whenever I have difficulty reaching a student or making a tough decision, I find myself wondering how Annalies would handle the situation. All I have to do is pattern my teaching style on her patience, caring, and attention to detail, and the situation is resolved. Every time I practice her example, I find my students become confident, excited, and top-notch archaeologists. She is my mentor and my compass; for this reason I will always be her student.

I would also like thank my friends at ECU: Heather, Holly, Jackie, Sam, and Drew. They were always available for encouragement, venting, or harmless debauchery. I would especially like to thank Josh Howard for being a better historian than me, but never pointing it out. I also thank him for proving that the fraternity of Southern gentlemen is thriving in our generation, and that it has enough room for a damn Yankee like me.

Finally, I would like to thank my family for giving me the confidence to move far from home for my education. I especially thank my grandparents George and Irene Divizio for whom this thesis is dedicated. I also thank my aunt Carol and uncle Joe, my brilliant sister Katie, and my wonderful parents Bob and Liz Wassel. I am especially

indebted to them for creating every good quality I posses and for exemplifying all the ones I pray for courage to display.

Thank you all.

ABBREVIATIONS

ADHZP	A.D. Harmon, and Zebulon Papers
FFP	Filley Family Papers
GCSP	George Champlain Sibley Papers
HSP	Homer Stanford Papers
JCLP	James C. Lackland Papers
MFP	Mullanphy Family Papers
MHC	Missouri History Collection
PCMC	Pierre Chouteau Maffit Collection
SLCCR	St. Louis Circuit Court Records
SCMC	St. Charles, Missouri, Collection
WHMC	Western Historical Manuscript Collection
WJA	Western Journal of Agriculture, Manufactures, Mechanic

Arts, Internal Improvements, Commerce, and General Literature

WJC Western Journal and Civilian

ABSTRACT

The following thesis explores the influence of the transportation revolution in early to mid-nineteenth-century St. Charles, Missouri. The complexity of the transportation revolution is first considered on a broad, national scale. It is then described on a narrower regional scale in the Missouri River Valley. It is finally examined on the narrowest, possible scale of specific interactions between St. Charles businessmen and their associates in several locations.

This thesis argues that the transportation revolution altered the way in which individuals perceived St. Charles's location on the Missouri River. Prior to the transportation revolution, St. Charles benefited by being the closest river town to St. Louis, Missouri. As steamboat technology adapted to the hostile conditions of the Missouri River, outpost towns west of St. Charles gained favor with St. Louis merchants. These newly found and lucrative connections between the metropolitan St. Louis community and the former Missouri hinterlands were possible only after advancements to transportation technology. Although the transportation revolution brought sweeping changes to the Missouri River Valley, it was ultimately the fine scale interrelationships between community members that determined how the new technology would be utilized.

INTRODUCTION

In 1893 Frederick Jackson Turner presented a critical paper on the process of frontier colonization.[1] Turner characterized the early nineteenth century as the beginning of the "new West." The break between the new and old occurred immediately after the War of 1812. George Rogers Taylor identified this period was identified as the "Transportation Revolution."[2] Taylor credited the rapid technological improvements to ground and water transportation as the distinctive trait in nineteenth-century America. During this period, goods moved across the country at exponentially faster speeds, while dramatic decreases in transportation costs changed the nature of trade in the West. Although Turner agreed with Taylor on the rapid changes after 1812, his characterization of the new West was a bit more theatrical than Taylor's. For Turner,

> There had been a West even in early colonial days; but then it lay close to the coast. By the middle of the eighteenth century the West was to be found beyond tide-water, passing toward the Allegheny mountains. When this barrier was crossed and the lands on the other side of the mountains were won, in the days of the Revolution, a new and greater West, more influential on the nation's destiny, was created. The men [and women] of the "Western Waters" or the "Western World," as they loved to call themselves, developed under conditions of separation from the older settlements and from Europe. The lands, practically free, in this vast area not only attracted the settler, but furnished opportunity for all men to hew out their own careers. The wilderness ever opened a gate of escape to the poor, the discontented, and the oppressed. If social conditions tended to crystallize in the East, beyond the Alleghenies there was freedom.[3]

---

[1] Frederick J. Turner, "The Significance of the Frontier in American History," *Annual Report of the American Historical Association for the Year 1893* (1894): 199–227.

[2] George Rogers Taylor, *The Transportation Revolution, 1815–1860* (White Plains, NY, 1951).

[3] Frederick J. Turner, "The Colonization of the West, 1820–1830," *American*

Turner's students labeled his central argument as the "frontier hypothesis."[4] Also referred to as the frontier thesis, it laid the foundation for his views on the distinctiveness of nineteenth-century American society. Originally, Turner stated "the existence of an area of free land, its continuous recession, and the advance of American settlement westward, explain American development."[5] He later expanded his definition of the process as

> Thus western occupation advanced in a series of waves: the Indian was sought by the fur trader; the fur trader was followed by the frontiersmen, whose cattle exploited the natural grasses and the acorns of the forest; next came the wave of primitive agriculture, followed by more intensive farming and city life. All the stages of social development went on under the eye of the traveler as he passed from the frontier towards the East. Such was the process which was steadily pushing its way into the American wilderness, as it had for generations.[6]

Turner's argument hinged on two key characteristics of frontier settlement. First, he believed that colonization events began when bold-spirited citizens felt constricted in overcrowded settlements. Urban areas, in particular, limited the economic opportunities for people of meager resources. These disadvantaged individuals felt marginalized and eventually were pushed out of settled civilization. Among this group emerged the

---

Historical Review 11 (Jan., 1906): 303.

[4] Ray Allen Billington, "Frederick Jackson Turner: The Image and the Man," *The Western Historical Quarterly* 3 (Apr., 1972): 137–152; idem, "Frederick Jackson Turner Visits New England: 1887," *New England Quarterly* 41 (Sep., 1968): 409–436; idem, ed., *The Frontier Thesis: Valid Interpretation of American History?* (NY, 1966); John Lauritz Larson, "Grasping for the Significance of the Turner Legacy: An Afterword," *Journal of the Early Republic* 13 (Summer, 1993): 241–249.

[5] Turner, "The Significance of the Frontier," 199.

[6] Turner, "The Colonization of the West," 315–316.

frontiersmen who made the first forays into unsettled places. Turner credited the American frontier spirit to the enormous land reserves of the western hemisphere. Unlike Europe, settled for millennia, the American wilderness provided countless opportunities for experimenting with new modes of living. In this laboratory, a new type of society emerged, one that was radically different from its ancestral home.

Second, Turner argued that the original impetus for frontier colonization ensured its replication. As the first wave of settlers entered the frontier, they maintained ties with their homeland. Still dependent on the material products of civilization, pioneering settlers extracted wilderness resources valued in homeland trade. Soon the frontier's allure for quick profits pulled in a second wave of settlers. This group adapted the towns, governments, and institutions of the home nation leaving only faint, superficial traces of their original ancestry. The subsequent population swells eventually limited opportunities for underprivileged members thereby pushing out a new generation of frontiersmen. Turner believed this process continued until all uninhabited land was settled. In 1890, the US Census Bureau proclaimed the American frontier officially closed.[7] For Turner, the census bureau's proclamation signaled the end of the frontier as both a process and a crucible for the American spirit.

Turner's frontier hypothesis became shorthand for the "safety valve" effect of colonization.[8] Turner and his followers initially theorized that economic depressions made unsettled frontiers attractive to marginalized individuals. What these frontiersmen

---

[7] Turner, "The Significance of the Frontier," 199.

[8] Billington, *The Frontier Thesis,* 41–62.

lacked in fiscal resources, they made up in grit, gumption, and bravado. Turner described them as

> With his rifle he eked out his sustenance, and the peltries furnished him a little "ready cash." His few cattle grazed in the surrounding forest and his hogs fed on its mast.
>
> The backwoodsmen of this type represented the outer edge of the advance of civilization. Where settlement was closer, co-operative activity possible, and little villages, with the mill and retail stores, existed, conditions of life were ameliorated, and a better type of pioneer was found.... But the frontiersmen proper constituted a moving class, ever ready to sell out their clearings in order to press on to a new frontier, where game more abounded, soil was reported to be better, and where the forest furnished a welcome retreat from the uncongenial encroachments of civilization.[9]

Unsurprisingly, the nation's leading outdoorsman, President Theodore Roosevelt applauded Turner's findings crediting him for striking "some first class ideas which [have] been floating around rather loosely."[10] Since then, scholars across disciplines have debated Turner's original thesis. The first criticisms leveled against Turner came from scholars allied with Herbert Baxter Adams who traced back the foundations of American society to medieval Germany where they believed individualism and industriousness were founded.[11] For them, Americans inherited too many intellectual, political, and social characteristics from Europe to be passively dismissed. Others like them attacked the safety valve effect by demonstrating that frontier expansion occurred during times of economic growth, rather than depressions. Additionally, colonizers

---

[9] Turner, "The Colonization of the West," 315.

[10] Quoted in Billington, *The Frontier Thesis,* 2. Although Billington did not provide the original source for this quote, it was a reasonable statement based on the common caricature of Roosevelt.

[11] Billington, *The Frontier Thesis,* 41–62, 80–96.

generally possessed more capital and less self sufficiency than Turner suggested. Still others came to regard Turner's statements as overly simplistic and ignorant of indigenous New World cultural contributions to "American" society and European-American women.[12] During the mid-twentieth century, a group of scholars revitalized Turner's hypothesis.[13] They pointed to Turner's reluctance to make definite statements. These new proponents highlighted the hypothetical basis of Turner's observations and reiterated his call for testing those insights. After all, no one could dispute the United States' unparalleled expansion in modern times or its populist sentiments for isolation from Europe. These characteristics, proponents argued, had to have profound effects on both the US and the entire modern world. In a sense, then, Turner's greatest legacy to American history was not the answers he tentatively provided but the endurance of the questions he posited. Perhaps the most critical advance by Turner's followers was the realization that his frontier hypothesis (although focused on US expansion) was actually part of the larger spread of the modern world. Historian William Cronon eloquently captured Turner's legacy in the following:

> The greatest attraction of the frontier thesis has been its simplicity and its sense of movement, its ability to shape and set in motion so many of the mere *facts* that American historians need to narrate. It supplies at least a rhetorical connection

---

[12] Wilbur R. Jacobs, "Turner's Methodology: Multiple Working Hypotheses or Ruling Theory?" *Journal of American History* 54 (Mar., 1968): 853–863; Glenda Riley, "Frederick Jackson Turner Overlooked the Ladies," *Journal of the Early Republic* 13 (Summer, 1993): 216–230.

[13] C. Vann Woodward, *The Comparative Approach to American History* (New York, 1968); Ray Allen Billington, *The American Frontier: Attack and Defense* (Washington DC, 1958); William Cronon, "Revisiting the Vanishing Frontier: The Legacy of Frederick Jackson Turner," *Western Historical Quarterly* 18 (Apr., 1987): 157–176.

> between those facts, and that connection in turn supplies the larger sense of order and unity that keep a reader turning the pages to find out "what happened" [emphasis in original].[14]

Agreeing with Cronon, frontier processes are viewed here as united scalar phenomena, occurring globally as well as locally. In many respects the following thesis continues Turner's legacy. It asks how residents of the lower Missouri Valley, especially those of St. Charles, Missouri, engaged the global spread of the modern world with local alterations in transportation, production, and personal interactions. Because this study focuses on mid-nineteenth-century US history, I will draw parallels between that period and those of the English/British colonial experience in North America. Although I remain cognizant of influences from non-British Europeans and Native Americans, I must set practical limits and make some difficult omissions. But with my staring point set, how do I begin?

Chapter one sets the foundation for understanding the spread of the modern world. It begins by assessing the factors colonial economic historians have incorporated into their analyses. It then moves to general theories of modern development to highlight key areas and relationships where change occurred. Then it moves to the particular pattern in colonial economic history. These particular events establish themes discussed throughout the following thesis.

Chapter two carries the theme of transportation. It uses George Rogers Taylor's terminology to argue that a "Transportation Revolution" began after the War of 1812 and brought rapid economic changes throughout the United States. These changes are

---

[14]Cronon, "Revisiting the Vanishing Frontier," 170.

discussed first on the national scale, then on the western regional scale, and then on the lower-Missouri Valley scale. The large scale developments that occurred across the country created countless opportunities for economic change in several regions. Of particular note, the activities of early St. Louis businessmen demonstrated how they learned to operate in an economy distinct from their eastern contemporaries.

Chapter three examines the expansion of US transportation and economy on the regional level of St. Louis and the Missouri Valley. During the 1830s, St. Louis became the *commercial emporium of the West*. Businessmen like the Filley brothers and J. R. Stanford bridged the gap between the older frontier economy of St. Louis and a transforming modern one. They could not easily conduct a cash-only business, but found a way to ship western products with cash values to the East. While transportation allowed men like the Filleys and Stanford to coordinate their businesses between the East and the West, it had a different impact on smaller markets like St. Charles.

Chapter four explores the growing primacy of credit and cash in St. Charles business. As transportation brought western Missouri in from the frontier, however, later St. Charles businessmen had a narrower range of opportunities. The increase in steamboats on the river limited St. Charles merchant George W. Garriott's options for transportation, ultimately giving him few choices other than to become both a flour miller and a steamboat owner. St. Charles's location created an unexpected irony. Although it was the closest Missouri River town to St. Louis, it increasingly became last in line for steamboat service.

Chapter five demonstrates that the manner in which Garriott secured capital to construct his own steamboat linked him to St. Louis in unexpected ways. While the reliability of his Steamboat *Fayaway* gave him freedom from unruly boat captains and upriver wheat markets, it tethered his interests to his investors in St. Louis. By the time he restructured his business to generate large cash revenues, the trappings of earlier debts caught up to Garriott. He sold the *Fayaway* and his partners abandoned the operations Garriott established.

I. SCALING THE MODERN WORLD

The following chapter steps back from the specifics of Turner's frontier hypothesis, but attempts to set the foundation for applying his general understanding of a united colonization process from the seventeenth through the nineteenth century. This is undertaken by first exploring the analyses of colonial historians, second by moving to general modern world theories, and finally by returning to specific circumstances of North American colonization. These seventeenth- and eighteenth-century traits will be shown as common factors in the development of the nineteenth-century lower Missouri Valley as well as St. Charles. This thesis contends that influential economic developments in colonial North America appeared in the nineteenth-century West and influenced a similar pattern of internal change. That argument begins here.

In 2000, colonial economic historians honored the career of Jacob Price.[1] Throughout his career, Price crafted detailed analyses for the early-modern economies of Great Britain and its North American colonies. In a more general sense, Price revealed the magnitude of those early economies. He indicated the extent to which Europeans spread a web of influence across the globe. Price's intimate knowledge of colonial trade networks instilled a sense of enormity for the scale at which historians must operate. As an example, he articulated the far-reaching parameters necessary for examining North American colonial wheat staples. As a caveat against narrowly focused research, Price explained that "a comprehensive study of the North Atlantic wheat trade in the second

[1]John J. McCusker and Kenneth Morgan, eds., *The Early Modern Atlantic Economy* (Cambridge, UK, 2000).

half of the eighteenth century must include, in addition to American production, exports, and prices, a discussion of European states, and some appreciation of the significance of the Russian conquest of the southern Ukraine and the opening of the Black Sea to international trade."[2] Price was not only interested in scale from a geographic sense, but also from an economic one.

Price noted the increased scale of economic activity among American and British firms during the late eighteenth century. For instance, two of the largest London tobacco traders in 1775 imported more tobacco than over one hundred traders had in the 1660s.[3] Price accounted for these radical jumps in trade volume from two sources. First, because most markets were easy to enter but difficult to endure, only a small percentage of firms maintained a good reputation and high credit rating. [4] These firms, in turn, used their reputation as leverage for credit and for trading on their bills of exchange. Second, firms with greater access to credit gained control over shipping arrangements. As their purchasing power increased, reputable firms moved entire shiploads of goods. They could then charter vessels to sail according to the firm's schedule. A steady supply of credit and dependable shipping, therefore, gave high volume trading firms an advantage. As a result, smaller firms "importing a quarter-shipload of sugar or tobacco had little

---

[2] Jacob M. Price, *The Atlantic Frontier of the Thirteen American Colonies and States: Essays in Eighteenth Century Commercial and Social History*, Collected Studies Series (Brookfield, Vt., 1996), 24.

[3] Ibid., 38.

[4]Ibid, 18–42; Jacob M. Price, "The Rise of Glasgow in the Chesapeake Tobacco Trade, 1707–1775," *William and Mary Quarterly*, 3rd Ser. 11, Scotland and America (Apr., 1954): 179–199.

room to maneuver and usually had to accept the added costs of long delays." [5] Price devoted many years of careful analysis of the tobacco trade and Glasgow's mid-eighteenth-century rise over cities like London, Bristol, and Liverpool. Even in his preliminary analysis, Price underscored the primary reason for Glasgow's rise when he stated that "first place must be given to credit."[6]

Increased credit lines extended to British exchange houses produced a corresponding rise in colonial economic activity. Price made clear that tobacco produced more profit than any other colonial export. The second most valuable commodity, however, was "invisible earnings." Invisibles were activities related to service industries of Atlantic shipping. These services, also referred to as spin-of industries, comprised mainly of shipping, commission on freight purchases, storage and sales, as well as marine insurance. Historians James F. Shepard and Gary Walton provided careful estimations for the value of colonial "invisible earnings" to demonstrate that these services relieved 62 percent of colonial trade deficit with Great Britain.[7] By examining the role of these intangible commodities, Shepard and Walton explained how the middle and New England colonies experienced substantial economic gains even though their agricultural exports cost less than the value of their European imports.[8]

From Price's work is gained a sense for both the physical and economic scales

---

[5]Price, *The Atlantic Frontier,* 38.

[6]Price, "The Rise of Glasgow," 197.

[7]James F. Shepard and Gary M. Walton, *Shipping, Maritime Trade, and the Economic Development of Colonial North America* (Cambridge, UK, 1972), 116.

[8] Ibid.

necessary to understand modern development. Price directed the bulk of his long career towards synthesis of just one aspect in this undertaking. Although, putting Price's advice to practice is difficult, it is possible in a manageable way. The following chapter examines general theories concerned with modern world development as a means to understand and unite colonial history and Western North American history.

First, I must turn our attention to general theories of modern development. These theories identify sets of important variables to test in specific situations. Second, I must look to other scholars who placed these theories into practical use. Third, I must confine my geographic scale in a manageable way. This is accomplished by limiting parallels to the Missouri Valley to those of British colonial North America. Once these three steps are taken, I can then approach the lower Missouri Valley with a clearer sense of what will inform us about its position during the spread of the modern world.

Economist Karl Marx viewed the modern world's emergence as an abrupt departure from past life ways. Marx defined historic episodes on the presence of temporally specific "modes of production."[9] Overly simplified, a mode of production encompassed the methods and human relations determining how products were manufactured, labor was controlled, and profits were distributed. Inequality in the latter two especially caused tensions between classes. The tension, in turn, caused conflict resolved only by the

[9]Thomas C. Patterson, *Marx's Ghost: Conversations with Archaeologists* (Oxford, UK, 2003); William Roseberry, "Understanding Capitalism – Historically, Structurally, Spatially," in *Locating Capitalism in Time and Space: Global Restructuring, Politics, and Identity,* ed. David Nugent (Stanford, Calif., 2002), 61–79; idem, "Marx and Anthropology," *Annual Review of Anthropology* 26 (1997): 25–46; idem, "Political Economy," *Annual Review of Anthropology* 17 (1988): 161–185.

emergence of a revolutionary mode of production.[10] Tension, conflict, and revolution, therefore, formed the cycles of cultural change. Each new historic era for Marx represented a completely new kind of lifestyle. When new eras arose, the subsequent upheaval was dramatic and easily recognized. Whether I disagree with Marx's view concerning historical eras, I must appreciate his elucidation of critical variables important to the shaping of the modern world. With Marx, I can identify a truly unique historical transition by using his predictions to pinpoint important changes in human relationships. Roughly, my concern is changes in how people made things and who benefited most from their making. Marx, however, was not a scholar interested in the developing modern world.

Like Turner, other scholars linked western colonization to broader developments in European history. Historians of the Annales School, most notably Fernand Braudel, took a much larger view of the past than did Turner. Braudel focused his efforts on analyzing the totality of the modern world. Like Turner, he believed that population growth contributed to a "differential geography of globe."[11] He also saw the development of the modern world as a process structuring relationships between geographically separate populations. Braudel credited limit economic opportunity in European cities for contributing to population expansion. He argued, however, that Europe's rising merchant class engineered expansion to subvert ruling elites' influence within traditional political

---

[10] See Patterson, *Marx's Ghost,* 23–47.

[11] Fernand Braudel, *Civilization and Capitalism 15th–18th Century: The Structures of Everyday Life: The Limits of the Possible,* vol. 1 (London, 1979; reprint, trans., Sian Reynolds, NY, 1981), 31 (page citations are to the reprint edition).

borders. From either scholar's view, privileged members in European society determined the geographic setting of frontier colonization as well as conditions for the colonial relationship.

Political scientist Immanuel Wallerstein built on Braudel's concepts to formulate his theory of modern world systems.[12] He saw the modern world as a product of the capitalist world system, which originated in fifteenth-century Italian city states. Like Turner, he recognized the need for sustained relationships between a frontier and the home nation. For Wallerstein, asymmetrical trade relationships led to differential control of wage labor. Because the home nation's merchants provided capital for frontier expansion, they determined the function of colonial ventures. Additionally, these individuals owned processing facilities for converting frontier materials into finished goods destined for colonial consumption. As a result, the merchant class exerted considerable influence over raw material value and ensured higher prices for finished goods. The merchant class efforts to determine colonial functions also created a distinct structural appearance across global settlements. Wallerstein indicated three basic areas in the world system structure. The "core" served as the physical setting for manufacturing and distributing finished goods. It was also the seat of economic power that shifted between political borders. These shifts occurred in cycles throughout history and were characterized by such events as the diminishing importance of Amsterdam's stock

[12] Immanuel Wallerstein, *The Modern World-System: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century* (New York, 1974).

exchange in preference for London's during the mid-nineteenth century.[13] Although these shifts carried political ramifications and were, in part, influenced by political leaders, Wallerstein successfully argued for the modern world's unique ability to move capital freely across nations at the behest of private investors.

The "periphery" provided raw materials and labor to extract them. This area often characterized colonial settlements. Importantly, its products were routinely valued lower than those of the core. Because peripheral members did not supply capital for colonial ventures, they remained indebted to, and dependent on, outside investors. This dependency laid the foundation for unequal negotiating power in trade.

Between the two areas, the "semi-periphery" served as an intermediary between the core and periphery.[14] This was the location where raw materials were collected for shipment to the core and where finished products were redistributed to dispersed peripheral locations. The semi-periphery also acted as a sort of middle management for home nation policies and institutions. Often these areas were colonial capitals or other hubs of industry and trade.[15]

---

[13] Immanuel Wallerstein, *The Modern World System III: The Second Era of Great Expansion of the Capitalist World-Economy, 1730–1840s* (New York, 1989).

[14] See Giovanni Arrighi, "The Development of Illusion: A Reconceptualization of the Semiperiphery," in *Semiperipheral States in the World Economy*, ed. William G. Martin (New York, 1990), 11–44.

[15] See Immanuel Wallerstein, "From Feudalism to Capitalism: Transition or Transitions?" *Social Forces* 55 no.2 (1976): 273–283; idem, *The Modern World-System II: Mercantilism and the Consolidation of the European World-Economy, 1600–1750* (New York, 1980); idem, *Historical Capitalism with Capitalist Civilization* (New York,

Anthropologist Eric Wolf also saw the spread of the modern world emanating from European developments.[16] Differing from Wallerstein's focus on *trade* relations, Wolf placed primacy on *production* relations. He agreed with Wallerstein's assertion that the spread of the modern world corresponded with the ascendancy of capitalism. Wolf placed the transition to capitalism, however, at a more recent date. For Wolf, capitalism came to dominate global events when the Industrial Revolution removed production from households to large mechanized factories. As individual family units produced fewer products in their homes, they lost control over their labor. Wolf documented this transition in early nineteenth-century Great Britain. Prior to the Industrial Revolution, textile merchants operated a "putting out system," in which they provided households with wool or cotton raw materials for yarn and cloth production. This system allowed households to control their pace of work as leverage in determining the value of labor. Mechanization, however, moved production to specialized factories where merchants controlled the pace of work. In addition, the move away from household production to mechanical devices decreased the human energy needs for manufacturing. This reduction devalued household labor and created tension between factory workers and owners.[17]

Although similar linkages existed between Turner's description of frontier processes and Wallerstein's and Wolf's views for the development of the modern world, the latter

---

1983); idem, "Households as an Institution of the World-Economy," in *Creating and Transforming Households: The Constraints of the World Economy,* ed. Joan Smith and Immanuel Wallerstein (Cambridge, UK, 1992), 3–26.

[16] Eric Wolf, *Europe and the People without History* (London, 1982).

[17] Ibid.

two scholars never made those similarities explicit. Wallerstein and Wolf greatly expanded insights related to Turner's. Their analyses detailed a much larger process operating on a global level, of which the Turnerian frontier hypothesis comprised only a small part. Wallerstein and Wolf contributed to discussions of the modern world most profoundly in their awareness of the geographic magnitude of modern human relations. They also clearly articulated sets of critical variables indicating the alteration of those relations under capitalism.

In the second half of the twentieth century, practitioners of the "New Geography" school explored issues of social patterning and processes. The new geographers revitalized the Turnerian hypothesis along with Carl Von Thünen's Central Place Theory.[18] Formulated years earlier than Turner's hypothesis, Von Thünen postulated a theoretical world without natural barriers such as mountains, oceans, and canyons. In this world, he believed dense population clusters naturally raised land values. Inflated property values forced land owners to maximize profits from their holdings. As a result, urban centers encouraged the development of industrial and craft production primarily because they were more profitable and required less land than agriculture. Von Thünen had linked population density to inflated property values that, in turn, determined the type

[18] Jerome O. Steffen, "Insular vs. Cosmopolitan Frontiers: A Proposal for Comparative Frontier Studies," in *The American West, New Perspectives, New Dimensions*, ed. Jerome Steffen (Norman, 1979), 94–123; Joseph B. Cassagrande, Stephen I. Thompson, and Philip D. Young, "Colonization as a Research Frontier: The Ecuadorian Case," in *Process and Pattern in Culture: Essays in Honor of Julian H. Steward*, ed. Robert A. Manners (Chicago, 1964), 281–325; see also historian William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York, 1991); and archaeologist Kenneth E. Lewis, *West to Far Michigan: Settling the Lower Peninsula, 1815–1860* (East Lansing, 2002).

of labor performed in a location. This relationship, he argued, explained a three-tiered settlement hierarchy in which industrial labor occurred in the center. As one moved outward from the population cluster, he or she encountered a second settlement tier with moderate priced land. In this area, land values were lower than urban areas but high enough to demand intensive agricultural production. Decreased transportation costs to market centers offset the inflated value of agricultural land. Beyond the ring of agriculture, lay a zone of cheap land suitable for livestock grazing. Land in this area was devalued because of its distance from urban clusters that increased transportation costs to the center. This was the only area, however, where herders could amass land parcels large enough to profit from livestock. Although they experienced the highest transportation costs, herders absorbed those costs through higher per volume profit than agriculturalists. At the core of Von Thünen's model existed a fundamental flaw. Because his postulations rested on a theoretical plane without geographic barriers, it lacked real-world explanatory power.[19]

Geographer Jerome Steffen adapted the frontier hypothesis and central place theory to formulate a structural classification of colonial expansion. He split colonies into two basic types. He defined the first type as "cosmopolitan" colonies that had specialized economic activities focused on extraction of single resources (e.g., fur, lumber, or precious metals). Cosmopolitan frontiers retained close, dependent ties with their parent state. Because resources were generally extracted by small mobile communities, a colonial entrepôt emerged as a permanent, regional administrative unit and as a supply

[19] The best description of Von Thünen's model is found in the first chapter of Cronon, *Nature's Metropolis,* 11–20.

source for manufactured goods.[20] During Spanish occupation of the western United States, New Orleans served this administrative and economic function for control over the Missouri Valley fur trade.[21] Local agricultural production typically occurred for the colony's subsistence. The result was a "household mode of production," in which limited manufacturing occurred solely intended for household consumption.[22] Archaeologist Kenneth E. Lewis noted remnants of this production mode in mid-nineteenth-century Michigan.

As US citizens established farmsteads around Saginaw Bay, Michigan, they noted how the former French colonists routinely planted small apple orchards around their homes. The Americans were dismayed, however, when they witnessed French settlers collecting enough apples for their own consumption and leaving hundreds more lying rotten on the ground. The Americans criticized the French settlers' for squandering potential profit. To the Americans this clearly revealed endemic laziness within the French community. The former French occupation, however, specialized on fur trade and did not create an alternate market for apples or processed cider. The misinterpretation of French laziness on the Americans' part showed conflicted ideologies between singularly focused cosmopolitan colonies and the type of commercial frontier Americans created. Steffen's defined this second type as an "insular" colony.

Historian Cathy Matson discussed the transition from a cosmopolitan to insular

---

[20] Lewis, *West to Far Michigan*, 6–7.

[21] See Richard E. Oglesby, *Manuel Lisa and the Opening of the Missouri Fur Trade* (Norman, OK, 1963).

[22] Lewis, *West to Far Michigan*, 168.

frontier in colonial New York.[23] Although Matson's terminology differed from Steffen's, she revealed a process where the colonial economy shifted during the decline of New York's fur trade in the late seventeenth century. Instead of singular efforts focused on extracting furs, the city merchants sought other items for export. As merchants supplemented dwindling stocks with manufactured-household products, farm families viewed surplus production only as the means to acquire goods not produced at home. Although market potential existed for farmers to profit beyond subsistence levels, they saw the market only as an opportunity "to exchange agricultural produce for windows for their homes, buttons for their clothing, and dishes for their tables."[24]

Contemporary colonial observers believed, however, that farmers indeed desired to produce beyond expedient needs. Matson recorded one such observer, Daniel Denton, stating that every farmer was "making their own Linnen [sic], and a great part of their woollen-cloth [sic] for their ordinary wearing…. Had they more tradesmen amongst them … [the colonists] would in a little time live without the help of any other Countrey [sic] for their Cloathing [sic]."[25] Certainly farmers' intentions across colonial North America varied, however, Matson importantly showed that farmers' utilization of the provisions market conformed to the extraneous needs of agricultural households.

Insular frontier colonies had diversified economic activities focused on a wide range

---

[23]Cathy Matson, "'Damned Scoundrels' and 'Libertisme of Trade': Freedom and Regulation in Colonial New York's Fur and Grain Trades," *William and Mary Quarterly*, 3rd ser., 51, Mid-Atlantic Perspectives (Jul., 1994): 389–418.

[24] Matson, "Damned Scoundrels," 397.

[25] Daniel Denton, *A Brief Description of New York* (New York, 1845; orig. pub. 1670), 18–20; quoted in ibid, 397.

of resources. This increased activity lessened dependence on the home nation, and led to an increase in local reinvestment of surplus. These colonies tended to become more stratified as certain areas along transportation networks developed secondary markets for exports.

Matson articulated part of this process unfolding in 1690s New York. As more capital flowed into the colony, "a lumber interest developed among farmers who sold boards, cords of firewood, and homemade casks to merchants' country agents; a few sawmill owners ceased their farming operations when returns from producing resin, pitch, and tar for export grew appreciably."[26]

Cassagrande *et al.* showed how the transition from cosmopolitan to insular produced a hierarchy of settlements similar to Von Thünen's model but developed specifically for frontier regions. Population centers fell under a four-tiered ranking of "frontier towns," "nucleated settlements," "semi nucleated settlements," or, "dispersed farms."[27]

Cassagrande *et al.* expanded Steffen's model and placed it in more general terms to provide a useful set of descriptors for discussing similarities between different frontier settings.[28] With the introduction of steamboats on the Mississippi River, New Orleans shifted from a former entrepôt of fur trade to a frontier town linking markets of the West to those in the East. St. Louis merchants in the 1830s replicated the diverse activities

---

[26] Matson, "Damned Scoundrels," 398.

[27] Joseph B. Cassagrande, Stephen I. Thompson, and Philip D. Young, "Colonization as a Research Frontier: The Ecuadorian Case," in *Process and Pattern in Culture: Essays in Honor of Julian H. Steward*, ed. Robert A. Manners (Chicago, 1964), 281–325.

[28] Lewis, *West to Far Michigan*, 6–11.

begun in New Orleans in the first decades of the nineteenth century. St. Louis then became a second frontier town particularly for the increased variety of products flowing out the Missouri Valley. After the arrival of steamboats, St. Louis became the major collection, processing, and redistribution center for the upper Mississippi and Missouri valleys. With its position as a frontier town, merchants in St. Louis interacted more closely with eastern suppliers. As St. Louis developed into a regional center of trade, other smaller locations interacted directly with the St. Louis market. This allowed communities like Weston and Independence to become "nucleated settlements." These towns accommodated increased demand for manufactured products as settlers rendezvoused before departing on the Santa Fe and Oregon trails. Although all communities along the Missouri River depended on river shipments to and from St. Louis, communities at the heads of overland trails structured steamboat routes to their advantage. As a result, tensions arose between merchants, farmers, and steamboat owners.

Lewis successfully adapted Steffen's terminology to describe Michigan settlers' colonization of Lower Peninsula during the nineteenth century. Steffen's model, however, was not as successful for explaining the underlying processes directing settlements hierarchy. In particular, Steffen's use of the term "insular" implied that diversified economic activities lessened dependency on outside capital investment. Wallerstein argued the opposite, believing increased trade created further imbalances in colonial relationships and only elevated dependency on outside capital.[29] Although

[29] Wallerstein, T*he Modern World-System II.*

Steffen's model lacked important explanatory power, it significantly refined the model presented by Von Thünen's central place theory. It also provided a clearer classification for physical locations than presented in world systems theory. Probably for this reason, criticisms directed towards Steffen's work have generally been based upon flaws he inherited from Von Thünen's original thesis.[30]

Historian William Cronon discussed central place theory's most critical flaw in his analysis of Chicago's commercial ascendancy during the nineteenth century. Cronon argued that central place theory created a deterministic view of history. In his work, he related a personal anecdote in which he described driving from Chicago's inner city to the surrounding countryside. As Cronon drove past the urban sprawl, he traveled first past agricultural fields and then past grazing land. It appeared that Von Thünen's model was literally unfolding before his eyes. Cronon later realized, however, that central place theory failed to explain the origin of urban centers. Von Thünen had not considered the primary rationale for locating population centers. In Cronon's estimation, high land values occurred after a center began attracting dense populations and must have been the result (rather than the cause) of hierarchies.[31]

Cronon considered a point in time when Chicago's businessmen competed against other Midwest centers for Eastern capital. Without the successful partnership established by Chicago-based merchants with the East, any number of towns might today be a Midwest center for commerce. Cronon documented Chicago businessmen who

---

[30] See Cronon, *Nature's Metropolis,* chap. 1.

[31] Ibid.

channeled capital investment into areas like transportation and agricultural storage facilities. Determining railroad routes, allowed Chicago boot manufacturers, for example, to bypass leather processing centers in western Illinois. By circumventing towns like Alton, Illinois, Chicago's leather producers purchased cattle directly from herders and gave rise to their city's well-known slaughtering industry.[32]

Similarly, Chicago's wheat dealers provided capital for grain elevators throughout the Midwest. Railroads linked these storage facilities to the stock exchange in Chicago. As elevator owners issued grain receipts to farmers, they restructured agricultural economics throughout the Midwest. The elevator receipts were backed by wheat futures sold in Chicago with Eastern capital. They, in turn, became a source of currency within rural communities. Because railroads primarily utilized grain elevators, they drew freight from river transportation and favored the Chicago exchange over St. Louis.[33] By highlighting the personal business relationships of Chicago merchants with Eastern capital, Cronon successfully argued against the predetermined ascendancy of Chicago. He refined Von Thünen's model and illustrated the process through which specific individuals in a population cluster purposely center their community within a settlement hierarchy. He also underscored the power of micro-historical examinations to inform us on large historical processes.

The following thesis takes a similar approach to its analysis of mid-nineteenth-century St. Charles, Missouri. It does not discuss St. Louis's ascendancy as a commercial

---

[32] Ibid., 145–176.

[33] Ibid.

magnet from a single perspective. On the contrary, it examines this rise from the viewpoint of lower Missouri Valley and St. Charles.

As St. Louis moved from a specialized frontier setting, based on fur trade, to a more diversified economy based on agriculture, furs, and metal extraction, as well as manufacturing, it began to take on characteristics of an insular locale. With diversification, came an increased reliance on Eastern capital that consolidated business activates into specialized sectors existing side-by-side. This reliance on outside capital created unequal trade relationships and forced country merchants to operate in a modern economy of scale. With the shift towards capital investments, tensions arose between local farmers and manufacturers. Steamboat owners operating in the lower Missouri Valley increased tensions by demanding storage facilities for freight. Because farming organizations lacked resources to build storage infrastructures, only local merchants could meat these demands. These merchants, however, acquired capital from partners in urban markets for local infrastructure investments. Added investment to local business created enough incentives to arrange permanent shipping deals with steamboat owners. The extra costs from loans forced merchants to offer lower prices for farm products in local markets. These urban loans also forced merchants to conduct business in a manner dictated by their investors. The more indebted a country merchant became to urban partners, the less autonomy he had in accepting payments. If his investors demanded cash, or a specific cash crop, a merchant could only accept those commodities from his clientele. Each time capital flowed into a community, its merchants built new stores, warehouses, and manufacturing plants. This gave a community the appearance of

modernity but was paid for with its economic independence. The demands of urban investors eventually forced local producers to specialize their activities around particular commodities. These developments created an imbalance, or asymmetry, in regional trade that altered producer and manufacturer relationships within a region. As each small area became linked in a large global trade, it was assigned a specific function by those holding the purse. Although the lives of western frontier people differed in many ways from those of earlier eastern colonists, emerging changes to the relationships between producers and manufactures marked both periods in profound ways.

Merging the works of Wallerstein and Wolf, two decisive relationships are explored. First, asymmetrical trade relationships between Western merchants and Eastern capitalists revealed tensions that ultimately forced Western businessmen to operate within capitalism's rules. Second, shifting modes of production from household-based agriculture to mechanized flour production created tensions between Western merchants, farmers, and steamboat owners. In the following, Marx's term "mode of production" is replaced with the term "economy of scale." Marx's description of the capitalist mode of production contained many essential aspects of economies of scale. Because the latter term appears more frequently in colonial history, it is better suited to characterize the spreading modern world discussed here. Defined in more detail below, economy of scales described a uniquely modern process where increased surplus production was coupled with centralization of output and profit.

Ultimately, the effects of modern economy of scale continually stacked the deck against St. Charles merchants. From a present-day gaze, the city seemed destined to

never match St. Louis's economic might. Similarly, the efforts of its merchants appear desperately futile; but as Cronon argued, businesses relations on a case-by-case basis were far from predictable. Although capitalism exerted heavy pressures upon St. Charles merchants, I must acknowledge the possibility of a different history. The following pages cannot possibly do justice to the incalculable myriad of possibilities. They do, however, bring to light what actually occurred as mid-nineteenth-century St. Charles encountered the spreading modern world.

In general, historical analyses of modern developments can be placed in two broad groups. The first are sometimes referred to as Malthusian studies. These arguments generally rely on population growth models. Once internal population pressures within a society reached a critical threshold, expansion occurred to meet subsistence needs.[34] Occasionally, these are also labeled "germ theories" for their analogues with biological organisms. In a liberal definition, Turner's frontier hypothesis may also be couched in these terms. Like Malthusian theories, he saw change originating *internally* in a society. The negative influences those changes exerted upon certain individuals provided a "push" for expansion. Scholars should apply Malthusian labels with extreme caution. Malthusian theories stem back to Thomas Robert Malthus. In 1798, Malthus penned "An Essay on the Principle of Population," in which he hoped to explain a disturbing reversal in the natural "struggle for existence." Without natural predators, Malthus predicted that the world's human population would outstrip its food supply by the mid-nineteenth century. Malthus's provocative work influenced many other scholars like Hebert Spencer

[34] John J. McCusker and Russell R. Menard, *The Economy of British North America, 1607–1789* (Chapel Hill, 1991), 17–34.

and Charles Darwin. Where Darwin found inspiration to formulate his theory of natural selection, others like Spencer continued Malthus's work with human populations. To the detriment of succeeding generations, Malthus's original findings were used (beyond his original intent) to validate racial and class-based oppression, the full extension of which occurred in our era's most insidious form of population control in late 1930s Europe.[35]

Population growth as the sole determinant in the spread of the modern world economy failed to explain disparities of economic increase such as those observed within the English/British markets between the seventeenth and eighteenth centuries. For instance, even though the British population expanded sluggishly from 1670 to 1770, their domestic markets (comprised mainly of home-grown foodstuffs) increased by 70 percent. Conversely, their import markets (comprised almost entirely of colonial tobacco, coffee, and sugar, along with Asian manufactured goods) increased by 188 percent throughout the same period. Disparate growth in non-subsistence production sectors cannot be explained simply by correspondent population increase.[36] The span between frontier processes and institutionalized oppression is immense, and therefore, should always be treated distinctly.

Economic historians label a second approach as the "staples thesis." In brief, the staples thesis asserted that colonies began with small domestic markets, limited supplies of labor and capital, but large amounts of natural resources. Colonists' synchronized

---

[35] See Joseph L. Graves Jr., *The Emperor's New Clothes: Biological Theories of Race at the Millennium*, (New Brunswick, NJ, 2002).

[36] Jacob M. Price, "What Did Merchants Do? Reflections on British Overseas Trade, 1660–1790," *Journal of Economic History* 49, The Tasks of Economic History (Jun., 1989): 271.

their labor to external market demands. Initially, they traded with home markets in a simple exchange system, converting resource-intensive goods into manufactured products and additional capital. They, then, reinvested this capital to further exploit local resources and/or diversify production into new sectors. Based on metropolitan demand and the nature of production, two types of economic growth occurred. In plantation colonies, income distribution was highly uneven. Most colonists received little or no income that barely provided for daily subsistence and left nothing for reinvestment. Plantation owners, on the other hand, invested profits locally only to increase yields of a single staple, or they sent profits overseas purchasing expensive luxury items. As a result, plantation colonies generally possessed large, unskilled populations with no means for diversification. Expansion of their exports had nominal effects on the range of activities in the colony.[37]

In contrast to plantations, farming colonies developed a broader economic base. Distribution of capital was more even and resulted in a wide-ranging demand for goods and services. Although colonists' quickly profited from staple production, their early efforts (less orchestrated than plantations) were not channeled exclusively into increasing supplies. The workforce in these colonies, more skilled than plantations, directed their efforts into "spin-off" sectors.[38] For example, Shepard and Walton estimated that the middle and New England American colonies captured the majority of invisible earnings from the shipping sector. Between 1768 and 1772, services associated with shipping

[37] McCusker and Menard, *The Economy of British North America*, 17–34.

[38] Ibid.

netted colonists £610,000; an amount second only to tobacco profits of £766,000.[39] As the domestic demand for export products increased, so did home manufacturing as well as supportive industries for staple production. Manufacturing of items like barrels and casks increased along with service industries like storage, drayage, and transportation. Although each staple produced differing spin-off industries, they all encouraged diversity of the economic base.[40]

The staple thesis assumed a two-region world that combined labor, capital, management, and manufacturing. The first region was the colony whose initial settlement was characterized by the movement of labor from the metropolitan second region. High demand for resources or lower transportation costs in metropolitan areas provided the initial push for colonization. Metropolitan demand and high risk for settling new areas earned initial colonists high profits. The lure of profit attracted more colonists who increased production, but leveled the staple price. The stabilization of market prices, however, lowered risk in the colony thereby attracting external investment. Metropolitan merchants reduced costs by capturing economies of scale. Historians John McCusker and Russell Menard referred to this as the "cheaper-by-the-dozen effect."[41] Staple producers in or around metropolitan areas did not have land resources to compete with the growing scale of supply from colonial areas. Often they were forced out of business but redirected their labor and capital to more productive sectors – becoming specialized

---

[39] Shepard and Walton, *Shipping,* 135.

[40] McCusker and Menard, *The Economy of British North America,* 17–34.

[41] Ibid., 21.

merchants, tradesmen, etc. As this process eventually stabilized, expansion would begin again as demand rose or transportation costs fell.[42]

Although a general pattern of specialization occurred throughout the North American colonies, some areas began the transition earlier than others. Especially in New York and Philadelphia, pre-Revolutionary city merchants concentrated on single overseas markets while their counterparts in Providence and Boston maintained simultaneous relationships with British dry goods manufactures, Chesapeake tobacconists, and West Indies sugar planters. The differing levels of specialization resulted primarily from domestic exchange conditions. In New York and Philadelphia, paper and hard currency circulated more abundantly than in New England. The former cities' merchants often held exchange bills drawn directly from British firms. Other New England merchants acquired these necessary bills from Southern and Caribbean colonies. Obtaining bills from colonial middlemen complicated the exchange system and reduced profit. Each hand through which a bill of exchange passed kept a portion of its represented profit thereby devaluing it along the exchange network. Additionally, New York and Philadelphia prospered from larger amounts of British military spending. A military presence, in turn, brought more specie and bills of exchange. The fewer port facilities in New York and Philadelphia concentrated business sectors in a handful of areas. This concentration encouraged exchange efficiency and allowed for markets to expand sufficiently for "spin-off" industries like commission shipping or provision exporting.[43]

---

[42] Ibid.

[43] Thomas M. Doerflinger, "Commercial Specialization in Philadelphia's Merchant

Capturing profits from a growing economy of scale implied more variables than simple supply and demand models might suggest. A considerable variable in the general trend towards specialization in the North American colonies was, indeed, the availability of larger supplies and increasing consumer demand. Historian Thomas Doerflinger found this aspect true only to a certain threshold of capital input. While he upheld the position of most colonial historians that pre-Revolutionary markets tended to be too small for wealthy firms to capture large economies of scale, he was unable to find positive correlations between market growth and specialized activity in later periods. Instead, he found that small firms generally chose to specialize in accommodating market conditions, while rich firms preferred to "comfortably" grab opportunities from different sectors across the globe.[44]

Shipping magnate, Thomas Fitzsimmons, complicated this pattern by concentrating exclusively on the provision trade in 1784. Fitzsimmons chose to specialize in a single trade although he was well positioned to capitalize on the post-Revolution dry goods import boom. On the other hand, wealthy firms like Alexander Brown and Sons of Baltimore remained extensively diversified up to the 1830s, well past the supposed "mythical state of perfect specialization after 1815."[45] The key distinction for diversity of activities, indicted by Doerflinger, rested in a firm's available capital and the degree of risk they chose to take. For larger firms, capital provided more alternatives for diversity

---

Community, 1750-1791," *Business History Review* 57 (Spring, 1983): 46–47. Quotation marks surrounding the words spin-off are for emphasis.

[44] Ibid., 29.

[45] Ibid., 32.

or specialization. Smaller firms could specialize only where market conditions accommodated small volume competitors or where capital loans were abundant.[46]

The frontier markets generally inhibited accumulation of large provisions and fostered a web of mid-level traders. In agricultural areas, milling emerged most commonly as the first spin-off industry.[47] Either from proximity to markets or ambition, a miller might choose to sell his products in an urban market for cash revenues. Competition for transportation produced a need to capture ever larger supplies of farm products, which forced millers to increase their output and become fulltime, specialized provision merchants. In places where transportation to urban markets was unreliable, a country miller relied on barter, labor exchange, and a host of subsidiary uses for his mill. In seventeenth-century New York, Matson noted "millers also used the millstone to sharpen tools, shred rags for the colony's paper mills, press flaxseed into oil, and grate bones for pastes and medicines."[48] If a miller could not find work for his mill he also "circulated as a local handyman earning small sums for odd jobs."[49]

The merchants in urban centers like Philadelphia and New York prospered from abundant and fluid credit extensions. Even with outliers such as Fitzsimmons and the Browns of Baltimore, Doerflinger argued the overall effects of consumer revolution accounted largely for the fact that 79 percent of 1780s Philadelphian merchants

---

[46] Ibid., 29–35.

[47] Matson, "Damned Scoundrels," 407–411.

[48] Ibid., 408.

[49] Ibid.

specialized in only one sector of trade: import, exports, or shipping. The outliers, however, give considerable insights into the desires and rationales of eighteenth- and nineteenth-century businessmen. Merchants like Fitzsimmons, desirous of large profits with low risks, captured profit from high trade in a single area suited to their personal network and talents. Fitzsimmons's peers who were willing to venture more capital spread their wealth with greater abandon.[50]

Merchants of smaller means, on the other hand, played to the whims of their markets and credit ratings. These merchants came closer to the dependent relationships argued by Wallerstein. Their standing among the "peripheral" peers gave no leverage to negotiate with creditors who mainly resided in the core. Like Fitzsimmons, they chose smaller risk ventures, but their decisions were based on necessity over choice. Without capital surplus or options for specialization, smaller merchants felt forced to gamble in trade sectors outside their comfort zone.[51] This situation will be discussed in chapter 3 with examples from St. Louis. Two examples from St. Charles show how these small merchants often diversified their activities in the provisions sector for short term gains. They did so only when accumulation of specie was not critical to their primary business goals.

In the colonial Chesapeake, Jacob Price tracked the development of modern economies of scale and clearly showed two-way effects between the core and periphery. From the seventeenth to the eighteenth centuries, wealthy British exchange houses

[50] Doerflinger, "Commercial Specialization," 35–47.

[51] Ibid.

directed capital investment to favored colonial planters. Foreign investment allowed certain planters to consolidate their output. As a few Chesapeake planters accumulated large, shipload quantities of tobacco, British exchange houses justified the risks of purchasing or chartering vessels in increased numbers. The guarantee of large shipments set off a cycle of higher profit and more investment that consolidated wealth within certain British exchange houses.[52]

Between 1640 and 1775, the number of English/British tobacco importers dropped from 346 to 66. Similarly, the average firm in 1640 traded 3,400 pounds of tobacco, but by 1775 the average increased to 668,000 pounds. The reduction of firms reflected a dramatic disparity within the wealth pyramid of exchange houses. Between 1719 and 1775, the number of firms handling over one million pounds of tobacco increased from five to twelve. Firms at the bottom of the pyramid (those importing under 50,000 pounds) previously captured 29 percent of all imports in 1676, but by 1719 they captured 2.4 percent and by 1775 their imports accounted for only 0.5 percent of the trade.[53]

The overall trend from 1676 to 1775 revealed a quadrupling of British tobacco imports (11 million pounds to 44 million), while the number of trading firms or individuals dropped about nine-tenths (573 to 66) with the average importer trading 35 times more tobacco.[54] All this relied significantly on the influences, desires, and

---

[52] Jacob M. Price and Paul G. E. Clemens, "A Revolution of Scale in Overseas Trade: British Firms in the Chesapeake Trade, 1675–1775," *Journal of Economic History* 47 (Mar., 1987): 23–24.

[53] Ibid.

[54] Ibid.

cooperation of Chesapeake planters. Although the capital flowed from the core, personal ambition sparked fundamental changes within the Chesapeake colonies. The cross-Atlantic relationships appeared more as mutual co-dependencies than asymmetrical trade hierarchies. Price's work greatly contributed to the historical and economic discussion of the twofold effects produced by the modern economy of scale. Implicit in the following discussion of modern economies of scale is the twofold process of increased production output with corresponding decrease in the entities controlling and profiting from that growth.

Although the staple thesis described processes similar to other theories discussed above, the critical distinction was the motivation for settlement. Lowered costs of transportation generally resulted from technological innovation, not beholden to increasing population pressures. Similarly, rises in market demand were not based solely on increased population. For instance, Britain's four largest imports (sugar, rum, tobacco, and coffee) from its North American and the West Indian colonies were in demand based on population preferences rather than population subsistence needs. Whereas Malthusians saw population increase as more "mouths to feed," staple theorists saw more "hands in the field." Although staple theorists did not ignore the truism that increased populations have higher subsistence needs, they saw colonial expansion determined by cultural processes rather biological ones. The underlying process was the economics of mercantilism.

Mercantilism drove European influence throughout the world. McCusker and Menard reminded scholars that, although giving it a label implies formality, mercantilism

never achieved a formal body of theoretical thought.[55] The principles of mercantilism were not articulated fully until 1776 in Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations*. Although many scholars credited Smith for originating important concepts to the staples theory, historian Harold Innis in the 1930s formulated the disciplinary approach in current use.[56] So while it is tempting to envision sixteenth- through eighteenth-century merchants consciously applying principles of mercantilism in their business ventures, the reality was quite different. Unlike modern economists who can analyze formal principles of capitalism, those who controlled European colonial affairs had "little more than a shared perception … that foreign trade could be made to serve the interests of government – and vice versa."[57] In brief, mercantilism developed under co-dependent relationships between merchants and the European nobility. Nobles sought to maintain and extend their power. Accomplishing their goals required money foremost. For daily expenditures, governments relied on revenues from import and export duties. During emergencies they borrowed money from wealthy merchants. Merchants, in turn, relied on nobility to lower risks in colonial ventures by protecting overseas colonies and shipping lanes, and through minimizing domestic and foreign competition through trade regulations and charter agreements.[58]

For example, the three largest capital holders in Britain were also the nation's biggest

---

[55] McCusker and Menard, *The Economy of British North America*,35–50.

[56] Harold Innis, *The Fur Trade in Canada: An Introduction to Canadian Economic* History (New Haven Conn., 1930); see ibid., 19.

[57] McCusker and Menard, *The Economy of British North America*, 35.

[58] Ibid.

lenders. In 1742, the Bank of England lent Britain £1.6 million. The bank withheld interest charges in exchange for a twenty-three year extension of its charter. To gain similar government protection, in 1760 the South Sea Company financed 27 percent of Britain's national debt while the East India Company contributed an additional 4 percent.[59]

For nobles, then, catering to the interests of merchants (even at the expenses of higher-priced / poorer-quality goods) ensured a steady flow of bullion into royal coffers. Additionally, nobles who increased their country's trade revenues did so at the expense of other European powers.[60] In a sense, nobles played a zero-sum game where all the world's wealth was like tokens. Because the number of tokens could not increase, any additions to a country's holdings meant equivalent subtractions to opponents' total pieces. McCusker and Menard stated it thusly: "strength not only replaced weakness but

---

[59] David Hancock, "'Domestic Bubbling': Eighteenth-Century London Merchants and Individual Investment in the Funds," *Economic History Review*, new series 47 (Nov., 1994): 684. For perspective, when the US Department of the Treasury released its national deficit report for September 2006, the largest corporate shares of US public debt were held by foreign governments (53%), American insurance companies (4.1%), and American banks (2.7%). The difference between the eighteenth century and the Common Era was the transparency of private finance. When British companies provided capital to the state, they financed their loans through public annuities, which returned small but guaranteed returns. When the United States Government spent more than it received in taxes, the US Department of the Treasury issued its own annuities in the form of bonds, securities, etc. In a sense, the US debt was available for purchase by any foreign or domestic individual/organization. Although the links between government debt and private business interest still exist, the modern management of state finances is much less explicit than in past centuries. The above statistics were referenced from US Department of the Treasury, *Ownership of Federal Securities* (Washington DC, 2007); Available online from US Department of the Treasury, Financial Management Service Bureau, website www.fms.treas.gov/bulletin/index.html.

[60] McCusker and Menard, *The Economy of British North America*,35–50.

also did so at the expense of one's enemy."[61] Mercantilism provided the explanation for why colonial markets exported particular products in favor of others.

The fiscal interests of the state frequently conflicted with the economic development of colonial trade. Because governments required taxes, their fiscal interests almost always won out over private interests at home or in the colonies. The British government, for instance, prohibited importing colonial wheat and flour to protect their domestic agriculture. The French mandated similar prohibitions against colonial rum imports. By prohibiting certain colonial imports, European governments controlled the range of economic diversity within their colonies. As a result, colonists produced export items for markets dependent on western products like, tobacco, chocolate, and tropical dyes.[62] Although agricultural products such as wheat and flour were important exports for colonies like Pennsylvania, New York, and New Jersey, these commodities were traded through other colonial ports in exchange for ones valued in domestic British markets. This system strongly encouraged the nature of production and the linkages between each area of the British Empire.

Prohibitions and import duties also played heavily in the mercantilist component of colonial economics. Government rationale for controlling trade frequently centered on foreign policy. During the eighteenth century, for example, the British government routinely subsidized naval-store production in the pine-rich colonies of North America. They did so to diminish the Royal Navy's dependence on Baltic countries whose access

---

[61] Ibid., 36.

[62] Price, *The Atlantic Frontier*,18–42.

to timber made them lead suppliers of stores like masts and pine tar.[63] The British Navigation Acts represented the *par excellence* of mercantilist strategies. These were a series of trade restrictions first enacted in 1651 and further adjusted throughout the colonial period. The first act stipulated that all items imported into England be carried aboard English ships. A second act in 1660 extended the earlier provision and required certain colonial items be exported only to England or its colonies. Known as "enumerated commodities," these regulated products were, unsurprisingly, items such as sugar, tobacco, coffee, and dyes. An additional act in 1663 stipulated that all European goods must pass through English ports prior to importation to the colonies.[64]

The Navigation Acts critically served to insulate British merchants from their Dutch rivals. They greatly multiplied royal wealth serving the British monarchy's ambitions. From a colonial perspective, American scholars have emphasized the impediments trade regulations placed upon colonists. The continued strengthening of the acts, especially in 1673 and 1696, gave testament to England's inability to wield absolute control over its colonial affairs. McCusker and Menard argued, however, that historians tended to focus too narrowly on the negative aspects of the Navigation Acts. Just as England's merchants were protected by the trade regulations, so too were its colonists.[65]

Protection from Dutch and other European competition afforded colonists, especially in northern colonies, three profitable advantages. First, less foreign competition

---

[63] Ibid., 29–30.

[64] McCusker and Menard, *The Economy of British North America*, 46–50.

[65] Ibid.

increased domestic colonial demand for New England and mid-Atlantic manufactures. Second, the lowered demand across the empire gave northern colonists an advantage in trading manufactures to the West Indies. Northern colonists exchanged their wares for West Indian goods for credits that had value in English markets. These exchanges allowed colonists to trade in English markets without producing items in direct demand there. Third, northerners quickly learned to make large profits in service industries like shipping that were no longer controlled by Dutch interests. Largely because of the Navigation Acts, then, "New Englanders became the Dutch of England's empire."[66] As economic historians formulated sound arguments for colonial manipulation of English/British trade regulations, the core-periphery relationship appeared less totalitarian.

Wallerstein's critics resounded most loudly to his characterization of the dominance of core areas over the periphery. Many anthropologists and historians provided strong evidence for varying degrees of independence and influence flowing from the periphery to the core.[67] Although not responding specifically to Wallerstein, McCusker argued that North American colonists agitated their British counterparts in "most every sphere of

---

[66] Ibid., 92.

[67] See William Roseberry, "Political Economy," *Annual Review of Anthropology* 17 (1988): 161–185; Wilma A. Dunaway, *The First American Frontier: Transition to Capitalism in Southern Appalachia,1700–1860* (Chapel Hill, 1996); Allan Kulikoff, "Households and Markets: Toward a New Synthesis of American Agrarian History," *William and Mary Quarterly*, 50, no. 2 (1993): 342–355; Kent G. Lightfoot, Thomas A. Wake, and Ann M. Schiff, "Native Responses to the Russian Mercantile Colony of Fort Ross, Northern California," *Journal of Field Archaeology* 20 (1993): 159-179.

activity."[68] According to McCusker, earlier historians dismissed anti-colonial sentiments as "puffery or self-pity" among British merchants, but more recent scholarship showed North American colonists controlled shipping in many sectors of the British Empire.[69] For the vast majority of exports to Britain, colonial merchants charged higher freight rates than the wholesale cost of goods (except in most cases for tobacco).[70]

Throughout the eighteenth century, shipping-related industries flourished in North American colonies. By the 1770s, colonists constructed and likely owned nearly one-third of British Empire shipping. This was an impressive accomplishment and meant North American shippers were responsible for about 500,000 tons of the 1,500,000 total measured imperial tonnage. The value of this tonnage alone, required over £2,500,000 sterling in capital investment showing the power of colonial economies to generate large investment surpluses. Additionally, Philadelphia's merchants provided about 20 percent of the total colonial share in shipping.[71]

As city investors contributed increasing amounts of capital into freight handling, foreign capital decreased in volume. In the 1720s, Pennsylvanians owned just less than half the registered tonnage in Philadelphia, whereas their British counterparts owned just over one-third. By the 1770s, the trend had shifted as Pennsylvanians owned more than

---

[68] John J. McCusker, "Sources of Investment Capital in the Colonial Philadelphia Shipping Industry," *Journal of Economic History*, The Tasks of Economic History 32 (Mar., 1972): 146.

[69] Ibid.

[70] Price, *The Atlantic Frontier*,18–42.

[71] McCusker, "Sources of Investment Capital," 147.

three-quarters of Philadelphia's registered tonnage (increase of 59.4 percent), whereas British investors owned just over one-eighth (decrease of 62.6 percent).[72] The take-over occurred even as registered tonnage in Philadelphia grew by 42 percent from 1751 to 1775.[73] The cargo industry, therefore, was no small enterprise and could be the source of great wealth for all merchants in the modern era.

Historians Jacob Price and Paul Clemens detailed the emergence of a new colonial economy of scale from the effects of shipping. The process they described began as larger planters sought higher prices for their overseas tobacco sales. In the 1650s, a handful of these planters avoided colonial middlemen by shipping directly to exchange houses in London and Bristol. By the 1690s, a substantial number of planters routinely shipped directly to English factors and commission merchants.[74]

A shift occurred as more exchange houses emerged in England making it difficult for firms to passively receive colonial freight. Ambitious London and Bristol merchants secured tobacco supplies by accepting consignments directly from colonial planters. Wealthy firms did so by receiving European and Asian goods on one-year credit from their suppliers. They transferred this credit to their corresponding Chesapeake planters for guaranteed consignments of large shipments before payments were due. As a result, large English firms began a cyclical pattern of trade dominance. As they established their ability to reliably secure colonial shipments, their credit ratings improved and allowed

---

[72] Ibid., 153.

[73] Thomas M. Doerflinger, *A Vigorous Spirit of Enterprise: Merchants and Economic Development in Revolutionary Philadelphia* (Chapel Hill, NC, 1986), table 13, 174.

[74] Price and Clemens, "A Revolution of Scale," 6–7.

larger capital loans to secure even more shipments.[75]

Throughout the seventeenth century, however, direct shipments from planters accounted for less than half of the Chesapeake trade. The main obstacle for colonial tobacco planters was the size of their production. English commission merchants routinely favored consignments from the colonial planters, though few had the resources to accept them. The guaranteed delivery of tobacco eliminated their need to search out shipments across the Atlantic and reduced wholesale costs. The most serious drawback to accepting consignment futures was the risk involved with shipping. Smaller Chesapeake planters, working with North American middlemen, delivered their freight to independent forwarding houses or ship owners stationed at eastern ports. These smaller firms assumed the cargo risk and sold tobacco to larger firms at home. Although these smaller shipments incurred middlemen price inflation, English houses avoided risks associated with delays in production or losses during shipping. When an English house purchased directly from colonial producers, they assumed more risk because they now were forced to purchase or charter a vessel for the Atlantic voyage. For example, when the eighth largest London tobacco importer, Barnaby Dunch, died in 1680, he held shares in nine vessels and owned one outright – a feat matched by few.[76]

Because most firms could not purchase or charter entire vessels, only a few with large capital surplus or favorable credit standing afforded the expenses of ship ownership. In turn, they justified increased risk only by negotiating with large planters capable of

---

[75] Ibid., 22.

[76] Ibid., 7.

producing full shiploads of cargo. Regardless of how large the Chesapeake tobacco production grew as a whole, no English house wanted to risk its ship to sit idle in a colonial port for days or weeks accumulating fractional sized ship loads from mid-level planters. To profit from ship ownership, a house needed guarantees from a single planter (or a small consortium) that a full load would meet their vessel on or near arrival. This meant that exchange houses directly benefited from capital investments in select colonial plantations. As the large exchange houses became dependent on large planters, the planters in turn, depended on foreign capital to consolidate regional production. As discussed earlier, consolidation of Chesapeake tobacco production correspondingly affected developments within Britain.[77]

From the late seventeenth to the early eighteenth centuries, the amount of tobacco exports to Britain increased while the number of exchange houses decreased. Firms atop the wealth pyramid expanded their trade volume and successfully blocked smaller houses from capturing exchange goods. Without the mutual wealth benefits between England and the Chesapeake, both production and sales likely would have expanded in direct relation to the number of planters and the number of exchange houses. Tapping a new economy of scale funneled growth in both sectors to only a few parties while it discouraged upstart competition on either shore of the Atlantic. As Price and Clemens noted, by the eve of the Revolution the co-dependency of wealth created a "complex chain of credit" linking the interests of Chesapeake planter and British exchange

[77] Ibid., 6–22.

houses.[78]

Accounting for colonial influences on economic growth within the core, based solely on disparities of export to import values, ignored the importance of credit to the whole colonial system. Even at times when colonial products were cheap and available in European markets and did not stimulate the range of diversification as in an American metropolis, the role of credit had widespread internal core effects. Credit also affected relations between other core states.

Credit factored largely in the commercial success of England over the Netherlands. Price indicated the distress Britain's flexible and generous credit systems created among other European nations with an inter communication of the Amsterdam exchange house, Hope & Co. The house's partners lamented the uneven credit lines fostered by Britain's mercantilist policies, stating that the British "are of all nations the least difficult to treat with, and the most averse, through motives of personal interest, from distressing their neighbours; and thence partly their unbounded trust to one another."[79]

The free circulation of credit within the British Empire linked large business interests at home with those of colonial merchants and producers. By the 1720s, these links were clear to author Daniel Defoe, who commented that wealthy "Wholesale Men of *London* . . . [who] give Credit to the Country Tradesmen and even to the Merchants themselves, so that both Home Trade and Foreign Trade is in a great measure carried upon their

---

[78] Ibid., 22.

[79] John Hope, *Letters on Credit*, 2d. ed. (London, 1784): 9–10, quoted in Price, "What Did Merchants Do?" 273.

Stocks."[80]

European exports marked the first leg in the credit chain. The exported goods in a sense provided a physical measure for the growing inter-connections within Britain's empire. For example, British exports to its colonies increased sevenfold from 1699 to 1774. At the beginning of this period, England exported 19 percent of its goods to its colonies. By the end, however, it exported 60 percent to its colonies. For North America alone, the export trade increased from 6 to 26 percent.[81] In mercantilists' perspectives, this growth not only increased home wealth but also decreased foreign prestige and reflected the vigorous pulse of the British economic health.

In other instances, however, government regulations exerted negative impacts on the domestic economy. Duties on British colonial imports increased retail prices in home markets 200–300 percent over wholesale. Phyllis Deane and William Cole estimated that between 1765 and 1774, English consumers spent £12 million sterling per year on transatlantic colonial products.[82] Even though only about a third of British imports originated with the Americas and West Indies, a single English consumer spent about £1 13s per year on these items alone. Deane and Cole's most liberal estimate set the average Englishmen's yearly income at about £18. Duties from transatlantic imports, therefore, cost average Englishmen a noticeable amount of his income.

---

[80] Daniel Defoe, A *Brief State of the Inland or Home Trade of England* (London, 1730): 21–22, quoted in Price, "What Did Merchants Do?" 274.

[81] Jacob M. Price, "What Did Merchants Do?" 274.

[82] Phyllis Deane and William A. Cole, *British Economic Growth, 1688–1959: Trends and Structure*, 2d ed., University of Cambridge Department of Applied Economics Monographs, viii (Cambridge, UK, 1967).

Between 1723 and 1775, the French government took a more extreme position with its tobacco duties. It allied with monopolist French tobacco producers to prohibit domestic and colonial competition. The French monopoly failed to meet its fellow citizens' tobacco demand, which opened the market to British tobacco imports priced hundreds of times over wholesale by duties or smuggling costs.[83]

Most colonists' debts to Britain resulted from balances on trading accounts and other commercial transactions. Some British firms, however, directly invested in American colonies either through buying stock in American companies, or through direct ownership of properties like plantations, warehouses, wharves, and ironworks.[84] The real source of colonial wealth, however, came from "invisible" industries like shipping that produced no tangible trade products but offered an indispensable service to trade as a whole.

From colonial history I can add to the relationships gained from Marx, Wallerstein, and Wolf. I arrive at much clearer understanding for the role of the "invisible" trade. I see this as providing clues to the uniquely American encounter with the modern world. Because this invisible trade manifested in transportation, new methods of shipping created by steamboatmen factored largely in the development of the West as well. I am still concerned with changes in how people made things and who benefited most from their making, but now I look for changes to how people moved those things around.

---

[83] Price, *The Atlantic Frontier,*18–42.

[84] Ibid., 37.

II. THE UNITED STATES TRANSPORTATION REVOLUTION

For over a century, historians, folklorists, and literary authors have chronicled vivid, fanciful descriptions of the Missouri River. Its long winding courses and notoriously shallow riverbed made snare-like river channels of muddied dark-brown water whose intimates chided it as "a river too thick to drink, but too thin to plow."[1] In 1882, the citizens of Brotherton, Missouri, across the river the from St. Charles, felt the Missouri's power when in it abruptly changed course and devoured the sandy bluff beneath their town (figure 1). Within a few days the Missouri swallowed all traces of the riverside community. They, like many others, learned that the Missouri River commands respect from the first encounter, and maintains subordination through spiteful examples to those who had, for a brief instant, forgotten that she is as wild as any charted water anywhere.

Though the rough and wild nature of the river is well documented in scores of folk tales, personal narratives, and biographies of her more fortunate boatmen, the Missouri River does have another, less sinister, personality. For merchants and farmers, whose economic viability depended upon land-based agriculture, the river supported their dire transportation needs for large bulky farm products in a way superior to land travel.[2]

---

[1] See Richard E. Oglesby, *Manuel Lisa and the Opening of the Missouri Fur Trade* (Norman, OK, 1963), 12.

[2] Phil E. Chappell, *A History of the Missouri River: Discovery of the River by the Jesuit Explorers; Indian Tribes Along the River; Early Navigation and Craft Used; the Rise and Fall of Steamboating* (Kansas City, MO, 1911); Annalies Corbin, *The Material Culture of Steamboat Passengers : Archaeological Evidence from the Missouri River* (New York, 2000); Michael Gillespie, *Wild River, Wooden Boats: True Stories of Steamboating and the Missouri River* (Stoddard, WI, 2000); Joseph Mills Hanson, *The*

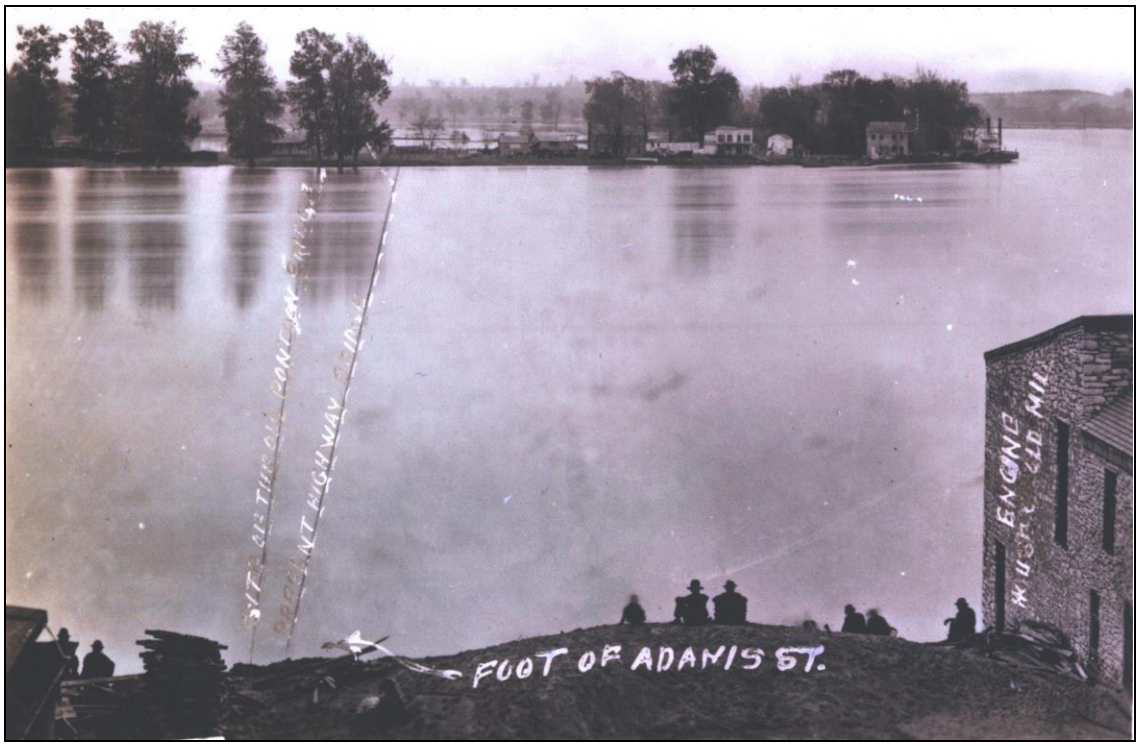


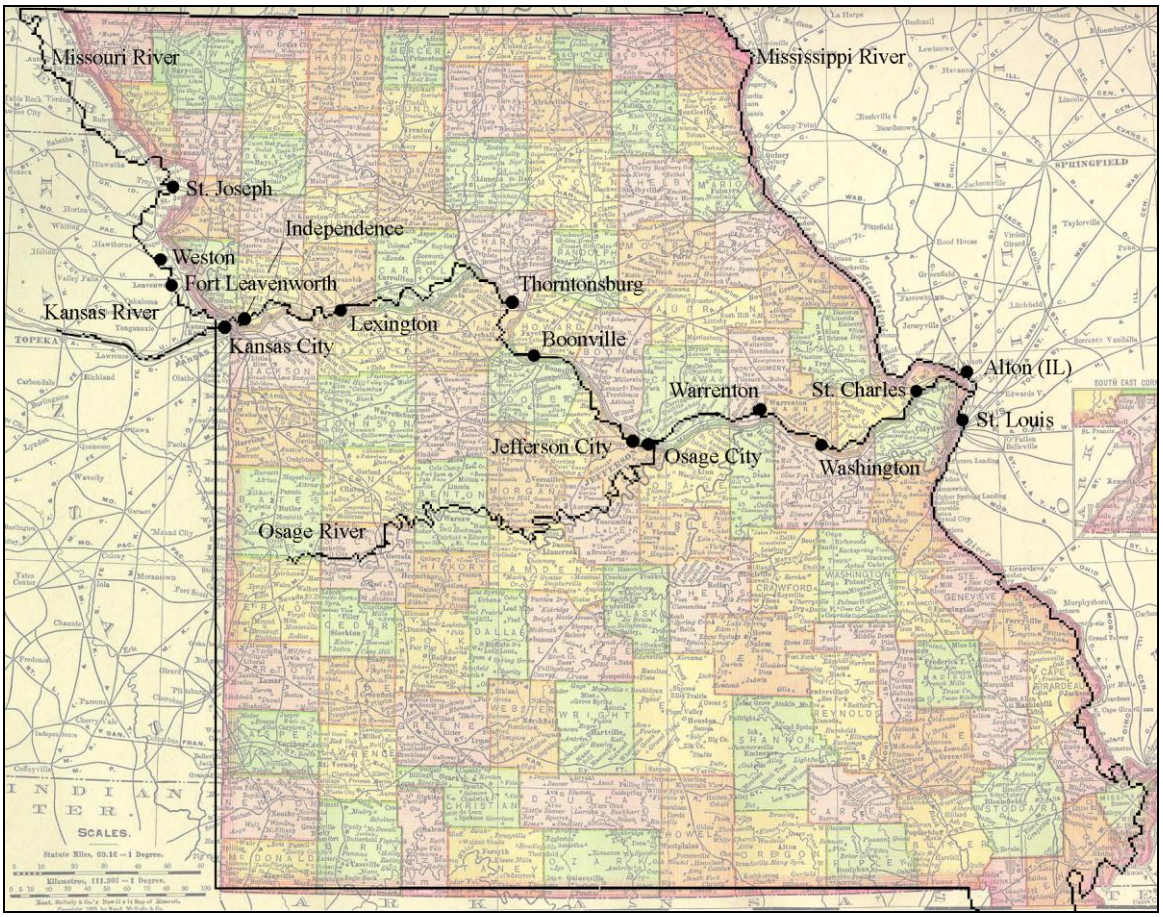
Fig. 1. Rudolph Goebel, Last Days of Brotherton, across the Missouri River from St. Charles, The Foot of Adams Street. (John J. Buse Collection (JJBC), folder 173: St. Charles – Panoramic Views, Western Historical Manuscript Collection, University of Missouri, Columbia.) This photograph by Rudolph Goebel records the final days of Brotherton, near the time of its destruction from the changing course of the Missouri River.

Ironically, those individuals most tethered to the products of the land, were correspondingly most dependant upon water transportation. With this interdependence of agricultural and inland river technology in mind, the following chapter argues that lower Missouri River communities depended upon steamboats for access to the grain, flour, wheat, hemp, and tobacco markets at St. Louis. The central argument asserts that while St. Charles lay in close proximity to the major Mississippi River port of St. Louis, the

---

Conquest of the Missouri: Being the Story of the Life and Exploits of Captain Grant Marsh (Mechanicsburg, PA, 1909); Donald Dean Jackson, *Voyages of the Steamboat Yellow Stone* (New York, 1985).

nation-wide transportation revolution, actually bypassed St. Charles in preference for upriver towns lying farther from St. Louis. As steamboat crews brought central and western Missouri towns like Independence, Boonville, Lexington, and Weston in from the frontier, their reluctance to service St. Charles relegated her agriculturalists to the figurative hinterland of the Missouri Valley (map 1).



Map 1. Location of Select River Towns in Missouri, 1860. (Source for underlay, the 1895 US Atlas Missouri, available online www.livgenmi.com/1895/MO/state.htm.) Note the stability of the upper Mississippi River compared to the Missouri. Also note the change in stability between the upper and lower Mississippi River after joining the Missouri River.

Frederick Jackson Turner believed American expansion was more dynamic than population statistics projected.[3] For Turner, the "history of the occupation of the Mississippi Valley is the history of the colonization of a region far surpassing in area the territory of the old thirteen states. The explanation of this movement into the interior is a simple one. It was, indeed, but the continuation of the advance of the frontier which had begun in the earliest days of American colonization."[4] Turner saw the statistics of westward expansion as the platform from which to arrive at a deeper social history of the Westerners. Turner's students coined the process of western colonization as the "frontier hypothesis" that relied on the activities of two types of people. The first backwoodsmen to venture out into the wilderness instilled great esteem for Turner. Following behind this first wave was the pioneer farmer, equally admirable to the backwoodsmen but for different reasons. In Turner's eyes, the pioneers brought the first signs of civilization:

> Behind the type of the backwoodsman came the type of the pioneer farmer. Equipped with a little capital, he often, as we have seen, purchased the clearing, and thus avoided some of the initial hardship of pioneer life. In the course of a few years, as sawmills were erected, frame-houses took the place of the log-cabins; the rough clearing, with stumps, gave way to well-tilled fields; orchards; livestock roamed over the enlarged clearing; and an agricultural surplus was ready for export. Soon the adventurous speculator offered corner lots in a new town-site, and the rude

---

[3] Frederick J. Turner, "The Significance of the Frontier in American History," *Annual Report of the American Historical Association for the Year 1893* (1894): 199–227.; Gregory H. Nobles, "Introduction: Reopening the Frontier," in *American Frontiers*, ed. Gregory H. Nobles (New York, 1997), 3-16; William W. Savage Jr. and Stephen T. Thompson, "The Comparative Study of the Frontier: An Introduction," in *The Frontier: Comparative Studies*, vol. 2, ed. William W. Savage, Jr. and Stephen T. Thompson (Norman, OK, 1979), 3–16.

[4] Frederick J. Turner, "The Colonization of the West, 1820–1830," *American Historical Review* 11 (Jan., 1906): 306.

beginnings of a city were seen.[5]

Although Turner's critics were numerous, they could never fault him for uninspired prose. Even so, he was correct on several general points. For instance, he realized the rapid changes to Western lives after the invention of the steamboat. Turner believed "the introduction of steamboats had revolutionized transportation conditions in the West…This explains some of the extension of [Western] settlement, for it was now possible to carry supplies up the river-courses and to secure a better outlet for agricultural products."[6] Turner, however, was not the only historian to realize the power of technological improvements at the start of the nineteenth century. George Rogers Taylor defined the transportation revolution as a progression of technological improvements aimed at quickening and cheapening the movement of cargo within the United States.[7] At its heart, however, the revolution eliminated nearly all remnants of a colonial economy from the eastern states but transplanted them along the new "coastline" of the Ohio-Mississippi river system. By the end of the War of 1812, merchant capitalists in urban centers like Philadelphia, New York, and Boston, who traditionally engaged in nearly every aspect of commerce, gave way to more specialized classes of merchants.

Shipping played a vital role in the specialization of colonial economies. Thomas Doerflinger quantitatively analyzed specialized shipping merchants in Philadelphia from

---

[5] Ibid., 315.

[6] Ibid, 306.

[7] George Rogers Taylor, *The Transportation Revolution 1815–1860* (White Plains, NY, 1951); see also Harry Sinclair Drago, *Roads to Empire: The Dramatic Conquest of the American West* (New York, 1968).

1756 to 1774. He demonstrated a pattern of expanding dissociation between shipping and trading activities among colonial Philadelphians. Merchant incomes from shipping derived from two direct sources: owning all or part of a vessel or managing a consigned vessel owned by others. In the former case, a merchant used a vessel for his trade exclusively and/or sold cargo space for customer freight. In the latter, he profited from commission sales of freight arrangements and from tending to repairs and crew provisions.[8]

Each of these activities left a distinct trace in Philadelphia port records. Merchants who purchased even a share of a vessel appeared in the Pennsylvania Ship Register, while those who handled commission freight appeared in the Tonnage Duty Book for Philadelphia's port. Although the nature of colonial records prohibited Doerflinger from precisely separating commission merchants from ship owners, a clear trend existed between merchants' involvement in any shipping activity. Between 1756 and 1761, 62 percent of Philadelphia merchants shipped freight as either owners or commission agents. In contrast, between 1765 and 1774, only 55 percent of merchants acted in either or both capacities. More revealing, however, was that 6 percent of the city's merchants from 1756 to 1774 commissioned an impressive 38 percent of total port freight. Conversely, only 13 percent of the city's merchants owned about 50 percent of measured ships' tonnage. Doerflinger's analysis showed that only about half of Philadelphia merchants engaged in shipping of any kind, and the few wealthy firms shipped intensively. Colonial Philadelphia exemplified the transportation service industry's power to capture and

[8] Thomas M. Doerflinger, "Commercial Specialization in Philadelphia's Merchant Community, 1750-1791," *Business History Review* 57 (Spring, 1983): 34.

control capital.

Taylor attributed the growth of this new merchant class mainly to improvements in transportation on both land and water.[9] When later merchants moved to the West on the flood of expansionism in the 1830s, they encountered an economic environment more familiar to their colonial predecessors.

In colonial ports, an importer (known as dry goods merchant) received finished goods like cloth and hardware. These items sold quickly to other colonial artisans, shopkeepers, and farmers, not for cash, but for extended credit of several months. Even though dry goods merchants preferred to pay their suppliers with cash, they often had to accept bills of exchange drawn on British firms by other colonists. These bills originally resulted from shipments of provisions like tobacco, sugar, dyes, or foodstuffs sent from the colonies to a British exchange house. The bills for colonial foodstuffs, however, did not represent direct shipments from North America to England proper. Because British exchange houses purchased these items cheaper in their home markets, provision merchants shipped foodstuffs to satellite branches of British houses stationed in the Iberian Peninsula and Madeira, or to other West Hemisphere colonial ports in exchange for products valued in England. Provisions like Chesapeake tobacco or West Indies sugar were sent directly to British home markets. Colonists who purchased foodstuffs paid for them by drawing on their British contacts to transfer their credit from a tobacco shipment to the debit account of the foodstuff exporter. The tobacco exporter then sent the exchange bill to the foodstuff exporter thereby balancing their account. The bill

[9]Taylor, *The Transportation Revolution*, 3.

represented a contract to share a certain percentage of profits gained from the sale of stipulate goods.[10]

The English innovated this system by allowing the bearer of an exchange bill to discount and transfer the original percent. Hypothetically, a tobacco exporter who was guaranteed 5 percent retail value from his shipment might sell a flour exporter 3 percent of the retail. The negotiation became a wager between the current value of flour and the future value of tobacco. The provisions merchant returned the bill to the exchange house (from which he likely purchased dry goods) to cancel his debt. In the rare event he had no debt, a merchant sold bills to other colonists with debt. In the latter situation, the provision merchant could discount the bill yet again, further dividing future profit. The degree a holder discounted a bill depended on the exchange rate set by the amount of colonists needing bills to clear debts. When demand rose, the exchange rate soared. This in turn heightened demand for stable currency like specie, which further compounded the scarcity of gold and silver (the only reason for accepting bills in the first place). Merchants unable to find either bills or specie sent their creditors provisions valued in England and known as a remittances. When the need for a remittance originated from inflated prices for easily obtained products like tobacco and sugar, merchants sought other valued products.[11] In New England and the Mid-Atlantic, for example, alternative

---

[10] Thomas M. Doerflinger, "Commercial Specialization"; Thomas M. Doerflinger, *A Vigorous Spirit of Enterprise: Merchants and Economic Development in Revolutionary Philadelphia* (Chapel Hill, NC, 1986).

[11] Jacob M. Price, "What Did Merchants Do? Reflections on British Overseas Trade, 1660–1790," *Journal of Economic History* 49, The Tasks of Economic History (Jun., 1989): 281.

remittances generally consisted of iron, which was difficult to obtain and expensive to ship. The colonial exchange system resembled a triangular trade carrying both physical goods and debts around the Atlantic's rim.[12]

Although the sources and destinations for provisions varied for the colonists and mid-nineteenth-century merchants, they both succumbed to the same external market forces from their creditors. Chapter 3 will show how two New England brothers traveled to St. Louis in the 1830s to produce tin ware. They found an environment that forced them to operate much as colonial merchants had a century earlier. In order to sell their goods, they eventually found products valued in the East as remittances. In broad terms, both their notions of the "East" and of items valuable to remit differed from their colonial predecessors. The critical aspect, however, lay in the broader process. It was not the particulars of space and time that wove threads common between early colonists and later westerners; instead, it was the fundamental universality of their problems and solutions.

Considering the western United States simply as a frontier, however, obscures this area's resemblance to a colony. As Kenneth E. Lewis demonstrated in his work concerning the settlement of Michigan in 1815–1860, the process of frontier expansion was inseparable from agricultural colonization.[13] As physical borders expanded, the newly settled periphery relied on agricultural production for its economic survival.[14]

---

[12] Doerflinger, "Commercial Specialization," 28–32.

[13] Kenneth E. Lewis, *West to Far Michigan: Settling the Lower Peninsula, 1815–1860* (East Lansing, MI, 2002).

[14] See also, Allan Kulikoff, "Households and Markets: Toward a New Synthesis of American Agrarian History," *William and Mary Quarterly* 50, no. 2 (1993): 342–355;

Lewis considered the settlement of the western United States as the manifestation of the Europe's agricultural expansion beginning in the fifteenth century. By viewing the nineteenth-century growth of the United States as a part of a continuum of European colonization, therefore, several aspects of the western economy are elucidated.

Throughout the first half of the nineteenth century, the western economy depended on the East.[15] Even up to the twentieth century, however, eastern colonial America depended on an cross-Atlantic economy. Lewis pointed out that "as the frontier incorporates new lands, the process of colonization follows an evolutionary sequence in the sense that the pattern of change once occurring in the center of the newly settled area was later repeated along its periphery."[16] The process of economic replication in the expanding frontier, justified viewing the West as a figurative United States colony. Similarly, it gave an explanation for the actions, and subsequent reaction, to the western economy that eastern-born merchants exhibited after emigrating westward in the early nineteenth century. The spread of modern economy of scale that had begun in the East during the 1780s did not reach the western states until the 1830s.

By the 1780s, a new economy of scale separated the two activities among traders in eastern states. After the Revolution, Doerflinger found it common for Philadelphia dry

---

Allan Kulikoff, *The Agrarian Origins of American Capitalism* (Charlottesville, VA, 1992); Christopher Clark, "Rural America and the Transition to Capitalism," *Journal of the Early Republic* 16, no. 2 (1996): 223–236.

[15] William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York, 1991); Wilma A. Dunaway, *The First American Frontier: Transition to Capitalism in Southern Appalachia, 1700–1860* (Chapel Hill, NC, 1996).

[16] Lewis, *West to Far Michigan*, 4.

goods firms to keep 300–400 accounts open.[17] Although this was similar to earlier importers like New York's Christopher Bancker, who in the early eighteenth century, extended credit to over 200 individuals, and to later 1770s importers like William Alexander who kept over 300 accounts open with country producers, a different pattern arose after the Revolutionary War.[18] After 1783, even large merchants like the prominent provision traders, Stephen Girard and Benjamin Fuller kept open only 85–165 accounts.[19]

An eastern merchant tried to keep the smallest number of accounts open as possible. When he arrived in the West, however, he discovered that a widespread lack of currency required him to extend credit to many customers. Instead of specie, a merchant accepted bills of exchange or local products to ship east for remittance. Those arriving in the 1830s found these practices anachronistic. For example, Chapter 3 relates the experiences of a St. Louis dry goods merchant during the 1830s and shows his displeasure to act as provisions exporter, shipper, and money lender. Even though eastern merchants engaged in these diverse business enterprises up to the late eighteenth century, Doerflinger argued this type of diversification was becoming rare in the East by the beginning of the nineteenth century. From an economic viewpoint, then, emigrating west in early to mid-nineteenth century was akin to emigrating from Britain to eighteenth-century colonial America. As long as the western United States remained

---

[17] Doerflinger, "Commercial Specialization," 40.

[18] Cathy Matson, "'Damned Scoundrels' and 'Libertisme of Trade': Freedom and Regulation in Colonial New York's Fur and Grain Trades," *William and Mary Quarterly*, 3rd ser. 51, Mid-Atlantic Perspectives (Jul., 1994): 410.

[19] Doerflinger, "Commercial Specialization," 40.

physically isolated from the East, its inhabitants remained both spatially and economically separated from their "home country," the United States proper.

A turning point arrived with the great innovation of steampower that shortened the gap between the eastern and western states by bringing two contrasting economies together. This chapter steps back to define Taylor's transportation revolution and then narrows the broader national developments to the western river steamboat, and then finally to the lower Missouri River. This chapter provides the context for the narrow scope of the following chapters.

The hallmark of the transportation revolution was the overall decrease in freight rates across the United States. In 1815 as the era dawned, shipping one ton of freight 3,000 miles (4,828 km) westward across the Atlantic Ocean typically cost about $9. For that same $9, however, one ton of freight across land routes inside the United States could be transported only 30 miles (48 km).[20] The effect of such differing rates severely constricted travel within North America, so that the distance between Europe and New England was, from an economic perspective, shorter than between Philadelphia and Pittsburgh. By the era's end in 1860, construction of turnpikes and plank roads, coupled with competition from canals, steamboats, and railroads dramatically decreased freight rates by 95 percent, thereby shortening the transportation gap between eastern and western states.[21]

The first great push towards connecting large sections of the Untied States came in

---

[20]Taylor, *The Transportation Revolution*, 132–133.
[21]Ibid., 133–135.

the form of turnpikes. Though improved toll roads existed in the eighteenth century, the call for large-scale turnpike construction was relatively silent until after the War of 1812. A large network of country and farm roads already connected most of the settled United States, but these roads, plagued with potholes and mud pits, were notoriously ill-suited for heavy cargo. Although eastern roadways were notoriously rugged, citizens of the West looked on them with envy. As late as 1850, a St. Louis farming journal, the *Valley Farmerr* [sic], compared roads in both regions and noted that:

> One great draw-back to the prosperity of Western and Southern farmers, and one that has prevented, in a great measure, the increase of population in particular localities, has been the difficulty of transportation and travel from one point to another. A portion of the year, the roads have been passable, even very good and pleasant, but for a few months in the winter season, nearly all travel must be suspended except what may be done on horseback. A fertile, clay soil, destitute of rock and gravel and lying nearly level, becomes so muddy from a little rain as to be nearly impassable. – Roads in such a country are not like the dirt roads of New England where the soil is hard, and the surface uneven, and consequently soon drained of the water. – This peculiarity of the Western country to have muddy roads, has often been referred to, and still is, by the eastern emigrant when writing to his friends at home. He tells them that this is a fine, rich country, but the roads, oh, they are horrible![22]

When relied upon for the movement of troops and supplies during British coastal blockades in 1812, country roads in the East proved alarmingly inadequate for national defense. From the war's end until the 1830s, a boom in turnpike construction converted highly traveled portions of the preexisting country road network into smooth, well-drained, gravel roadbeds.[23] This national attention throughout the nineteenth century

---

[22] *Valley Farmerr: A Monthly Journal of Agricultural, Horticulture, Education, and Domestic Economy, Adapted to the Wants of the Cultivators of the Soil in the Valley of the Mississippi* 2, no. 3, ed., Ephraim Abbot (St. Louis, MO, March 1850): 91.

[23] Taylor, *The Transportation Revolution*, 17–20.

prompted several bills in Congress for federally sponsored turnpike projects. The legislative or executive branches consistently rejected these bills which, in Taylor's opinion, testified to the "bitter state and sectional jealousies which were wracking the new nation."[24] Even with lessons learned in 1812–1815, federal sentiments against the constitutionality of multi-state thoroughfares placed appropriations for turnpike construction in local municipalities' hands. State governments like Massachusetts, fearing to enhance the westward migration of their farmers, bitterly opposed improved connections with the mid-Atlantic region. Other states in the mid-Atlantic and Midwest, however, facilitated the eastward movement of crops to their own ports by encouraging turnpike projects. By the high point of turnpike construction in the mid-1820s, New York and Pennsylvania contained the most turnpike mileage in the country, with 4,000 and 2,400 miles (6,437 and 3,862 km) respectively. But with the average capital investment nearing $100,000 for each project, ample private support was not found easily in sparsely populated rural areas. For passenger service, turnpikes provided superior travel compared to country roads, but for the average farmer carrying heavy loads to market, turnpikes were too expensive.[25]

Although a few states, like Pennsylvania, invested money directly from their own treasuries for turnpike projects, capital investments came mainly from private stock companies. With turnpike construction falling to the private sector, no significant improvements to roadways extended beyond state borders. The lack of national or multi-

[24]Ibid., 21.

[25]Ibid., 23–25.

state organization, huge capital demands, and endless maintenance costs, returned unimpressive dividends for turnpike investors. Even on the few successful turnpikes that charged reasonable fares, the added cost to bulky, agricultural products cut profits too sharply when transporting over any sizeable distance. Ultimately, the short-lived zeal for turnpikes yielded to more profitable bridge and plank road companies that quickly showed separate advantages to their predecessors.[26]

Similar to turnpikes, bridges normally were constructed by private stock companies charging tolls for their use. The most notable distinction with bridges, however, was their profit generating capabilities. The iconic covered bridges common in the East, required the same basic set of skills needed in home building and masonry work. The added benefits of cheap lumber and stone made these bridges affordable options in rural settings. With the development of railroads, however, bridge construction acquired a new specialized set of engineering skills. Although Taylor argued that "the strides which marked bridge building between 1816 and 1860 epitomize the transportation revolution," he fell short of giving them full credit for providing economical long-distance transportation.[27] Before railroads, even the best built bridge only connected two sides of an incorrigible country road. Not until their incorporation into the system of railroads did bridges serve a vital role in long-distance transportation. Yet even as railroads and bridges linked major markets inside the United States, farmers and merchants still relied

[26]Ibid., 28–29.

[27]Ibid., 28–29.

upon unfavorable country roads for access to the main lines.[28]

Starting in the mid-1840s, communities invested funds in plank roads. These roads were the cheapest solution to span short distances to a nearby market house or another transportation hub. Plank roads emerged much like turnpikes. Private stock companies raised capital, charged tolls, and maintained the road bed. They differed widely, however, in their initial cost. Whereas turnpikes consumed large amounts of time and labor for grading, and laying a stone foundation beneath a gravel roadbed, plank roads were much quicker and simpler in nature. Typically laid upon a well-used country road, plank roads required little extra modification to the original surface. Workers laid thick wooden timbers (called stringers) on the ground parallel with the road direction. Stingers were similar to the metal rails of a train track, except that across their top sides an additional set of perpendicular wooden planks (about three inches thick and eight feet long) created a deck-like floor. In one sense, plank roads resembled an upside-down railroad track without any gaps between the wooden planks. The end product appeared much like the wooden sidewalks common to many American towns in the nineteenth century. Averaging between $1,500 and $1,800 per mile, a plank road compared favorably with standard costs of $3,000 to $4,000 per mile for most stone turnpikes.[29] While no community intended plank roads to cover large distances, they were touted as affordable options for communities where a market house or trunk line lay just beyond the horizon.

---

[28]Ibid., 29.

[29]Ibid., 30.

Appealing to Missouri farmers' sense of state pride, the *Valley Farmerr* [sic] editor reminded his readership about the "intelligent yeomanry" of Indiana farmers and their zeal for plank road projects.[30] Not only were Indianans increasing their material wealth by building plank roads, but they were also "promot[ing] the cause of civilization, and unit[ing] more perfectly the interests of the people."[31] There was likely no other project requiring more involvement from the local community than plank roads. Similarly, no other personal investment would likely translate so succinctly to both individual and communal prosperity. Even with their benefits, however, these roads required local funding that foremost meant community support. This could be done, as the *Valley Farmerr* editor did, by highlighting neighboring communities' foresight for the inevitable profits of road construction and by associating their eagerness to invest with a desire for greater liberty. The *Valley Farmerr* noted:

> Hardly a paper in the State [of Indiana] but comes laden with the proceedings of plank road meetings – account of stock subscribed – receipts from those already constructed – and proposed new routes. All the small towns in the interior of the State are seeking connection with each other and preparing a thousand tributary branches by which to reach the great thoroughfares that lead to the best markets. The cheapness of construction, the abundance of material found in all portions of the State, the rapidity with which they may be completed, the wonderful adaptation to present wants and present means and their unparalleled profits – all these conspire to make them the favorite highways of the farmer.
>
> … [Plank roads] render man more social, and by constant intercourse with others, he extends the limits of his thoughts and opens his heart to the operations of an enlarged liberality. Prejudices are removed, and knowledge becomes the invoker of unity and peace.[32]

---

[30] *Valley Farmerr* 2, no. 3 (March 1850): 91.

[31] Ibid.

[32] Ibid.

Ultimately though, planks roads deteriorated quickly, as large impassable holes appeared when rotten stringers collapsed. Extensive replacement of the roadway prohibited long term use, and brought a quick end to plank road mania by the late 1850s.[33] For a brief period, however, these roads linked farming communities that sat in tantalizing nearness to regional markets. They remained viable only until alternate infrastructure penetrated and brought a more cost-effective means of transportation. Before transportation alternatives reached St. Charles, the Wheat Growers Association of St. Charles led a campaign to raise capital for a 25-mile (40-kilometer) plank road to St. Louis. Their desire for a plank road was a matter of independence from high freight rates on the Mississippi and Missouri rivers.[34]

Internal improvements upon the roadways of the United States gave unsatisfactory results to both investors and long distance shippers. With some notable exceptions like the Lancaster and Cumberland Road turnpikes, the real champions of ground transportation were railroads.[35] Appearing first in the former colonies, steam-powered locomotives did not reach the growing agricultural belt of the Midwest until the final years of the transportation revolution. Their relatively slow arrival, therefore, allowed developments in water transportation to flourish without serious competition for nearly half a century.

---

[33]Taylor, *The Transportation Revolution*, 31.

[34]B. A. Alderson, "Wheat Growers Association," *Missouri Patriot* (St. Charles), 23 Sept. 1847; B. A. Alderson, "Wheat Growers' Association of St. Charles County," *Western Journal and Civilian* 1 (1848): 588–595. Hereafter referred to as *WJC*.

[35]Taylor, *The Transportation Revolution*, 75.

The first great internal improvement to water transportation was the Erie Canal. Just as the War of 1812 sparked enthusiasm for turnpike construction, it also created zeal for ambitious canal projects. Prior to authorization of the Erie Canal in 1817, the United States contained only 100 miles (161 km) of canals, although only three stretched longer than 2 miles (3 km).[36] Like turnpikes, canal projects in the past suffered from apathetic support as frighteningly high capital investments promised only dismal returns. Equally detrimental for their supporters was the general lack of engineering skill in the United States prior to 1817. Only in terms of political backing did canal projects distinguish themselves from other internal improvements. Without the trumpeting support of New York Governor De Witt Clinton, the ambitious Erie Canal project, globally unprecedented for both distance and engineering, never would have gained support in the state legislature. Dubbed by its opponents as "Clinton's Big Ditch," the Erie Canal cut through an impressive 364 miles (586 km) of rugged upstate New York descending 650 feet (198 m) from its high point at Buffalo and down through a series of sophisticated locks and aqueducts to its terminus on the Hudson River at Albany.[37] Neither the United States, nor any other nation, had attempted an improvement project on such phenomenal scale. As Taylor aptly stated "the Erie Canal was an act of faith, the demonstration of a

[36]Ibid., 32. The three canals listed by Taylor are the Middlesex Canal (starting on the Merrimack River in New Hampshire and ending 27.25 miles at Boston Harbor); the Santee and Cooper Canal (starting on the Santee River in South Carolina and ending at Charleston); and the Dismal Swamp Canal (starting in Norfolk, Virginia, and ending at the Albemarle Sound on the North Carolina border).

[37]Ibid., 32–33.

spirit of enterprise by an organized government that has few parallels in world history."[38] The credit given to Governor Clinton and the New York legislature for assuming total responsibility in raising $10,000,000 or $130,000,000 in modern currency cannot be overstated.[39] By 1819, after nearly two years of construction, the canal's 75-mile (194-km) middle-section opened for traffic. By 1825, the entire waterway, including the adjoining Champlain Canal, was officially opened with grand ceremonies. By its second anniversary, toll receipts for both canals amounted to over $1,250,000 or $21,250,000 in modern currency.[40] By 1835, work began to widen the canal by 30 feet (9 m) and deepen it by 3 feet (1 m) to accommodate the steadily growing traffic volume. Besides sparking a "nation-wide craze for canal building," the proven success of the Erie and Champlain canals marked the first viable solution to opening the bottleneck of internal transportation within the United States.[41] Even though by 1850 nearly 3,700 miles (5,955 km) of canals crisscrossed the United States, the vast majority served areas in the Northeast. While the Midwest captured the distance record in 1853 by completing the 450-mile (724-km) long

---

[38]Ibid., 33.

[39]Ibid., 33.; for financial equation see, John J. McCusker, *How Much Is That In Real Money?: A Historical Commodity Price Index for Use as a Deflator of Money Values in the Economy of the United States* 2d ed. rev. (Worcester, MA., 2001). McCusker's book is a useful tool for converting historic money into modern equivalents. All conversions from this point forward are based on his formula that divides the composite commodity price index (CPI) for the year 2000 by the CPI for any given year. In this case the year 2000 CPI is divided by the year 1817 CPI (2,059 ÷ 160 = 13). This establishes the ratio of year 2000 dollars to year 1817 dollars, which is then multiplied by the dollar amount in question to arrive at a modern currency equivalent (13 x $10,000,000 = $130,000,000).

[40]Taylor, *The Transportation Revolution*; for financial equation see McCusker, *How Much Is That in Real Money?*

[41]Taylor, *The Transportation Revolution*, 79.

Wabash and Eire Canal, the greatest impact to transportation upon the western waters came from the technological improvement of steamboats.[42]

Steamboat technology fit particularly well into nineteenth-century American life. As Taylor stated, "with its continental expanse and vast inland distances the United States was from the beginning peculiarly dependent upon river transportation."[43] At the dawn of the transportation revolution few places stood to benefit more from improvements in river transportation than the western states. Across the United States inland trade moved in a counterclockwise route beginning in the Ohio River Valley. Farm products like wheat, butter, and pork from western Pennsylvania, Ohio, and Indiana moved southward along the downstream course of the Ohio River. Rivermen loaded these foodstuffs in flatboats at Pittsburgh, Cincinnati, or Louisville. They then joined these products with shipments of hemp, lead, and tobacco collected from points around the Mississippi and Missouri rivers; all eventually headed for New Orleans. From the port of New Orleans, overseas provisions merchants bought small portions the interior's goods for export to Europe or the West Indies. Most other purchases sailed around the North American coast to principal Atlantic ports like New York, Boston, and Philadelphia. As exchange for the raw materials of the Ohio-Mississippi river valleys, dry goods importers purchased manufactured items like textiles, hardware, and china that their eastern suppliers shipped westward in wagon trains across the Appalachian Highlands from Philadelphia or

[42]Ibid., 47–48. The Wabash and Erie Canal started on Lake Erie at Toledo, Ohio, and ended on the Ohio River at Evansville, Indiana. Plagued by all manner of problems, the initial work began in 1832, was slowed by the depression of the late 1830s, and not completed until 1853.

[43]Ibid., 56.

Baltimore. This circular trade route covered over 3,000 miles (4,828 km) with each section utilizing a distinct form of transportation. The route, however, moved primarily in a counterclockwise direction until the introduction of steamboats.[44]

Although trade goods moved westward across the Appalachian Mountains by wagon routes, bulky farm products of the west could not be transported eastward over the turnpikes at a cost effective rate. Westerners opined this asymmetrical flow of goods was an outright conspiracy orchestrated by the eastern businessmen. Turner credited this conspiratorial view mainly to the social circumstances in which Westerners lived. He argued

> it was certain that this society, where equality and individualism flourished, where assertive democracy was supreme, where impatience with the old order of things was a ruling passion, would demand control of the government, would resent the rule of the trained statesmen and official classes, and would fight nomination by Congressional caucus and the continuance of presidential dynasties.[45]

From a world systems approach, conspiratorial sentiments underscored the inherent tensions created by asymmetrical trade relationships. In Wallerstein's terms, the West sat in a peripheral relationship to the East. As long the eastern capital directed the flow of internal trade, eastern businessmen would always ensure profit margins favoring eastern goods over western ones. Westerners intuitively understood their future independence in trade literally hinged on steamboats' ability to travel against the current of western rivers. Their statements revealed this fact clearly:

> if we continue as we have done for the last twenty years, to be tributary to the

[44]Ibid., 158–159.

[45]Ibid., 159.

> Pennsylvania and Maryland wagoners, it would have been much better for us that we had not separated from Great Britain ... The British Government felt no jealousy against any portion of the West, as is now felt by the mercantile states of the Atlantic and particularly by New England. Pennsylvania, Maryland, and New York have and are now contending with each other which will monopolize the greatest portion of the trade of the western country, and these states have for many years succeeded in diverting the trade of the West from its *natural channel* (the Ohio and Mississippi) through the states of Pennsylvania and Maryland and over the rugged mountains which nature never intended for the transportation of merchandise for the western country.[46]

Even with land carriage from Philadelphia to Pittsburgh comprising only about 300 miles (483 km), or about 10 percent, of the entire trade circle, this part of the trip cost more than both river and coastal shipments combined.[47] Similarly, the river portion of the trade route flowed primarily in only one direction. The fast currents and numerous hidden obstructions of the Mississippi greatly inhibited upriver transportation. At the end of their trip, a flatboat crew dismantled its vessel, sold it as lumber in New Orleans, and then literally walked home over the Natchez Trace foot path. Even for light-weight, high-value goods, river shipments against the current of the Mississippi or Ohio rivers were simply too costly and laborious for profitable use.[48] Before the introduction of steampower on the western rivers, the only noteworthy attempts to curtail the loss of profit and time from flatboat transportation was the construction of larger seagoing vessels in upper Ohio River Valley.

During the early summer of 1816, the fifty-ton schooner *Maria*, built at Marietta,

---

[46]*Commonwealth* (Pittsburgh), 14 Oct. 1815, quoted in Hunter, *Steamboats on the Western Rivers*, 21.

[47]Taylor, *The Transportation Revolution*, 159.

[48]Ibid., 158.

Ohio, sailed to Baltimore in forty-six days with a cargo of pork, flour, and lard. By setting out on the Ohio River, she overcame the typical delays from transferring cargo and scrapping a flatboat at New Orleans, but the hazards of river navigation, especially in the shallow Mississippi, proved too dangerous for the deep drafts and sharp keels necessary on sea going schooners.[49]

Only steamboats advanced the steady westward progression of American culture without contest from the railroads until the late 1850s. Though they were particularly suited to the western dependence upon river transportation, some brief mention of their role in the East is worth noting. Several attempts to apply steampower to water transportation occurred during the eighteenth century. In 1737, Jonathan Hull acquired the first known patent for a steam-powered vessel.[50]

By the late eighteenth century, American inventors, particularly James Rumsey and John Fitch, devised clever steamboat designs for use on eastern rivers like the Potomac, Hudson, and Delaware. Rumsey's design for the Potomac used a simple steam-pump, similar to those used in mines, which sucked water from the boat's bow and expelled it from the stern. His propulsion technique worked well on the calm waters of Virginia, but low horsepower and the unreliability of Rumsey's design made his boat a commercial failure. Like Rumsey, Fitch's designs excelled in ingenuity, but proved better for gathering spectators than for moving them. Though Fitch briefly profited from shuttling between Philadelphia and Trenton in 1790, the real commercial success of steamboating

---

[49]Ibid., 159.

[50] Robert C. Macfarlane, *History of Propellers and Steam Navigation: With Biographical Sketches of the Early Inventors* (New York, 1851), 13.

came with Robert Fulton and Robert Livingston's *Clermont* in 1807.[51] Built for use on the Hudson River, the *Clermont* enjoyed an exclusive monopoly within the state of New York. By the end of the War of 1812, the Fulton-Livingston partnership had added several other steamboats to its monopoly, but challengers wishing to grab profits for themselves soon appeared. John Stevens twice attempted to place steamboats, the *Phoenix* and the *Juliana*, in New York waters. By 1813, the Fulton-Livingston partnership forced Stevens to withdraw both boats to the Delaware and Connecticut rivers.[52] Granting navigation rights solely to the Fulton and Livingston partnership ensured a private monopoly between New York City and Philadelphia, the most lucrative trade route in the East, but a second challenger to their title could not be disposed as easily as Stevens.

By 1815, Aaron Ogden successfully convinced the New Jersey legislature to enact retaliatory legislation against the New York monopolists. With this he forced the Fulton-Livingston partnership into a compromise in which Ogden paid the former for exclusive rights to operate steam ferry service between New York and Elizabeth-Town Point, New Jersey. Ogden's efforts, however, saved him from competition for only a few years. In 1818, he formed a partnership with the wealthy southern planter, Thomas Gibbons, who carried a reputation as a stubborn duelist and fighter. Not surprisingly, a quarrel soon dissolved the partnership, and Gibbons spitefully outfitted his own boat with Cornelius Vanderbilt in command. Gibbons and Vanderbilt suited each other perfectly. On the

---

[51]Taylor, *The Transportation Revolution*, 56–57.

[52]Ibid., 58–59.

water Vanderbilt brazenly ignored New York state law, while in the courts Gibbons pushed his legal rights to the US Supreme Court. In the famous 1824 decision of *Gibbons v. Ogden*, Chief Justice John Marshall held that only Congress could regulate interstate trade thereby dismantling the Fulton-Livingston monopoly run on water between states. The following year New York repealed its monopoly privileges, and steam navigation on eastern waters tremendously expanded.[53] Turner noted the importance of this decision to Western life:

> the outlet from the West over the roads to the East and South was but a subordinate element in her internal commerce. It was the Father of Waters, with its ramifying tributaries, which gathered the products of the great valley and brought them to New Orleans. … As steamboats ascended the various tributaries of the Mississippi to gather the products of the growing West, the pioneers came more and more to realize the importance of the invention. They resented the idea of the monopoly which Fulton and Livingston wished to enforce prior to the decision of Chief Justice Marshall, in the case of *Gibbons v. Ogden* – a decision of vital interest to the whole interior.[54]

By the late 1820s, and for the rest of their existence, eastern steamboats concentrated heavily on passenger service across rivers and lakes. With inland freight falling primarily to canals and railroads, steamboats in the East could not compete for low-value bulk freight. Likewise, on the Great Lakes steamboats could not compete for freight business because those waters better suited low-cost sailing schooners.[55] As passenger carriers, however, steamboats became integrated into the system of canals and turnpikes in the East. In upper New York state, for instance, passengers traveling the country could

---

[53]Ibid., 59.

[54] Turner, "The Colonization of the West," 323.

[55]Taylor, *The Transportation Revolution*, 60–62.

expect coordinating schedules between stagecoaches, canal boats, and steamboats so that a trip requiring more than one mode of transportation was theoretically possible without long delays (figure 2).[56]

By the mid-nineteenth century, westerners traveling east utilized a predictable passenger service to move about the country. In 1844, St. Charles resident, George C. Sibley, recorded his trip throughout the United States in one of his surviving "Commonplace Books."[57] The main impetus for Sibley's travels was the national Whig Party convention held that spring in Washington, DC. His account detailed the use of several modes of transportation, including steamboats, coaches, and railroads. Most interesting for students of transportation was Sibley's desire to visit friends, relatives, and a party of Liberia-bound freedmen in various coastal cities. While the first leg of his trip was a rather straightforward route from the Mississippi River to Washington, his return trip took a circuitous route from Baltimore to Philadelphia, then to New York City, and finally back home via the Great Lakes. Sibley revealed a surprising sophistication for the mid-nineteenth-century eastern transportation infrastructure. A condensed version of his travel log appears in appendix C of this work, and certainly is worth the extra pages afforded its printing.

---

[56]J. Parker & Co., Stage, Canal, and Steamboat Register, &c., for 1829 (place unknown, 1829), Missouri History Collection, Missouri Historical Society (MHS), St. Louis.

[57] George C. Sibley, Commonplace Book No. 3, George Champlain Sibley Papers, MHS, 1844, 76–77.

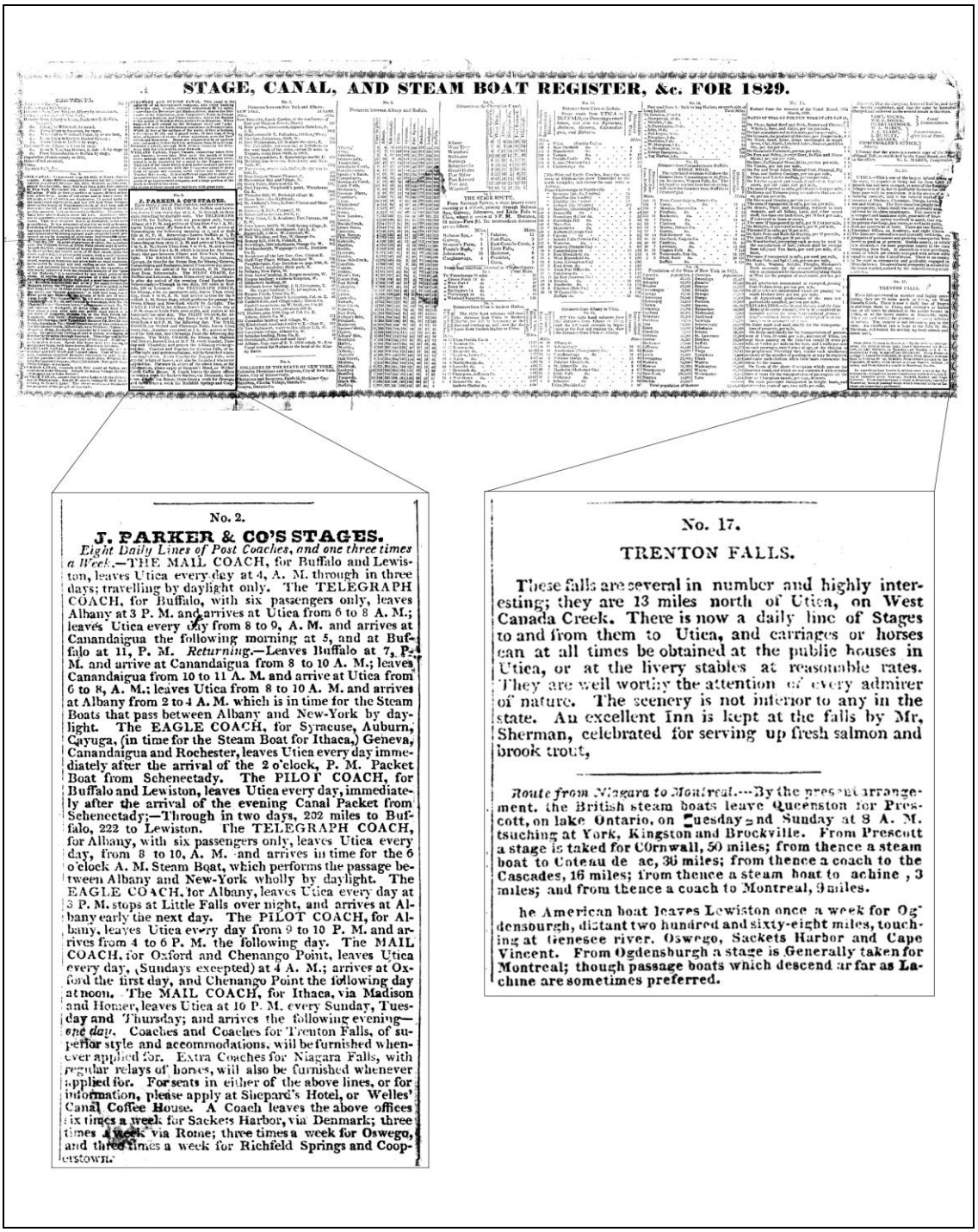


Fig. 2. Stage, Canal, and Steamboat Register, for Upstate New York in 1829. The figure is shown with two enlarged sections giving directions for travel arrangements. (Missouri History Collection, Missouri Historical Society, St. Louis.).

Even with early experimentation and commercialization occurring first on eastern rivers, the waters of western America quickly rose to the forefront of steamboating. Rumsey first advocated the use of steamboats on the Mississippi and Ohio rivers as early as 1785 in a letter to George Washington, his sponsor. Having spent several years in the mountains of Appalachia, John Fitch repeatedly advocated the commercial advantages of western steamboats, though he always failed to convince investors. Even as Fulton prepared the *Clermont* for her maiden voyage, he placed hope in the West, writing that "whatever may be the fate of steamboats for the Hudson, everything is completely proved for the Mississippi."[58] Shortly after his successful debut, Fulton still insisted that his experiment proved steamboats would "give a cheap and quick conveyance to the merchandise on the Mississippi, Missouri, and other great rivers, which are now laying open their treasures to the enterprise of our countrymen."[59] Least of those Fulton needed to convince of western steamboating was his partner Robert Livingston.

As minister to France for President Thomas Jefferson, Livingston negotiated the Louisiana Purchase and firmly understood the commercial success awaiting steamboats in the new territory. By calling on his brother Edward, a practicing lawyer in New Orleans, Livingston kept informed on Louisiana's political environment and used his

---

[58]Alice C. Sutcliffe, *Robert Fulton and the "Clermont"* (New York, 1909), 201, quoted in Hunter, *Steamboats on the Western Rivers* (Minneola, NY, 1993), 8.

[59]Sutcliffe, *Robert Fulton,* 235; Andre Michaux, "Historical Anecdote of Robert Fulton," *Journal of the Franklin Institute* 48 (1849), 39–40, quoted in Hunter, *Steamboats on the Western Rivers,* 8.

connections to duplicate the Fulton-Livingston New York monopoly in the West.[60]

Unlike the Hudson River, however, exclusive rights to the Mississippi and Ohio rivers were not easily obtained. Most of the Mississippi and Ohio rivers lay between states or territories, forcing Fulton and Livingston to petition several legislatures for patent rights. Although granting exclusive rights had traditionally occurred in the East – Rumsey received patents from three states and Fitch received them from seven – all but one of Fulton and Livingston's petitions were denied in the West.[61]

Distrust of Eastern business interests was more complicated than geographic loyalties. The possible source of distrust centered in the fears of monopolistic control from outside capitalists. Monopolies had long traditions among mercantilist governments and their colonists. As early as 1684, wealthy New York exporters convinced the provincial council and Governor Thomas Dongan to pass a city ordinance creating a bolting monopoly. The ordinance passed even with strong protest from the city's general assembly. Although the next governor disbanded the monopoly in 1690, it foreshadowed decades of tensions between country agriculturalists and city exporters.[62] Perhaps, lingering sentiments of mercantilism were pervasive in the West? Like seventeenth-century colonial investors, the Fulton-Livingston partnership could not protect their risk without political aid. Because their success carried mutual public benefit, they could argue, state governments had the right, if not the obligation, to offer protective measures.

---

[60]Hunter, *Steamboats on the Western Rivers,* 8–10.

[61]Ibid., 8–10.

[62] Matson, "Damned Scoundrels," 403–404.

The Fulton-Livingston partnership made an understandable argument. Besides being standard practice in the Atlantic states, the partnership estimated its initial investment in 1807 for just one steamboat on the Mississippi to reach $200,000 or $3,000,000 in modern currency.[63] Exaggerated or not, how could Fulton and Livingston expect to entice investors without assuring protection of their rights? The partnership's argument, however, fell on deaf ears in the legislatures of Ohio, Kentucky, Tennessee, Indiana, and the Upper Louisiana Territory. Only through Edward Livingston's personal connection with W. C. C. Claiborne, governor of the territory of Orleans, did the Fulton-Livingston partnership gain an exclusive rights patent. Though their one success provided an eighteen-year monopoly on the most crucial portion of the Mississippi, the partnership's widespread failure resulted from a general distrust of eastern business, weighing heavy in the minds of western politicians. The Territory of Orleans grant took effect in 1810, and immediately upriver legislatures protested the monopoly. Ohio and Kentucky passed formal resolutions denouncing the virtual control given to the Fulton-Livingston partnership for effectively blocking free movement of trade at Mississippi's doorstep. In the face of overwhelming protest, however, the path for the first western steamboat opened.[64]

In October 1811, Fulton and Livingston sent the steamboat *New Orleans*, built in Pittsburgh that same year, on a 2,000-mile (3,219-km) trip to southern Louisiana. Reaching New Orleans in January 1812, the 371 ton boat enjoyed two brief but profitable

---

[63]Hunter, *Steamboats on the Western Rivers*., 10; for financial equation see McCusker, *How Much Is That in Real Money?*

[64]Hunter, *Steamboats on the Western Rivers*., 10–12.

years in the New Orleans-Natchez trade. In just her first year, the *New Orleans* returned 50 percent of the original capital investment by netting a profit of $20,000 or $260,000 in modern currency.[65] Encouraged by this success, the partnership constructed three more steamboats for the trade by 1815.[66] The additional capital placed in steamboats running the lower Mississippi quickly proved wise investments. On just one trip from New Orleans to Louisville in 1816, the Fulton-Livingston steamboat *Aetna* carried a freight bill of $25,000 or $300,000 in modern currency.[67] Two years later on the same run, the *Vesuvius* brought a freight bill totaling $47,000 or $611,000 in modern currency, of which half was reportedly net profit.[68] Like those on the Hudson River, however, profits of the Mississippi fleet were simply too impressive to go unnoticed. After serving only one full year on the Mississippi River, a rival steamboat group of Daniel French and Henry M. Shreve out of Brownsville, Pennsylvania, challenged the *New Orleans*.[69]

The French-Shreve partnership constructed four steamboats between 1813 and 1816. As they prepared their first boat, the *Comet,* for launch on the Ohio River, French and Shreve came under legal suit by Fulton and Livingston. Undeterred by claims of rights violations, French and Shreve continued to violate trade restrictions by sending boats to

---

[65]Ibid., 20; for financial equation see McCusker, *How Much Is That in Real Money?*

[66]Ibid., 12. The three other steamboats listed by Hunter are the *Vesuvius* (340 tons, built 1814), the *Aetna* (360 tons, built in 1815), and a second *New Orleans* (324 tons, built in 1815).

[67]Ibid., 19; for financial equation see McCusker, *How Much Is That in Real Money?*

[68]Ibid., *Steamboats on the Western Rivers,* 20; for financial equation see McCusker, *How Much Is That in Real Money?*

[69]Ibid., 13–14.

the port of New Orleans. Ultimately, their disregard for territorial monopoly led twice to seizures of their third steamboat, the *Enterprise*. Out of the ensuing lawsuit in 1816, the lower state court of Louisiana (statehood in 1812) held that the former territorial legislature lacked authority to grant Fulton and Livingston's monopoly. Even with an unfavorable ruling, the Fulton-Livingston partnership continued bringing legal suits until 1818. By this time, however, both Fulton and Livingston had died, and their successors grew increasingly unwilling to suffer further courtroom defeats. Succumbing rather ingloriously to the pressures of French and Shreve, two of the three surviving Fulton boats were sold, effectively ending the monopoly.[70]

Exclusive control of the lower Mississippi ended six years earlier than its counterpart on the Hudson River had with *Gibbons v. Ogden* in 1824. Without Supreme Court intervention, the entire Ohio-Mississippi river system now lay completely unhindered to the development and expansion of steamboats. During the seven-year reign of the Fulton-Livingston partnership, from 1811 to 1818, only eighteen steamboats traversed the western waters. In the following years from 1818 to 1820, however, the number of steamboats built and operating in the West rose to fifty-eight, not including the original eighteen.[71] While French and Shreve's dogged assault on the lower Mississippi factored greatly into this 322 percent increase, a second event is equally noteworthy.

In 1816, French and Shreve built their fourth steamboat, the *Washington*. The following year Shreve accompanied the boat on a trip from New Orleans to Louisville.

---

[70]Ibid., 13–14.

[71]Ibid., 17, footnote 54.

Beside the inevitable courtroom appearance, the trip also sparked great excitement for making the run in a record-setting twenty-five days.[72] Compared to the three or four months consumed by keelboat and barge boats ascending the river, the *Washington*'s short trip seemed unbelievable. Louisville's citizens held a public dinner honoring Shreve for his accomplishment. Captain Robeson de Hart master of Fulton's *Aetna*, which made the run in an equally impressive thirty-five days just one week prior, also was invited. Newspaper editors at the dinner praised both men for having "gained much of public esteem by their success and enterprising exertions to demonstrate the practicability of navigating the Ohio and Mississippi, 'the high seas of the western country,' with steam vessels."[73] In one respect, western enthusiasm for steamboats began with the first line of Fulton-Livingston boats five years earlier, but not until the *Washington*'s celebrated time did westerners truly focus on the possibilities of the new era. No longer could steamboats be seen simply as ambitious experiments. They were now a legitimate part of the western scene, a substantive indicator of the rising prosperity of the western economy.[74]

The effects of transportation revolution were now fully noticeable to easterners who watched New Orleans divert trade from the trans-Appalachian routes. As congressional committees planned to improve turnpikes leading to the Mississippi Valley, western

---

[72]Ibid., 17.

[73]*Western Spy* (Cincinnati), 9 May 1817; *Gazette* (Louisiana), 6 May 1817, quoted in Hunter, *Steamboats on the Western Rivers,* 19.

[74]Hunter, *Steamboats on the Western Rivers*, 19–20.

newspaper editors believed this signaled fear in eastern cities.[75] Re-routing trade through cheaper, faster channels kept western wealth at home and balanced political power in Washington. From a westerner's perspective, then, as the door West swung both ways at New Orleans, it could finally correct the asymmetry of economic power. This fact was most apparent in the renewed interest of eastern congressmen who called for internal-roadway improvements leading to the West. Westerners believed that steam navigation "seals our claims to independence," and that " Mississippi steamboats work every miracle; form roads, dig canals, enlighten committees of Congress, polish eastern manners, connect by mutual interest the east with the west, make western members of Congress feel and know their consequence. All this affected by the power of steam."[76] For western congressmen, steamboats personified the balancing of trade relations between themselves and the core of economic influence. As Wallerstein predicted, trade relations equated to economic power leveling the former had immediate corresponding affects to the latter.

Both the number and size of steamboats on the western rivers grew at astonishing rates throughout the ante-bellum period. By 1830, the number reached 187 boats measuring 29,481 tons. In ten years, the number nearly tripled to 536 boats measuring 83,592 tons. In 1860, steamboats numbered 735, and the tonnage measurement had

---

[75]Ibid., 22.

[76]*Gazette* (Cincinnati), 15 April 1816, quoted in Hunter, *Steamboats on the Western Rivers,* 22.

increased to 162,735 tons (see Appendix A for Missouri River tonnage estimates).[77] Not reflected in the tonnage measurement was the impressive increase in cargo capacity. The early steamboats carried about half their measured tonnage (cubic capacity) in cargo, but by the mid-nineteenth century cargo capacity exceeded the measured tonnage by one-third to one-half. These figures revealed that if every steamboat in 1817 made at least one fully loaded trip, the total cargo transported along the rivers amounted to a maximum of 1,645 tons of cargo. In contrast, if every steamboat made at least one fully loaded trip in 1860, the total cargo transported amounted to a minimum of 216,980 tons of cargo.[78]

Like the links between cargo capacity and colonial wealth, the dramatic increase in cargo capacity during the transportation revolution was a good indicator of the West's growing economy of scale characteristic of the spreading modern world. By the Civil War, not only were there more, larger steamboats in service, there was also a substantial decrease in port-to-port times. From their onset in 1812, steamboats reduced upriver trips from New Orleans to Louisville from about four months to just over four weeks. By the mid-1850s, the trip averaged about six days, and the expected number of round trips per boat per season grew from only two to upwards of ten or twelve.[79] The quickening pace of transportation occurring within the Mississippi-Ohio valleys essentially reduced the distance between New Orleans and major ports in the interior like Louisville, Cincinnati, Pittsburgh, and St. Louis. Correspondingly, the distance between the interior ports and

---

[77]Hunter, *Steamboats on the Western Rivers,* 33, table 1.

[78]Ibid., 34, table 1.

[79]Ibid., 23, 34.

the Atlantic coast was equally reduced. For instance, trade moving from Cincinnati to New York in 1816 required fifty-two days from a combination of Ohio River keelboats to Pittsburgh and then wagons to New York. By 1852, Cincinnati and New York were only about twenty-eight days apart by way of steamboat to New Orleans and then coastwise to New York.[80]

In addition to faster service, freight rates declined. Around 1820, freight traveling by keelboat upriver from New Orleans to Louisville averaged about $5.00 per hundred pounds or $75.00 in modern currency. Steamboats during the Fulton-Livingston years undercut keelboats only slightly, charging upriver rates between $4.00 and $5.00 per hundred pounds or between $60.00 and $75.00 in modern currency. The expansion of steamboat competition and a nation-wide depression in 1819, however, cut steamboat freight rates from New Orleans to Louisville in half to $2.00 per hundred pounds or $30.00 in modern currency. By the mid-1830s, rates in the Louisville trade fell further to about 50¢, and in the growing New Orleans to St. Louis trade rates averaged about 63¢. Nearing the end of ante-bellum period, rates from New Orleans bottomed at about 15¢ per hundred pounds or $2.25 in modern currency.[81] By 1860, the Mississippi-Ohio river system produced the second lowest national freight rate for inland transportation at 37¢ per ton-mile, behind only the Chesapeake and Ohio Canal averaging 25¢ per ton-mile.[82] Across the United States, rates for every mode of transportation continually declined

---

[80]Taylor, *The Transportation Revolution*, 443 table 3.

[81]Hunter, *Steamboats on the Western Rivers*, 25–26.

[82]Taylor, *The Transportation Revolution*, 442 table 2.

during the first half of the nineteenth century. During this period, however, the two important transportation routes for the Mississippi and Ohio valleys, western rivers and turnpikes, experienced rather lopsided decreases. While freight rates over turnpikes dropped 50 percent between 1816 and 1860, rates for downstream freight dropped by 78 percent, but more importantly upstream charges dropped by 94 percent.[83]

The great reduction in shipping costs and speed of travel, championed in the West by steamboats, provided the necessary foundation for the frenzied western migration of the mid-nineteenth century. The influx of settlers into the Mississippi-Ohio valleys matured the region's pioneer-type economy, based on self sufficiency and barter, to one relying upon manufacturing and agricultural trade. Within two decades of western river steamboating, trade of the Ohio Valley concentrated and flowed out of the ports of Pittsburgh and Cincinnati. By the late 1830s, points above Louisville, like St. Louis, on the Mississippi River, expanded their populations and trade, eventually becoming important steamboating hubs.[84]

St. Louis slowly rose as a steamboating hub during the first few decades of the nineteenth century. By the early 1840s, the population of the United States began moving increasingly westward. As the centers of habitation relocated out of the Ohio Valley and into the Mississippi, the centers of steamboat activity moved accordingly. St. Louis's population growth, coupled with increased lead mining in northwestern Illinois and southwestern Wisconsin, eventually made St. Louis the post-Civil War steamboating

---

[83]Ibid., 442 table 2.

[84]Hunter, *Steamboats on the Western Rivers,* 30–35.

center of both the Ohio and Mississippi rivers.[85] For the last two ante-bellum decades, however, St. Louis's economy matured from a fur-trading economy to a manufacturing/agricultural exporter.

In August 1817, the steamboat *Zebulon M. Pike* made the first powered boat trip to the village of St. Louis. At that time, trade followed a triangular route as manufactured goods traveled west across turnpikes in Pennsylvania or Maryland. In either Pittsburgh or Cincinnati, the commission merchants loaded eastern wares on keelboats headed to Louisville via the Ohio River. Louisville's dry goods merchants unloaded their freight or sent it farther down the Ohio River to the Mississippi junction at Cairo, Illinois. At Cairo, keelboat crews carried western exports downriver to New Orleans, while steamboat crews carried eastern imports to upriver towns such as St. Louis. By 1840, steamboats traveled the Mississippi River from New Orleans all the way to St. Paul, Minnesota. In St. Louis, dry goods merchants exchanged eastern products for credit with miners, trappers, and farmers. St. Louis provisions merchants then sent lead, furs, and farm products downriver to New Orleans by keel or flatboat where they were subsequently sent to the Atlantic coast to balance dry goods merchants' accounts on previous shipments of manufactured articles.[86] The *Pike*'s voyage in 1817, therefore, was an extension of this triangular trade by replacing the use of keelboats for the Louisville to St. Louis leg.

In St. Louis's early period, a dry goods merchant operated dually as a provisions

---

[85]Ibid., 37, 43–45.

[86]Lawrence Everett Giffen, *"Walks in Water": The Impact of Steamboating on the Lower Missouri River* (Jefferson City, Mo., 2001), 7–8, 15–16.

merchant. As the economy expanded through cheaper and more abundant supplies in all sectors, dry goods and provisions merchants separated their activities by handling only imports, exports, or freight. Colonial historians have recognized a similar pattern in major North American east coast cities.

Thomas Doerflinger believed the transition from widespread diversification to specialization was not necessarily a universal phenomenon across all sectors. Nevertheless, the transition occurred rapidly and dramatically. In contrast to the eclectic merchant strategies of 1760s New England, Doerflinger found that by the 1780s "shippers no longer had to wrangle with farmers and millers to construct a cargo; storage facilities could be designed for particular types of goods; and traders developed expertise in the one or two markets to which they traded." [87]

Although diversifying into provisions sectors occurred regularly throughout the North American colonies, there existed a few pocketed locations where various activities were not dire preconditions for solvency. In urban centers such as Philadelphia and New York especially, abundance and fluidity of capital encouraged specialization sooner than in New England.[88] In frontier locations, whether far removed from urban centers, or just past their outer edges, provisions trading occasionally served as small, but important sources of extra income.[89] Often young businessmen engaged in limited provisions trading to secure start-up capital for their primary pursuit. For example, Doerflinger

---

[87] Doerflinger, "Commercial Specialization," 24.

[88] Ibid., 28.

[89] Matson, "Damned Scoundrels," 398.

found that the 1780s Philadelphia textile manufacture, Robert Henderson, engaged in small and unprofitable dry goods importing to obtain regional flour for export to Charleston, South Carolina. He did so to exchange flour for indigo. Henderson's provision shipments neither made a substantial portion of his overall income nor did they absorb a considerable amount of his energies. His cumulative shipments hardly amounted to a full cargo load per year, yet his strategy appeared successful as a subsidiary to his principal textile operation. For many other young colonial merchants, small-scale provisions trading provided a low profit to risk ratio that was well suited to locations with either abundant capital or fluid credit, or where hard currency rarely was needed.[90]

Placing intensive energy into provisions trading had clear advantages, but they, however, came at heavy price. A full time provisions trader who moved into ship ownership added a level of complexity further compounding already tight credit allowances. Unlike the year-long terms normal in dry goods credit, a provisions shipper operated with loans lasting only a few weeks or days. Complicating his need for ready cash payments, ships in all ages were "voracious consumer[s] of cash for wages, repairs, [and] provisions."[91] As a result, a provisions merchant wagered the risk of accepting short-term loans against his ability to quickly turn out processed goods. These risks presumably counted less than the promise of reduced per-unit cost through high volume staples purchases and the subsequent profit from continuous provisions sales.

---

[90] Doerflinger, "Commercial Specialization," 28.

[91] Ibid., 40.

The move into intensive provisions trading revealed a strange irony in the incompatibility of business relations emerging from new economies of scale. In dry goods, supply volume never weighed on a merchant's mind. Without much effort he could order hundreds of teaspoons, for example, from foreign manufacturers. But how many teaspoons did a farming household really need? The consumer demand for a single household, however, was negligible compared against the sheer number of those households. The ready supply of dry goods, then, was offset by a ready source of customers. In small economies of scale, dry goods merchants were pushed into provisions trading. The reverse was true also for merchants intending to focus solely on provisions. In the 1750s, even the large colonial shippers, Charles Willing and Son, were obligated to import dry goods for local "backcountry credit sales."[92] Although they concentrated on West Indian trading, they reluctantly sold imported dry goods and viewed these sales as "throwing Your Money on the surface of the Water."[93]

Other provisions merchants took a more benign view of country trading. Even though farmers were keenly aware that increased foreign demand raised their negotiating leverage, their need for hard currency was more accommodating than a merchant's other contacts. As a result, provisions merchants often fell into the dry goods trade with an attitude similar to New York exporter, Abraham Ten Eyck, who claimed that imported goods "will make considerable easement to the [country] Purchasers thereof, and will

---

[92] Ibid.,32.

[93] Charles Willing and Son to Robert Hibbert, 30 July 1754, Willing and Morris Letterbook, 1754–1761, 10, quoted in ibid., 32.

answer their [i.e., merchants'] Ends as well as Cash."[94]

Steamboat arrivals at St. Louis continued at a steady pace throughout the ante-bellum period. By 1823, the number of annual arrivals rose to 51. By 1835, it increased to 803, and within a decade grew even more frequent to 2,050, finally reaching a pre-war high of 3,443 in 1857.[95] As Cincinnati and Pittsburgh supplanted Louisville for dominance in the Ohio River trade, steamboat arrivals in St. Louis from these ports eventually outnumbered those from Louisville. Similarly, as trade on the upper Mississippi and Missouri rivers developed in the 1840s, New Orleans dry goods merchants expanded their markets by sending eastern wares upriver to St. Louis. New Orleans suppliers loaded wares aboard sailing craft for the east coat or Europe and eliminated the coast expense for internal land transportation. As a result, the number of steamboat annual arrivals from New Orleans between 1845 and 1852 increased from 205 to 330. By the last decade of the ante-bellum period, St. Louis's central location on the Mississippi River secured its dominance of the trade within the interior of the North American continent.[96] Its dry goods merchants gained access to eastern goods via New Orleans at substantially reduced costs and higher volumes. To pay for these goods, however, required corresponding increases to the economy of scale within the agricultural sector of the Missouri River Valley.

The development of steamboating on the Missouri River occurred later than most

---

[94] Abraham Ten Eyck and [?] Seaman, *New York Gazette and Weekly Mercury*, 17 Oct. 1768, quoted in Matson, "Damned Scoundrels," 410.

[95] Hunter, *Steamboats on the Western Rivers*, 644 table 2.

[96] Ibid., 37, 43, 49 table 2.

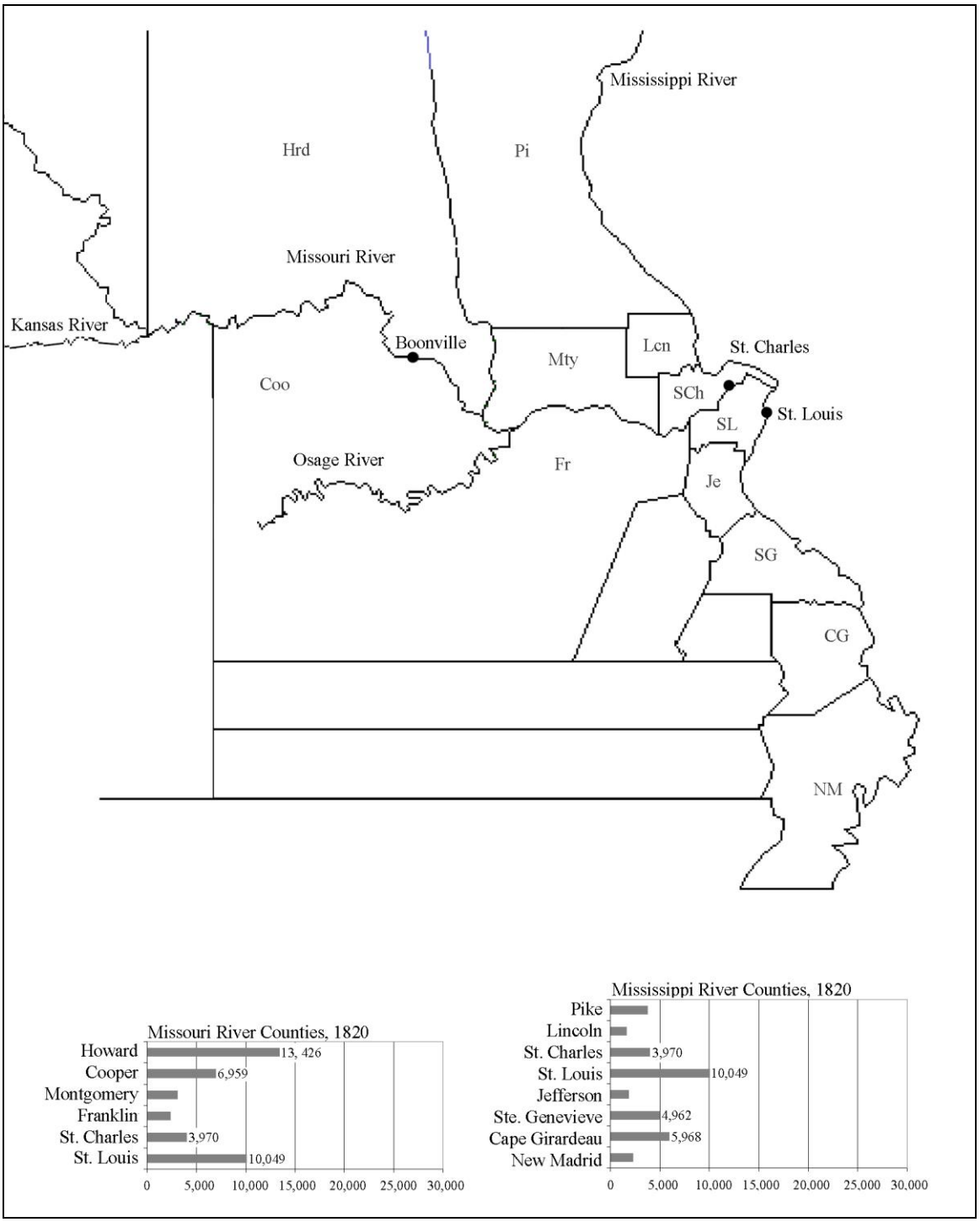
parts of the Mississippi or Ohio rivers. Naturally by being the more western location, the spread of habitation and the subsequent rise in noticeable communities occurred more slowly than in places like Cincinnati or St. Louis. The first steamboat to enter the Missouri, only two years later than the *Pike* at St. Louis, actually misrepresents the late arrival of steampower. In reality, the fruitfulness of steamboats on this main tributary of the Mississippi did not become fully appreciable until the early 1830s, and remained under-utilized until the mid-1840s.

In May 1819, Captain John Nelson piloted his steamboat, *Independence*, a modest 250 miles (402 km) above the Missouri's mouth to Franklin. [97] After its thirteen-day trip, citizens of Franklin, Missouri, heralded the steamboat's arrival with a cannon salute and banquet. Franklin was an appropriate choice for the destination of steamboating's debut on the river. During the first decades of the nineteenth century, the population of Howard County experienced one of the first population booms of the new territory, rivaling that of St. Louis for a brief time (maps 2, 3 and appendix B). In addition to being county seat and home to a land office, Franklin boasted the largest population in Missouri west of St. Louis. Nearly all traffic in Missouri, whether by river or by land across the Boonslick Trace, eventually made its way to Franklin or nearby Chariton, Missouri. For this reason, Franklin became the gathering point for the Santa Fe Trail just three years after the arrival of the *Independence*.[98] The trip of the *Independence* was distinguished from other early steamboat forays, however, by its exploratory purpose.

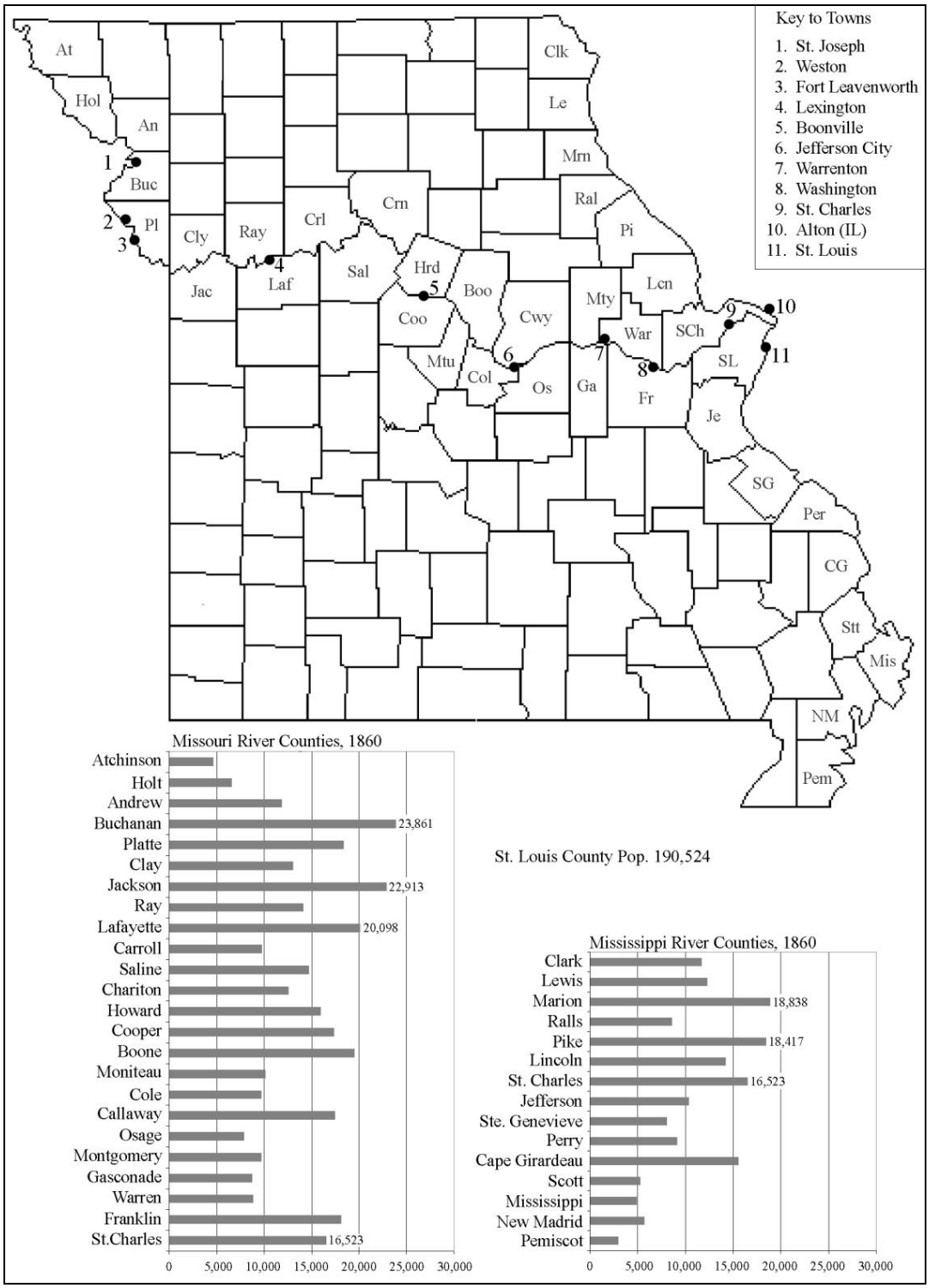
---

[97]William E. Lass, *A History of Steamboating on the Upper Missouri River* (Lincoln, NE, 1962).

[98]Giffen, "*Walks in Water*," 18–19.



Map 2. Population of Missouri and Mississippi River Counties, Missouri 1820. Figure shows county lines, and selected river towns. See also appendix B. (Source for population tables is the Third United States Census.)



Map 3. Population of Missouri and Mississippi River Counties, Missouri 1860. Figure shows county lines, and selected river towns. See also appendix B. (Source for population tables is the Third United States Census.)

Unlike the first trips of the *New Orleans*, the *Washington*, or the *Zebulon M. Pike*, the trip of the *Independence* was neither motivated purely by profit, nor did it carry a cargo indicative of a burgeoning trade center. Undoubtedly, the voyage created great excitement in the area apparent in the rise of several smaller communities in the Boonslick region of central Missouri. As in the days before steamboats, local promoters advertised the rich agricultural soil to attract potential settlers. Perhaps even more attractive to western immigrants was the name itself. Named for relatives of Daniel Boone, the region failed to produce profits in its intended salt spring ventures. Even loose association with the beloved frontiersmen was enough, however, to keep some western immigrants from going any farther west. Now that at least one boat had steamed up the Missouri's current, the future seemed bright, and soil fertility became a secondary selling point. The promoters of Osage City, Missouri, stressed the natural advantage of its location on the confluence of the Missouri and Osage rivers. Halfway between the Kansas and Mississippi rivers, the town offered a safe anchorage for steamboats whose inevitable appearance on the river made Osage City a leading intermediary point for commercial traffic of the Missouri Valley (see map 1). Other towns like Thorntonsburg made similar promises that their location would become "Louisville of Missouri," even though a second steamboat experiment only months after the *Independence* revealed the haste of that claim.[99]

Late in December 1818, Secretary of War John C. Calhoun organized an ambitious plan to firmly assert the United States expansionist goals. The plan he presented to

[99]Ibid., 20–23.

Congress soon became known as the Yellowstone Expedition. Calhoun's primary objective was to establish two military posts, one at the junction of the Minnesota and Mississippi rivers and a second at the junction of the Missouri and Yellowstone rivers. Though plans for the Missouri River were altered to place the post lower downriver near present-day Bismarck, North Dakota, steamboats remained a vital component of Calhoun's vision. By ascending the river with the new steam technology, Calhoun sought to elevate the government's prestige by the daring placement of military posts in remote regions of the new nation.[100] With four steamboats and 1,100 troops, the expedition left St. Louis on June 21, 1819. Accompanied by a small a complement of keelboats, the expedition succeeded only in proving the Missouri's unforgiving nature. Before a single boiler was fired, the government insured failure by ignoring two important aspects of Missouri River navigation. First, the river typically maintains an extremely shallow depth along its entire course. In the decades following the Yellowstone Expedition, Missouri River steamboats rarely exceeded drafts of 4 feet (1.2 m) at full cargo capacity, but in 1819 the US government employed three boats with drafts over 6 feet (1.8 m).[101] The fourth steamboat, *Western Engineer,* was the only one with a draft less than 4 feet (1.2 m) and light enough for the Missouri. Second, the government expedition departed from St. Louis in late June, magnifying the incompatibility of the deep draft boats by placing them on the river at the end of the navigation season.

---

[100]Ibid., 26–29.

[101]Lass, *A History of Steamboating*, 5–7.

Two important rises in water level occurred on the Missouri each year.[102] The first rise began in April as a result of melt-water from the Great Plains and lower Rocky Mountains. The second rise occurred from mid- May through June from precipitation on the Great Plains and melt-water from the upper regions of the Rocky Mountains. The expedition's late departure, compounded by the boats' deep drafts, resulted in an arduous trip during which the steamboats grounded numerous times.[103]

The *Western Engineer* advanced the farthest, reaching a point slightly above present-day Omaha, Nebraska but far short of intended destination. Most doubters believed the Yellowstone Expedition of 1819 proved the ineffectiveness of early steamboat designs for use on the Missouri. Because the expedition's keelboats covered more distance than its steamboats, it is of no surprise that the second Yellowstone Expedition in 1824 used only keelboats.[104]

In the years following the trips of the *Independence* and the first Yellowstone Expedition, steamboat traffic on the lower Missouri slowly increased. Though the failure of the Yellowstone Expedition had not established a post as high on the river as Calhoun anticipated, it did lead to the creation of Fort Atkinson just above present-day Omaha. For the next decade, therefore, steamboating on the Missouri River centered on supplying Fort Atkinson until it was abandoned and replaced by Fort Leavenworth in 1827. During

---

[102] Currently, the Missouri River fluctuates less noticeably because of dams constructed during the early and mid-twentieth century. Although flooding occasionally causes major damage to communities along the Missouri's banks, the river is much more stable today than it once was.

[103] Ibid., 3, 6; Giffen, "*Walks in Water*," 33–35.

[104] Lass, *A History of Steamboating*, 7.

the 1820s, steamboats reduced the shipping time against the Missouri's current compared to laborious keelboat service, but they often succumbed to mechanical failure or river hazards and could not be chartered without exorbitant freight rates. In the early 1820s, only Untied States government contracts met the large freight demands and shipping rates of 10¢ per pound required by steamboatmen to risk a voyage up the Missouri.[105]

As a result of Mexico's independence from Spain in 1821, the Santa Fe Trail officially opened in the following year, making central Missouri the staging area for western expansion. With growing settlement in the state's interior and the rise of sales in wheat, tobacco, and hemp the Missouri Valley's economy boomed. Dry goods merchants, like James Aull of Lexington, found a lucrative business in supplying freighters headed for Santa Fe with manufactured goods originating on the Atlantic seaboard. In 1830, Aull sold over $8,000 worth of Philadelphia merchandise, but could secure regular upriver steamboat shipments only after buying partial ownership in three steamboats operating out of St. Louis.[106] Harkening back to the days of merchant capitalism in New England, Aull's experience resembled that of colonial merchants and the necessity for owning boat shares to assuredly predict the arrival of cargo bought in foreign markets.

Although dry goods and provisions trade became increasingly specialized with emerging modern economies of scale, the relationship between the two activities and shipping was not immediately incompatible. Pre-Revolutionary colonial merchants,

---

[105]Giffen, *"Walks in Water,"* 41.

[106]Ibid., 47.

regardless of their primary focus, frequently engaged in shipping. The connectedness of global colonial trade allowed merchants to have a Janus-gaze from the backcountry to the waterfront. Initially, the two arenas were compatible. By the 1790s, however, merchants in eastern states looked in one direction. Dry goods importers spent more time in the backcountry foraging for customers and setting up regional distributors. Provisions exporters like Stephen Girard, on the other hand, spent more time in home ports. By 1786, Girard invested in stores on or near the Philadelphia waterfront specifically to oversee loading provisions in his vessels. As he placed intensive energy into freight handling he had to maintain good relations with his shipping contacts. These relations required physical proximity to a "miscellany of waterfront artisans and related personnel – captains, carters, chandlers, customs officers – as well as with the merchants who supplied outward cargoes and bought the incoming ones."[107]

The relations forged with the shipping community fostered reliable access to cargo space beyond the capabilities of foreign dry goods firms. As result, provisions merchants tended to abandon their dry goods activities and focus more intently on catering to, or investing in, the shipping industry. Garriott's intensification in shipping connections resembled the post-1790 phenomenon seen in eastern states where the "the disparate nature of shipping and importing caused firms after 1775 to expand within the context of one of these operational modes, instead of freely branching from one to the other."[108]

Unlike those in the East, however, Aull and his competitors relied on the United

[107] Doerflinger, "Commercial Specialization," 42.

[108] Ibid., 44.

States military to contract the services of their boats and defray shipping costs. Even though the Boonslick Region was rapidly increasing the scale of agricultural products, farmers generally preferred to send their shipments downriver on home-built flatboats.[109] To offset the high transportation costs of his own products and heavy competition against downriver shipments, Aull's steamboat business profited with supplemental government contracts.[110]

Military supply contracts, therefore, provided the main impetus for steamboat service on the lower Missouri throughout the 1830s. Earlier in 1826, chronic flooding of the Missouri River forced abandonment of Franklin, which moved the staging area for the Santa Fe Trail across the river elevated site of Boonville, Missouri. For a short time, then, Boonville served as the leading depot for private cargo. From the mid to late 1830s, however, the head of the Santa Fe Trail moved three more times farther upriver to Independence, Lexington, and Westport, and these locations soon replaced those on the lower river. Each year during the 1830s saw record numbers of boats advertising departures from St. Louis for points on the Missouri. In 1834, at least fourteen boats were chartered for the Missouri. By 1835, the population and trade of the Boonslick region increased sufficiently to warrant the creation of five regular packets on the river.[111] Although steamboats ventured on the lower Missouri River with more frequency during

---

[109]Alphonso Wetmore, *Gazetteer of the State of Missouri: with a Map of the State, from the Office of the Surveyor-General, Including the Latest Additions and Surveys, to which is Added and Appendix Containing Frontier Sketches, and Illustrations of Indian Character, with a Frontispiece, Engraved on Steel* (New York, 1837), 35.

[110]Giffen, "*Walks in Water*," 47, 62.

[111]Ibid., 62.

the 1830s, the bulk of their cargo was mainly government stores for Fort Leavenworth (figure 3). Without steady supply contracts of the 1830s, little if any steamboat activity would have occurred on the lower Missouri.

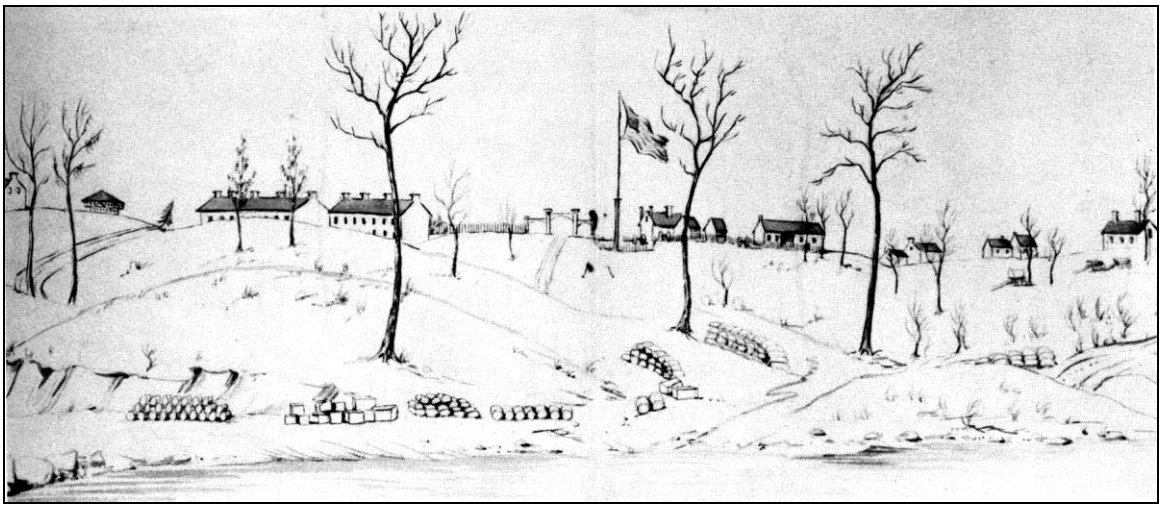


Fig. 3. Fort Leavenworth as drawn in 1849. (James D. Horan, *The Great American West: A Pictorial History From Colorado to the Last Frontier,* New York, 1959, 31.)

The Missouri River would not become synonymous with steamboating, however, until a member of the American Fur Company brought optimism for steamboat use in the remote regions of the fur trade. Kenneth McKenzie organized the Columbia Fur Company in 1822, and by 1827 diverted noticeable profits from the American Fur Company. The company promptly bought McKenzie's stock and offered him employment. McKenzie's addition to the company sparked interest in the use of steamboats on the upper Missouri. Within three years of his association with the company he and prominent member, Pierre Chouteau, Jr., convinced the company to construct the steamboat *Yellow Stone*. Though the boat's first trip up the Missouri in 1831 failed to reach the center of fur trading activity at Fort Union (in modern day North

Dakota), the *Yellow Stone* reached the fort in the following season, thereby silencing the steamboat opponents in the company. The construction of a second steamboat, the *Assiniboin,* corrected the *Yellow Stone*'s design flaws and proved a valued addition to the company's operations in the upper Missouri Valley.[112] For the next several years, steamboats on the upper Missouri made annual trips to Fort Union. The American Fur Company brought national fame and enthusiasm for Missouri River steamboating. Stories of Indian attacks and cholera outbreaks told by pioneering river pilots like Joseph La Barge stirred interest and romance in the upriver history.[113] The fur trade, carried out in harsh environments by rugged outdoorsmen, blended the wild unforgiving nature of a frontier with the sleek fast technology of modernity. The obvious literary metaphors between human progress, manifest destiny, and indigenous rights embossed upriver steamboats and their crews as national heroes. They expanded the outer edges of civilization, pushed forward the frontline of progress. Though their stories were compelling, indeed, they were far from comprehensive.

The true weight of the western economy, however, was carried on the decks of humbler steamboats engaged in the lower Missouri River trade. These boats were celebrated locally for carrying the necessities of life – wheat, flour, nails, and dishes. They were not the sleek stallions of the American Fur Company. Instead, they were lumbering, strong Clydesdales. Never gaining national fame, the boats of lower Missouri

---

[112]Hiram Martin Chittenden, *History of Early Steamboat Navigation on the Missouri River: Life and Adventures of Joseph La Barge, Pioneer Navigator and Indian Trader, for Fifty Years Identified with the Commerce of the Missouri Valley* (New York, 1903).

[113]Ibid.; Jackson, *Voyages of the Steamboat Yellow Stone*.

were the unassuming workhorses of daily life. Although tales of these steamboats were likely never recounted in eastern cities, local communities routinely courted boat owners for regular service. The lower river's workhorses may have lacked romance, but they made up for it tenfold in significance. The transition from technological curiosity to economic necessity, however, was slow, rough, and the frequent source of more tension than relief. What follows is this story – that of Missouri's workhorses told from the banks of St. Charles (Figure 4).

Fig. 4. Unknown artist, Pen Picture of the Village of St. Charles from the East Bank of the River in 1835. (JJBC, folder 174.)

The sputtering rise of steamboat activity on the lower Missouri throughout the greater part of the 1820s and 1830s, allowed the few steamboats on the river to charge wildly

varying freight rates. In 1839 standard rates to Liberty Landing, just six days' trip from St. Louis, fluctuated between $1.00 and $3.00 per hundred pounds. Town merchants reported similar discrepancies on freight bills of groceries amounting as low as 10 percent or as high as 20 percent of their shipments' total value.[114] Though rates remained high in 1840, thirty-four steamboats operated on the lower river making 139 total trips. In 1841, only twenty-six steamboats were in operation, but they made a total of 312 trips.[115] The number of boats on the river during the 1840s leveled off early in decade remaining at about forty boats per year in active service. In 1848, thirty-six boats entered the Missouri, but made only 286 trips that season.[116] This decrease, however, likely reflects higher tonnage capacities for steamboats in the mid-nineteenth century. Even with greater cargo capacity on the river as a whole, the effect of fewer boating trips enhanced Missouri towns like Weston, Lexington, Boonville, and St. Joseph. These towns were among the first to receive regular packet service. Their dry goods merchants bought eastern products months in advance and expected steamboat service regardless of the total boats on the river. In Weston alone, steamboat arrivals between 1846 and 1848 grew from 132 to 193.[117] As the magnet of shipping for northwest Missouri, the *Frontier Journal* recorded that Weston exported nearly one-half of all agricultural products sent downriver from Platte, Clay, and Clinton counties in 1848. In addition to downriver

[114]Giffen, "*Walks in Water*," 75.

[115]Ibid., 83–84, table 6-2.

[116]Ibid., 108 table 7-3.

[117]Ibid., 107 table 7-2.

exports, the total worth of all sales in the Weston market, including goods sold to Fort Leavenworth and Santa Fe traders, for that year reportedly reached $500,000 or $11 million in modern currency.[118] In the same season, the *Lexington Weekly Press* reported 190 "up stream" arrivals and 180 "down stream" farther downriver in Lexington. The balance of steamboat arrivals reflected the growing economy of scale for agricultural exports out of the Missouri Valley. While the total value of products of imports into Lexington that year amounted to $200,000 or $4.4 million in modern currency, the total value of exports amounted to $250,000 or $5.5 million in modern currency.[119] The business of lower-Missouri river towns certainly thrived during the late 1840s. Improvements in Lexington just for 1848 counted: twenty-one brick residences, one three-story brick business house, ten blacksmith shops, three silversmith shops, sixteen dry goods houses, four commission storage and produce houses, and "fourteen or fifteen" other storage houses.[120] All of these structures were related to one another in the larger, growing infrastructure of the modern world. Jacob Price defined infrastructure as

> not merely roads, canals, docks, waterworks, and other physical improvements, but also the myriad commercial and financial institutions, including banks, clearinghouses, insurance companies, Lloyd's exchange, and the stock exchange of course, but also commercial practices and law, commercial education, an improved postal system, to say nothing of the human capital and good will created by the

---

[118]*Frontier Journal*, "Commerce of Weston," reprinted in *Western Journal of Agriculture, Manufactures, Mechanic Arts, Internal Improvements, Commerce, and General Literature*, 2, ed. M. Tarver and T. F. Risk (St. Louis, 1849), 269–271. Hereafter referred to as *WJA*; for financial equation see McCusker, *How Much Is That in Real Money?*

[119]*WJC*, "Commerce and Improvements of Lexington, Missouri," 1, 112–113; for financial equation see McCusker, *How Much Is That in Real Money?*

[120]*WJA*, "Western Towns: Lexington, Missouri," 2, 206–207.

worldwide experience of hundreds, even thousands, of firms.[121]

Centered in Missouri's tobacco region Glasgow, in Howard County, boasted successful shipping seasons in the late 1840s. In a description of their town's business affairs, the *Glasgow Times* reported that between two and four packets made regular stops at their levee each year, and shipments to St. Louis averaged from 18¢ to 20¢. Noticeably absent in the *Time's* description, however, was the mention of storage facilities and commission houses like those built in Lexington. In Lexington, ample facilities existed for a manufacturer or farmer to simply sell his products to a provision merchant specialized in export shipping. At Glasgow, however, "manufacturers and growers [of tobacco], in many instances, [were] their own shippers."[122]

The dramatic increase during the 1840s, at least in part, was a product of the immigration boom occurring across the entire nation. Throughout this decade, the population of Missouri more than doubled. More importantly though, the lower Missouri had officially entered the transportation revolution that tapped a growing economy of scale in agricultural production. Steamboat traffic increased and with it came broader ranges of economic diversity that was expanding westward since the end of the War of 1812. Individual merchants, especially those of St. Charles, Missouri, adapted to this new era by utilizing business strategies of a merchant capitalist in an ever diversifying economy. The self-reliant economy, initially focused on inter-regional trade, now became connected with markets in the East. The transition from a frontier economy to a

---

[121] Price, "What Did Merchants Do?," 283–284.

[122] *Glasgow Times*, "Glasgow–Its Location, Business, Population, &c., &c.," reprinted in *WJA* 2, 208–209.

market-oriented one, however, required western merchants to pattern their business strategies in ways not common to the eastern seaboard for almost a century.

III. THE MARGINAL FRONTIER:

TRAMP BOATS, WAREHOUSES, AND THE WAYSIDE

In the 1837 *Gazetteer of the State of Missouri*, Alphonso Wetmore, credited steamboats for the growing commercial prosperity of St. Louis, saying "the speedy voyages of steamboats … force commercial men to forget the space that intervenes between St. Louis and the ocean."[1] As the gaze of St. Louis businessmen moved steadily eastward, the space between them and the interior of Missouri grew increasingly larger. With each shipping season, the amount and variety of goods aboard steamboats seemed limitless, but equally limitless were the debts of western dry goods merchants. In an environment where hard currency was scare, western business had no other option than to export local products for balancing accounts with eastern suppliers. For towns on the lower Missouri, agricultural surplus promised the best rewards for export, but was also the least compatible with the quick pace and high volume cargos of steamboats. Although the eastern business environment demanded that St. Louis merchants participate in the export/provisions trade, the lower Missouri River was slow to develop an agricultural economy of scale fitting the needs of the St. Louis market. Just as St. Louis dry goods merchants came to depend on the availability of local exports to ship east, so too did merchants on the lower Missouri River become dependent on the growing market in St. Louis. The following chapter shows how St. Louis manufacturers and dry

[1]Alphonso Wetmore, *Gazetteer of the State of Missouri: with a Map of the State, from the Office of the Surveyor-General, Including the Latest Additions and Surveys, to which is Added and Appendix Containing Frontier Sketches, and Illustrations of Indian Character, with a Frontispiece, Engraved on Steel* (New York, 1837), 190.

goods merchants relied on local exports of lead ore to pay for eastern goods. Conversely, dry goods merchants along the Missouri River sought local agricultural exports to pay for their eastern purchases. As they did so, they experienced two added difficulties not present in St. Louis. First, fewer steamboats meant increased competition for freight handling, thereby raising shipping rates. Second, Missouri Valley exports were confined mainly to bulky, low-cost agricultural products that limited the variety of resources available to send East. Farm products also required additional infrastructure in a variety of collection and storage facilities already established in St. Louis by the late 1830s. While St. Louis merchants were afforded a luxury of an easily amassed variety of export goods namely lead ore, furs, and processed flour, Missouri River merchants had fewer options. On the Missouri, and especially in St. Charles, nothing was more critical to a provisions merchant than commanding the flow of agricultural exports from Missouri's interior. St. Charles, as the last center of population before the major markets in St. Louis, struggled to remain active in the growing agricultural export trade. Without an ability to send local agricultural products to market, the merchants of St. Charles risked being shut-out of the only viable source of trade between their region and the wealth of eastern America.

The western United States during the nineteenth century must be considered as both a frontier and an American colony. The process of colonization generally replicated economic conditions as the population expanded outward from the parent economy. This replication of the eastern economy in the Missouri Valley occurred first in St. Louis. As a result, it is critical to follow the development of the St. Louis economy to understand

the procedures its merchants adopted to engage in the market economies of the East.

The process was quite similar to John McCusker and Russell Menard's description of farming colonies during the seventeenth and eighteenth centuries. Increased demand for wheat staples encouraged "spin-off" industries like milling, barrel making, and specialized shipping services. As McCusker and Menard noted, mid-level producers around metropolitan areas either increased their scale of production or redirected their capital into emerging support sectors.[2] Because the whole Missouri Valley's population was increasing, commercial demand remained consistent. A dry goods dealer seeking to distribute foreign products never lacked customers. Tapping wealth from the other two growing sectors proved more difficult.

First, to engage in the St. Louis economy required obtaining local agricultural products of the Missouri Valley. In many areas, surplus of this sort, however, was still following the former household mode of production that affixed monetary values to articles and then traded products based on that value without actually handling hard currency. To obtain agricultural exports, a merchant in the Missouri Valley had to be willing to exchange his eastern goods (obtained at a fixed price), for local surplus (obtained a highly fluctuating price).

Second, because the source of population growth occurred in western Missouri, the transportation network was focused on the extreme ends of the state. For merchants located between St. Louis and the western trails, the most central concern was the

---

[2] John J. McCusker and Russell R. Menard, *The Economy of British North America, 1607–1789* (Chapel Hill, 1991), 17–34.

drawing away of steamboat service from their levees. All communities along the Missouri River fell under a hierarchy of regional exchange based in St. Louis. For intermediary places, like St. Charles, the need for water transportation became a desperate attempt to compete with the growing economies farther upriver. Contingent to all these events, however, was a pattern of economic growth begun in New Orleans that rippled out to the entire western territory. As the Mississippi Valley economy prospered, regional centers like St. Louis gained prominence as both importers and exporters of commodities. The rise of St. Louis as a transportation hub for the Mississippi River set in motion further ripples of economic growth throughout the Missouri Valley. Once again, water transport was the true measure of a community's prominence. The question for towns along the Missouri River, then, was simple: Who would be the next St. Louis? To understand the strategies of merchants in Missouri's interior, it is important, therefore, to explore the strategies of St. Louis merchants and the impact steamboats had during the city's rise to a "commercial emporium."

Steamboats in the lower Missouri River trade cannot be considered in the same light as their counterparts in the upper river trade. Generally, a steamboat on a fur trade run did not service river towns on the lower Missouri. Their upriver cargos consisted of trade items, post supplies, and government freight for extreme frontier locations. Places like Fort Union had practically no other contact with the outside world, and so the single yearly trip of a fur company's steamboat by necessity had to be filled before going up river. Occasionally fur trade boats purchased small stores at landings on the lower Missouri River. For instance, on a voyage in 1833 the steamboat *Yellow Stone*'s clerk

bought 33 1/2 bushels potatoes, 40 bushels corn meal, and 21 empty barrels from L. J. Chauvin, operator of the St. Charles ferry.[3] Purchases of this kind, however, were likely incidentals for the boat crew that were either overlooked in St. Louis, or more conveniently purchased en route. They did not reflect the burgeoning trade between fur traders and Missouri River communities. In other words, the fur trade never promoted, or directly tapped, the new economy of scale in the lower Missouri provisions sector. The downriver trip proved equally useless to lower ports' cargo needs since an entire year's worth of furs was crammed in boat hulls destined for St. Louis. Though incidents of small trade surely existed, steamboats employed by fur companies had no appreciable effect on the development of trade below Fort Leavenworth. The real lifeblood for communities in a marginal frontier setting was packet boats. Shuttling between St. Louis and some predetermined river town, steamboat packets never treaded the virgin waters of the upper-Missouri or reached the farthest boundaries of Euro-American civilization. They were, instead, movers of a growing frontier economy – the unrequited workhorses of the west.

The organization of packet service, however, followed a period of loosely organized tramp and transient service. Owners of these boats operated on a freelance basis, making *ad hoc* contracts with widely varying rates. While later packet service supplemented and did not eliminate tramp service, the former allowed a centralization of lower Missouri

---

[3]S. B. Yellow Stone to L. J. Chauvin, 4 Apr. 1833. Pierre Chouteau Maffit Collection, Papers of the St. Louis Fur Trade, Part I: The Chouteau Collection, 1752-1925. *University Publications of America*, Bethesda, Maryland. Microfilm Reel 21. Hereafter referred to as PCMC. Also, Ferry Licenses of L. J. Chauvin, Dexter P. Tiffany Collection, Missouri Historical Society (MHS), St. Louis.

River trade in the late 1830s. From St. Charles's perspective, however, the move towards organized packets centralized the agricultural monopolization of ports in western Missouri. As the hierarchy described by Cassagrande *et al.* crystallized, mid-level producers became more marginalized. This pattern emerged in colonial North America as the overall number of Chesapeake planters decreased while tobacco production increased. Planters who remained active expanded their production output at the expense of lower-level competitors. Historians Jacob Price and Paul Clemens related this development to the internal changes within the British tobacco exchange market. Paralleling consolidation of colonial planters, seventeenth-century English exchange firms in London, Bristol, and Liverpool became less numerous, dropping from 346 firms in 1640 to only 66 firms in 1775. The surviving firms captured larger economies of scale than their predecessors.[4]

By the eighteenth century, British firms in Glasgow, Scotland, diverted most tobacco imports away from London, Bristol, and Liverpool. The large firms utilized a two-fold strategy. First, they increased credit lines to colonial planters. The introduction of capital allowed favored planters to produce large volumes of tobacco on a predictable schedule. Second, exchange houses used guarantees for full shiploads of cargo to borrow money for chartering or purchasing a vessel. This ensured exclusive use of a vessel and allowed for speedy returns from the colonies. Many smaller firms could purchase only partial space aboard vessels. Frequently, their shipments spent weeks in a colonial port

[4] Jacob M. Price and Paul G. E. Clemens, "A Revolution of Scale in Overseas Trade: British Firms in the Chesapeake Trade, 1675–1775," *The Journal of Economic History* 47 (Mar., 1987): 1–43.

waiting for the ship's captain to fill his hold with other customers' freight. By the time the smaller houses' freight arrived home, the large firm had already sold its merchandize. Often the first large shipment of the season received the highest price; it also flooded the market thereby lowering prices for late-comers.[5] Through extended credit and controlled shipping, British tobacco merchants altered the nature of colonial production and domestic exchange. They revealed correlations between production, sales, and shipping that contributed to new economy of scale in the Chesapeake. Although changes within the Missouri Valley took different forms, the essential characteristic remained identical.

Although St. Charles was seemingly the gateway to the Missouri River, it was alternately the last destination for downriver agricultural products. Packets only appeared in locations with an established ability to fill boats headed back to St. Louis. With large stores of cargo accumulating in upriver ports, St. Charles found resistance from tramp captains to leave deck space for downriver freight from their levee, thus creating more resistance for later packet service. Even though dry goods merchants in the West had access to manufactured goods and credit from eastern centers like Boston, Philadelphia, and Pittsburgh, balancing accounts was impossible without a means to remit debt. The production of lead, wheat, and tobacco had the greatest potential for balanced trade with eastern markets. Without an ability to command the agricultural exports of Missouri's interior, St. Charles was effectively shutout from the foundation of their economy.

By the late 1830s, St. Louis was "the commercial emporium of Missouri" as well as a

[5] Ibid.

growing center for steamboating on the Mississippi River.[6] Eastern manufacturers like Oliver Dwight Filley emigrated westward hoping to find new markets for their products. Filley came from Wintonbury, Connecticut, where he learned his family business of making Japanese style tin ware.[7] Along with Oliver went, his brother Giles Filley, and their associate Sam Wing, all of whom found an abundant market for their tin ware. The St. Louis demand for manufactured goods kept the Filley brothers in constant work to the point that they were "nearly used up from the constant exercise of body and mind in selling and packing tin wares."[8] The active market Filley enjoyed in St. Louis, however, was not limited to only his wares. As his associate Sam Wing noted, "Business of all kinds is brisk. Steam Boats full freighted are continually coming and going and to see 30 lying at our wharves is but an every day occurrence."[9]

Wing was not alone in his assessment of St. Louis's business environment. In an 1837 guide for western travelers, W. G. Lyford gave a similar description of St. Louis commerce saying that "forty-two steam boats, of different sizes, varying from one hundred and fifty to three hundred tons, have frequently been seen at the wharf at one

---

[6]Wetmore, *Gazetteer of the State of Missouri*, 31.

[7]Sharon Y. Steinberg, "A Bold and Calculating Spirit – Capt. Oliver Filley (1784-1846)," Wintonbury Historical Society (2002), 2, available online, www.bloomfieldhistory.org.

[8]Oliver Filley, Giles Filley, and Sam Wing to Parents, 10 Apr. 1837, Filley Family Papers (FFP), MHS. The majority of the letters sent by Oliver Filley from St. Louis to his family in Connecticut also contain the correspondence of his brother Giles, and their associate Sam Wing. Each spoke of "brisk business." Sam Wing's quote above possessed a bit more color and was preferred over the others.

[9]Ibid.

time; and at no season, excepting winter, are there less than twenty steamboats within the harbor–the average number is about thirty.... They invariably arrive and depart with full freight."[10] Perhaps the most visible example of St. Louis's growing prominence as a steamboat port was the construction of a floating dock for the care and maintenance of boats. The floating dock was an excellent example of a nineteenth-century spin-off industry, distinct in practice but similar in spirit to those noticed by colonial historians. Lyford described the operation and convenience of this St. Louis-based invention saying that:

> This dock consists of a certain number of floats, which can be increased or diminished at pleasure, and are connected together laterally. Each float is about fourteen feet wide and sixty feet long, and can be sunk in the river to any given depth, and there suspended. When the floats are connected together and sunk, a boat is placed immediately over them; they are then gradually raised above the surface of the water, until the boat is entirely exposed. She is then repaired without any of the inconveniences attended on the mode of construction of other docks. A free circulation of air is obtained, by means of which the workmen can operate with facility and comfort; and the entire hull of the vessel being exposed to the action of the sun and air, is dried without the use of fire.[11]

The St. Louis Floating Dry Docks Company held patents for the dock and sold at least twenty shares to Kenneth Mackenzie who was a dogged advocate of Missouri River

---

[10]W.G. Lyford, *The Western Address Directory: Containing the Cards of Merchants, Manufacturers, and Other Business Men, in Pittsburgh, (Pa.), Wheeling, (Va.), Zanesville, (O.), Portsmouth, (O.), Dayton, (O.), Cincinnati, (O.), Madison, (Ind.), Louisville, (K.), [and] St. Louis, (Mo.). Together with Historical, Topographical & Statistical Sketches for the Year 1837, of Those Cities, and Towns in the Mississippi Valley. Intended as a Guide to Travellers to which is Added, Alphabetically Arranged, a list of the Steamboats on the Western Waters* (Baltimore, MD, 1837), 398.

[11]Lyford, *The Western Address Directory*, 398–399.

steamboating. Each of his shares valued between $100 and $110 in 1848–49 (figure 5).[12] Boats arrived in St. Louis principally to deliver freight, but they also had certain operational needs that St. Louis businessmen were more than happy to meet. Closer examination of employee records (assuming they survived) would likely reveal workers formerly originating from generalized service sectors like carpentry and mechanics. The Floating Dry Docks probably capitalized on the diversity of St. Louis industries to create a specialized workforce and service. Specialization, however, was not a universal phenomenon.

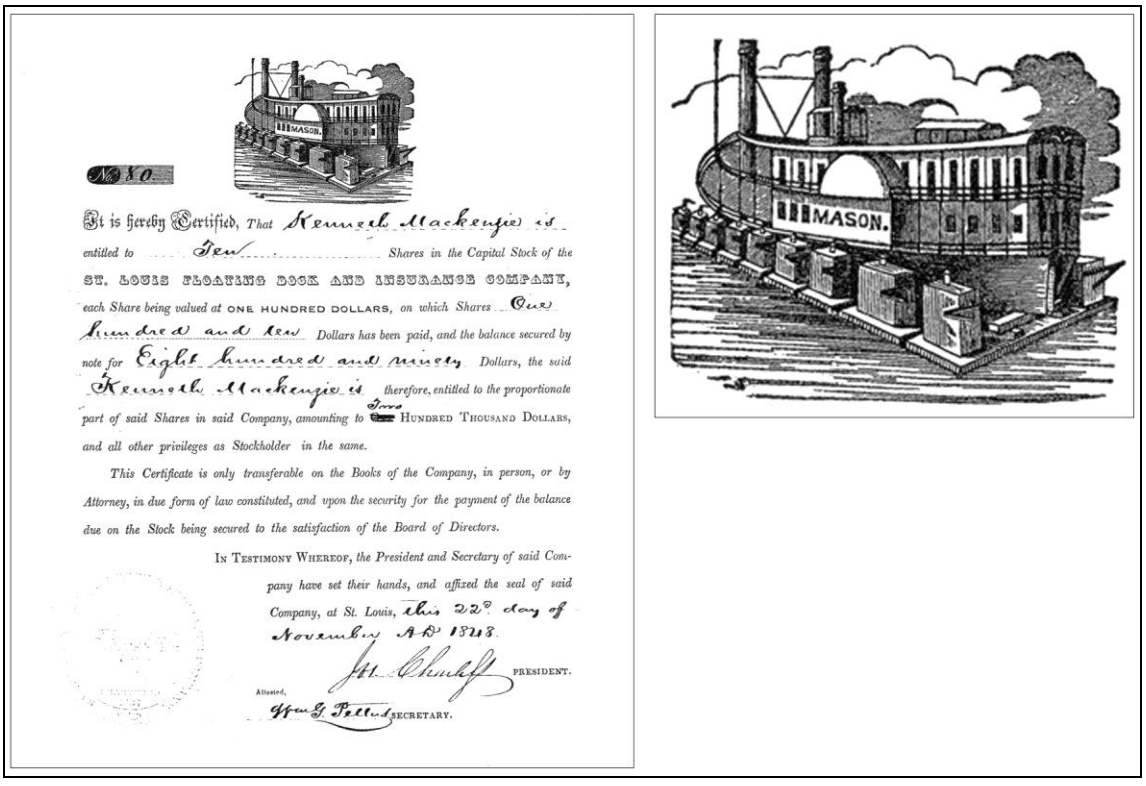


Fig. 5. Certificate of Purchase for Ten Shares in the St. Louis Floating Dock and Insurance Company by Kenneth Mackenzie, 22 Nov. 1848. (Steamboats Collection, Missouri Historical Society, St. Louis.)

[12]Certificate of Purchase for Ten Shares in the St. Louis Floating Dock and Insurance Company by Kenneth Mackenzie, 22 Nov. 1848, Steamboats Collection, MHS.

The brisk business found by the Filley brothers required acumen sharper than simple supply and demand. Even though their tin ware sold faster than their production output, the Filleys endured a series of severe money shortages.[13] The economics of the frontier, created by the paucity of specie in the western United States, functioned through extending credit and drawing drafts on individual debts. Ideally, the Filley brothers expected to purchase raw tin plates and wire from the East on long term credit. Colonial importers usually received twelve to eighteen months credit from European suppliers. Dry goods dealers often required such long-term loans to synchronize their accounts with agricultural cycles. Creditors from Europe happily extended large sums of long-term credit because it ensured payment in provisions valued at home.[14] The universal lack of specie in colonial North America and the western frontier forced a reliance on local production for repaying debts.

As the Filleys manufactured eastern materials into products for western sale, they encountered unexpected difficulties in western business. In theory, they only required ample supplies and energetic consumers. In practice, however, the Filley brothers could not risk selling merchandise to just any customer.

The sale of goods took one of three avenues: outright purchase with specie, trade of needed property or services, or purchase through bills of exchange. The first two were straightforward. The third practice was complicated and more common than Filley

---

[13]Oliver Filley to Parents, 18 June 1837, FFP.

[14] Thomas M. Doerflinger, *A Vigorous Spirit of Enterprise: Merchants and Economic Development in Revolutionary Philadelphia* (Chapel Hill, NC, 1986).

desired. Trading through bills of exchange occurred directly between Filley and his customer, but often required buying third party drafts based on a debt owed the customer by some other individual. If a farmer, for instance, sent wheat to an eastern firm he received an exchange bill as receipt for unsold shipments. Filley could accept bills of this type and either collect payment directly from the eastern firm or transfer it to his eastern supplier who then credited Filley's account. Exchange bills from large reputable firms were often endorsed by large eastern banks whose solvency was unquestioned. These were universally preferred and nearly as good as cash. When offered a bill endorsed locally, Filley had to weigh the purchase amount against the reputation of both the drawer and the endorser. If he could confidently expect either party to cover the value of the draft, he made the sale. By accepting drafts and extending credit, Filley easily liquidated his tin ware stock, but had little to show except scattered loans throughout St. Louis.

Thomas Doerflinger found similar strategies among Rhode Island colonial merchants. For example, he counted the "far-flung activities of the Brown brothers of Providence" as simultaneously focusing on operating a candle works and an iron works, while maintaining steady trade with the West Indies, England, and many American ports. The Brown brothers' most extensive activities occurred primarily in the decade prior to the Revolution. Their diverse trading operations provided specie and exchange bills to purchase manufactured items and semi-processed materials like whale head matter for candle making. This strategy was quite successful, but nevertheless represented "not a

choice but a necessity." [15]

Exchange bills from eastern firms were difficult to find because farmers preferred to trade with local Missouri firms. By June 1837, Filley's cash reserve was nearly as depleted as his inventory. He wrote with desperation that "we find considerable difficulty in arranging our money affairs, and what we shall do I hardly know. We have some $12.00 or $15.00 in specie and some little Eastern paper – how we shall manage for the balance I know not."[16]

Once those balances with eastern merchants came due, Filley faced a frustrating situation in which his brisk business in the West could not buy supplies from the East. In writing home, he explained that "we have money enough on hand and loaned out in town to pay for all we want to buy – but if we collect it, it is not in a shape that will answer our purpose East."[17] Filley's problem stemmed from the gamble associated with buying exchange bills. Hypothetically, for example, if Filley received a balance due for $100 worth of tin ware materials, he never would receive a corresponding exchange bill for $100 worth of wheat. Instead, he received bills verifying the transfer of some specified number of unsold bushels of wheat (measured in volume not monetary value). In a sense, Filley was not purchasing actual wheat, but the right to sell wheat in some distant port. Filley, then, had to anticipate the future price of wheat against the value of his labor and

---

[15] Thomas M. Doerflinger, "Commercial Specialization in Philadelphia's Merchant Community, 1750-1791," *Business History Review* 57, (Spring, 1983): 21.

[16]Oliver Filley to Parents, 18 June 1837, FFP.

[17]Ibid.

size of his debts. If prices rose he might turn a profit; if they fell he was sunk.

Historian William Cronon discussed the eventual extension of this system in the Chicago Stock Exchange during the late nineteenth century. As grain elevators dotted the Illinois countryside, local farmers sold their exchange bills directly to elevator operators. They transferred both physical property and the rights to its sale. The right to sell wheat was known as wheat futures but only nominally represented the amount of stored wheat awaiting sale. In Chicago, firms or individuals bought wheat futures that contractually obligated the seller to provide payment by a specified date. A firm or individual could also purchase stocks or shares of elevator supplies. If the same firm or individual secretly purchased a majority of both wheat futures and stocks, they owned the supply and demand for wheat. Because a stockholder was not bound to sell his shares, a majority holder could keep wheat tied up in elevators to artificially raise prices. He or she, then, forced those who sold futures to remit payment at several times the normal value. Traders referred to this maneuver as "cornering the market," and its practice was eventually curtailed in the twentieth century through trade regulations.[18]

Chicago traders' ability to corner wheat markets had parallels to business practices of the seventeenth and eighteenth centuries. Just as Price attributed growth in the tobacco economy of scale to increased carrying capacity of oceanic vessels, the increased cargo loads of railroads also contributed to correspondingly large economies of scale in the wheat market. In the colonial tobacco trade, English capital allowed individual planters

[18] William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York, 1991).

to consolidate their land holdings and increase output. They were still bound, however, to the carrying capacities of contemporaneous transportation. In Illinois, Chicago capital focused on transportation and storage infrastructure without direct investment in farming households. The grain elevator allowed farmsteads to maintain household production levels while consolidating their output. The system was simpler and more effective, but designed to achieve the same goals. In the mid-nineteenth century, bills of exchange represented small sack loads of wheat produced by individual farming households. Cornering a nineteenth-century market would require tens of thousands of exchange bills scattered across the nation. Although Filley never feared market collapses seen much later in Chicago, he was still gambling on wheat "futures." The scale was smaller, but the risks were present. Eventually, a new economy of scale changed every aspect of labor, organization, and transportation (see figure 6, 7, 8, 9).[19]

In addition to Filley's foreign market concerns, most local banks were unreliable or valueless when dealing with eastern merchants. The most stable means of making purchases and paying balances to and from eastern merchants, excepting actual specie, were notes drawn on banks in the East. The financial crisis of eastern banks in 1837, however, made this form of currency even more attractive, since it lowered bank note values so that "New York money is worth from 4 to 5 percent as is almost all Eastern money."[20] Filley likely hoped to offer the holder of a New York bank note this small percentage of its value, and then draw on that bank for a larger percentage than he paid.

---

[19] Ibid.

[20]Oliver Filley to Parents, 18 June 1837, FFP.

Fig. 6. George W. Ackerman, Unloading dry farm wheat, Wash., 1925. (National Archives and Records Administration, Records of the Extension Service, 33-SC-5094c.)

Fig. 7. Rudolph Goebel, The Steamboat General Meade Taking on a Cargo of Wheat at Marais Croche, 1870s. (John J. Buse Jr. Collection, folder 110, Western Historical Manuscripts Collection, University of Missouri, Columbia.) Marais Croche is located on fig. 12.

Fig. 8. Working Grain Elevator in southern Missouri (photographed by author, 2007).

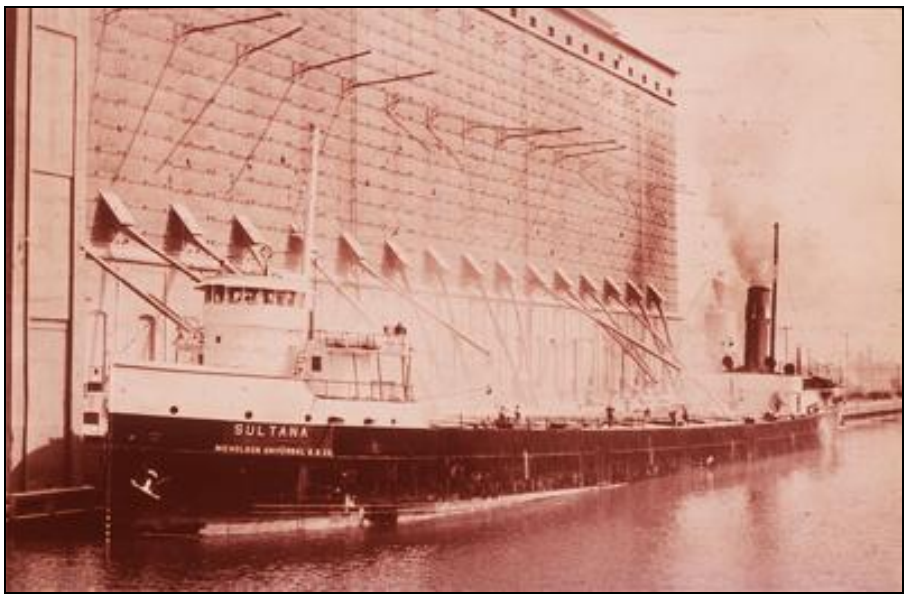


Fig. 9. James Vachon, Loading a Grain Boat at a Great Northern Railroad Elevator, Lake Superior, Wisc., 1941. (University of California, San

Diego) [database on-line]; available from artstor.org.

Even if Filley received the same amount for a note, he still profited simply by having the opportunity to make transactions in the East. Even though Filley knew his business "could get along tolerably well if we could get Eastern funds," this currency as well as specie circulated in short supply, and was not a reliable commodity.[21] Filley, like other western merchants, needed a means to convert his western profits into a commodity of exchange compatible in the East.

Knowing the value of local products was equally critical for colonial city traders. Cathy Matson noted that this occurred in New York during the 1670s when the fur trade declined. In this city, merchants not finding sufficient fur stocks purchased additional "small quantities of agricultural surpluses, including horses, cheese, staves, beeswax, butter, candles, tanned hides, flaxseed, straw wares, and earthen wares, from rural producers on Long Island and in New England."[22] Finding the right saleable items, however, was only half the task. Rural producers often viewed transactions as more than impersonal business negotiations. These transactions may have occurred among members of different social classes but nevertheless, took place between members of the same physical community. As a result, small producers dealing more frequently with regional merchants set prices on "a calculation based on economic justice" between the seller and purchaser. The hardest deals (and highest prices) farmers reserved for less-

[21]Ibid.

[22] Matson, "Damned Scoundrels," 397.

familiar associates.[23]

Even in urban settings, a sort of economic justice was common. For instance, prominent New Yorker Kiliaen Van Rensselaer's profit margin required a 50 percent markup from wholesale to retail on his imported goods. Matson quoted Rensselaer's instructions to his city store clerk that he "must sell all such goods as can bear it, somewhat higher than 50 percent. But I do not wish my own people to be charged more than 60 percent since they must gain it by hard labor. But from other people, for whom I need not care, you may take as much as is the market rate you can get."[24] Rensselaer's "own people" were his tenants and nearby associates who he charged lower prices than to unknown shoppers. A merchant's knowledge of farm product values, by necessity, was as broad as the activities within each household. In addition to the types of products available, a merchant also kept a large mental list of favored customers. For newcomers like the Filleys, the learning curve must have been painfully steep.

Between June and November 1837, Filley increased his cash holdings from $15.00 to $300.00.[25] He then promptly sent those funds to New York for a shipment of tin-plate bought earlier that season on credit. Considering his earlier letters and the difficulties he expressed about collecting cash on debts owed him, amassing $300.00 seemed to solve his liquidity dilemma. In actuality the shipment, paid for by the $300.00, was meant only

---

[23] Ibid., 410.

[24] Kiliaen Van Rensselaer to Jacob Albertsz Planck, 3 Oct. 1636, in *Van Rensseher-Bowier Manuscripts,* ed. A.J.F. Van Laer (Albany, NY, 1908), 74n, quoted in ibid, 410–411.

[25]Oliver and Giles Filley to Parents, 8 Nov. 1837, FFP.

to sustain his tin ware production until a much larger supply of materials could be purchased.[26] Most likely, Filley never hoped that hard currency could meet his purchasing needs, as is evident in a cargo of 60,000 pounds of lead sent along with the $300.00 to New York. This shipment of lead represented an exchange commodity that Filley could readily procure in St. Louis and that his suppliers in New York would accept.

Filley expected the lead shipment to bring from "$1,000 to $2,000 for another lot of Tin Plate."[27] He likely purchased the lead through debts owed him in St. Louis, but no matter the means, his shipment clearly shows that in the four months between June and November Filley more easily amassed $2,000 worth of lead, than $300 worth of "eastern funds." The export/provisions trade, although a viable solution to currency shortages, was not the business for which Filley had gone west. In spring 1837, exporting goods east was never mentioned as a possible option, but by late fall, it became a last resort, and the only means to maintain trade with the East. Filley's wide ranging estimate of how much tin-plate he could receive for a shipment of lead points to his novelty in the export business. His brother Giles, similarly, shows an unfamiliarity with exporting by adding "we have had a notion to ship a quantity of Buffalo Robes for your market [in Connecticut] but do not know how they would pay for the trouble... I must learn the

[26]Oliver Filley to Parents, 18 June 1837; and Oliver and Giles Filley to Parents, 8 Nov. 1837, FFP.

[27]Oliver and Giles Filley to Parents, 8 Nov. 1837, FFP.

value for things."[28] That the Filleys looked to an export commodity as a solution to their purchasing problems in the East after other options had failed shows that keeping pace with the energetic consumer market in St. Louis demanded that a merchant look for alternate commodities of exchange in the form of local exports. For the Filley brothers, incorporating local exports into their tin ware business was more a product of necessity than entrepreneurship. Even merchants with lofty entrepreneurial goals, however, did not always anticipate becoming exporters of western products.

Unlike the Filleys who confined their business to the city limits of St. Louis, J. R. Stanford sought to sell eastern goods in both St. Louis and Alton, Illinois. In December 1832, Stanford heeded the advice of his Boston suppliers by entering "an agreement with a man at Alton to supply him with a small stock of goods."[29] Though Stanford's man promised that "he can sell a great many goods at the place," Stanford had no intention of exchanging his goods for exportable products.[30] Although Alton never matched the commercial activity in St. Louis, by the late 1830s it was also becoming a legitimate hub of river trade for both the Mississippi and Illinois rivers (figure 10). Even in the larger St. Louis market, Stanford struggled to collect payments for credited purchases. Had he not admitted to having collection difficulties, he could reasonably expect the smaller market in Alton to have cash in circulation. He was equally aware that disreputable

---

[28]Ibid.

[29] J. R. Stanford to Messrs. Griggs and Weld, 3 Dec. 1832, Homer Stanford Papers (HSP), MHS.

[30]Ibid.

practices in the Missouri banking system forced "every man [to] have his bank in his own iron chest and be careful how he disposed" of it.[31] With all this in mind, Stanford still insisted on a cash only business in both St. Louis and Alton, saying that "as I do not do a general credit business here [St. Louis]... his instructions [at Alton] are to sell to none except for cash."[32]

Fig. 10. Henry Lewis, Alton, Illinois. *Das Illustrirte Mississippthal* (The Valley of the Mississippi Illustrated (Dusseldorf, Germany, 1854, reprint, trans., A. Hermina Poatgieter, ed. Bertha L. Heilbron, St. Paul, Minn., 1967, plate 60.)

At the close of 1832, Stanford preferred a specialized dimensional business strategy of buying goods from the East and selling for cash in the West. Like 1780s Philadelphian Thomas Fitzsimmons, Stanford hoped to be a specialized merchant. Although

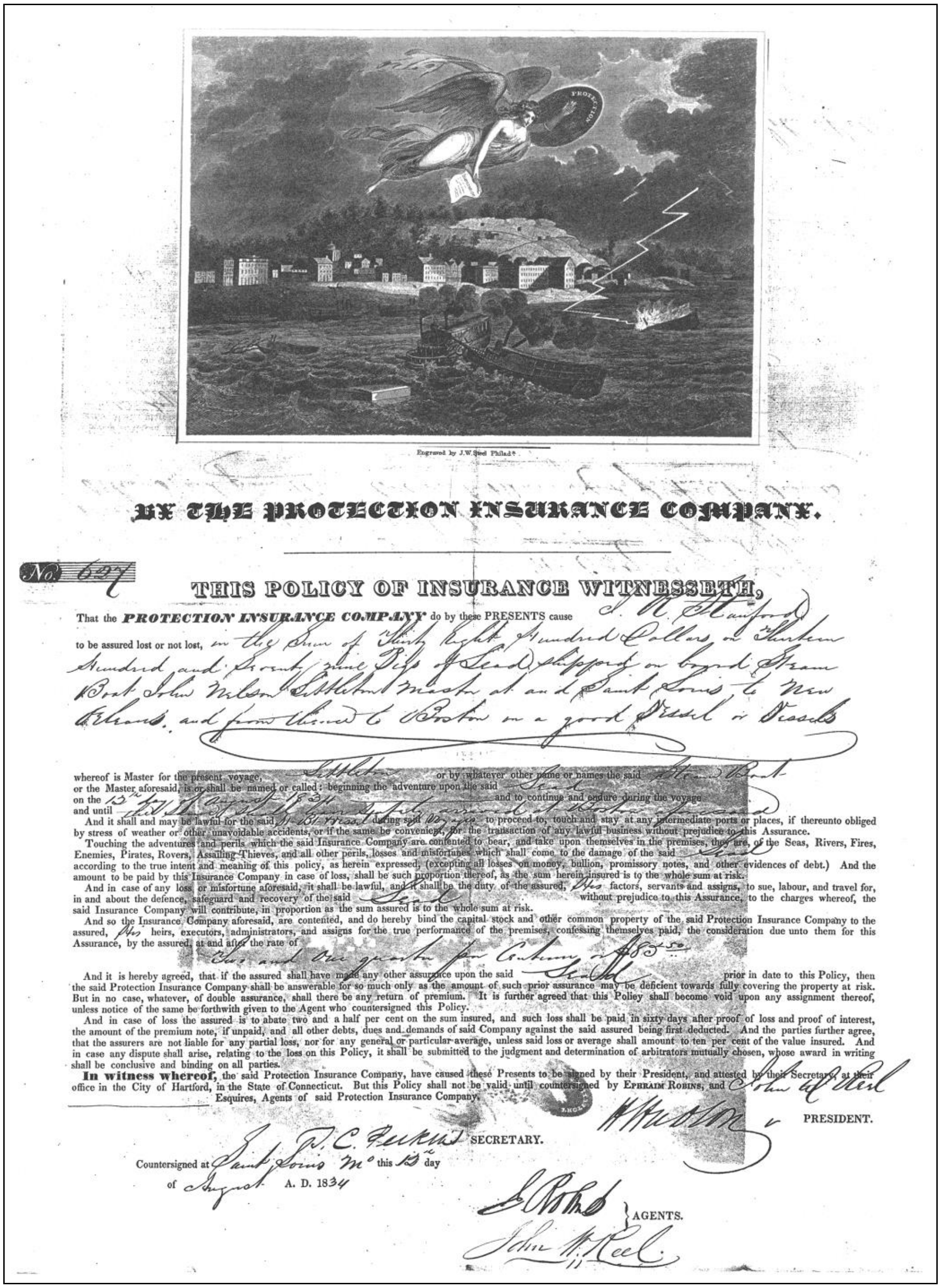
[31] Ibid.

[32] Ibid.

Fitzsimmons specialized in provisions exports, he and Stanford wished to direct their energies into a single, stable market. The critical distinction was that Fitzsimmons's wealth afforded more options. Stanford's, on the other hand, left him with almost no other choice but to venture into unfamiliar markets. By the 1834 shipping season, his business strategy incorporated a second dimension of exporting Midwest provisions to the East. Like the Filley brothers, Stanford's cash-only business had to yield to a combination of imports and exports. His arrangements in Alton gave him access to the lead reserves surrounding the Mississippi and Illinois rivers above St. Louis. Although Stanford could not simply receive cash for his goods at Alton, he could at least procure lead there, either through barter or local bank notes, and then ship the lead from St. Louis to Boston, via New Orleans.[33] This trade added layers to the original plan, as it used steamboats on the Mississippi River along with keelboats on the Illinois (figure 11).

---

[33]Stanford's records contained three marine insurance policies signed in his name and one policy in Stone & Co.'s name. These policies documented his lead exporting. The first, was dated 12 Aug. 1834 and issued by Protection Insurance Company, Hartford, Connecticut. The policy insured $3,800 on 1,379 pigs of lead at 2 1/4% ($85.50) for the safe passage of that freight on its entire journey from St. Louis to New Orleans (via steamboat *John Nelson*) and then to Boston (via an unnamed ocean vessel) (see figure 11). The second, was dated 29 June 1834 and issued by Protection Insurance Company, Hartford, Connecticut. The policy insured $1,500 on 570 pigs of lead at 2 1/4% ($33.25) for the safe passage of that freight on its entire journey from St. Louis to New Orleans (via steamboat *Christen*) and then to Boston (via an unnamed ocean vessel). The third was dated 20 June 1835 and issued by Protection Insurance Company, Hartford, Connecticut. The policy insured $1,000 on assorted merchandise at 1 1/2% ($5.00) for the safe passage of that freight on its entire journey from St. Louis to Pekin, Illinois (via steamboat *Cygnet* [baby swan]). The fourth was dated 31 Dec. 1836 and issued by Alton Marine & Fire Insurance Company, Alton, Illinois, but was in the name of Messrs. Stone & Co. The policy insured $2,750 on the keelboat *O' Hush* and cargo at 2 1/2% ($69.75) for the safe passage of that boat and freight on its entire journey from Pekin, Illinois, to Alton, Illinois. All four are part of the J.R. Stanford Collection.



BY THE PROTECTION INSURANCE COMPANY.

No. 627

THIS POLICY OF INSURANCE WITNESSETH,

That the **PROTECTION INSURANCE COMPANY** do by these PRESENTS cause

to be assured lost or not lost,

whereof is Master for the present voyage, or by whatever other name or names the said or the Master aforesaid, is or shall be named or called: beginning the adventure upon the said on the and to continue and endure during the voyage and until

And it shall and may be lawful for the said during said to proceed to, touch and stay at any intermediate ports or places, if thereunto obliged by stress of weather or other unavoidable accidents, or if the same be convenient, for the transaction of any lawful business without prejudice to this Assurance.

Touching the adventures and perils which the said Insurance Company are contented to bear, and take upon themselves in the premises, they are, of the Seas, Rivers, Fires, Enemies, Pirates, Rovers, Assailing Thieves, and all other perils, losses and misfortunes which shall come to the damage of the said according to the true intent and meaning of this policy, as herein expressed, (excepting all losses on money, bullion, promissory notes, and other evidences of debt.) And the amount to be paid by this Insurance Company in case of loss, shall be such proportion thereof, as the sum herein insured is to the whole sum at risk.

And in case of any loss or misfortune aforesaid, it shall be lawful, and it shall be the duty of the assured, factors, servants and assigns, to sue, labour, and travel for, in and about the defence, safeguard and recovery of the said without prejudice to this Assurance, to the charges whereof, the said Insurance Company will contribute, in proportion as the sum assured is to the whole sum at risk.

And so the Insurance Company aforesaid, are contented, and do hereby bind the capital stock and other common property of the said Protection Insurance Company to the assured, heirs, executors, administrators, and assigns for the true performance of the premises, confessing themselves paid, the consideration due unto them for this Assurance, by the assured, at and after the rate of

And it is hereby agreed, that if the assured shall have made any other assurance upon the said prior in date to this Policy, then the said Protection Insurance Company shall be answerable for so much only as the amount of such prior assurance may be deficient towards fully covering the property at risk. But in no case, whatever, of double assurance, shall there be any return of premium. It is further agreed that this Policy shall become void upon any assignment thereof, unless notice of the same be forthwith given to the Agent who countersigned this Policy.

And in case of loss the assured is to abate two and a half per cent on the sum insured, and such loss shall be paid in sixty days after proof of loss and proof of interest, the amount of the premium note, if unpaid, and all other debts, dues and demands of said Company against the said assured being first deducted. And the parties further agree, that the assurers are not liable for any partial loss, nor for any general or particular average, unless said loss or average shall amount to ten per cent of the value insured. And in case any dispute shall arise, relating to the loss on this Policy, it shall be submitted to the judgment and determination of arbitrators mutually chosen, whose award in writing shall be conclusive and binding on all parties.

In witness whereof, the said Protection Insurance Company, have caused these Presents to be signed by their President, and attested by their Secretary, at their office in the City of Hartford, in the State of Connecticut. But this Policy shall not be valid until countersigned by EPHRAIM ROBINS, and Esquires, Agents of said Protection Insurance Company.

PRESIDENT.

SECRETARY.

Countersigned at this day of A. D. 1834

AGENTS.

Fig. 11. Marine Insurance Policy of J. R. Stanford, 12 Aug. 1834. (Homer Stanford Collection, Missouri Historical Society, St. Louis.) Issued by Protection Insurance Company, Hartford, Connecticut. The policy insures $3,800 on 1,379 pigs of lead at 2 1/4% ($85.50) for the safe passage of that freight on its entire journey from St. Louis to New Orleans (via steamboat *John Nelson*) and then to Boston (via an unnamed ocean vessel).

For St. Louis merchants like Filley and Stanford, the easiest commodity to export was lead. Their earlier counterparts, the Brown brothers, shipped iron and other provisions across the British Empire. For merchants on the lower Missouri River wheat, flour, hemp, and tobacco served a similar purpose.

The ability to ship local exports out of St. Louis aboard steamboats provided city merchants with a ready means to convert western profits into a commodity demanded in the East. For merchants along the lower Missouri, however, shipping Missouri Valley products aboard steamboats was more difficult. Historians Lawrence Giffen and James Pope, in writing about the emergence of steamboating on the lower Missouri River, uncovered their most insightful information from editorial remarks in Missouri state newspapers.[34]

Placing St. Charles within the context of similar river communities, like Weston or Independence, is unfortunately impossible through the newspapers, because of a gap in St. Charles local newspaper records between the early 1820s and the mid-1840s. Nevertheless, there are indications of similar economic conditions in St. Charles. Like merchants in St. Louis, those in St. Charles enjoyed an energetic market from the rapid influx of consumers passing through town. By the mid-1830s settlers flooded St. Charles County in groups "sometime 8 and 10 wagons together."[35] The completion of a steam

---

[34] Lawrence Edward Giffen, *Walks in Water: The Impact of Steamboating on the Lower Missouri River* (Jefferson City, Mo., 2001); James Sterling Pope, "A History of Steamboating on the Lower Missouri 1838–1849, Saint Louis to Council Bluffs, Iowa Territory" (Ph. D. diss. Saint Louis University, 1984).

[35] George Myers to Sarah Smith, 16 Oct. 1835, Saint Charles, Missouri, Collection

gristmill in 1835, and steam sawmill in 1837, indicated that St. Charles was poised to take advantage of the growing commercial wealth in eastern Missouri.[36] Its proximity to St. Louis afforded the opportunity to buy goods directly from eastern suppliers, or through commission and forwarding agents in the city.

Just as shortages of currency presented difficulties to St. Louis based businesses, merchants in St. Charles similarly found it difficult to collect debts and pay balances. The proprietors of the St. Charles based dry goods business, Harmon & Zebulon, spent inordinate amounts of time collecting debts to balance their accounts with St. Louis creditors. In the late 1830s, they purchased assortments of dry goods bought directly from Charles H. Carroll in Baltimore, along with similar purchases from N. E. Janney & Co. of St. Louis.[37] At times Harmon & Zebulon filed protests with the county circuit court to receive payment for credited purchases.[38] They were also forced to take personal

---

(SCMC), MHS.

[36]Ibid; James C. Lackland, Ledger Sheet, "Repairs on Sawmill for 1839," James C. Lackland Papers (JCLP), MHS. This sheet listed the costs of repairs and three years of taxes paid on Lackland's sawmill and in its third year of operation.

[37]Within the Harmon and Zebulon papers were several account sheets representing purchases of various types of dry goods that included clothing, hardware, and general domestic items. Cited here are: Account of Messrs. Z. Harmon with N. E. Janney, 5 Mar. 1840; and Account of Messrs. A. D. Harmon with Charles H. Carroll, 8 Apr. 1835. Both documents were part of the A. D. Harmon and Zebulon Papers (ADHZP), Western Historical Manuscripts Collection (WHMC), University of Missouri, Columbia, Missouri.

[38]John Bolten to A. D. Harmon, 24 Oct. 1839, ADHZP. In this letter, John Bolten complained that he could not pay his debt to Harmon & Zebulon, and that their execution against his property filed in the county circuit court would not produce cash, since "cash is not to be found in this county."

loans for payment of their own debts in St. Louis.[39] As their counterparts in St. Louis did, Harmon & Zebulon exported local provisions to supplement their sales business. Shipping local exports via steamboat, however, did not factor significantly in their business strategy. Barrels of bacon brought to town by county farmers were sent to St. Louis, not by steamboat, but by wagon.[40] On the return trip, Harmon & Zebulon's teamster brought back dry goods purchased in St. Louis.[41] Although available records do not discuss steamboat shipments to St. Charles in the late 1830s, they certainly benefited indirectly from increased shipments of eastern goods on the Mississippi River that were eventually sold in St. Charles.

St. Charles merchants' apparent underutilization of steamboats was not because of a lack of exportable goods. With the rise of commercial markets in St. Louis, St. Charles was poised to take full advantage of the growing commercial wealth. Bound by both the Mississippi and Missouri rivers, St. Charles County had ample water access to St. Louis markets (figure 12). The county's abundance of agriculture resources warranted constructing a steam gristmill in 1835 that could grind 60,000 bushels of wheat per year.[42] Other natural factors like a series of rapids above Alton isolated upriver shipping points on the Mississippi and favored communities with easier access to St. Louis. The difficulties associated with transporting cargo from upriver locations exerted negative

---

[39]Harmon & Zebulon to Messrs Judah & Block, 9 Oct. 1839, ADHZP.

[40]John Newill to A. D. Harmon, 19 Nov. 1839, ADHZP.

[41]Erskine Gose & Co. to Zebulon & Harmon, 19 May 1840, ADHZP.

[42]George Myers to Sarah Smith, 16 Oct. 1835, SCMC.

impacts on St. Louis commission merchants who decided against purchasing agriculture products from areas above the rapids on the Mississippi (figure 13).

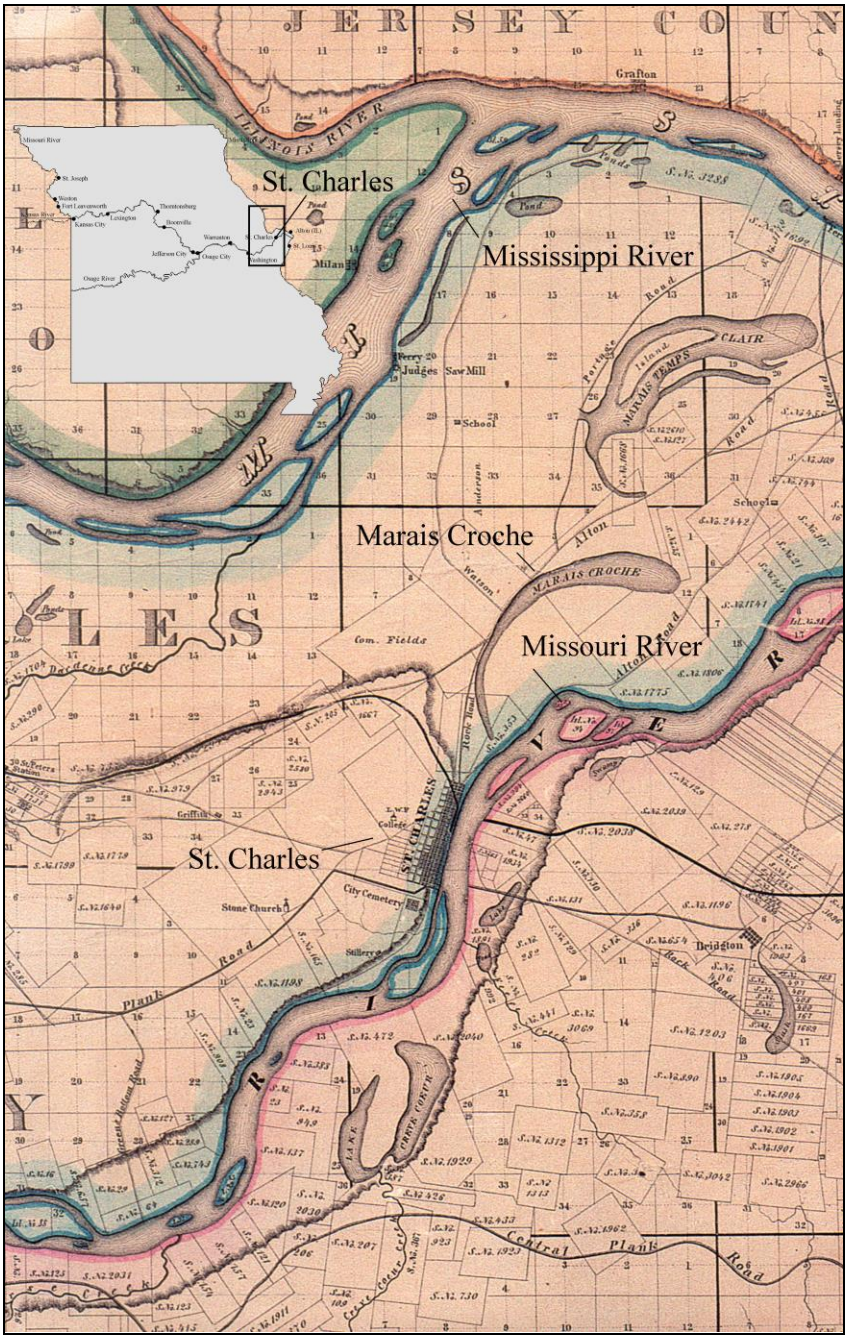


Fig. 12. Detail from Missouri River Survey Map of 1858. (National Archives Missouri River Survey Map, 1858).

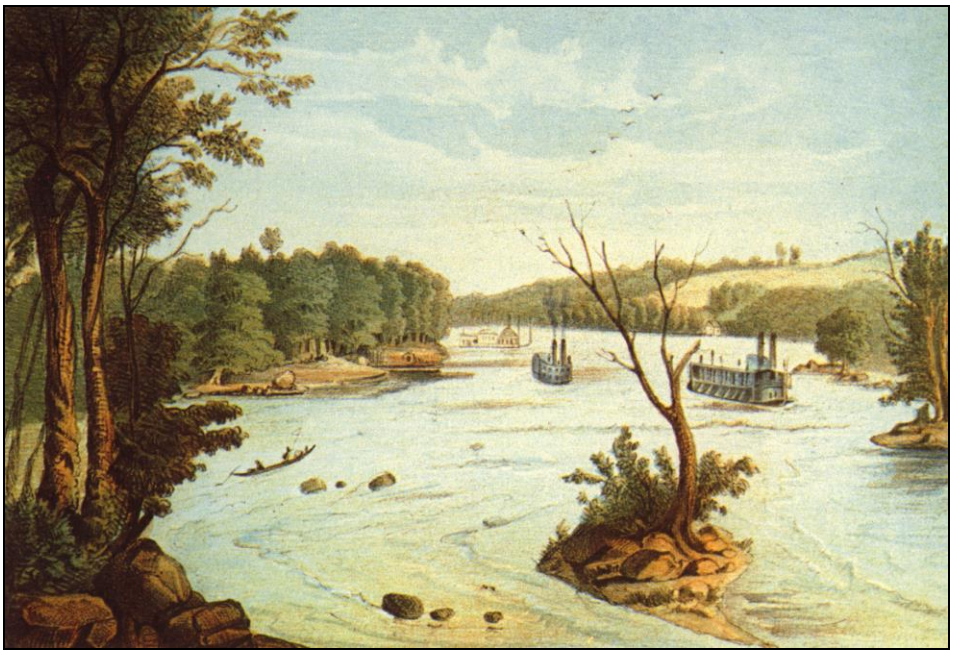


Fig. 13. Henry Miller, The Lower Rapids of the Mississippi River. *Das Illustrirte Mississippthal* (The Valley of the Mississippi Illustrated (Dusseldorf, Germany, 1854, reprint, trans., A. Hermina Poatgieter, ed. Bertha L. Heilbron, St. Paul, Minn., 1967, plate 41.) The Lower Rapids or Des Moines Rapids were 204 miles above St. Louis and beyond the mouth of the Des Moines River. At low water stage steamboats had to unload heavy cargo to pass the rapids. The above illustration shows the rapids at the low water.

The extra time and handling required to unload freight just above the rapids, only to reload it on another boat just below the rapids, incurred a loss for grain shipments typically sent in flimsy burlap bags. The commission merchants, Pope & West, in St. Louis complained that shipments of oats from Burlington, Iowa Territory, were not worth their effort to send to New Orleans. The oats lost weight during the descent downriver, so that "the freight and bags and trouble in putting up oats and the loss in prices obtained must make a losing business to anyone that ships them from above the rapids."[43] Those wishing to send the agricultural products of St. Charles County to St. Louis seemingly

[43]Pope & West to George Kriechbaum, 19 June 1841, Steamboats Collection.

had an advantage over anyone above the rapids of the Mississippi. Even with the same economic concerns as those in St. Louis, St. Charles merchants did not use steamboats for local exports. Pope & West, in consideration of freight rates, advised that wheat marked for shipment on the Mississippi should not be purchased for more than 50¢ a bushel, if it was to compete with wheat selling in St. Louis for less than 63¢.[44] Freight rates on the Missouri as rule were much higher than the Mississippi, and with bushels of wheat fetching upwards of $1.00, steamboats were not economically compatible with the shipment of agricultural products on the lower Missouri.[45] Freights rates, however, were only one hindrance to early steamboat shipments out of the lower Missouri River. Before steamboats could be a viable means of local export the nature of both the steamboat industry and the agricultural producers had to change.

Even on a small scale, the agricultural products of St. Charles County generated cash revenues. Three years before constructing his steam sawmill, James C. Lackland bought and stored small quantities of flour in his warehouse at St. Charles. His account book from 1834 shows 382 sales of flour, typically less than 200 pounds per purchase (i.e., less than one full barrel).[46] He sold most of the flour in and around St. Charles County, but he also placed about one third of the flour in barrels holding 196 pounds each for the St.

---

[44]Ibid.

[45]See Lass, *A History of Steamboating*; Giffen, "*Walks in Water*"; George Myers to Sarah Smith, 16 Oct. 1835, SCMC.

[46] James C. Lackland, Accounts Book, vol. 2, JCLP.

Louis market.[47] Unfortunately, missing portions of the account book prohibit accurate comparisons between flour purchases and sales. The existing portions, however, showed that the small lots of flour purchased locally amounted to 62,908 pounds between September and December 1834. During that same period, Lackland sent 246 barrels to St. Louis. Except for one shipment of 49 barrels, exports to St. Louis averaged only 7 barrels per shipment. While Lackland's account of flour sent to St. Louis did not record the method of transport, the small amounts sent and his notations of "sent via Jack," or "sent via Davy" suggested Lackland employed teamsters using horses and wagons over the 20-mile connecting road between St. Charles and St. Louis.[48] Lackland recorded sending these shipments to commission and forwarding agents in St. Louis like Von Phul and Magrill and received higher profits from those sold in town (figure 14).

What Lackland received foremost for the added labor, however, was cash. Lackland's net proceeds for 62,908 pounds of flour sales between September and December were $1140.32, including both cash and credit (average $1.82 cwt). His cash receipts totaled $991.40, leaving only $148.92 in outstanding accounts. Of the total cash received for flour, however, $915.36 came from barrel sales in St. Louis.[49]

---

[47] British custom set the standard for the weight of flour barrels. Although the exact reason for setting the standard at 196 pounds is unclear, it likely originated from the older unit measure known as the stone, which equaled 14 pounds. This explanation makes sense because a full barrel of flour measured to exactly 14 stones (14 x 14 = 196). Lass personal communication with author June 2007.

[48] Ibid.; for road distances see Wetmore, 269 (transcribed here in Appendix D).

[49] Lackland divided his account book in three sections. The first section gave total flour sales in both cash and credit (62,908 pounds bringing $1,140.32). The second

Fig. 14. Business Card of Von Phul & McGill, 1837. (*The Western Address Directory*.)

In the local market, Lackland sold 14,692 pounds of flour for $224.97, of which only $76.04 were in cash; the rest was in credit (average $1.54 cwt). Of the total sales amount in pounds of flour, Lackland sold 48,216 pounds in St. Louis (average $1.90 cwt).[50] His account book clearly demonstrates the cash generating power of agricultural surplus in Missouri. Although the sheer number of local sales outweighs those in St. Louis, Lackland rarely sold more than 200 pounds of flour at St. Charles, and received cash for only half his sales. The home market was simply too small to produce the amount of cash available in the export trade of St. Louis.

---

section gave cash received for flour sales listed in the first section (53,932.5 pounds bringing $991.40). The third section gave total barrels "sent to St. Louis and elsewhere" showing an export of 177 barrels (155 to St. Louis) but did not give prices received. The figure of $915.36 received for barrels sent to St. Louis, was based on comparisons between the last two sections showing cash received for the 155 barrels exported to St. Louis, plus another 91 not listed in the third section, due to missing pages. The average price per barrel for Lackland's flour, therefore, was $3.72 per barrel, with highest price was $4.25 for one sold individually in St. Charles. The remaining 22 barrels sold on average at $3.94 per barrel. Likely reflecting price incentives for cash customers.

[50] James C. Lackland, Accounts Book, vol.2, JCLP.

Lackland likely never sent flour shipments to St. Louis via steamboat since those boats on the lower Missouri River generally considered an acceptable shipment to be upwards of 1,000 barrels a trip. He did, however, utilize two important factors in a frontier economy. He used an abundant local export in the procurement of cash, and he used a warehouse to store small amounts of flour until they were packaged for sale in the larger St. Louis market. To match the economy of scale necessary for regular steamboat service, however, Lackland's output for four months needed to increase 400 percent for just one shipment. Though he had the facilities and access to exports, Lackland's flour sales were simply not on a magnitude compatible with the carrying demands of steamboats. Lackland was likely operating as Robert Henderson and other colonial merchants had who engaged in provision trades only briefly to generate cash for startup costs for their real ventures.

Even though by the 1820s steamboating proved possible on the Missouri River, many communities in the state's interior did not yet possess the means to exploit the new mode of transportation. Even by the 1830s, as St. Louis was fast becoming a major trade center on the Mississippi, counties in Missouri's interior had difficulty fully using steamboat traffic on the Missouri. Historian Louis C. Hunter noted that growing use of steamboats on western rivers only gradually replaced traditional watercraft like keelboats and flatboats. Though keelboat freight rates generally remained lower than steamboat rates, the expedience of steamboats offset the extra charges on the Mississippi River.

Residents of the lower Missouri River, however, still paid higher freight rates from the Mississippi River via keelboat. On her trip in October 1826 from the Mississippi

River to the town of Franklin in Howard County, the keelboat *Water Witch* charged 1¢ per pound for delivering freight to Boonville in Cooper County, just 222 miles (357 km) from St. Louis (figure 15).[51] Three years earlier in 1823, the steamboat *Maysville* charged 40¢ per hundred pounds on its 700-mile (1,127-kilometer) trip from Trinity, Louisiana, to St. Louis (figure 16).[52] Even the adoption of steamboats by the American Fur Company never was intended to eliminate keelboat use, since their forays into the extreme upper reaches of the Missouri were profitable only with the use of keelboats that stockpiled fur shipments at forts marking the terminus of steamboat navigation.

The lower Missouri saw an equally prolonged period of traditional watercraft use. On the lower Missouri, however, no organized system of stockpiling the area's resources existed until later in the 1830s. While manufactures in St. Louis found boats available to send their cargos upriver, there was no way to ensure that the boats would receive full cargos on the return trip. Alphonso Wetmore described these economic conditions along the "mad waters" of the Missouri.[53] The Missouri River counties' agricultural surplus far exceeded the available capacity of steamboats then employed in the Missouri River trade.

---

[51]Keelboat *Water Witch*, "Bill of Lading, Mississippi River bound for Franklin, Missouri," 7 Oct. 1826, Steamboats Collection. Please note that the town of Franklin was not located in Franklin County, just as the town of Boonville was not located in Boone County.

[52]Steamboat *Maysville*, "Bill of Lading, Trinity bound for St. Louis," 24 Feb. 1823, Steamboats Collection.

[53]Wetmore, *Gazetteer of the State of Missouri*, 33. Wetmore recounted "There is a tradition, that the name given to it [Missouri River], in some one of the Indian dialects, when rendered into English, is mad water; other Indian tribes term it, in their, Nee-Shuga, or smoky water," 33.

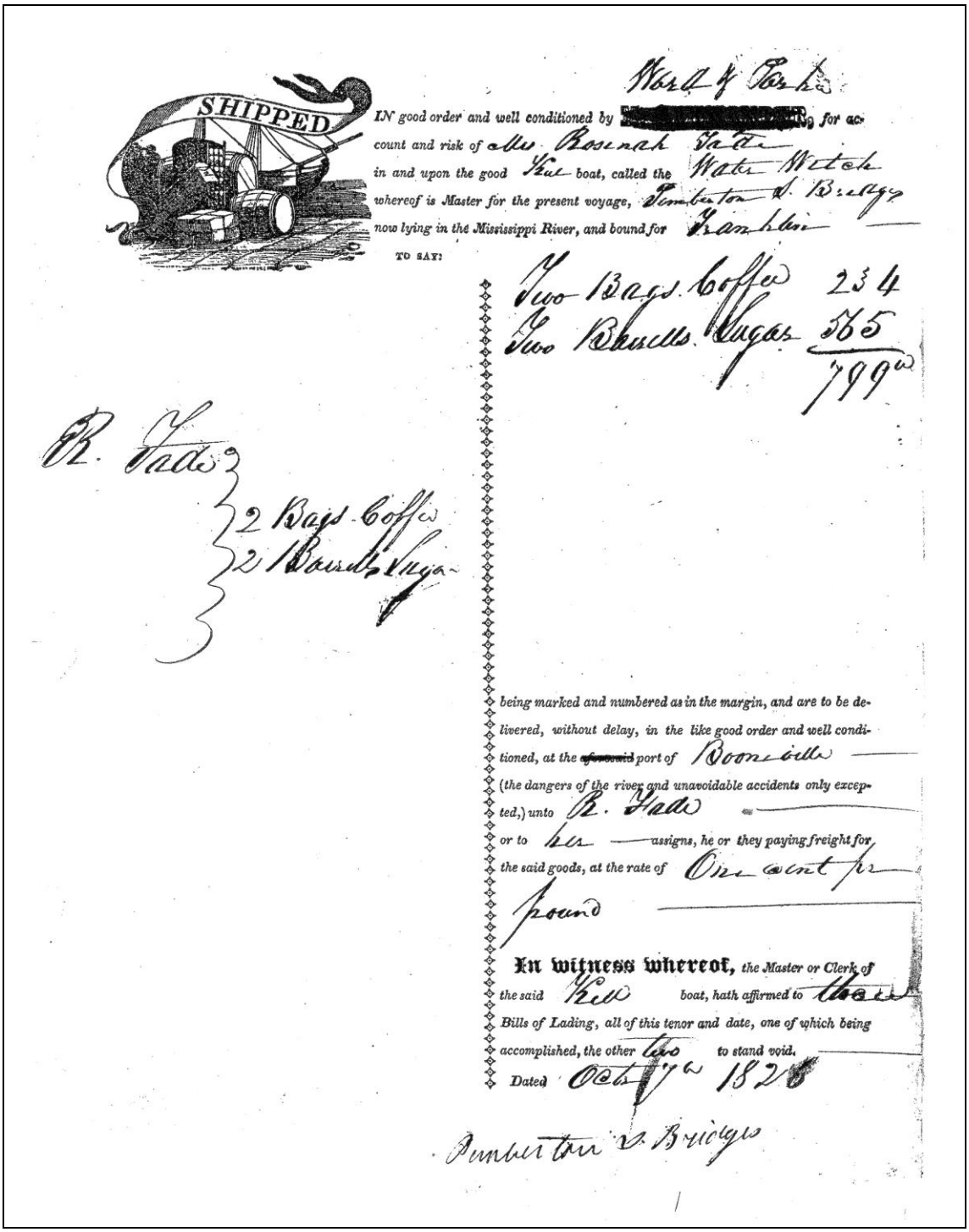
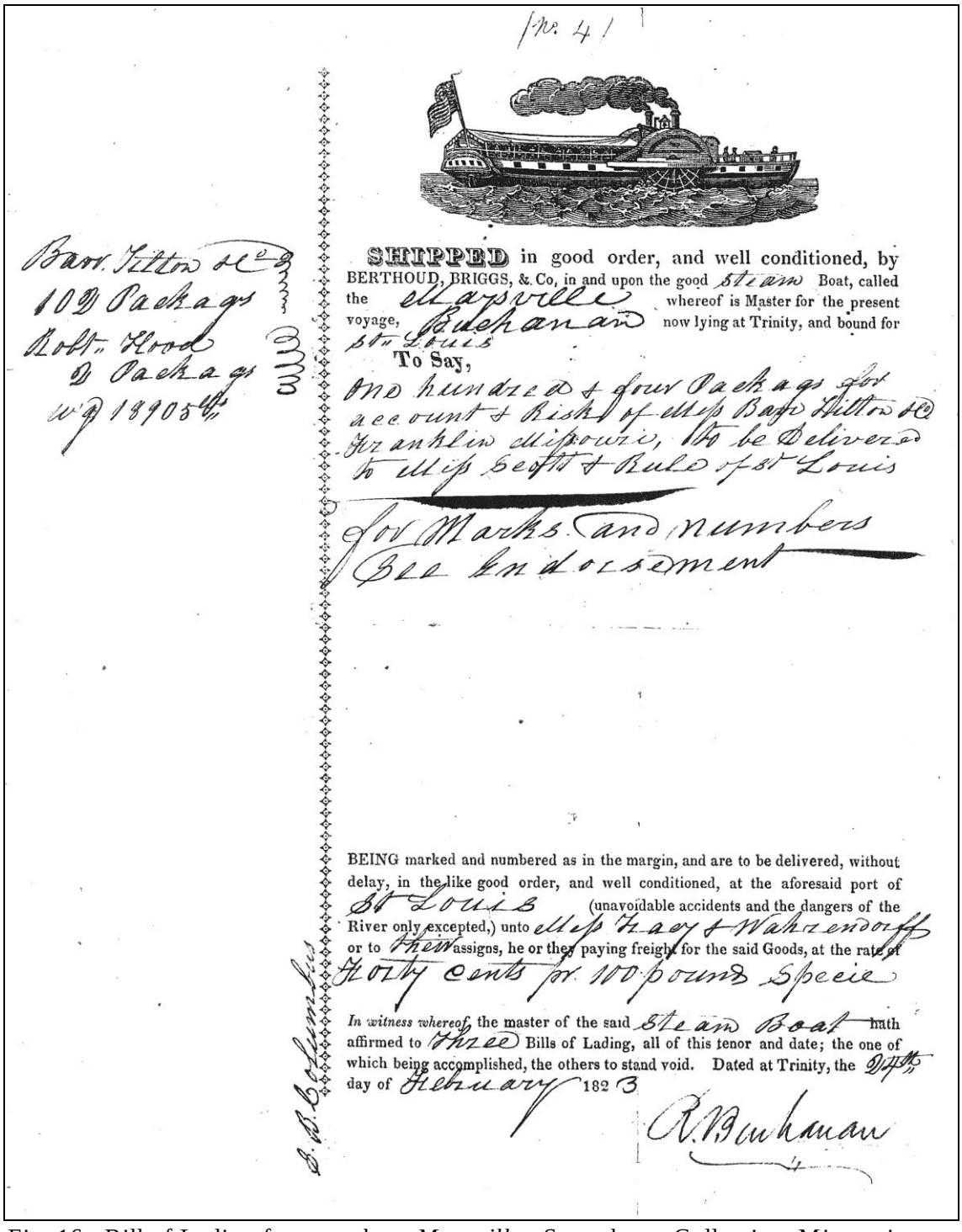


Fig. 15. Bill of Lading for keelboat *Water Witch*. (Steamboats Collection, Missouri Historical Society.)



No. 41

Barr. Tilton & Co
100 Packages
Robt. Wood
2 Packages
W.J. 18905 lbs

SHIPPED in good order, and well conditioned, by BERTHOUD, BRIGGS, & Co, in and upon the good Steam Boat, called the Maysville whereof is Master for the present voyage, Buchanan now lying at Trinity, and bound for St. Louis

To Say,

One hundred & four Packages for account & Risk of Messrs Barr. Tilton & Co Franklin Missouri, to be Delivered to Messrs Scott & Rule of St Louis

See Marks and numbers See Endorsement

BEING marked and numbered as in the margin, and are to be delivered, without delay, in the like good order, and well conditioned, at the aforesaid port of St Louis (unavoidable accidents and the dangers of the River only excepted,) unto Messrs Tracy & Wahrendorff or to their assigns, he or they paying freight for the said Goods, at the rate of Forty cents per 100 pounds Specie

In witness whereof, the master of the said Steam Boat hath affirmed to Three Bills of Lading, all of this tenor and date; the one of which being accomplished, the others to stand void. Dated at Trinity, the 21st day of February 1823

R. Buchanan

S. S. Columbus

Fig. 16. Bill of Lading for steamboat *Maysville*. Steamboats Collection, Missouri Historical Society.

Wetmore contended that farmers preferred flatboats for carrying their products to market (figure 17). Although several smaller class steamboats carried merchandise up from St. Louis well after the June rise, they were not taking agricultural products downriver. The individual farmer tended, to his own detriment, to "calculate on the highest prices, and the most ready sale of the products of his soil and labor," essentially stalling shipment of produce until "the channel of communication is closed with ice, or too shoal for safe navigation, even with flat-boats."[54]

Wetmore indicated that single farming households had the capabilities to finance, construct, and operate a flatboat. Steamboats, however, were well beyond the financial, technical, and organizational capacities of a single household. Even the smallest steamboat represented a group of investors who had financed the venture. In May 1831, St. Charles resident George Collier agreed to "build a Steam Boat for the Missouri River," with four other investors.[55] Though Collier was to oversee the construction, insurance, and all other accounts of the boat, the five investors equally shared the venture's $10,000 cost.[56]

Steamboats in the Mississippi River trade similarly required a consortium of investors to defray expenses and risk. Henry Chouteau considered investing in a steamboat under

---

[54]Ibid., 35.

[55]George Collier and others, "Agreement to build a steamboat for the Missouri River," 23 May 1831 (St. Louis), Hamilton Rowan Gamble Papers, MHS. Collier was a St. Charles resident, but he appeared to conduct his steamboating endeavors exclusively in St. Louis. The agreement did not mention where the boat was built, or its dimensions. The amount suggested a boat of about 100 tons, and likely a side-wheeler for that era.

[56]Ibid.

construction at Cincinnati and destined for the St. Louis to New Orleans trade. As the boat neared completion, steamboat owner, Richard Ackerman, assured Chouteau that "a boat which is owned in the City of Saint Louis, cannot help making money unless she should have unusual bad luck, or very bad management."[57]

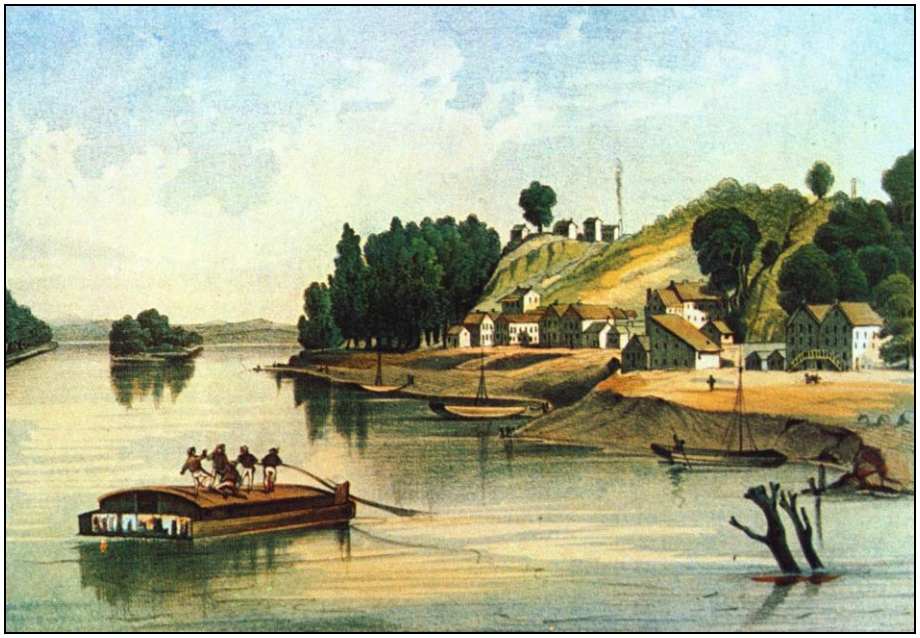


Fig. 17. Henry Lewis, Flatboat without Sail Rigging Near Warsaw, Illinois. *Das Illustrirte Mississippthal* (The Valley of the Mississippi Illustrated (Dusseldorf, Germany, 1854, reprint, trans., A. Hermina Poatgieter, ed. Bertha L. Heilbron, St. Paul, Minn., 1967, plate 50.)

Ackerman's projected cost for the new steamboat was $13,000.00.[58] For comparison, in 1831 Edward Chouteau paid $200.00 for a two-year-old 35 ton keelboat, a cost of $5.71 per ton.[59] Ackerman figured $16.00 per ton for the steamboat's hull, although the

[57]R. Ackerman to Henry Chouteau, 26 Feb. 1840, PCMC, reel 27.

[58]Ibid., 14 Mar. 1840, PCMC, reel 27.

[59]Testimony in Case of *Chouteau vs. Provenchere*, St. Louis Circuit Court Records

actual cost calculated between $65.00 and $52.00 per ton, figured for either 200 or 250 ton carrying capacity.[60] Boats used by farmers, likewise were smaller and less expensive than even keelboats, considering that a new keelboat of 35 tons cost $375 and required about ten men to operate.[61] Included in the inventory of tools during the sale of the St. Charles Steam Flour Mill was one "wood boat" valued at $30.00 in 1848.[62] Whatever the actual cost of the typical farmer's flatboat, Wetmore leaves the impression that these were cheap enough to be built and operated by a single farming household.

Ackerman personally owned a single 1/4 share of the steamboat. He previously sold two 1/8 shares, and attempted to divide the remaining 1/2 share between Chouteau and Captain Phillip, a mutual acquaintance.[63] Ackerman's comment on "bad management" downplayed the unavoidable risks associated with river navigation, but also struck at a particularity of the tramp and transient business.

Whether on the Missouri or Mississippi rivers, a tramp boat captain hauled return freight with no previous arrangements. After these boats left St. Louis, whatever freight

---

(SLCCR), no date [1832]; George W. Garriott Papers (GWGP). This document bears no date in the heading or ending, but the text clearly states that the events occurred in November 1831.

[60]R. Ackerman to Henry Chouteau, 26 Feb. 1840, PCMC, reel 27.

[61]Testimony in Case of *Chouteau vs. Provenchere*, SLCCR, no date [1832]; GWGP.

[62]John Atkinson, Account of Garriott and Lischy, 19 Feb. 1848, Mullanphy Family Papers (MFP), MHS. Later in 1848, George W. Garriott received an offer to buy a 63-foot, 18-month-old flatboat worth "not more than $50.00" (William Holtz to George W. Garriott, 8 Aug. 1848, GWGP.

[63]R. Ackerman to Henry Chouteau, 26 Feb. 1840, PCMC, reel 27.

business was available at the destination port was the responsibility of the boat's crew to find. Ackerman admitted that boat captains sometimes could not find return freight, but that "Nine cares [sic] out of ten, the cry of bad luck is all unreal, it is bad management, a want of perseverance. They [boat crews] will say on arrival at New Orleans after lying there ten days, freights were scare, could not get them. Whereas had they looked about the city they could have found them."[64] Applying this same "want of perseverance" on the lower Missouri River explains Alphonso Wetmore's description of tramp boats refusing to take return cargos down to St. Louis. The smattering of agricultural shipments required captains to stop at several small landings and deal with numerous individuals, something they clearly were averse to doing in New Orleans.[65] In a letter to Chouteau, Ackerman reiterated that the new "cheap" boat would realize profits, and explained how Chouteau's investment would be spent with an itemized list showing that:

> Her length is 145 foot Keel. 24 foot Beam. 163 feet on Deck. 6 foot Hold, will carry [on the Mississippi River] 200 Tons up and 250 Tons down and will not draw when light 28 inches water. The contract for her hull when completed and launched, is $3,250.00. $2,000.00 Cash, the balance Forward 6 months. For her Cabin work all complete $2,250.00 – $1,500.00 Cash the balance 4 & 6 months. For new work to Engines, putting up and put her in complete running order, ready for Steam $1,250.00, one half Cash, balance 6 months. For Painting and Glazing furnishing all the glass wanting about the boat, 3 Coats white and 3 coats Green, $500.00. $250.00 Cash balance 4 months. Capt. Philips puts in the Engine, Boilers, Chain Cable, Anchors, Mattresses, Chairs, Tables, Sheets, Pillow cases, and everything belonging to H LeKinny which can be used to advantage for $4,500.00. That you will perceive will make it cost $11,750.00 to which I have added for Carpet and many little things about the boat $1,250.00 making the whole cost about $13,000.00 which you will perceive is

[64]Ibid.

[65]Although Ackerman referred to circumstances in New Orleans, his statement was applicable here since the vast majority of steamboats on the Missouri River also frequented the Mississippi River.

very cheap for a boat of her class and is a boat which I think will be profitable.[66]

An earlier letter from Ackerman to Chouteau dated February 26, 1840, included a slightly altered but similar list of expenses. The total cost remained the same in both letters, but the March letter above included a more complete breakdown of expenses. Nonetheless, a few details did not carry over to the March letter. The details omitted in the March letter included chandeliers and glassware for the cabin, new fire fronts and fire-bed chimneys for the engines, and carpentry work on the cook house and "rooms below."[67]

The important consideration here is that nearly every item on the list represents a segment of a national trade network – all specialized industries supporting the carrying trade. Each industry came with a set of credits drawn and debts owed that necessitated owners to employ their boat in an economy of scale sufficient to balance her books. The connections required to engage in any business activity were the key to success. Even for businessmen who were not placing capital directly in transportation, their business pursuits certainly hinged on the availability of transportation.

Like steamboatmen, western merchants also needed a variety of business connections, especially with eastern suppliers, as well as forwarding agents in New Orleans. Once a shipment destined for St. Louis arrived in New Orleans, a commission house tended to the forwarding of goods via steamboat. In this system, forwarding agents served an intermediary function, agreeing to ship freight based on specified rate charges. When

---

[66]R. Ackerman to Henry Chouteau, 14 Mar. 1840, PCMC, reel 27.

[67]R. Ackerman to Henry Chouteau, 26 Feb. 1840, PCMC, reel 27.

miss-communication or disagreements occurred between St. Louis merchants and their forwarding agents, a merchant in St. Louis could not always make direct arrangements with boats at his wharf. After failing to have his freight forwarded to St. Louis, J. R. Stanford was forced to ask his partners in Boston to deal with a dispute between himself and New Orleans forwarding agents Stetson & Avery. Stanford complained that:

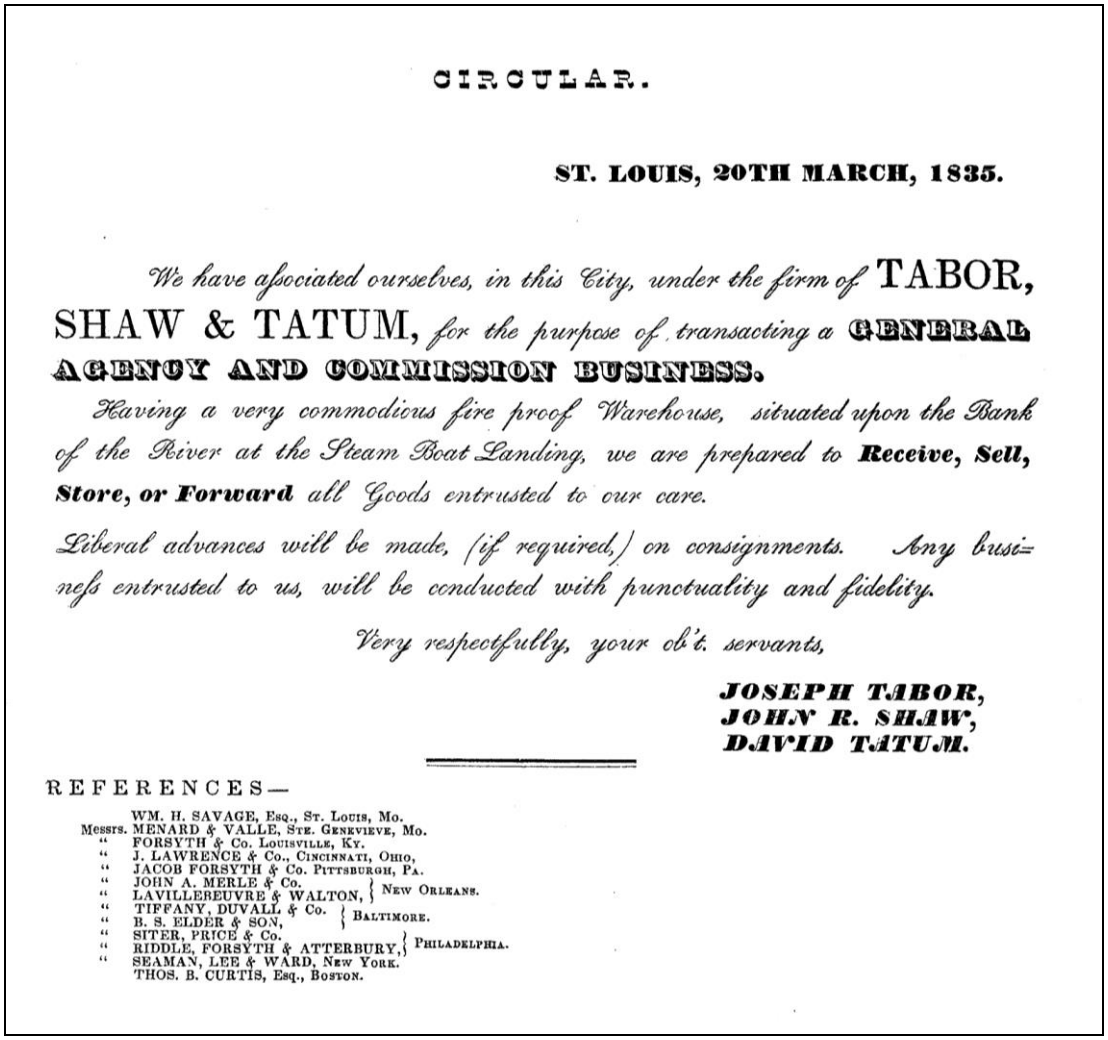
> 6 Boats arrived here [St. Louis] since the first shipment of my goods [from Boston] arrived at New Orleans. The Captains of Boats which have arrived say that Messrs. S & A state that they are limited not to pay for my freight more than fifty cents per hundred. I have given no such orders. I did write them that I did not wish them to ship goods to me on a boat that would charge 75¢ for my freight and others fifty, which they did do to my certain knowledge. I believe know that they are a little miffed at this and think to vent their spleen by keeping my goods and holding out as an excuse that they are limited to 50¢....[68]

Stanford's appeal for intervention from his Boston partners shows the inability for making independent arrangements with steamboats loading at New Orleans.

Stanford's and Ackerman's letters demonstrate the degree of organization and labor involved in steamboating. This was an enterprise requiring the combined efforts and capital of numerous individuals, all seeking their own profit. Given the amount of money and risk associated with the steamboating business, it is understandable that boat owners had to dissuade investors' fears. Ackerman promised Chouteau that "diligent men" would safeguard against loss in the New Orleans freight business. Steamboating ventures on the lower Missouri River had added concerns for loss. Unlike New Orleans's abundance of docks, wharves, and holding houses, few Missouri River towns had any comparable infrastructure. While boat owners on either river attracted investors with

[68]J. R. Stanford to Messrs. Griggs & Weld, 3 Dec. 1832, HSP.

promises of business acumen and competent crews, warehouses became a key factor in determining steamboat profitability on the Missouri River. For the most part, capital for warehouse infrastructure originated from commission and forwarding agents (figure 18). Their absence from the lower Missouri River left warehouse construction to farming organizations and local merchants – two groups lacking the financial or organizational resources of the large cities.



CIRCULAR.

ST. LOUIS, 20TH MARCH, 1835.

We have associated ourselves, in this City, under the firm of TABOR, SHAW & TATUM, *for the purpose of transacting a* **GENERAL AGENCY AND COMMISSION BUSINESS.**

Having a very commodious fire proof Warehouse, situated upon the Bank of the River at the Steam Boat Landing, we are prepared to **Receive, Sell, Store, or Forward** *all Goods entrusted to our care.*

Liberal advances will be made, (if required,) on consignments. Any business entrusted to us, will be conducted with punctuality and fidelity.

Very respectfully, your ob't. servants,

JOSEPH TABOR,
JOHN R. SHAW,
DAVID TATUM.

REFERENCES—

WM. H. SAVAGE, Esq., St. Louis, Mo.
Messrs. MENARD & VALLE, Ste. Genevieve, Mo.
" FORSYTH & Co. Louisville, Ky.
" J. LAWRENCE & Co., Cincinnati, Ohio,
" JACOB FORSYTH & Co. Pittsburgh, Pa.
" JOHN A. MERLE & Co. } New Orleans.
" LAVILLEBEUVRE & WALTON, }
" TIFFANY, DUVALL & Co. } Baltimore.
" B. S. ELDER & SON, }
" SITER, PRICE & Co.
" RIDDLE, FORSYTH & ATTERBURY, } Philadelphia.
" SEAMAN, LEE & WARD, New York.
THOS. B. CURTIS, Esq., Boston.

Fig. 18. Advertisement for Tabor, Shaw & Tatum, commission and forwarding agents St. Louis, 20 March 1835. (Circulars Collection, MHS.)

When farming organizations or merchants constructed a warehouse, they connected with the larger corporate entities behind steamboats. By having a location to safely store products, farmers could transport small wagon loads of goods on their own terms and merchants could promise a steady supply of freight as leverage in shipping arrangements. In a sense, farming communities acted as their own forwarding agents. They provided resources for warehouse construction and negotiated freight rates with steamboat captains oftentimes without the need for direct communication.

In *A Mechanic's Diary*, former Missouri Governor Henry C. Brokmeyer described how neatly a warehouse fit into the farming lifestyle. In his entry for October 19, 1856, Brokmeyer and his hunting party came across a surprisingly well kept road leading to a small, boat landing on the Mississippi River. Upon meeting the owner of the landing, Conrad Witte, Brokmeyer learned that local farmers had built a house near the landing "to have something to put their wheat in."[69] After examining the small structure, Brokmeyer made note that "half a steamboat load of wheat was already" inside, and that the sacks of wheat belonged to multiple owners. Witte replied that the wheat was awaiting shipment to market by river, and that prior to the warehouse, local farmers "had to haul it so far with wagons that they had to earn it over again."[70] Brokmeyer further recounted that Witte, pointing to the stored wheat, explained "it was the wheat which

[69] Henry C. Brokmeyer, *A Mechanics Diary* (Washington, DC, 1910), 190.

[70] Ibid.

built the road – the marketing of that wheat."[71] Shortly after construction of the road and warehouse, local farmers built a schoolhouse, market house, and church. The placement of these structures hinged their location to the warehouse and boat landing, as Witte described "our people can't run around on week days and make special trips for things…when the wagons go to the landing they all pass here, and that would be convenient for them. Then, if the church were here too."[72] By building a warehouse, farmers had created an infrastructure to match the pace of household production. As long as the warehouse stored grain at a pace corresponding to the capacity of steamboat holds and the frequency of their routes, the system worked well.

Brokmeyer was a prominent leader of the St. Louis Hegelians, a Missouri-based philosophical school grounded in the German idealism of Georg Wilhelm Friedrich Hegel. One of the Hegelians' beliefs was a rejection of written history too sterilized with fact. Brokmeyer, like his fellow Hegelians, considered work based purely on inductive reasoning as meaningless for its absence of true knowledge.[73] Brokmeyer's editor freely

---

[71] Ibid., 191.

[72] Ibid., 192.

[73] George Haines IV, and Frederick H. Jackson, "A Neglected Landmark in the History of Ideas," *Mississippi Valley Historical Review* 34 (Sept., 1947): 201–205. Haines and Jackson qouted a particularly harsh criticism made by followers of the movment against their contempories in the history field. At the New Orleans meeting of the American Historical Association in 1903 the charge cited that "historians, in spite of all their rejoicing over a new era, have not as yet found the social viewpoint. They spend all their time in indexing dreary, profitless details about inconsequential folk, in developing their technicial skill for the discovery of insignifcant objects, in learning so much about how to investigate that they have forgotten what is worth investigating." (quoted from *American Historical Review* 9 (1903–1904), 449.

admits that the diary is based more on the author's personal observation than actual experience.

Although the chance meeting of a boat landing owner likely never occurred, Brokmeyer's tale was cautiously useful as an anecdote for the state of farmers in Missouri. His account, though factually suspect, presented two key truths about the relationship between farming and steamboating. First, steamboat captains/owners afforded farmers profitable access to agricultural markets linked to rivers. Brokmeyer's surprise at finding a good road showed the universally poor condition of Missouri roadways that added time and labor for wagon transportation. By organizing to facilitate mobility to a boat landing, local farmers greatly reduced the distance between themselves and the market. Second, these types of cooperative ventures between farmers were rare. The few instances in which local farmers banded together and built a storage facility proved decidedly advantageous. When he loaded a wagon for the market, storing his goods in warehouses freed a farmer from scheduling his activities around those of steamboats. Although Brokmeyer's diary created a utopian Missouri community as a tool to dispense business advice on the farming community, his observation was from far novel.

In July 1847, the Wheat Growers Association of St. Charles County prepared a report outlining their solution to the lack of acceptable shipping arrangements for its products. The report first addressed the need for a suitable warehouse in the town of St. Charles.[74]

[74] B. A. Alderson, "Wheat Growers Association," *Missouri Patriot* (St. Charles), 23 Sept. 1847, 2.

The Wheat Growers Association found "the old warehouse in the town of St. Charles…to be entirely unfit, in its present condition, for the storage of grain of any kind, but may be rendered secure at a small expense….The house belongs to Mr. Lackland and can be purchased at $26." Although James Lackland used his warehouse in 1834 to store flour, no records indicate his use of the facility for that purpose after constructing his sawmill in 1837.[75] A second proposed warehouse on the Mississippi River in St. Charles County promised area farmers dual access to shipping on both rivers. The Wheat Growers Association, like Brokmeyer, realized that warehouses had to be paired with steamboat shipments of agricultural products.

The Wheat Growers Association, however, was not content with simply gaining access to steamboat transportation. It also sought independence from town merchants by constructing a macadamized turnpike road between St. Charles and St. Louis. The central issue for the association was a choice in transportation and markets. Like Brokmeyer's utopian community, the Wheat Growers Association called for the construction of a warehouse and a smooth road, so that:

> when a small amount of produce is to be forwarded and a sufficient inducement is not offered in St. Charles to stop it there, the farmer may pass through and avail himself of the travel over a good road, where there will be neither stalling, prizing out of mud holes, nor sand banks as the case at the present. This will render the small farmer as independent with his wagon, as the larger one is with his boat load of produce. We say that we want two modes of transportation – that the turnpike is essential to the promotion of our true interests – it will afford to us the choice of markets, and place us above the reach of imposition.[76]

---

[75] JCLP.

[76] Alderson, *Missouri Patriot* (St. Charles), 23 Sept.1847, 2.

The Wheat Growers Association calculated the annual surplus of St. Charles County at $220,425. Its estimate stemmed from the value of 14,076 tons of produce, mainly wheat, hemp, tobacco, and livestock. Transporting these products required the equivalent of 35,190 horses, each hauling 800 pounds per wagon. The estimated cost of the 19-mile (31-kilometer) turnpike from St. Charles to St. Louis was $124,000. The Wheat Growers Association also estimated a trebling in horse traffic after constructing the turnpike, so that an annual traffic flow of 100,000 horses would produce revenues of $5,000–$20,000, dependent on toll fees of 5¢–20¢.[77] At that time in St. Louis, a modest sized steamboat (rated under 150 tons) cost just under $15,000.[78] Based on the Wheat Growers Association's estimates, one trip of a fully loaded 150 ton steamboat could carry the equivalent of 375 horses. A fully loaded steamboat of this size would require 94 trips (2 days each) to carry the same tonnage as the 35,190 horses could in an entire year. Even with the addition of wages, maintenance, fuel, and certain lack of optimal conditions, steamboats decisively out competed horse and wagons. The Wheat Growers Association realized this fact, since it admitted that "transportation by the rivers and upon a good turnpike road must go hand in hand."[79] Although the association certainly recognized the value of permanent shipping arrangements, one wonders if it also recognized the low cost of steamboats compared to turnpikes. Stripped of their context, the transportation and cost estimates raise questions as to why the association never attempted to purchase a

[77] Ibid.

[78] "Boat Building in St. Louis," *The WJC* 1, no.1, Jan. 1848, 46–50.

[79] Alderson, *Missouri Patriot* (St. Charles), 23 Sept. 1847, 2.

steamboat, or even to subsidize regular packet service. One answer might be found in a contemporaneous criticism that "farmers, especially of the west, seem to suppose that their interests will take care of themselves."[80] Statements like these revealed tensions between direct producers like farmers and owners of mills who controlled the means of agricultural production and entered direct transportation negotiations. The Wheat Growers petition to the farming community for collective action was an implicit call to capture more control of their labor. Cheaper transportation to several markets increased demand for their products and thereby raised labor value. Historian Cathy Matson discussed similar tensions present in colonial New York.

By the 1740s, New York merchants aggressively directed wheat supplies from their city's hinterlands as well as from New Jersey and Connecticut. During this period, the entire New York merchant class overtook their Boston neighbors for the lead in export values. Although the city's commercial sector flourished, provisions merchants continually petitioned the city council for favorable regulations of wheat and flour sales. Because purchasing power came from connections with local farmers, merchants in this sector were more vulnerable to up-start competition and so sought any means to subvert burgeoning non-city traders.[81] As the city provisions merchants attempted to block non-resident traders from purchasing either in the city limits or directly from country farmers, tension over prices and free trade mounted. For Matson, the critical relationships to understand in colonial economies were found in these intermediate regional markets.

---

[80] *The WJC* 1, no.11, Nov. 1848, 590.

[81] Matson, "Damned Scoundrels," 407–408.

These locations provided the setting where rural producers and urban merchants negotiated prices based on the quality of agricultural goods and the cost of foreign wares. In the space between country households and city waterfronts "the distinct interests of colonists as buyers and sellers intersected and were muted or sharpened by continual negotiation."[82] Those negotiations sometimes broke down as when mid-eighteenth Long Island farmers once threatened to withhold their produce until prices rose or "till the Vermin Eat and Spoiled it."[83]

From the perspective of negotiations, Midwestern grain elevators showed the power of storage and transportation infrastructures to alleviate tensions between farmer and producers. Chicago traders divorced farmers from direct negotiations with local millers in exchange for expedient payment. As they relinquished control over their labor, it became a commodity for sale by city exchange houses.[84] Anthropologist Eric Wolf saw the source of these tensions in seventeenth-century Europe. He related the emergence of mechanized textile production to decreased requirements for human energy in thread and fabric production. As the demand for labor decreased, so did labor value. The emergence of factories during the Industrial Revolution altered the nature of household production especially in outlying urban areas. Households that formerly produced finished textiles at their own pace, could negotiate their labor value in much the same

---

[82] Ibid., 390–391.

[83] Capt. Mulford's Representation against the Government of New York, in *NY Col. Docs*, ed. O'Callaghan and Fernow, 111, 363–371, 372–383, quoted in ibid., 412.

[84] Cronon, *Nature's Metropolis.*

way as farmers did.[85] Because textile producers eventually began working in factories for wages determined by owners, they lost their negotiating powers in a much more obvious way. Grain elevators, on the other hand, neither altered the nature of farming household production, nor made the loss of negotiating power as obvious. As a result, tensions appeared alleviated in within farming communities, whereas they were exacerbated in industrial ones. No doubt, these distinctions partially explained the rise of collective labor unions in manufacturing sectors. Caution must be raised, however, before taking such a narrow view for the organizational abilities of St. Charles farmers. Regardless of how loosely organized the Wheat Growers Association appeared, the steamboat business was not easily entered from the levee at St. Charles.

With high costs associated with labor, insurance, and operational expenses, boat captains preferred to carry either a full load or none at all when leaving the Missouri River. It was often cheaper to make a speedy return back to St. Louis empty handed rather than search about river towns for piecemeal small orders. Compounding boat captains' dislike for taking small shipments, farmers continually balked at specifying exact times for hauling goods to a landing. Although an area might collectively have ample supplies to satisfy boat captains, farm products remained scattered about the countryside with no indication of moving. Because no one could predict the size of freight at most river locations, captains were reluctant to offer continued service. As a result, they frequently charged rates that made flatboats more affordable for household-sized shipments. Farmers who hesitated too late for safe flatboat navigation, oftentimes

[85] Eric Wolf, *Europe and the People without History* (London, 1982).

found themselves at the mercy of the few captains making late season runs. The desire to get the highest price possible was driven more by greed. As Turner noted

> the beginning of manufacture in her cities [Mississippi Valley], however, promised to bring about a movement for industrial independence in the West. In spite of evidences of growing wealth, there was such a decline in agricultural prices that, for the farmer who did not live on the highways of commerce, it was almost unprofitable to raise wheat for the market.[86]

The allure of St. Louis's autumn price spike in wheat could prove detrimental to farmers but a windfall for shippers. The local dry goods merchants, however, were caught in the middle of this situation. They depended on the farming community (as import consumers and export producers) and on steamboat captains as the hub between their customers and suppliers. For some merchants, the middle ground was traversed with ease, but for others like George W. Garriott negotiating the tensions between farming and boating interests was exhausting.

Up to 1848, St. Charles merchant George W. Garriott concentrated his efforts in dry goods and tobacco manufacturing, but with the increasing difficulty to procure regular steamboat service between St. Louis and St. Charles, Garriott had to expand his enterprise to make St. Charles's levee an attractive destination. The best way to secure regular steamboat traffic was to guarantee full cargo loads for steamboat captains, but before 1848, Garriott's control of the amount of freight at St. Charles's levee was restricted to the productivity of his tobacco factory and whatever flour he could purchase from the steam mill owned by John Atkinson. By the winter of 1847, Atkinson's mill

[86] Turner, "The Colonization of the West," 325.

had produced flour for at least twelve months, and he had clearly just begun to establish a relationship with St. Louis forwarding agents. The products of the new mill, shipped by steamboat to St. Louis, entered the hands of forwarding agents who sold this new St. Charles brand of flour in lots of 100 barrels, so that "Every lot of your flour which we sell in this way for retail and distribute it about, will *tell well* in the way of establishing its reputation thoroughly."[87] Atkinson's flour found an active market in St. Louis, as his agents there requested him "to get out more [flour] as we can safely say, that we can give you good returns for all that you can send."[88] Without an effective way to control the output of flour in St. Charles's mill, Garriott could not directly control the amount of freight captains found waiting for shipment at the levee.

Every market contains particular price-setting conditions. One condition setting inland shipping rates apart from their oceanic counterparts was the variability of riparian navigation channels. As a result, the steamboating industry fluctuated prices according the depth and danger of a river channel. For boat captains, water was a commodity that provided leverage for negotiation. Deep channels supported large, efficient boats that lowered rates. Because rates depended more on navigation conditions than distance, charges between two levees varied widely regardless of mileage. For example, boat captains charged freight rates for the 45-mile (72-kilometer) river trip to St. Charles that were substantially higher than the 1,146-mile (1,844-kilometer) trip from St. Louis to New Orleans. During winter months and low water stages, few boat captains agreed to

[87] Ranney & Co. to John Atkinson, 4 Dec. 1847, GWGP, emphasis in original.

[88] Ibid.

run from St. Louis to St. Charles and did so only with guarantees for a full load or penalties for smaller ones. Garriott's forwarding agents in St. Louis during the winter of 1847, for example, secured a steamboat for one shipment with "considerable difficulty."[89] After agreeing with the captain of the steamboat *Revenue Cutter* to pay 37 1/2¢ per barrel of flour "conditional, that if you can give him [Capt. McMahon] there a full load he will take the flour at 35$^{\underline{cts}}$."[90] Clark & Edwards had good cause to conceded apologetically that this was "the very best we could do," since freight rates for the much longer trip from St. Louis to New Orleans generally cost 20¢ per barrel of flour, even during winter months.[91] By combining his dry goods and tobacco interests with products of the steam flour mill, Garriott stood a better chance of controlling the amount of freight available for delivery to St. Louis. Providing stronger guarantees for full cargoes increased his negotiating power with steamboat captains. Price and Clemens showed that tobacco shipping charges across the Atlantic in the seventeenth century routinely produced the lowest ratio of freight charges to import value. Tobacco was less bulky than grain and higher in price per pound, so that even small shipments would bring sizable profits.[92] Any penalties Garriott paid for light flour shipments likely would be absorbed with a few added boxes of tobacco. In either case, Garriott's first attempt to enter the flour market showed ambition and commitment in the venture.

---

[89] Clark & Edwards to George W. Garriott, 15 Jan. 1847, MFP.

[90] Ibid.

[91] Ibid; McDonald and Cole Papers, WHMC.

[92] Price and Clemens, "A Revolution of Scale," 1–43.

In an article of agreement created on December 31, 1847, Garriott formed a partnership with John Lischy to rent and lease for one year the "large steam flouring mill" owned by John Atkinson in St. Charles. The partnership conditions stated that Lischy was to "Superintend and manage all the business in and about pertaining to said mill," while Garriott was to "keep the books...and manage the financial business of the concern."[93] Garriott was clearly on his way to becoming a specialized provisions merchant described by Doerflinger. Price explained the intensive energy demands of a provisions merchant required delegation of certain activities. A merchant often entrusted record keeping to clerks, or supply to competent buyers, but "no merchant could delegate the giving of credit or neglect the balance sheet of his firm."[94]

Nothing in the agreement specifically stated the total capital investment of both partners, but it divided profits based on the fraction of investment each member contributed. Lischy's 1/3 investment entitled him to 1/3 share in profits. If he paid Garriott $1,500 by March 14, 1848, Lischy would be entitled to 1/2 of all profits. Since the agreement specifically set Garriott's contribution at 2/3 total expenses, the equalizing sum of $1,500 implies a total investment of $9,000, with Garriott's actual investment as $6,000.[95] As a continuation of the December agreement, Garriott and Atkinson drafted

---

[93]Article of Agreement between George W. Garriott and John Lischy, 31 December 1847, MFP.

[94] Jacob M. Price, "What Did Merchants Do? Reflections on British Overseas Trade, 1660–1790," *Journal of Economic History* 49, The Tasks of Economic History (Jun., 1989): 278.

[95]Ibid., The difference in each partners' contribution meant that each share had to

the official lease on February 4, 1848 that transferred half the rights of the flour mill from Atkinson to Garriott. Though Garriott and Lischy controlled the operation and divided the profits of the mill, Atkinson retained his rights to properties covered in the lease. Atkinson's role resembled a modern bank, in which he held rights of foreclosure should Garriott and Lischy renege on their debts.

In addition to the steam mill, Garriott's lease included rights to the adjacent lot, which included a cooper shop and a blacksmith shop, along with "the island lying immediately above and opposite St. Charles" that was part of a claim held against Atkinson by steamboat builder, George Collier (figures 19 and 20).[96] The island property was likely a valuable source for lumber, as the daybook of James C. Lackland, owner of the St. Charles Sawmill, frequently mentioned obtaining wood there. Garriott required fuel for his mill's engine and barrels for flour exports. Owning a nearby lumber source had obvious advantages and showed Garriott's efforts to manage as many spin-off industries as possible. This was a good strategy for a merchant whose profit margins were already narrowed by sizeable loans. In six bank notes, for example, Garriott indebted himself to Atkinson for the next three years, but the method of payment was such that $5000 of his total debt had to be paid by March 1849.[97]

---

equal $1500. Because there were six shares in total, the full capital investment was $9000.

[96]Article of agreement between John Atkinson and George W. Garriott, 4 Feb. 1848, MFP.

[97]Ibid., under the February agreement, Garriott's six bank notes were appropriated between the mill property and the island property. The first three notes, designated for the mill property, required payments of $3000, $1500, and $500 respectively. These

By the commencement of the 1848 navigation season, Garriott ambitiously combined his tobacco and dry goods interests with that of the steam flouring mill, but he also wagered against several factors outside his control. His ultimate success hinged as much on the mill's productiveness, as the negotiating power of his agents in St. Louis to secure steady and regular steamboat service to St. Charles.

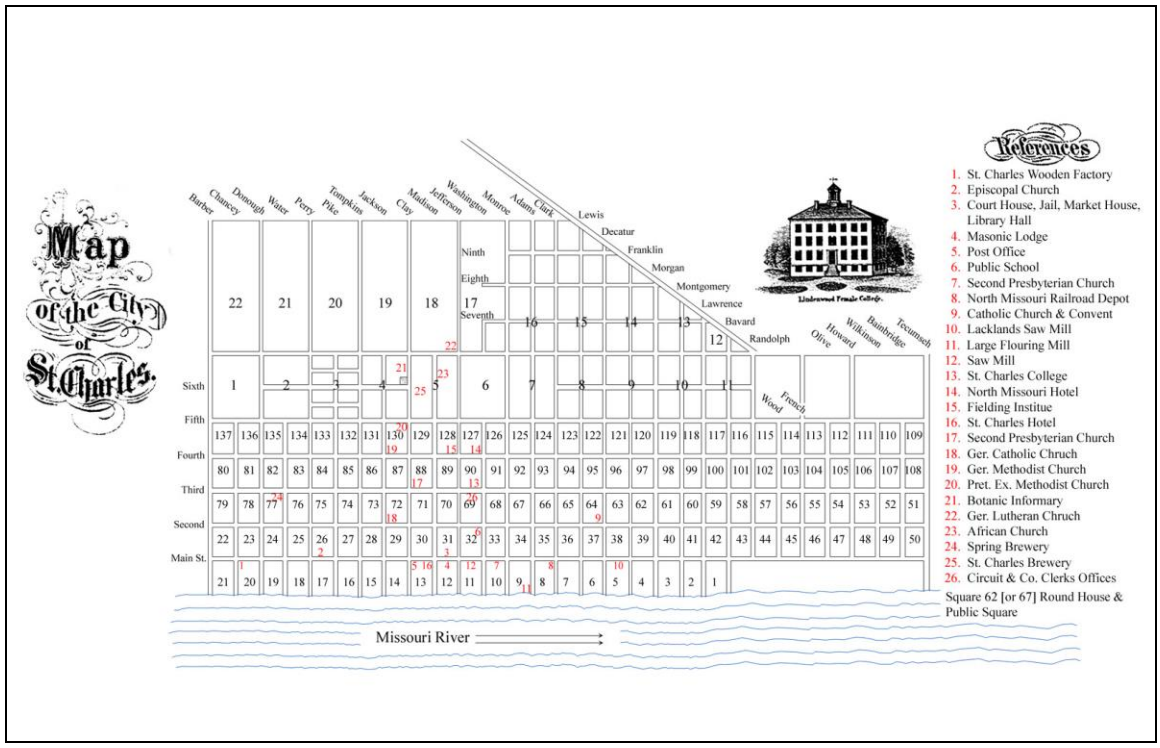


Fig. 19. St. Charles plan view redrawn from an 1858 survey map. Note lot 5 as the location of Lackland's sawmill, and lot 9 as the location of Garriott's large flour mill.

---

notes were due between July 1848 and Mar. 1849. The next three notes for $1000, $1000, and $500 were due Mar. 1849 and Mar. 1851. The six notes, totaling $8500, did not include the cost of the tools in the mill and two shops whose unstated value likely makes the $500 difference between the notes and $9000 expense implied by the December agreement.

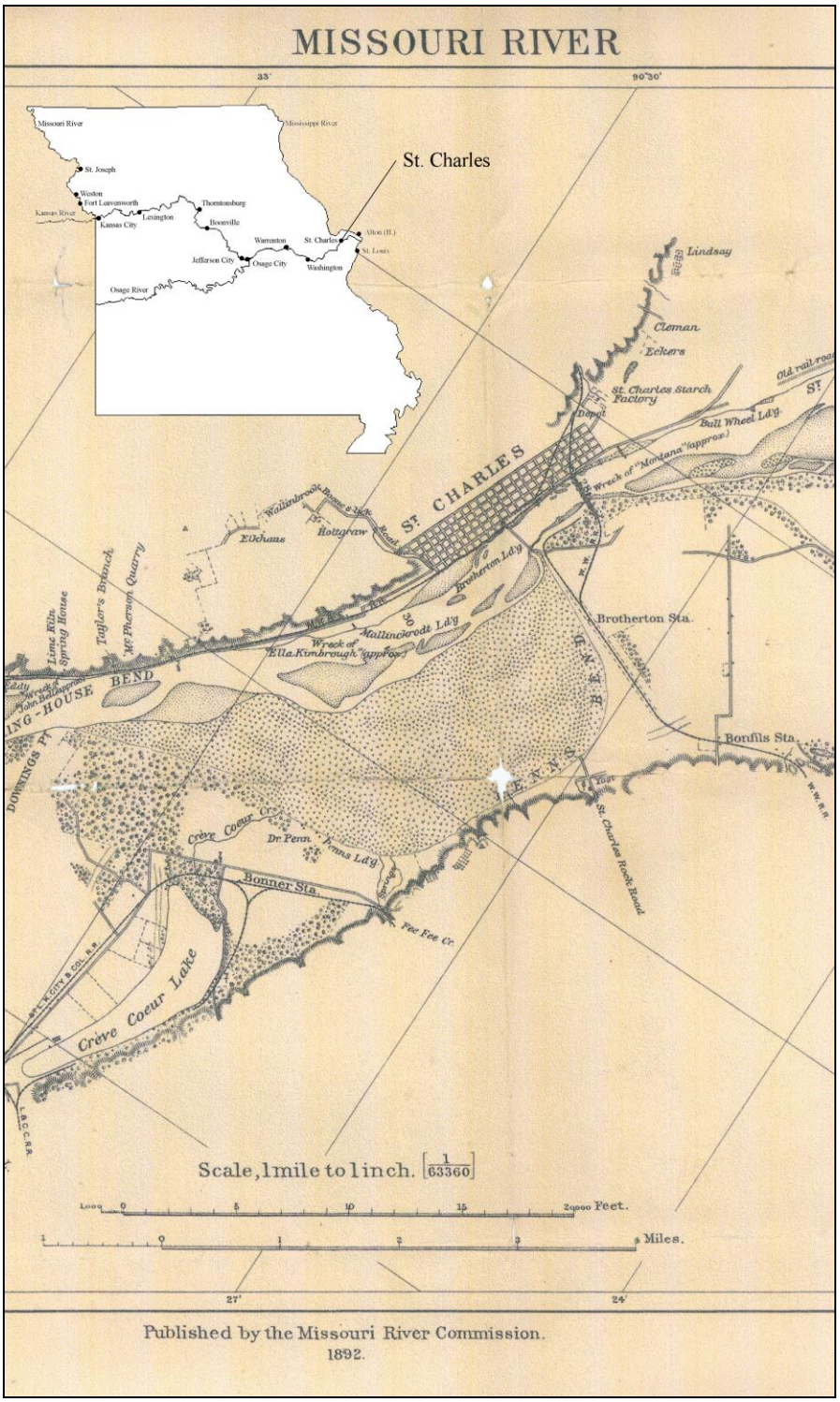


Fig. 20. Missouri River Commission Map, 1891. (St. Charles County Historical Society.) Below St. Charles were a number of small islands any one of which may have been the one referred to in Garriott's lease.

After finalizing his investment in the flour mill, Garriott was likely optimistic about the upcoming year. Unfortunately, his St. Louis agents were not quick to reciprocate those feelings. Reports of the sluggish market on the St. Louis levee echoed in letters to Garriott from two of his forwarding agents in the city. One firm, Houseman & Lowry, on January 24 noted at seeing only one purchase of "a small lot of fine [flour] at $4 [per barrel]."[98] Compared to the $5.25 per barrel price obtained by Atkinson's agents just six weeks earlier, this was certainly unfavorable news.[99] Garriott's shipments of tobacco fared equally poorly in the St. Louis markets that winter. Houseman & Lowry urged patience from Garriott by requesting that he keep his tobacco in St. Charles until the opening of navigation.[100] On a less bleak note, however, Garriott's second forwarding agents, Clark & Edwards, sold one lot of St. Charles flour for $4.50 per barrel. At this price they felt some obligation to reassure Garriott of their commitment for selling at the highest price possible, and that Garriott had to "rely a little on [their] judgments when the market has a downward tendency."[101] While facing a sluggish flour market in St. Louis, Garriott also encountered an equally poor reception from the city's boatmen.

Steamboat navigation to most destinations on the Missouri River was generally

---

[98] Houseman & Lowry to George W. Garriott, 24 Jan. 1848, GWGP. The MFP (Box 4: Feb 1848) contain a newspaper advertisement for listing Houseman & Lowry as "Commission Merchants, and Proprietors of the Planters' Tobacco Warehouse, corner of Washington Avenue and Second Street" St. Louis.

[99] Ranney & Co. to John Atkinson, 4 Dec. 1847, GWGP.

[100] Houseman & Lowry to George W. Garriott, 1 Feb. 1848, GWGP.

[101] Clark & Edwards to George W. Garriott, 3 Feb. 1848, GWGP.

impossible between November and March during any given season. Occasional trips to St. Charles outside the regular navigation season, however, did occur. Although forwarding agents cajoled a handful of boats to run to St. Charles in the winter, these were not counted on to maintain service during the spring and summer. As river conditions above St. Charles improved in early spring, the rising water channel opened navigation to upriver levees, thereby increasing the competition for service on the Missouri. The fact that winter navigation to St. Charles was sometimes possible did not create strong enough ties between St. Charles and the boating community to lessen the importance of obtaining a commitment from a boat captain. Garriott's agents in St. Louis during the winter waited for news of the proposed spring packet lines, as eagerly as they did for the latest market conditions in New Orleans and Europe. As they prepared for the upcoming season, positive news for dependable service between St. Louis and St. Charles gave promise for packet service.[102] By the beginning of February, Houseman & Lowry were confident that Captain Dozier (of the steamboat *Lake of the Woods*) would enter the St. Charles trade. They became even more confident after entering negotiations with a second boat captain. Writing to Garriott in St. Charles, Houseman & Lowry described the negotiations by saying:

> We have seen the Capt of the "Linn" [*Lewis F. Linn*] and had a talk with him in regard to the packet trade to your place, he thinks favorably of it, and has promised to let us

[102]Five letters from Houseman & Lowry to George W. Garriott between Jan. 1848 and Feb. 1848 mentioned their conversations with Captain Dozier, along with another steamboat *F. Linn*, and the optimistic sentiments they expressed for the availability of his boat in the St. Charles trade. See Houseman & Lowry to George W. Garriott, 24 Jan. 1848, GWGP; and three letters Houseman & Lowry to George W. Garriott, 4, 8, 12 Feb. 1848, MFP.

> know in a few days [of] his decision. As yet we have not been able to see Capt Dozier. If we can bring two or three Steam Boatmen into competition in this matter, [we] shall be able, we hope, to get one on favorable terms, to engage in the trade. We shall have this matter in view, and do all we can to fulfill your wishes in the matter.[103]

By mid-February, however, news of the planned packet service on the Missouri appeared less favorable from advertisements in St. Louis. Clark & Edwards sent word to Garriott on the fifteenth that both the *Tamerlane* and the *Hay Dee* arranged to run packet service on the Missouri River. Unfortunately, these boats were expected to "be loaded above" St. Charles.[104] Clark & Edwards's letter reflected the changing complexion of steamboating on the Missouri, where in the minds of steamboatmen, St. Charles was fast becoming the last levee on the downriver trip, instead of the first levee upriver. Within a matter of a few weeks, Garriott's agents conveyed a dwindling sense of optimism for the availability of boats for St. Charles. Negotiations swayed towards the boatmen's favor, as hope for "favorable terms" and "competition" gave way to one-sided arrangements where "Capt Dozier says he can come up [to St. Charles]..., but he demands not anything less than the bulk of 1000 bbls [barrels] down."[105] Just a month away from the opening of Missouri River's navigation season all of Garriott's business prospects rested on the mercy of boatmen who clearly had little interest in negotiation. Though Garriott likely had no difficulty in keeping the shelves of his store stocked with dry goods, the

---

[103]Houseman & Lowry to George W. Garriott, 8 Feb. 1848, MFP. I could not establish Captain Dozier's first name. For a list of steamboat captains with the last name "Dozier," see Frederick Way Jr., *Way's Packet Directory* (Athens, OH, 1994).

[104]Clark & Edwards to George W. Garriott, 15 Feb. 1848, MFP.

[105]Clark & Edwards to George W. Garriott, 16 Feb. 1848, GWGP.

downriver trip from St. Charles was being phased out (figures 21 and 22).

By the 1848 navigation season, Garriott's superintendent abandoned the mill and compounded his difficulties for dependable service to St. Louis. Selling his interest in the steam flouring mill to Garriott on April 24, 1848, John Lischy left Garriott without a miller for most of May.[106] Whatever impact the mill's production suffered by Lischy's absence could only have worsened the frustration of limited downriver cargo space and the increasingly sluggish market in the city. Throughout May and June, Houseman & Lowry's highest offer for flour was only $4.00 1/4¢.[107] At this price, they could not follow Garriott's instructions to accept no offers below $4.62 1/2¢.[108] The disappointing market in St. Louis, however, was a secondary concern. Missouri steamers were allowing only a trickle of Garriott's products to enter the market. Through a combination of sources, the St. Charles mill's estimated output was about 22,000 barrels per year (Dozier's 1,000 barrel demand would take about seventeen days). Throughout May 29 and June 7, however, no single shipment from St. Charles exceeded 100 barrels (far short of Dozier 1,000 barrel request).[109] During this period, Garriott shipped a total of 228

---

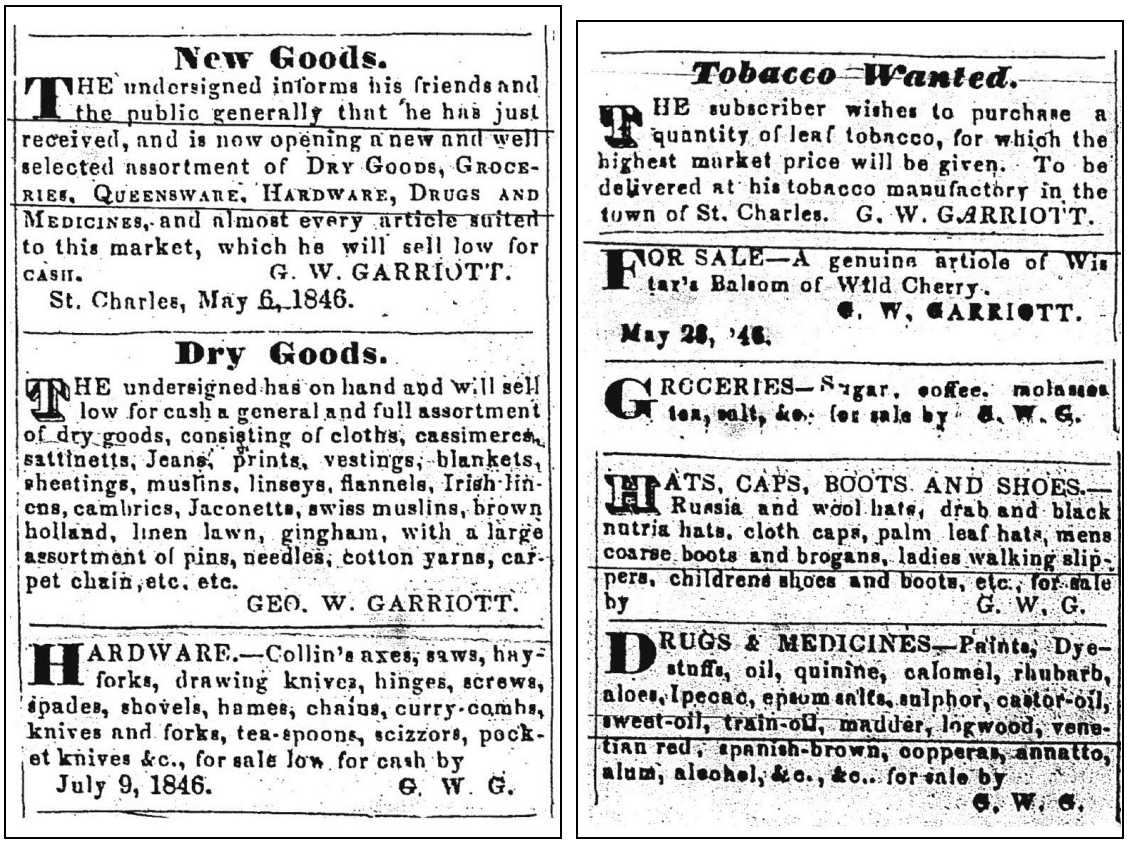
[106]Houseman & Lowry to George W. Garriott, 19 May 1848, GWGP.

[107] Ibid.

[108]Houseman & Lowry to George W. Garriott, 29 May 1848, MFP.

[109]Houseman & Lowry received at least three shipments of flour from St. Charles: on 29 May 1848 the *Lake of the Woods* delivered 90 barrels, on 31 May 1848 the *Mandan* delivered 50 barrels, and on 7 June 1848 the *Lake of the Woods* delivered 88 barrels. These shipments are described in letters written on the day of the shipments' arrivals from Houseman & Lowry to George W. Garriott. The first two letters dated in May are found in the MFP. The third letter dated in June is found in the GWGP.

barrels that required about 3.8 days to mill. Even subtracting two weekend days (June 3–4) from May 29 to June 7, the Missouri steamboats carried only about 48 percent of the St. Charles Mill production capacity. This figure is highly speculative, however, because no daybooks survive for the mill. Similarly, it is more than reasonable to assume that the mill underwent periods of slow production. One indication of "slower" periods was a shipment of 88 barrels of flour sent aboard the steamboat *Lake of the Woods.* On this shipment, Garriott combined barrels from the St. Charles mill with barrels purchased from the Grove Mills.[110] Receiving only $4.00 3/8¢ for the 39 barrels of St. Charles flour



New Goods.

THE undersigned informs his friends and the public generally that he has just received, and is now opening a new and well selected assortment of DRY GOODS, GROCERIES, QUEENSWARE, HARDWARE, DRUGS AND MEDICINES, and almost every article suited to this market, which he will sell low for CASH. G. W. GARRIOTT.

St. Charles, May 6, 1846.

Dry Goods.

THE undersigned has on hand and will sell low for cash a general and full assortment of dry goods, consisting of cloths, cassimeres, sattinetts, Jeans, prints, vestings, blankets, sheetings, muslins, linseys, flannels, Irish linens, cambrics, Jaconetts, swiss muslins, brown holland, linen lawn, gingham, with a large assortment of pins, needles, cotton yarns, carpet chain, etc. etc.

GEO. W. GARRIOTT.

HARDWARE.—Collin's axes, saws, hay-forks, drawing knives, hinges, screws, spades, shovels, hames, chains, curry-combs, knives and forks, tea-spoons, scizzors, pocket knives &c., for sale low for cash by

July 9, 1846. G. W. G.

Tobacco Wanted.

THE subscriber wishes to purchase a quantity of leaf tobacco, for which the highest market price will be given. To be delivered at his tobacco manufactory in the town of St. Charles. G. W. GARRIOTT.

FOR SALE—A genuine article of Wistar's Balsom of Wild Cherry.

G. W. GARRIOTT.

May 28, '46.

GROCERIES—Sugar, coffee, molasses tea, salt, &c. for sale by G. W. G.

HATS, CAPS, BOOTS AND SHOES.—Russia and wool hats, drab and black nutria hats, cloth caps, palm leaf hats, mens coarse boots and brogans, ladies walking slippers, childrens shoes and boots, etc., for sale by G. W. G.

DRUGS & MEDICINES—Paints, Dye-stuffs, oil, quinine, calomel, rhubarb, aloes, ipecac, epsom salts, sulphor, castor-oil, sweet-oil, train-oil, madder, logwood, venetian red, spanish-brown, copperas, annatto, alum, alcohol, &c., &c., for sale by

G. W. G.

Fig. 21. Newspaper advertisement for George W. Garriott's dry goods business. (*Missouri Patriot* (St. Charles), 13 Aug. 1846.)

[110]Houseman & Lowry to George W. Garriott, 7 June 1848, GWGP.

FALL AND WINTER
DRY GOODS,
&c., &c.

THE subscriber has just received and is now opening a general and well assorted stock of Dry Goods, Groceries, Hardware, Queensware, Drugs and Medicines, &c., &c., which having been selected with care, he is prepared to offer at low prices *for cash*. His stock consists in part as follows:

DRY GOODS.

Blue and blk Cloths,	Tickings and Sheeting Stripes,
Pl'n and Fancy Cassimeres,	4-4 Brown Muslins,
Striped and twoved Satinetts,	Bleached Muslins,
Kentucky Jeans,	Pl'n & Pl'd Lineys,
Plain and twilled Kerseys,	Canton Flannels,
Fancy Vestings,	White and scarlet Wool Flannels,
Fancy and Clintz Prints,	Plain black and fig. Alpacas,
Blue and Mourning Prints,	Bavarian Cloths and Lustres,
Black Cotton and Silk Velvet,	Irish Linens,
Cotton and Russia Diapers,	White Cambries,
Blue and Green Mack. Blankets,	Jaconetts,
Saddle Blankets,	Swiss and book Muslins,
	Brown Holland,
	Linen Lawn & ldkfs
	Scotch Gingham,

with a large assortment of small wares. Pins, Needles, Cotton, Cotton Yarns, and Carpet Chain. Also,

HATS AND CAPS,

McKinstry's blk Russia and Wool Hats, " drab and b'ack Nutria do Seal and fancy Cloth Caps, &c., &c.

BOOTS AND SHOES,

FALL AND WINTER
DRY GOODS,
&c., &c.

THE subscriber has just received and is now opening a general and well assorted stock of Dry Goods, Groceries, Hardware, Queensware, Drugs and Medicines, &c., &c., which having been selected with care, he is prepared to offer at low prices *for cash*. His stock consists in part as follows:

DRY GOODS.

Blue and blk Cloths,	Tickings and Sheeting Stripes,
Pl'n and Fancy Cassimeres,	4-4 Brown Muslins,
Striped and twoved Satinetts,	Bleached Muslins,
Kentucky Jeans,	Pl'n & Pl'd Lineys,
Plain and twilled Kerseys,	Canton Flannels,
Fancy Vestings,	White and scarlet Wool Flannels,
Fancy and Clintz Prints,	Plain black and fig. Alpacas,
Blue and Mourning Prints,	Bavarian Cloths and Lustres,
Black Cotton and Silk Velvet,	Irish Linens,
Cotton and Russia Diapers,	White Cambries,
Blue and Green Mack. Blankets,	Jaconetts,
Saddle Blankets,	Swiss and book Muslins,
	Brown Holland,
	Linen Lawn & ldkfs
	Scotch Gingham,

with a large assortment of small wares. Pins, Needles, Cotton, Cotton Yarns, and Carpet Chain. Also,

HATS AND CAPS,

McKinstry's blk Russia and Wool Hats, " drab and b'ack Nutria do Seal and fancy Cloth Caps, &c., &c.

BOOTS AND SHOES,

Fig. 22. Newspaper advertisement for George Garriott's dry goods business. (*St. Charles Advertiser,* 1 Jan. 1846.)

and $3.00 for the 49 barrels of Grove Mills flour, highlighted the need to have sufficient cargo awaiting a boat captain.[111] Garriott's frustrations were certainly centered on the lack of transportation to St. Louis, but the trip of *Lake of the Woods* hints at further frustrations with grain supply. To alleviate his supply problems, Garriott searched for

[111] Ibid.

new forwarding agents in the city.[112]

As he planned to end his business relations with Houseman & Lowry, Garriott sought not only more adept salesmen, but also new supply sources. In each report sent to Garriott, Houseman & Lowry consistently noted the rising prices of wheat and other unprocessed grains on St. Louis's levee. With lowering prices for manufactured products like flour and corn meal and rising prices for unprocessed wheat and grains, smaller wagon shipments were more competitive than large steamboat cargoes. Houseman & Lowry described the situation:

> We find that our retailers are supplied with corn meal, from country wagons, ...and that the demand here will hardly justify you in grinding & shipping meal *till Fall*. Dealers are afraid of having meal *mush* on their hands, and prefer buying from wagons in small quantities, as they want it [emphasis in original].[113]

Sending products to St. Louis by wagon was an option for Garriott that he employed at least once in 1848. Garriott likely sent small shipments like these to city grocers who provided him an alternate source for flour sales in St. Louis. This source, however, operated on smaller economy of scale than Garriott positioned himself to exploit. Although grocers emerged from the specialized economy of the city, their activities were insulated from the large-scale trade of the provisions market. Grocers generally dealt with only a handful of country millers who, like James Lackland a decade earlier, searched for short-term expedient cash profit. These small-volume country millers often received payment by keeping portions of their mills products for their own use. They

---

[112]Warburton Rossiter & Co. to George W. Garriott, 9 June 1848, GWGP.

[113]Houseman & Lowry to George W. Garriott, 31 May 1848, MFP.

generally did not actively purchase wheat. Instead, they exchanged services with local farmers and would generally spend winter months sharpening tools or repairing farmers' equipment for foodstuffs.[114] Both the country miller and city grocer were content in trading on a scale synchronized to farming household production. Garriott's production was more intensive and dependant on a much larger consumer base inaccessible through city grocers. One advantage for small markets, however, was that they may have provided at least some revenues during absences of steamboat service.

Almost as a rule, provisions trading was intensely competitive but the shared social position of these merchants made them all the more sensitive to business threats. Provisions merchants generally climbed out of humbler backgrounds without the benefits of inherited capital or advantageous marriages. Many New York colonial provisions merchants hailed from the countryside or low-level positions within the city's business world. As a result, they rarely purchased real estate like the houses and gardens seen as characteristic of true prominence. Instead of material possessions, they placed capital gains into shipping, bills of exchange markets, and the endless demands of their business maintenance. The lives of these provisions merchants were "not wealth and privilege but struggle against losses, gluts, and debts. … Their rates of return often were lower than those of eminent merchants, given their smaller vessels, widely shared ownership of cargo, and lower level of investment."[115] Although Garriott was certainly positioning himself for success, he was ascending heights tested by countless others before him –

---

[114] Matson, "Damned Scoundrels," 407–411.

[115] Ibid., 407–408.

many of whom "fell for good."[116]

One receipt from Houseman & Lowry showed the highest price they obtained for flour at $4.75 per barrel.[117] This shipment arrived in St. Louis by wagon, not steamboat. Though the sale grossed 13 1/2¢ per barrel below Garriott's lowest asking price, the wagon load consisted of only 14 barrels and netted $64.84 after subtracting Houseman & Lowry's 2 percent commission.[118] The labor and expense involved in land transportation likely gouged profits further, but Garriott had few other options. He found himself trading in a double-edged market where high grain prices raised milling costs, while plunging flour prices further magnified profit loss in a hostile shipping environment. St. Louis merchants' preference for purchasing small quantities until market prices returned to favorable conditions, allowed for higher prices but only for smaller shipments that were more likely to be sent by wagon at inflated transportation costs.

Garriott's shipping plight of May 1848 underscored the tense relationship between himself and the local farmers. Historians John McCusker and Russell Menard epitomized the growing economy of scale during the colonial period as the "cheaper-by-the-dozen effect."[119] Price clearly argued that British tobacco merchants knew full-well

---

[116] Ibid.

[117]Houseman & Lowry, Sales Receipt to George W. Garriott, 18 May 1848, GWGP.

[118]Houseman & Lowry to George W. Garriott, 29 May 1848, MFP; Houseman & Lowry, Sales Receipt to George W. Garriott, 18 May 1848, GWGP.

[119] John J. McCusker and Robert R. Menard, *The Economy of British North America, 1607–1789* (Chapel Hill, NC, 1991), 21.

that higher volume absorbed lower per unit costs.[120] The difference between them and Garriott, however, was that they provided capital incentives for individual planters to increase production. Exchange houses only accepted lower per unit retail sales because high volume ensured larger cumulative profits. On the supply end, they rewarded large planters willing to provide high-volume wholesale pricing. No matter how much Garriott increased his supply volume, however, the cheaper-by-the-dozen effect would never occur. Every extra bushel of wheat Garriott bought represented another local supplier. As long his local suppliers grew exponentially with supply volume, he would never find a farmer capable of giving, or benefiting from, high-volume pricing.

Houseman and Lowry's only solution for curtailing the escalating local wheat prices was for Garriott to "induce [his] farmers to lower their figures for wheat."[121] Though St. Charles lay on the edge of highly productive wheat fields in St. Charles County, the carrying capacity of farm wagons could not meet the supply demands of the steam mill. The small amounts of grain farmers hauled to the city limits yielded prices unsatisfactory for the labor involved in transportation.[122] The growing friction between the county's wheat growers and St. Charles merchants, coupled with rising wheat prices in St. Louis, forced Garriott to find alternative supply sources. Opening new avenues of exchange began first with forming new business relations in St. Louis, and second with finding

---

[120] Price and Clemens, "A Revolution of Scale."

[121] Houseman & Lowry to George W. Garriott, 29 May 1848, MFP.

[122] B. A. Alderson, "Wheat Growers Association," *Missouri Patriot* (St. Charles), 23 Sept. 1847, 2.

suppliers farther up the Missouri River. In other words, the downriver core promised access to the upriver periphery.

In early June 1848, Garriott formalized new arrangements with St. Louis agents, Scott Naylor & Co., while he scouted upriver locations for new suppliers. After hearing his intentions, Warburton Rossiter & Co. sent word to Garriott about their "pleasure" to introduce him to some "friends" on the Missouri River who could purchase wheat for the St. Charles steam mill.[123] Like earlier merchants, expanding to new territories required personal connections and reputable endorsers. Warburton Rossiter & Co.'s offer to provide "friends" likely responded to a request from Garriott for a credit advance. Although they were unwilling or unable to extend more credit in Garriott's favor, they at least pointed him to the right people. Their friends would help Garriott balance his account. Scott Naylor & Co. met Garriott's more pressing credit needs by providing capital for upriver purchases.[124] Garriott's strategy promised two positive outcomes. He could take advantage of any downward trends in the St. Louis wheat market, by working with agents who would extend credit for shipping large lots to St. Charles. He could also use upriver locations to his advantage by having agents write bills of lading obliging boat crews to land at St. Charles on downriver trips and discharge freight. This move stopped

[123]Warburton Rossiter & Co., forwarding agents in St. Louis, dealt with Garriott on some of his tobacco shipments. Unfortunately, there were too few records to make any statement regarding the amount or frequency of tobacco traded for Garriott by this firm. See GWGP; and MFP. Warburton Rossiter & Co. to George W. Garriott, 9 June 1848, GWGP.

[124] Ibid., Near the end of Garriott's relationship with Houseman & Lowry several letters mention their inability to make purchase because of their outstanding debts in St. Louis.

a boat at his levee and cleared space for shipments to St. Louis. By reorganizing downriver and upriver contacts, Garriott promised to lower his overhead costs and ensure access to larger economies of scale.

Rumors of Garriott's new business relations reached Houseman & Lowry, who inquired to "learn the truth of it."[125] By June 23, facts replaced hearsay, as Garriott's former agents brought his account up to date by presenting him a balance due of $60.99.[126] Severing ties with forwarding agents who, instead of generating profit, presented bills for payment made good business sense at any time. In late June along the Missouri, however, the few remaining weeks of predictable navigation magnified the necessity of seeing real profit soon. In the face of $8500 worth of maturing bank notes, the first $3000 due on 1 July 1848, Garriott's decision was even more justifiable.[127]

He replicated the same business strategy seen a decade earlier in St. Louis. Like the Filleys and J. R. Stanford, Garriott moved into the provisions trade. Although his move appeared more a choice than a necessity, it bound him to participate in an economy of scale synchronized to the carrying capacities of steamboats. Filley and Stanford benefited from spin-off industries in St. Louis. Captains had good reason to lay idle for days or weeks in a city with dry docks and other repair services. Additionally, they would not incur fuel expenses tied up at St. Louis waiting for customers. Merchants in

---

[125]Houseman & Lowry to George W. Garriott, 10 June 1848, GWGP.

[126]Houseman & Lowry to George W. Garriott, 23 June 1848, MFP.

[127]Article of agreement between John Atkinson and George W. Garriott, 4 Feb. 1848, MFP.

St. Louis rarely, if ever, complained about availability in St. Louis steamboats. Unfortunately for Garriott, transportation proved an obstacle between himself and the St. Louis market. Buying local exports was simply not enough to end his mounting debts. Garriott also had to control the storage, production, and shipment of western exports. Upriver sources for wheat promised to solve the more difficult of the latter two problems. In short, Garriott's business strategy would have been completely familiar to a merchant in the colonial East a century earlier. On the Missouri River, at mid-nineteenth century, however, Garriott was learning the rules of a colonial game. He, like the Filley's and Stanford, were reinventing an economy long since antiquated in the big urban markets, but now finding use in the growing insular frontier of the Missouri Valley.

IV. CREDIT, TRANSPORTATION, AND THE RHYTHM OF BUSINESS : BUILDUP TO A ST. CHARLES PACKET

The good paymaster is lord of another man's purse.
Benjamin Franklin, "Advice to a Young Tradesmen," 1748[1]

Diversification was the key to a successful western business. Even for St. Louis merchants and tradesmen, sitting in the heart of the western economy, specialized business strategies were impossible to maintain. Merchants like Oliver Filley and J. R. Stanford ventured west intending to be simply tin ware or dry goods dealers, but they quickly incorporated an unplanned export/provisions business into their original designs. Their reluctant transition into something akin to the antiquated merchant capitalist of New England was, however, completed with relative ease compared to smaller marketplaces like St. Charles. Similar to Filley and Stanford, George W. Garriott went west with a preconceived business strategy. He originally began as a dry goods dealer, purchasing eastern goods either directly on the east coast or indirectly from St. Louis forwarding agents. In either case, he also needed to generate an exchange commodity demanded by eastern firms.

Garriott in a sense was playing two sides of the fence. On the one hand, he acted like the large British exchange houses of the eighteenth century – if he wanted to *sell* more he had to *buy* more. Garriott, however, did not have the luxury of working with ambitious

[1] Benjamin Franklin, "Ben Franklin Gives Some "Advice to a Young Tradesmen," 1748, in *The Colonial Merchant: Sources and Readings*, ed. Stuart Bruchey (New York, NY, 1966), 114. Emphasis was in original published source.

planters, but he knew that at ports farther upriver wheat was centralizing in quantities large enough to keep his mill running full time. As he stretched his ambition, however, he would find what lay hidden on the other side of the fence. What distinguished him from the large tobacco firms in Britain was capital. Large reserves of currency and credit justified all the risks exchange firms assumed. At the base of every move they made was credit. The funds extended to them, they passed onto to shippers and planters. Credit let the large exchange firms orchestrate the rhythm of shipping and supply to their needs. This rhythm was the source of their fortune. The following chapter demonstrates that Garriott's lack of capital and his large debts became major obstacles. Garriott's first major move after buying the mill promised to succeed. He could potentially tap the economy of scale necessary to profit from flour production. As he purchased wheat upriver, he cleverly positioned himself to make steamboats finally work in his favor. Everything hinged, then on his wheat purchasing ability with farmers outside his normal territory. The following chapter demonstrates that even tapping a new economy of scale required capital and transportation to work in unison. Without either, the entire chain collapsed.

The overwhelming shortage of physical currency or "eastern funds" complained about by St. Louis merchants also prevailed in St. Charles. This lack of currency explained Garriott's alternate tobacco export business, which provided an essential exchange commodity for balancing accounts with eastern firms. This trade, however, never provided cash returns of real significance. Nearly half of all letters written to Garriott between 1845 and 1848 requested payment of debts. Most came directly from

St. Louis merchants like N. E Janney & Co. asking for only $102.[2] Several others were much higher, however, like his debts to Warburton & Rossiter Co., to whom Garriott owed at least two notes for just over $4,500.[3] These debts partially explained his purchase of the flour mill. Warburton & Rossiter acted as Garriott's tobacco agents in the city. Based on these notes, Garriott continually lost money in tobacco sales. After an audit in December 1848, Garriott's account showed only six payments in an eighteen-month period beginning in April 1847. After a year and half in the tobacco business, Garriott still owed $1,400 on his original notes. In the same letter, Warburton & Rossiter credited Garriott's account for only $75.00 on recent tobacco sales.[4]

Another account audit from St. Louis merchants J.C. Reynolds & Co. showed that from September 1847 through March 1848, Garriott purchased $1,502.71 worth of sundries on credit. During the same period, he made six cash payments on his bill that only amounted to $852.76, leaving a balance of $649.95. J.C. Reynolds & Co.'s letter to Garriott in March 1848 stated that they wished all remaining balances cleared immediately, so maintaining large credit balances was part and parcel of standard business.[5] Extension of large credit was not unique to western business.

City commission firms gladly extended country producers credit for practical reasons.

---

[2]N. E. Janney & Co. to George W. Garriott, 8 Feb. 1848, George W. Garriott Papers (GWGP), Western Historical Manuscripts Collection (WHMC), University of Missouri, Columbia.

[3]Warburton Rossiter & Co. to George W. Garriott, 27 Dec. 1848, Mullanphy Family Papers (MFP), Missouri Historical Society (MHS), St. Louis.

[4]Ibid.

[5]J. C. Reynolds to George W. Garriott, 20 Mar. 1848, GWGP.

Increasing arrivals of steamboats at the St. Louis levee necessitated that city merchants remain close to the waterfront. They could not devote time to tracking the countryside for shipments knowing that their home-stationed competitors would gobble up cargo space immediately as it arrived. The prosperous firms delegated collection to producers located closer to supply sources. This arrangement had clear advantages in the colonial era as well. Commission merchants managed the "dozens of details related to the management of vessels." Tending to these affairs allowed country producers to maintain close contact with farmers and establish a supply network. In colonial Philadelphia, city merchants were among the first to grasp this system's benefits when they offered capital and shipping services in return for country millers' stock and their "detailed knowledge of the various types of flour, which by the 1780s were going by specific brand names, such as Red Clay, Morton, and Fisher."[6]

Credit had downsides for Garriott too. On his Reynolds account alone, he was expected to produce as much cash in one payment as it took his tobacco interests four months to achieve. For Garriott, therefore, the tobacco business apparently produced more debt than profit. At some point, Garriott thought it wise to enter the flour provisions trade. To do this, however, he had to incur further debt. Why then was flour so important, and why did Garriott divert his energies to a new export? For St. Charles businessmen, like Garriott, flour was the most reliable exchange commodity. Flour produced more cash than any other local product in St. Louis, New Orleans, the east coast, or even farther up the Missouri River for the growing Santa Fe and Oregon trails

[6] Thomas M. Doerflinger, "Commercial Specialization in Philadelphia's Merchant Community, 1750-1791," *Business History Review* 57 (Spring, 1983): 43.

trade.

Unlike his counterparts in St. Louis, Garriott did not have the good fortune to own a shop sitting just a few city blocks from dozens of steamboats. His predecessor in the St. Charles tobacco trade, A.D. Harmon, seemed to rely more on his local market than attempting regular business with St. Louis. He sent one shipment of nine tobacco boxes to St. Louis in May 1840, via the steamboat *Fort Leavenworth*. Bypassing the St. Louis auction house, Harmon marked this cargo for shipment to New Orleans and then to Boston. The fact that Smith Brothers & Co. were unfamiliar with either of Harmon's New Orleans or Boston receivers showed how rarely he shipped freight directly to St. Louis. Writing from St. Louis, Smith Brothers & Co. elected to send Harmon's tobacco to a different house because "we ship to Joel Small at New Orleans as we did not know whether the house to which you had marked them was now in business in New Orleans."[7] Apparently, Harmon did little business in St. Louis prior to this shipment, as his forwarding agents further commented "we would be happy to attend to your business from hereafter. If you should not be personally acquainted with Messrs. Stevens & Wellington of Boston we would recommend to you to consign hereafter to Messrs. J.L. Maeggor & Co, good Boston merchants."[8]

Harmon had good reason to avoid steamboat transportation. For the Missouri River leg, the steamboat *Fort Leavenworth* carried Harmon's nine boxes weighing 1,404 pounds for 37.5¢ per box, which figures to 24¢ per hundred pounds. Compared to the

[7]Smith Brothers & Co. to Zebulon Harmon, 22 May 1840, A. D. Harmon and Zebulon Papers, WHMC.

[8]Ibid.

longer Mississippi River leg, on which the steamboat *Chester* charged 30¢ per hundred pounds, the difference appears somewhat reasonable. It becomes less reasonable, however, when considering the distance between St. Charles and St. Louis was only 45 river miles (72 km), or about 4 percent of the total river voyage after including the 1,146 river miles (1,844 km) between St. Louis and New Orleans (see appendix D). After additional shipping fees from two-day storage, drayage, and Smith Brother's commission, Harmon paid $6.12 to send his tobacco to St. Louis, but only $4.22 from St. Louis to New Orleans. On this one cargo, therefore, the first 4 percent of the total trip consumed 59 percent of all river expenses. Harmon likely shipped his tobacco to Boston for the same reasons Filley and Stanford shipped lead; both products served well as exchange commodities in the East. Just as with lead, the western market could not convert large quantities of tobacco directly into hard currency. Since Smith Brothers & Co. had not dealt previously with Harmon, one would expect them to bait a potential client with boasts of large cash sales. On the contrary, they apathetically offered to take Harmon's future tobacco shipments, saying "if you cannot sell to your market, we would recover them and sell if possible on any other articles that you may deal in, beeswax, … tallow, … deer skins, … and coon [skins]."[9]

Quite possibly, Harmon's previous shipments to the city were only small, wagon-sized loads, similar to James C. Lackland's early flour shipments. Had he sent products by land, he never would require the service of commission and forwarding agents, but instead could sell directly to a retail grocer in the city. Shortly after Garriott purchased

[9]Ibid. The list quoted above included all the items mentioned by Smith Brothers. The deleted text was market prices for the list items.

the St. Charles Flour Mill, he received an offer showing the distinction between goods sold to grocers over forwarding agents. From St. Louis, L. H. Cavanaugh offered to directly purchase Garriott's flour, writing:

> Being extensively engaged in the flour business. I am asked repeatedly for your flour, and always am compelled to buy from others instead of being in receipt of that, as I am of other flour. I therefore concluded to write to you, to ask you, at what rate you will furnish me *one hundred barrels* per week, delivered at my store on Commercial Street, if such by land carriage. Or if such by water, upon the landing, the cash to be paid for the same at three days sight, at any place in the city you may want [emphasis in original].[10]

City grocers were willing to purchase small quantities of tobacco or flour, but doubtfully could pay cash for steamboat-sized loads. Transactions of this kind also probably left a smaller paper record than larger ones completed through commission and forwarding houses. Thus, it is difficult to know how much business Garriott sent city grocers via land or water routes. Whatever expenses Harmon incurred over the 20-mile (32-km) country road to St. Louis would not have been too severe, as long as his shipments remained relatively small and light (see appendix D).[11] Unfortunately, it is impossible to estimate the exact shipping charges by land from St. Charles to St. Louis. The St. Charles Wheat Growers Association organized for the express purpose of reducing the high costs of land transportation. Its argument fell short of providing exact freight expenses, but inadvertently proved the overall efficiency of steamboat transportation. One letter written to Garriott in July 1848 gives some indication of freight expenses

---

[10] L. H. Cavanaugh to George W. Garriott, 29 June 1848, GWGP.

[11] Alphonso Wetmore, *Gazetteer of the State of Missouri: With a Map of the State, from the Office of the Surveyor-General, Including the Latest Additions and Surveys, to which is Added and Appendix Containing Frontier Sketches, and Illustrations of Indian Character, with a Frontispiece, Engraved on Steel* (New York, 1837), 269.

within St. Charles County. Local farmer James Glenday estimated the total cost for his recent harvest of 128 bushels of wheat at $37.00. This figure included all expenses of harvesting including hired hands and the use of two horses and one wagon for hauling to the mill. Out of this estimate, Glenday counted $11.50 for transportation expenses. On this one harvest, therefore, the cost of transportation was approximately 9¢ per bushel, or 15¢ per hundred pounds, surprisingly less than waterborne commerce.[12] Cavanaugh's offer showed that the market was ready for St. Charles flour, but the real question was how to get it there. Garriott could have shipped directly to wholesalers like Cavanaugh, just as James C. Lackland had done a decade earlier. Garriott's situation, however, was quite different. Generating large amounts of cash required selling large quantities of flour. Selling large quantities of flour required dependable shipping. Acquiring dependable shipping, in turn, required the assurance of large quantities of flour, which required owning a flour mill. This predicament revealed the distinctions between two economies of scale.

Although only a decade separated Garriott's and Lackland's flour sales, the modern world had penetrated the lower Missouri Valley during the interim. The changes occurred quickly and dramatically. Lackland and Harmon rarely dealt with commission merchants in the city because they faced less competition from upriver steamboats, and so could see profits from small shipments no matter the transportation costs. Garriott, however, was severely indebted to several individuals, and experienced greater boat traffic on the river, which flooded the St. Louis market with more agricultural products

[12]Mary Glenday to George W. Garriott, 18 July 1848, GWGP. Freight rate was based on standard 60 pound bushel.

each year. In addition, some of his creditors were also forwarding agents, such as Warburton and Rossiter, who likely linked him to steamboating simply because this was their preferred manner of business. At one point Warburton & Rossiter forced Garriott to sign over his life insurance policy to them. The St. Louis agent for Mutual Life Insurance wrote Garriott notifying him that:

> I notice in looking over the pocket book that you have never yet assigned the Life Insurance Policy as intended. As the original design of the same will probably be accomplished by a liquidation of the claim of Warburton & Rossiter at no *very* distant day and as your new business and new plans look to other persons with whom they do business, I have presumed that you would have no objection to the form that I have drawn up for you to sign [emphasis in original].[13]

Garriott clearly needed to make real cash quickly, something not possible with small wagon loads of tobacco or flour. Raising cash with wagon loads of flour worked well for James C. Lackland, at a time when few boats brought large flour shipments from higher up on the Missouri River. Similarly, Harmon left for the East just as the upriver ports of Weston, Lexington, and St. Joseph were fast becoming integrated with St. Louis shipping. As long as intermediary locations in the Missouri Valley were confined to the old pioneering economy, one in which flatboats and wagons moved freight at a trickling pace, St. Charles would remain close to St. Louis only in a literal sense. By the mid-1840s, however, the whole lower Missouri River Valley above St. Charles was in fast transition from a pioneering style economy to a modern scale of high volume trade and specialization. This transition depended exclusively on steamboat service for transportation. Initially because of military supply contracts and the burgeoning Santa Fe / Oregon Trail trades, the upper counties leapt over lower ones on the river. While the

[13] Warburton Rossiter & Co. to George W. Garriott, 27 June 1848, GWGP.

nationwide transportation revolution steadily brought Missouri's frontier closer to St. Louis, it effectively widened the gap between St. Charles and the modern world. As the number of packets increased on the river to service the growing populations of the Boonslick and Platte regions, the total number of boat trips decreased. As the western portion of Missouri became a focal point for steamboat operations, Garriott arranged his business in such a way to either out compete upriver locations or to enter into their market. Both options were equally troublesome.

By mid-summer 1848, Garriott had diversified his business to conform to demands of the western economy. No longer could he title himself simply a dry goods merchant. Now trapped in a frontier bubble, Garriott took additional measures to entice boat captains to stop at his levee. Controlling operations at the flour mill was the first step in negotiations with the boat captains. The second step involved informal agreements to act as steamboat agent for St. Charles.

Up to this point, it was easy to imagine a partner in an eighteenth-century tobacco exchange house fully agreeing with Garriott's strategy. Jacob Price's anyslsis of Glasgow exchange houses' dominance of the eighteenth-century tobacco trade compared closely with much of Garriott's plans. Glasgow firms out competed rivals in other ports like London and Bristol by seeking areas of colonial production with large supplies.[14] Because freight charges for colonial products were higher than the wholesale value of the products, shipping finished goods was frequently viewed as a complimentary service for

[14] Jacob M. Price, "The Rise of Glasgow in the Chesapeake Tobacco Trade, 1707–1775," *William and Mary Quarterly*, 3rd Ser. 11, Scotland and America (Apr., 1954): 179–199.

access to more lucrative agricultural freight.[15] If an exchange house could guarantee a shipper that a full cargo awaited across the Atlantic, their negotiating leverage rose dramatically. Often an exchange house received discounted, or even free, freight charges on colonial bound freight in exchange for a full ship load of cargo on the home voyage.[16] As their trade grew, large houses began purchasing and chartering their own vessels, this ensured shipping schedules were synchronized with both tobacco production and their account balances. They arranged credit on purchases of European goods for extended periods of months or years. Then they sold the finished goods to favored planters on short term credit. The credit relationship ensured that the indebted planter would ready tobacco shipments on schedule. The credit system had a multiplying effect on the wealth of all parties. As exchange houses grew, so did their credit ratings. As they received more credit, their planter became wealthier, and shipping arrangements became iron clad.[17] Shipping and credit were the keys that would have seemed familiar to Garriott's plan. The imaginary eighteenth-century tobacco partner, however, would cringe at the way Garriott had to mange his shipping needs.

On the western rivers, steamboat operators frequently made informal trade

---

[15] John J. McCusker, "Sources of Investment Capital in the Colonial Philadelphia Shipping Industry," *Journal of Economic History,* The Tasks of Economic History 32, (Mar., 1972): 147.

[16] Jacob M. Price, "What Did Merchants Do? Reflections on British Overseas Trade, 1660–1790," *Journal of Economic History* 49, The Tasks of Economic History (Jun., 1989): 274.

[17] Price, "The Rise of Glasgow," 179–199; Jacob M. Price and Paul G. E. Clemens, "A Revolution of Scale in Overseas Trade: British Firms in the Chesapeake Trade, 1675–1775," *Journal of Economic History* 47 (Mar., 1987): 1–43.

agreements with merchants at smaller ports. As a steamboat agent, the merchant acted as a middleman between a boat and the local community. Typically, an agent gathered the freight business of various individuals around town, storing their cargo with his own in a warehouse until the boat's arrival. He then accepted freight unloaded off the boat, and held deliveries until shipping charges were satisfied. For his services, an agent usually attached a small commission from 1 to 2 percent of the cargo's value. Although he also shipped his own goods, he mirrored forwarding houses found in larger ports that shipped solely on other people's behalf. If local demand occupied more time than his original business, however, he might eventually put all his energy into the forwarding business and become a full time commission merchant. Similarly, as his relationships with boat crews developed, he might purchase stock in one or several steamboats to further manage his local trade.[18]

Merchants and steamboat owners made cooperative agreements based on individual need and the particular characteristics of local trade. Informality seemed the only common trait with these agreements. Because a handshake left little in the way of legal documentation, it was difficult to ascertain exactly how many steamboats Garriott served as agent. When a person in the St. Charles area sent freight by steamboat through Garriott, the transaction produced three bills of lading. Also called way bills, these documents served as receipts for the involved parties – sender, shipper, and receiver. Garriott's function as an intermediary required him to hold the sender's bill only as long

[18]Louis C. Hunter, *Steamboats on the Western Rivers: An Economic and Technological History*, with the assistance of Beatrice Jones Hunter, and with a new introduction by John H. White, corrected from 1949 ed. (Minneola, NY, 1993), 382–384.

as the shipping account charges remained open. Once the sender paid the shipping charges, the account closed, and Garriott handed over the way bill. Although he likely kept several day logs for each of his business affairs, only one account book for his dry goods store exists – it expectedly contains no information about shipping.[19] One situation, however, did occur that provided some indication of Garriott's role as a steamboat agent.

If by chance Garriott left his warehouse unoccupied, and could not be found in town, a person sending freight left goods with a small note attached indicating the desired shipping directions (figure 23). Ironically then, Garriott's periodic truancy created the best surviving records for his role as a St. Charles steamboat agent. From a few hundred slips of paper, it was clear that Garriott made agreements with at least five steamboats: *Bertrand*, *Kit Carson*, *Revenue Cutter*, *Rowena*, and *Uncle Toby*.[20] Informal relationships with steamboat captains/owners characterized these agreements but also required interconnected arrangements with local farmers, Boonslick wheat purchasers, and St. Louis commission merchants. As a result, the business of steamboating was a large network of personal cooperative agreements, any one of which could be redefined without prior notice and without affecting all parts of the network.

The most crucial relationships for Garriott were agreements between himself and boat captains. Unfortunately for Garriott, these proved difficult to negotiate. Part of the

---

[19]George W. Garriott, Account Book of Grocery Sales, GWGP.

[20] The *Bertrand* above is not the well-known steamboat of the same name, which sank in 1865 and was later excavated in 1969. See Jerome E. Petsche, *The Steamboat* Bertrand*: History, Excavation, and Architecture* (Washington, D.C., 1974).

reason he abandoned Houseman & Lowry stemmed from their inability to form the same relationships Garriott had created. Garriott's position on the Missouri River gave him a peculiar set of advantages and handicaps. First, the section of the river running through

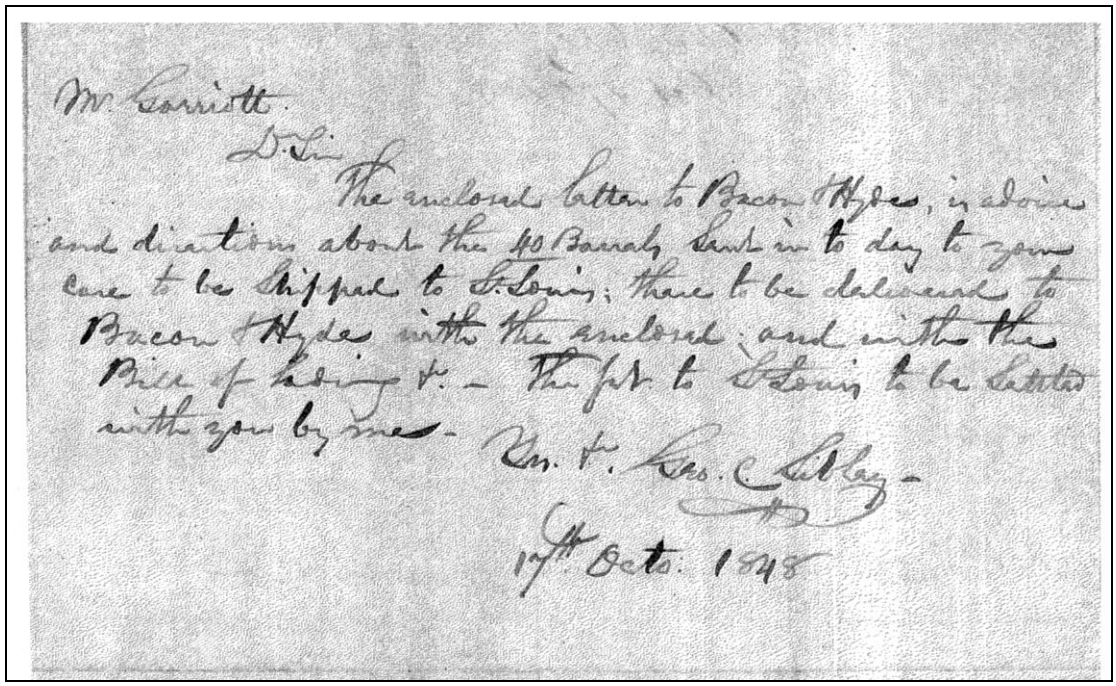

Mr Garriott.
D. Sir
The enclosed Letter to Bacon Hyde, is advice and direction about the 40 Barrels Lard in to day to your care to be Shipped to St. Louis; there to be delivered to Bacon & Hyde with the enclosed; and with the Bill of Lading &c. — The Lard to St Louis to be settled with you by me —
Yrs. &c. Geo. C. Sibley —
17th Octo. 1848

Fig. 23. Note with shipping instructions from George C. Sibley to George W. Garriott. (GWGP)

St. Charles County froze for only a fraction of the time compared to areas farther upriver.[21] This potentially extended Garriott's shipping season, and allowed him to bargain with steamboat captains when they otherwise could not make trips elsewhere on the Missouri. Although he seemingly had an advantage on upriver locations for winter shipments, at this time of year most smaller boats went south for the lower Mississippi trade. Steamboat captains, particularly of the smaller class vessels suited for the Missouri River, commonly owned part of their own boats and worked where and when the freight

[21]See George C. Sibley, Commonplace Book, George Champlain Sibley Papers, MHS.

business proved most lucrative. During the winter, when the Mississippi River dropped and no longer accommodated larger boats, many smaller steamboats running the Missouri River trade in the summer had no contractual obligations to remain in St. Louis, waiting for the spring thaw. Captains could be expected to leave a section of the river for any amount of time they chose, returning only when it was worth their effort.

Even though St. Charles offered a more attractive location on the Missouri River in terms of navigability, the real driving force behind a particular steamboat trade was availability of cargo. By the end of 1848, Garriott faced an incredible dependency on steamboats. He could only expect to see boats ready for his trade once the major shipping centers at Lexington, Weston, and St Joseph opened for navigation as well. As a result, Garriott's nearness to St. Louis became his largest disadvantage when negotiating directly with boat captains. One captain, Norman Cutter, bluntly made this point. Writing from St. Louis, Cutter taunted Garriott saying:

> You have heard probably that my boat which we talked about some months ago is finished and running. Perhaps you saw her as she passed up the Missouri. She is lighter and faster than I expected. She was *quite fast* and all her bedding, furniture, tackle, and etc. is good and new. In short she is just the packet for the St. Charles trade. Now I do not write to you to ask you to buy her, but perhaps your "say so" would act as a kind of stimulant or influence on others to do so. For your business is the butt end of the trade at present and of course those running a boat [to St. Charles] would like to have such a one as would please you, and you of course would like to be pleased yourself as well as to have the balance of the public pleased. I would sell her at a great bargain but not so low as I offered her to you for. Would you act as her agent and give me your business if I will run her to St. Charles as a regular packet. She is all right. Please give me a reply tomorrow and let this be confidential [emphasis in original].[22]

Why did Cutter switch tone from his opening taunts with such a *gracious* offer at the end

[22]Norman Cutter to George W. Garriott, 2 Oct. 1848, GWGP.

of his letter? Just two weeks later, he sent receipt of a $500 marine insurance policy, purchased with one of Garriott's bank notes. He closed the letter somewhat pointedly with "don't fail, my Dear Sir, to pay me the $1,400 this week as I find I shall need it much."[23] His offer then, rather left-handedly, played on Garriott's desperation. Intended less as cooperative business agreement, and more as blackmail, Cutter knew he could extort Garriott into a loose "partnership." By making Garriott his partner/agent in St. Charles, Cutter saved himself the trouble of dealing with multiple receipts and deliveries in town, and received some investment dollars for his boat, while not completely obligating himself to stay in the trade when navigation or freight conditions swayed.

Arrangements like Garriott and Cutter's occurred regularly in steamboating. Generally, two forms of business associations took place when dividing steamboat interests among several individuals. Co-ownerships were more formal contracts. These arrangements bonded each of the interested parties to both liabilities and profits of the steamboat venture. They also gave each member a proportionate share in the business management.[24] Steamboat co-ownerships, such as George Collier's, often fell into disarray when one or more owners opted out of the arrangement. The absence or death of a member required drafting new contracts, new insurance forms, and possibly the liquidation of company assets.

Partnerships were a second kind of arrangement that were a more fluid method of

---

[23]Norman Cutter to George W. Garriott, 18 Oct. 1848, MFP. The actual cost of the insurance policy was $501.25. Purchased from the Union Insurance Company, the policy gave six-month coverage on "all rivers except Red, Arkansas, and Yazoo."

[24]Hunter, *Steamboats on the Western River*, 308–311.

organization. These agreements took a similar, though less structured, appearance to a joint stock company. In a partnership any portion of the boat's management, profits, or losses could be divided among shareholders who held no claim over the actual boat. Partners could buy or sell their interest without disrupting the flow of business.[25] Similarly, they could be completely insulated from any damages occurring to freight on aboard an invested steamboat. This served a particular advantage for James C. Lackland's son, Eli, who was a business partner of Captain J. Goslee.

In December 1855, the *George Collier* docked in Memphis on a trip to New Orleans. While in port, fire erupted under the forward stairs, and quickly forced the crew to abandon the boat.[26] The damage destroyed both the boat and her cargo, and prompted a lawsuit between the owners and forwarding merchants. At the time of the fire, Captain Burnett Paris commanded the boat, though Captain J. Goslee owned her. Eli was Goslee's partner in St. Louis, and had signed a bill of lading for freight received in St. Louis. Signing bills of lading traditionally fell to a boat's clerk. On this occasion Eli's error caused a legal dispute between Goslee and Meacham & Galbraith, whose cargo burned with the *Collier*.

Most bills of lading limited boat owners' liabilities to damages other than "unavoidable dangers of the river and fire." The bill Eli signed did not include fire as a non-liable event, so the boat owners were held responsible. Had the boat's clerk prepared the bill of lading, he simply would have penciled in the word "fire," saving the owners

---

[25]Ibid., 311.

[26]Frederick Way Jr., *Way's Packet Directory* (Athens, OH, 1994).

from this risk. As Goslee's partner, not his co-owner, Eli faced no legal responsibility for damages to the *Collier*'s cargo. In July, Goslee's lawyers drafted a deposition for Eli to deliver in court, which Goslee sent to Eli with his own description of the matter's severity. Goslee's letter stated:

> Enclosed I sent you Henry G. Smith's letter to me about our suit with Messrs. Meacham and Galbraith. You will perceive how *important* it is: that in your deposition you state *emphatically* that you supposed the bill of lading contained the *fire clause* as is usual – and that you were not authorized to sign bills, which would make the boat become the *insurer* as well as the carrier; and that you never would have signed the bill, with the knowledge that the fire clause was left out.... Be careful not to let the *damned* lawyers entrap you into saying that you did not think the fire clause important, and that you supposed the dangers of the river meant fire also.... Now Eli I want you if possible to go at *once* to Memphis and let your deposition be taken, for it all depends on that. If you should conclude to hand in your checks, I will have to pay M & G the amount of their claim to a certainty. If you cannot possibly go, I want you to go to Pritchett's office and have your life insured in my benefit for the amount of *nine thousand dollars* [emphasis in original].[27]

Eli's partnership afforded him safety from legal suits brought directly against boats in which he had no official ownership. Garriott's partnership with Cutter appeared to have similar limitations, apparent when Cutter handed over a receipt for marine insurance. Although the policy did not require Garriott's signature, his partnership agreement required sharing insurance expenses. Garriott assumed no liabilities for the steamboat, which lowered his risk, but provided him only limited rights in the boat's management. Saving only the loss of his $1,400 investment, Garriott stood to lose little in the partnership, which could be dissolved at any time with or without his consent. His exact rights in the management of the steamboat's affairs were uncertain. He certainly provided storage facilities for local freight business, but he appeared not to have directed

[27]J. Goslee to Eli Lackland, 10 July 1856, James C. Lackland Papers, MHS.

boating affairs beyond the St. Charles levee. Even if Garriott's new arrangements came with less than sanguine intentions, he could at least assume some stability over steamboat activity on the river.

From the pages of the St. Charles *Missouri Patriot* Garriott brought no attention to his role as a steamboating agent. He frequently bought numerous ads for his dry goods store, and repeatedly printed offers to purchase wheat, wool, and tobacco for cash, but did not advertise himself as a steamboat agent in St. Charles. One inquiry for his services, however, came by way of the St. Louis *Missouri Republican*. In October 1848, James McConathy of Columbia, Missouri, contacted Garriott writing, "I see from the *Missouri Republican* you are the agent of the steamboat *Revenue Cutter* at St. Charles. I have a distillery near Nashville about twenty-five miles above Jefferson City [both Missouri] and can give you two loads of whiskey say 250 barrels at each time and I am willing to pay you seventy five cents per barrel for freight."[28]

At the bottom of McConathy's letter, Garriott penciled in a simple calculation. He multiplied 250 barrels by 3.00 (for dollars). He then divided that figure by 2, and then multiplied the new number by 5. He apparently only considered the offer, since none his records contained further correspondences with McConathy or showed any shipments of whiskey. Perhaps Garriott was a man of temperance, or perhaps he never realized his mathematical error that five whiskey cargoes would yield, not $185 as he calculated, but actually $1,875 (figure 24). Significantly though, this letter showed that Garriott anticipated sharing his earnings equally with someone else, and that this was the one part

[28]James McConathy to George W. Garriott, 12 Oct. 1848, GWGP.

of his business not advertised in the St. Charles newspaper.

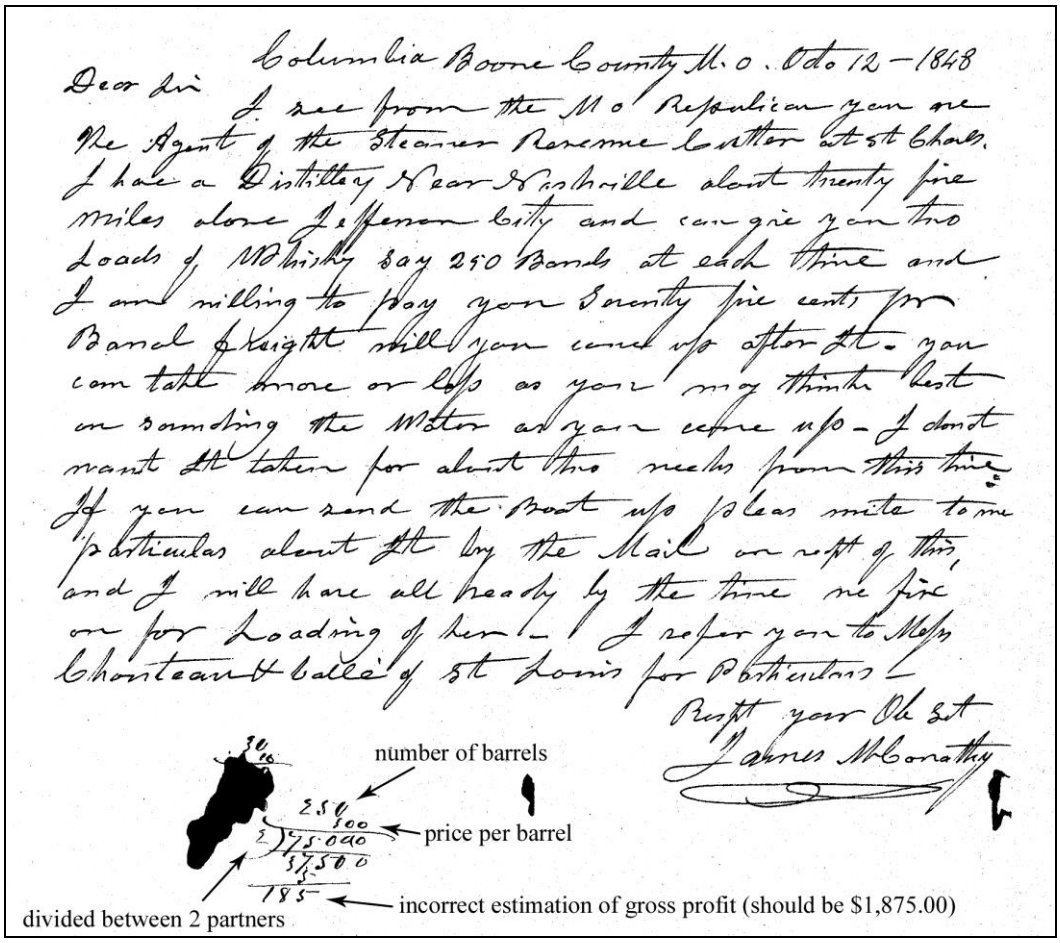
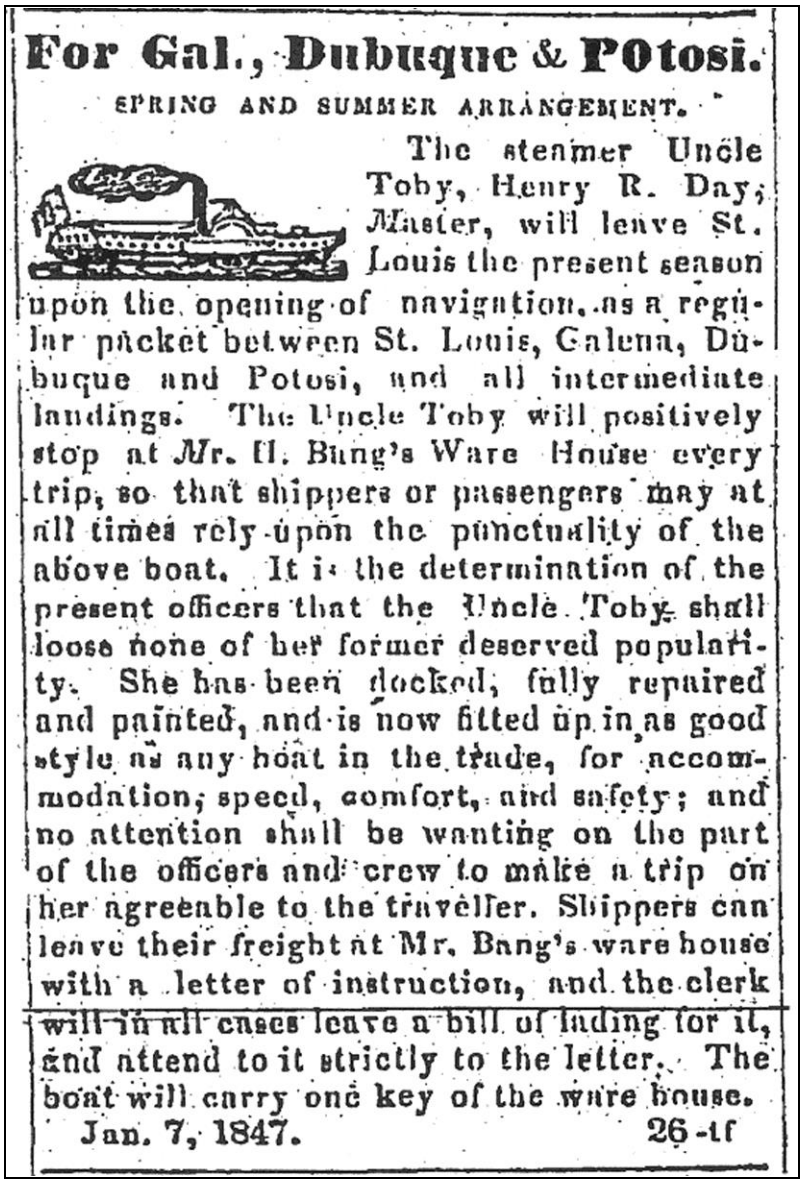


Fig. 24. James McConathy to George W. Garriott, 12 Oct. 1848, showing a curious mathematical error. George W. Garriott Papers.

Oddly, the only steamboat advertisement appearing in the St. Charles newspapers in the late 1840s was for the *Uncle Toby*, which ran between St. Louis, Galena, Dubuque, and Potosi on the Mississippi River. The advertisement stated that regular service was offered to Henry Bangs's warehouse, presumably on the Mississippi River (figure 25). Census records show Bangs as a St. Charles resident during the 1840s but not the 1850s. Garriott acted as his agent, even though this boat rarely, if ever, served the St. Charles

levee. Most likely Garriott contracted to purchase wheat from county farmers on speculation. Those farmers closer to the Mississippi River, found it easier to haul to Bangs's warehouse where the shipments were predominately taken to St. Louis, with only occasional stops at St. Charles.



For Gal., Dubuque & Potosi.

SPRING AND SUMMER ARRANGEMENT.

The steamer Uncle Toby, Henry R. Day, Master, will leave St. Louis the present season upon the opening of navigation, as a regular packet between St. Louis, Galena, Dubuque and Potosi, and all intermediate landings. The Uncle Toby will positively stop at Mr. H. Bang's Ware House every trip, so that shippers or passengers may at all times rely upon the punctuality of the above boat. It is the determination of the present officers that the Uncle Toby shall loose none of her former deserved popularity. She has been docked, fully repaired and painted, and is now fitted up in as good style as any boat in the trade, for accommodation, speed, comfort, and safety; and no attention shall be wanting on the part of the officers and crew to make a trip on her agreeable to the traveller. Shippers can leave their freight at Mr. Bang's ware house with a letter of instruction, and the clerk will in all cases leave a bill of lading for it, and attend to it strictly to the letter. The boat will carry one key of the ware house.

Jan. 7, 1847. 26-tf

Fig. 25. Advertisement for steamboat *Uncle Toby*. (*Missouri Patriot* (St. Charles), 13 January 1847.)

This scenario gave Garriott two favorable outcomes. First, if he wagered a low enough price for county wheat, he stood to reduce his purchasing costs even if some had to be transferred at St. Louis to another boat for the Missouri River. This scenario was unlikely since wheat prices in St. Charles usually remained equal, or only a few cents lower, than St. Louis prices. The second, and more likely scenario, was that Garriott planned to sell wheat shipments from the *Uncle Toby* at St. Louis, making this boat independent of his flour mill and steamboat interests on the Missouri. The *Uncle Toby*, therefore, was either an alternate source of his wheat supply, or another way to increase sales at St. Louis. That he had planned on selling wheat was apparent in blank receipts for wheat sales preprinted in Garriott's name. Although Garriott printed these receipts to facilitate his wheat sales, they also served as receipts for his wheat purchases simply by crossing out his name (as the seller) and inserting the other person's name (figure 26). All surviving records from St. Charles had Garriott's name crossed out. It appeared, then, that in St. Charles Garriott only bought wheat but planned to sell it elsewhere. His wheat sales presumably came from his service with the *Uncle Toby* running on the Mississippi River. Whatever his connection with Mississippi packet boats, it was relatively brief, ending in January 1849 after he complied with an order to "deliver to Mr. Bangs all moneys and papers relating to the *Uncle Toby*."[29]

Garriott benefited most from his role as a steamboat agent when he engaged in the wheat trade above St. Charles. The population of central and northwest Missouri was growing at a faster pace than St. Charles. This growth increased market competition and

[29]Oliver Harris to George W. Garriott, 30 Jan. 1849, GWGP.

promised larger and cheaper wheat supplies. Upriver from St. Charles, Garriott sought the cheaper-by-dozen effect, but would he find it there?

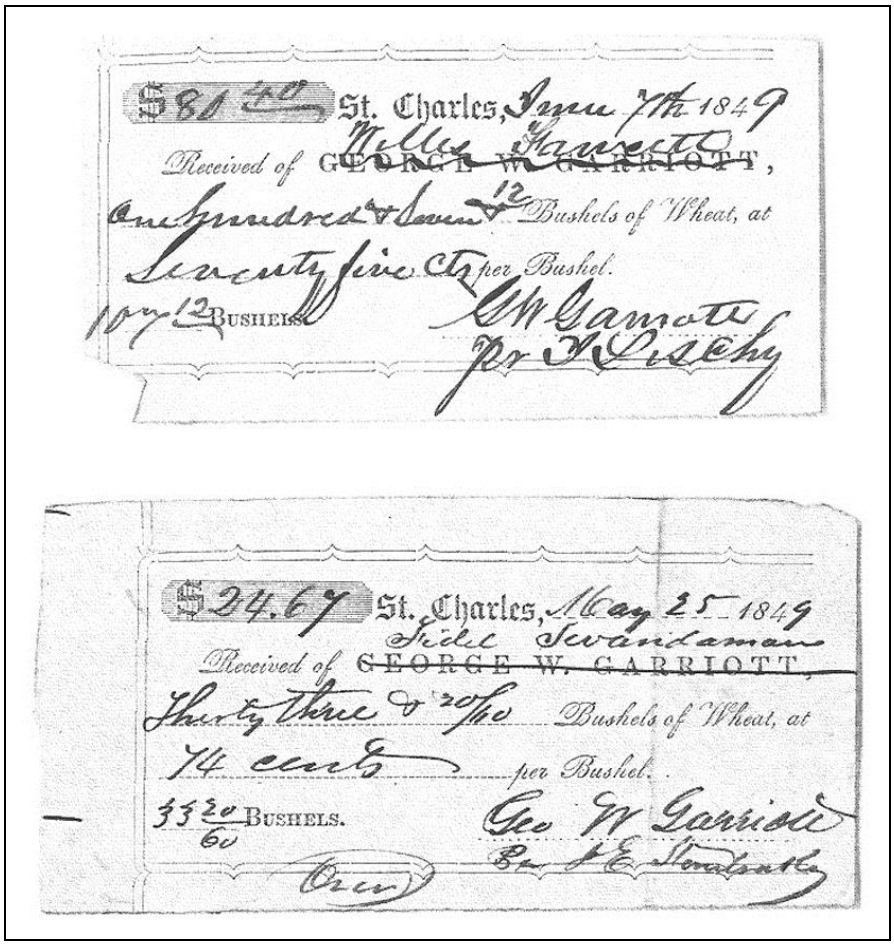


Fig. 26. Preprinted Wheat Receipts for George W. Garriott. (GWGP)

He first entered the upriver wheat trade by establishing a relationship with agents of his own in Boonville. From this location Garriott's agent, James Watson, negotiated prices with local farmers and sent shipments downriver on the *Kit Carson* and *Rowena*. The first two months of this arrangement appeared relatively productive. Watson made nineteen purchases of wheat in Garriott's name at an average price of 50¢ per bushel.

These purchases supplied the St. Charles mill with 1,842.16 bushels wheat, approximately 110,529.6 pounds.[30] (See table 1 for standard weights of grain.)

Millers expected a 2–5 percent loss, called shrinkage, from the difference in weight of wheat ground to the flour produced. Thus, one-hundred pounds of cleaned wheat ground in a mill produced between 98 and 95 pounds of flour.[31] From Watson's purchases, therefore, Garriott likely produced a minimum of 105,003.12 pounds flour, equaling 525 barrels flour, or about 52.5 tons freight for St. Louis. Tables 2 and 3 show comparative flour prices in St. Louis and New Orleans giving the average prices for five years. Based on these market reports, Garriott presumably grossed between $2,142.00 and $2,278.50 on flour sales in St. Louis. His net profits, however, were more difficult to ascertain. At least four overhead expenses reduced Garriott's net profits. Two of these expenses, cash paid to farmers and Watson's commission for buying, were clearly stated. Watson paid $930.18 to Boonville farmers for wheat. His commission services added 5¢ per bushel of $92.10, making a total of $1,022.28, and raising the price per bushel to 55¢. The next two expenses from sacking and shipping wheat, however, can only be estimated from Watson's records. He purchased several sacks at an average price of 19¢ per sack. He also shipped one lot of 52 sacks, weighing 6,205 pounds, making about 120 pounds per sack, or two bushels of wheat in each. This indicates that Watson's purchase of 1,842.16

[30]James Watson to George W. Garriott, 27 June 1848, Steamboats Collection, MHS; James Watson, Account of Purchases, 1 Aug. 1848, GWGP.

[31]David Babits (operator of historic Thompson Mill, Shedd, Oregon), interview by Lawrence E. Babits, 18 May 2004, L. Babits personal communication with author 18 May, 2004.

bushels of wheat required at least 921 sacks, costing $175.[32] In a letter dated in late August, Watson stated that steamboats quoted freight charges from Boonville to St. Charles from 12.5¢ to 15¢ per bushel. Unfortunately, he did not indicate the acceptability of these charges. If the lowest quote was charged on Watson's shipments, then steamboat freight from Boonville to St. Charles added at least another $230.33 to the cost of wheat.[33] Using Watson's information and the inferences made from his sales account, the total cost for wheat purchased in Boonville, therefore, was about $1,427.61 at an average price of just over 77¢ per bushel.

Table 1. Weights of Grain

Type of Grain	Mean weight of bushel (lbs.)
Wheat	60
Rye	56
Barley	48
Oats	35
Indian Corn	58
Peas	63
Beans	62
Red Clover	64

Source: The Western Farmer: Devoted to Agriculture, Horticulture, and Rural Economy 1, (Feb. 1840), American Periodical Series, Reel 698, 183.

[32]James Watson to George W. Garriott, 27 June 1848, Steamboats Collection, MHS; James Watson, Account of Purchases, 1 Aug. 1848, GWGP.

[33]James Watson to George W. Garriott, 25 Aug. 1848, MFP.

Table 2. Comparative Monthly Prices of Flour per Barrel at St. Louis 1844–1488

	1844 $	1845 $	1846 $	1847 $	1848 $
January	3.75 - 4.00	3.63 - 3.70	4.38 - 4.50	3.62 - 3.75	4.69 - 4.94
February	3.75 - 4.60	3.60 - 3.63	4.00 - 4.13	4.62 - 4.75	4.09 - 4.35
March	3.95- 4.13	3.60 - 3.63	3.88 - 4.00	4.37 - 4.50	4.38 - 4.67
April	3.70 - 3.75	3.45 - 3.50	3.50 - 3.63	4.62 - 4.75	4.24 - 4.44
May	3.70 - 3.75	3.65 - 3.70	2.95 - 3.00	4.87 - 5.00	4.20 - 4.33
June	3.50 - 3.55	3.65 - 3.70	3.05 - 3.10	6.25 - 6.50	3.70 - 3.90
July	3.70 - 3.75	3.70 - 3.75	2.00 - 2.25	4.50 - 4.62	3.87 - 4.19
August	3.75 - 4.00	3.45 - 3.50	2.50 - 2.55	4.62 - 4.75	3.47 - 3.83
September	3.80 - 3.90	3.00 - 3.07	2.88 - 3.00	3.87 - 4.00	3.87 - 4.41
October	3.88 - 4.00	3.13 - 3.25	3.75 - 3.80	4.30 - 4.37	4.10 - 4.25
November	3.56 - 4.00	3.70 - 3.75	3.80 - 3.88	4.50 - 4.62	4.13 - 4.36
December	3.75 - 4.00	5.75 - 6.00	3.75 - 3.80	5.00 - 5.25	4.12 - 4.35
Average:	3.74 - 3.96	3.70 - 3.77	3.38 - 3.47	4.60 - 4.74	4.08 - 4.34

Source: Western Journal 2 (Feb. 1849), 134.
Note: Numbers on the left represent wheat prices on the first of each month. Numbers on the right represent average wheat prices for each month.

Table 4 lists the comparative prices of wheat at St. Louis for five years, and shows that wheat purchases from Boonville provided no economic benefits from city prices that ranged from 48¢ to 74¢ during June and July. Additionally, St. Charles farmers asked nearly 65¢ per bushel and reported transportation costs at only 9¢ per bushel.[34] By looking only at the prices Watson paid his local farmers, Garriott did receive competitive

[34]Mary Glenday to George W. Garriott, 18 July 1848, GWGP.

prices against the St. Louis and St. Charles markets. When considering the added expenses of conducting business upriver from his home port, however, Garriott's business strategy appeared to be a losing concern.

Table 3. Comparative Prices of Flour per Barrel at New Orleans 1843–1848

	1843 - 1844 $	1844 - 1845 $	1845 - 1846 $	1846 - 1847 $	1847 - 1848 $
January	4.60 - 4.50	4.60 - 5.25	5.75 - 7.00	4.88 - 5.25	5.50 - 6.00
February	4.50 - na	3.75 - 4.50	5.00 - 6.25	6.00 - 6.34	4.75 - 5.50
March	4.50 - 4.84	4.00 - 4.75	4.88 - 5.25	5.50 - 6.25	5.00 - 5.75
April	4.25 - 4.50	3.50 - 4.25	4.50 - 5.00	6.00 - 6.25	5.50 - 5.88
May	4.13 - 4.25	3.88 - 4.50	4.00 - 4.75	5.75 - 6.50	4.50 - 5.50
June	3.50 - 3.75	3.34 - 4.67	3.88 - 4.50	6.75 - 7.50	4.50 - 4.75
July	3.50 - 4.25	3.50 - 4.63	4.00 - 4.00	6.00 - 7.00	4.50 - 5.00
August	4.00 - 5.50	4.00 - 4.74	3.50 - 4.00	4.00 - 5.50	4.00 - 4.84
September	4.50 - 4.50	na - 6.00	3.50 - 4.50	3.50 - 4.00	4.75 - 6.00
October	4.00 - 4.60	3.50 - 3.60	3.88 - 4.50	4.00 - 4.88	4.00 - 5.00
November	4.00 - 4.25	4.00 - 4.50	4.50 - 5.50	5.00 - 5.50	5.25 - 5.75
December	4.25 - 4.50	4.00 - 4.38	7.50 - 8.50	4.50 - 5.34	5.34 - 6.00
Average	4.15 - 4.50	3.83 - 4.65	4.58 - 5.32	5.16 - 5.86	4.80 - 5.50

Source: Western Journal 1 (Nov. 1848), 632.
Note: Numbers on the left represent wheat prices on the first of each month. Numbers on the right represent average wheat prices for each month.

Table 4. Comparative Monthly Prices of Wheat per Bushel at St. Louis 1844–1848

	1844 $	1845 $	1846 $	1847 $	1848 $
January	.65 - .70	.68 - .70	.70 - .75	.50 - .62	.69 - .88
February	.65 - .70	.60 - .65	.65 - .68	.80 - .85	.59 - .83
March	.75 - .80	.68 - .70	.63 - .66	.65 - .75	.69 - .93
April	.70 - .75	.65 - .67	.63 - .65	.80 - .85	.69 - .89
May	.70 - .72	.68 - .70	.63 - .65	.90 - .95	.55 - .83
June	.60 - .63	.68 - .70	.50 - .52	1.10 - .25	.53 - .74
July	.50 - .56	.70 - .73	.38 - .40	.80 - .90	.48 - .70
August	.60 - .65	.50 - .53	.48 - .50	.75 - .85	.49 - .66
September	.65 - .68	.54 - .56	.50 - .53	.70 - .80	.52 - .80
October	.60 - .63	.63 - .65	.60 - .63	.80 - .87	.49 - .84
November	.70 - .73	.75 - .80	.57 - .59	.75 - .85	.52 - .84
December	.67 - .70	.85 - .90	.58 - .60	.77 - .00	.60 - .83
Average	.65 - .69	.67 - .70	.58 - .60	.78 - .88	.57 - .82

Source: Western Journal 2 (Feb. 1849), 132.
Note: Numbers on the left represent wheat prices on the first of each month. Numbers on the right represent average wheat prices for each month.

Surprisingly though, Garriott bought wheat from Watson throughout the remainder of the summer, and culled more relationships with at least two other wheat buyers in Union and Washington, Missouri.[35] Although his initial purchases came at higher prices than his local market, Garriott fully realized the apparent folly of his upriver contacts. The cheaper-by-the-dozen effect seemed to elude Garriott again.

[35]John D. Stevenson to George W. Garriott, 15 Aug. 1848, MFP; F.G. McDonald to George W. Garriott, 3 Sept. 1848, GWGP.

By mid-August, Watson appealed Garriott to loosen his restrictions on purchasing, saying "I am offering from 40¢ to 42¢ [per bushel of wheat], but so far have been unable to buy a single bushel since I saw you. If you think it advisable to advance to 45¢, please advise me immediately, as I think some wheat can be bought at that price – but under that, I think but little if any can be bought before the close of navigation." Watson reiterated his appeal with "I shall of course be governed by instructions, although have offered as high as 42¢ today, without purchasing."[36]

Cutting the average price of wheat by just 10¢ from those of June and July, brought Garriott's expenses closer St. Charles's. At 40¢ a bushel, the additional commission and steamboat freight raised the price to about 67¢ per bushel, or only a few cents above St. Charles farmers. If Garriott allowed Watson to raise quotes, he would revert to the exorbitant prices paid in June and July. He apparently had no choice but to grant quotes above 45¢. Even with this slightly higher offer, however, Watson still encountered difficultly purchasing wheat. Shortly after receiving his new instructions, Watson complained that "your favor of the 15th of this month per *Rowena* was duly received but I have not as yet been able to buy any wheat except one small lot of 25 bushels at 45 cents."[37] Garriott's options, however, were limited. As Wetmore described, farmers held their crops waiting for higher autumn prices. Watson's suppliers knew full well the close of navigation signaled higher prices for their products. As captains prepared their last trips, farmers demanded higher prices from increasingly anxious buyers. Watson reported that "principle [sic] lots now in the county are held firm at 50 cents and even to

[36]James Watson to George W. Garriott, 11 Aug. 1848, MFP.
[37]James Watson to George W. Garriott, 21 Aug. 1848, GWGP.

this is added the time they want given them to get it out, from one to two weeks. This is one great difficulty in getting wheat readily here – our farmers are decidedly too independent for their own good."[38]

Watson's sentiments echoed those of earlier colonial provisions merchants. Tensions between New York City merchants and county farmers arose frequently from the 1680s through the 1770s. Cathy Matson noted a typical complaint among city traders that farmers "pay No Regard to [traditional pricing] but are Governd [sic] by their Own Judgement [sic]. [They] are not Ignorant of the Quality and Prices [for exchanged commodities], but they choose to set their own levels."[39]

This disparity between Garriott's supply needs and farmers' unwillingness to lower prices revealed how the large consumer base produced by dry goods trading did not scale-up to the large supply base required for provisions trading. The cheaper-by-the-dozen effect occurred only when staples purchasers targeted a few high-volume producers/traders – as British tobacco firms did. Even though increased numbers of farming households multiplied regional production, it did not create incentives for individual low-level producers to reduce offers. To a farmer needing a teaspoon sitting on Garriott's shelf, it made little difference how quickly his foreign accounts were balanced. To a high-volume St. Louis wheat trader, however, subtracting a few cents off

---

[38] Ibid.

[39] Gerard Beekman to David and William Ross, in Newry, 3 Feb. 1768, 15 Dec. 1766, in *Beekman Mercantile Papers,* ed. White, I, 504-505, 516, quoted in Cathy Matson, "'Damned Scoundrels' and 'Libertisme of Trade': Freedom and Regulation in Colonial New York's Fur and Grain Trades," *William and Mary Quarterly*, 3rd Ser. 51, Mid-Atlantic Perspectives (July, 1994): 411–412.

each bushel gave him a competitive edge over other traders. On a personal level, it aligned Garriott's solvency to the trader's interests since reduced overhead made payment inevitable. In this way, modern economies of scale tethered the interests of big business while they severed country traders from their former suppliers. Garriott was painfully learning this fact.

Watson's complaints forced Garriott to revert his quotes to the June and July price of 50¢ per bushel. Garriott's other agents expressed similar purchasing difficulties as those in Boonville. Writing from Washington, F.G. McDonald reported that "wheat in this neighborhood can be bought at fifty cents per bushel, though the largest lots they are asking fifty-five for."[40] Again, Garriott raised his offer in accordance with his agents' recommendations. He now offered 15¢ above his lowest competitive price, but still received appeals for yet higher offers. By mid September, McDonald refused to continue purchasing wheat for Garriott, explaining that "when I wrote to you on the 3rd of this month, I could have got wheat at 50¢. Since that time wheat has advanced in St. Louis, and it can't be bought for less than 55¢ per bushel. I shall not attempt to buy at your price. The merchants are paying more, and it would be nonsense to offer less than they were offering."[41] As the year ended, Garriott sought more purchasing agents upriver from St. Charles. He held tight to his final offer of 50¢ per bushel, but failed to make purchases at this price. Two final attempts in late December show how far Garriott underestimated the upriver market prices. Writing from Providence in Boone County,

---

[40]F.G. McDonald to George W. Garriott, 3 Sept. 1848, GWGP.

[41]F.G. McDonald to George W. Garriott, 12 Sept. 1848, GWGP.

John Parker boasted that:

> I have bought considerable wheat since the 15th of September, say 5,000 bushels, which I shipped to St. Louis with the exception of a few hundred bushels I have on hand. There is still some fine lots of wheat in this county ... I think that most of the wheat is sold that can be bought at 50 cents. At present all the farmers that have lots of any size are holding to ship and it will take an advance to buy it at present. I do not think I could make any contract with you to any certain amount. I am willing to purchase wheat for you at the commission you suggest – 5 cents per bushel including storage, shipping, and etc, provided you will give the highest market price. Our farmers have got in a great notion of shipping to St. Louis.[42]

Table 4 shows that the market price for wheat in St. Louis during December 1848 peaked at 83¢. Although Parker offered no exact figure for wheat purchases, Garriott received a similar rejection from another buyer in Glasgow who suggested nothing less than 65¢ per bushel.[43]

Garriott's desire to buy wheat from upriver locales at higher prices than his local market is not simply explained by poor business management. This situation revealed Garriott's shipping predicament and the peculiar nature of the transportation network between St. Charles and St. Louis. McCusker's truism was validated by viewing upriver purchases beyond face value. Although wheat was not necessarily cheaper by the dozen, the guarantee for available shipping space was invaluable.

Going back to Cavanaugh's offer raises two curious questions about the organization of Garriott's business. First, could Garriott realize profits from large shipments of flour sent by wagon to St. Louis? The demand for St. Charles brand flour in St. Louis appeared based upon quality, not price. Several letters from Garriott's former agents in

---

[42]John Parker to George W. Garriott, 30 Dec. 1848, GWGP.

[43]John W. Harris to George W. Garriott, 25 Dec. 1848, MFP.

the city, Houseman & Lowry, discussed selling Garriott's barrels at higher rates than other brands. Likewise, Cavanaugh's offer indicated that when St. Charles's flour was unavailable, he could find other brands to fill his orders. At times of ready supply, the St. Charles brand sold quickly. For Garriott, the key to selling flour was not simply to offer the lowest price, but more difficultly, to get the flour on steamboats headed to market.

Garriott's shipping needs hinged on the productivity of his mill. If he anticipated flour exports to bring only a secondary income, he would not have leased the mill from John Atkinson. Garriott showed much more ambitious intent, so it can be safely assumed that he planned to divert serious energy into the flour business. The only way to realize profits, therefore, was to keep the mill in continuous production and to ensure the availability of cargo space on boats. The need for constant production set Garriott apart from other country millers who spent inactive days sharpening tools on their mill stones. Had he remained content with small export shipments, such as sent by Harmon and Lackland, his business would depend less on steamboating, and probably could have sputtered along the country roads to St. Louis. But ambition linked him irrevocably to steamboats, flour production, and a modern economy of scale. The second question is how dependent was Garriott on steamboating, or more simply, how much flour did his mill produce?

Garriott's mill ran three sets of stones that acted like an assembly line. Each stone, placed progressively closer to the grinding surface, produced consecutively finer grades of flour from course, to fine, to super fine.[44] Disappointingly, records concerning output

[44] John Atkinson to George W. Garriott, Inventory of Sundry Articles for Use of the

for the St. Charles Flour Mill do not exist. Table 5 shows productivity estimates for fifteen St. Louis flour mills in 1847. These estimates ranged from 6,000 to 70,000 barrels for one year, with a total average of just over 24,000 barrels and a cumulative output of 365,000 barrels. Table 5 shows only two of the four main indicators for productivity, speed, coarseness setting, and number and size of stones running in each mill.

Although neither the speed nor coarseness setting for any of these mills were reported, some comparison with the St. Charles Mill is possible. For three of the four St. Louis mills running three stones, all but one used five-foot diameter stones. The remaining mill used 4.5 diameter stones. These five mills reported a production of 11,000–30,000 barrels, with an average of 22,750 barrels and a cumulative output of 91,000 barrels.[45]

If the St. Charles Mill fell anywhere within the productivity range of the St. Louis three-stone mills, Garriott's expected shipping needs would range between 1,100 and 3,000 tons per year (200 pounds standard barrel weight). With even a smaller class steamboat measuring only about 150 tons, Garriott potentially required only about seven to twenty shipments a year, aboard an empty steamboat. Table 6 shows that this trade was less than 2 percent of the tonnage moved on the Missouri River in 1848. By the late 1840s, boat captains stationed in St. Louis reported making at least twenty individual trips per year from the levee. Similarly, boat construction of the mid-nineteenth century

---

Mill, 1 Mar. 1848, GWGP; David Babits (operator of historic Thompson Mill, Shedd, Oregon), interview by Lawrence E. Babits, 18 May 2004, L. Babits personal communication with author 18 May, 2004.

[45]*The WJC* 1, no. 1 (1848), 54.

produced lightweight hulls that allowed steamboats to carry one and a half to twice the cargo weight of their reported tonnage.[46] Even with one of these smaller class steamboats, then, Garriott's true shipping needs easily fell within the carrying capacity of just one smaller class steamboat, and certainly could have been accommodated by the thirty to forty boats expected to service the Missouri River.

Table 5. Flour Production in St. Louis City Mills 1847

Name of Mill	Number of Stones (sets of two)	Average Size of Stones (ft.)	Number of Flour Barrels
Page's Mill	8	4′ 6″	70,000
Missouri Mill	3	4′ 6″	30,000
Star Mill	3	5′	26,000
Union Mill	3	5′	24,000
Eagle Mill	2	4′ 9″	24,000
Park Mill	2	4′ 6″	24,000
Brick Mill	2	4′ 6″	20,000
Washington Mill	2	4′	24,000
Franklin Mill	4	3′	16,000
Phoenix Mill	4	4′	30,000
Nonantum Mill	2	4′ 6″	30,000
Centre Mill	na	na	16,000
Chouteau's Mill	3	5′	11,000
Paragon Mill	na	na	6,000
Mound Mill	na	na	14,000
Total Number of Flour Barrels			365,000

Source: *Western Journal and Civilian* 1 (Jan. 1848), 54.

[46]Ibid., 1(Aug.) 1848, 415; Hunter, *Steamboats on the Western Rivers*.

Table 6. Arrivals and Tonnage of Watercraft to St. Louis 1847–1848

From	1847			1848		
	Steamboat Arrivals	Various Tonnage*	Steamboat Tonnage	Steamboat Arrivals	Various Tonnage*	Steamboat Tonnage
Illinois River	658	104,000	na	710	140,000	101,391
Upper Mississippi	717	151,000	na	619	211,000	198,510
Missouri River	314	55,000	na	363	57,640	57,640
Alton	201	35,500	na	615	38,200	84,454
Coast[†]	na[‡]	1,800	na	105	12,000	23,120
Cairo	146	14,000	na	136	29,000	28,403
New Orleans	502	100,000	na	443	120,000	173,223
Ohio River	430	75,000	na	506	83,000	103,546
Totals	2,968	563,300	na	3,497	690,840	770,287

Source: Western Journal 2 (Feb 1848), 135.
*The original table included the header "Estimated Tonnage Keelboats, Flatboats, etc." The *Western Journal* did not specify the kind of watercraft included in "etc."
[†]The *Western Journal* did not specify the meaning of "coast."
[‡]In the original table this cell contained the entry "combined with Alton."

Garriott's flour shipments appeared rather light compared to the actual number of steamboat trips required for transportation. Why then did Houseman & Lowry seem so anxious to secure agreements for packet service to St. Charles, when only a relatively small amount of cargo needed shipment? The answer was the crystallization of settlement hierarchy discussed earlier. As St. Louis's economy spread throughout the whole valley, shippers found it more profitable to shuttle between St. Louis and the next most active centers at Weston, Boonville, etc. Steamboats represented a physical manifestation for the underlying business connections competing against Garriott. Like Chicago leather manufacturers discussed earlier by William Cronon, personal relationships between the two markets were structuring transportation routes to suit their needs. Cronon detailed how the Chicago leather industry successfully diverted capital to railroad construction from their city to the cattle herds of northern Missouri. As they secured direct train connections, the former center for leather processing at Alton, Illinois, was bypassed.[47]

Initially, Alton lay between Chicago and the Missouri cattle producers. Its industries collected, processed, and then distributed hides and beef across the Midwest. Prior to the railroads, the Alton cattle industry functioned relatively independent of Chicago and was its main source for semi-processed hides and beef. The Chicago businessmen, however, successfully used railroads to subordinate Alton industry. Alton's leather producers stood helpless as they watched fully loaded cattle cars move east past their town. Even more disheartening, west bound trains from Chicago carried stores of beef and leather

[47] William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York, 1991).

boots formerly produced at Alton. Again, Cronon showed the ultimate extension of a process occurring throughout the nineteenth century. The transportation infrastructure underscored business relations that placed peripheral areas in dependency to core areas of investment. The secondary effects created large urban centers with supporting county industries in the same pattern noticed by Von Thünen. Cronon, however, revealed the possibility for Alton businessmen to have been a source for a quite different history. Had they directed capital to build an infrastructure suiting their needs, Alton might be quite a different city today.

As in Alton, transportation threatened to subordinate Garriott's industry to a larger market. Garriott attempted to use shipments to his advantage, but he failed to attract considerable business to the levee. He had only one way to guarantee steamboat service. He had to buy and operate his own boat. Once he did this he would be in prime position to coordinate his mill production with shipping and be able to send flour to St. Louis with a degree of efficiency that was otherwise impossible to achieve. Houseman & Lowry's worries over securing steady transportation for the St. Charles Mill were directly related to the credit they extended Garriott. He and his upriver agents mostly purchased wheat on credit. In fact, John Atkinson (former operator of the St. Charles Mill) acknowledged the great advantage of Missouri Valley farmers' willingness to sell on credit. In a letter to Garriott, Atkinson wrote of his fledging operations in Pekin, Illinois.[48] He was disheartened that "I must raise every dollar I can and only borrow some before I can get into business operations – it is not here as with you all kinds of grain command the cash

[48] John Atkinson to George W. Garriott, 27 Sept. 1848, GWGP.

and the buyers [i.e., Atkinson's competitors] have plenty of money to operate on."[49] Although Garriott's advertisements in St. Charles newspapers routinely offered cash for wheat, wool, tobacco, and other products, his local business could operate efficiently without hard currency.

Whereas Atkinson complained that "here among strangers…every bushel of grain is sold for cash down," Garriott could use his mill as a sort of personal bank.[50] His records contained hundreds of paper slips promising the holder a specified amount of flour. These "coupons" were as good as cash locally but not outside the St. Charles area (figure 27).[51] The system operating for Garriott was similar to Kenneth Lewis's identification of a cash barter system in mid-nineteenth-century frontier Michigan. Local producers sold items like wheat, wool, or tobacco to Garriott not for actual cash but for their *cash value* in flour. Similarly, those who sold products to Garriott could charge the cash equivalent of their sale to other local merchants who also had accounts with Garriott.[52] In this way, credit became the actual currency for which cash was just a unit of measure. In this system, all transactions maintained a balance of indebtedness. That is until some part of the system demanded actual cash for the debt.

---

[49] Ibid.

[50] Ibid.

[51] GWGP, Miscellaneous Folder, WHMC.

[52] Ibid.

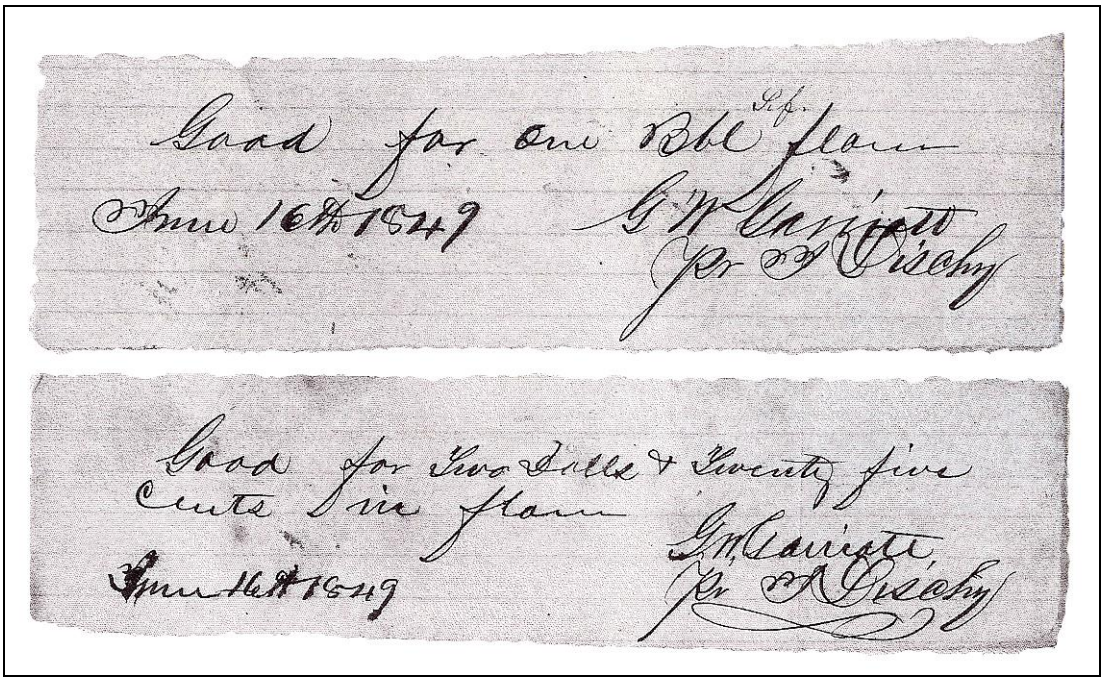


Fig. 27. Two "Coupons" Redeemable for Flour at the St. Charles Mill. (GWGP) The top coupon reads "Good for one Bbl [barrel] flour." The bottom coupon reads "Good for five dollars and seventy five cents in flour" These slips represent the cash barter system in action. They also illustrate the personal and informal workings of the frontier economy.

Atkinson's letters to Garriott in the fall of 1848 were not just reports on the progress of his business endeavors in Illinois. Atkinson and Garriott shared business connections with Warburton and Rossiter, commission and forwarding agents in St. Louis. Atkinson sought cash from a note drawn by Garriott in the amount of $511 owed to Atkinson for the mill's lease.[53] Warburton and Rossiter then sought to collect cash for the note from Garriott. Atkinson's letters appealed to Garriott to pay the sum, so that Atkinson could purchase wheat in his market. Normally, Warburton and Rossiter would simply extend credit to Atkinson and then deduct the balance from Garriott's sales. The cash demands in the Pekin market, however, placed new stress on the cash/credit system. It is unclear

[53] John Atkinson to George W. Garriott, 14 Oct. 14, 1848, MFP.

how Garriott satisfied this debt, but this example illustrated that St. Louis commission merchants were the means for generating cash. By accepting Garriott's drafts, Warburton and Rossiter made guarantees of receiving Atkinson's business. They also further solidified their interests with Garriott's success (namely in tobacco sales). Through their network of clients, then, commission merchants became a node of business connections/interests, and they also were the point at which credit was converted to cash.

Scott Naylor & Co.'s situation with Garriott was hardly different. The credit they had extended to Garriott allied his interests with theirs. Garriott's sales in the local market probably only rarely involved actual cash, but Naylor & Co. undoubtedly had clients whose markets demanded it. Unlike Houseman &Lowry, however, Naylor & Co. never expressed anxiety over the availability of shipping from St. Charles. Their strategy was to remove Garriott's products from a credit generating system to one generating cash. The solution was to remove themselves from unfruitful negotiations with boat captains, and provide Garriott with the means to procure his own steamboat. Naylor & Co. also turned over some of Garriott's drafts to Warburton and Rossiter.[54] Warburton and Rossiter became eager to close Garriott's account saying "we are anxious to close this matter up and do not think we have been impatient but as we either have to raise money by borrowing ourselves or from our debts must prefer the latter mode."[55] The credit line connected Naylor & Co., Warburton and Rossiter, and Garriott. This connection explains Naylor & Co.'s willingness to invest further funds in Garriott's business – his debts were

[54] Isaac Forbes to George W. Garriott, 4 Sept. 4, 1848, MFP.

[55] Warbuton and Rossiter to George W. Garriott, 25 Dec. 1848, MFP.

now theirs. A steamboat would simultaneously promise to solve many of Garriott's transportation and cash problems, but it required even more debt.

Garriott's overall strategy was well founded. Like the prominent British exchange houses of the eighteenth century, access to larger markets became the first step towards engaging the new economy of scale sweeping through the Missouri Valley. Garriott's purchase of wheat at higher prices than found in his home market was a consequence of his shipping predicament. The added expense of wheat could not compare to the benefit of transportation. Although Garriott could not manipulate the shipping industry to suit his purchasing needs, his commission merchants in the city were willing to offer their help. They supplemented Garriott's capital deficit by extending credit to purchase reliable transportation. Like the exchange firms in Glasgow, Garriott now had two ends of the economy secured. He could tap large supplies, receive them at his port, and ship finished products at will. This was all possible because of his connections to St. Louis capital. What Garriott found, however, was that the more capital his partners placed in his business, the more their risks increased. Garriott was no longer the ambitious, self-made man he appeared, and was now an investment. He was a favored miller playing to his creditors' tune.

V. THE ORGANIZATION OF A ST. CHARLES PACKET

> The West admired the self-made man and was ready to follow its hero with the enthusiasm of a section more responsive to personality than to the programs of trained statesmen.
>
> Frederick J. Turner, "Social Forces in American History"[1]

Up to fall 1848, every aspect of the St. Charles Mill relied on the stability of river transportation. The availability of upriver wheat sellers, the production capacities of Garriott's mill, and the activity of the St. Louis flour market were inconsequential without steamboat connections. Garriott's St. Louis agents tried unsuccessfully to contract boat captains for the St. Charles trade. Agreements with boatmen such as Captain Dozier were never reliable and created more competitors than allies. In one instance, one of Garriott's agents informed him that Dozier and his partner had purchased the majority of wheat remaining above Washington, Missouri.[2] Although Garriott had invested funds in Dozier's boat, he had no control over its operations or the interests of other partners.

Garriott's trouble in securing downriver freight was explained further by similarities to colonial shipping patterns. Prior to the Revolution, British shippers profited mostly from transporting colonial exports back home. Competition for shipping less bulky manufactured items to the colonies kept westbound freight charges low. A ship owner's

---

[1] Frederick J. Turner, "Social Forces in American History," *American Historical Review* 16 (Jan., 1911): 327.

[2] Peter Fulkerson to George W. Garriott, 25 Oct. 1848, George W. Garriott Papers (GWGP), Western Historical Manuscripts Collection (WHMC), Columbia Missouri.

main profit came from high charges attached to bulky agricultural products exported out of the colonies. As a result, outbound British shippers often charged about 2.5 percent of invoice value for freight departing home ports. Frequently, they even waved charges for a favorite exchange house that referred colonial customers to the ship owner.[3]

Garriott likely had no trouble receiving a few boxes of plates, hardware, etc. from St. Louis. What he found, however, was that steamboat captains also delivered identical goods farther upriver. Those locations, in turn, were afforded the first opportunity to ship goods preferred by captains. A captain's universal desire to ship the most profitable freight over the longest distance explained how St. Charles became seen as the last stop in the St. Louis wheat trade. Referring back to central place theory, this situation appeared to contradict Von Thünen's original model. Instead of cheaper transportation and higher land prices orchestrating the nature of settlement hierarchy, it was the profit motivation of shippers that ensured agriculturalists who lived farthest from urban centers gained access to city markets. Unreliable transportation to St. Louis put Garriott directly at odds with boat captains and indirectly with local producers. The following chapter argues that the mechanism to alleviate those former tensions came from St. Louis based capital and the reliable transportation it purchased. As Garriott freed himself from transportation tensions, he briefly continued purchasing wheat from his former suppliers. Transportation alone could not solve the endemic problem of upriver supplies – they were not found at prices cheap enough to maintain the scale of operations at the mill. His

[3] Jacob M. Price, "What Did Merchants Do? Reflections on British Overseas Trade, 1660–1790," *Journal of Economic History* 49, The Tasks of Economic History (June, 1989): 274.

creditors in St. Louis, now viewed Garriott as their investment. They, in turn, focused his operation exclusively on the St. Louis market for wheat supplies and flour exports. Garriott in one sense was free from former trouble, but he was no longer his own man. Through the extension of credit, Garriott's success became interlocked with the interests of St. Louis commission merchants. After exhausting themselves with unruly captains and their unpredictable agreements, the next alternative was to build their own steamboat, the *Fayaway*.[4]

With this acquisition, all components of the milling operations were coordinated. For a brief period, the *Fayaway* provided a stable source of transportation for upriver wheat purchases. Throughout the fall of 1848, Garriott employed Isaac Fulkerson as his boat captain and purchasing clerk. Fulkerson traversed the rivers between St. Louis, St. Charles, and the wheat fields of western Missouri.[5] By June 1849, however, Fulkerson left command of the *Fayaway*, and Garriott replaced him with John Orrick.[6] Orrick had spent his earlier years as a clerk and partner for mercantile firms in Pennsylvania and

---

[4] The *Fayaway* was a 102-ton side wheel paddle boat built in St. Louis in 1848. See Frederick Way Jr., *Way's Packet Directory*, (Athens, OH, 1994).). The name Fayaway presumably alluded to a character in Herman Melville's *Typee* published in 1846. In the book, Fayaway was a young native woman on the Island of Typee. Melville's main character, based on his own experiences, fell in love with Fayaway and wrote many endearing passages in her honor.

[5] GWGP; and Mullanphy Family Papers (MFP), Missouri Historical Society (MHS), St. Louis.

[6] H. J. McMichael to George W. Garriott, 16 Jan. 1849, MFP; and John Orrick to George Garriott, 1 June 1849, MFP.

Maryland.[7] With the addition of Orrick, the operations strategy changed. While the *Fayaway* eliminated the need to contract with boat captains for deliveries of upriver wheat, she also guaranteed a steady source of cargo space for downriver shipments from St. Charles. Prior to purchasing the *Fayaway*, a significant factor for purchasing wheat above St. Charles was to ensure that a boat would stop at the levee, unload freight, and free up space for flour shipments to St. Louis. After buying the *Fayaway*, upriver purchases no longer became vital. Once Orrick joined the operations, the *Fayaway* became a true packet boat. She received wheat shipments from St. Louis and brought them to St. Charles. Although the St. Louis wheat prices were higher than markets on the Missouri River, the alleviation of transportation costs and the aggravation of dealing with boat captains appeared to be worth the extra expense. In addition, the *Fayaway* provided revenue by carrying local freight between the two levees.

Running a packet boat created some additional complications, such as attending shippers' requests. For instance, Thomas Bates asked Garriott to "do me the favor to see that the bungs are tost [sic] in and the small holes by the sides are stopped."[8] Garriott was shipping barrels of cider to St. Louis for Bates. In another instance, Garriott had to hold some hogs for D. K. Pittman who requested "do not send the hogs tomorrow, I fear they will die of heat, and it will perhaps be cooler in a day or two."[9] Owning a steamboat was not a glamorous business, but it came with big rewards.

---

[7] *History of St. Charles County (1765–1885)* (publisher unknown, 1885.; W. R. Brink & Co., *Illustrated Atlas Map of St. Charles County Mo*., (Illinois, no city given, 1875).

[8] Thomas Bates to George W. Garriott, 25 Jan. 1849, GWGP.

[9] D. K. Pittman to George W. Garriott, 6 June 1849, ibid.

The *Fayaway*'s shipping records indicated extremely brisk sales in wheat and flour. The turnover rates appeared to be the primary factor for generating profit. On each trip to St. Louis, Orrick purchased between $500 and $1500 worth of wheat. He then delivered flour to Scott Naylor & Co., who sold the flour in St. Louis, New Orleans, or Boston in lots worth between $600 and $1300. Estimating the profits of this venture were nearly impossible. The transactions for wheat purchases survived in two forms. First, Orrick purchased wheat from a variety of commission merchants. Only the statements of one merchant house (Morgan and Reid) have survived.

Second, the record of wheat sales accompanied a city weigher certification. These records were more numerous than other accounting documents and showed purchases of up to 45,000 pounds of wheat (figure 28). Unfortunately, the weigher certifications did not always list prices paid for the wheat or the associated commission attached by the purchaser. As a result, there is no way of tallying exact expenses of wheat purchases made under Orrick's command. One certainty, however, is that the decision to purchase wheat from the St. Louis market took the mill out of the cash barter system and gave it access to a sufficient economy of scale needed from the beginning. Credit still played a role in transactions, however, but loans were of a much shorter duration and were not paid in mill products.[10]

[10] James Benson to George W. Garriott, 20 Oct. 1849, MFP.

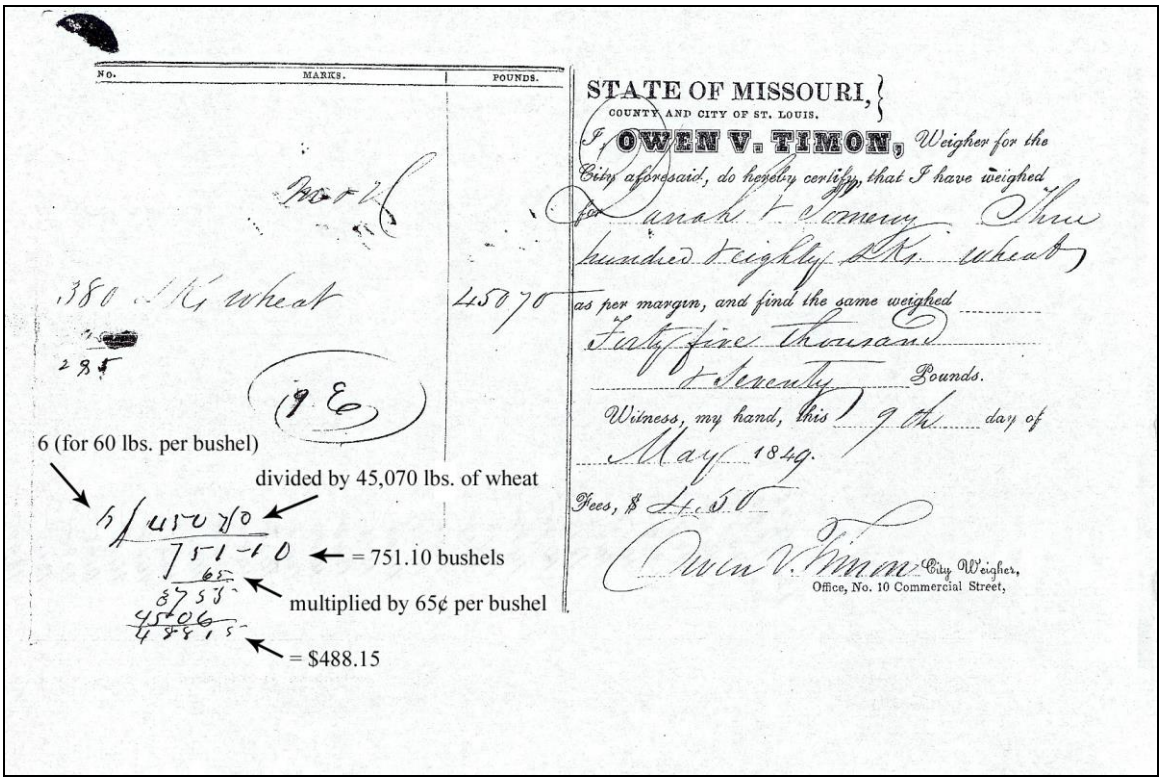


Fig. 28. City Weigher Certificate from St. Louis with hand written calculation for the price paid for wheat (GWGP). This receipt shows the purchase of 45,070 pounds wheat. The actual price should have been $488.26. Most weigher certificates did not contain similar hand written calculations.

Although credit still comprised much of the mill operations, the *Fayaway* provided a more efficient way of managing it. Writing from St. Louis, Orrick reminded Garriott that by coordinating wheat purchases with flour sales they could obtain and manage the credit needed to stay in business. In his letter, Orrick related having made several large purchases of wheat but stated that a number of payments were soon due. He had no doubt that St. Charles flour would command a high price certain to meet these debts, but "every effort must be made to bring [the flour] out on Saturday."[11] By ensuring commission merchants that their loans would be paid quickly, Orrick believed that "we

[11] John Orrick to George W. Garriott, 1 June 1849, MFP.

shall get credit here that will be equal to cash capital."[12] The turnover rate required securing a reputation of both quality and solvency. For example, one commission merchant in St. Louis told Garriott that "I shall have no difficulty in buying what wheat you want at three days credit, but cannot on a week, you are aware, that all sales of wheat flour are made for cash."[13]

Orrick's faith in focusing attention on the St. Louis market was quickly proven to be a wise decision. Throughout the summer of 1849, Garriott's commission merchants for flour sales reported cash profits in his favor. In their letters, Scott Naylor & Co. continually reported rising wheat prices and dropping flour prices in St. Louis. Although these conditions should have exerted a negative impact on Garriott's business, owning a steamboat provided the necessary flexibility to cope with down trends in the market. At times when flour sales were slow, Naylor & Co. arranged to have Orrick tie up alongside other boats at the St. Louis levee. The *Fayaway*'s flour cargo was then transferred directly to the other boat. Occasionally, the *Fayaway* made several trips over the course of two or three days transferring her cargo to a single boat. While onboard the receiving boat, Naylor & Co. accepted bids for St. Charles flour. Whatever amount of cargo remained on the boat was sent to New Orleans, Boston, or back up the Missouri River. By coordinating flour sales in this way, Naylor & Co. avoided additional charges for storage and drayage, and guaranteed that the mill's stock was in constant circulation throughout several markets.

---

[12] Ibid.

[13] James Benson to George W. Garriott, 20 Oct. 1849, MFP.

Orrick and Garriott safeguarded against a glut of St. Charles flour by synchronizing wheat flowing into the mill with flour demand in St. Louis. As soon as prices dipped for even a single day the boat was on hand to carry back "all the wheat [in St. Louis] that the Fayaway can swim under."[14] The profits generated through these efforts were evident in the periodic audits of Garriott's account. Naylor & Co. showed several cash returns netting about $5,000 each even during times when they claimed the flour market was slow.[15] In addition, Naylor & Co. paid off drafts held in Garriott's name. It appeared, then, that the interests of both Garriott and Naylor & Co. were on an upswing.

The relationship between Garriott and his commission merchants reflected the growing attraction of the St. Louis market. Prior to the *Fayaway*, Naylor & Co. offered little advice to Garriott. The *Fayaway*, however, dramatically altered this relationship. Naylor & Co. not only recognized the financial interests of Garriott as their client, but they eventually came to see Garriott as an investment.

Throughout the summer of 1849, wheat farmers above St. Charles asked Garriott whether he planned to send the *Fayaway* to collect their wheat. Even with high wheat prices in St. Louis both Naylor & Co. and Orrick urged Garriott to focus on St. Louis. Orrick recommended that Garriott loosen his quality standards and accept lower grades of wheat. Naylor & Co. also found it necessary to keep Garriott's attention focused in St. Louis. In one instance, Garriott complained that Naylor & Co.'s reports of inactivity in the St. Louis flour market were inaccurate. Business reports coming back from St. Louis

---

[14] Scott Naylor & Co. to George W. Garriott, 14 Aug. 1849, MFP.

[15] GWGP; and MFP.

had apparently convinced Garriott that he was not receiving the highest possible price for his shipments. Naylor & Co. assured Garriott the "we do not wonder that you notice the discrepancy between our letters, and the market reports. For the last eight days the reporters have not known much more about the flour market here than if they were in Greenland. It has been the policy of nearly all the dealers to keep them in the dark, and keep the rates up here."[16] Naylor & Co. continued to say that the business reports were frequently wrong during periods of inactivity because

> no one [was] under any obligation to state the facts to the reporters, and some men would as soon tell them lies as truth. When everything is moving on quiet, and smooth, and even, and nobody interested to mislead, the market reports approximate the truth, but in such times as we have had for the past three weeks the newspapers are the wrong place to go for the real facts."[17]

Naylor & Co.'s letter sought to appease Garriott and maintain his trust in their judgment. Their strategy thus far had been netting cash profits for themselves and Garriott. Even with cash rewards from the new business plan, Garriott seemed dissatisfied.

At one point, he apparently complained that Naylor & Co. were too conservative with their cash advances for wheat purchases. Their response to this claim demonstrated the ties between their interests and Garriott's. Naylor & Co. assured Garriott that their advances on his flour shipments were as liberal as they could afford. They further commented that "you seem to think that we advance sparingly on your flour. We *hope* and believe, that it will net something more than we advanced, but it is not *certain* to,

---

[16] Scott Naylor & Co. to George W. Garriott, 15 Aug. 1849, GWGP. The word "nearly" was curiously inserted at later point, presumably by someone in Naylor's office.

[17] Ibid.

and, everything considered, you cannot but feel that we ought not to go beyond absolute certainty" [emphasis in original].[18]

Naylor & Co. sought to maximize returns from the St. Charles Mill. While Garriott controlled the speed of production, Naylor & Co. increasingly controlled the cash flow. By keeping Garriott in the cash market of St. Louis, Naylor & Co.'s position became increasingly influential in the milling operation.

By removing himself largely from the cash barter system of the Missouri Valley, Garriott's dependency on cash became more severe. He no longer operated in a manner similar to his predecessors, such as James Lackland, whose purchases of wheat rarely required the exchange of hard currency. For these individuals, the cash obtained from sales in St. Louis was likely seen as a windfall. For Garriott, it became necessary to tether all his operations to both St. Louis and Naylor & Co. The wheat purchases were no longer based on the availability of Missouri River transportation, but on the degree to which Naylor & Co. gambled on flour futures. Garriott was now an investment dependent upon the activity of markets in St. Louis, New Orleans, and Boston. Unlike local farmers, he could not pay St. Louis merchants for wheat purchases directly with flour. The mill's products could not simply circulate debt, but had to produce hard currency for every dollar spent on wheat.

As the process of Garriott's transformation from client to investment unfolded, Naylor & Co. became involved in new aspects of the mill. At one point, they advised Garriott to purchase new barrels for shipping flour saying "we notice with regret that

[18] Ibid.

some of the *barrels* of 'St. Charles' flour are badly stained – weather beaten – old. These barrels we think you had much better sell to the apple men, but if you use them at all, put the 'Mo River Mills' flour in them" [emphasis in original].[19] A few weeks later Garriott heeded their advice by selling some barrels to a local orchard and by putting the lower-grade middling flour into some barrels.[20] Naylor & Co. offered other unsolicited advice about John Orrick's purchasing habits. Responding to Orrick's earlier advice about loosening quality standards at the mill, Naylor & Co. informed Garriott that

> Captain Orrick is probably doing as well for you as anyone could… you ought to be *specially* and *particularly* careful not to get any second rate wheat into the "St. Charles."
>
> You had better pay a man $10.00 per day, to assort your mixed wheat – (i.e.) where each sack is of one kind than to get it indiscriminately….
>
> …We are very much afraid you will not keep up the reputation of your brand [emphasis in original].[21]

Naylor & Co.'s fears over the damage to St. Charles Mill quality resulted from a need to protect their investment. The ease of operations made possible by the *Fayaway* came at a price besides the debt incurred from its purchase. Garriott released himself from the whims of ornery boat captains and the instability of Missouri River shipping, but he now gave up control to the captains of capital in St. Louis.

These were common concerns for firms whose investment weighed heavily on the specialized knowledge of country millers. For instance, the Philadelphia miller William

---

[19] Scott Naylor & Co. to George W. Garriott, 18 Aug. 1849, GWGP.

[20] William Pettus to Thomas Bates, 22 Oct. 1849, GWGP; Scott Naylor & Co. to George W. Garriott, 30 Aug. 1849, GWGP.

[21] Scott Naylor & Co. to George W. Garriott, 30 Aug. 1849, GWGP.

Crammond, received similar advice early in his career when his British partner wrote, "I doubt not you will engage a person to purchase your grain who is a *perfect* judge of the article, as some Houses object to give their orders to general [word unclear] because they do not perfectly understand the quality" [emphasis in original].[22]

A miller's reputation was not taken lightly. Cathy Matson noted fears of disreputable practices among millers in New York during the late seventeenth century. Wheat prices in New York's countryside fluctuated widely. Part of this fluctuation was because country farmers often heard city wheat prices through regional informants. City millers felt neighboring farmers dishonestly raised their prices and frequently searched for supplies in New Jersey or Connecticut. Tensions on both sides created heated competition and hostilities among millers. The high wheat prices and competitive flour market often nudged millers to act unscrupulously. Because a region's reputation was paramount, city millers kept close watch over their rivals. Matson related one incident in 1715 when two merchants accused another of discrediting New Yorkers by shipping half-barrels of flour to Barbados. The flour was mixed with substantial amounts of foreign matter and represented a real threat to New York's flour reputation.[23] Other incidents like this continued to tarnish New York's flour brands until the city's merchants gathered in 1750 to call for an end to dishonest practices. Matson quoted prominent exporter

---

[22] John Philips to William Crammond, 7 Oct. 1789, Crammond and Philips Papers, Gratz Collection, Historical Society of Pennsylvania, Philadelphia, quoted in Thomas M. Doerflinger, "Commercial Specialization in Philadelphia's Merchant Community, 1750-1791," *Business History Review* 57, (Spring, 1983): 43–44.

[23] Cathy Matson, "'Damned Scoundrels' and 'Libertisme of Trade': Freedom and Regulation in Colonial New York's Fur and Grain Trades," *William and Mary Quarterly*, 3rd ser. 51, Mid-Atlantic Perspectives (July, 1994): 413.

William Alexander:

> the Great frauds Committed in the manufacturing [of flour] and the great necessity there is of some remedy being applied. …about seventy of the merchants of this City petitioned the Assembly to the same purpose, and the next day attended the house with above thirty Evidences of the discredit our flower is in through all the Islands in the West Indies and . . . letters by which it clearly appeared that neither the English, French, Dutch, Spaniards or even the Negroes would buy a barrel of New York flower while Philadelphia flour is to be had.[24]

The protests led to a 1751 act to regulate quality, weight, brand naming, and to penalize fraudulent millers.[25] Reputation of a miller's flour, like a good credit rating, was a point of both pride and wealth.

Throughout the summer and fall of 1849 the *Fayaway* played an instrumental role in generating cash revenues. The mill's products arrived in St. Louis without interruption. Although the coordinated activities of milling and steamboating made for profitable business, the old hobgoblin of debt again haunted Garriott. When he first purchased the *Fayaway* in the fall of 1848, Naylor & Co. provided an advance capital in actual cash of $5,600.[26] This amount appeared unusually high compared to their other clients as they reminded Garriott that they had "extended accommodations … far beyond what our arrangements contemplated."[27] In addition, they pointed out instances in which they sold flour shipments at lower prices than the advance received by Garriott. Naylor & Co.

---

[24] William Alexander to John Provoost (in London), 16 Nov. 1750, Alexander Papers, vol. 1, fol. 20; quoted in ibid., 414–415.

[25] Matson, "'Damned Scoundrels," 415.

[26] Scott Naylor & Co. to George W. Garriott, 9 Nov. 1848, MFP.

[27] Ibid.

informed Garriott that "I find the account has if possible been growing rather than otherwise recently – viz. on the last shipment of 165 barrels worth $660 you have drawn $1,000."[28]

This audit occurred before Orrick joined the operations and was a point at which Garriott was still running the *Fayaway* to upriver locations – buying wheat in the cash barter system. Shortly after the November audit, the *Fayaway* ran exclusively between St. Louis and St. Charles. This was also a turning point in Garriott and Naylor & Co.'s correspondence. As cash proceeds were shown in future audits, Naylor & Co. increased control over the pace of mill production (i.e., through conservative or liberal cash advances). Although Garriott's total debt amounted to over $16,000 to Naylor & Co. by June 1849, their correspondence suggested shrinking debt. They were paying off drafts and sending cash back to St. Charles. Garriott, however, was still indebted to several other individuals who applied pressure just as the mill began turning profits. One of the more virulent protests came from E. D. Smith who wrote Garriott in June 1849 demanding payment on a draft note. Smith bluntly told Garriott that "your honor is at stake, and I hope you value yourself at more than $850."[29] Garriott had several other creditors who were all as equally irate as Smith.[30]

None of Garriott's creditors exerted a greater impact on the mill's operations than John Atkinson. In November 1849, Atkinson sued Garriott, John McDonald, and Charles

---

[28] Ibid.

[29] E. D. Smith to George W. Garriott, 12 June 1849, GWGP.

[30] GWGP; and MFP.

Cole to protest a leasing agreement the three had entered. Garriott had subleased a portion of the mill and its property to McDonald and Cole. In the *St. Charles Chronotype*, McDonald and Cole advertised:

> We, the undersigned, take this mode of informing the public, that we have leased the St. Charles steam Flouring Mill of George W. Garriott, and have bought the steamer *Fayaway*, and intend running the same. We also state that we will pay the highest price for wheat delivered at said mill. [31]

Garriott, however, never obtained permission from John Atkinson to sublease the mill.

By early 1851, the St. Charles Circuit Court ruled in Atkinson's favor. The resulting actions transferred ownership of the mill back to him, while McDonald and Cole took control of the *Fayaway*.[32] Garriott's fate, unfortunately, remained unclear. His name never appeared on the 1840 or 1850 census records for St. Charles County. His tenure there appeared confined to the interval between official census records. The anonymous writers of the St. Charles County history mentioned Garriott only once, saying simply that he was one of the many residents who left for the lure of western gold.[33]

In the winter of 1850, Atkinson placed advertisements seeking to purchase wheat from county farmers.[34] McDonald and Cole also advertised for the *Fayaway*.[35] Dissolving joint ownership of the mill and the *Fayaway*, however, altered the nature of

---

[31] *St. Charles Chronotype*, 24 Nov. 1849 1(8): 3.

[32] St. Charles Circuit Court Records, D98-1850-Ai; and D83-1851-A1, Saint Charles County Historical Society.

[33] *History of St. Charles County*; W. R. Brink & Co., *Illustrated Atlas Map of St. Charles County*.

[34] *Missouri Patriot* (St. Charles), January–March 1850.

[35] *St. Charles Chronotype*, 2 July 1850

St. Charles steamboat service. McDonald and Cole's papers showed a brief period in which they operated the *Fayaway* in the St. Louis wheat/flour trade. By November 1850, however, they dissolved their partnership and sold the *Fayaway* to R. M. Barclay who ran her exclusively between St. Charles and Jefferson City (125 miles (201 kilometers) up the Missouri River, see appendix D).[36] Orrick's steamboating career also ended at this time. He, however, remained in the wheat/flour business by entering a partnership with St. Charles resident Louis Yosti. Orrick and Yosti eventually served on the board of commissioners for the North Missouri Railroad and were instrumental in securing St. Charles as a stop on the railroad (figure 29).[37]

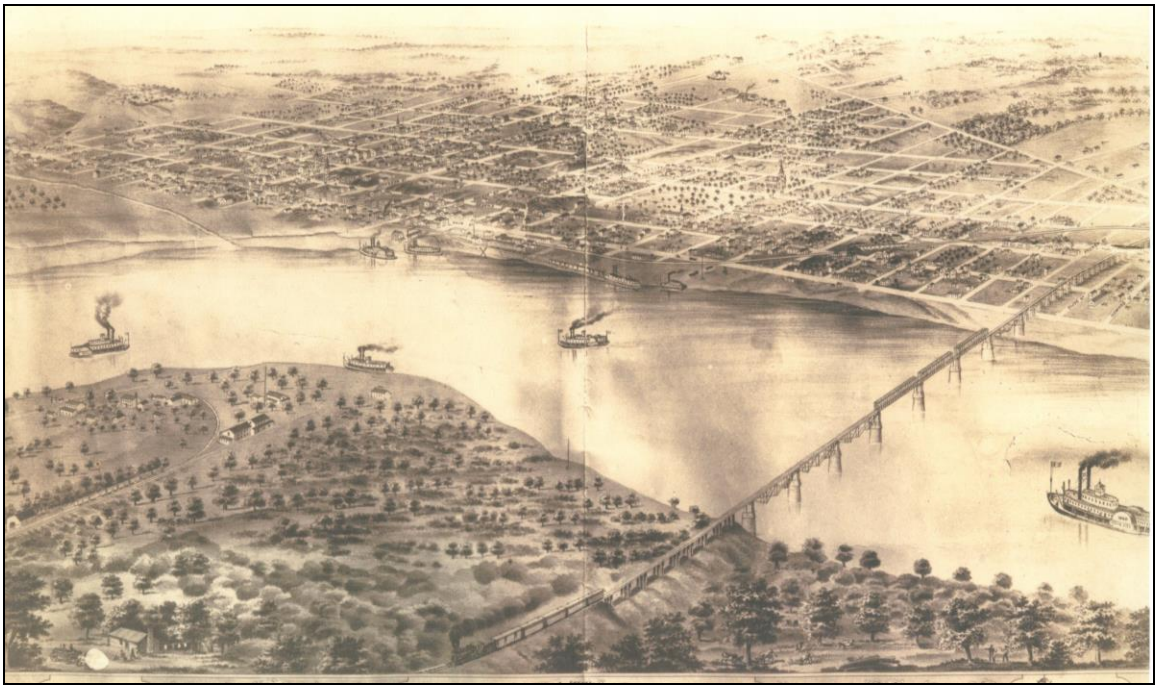


Fig. 29. A. Ruger, St. Charles, Pen Picture of St. Charles and the Little Village of Brotherton, 1869. (John J. Buse Jr. Collection, folder 174, Western Historical Manuscripts Collection, University of Missouri, Columbia.) The North Missouri Railroad Bridge spans the river on the right.

[36] *St. Charles Chronotype*, 9 Nov. 1850, 2(4): 3 and 4.

[37] *History of St. Charles County; Illustrated Atlas Map of St. Charles County*.

The brief period of coordination between milling and steamboating in St. Charles underscored three essential elements in the frontier economy. First, the agricultural wheat market functioned in a cash-only environment in St. Louis but in a cash-barter environment along the Missouri River. Initially, the *Fayaway* linked upriver wheat with the St. Louis flour market, but it soon became more advantageous to operate in the St. Louis trade for both purchases and sales. The duality between St. Louis and upriver markets, therefore, forced a geographical specialization of the mill's major activities.

The specialization, however, was impossible without access to transportation infrastructure. To function in the cash-only market, shipments of wheat and flour had to occur at a predictable rate. The transportation network of the Missouri Valley, as a whole, focused increasingly on the movement of goods between St. Louis and the western edge of the state. This made intermediate stops less significant and directed transportation to the cash markets. The shift in strategy from making upriver wheat purchases to buying wheat in St. Louis was Orrick's way of following suit with the rest of the Missouri. It also allowed synchronization between mill input and the economy of scale necessary to profit from provision output. All the events leading up to the purchase of the *Fayaway* indicated an increasing shortage of cargo space for St. Charles products. With its own source of transportation, however, the St. Charles Mill took advantage of its proximity to St. Louis. As Orrick knew, closeness to St. Louis meant a speedy transition from purchased wheat to saleable flour. The *Fayaway* made all this possible, but required capital that could not be obtained from local farmers. The only individuals with sufficient capital were those already in a cash-only market. When they extended credit, it

was not in hopes of receiving goods for their farm and family, but for cash. At this point, then, the two markets created the need for transportation, and then transportation created the need for cash.

Although credit always played an important role in the western economy, its meaning was transformed. In the cash-barter system credit served as an equalizer for transactions in that wheat was sold for the cash equivalent in other goods. Once credit could no longer be paid in alternate products, all goods were expected to bring actual cash. This split the flour business into separate operations (purchasing and selling) that were independent but demanded coordination. The linkage between these two separate businesses was transportation. In an intermediary location like St. Charles, however, the link could only be established through indebtedness to individuals in St. Louis. This revealed the major transformation in the credit system. Whereas Garriott's extension of credit had previously originated from farmers who had a need for the staples of life over specie, the source of credit now flowed from middlemen (i.e. wheat dealers) in St. Louis. They could not be satisfied in the same way as farmers. The mill was now exclusively at the mercy of market conditions and could not operate outside them. The *Fayaway*'s restriction to the route between St. Charles and St. Louis was a glaring indication of the movements of goods and, more importantly, *cash*.

Garriott's quest for reliable transportation reflected a larger process of the transforming western economy. Cash was no longer a windfall received from surplus staple goods, but was itself a staple. Trading alliances between Native Americans and Europeans characterized early Western history, but the new West began in the mid-

nineteenth century as an alliance between agriculture and cash. It was in the transition from cash value to actual cash that the West was reshaped, and adjusted to the spreading modern world. Garriott's ambition linked him to exports, transportation linked him to St. Louis, but credit broke it all apart.

VI. CONCLUSION

Since Frederick Jackson Turner's seminal paper on the frontier, historical studies have approached American expansion as both a geographic and cultural phenomenon.[1] Defining the frontier simply in geographic terms was difficult with Turner's logic. On the one hand he provided a starting point in seventeenth-century colonial America for a process that was set in motion across the expansive American West. On the other, his definition never provided a way to satisfactorily understand the mechanics of the process.

Chapter one discussed the work of other scholars who clarified Turner's process. Turner's frontier hypothesis was part of a greater whole – the spreading of the modern world and the formation of a new economy of scale. Theorists like Karl Marx, Immanuel Wallerstein, and Eric Wolf revealed how altering relations of trade and production were significant indicators of tensions experienced by people engaging the modern world. Analytical historians Jacob Price, Paul Clemens, John McCusker, Russell Menard, Thomas Doerflinger, and Cathy Matson revealed how colonial people manipulated and adapted economies of scale on the cusp of the emerging modern world. Their work showed that the process critical to seventeenth-century North American developments had discernable traces in nineteenth-century western America. Geographers Jerome Steffen and Joseph Cassagrande defined terminology describing how the modern world reshaped settlement. William Cronon and Kenneth Lewis showed that these terms were viable led to clearer understandings for the predicament George Garriott faced in shipping.

---

[1] Frederick Jackson Turner, "The Significance of the Frontier in American History." *Annual Report of the American Historical Association for the Year 1893*, 199–227.

Chapter two demonstrated how transportation spread across the United States from the east coast to the interior west. In every location where new technology was the source of transportation improvement, large capital investments were always required. These investments inseparably linked transportation to business. Although the types of transportation improvements shifted through time – from the canal mania of the 1820s to the steamboat craze of the 1840s – the reduction in shipping costs and the drawing together of markets was a constantly repeated process throughout the decades. These large-scale processes provided the context for replication on the smaller regional level.

The concept of replication also gave the frontier a temporal aspect that allowed us to understand the developments in one particular region as part of a larger, continuous process. There was no single part of nineteenth-century America that can be studied in isolation. The difficult aspect of seeing the frontier as a process, however, was that this view easily leads towards deterministic explanations of the past. When one looks at the United States on a broad scale, the patterns of colonization appear quite regular and determined. On this broad scale, it seemed predestined that eastern cities like Boston or Philadelphia should develop before western cites like New Orleans or St. Louis. When we looked at the United States on a finer scale, the picture and explanation became more complicated.

The large scale developments occurring across the country created countless opportunities for economic development in several regions. For instance, the activities of early St. Louis businessmen demonstrated how they learned to operate in an economy distinct from their eastern contemporaries. Through their efforts St. Louis became the

magnet for river commerce.

Chapter three examined the expansion of US transportation and economy on the regional level of St. Louis and the Missouri Valley. During the 1830s, St. Louis became the "commercial emporium of the West." Businessmen like the Filley brothers and J. R. Stanford bridged the gap between the older frontier economy of St. Louis and transforming modern one. They could not easily conduct a cash-only business, but found a way to ship western products with cash values in the East. While transportation allowed men like the Filleys and Stanford to coordinate their businesses between the East and the West, it had a different impact on smaller markets like St. Charles.

In St. Charles, the larger process of frontier expansion created restraints on certain activities but favored others. As transportation brought St. Louis closer to the eastern markets in the 1830s, the opportunities for St. Charles businessmen were extremely broad. The town's residents engaged in the growing markets at their leisure with relatively little modification to their business. Men like James Lackland required no extra investment to cart a few wagonloads of flour to St. Louis for some extra cash. Other men like A. D. Harmon conducted business by land or water and still realized profit. While the growth of transportation to St. Louis initially allowed resident merchants to directly engage in the eastern markets, it also restricted that same access to the external markets like St. Charles. The restricted access to cash markets, however, was not problematic until cash became the primary method of business transactions.

Chapter four highlighted the growing primacy of credit and cash in St. Charles business operations. As transportation brought western Missouri in from the frontier,

however, later St. Charles businessmen had a narrower range of opportunities. The increase in steamboats on the river limited George Garriott's options for transportation, ultimately giving him few choices other than to become both a flour miller and a steamboat owner. St. Charles's location created an unexpected irony. Although it was the closest Missouri River town to St. Louis, it increasingly became last in line for steamboat service. This position inverted the process of frontier expansion, but was the result of how the frontier process reshaped regional markets. Ultimately, a businessman like George Garriott could not operate in the market of St. Louis without reliable river transportation. Similarly, he could not operate without the extension of credit. The major change brought about in the growing economic environment was the acceptable sources of credit. To procure transportation, Garriott had to disconnect himself from his primary source of credit – his customers. As transportation became more unpredictable, Garriott had to send increasing amounts of shipments to St. Louis. This eventually led him to discontinue the practice of buying wheat from the farmers who bought flour from his mill and dry goods from his store. He now bought from city dealers who only accepted cash.

Chapter five demonstrated that no predetermined reason existed for Garriott's business failures. The explanations were found in his business choices that opened him to the mercy of his creditors. The fact that he was forced into a cash-only market on the purchasing end of his business certainly has strong links to the national economic expansion. The choices he made from that point forward, however, were entirely a personal matter. Had he made different choices for the payment of debt or the

partnerships forged, there is no telling how his business would have impacted the local St. Charles economy, or what lasting effects might still be seen today.

The value of examining the frontier process in the light of decreasing scales had a number of positive effects. First, it provided an understanding for the links between transportation and capital investment. On the large scale, the US economy appeared to spread from east to west at a raid and predictable rate. It also provided a context to understand how early western businessmen mitigated the different environments of the east coast and the western interior.

Second, by looking at the frontier process on the regional level, the context of large-scale expansion became less-deterministic. The national changes allowed individuals on the fringe of expansion to capitalize on opportunities afforded by a growing economy. While people like James Lackland remained on the fringe, cash was less essential and could be used as a supplement to other forms of labor exchange.

Third, by looking at the finest scale, that of individual businessmen, the frontier process lost any degree of determinism. Although the economic environment selected certain types of activities (like water transportation), the ultimate decisions were still individualistic in nature. People, like John Orrick, who appeared to grasp the favored options for the new environment flourished, while others did not.

The developments affecting St. Charles residents were similar to those of earlier times and places. In many ways, theirs was the story of ordinary people living ordinary lives. As it stands today, we have yet to record, or even quantify, the tens of thousands of similar locales throughout the past half millennium. But what gives this story power in

our modern world, however, is not its degree of ordinariness but its rarity of telling.

Appendix A. Steamboat arrivals and tonnage estimates compiled from multiple sources.

Table A1. Arrival of Steamboats at St. Louis 1846–1847

	New Orleans	Ohio	Illinois	Upper Mississippi	Missouri	Other Points	Cairo
	1846-47	1846-47	1846-47	1846-47	1846-47	1846-47	1847
Jan.	15 22	8 8	3 9	5 4	7 0	15 5	11
Feb.	33 15	24 16	42 8	31 8	1 1	21 6	10
Mar.	25 48	26 28	40 85	36 41	10 14	21 13	3
April	27 77	35 41	44 91	55 74	20 32	14 12	1
May	59 93	65 61	80 106	115 128	43 63	10 20	19
June	36 49	52 37	51 60	98 91	47 48	11 13	8
July	23 67	30 41	32 58	60 81	32 45	16 19	19
Aug.	32 24	44 37	32 41	56 51	29 32	18 24	10
Sept.	30 28	37 30	15 45	46 57	27 23	16 28	18
Oct.	32 22	48 67	41 57	61 80	18 31	37 34	18
Nov.	34 32	24 42	30 60	56 69	14 16	27 18	13
Dec.	49 25	27 22	36 38	44 33	8 9	26 12	16
Total	395 502	420 430	446 658	663 717	256 314	232 201	146
1845	250	406	298	547	249	167	na

Source: Western Journal 2 (Feb. 1848) 135.
*Cairo was listed separately for the 1847 Illinois monthly totals. It was not clear whether it was also excluded from the 1846 totals.

Table A2. Arrivals and Tonnage of Watercraft Each Month at St. Louis 1846–1847

	1846			1847		
	steamboats	tonnage*	keel & flat boats	steamboats	tonnage*	keel & flat boats
Jan.	50	8,917	6	64	12,312	27
Feb.	152	26,111	35	67	19,550	24
Mar.	158	31,850	22	231	48,804	81
April	158	49,334	44	119	181,536	192
May	162	78,124	68	na	na	na
June	195	64,043	38	245	56,537	30
July	193	46,554	68	351	75,085	26
Aug.	211	37,553	75	238	42,408	74
Sept.	171	28,331	72	242	41,229	20
Oct.	237	37,558	162	341	56,038	35
Nov.	185	31,346	171	297	46,731	60
Dec.	190	32,393	120	na	na	na
reported totals[†]	2,412	577,824	881	2,995	558,186	558
corrected totals[‡]	2,062	472,114	881	2,195	580,230	569

Source: Western Journal, 1 (Jan. 1848), 55.
*Tonnage represents steamboats.
[†]The *Western Journal* did not explain the meaning of reported totals.
[‡]The *Western Journal* did not explain the meaning of corrected totals.

Table A3. Arrival of Steamboats to St. Louis from the Missouri River

	1838	1839	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849
Jan.	na	1	2	0	0	1	2	4	2	0	0	0
Feb.	na	0	6	0	3	1	6	1	0	1	4	5
Mar.	na	10	14	12	19	0	25	10	11	18	13	44
April	na	12	18	22	25	20	36	26	25	46	36	71
May	na	20	25	28	36	27	36	43	37	45	48	55
June	na	21	24	24	25	26	30	40	39	53	31	43
July	na	17	16	15	16	29	23	30	32	36	36	21
Aug.	na	7	7	10	17	27	25	23	23	34	38	41
Sept.	na	7	9	12	16	22	20	20	23	26	45	44
Oct.	na	9	13	12	12	13	28	18	18	25	40	47
Nov.	na	7	9	10	7	10	23	17	14	19	30	26
Dec.	na	2	1	3	0	7	2	1	6	5	8	10
Total	93	113	144	148	176	183	256	233	230	308	329	407

Source: James Sterling Pope, "A History of Steamboating on the Lower Missouri 1838–1849, Saint Louis to Council Bluffs, Iowa Territory," (Ph. D. diss. Saint Louis University, 1984), appendix B, 187.
Note: Pope compiled his figures from the St. Louis newspapers: *Missouri Republican, Evening Gazette,* and *New Era.*

Table A4. Steamboat Activity on the Missouri River 1838

1838	Trips*	Tonnage (Pope†)	Tonnage (*Western Boatmen*‡)	Averaged Tonnage	Estimated Tonnage Carried
Adventure	1	49	50	49.5	49.5
Antelope	3	132	210	171	513
Ashley	2	na	140	140	280
Astoria	13	na	150	150	1,950
Belle of Missouri	2	na	160	160	320
Dart	15	na	125	125	1,875
Glasgow	1	na	249	249	249
Howard	11	122	122	122	1,342
Kansas	10	na	112	112	1,120
Little Red	4	201	223	223	892
London	3	na	160	160	480
Naples	1	na	100	100	100
Pirate	11	137	128	132.5	1,457.5
Platte	8	na	160	160	1,280
Relief	1	na	75	75	75
Saint Peters	17	na	119	119	2,023
Susquehanna	1	na	138	138	138
Willmington	4	206	206	206	824
Total (18 boats)	108	na	2,627	2,592	14,968

Sources: *Lawrence E. Giffen, *Walks in Water: The Impact of Steamboating on the Lower Missouri River* (Jefferson City, Mo., 2001), table 5-3, 66; †Pope, "A History of Steamboating on the Lower Missouri," tables 1, 23; ‡*Western Boatmen* (St. Louis) 21 Jan. 1839.

Note: Pope compiled his figures from *Missouri Republican* (St. Louis) 3 March 1839.

Table A5. Steamboat Activity on the Missouri River 1840

1840	Trips*	Tonnage (Pope†)	Tonnage (*Western Boatmen*‡)	Tonnage (Way§)	Averaged Tonnage	Estimated Tonnage Carried
Aerial	1	na	100	na	100	100
Albany	1	na	158	na	158	158
Antelope	1	132	210	na	171	171
Bedford	4	83	105	na	94	376
Bowling Green	10	na	144	148	146	1,460
Corsican	1	na	224	na	224	224
Euphrasie	9	na	161	na	161	1,449
Fayette	1	na	112	na	112	112
Flora	2	na	119	na	119	238
Fulton	1	na	122	122	122	122
General Brady	2	na	178	na	178	356
General Leavenworth	8	na	160	na	160	1,280
Georgia	1	na	135	na	135	135
Glaucus	2	na	191	na	191	382
Gloster	2	na	128	na	128	256
Harry Tompkins	1	na	81	na	81	81
Hugh L. White	1	na	230	na	230	230
Leander	2	na	138	na	138	276
Little Red	6	201	223	na	212	1,272
Mail	1	na	148	na	148	148
Malta	5	na	100	na	100	500

Table A5 — *Continued.*

1840	Trips*	Tonnage (Pope†)	Tonnage (*Western Boatmen*‡)	Tonnage (Way§)	Averaged Tonnage	Estimated Tonnage Carried
Naomi	3	164	184	165	171.34	514.02
Osceola	4	na	94	na	94	376
Pensacola	1	na	140	na	140	140
Platte	7	na	160	na	160	1,120
Pocahontas	2	na	250	na	250	500
Preemption	4	na	180	na	180	720
Rhine	16	na	118	na	118	1,888
Rienzi	2	na	141	na	141	282
Robert Emmet	1	na	104	na	104	104
Salem	2	na	106	na	106	212
Shawnee	16	na	177	na	177	2,832
Thames	19	na	136	na	136	2,584
Tiber	1	na	207	na	207	207
Wilmington	1	na	206	na	206	206
Worden Pope	3	na	180	na	180	540
Total (36 boats)	144	na	na	na	5,478.34	21,551

Source: *Lawrence E. Giffen, *Walks in Water,* table 6-2, 83; †Pope, "A History of Steamboating on the Lower Missouri," tables 5, 48; ‡*Western Boatmen* (St. Louis) 13 Jan. 1841; §Frederick Way Jr., *Way's Packet Directory* (Athens, OH, 1994).
Note: Pope compiled his figures from the St. Louis newspapers: *Missouri Republican*, *New Era*, and *Evening Gazette*. Because Way listed steamboats alphabetically, reference to page numbers were not provided here.

Table A6. Steamboat Activity on the Missouri River 1848

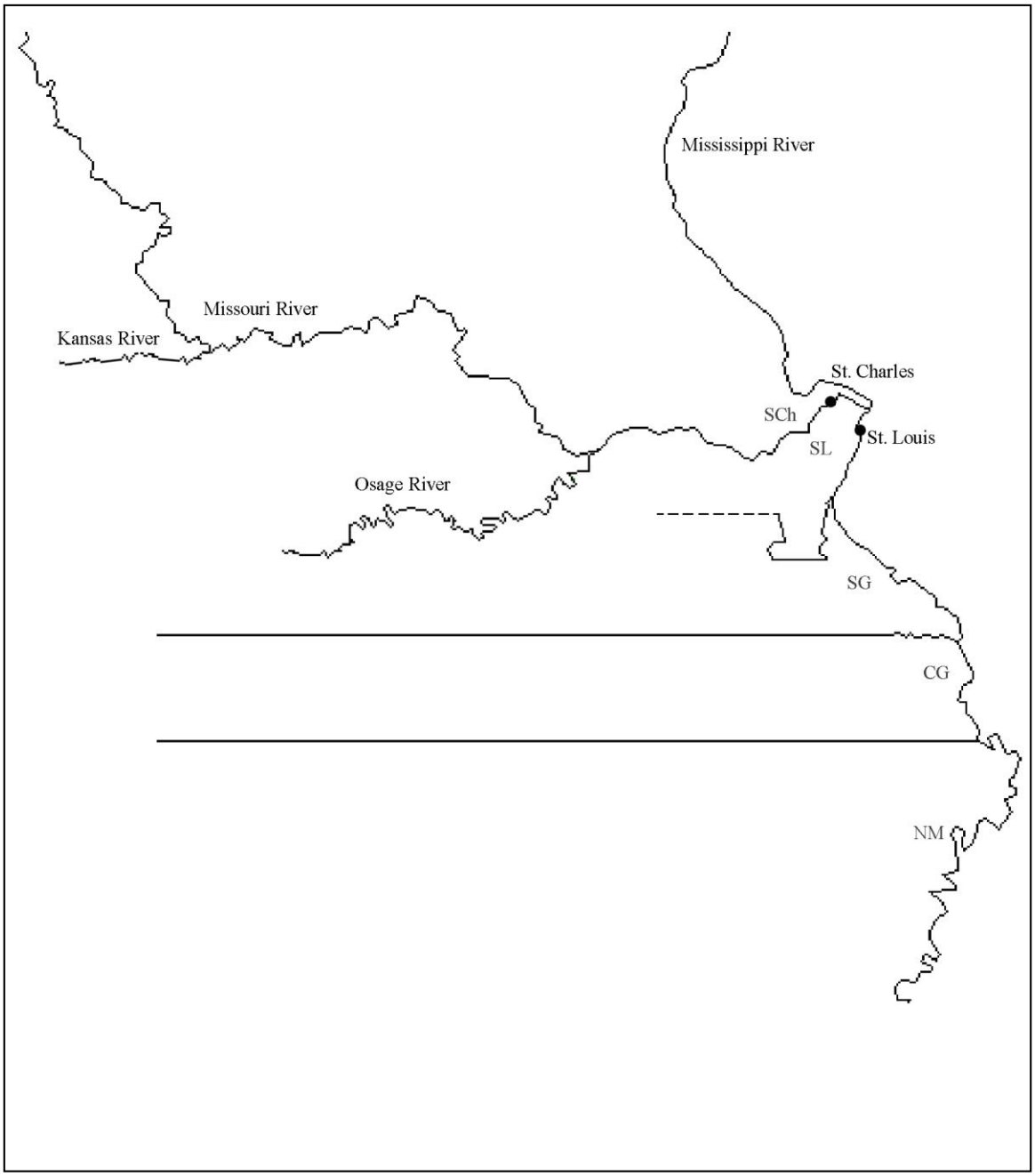
1848	Trips*	Tonnage (Pope†)	Tonnage (*Western Boatmen*‡)	Tonnage (Way§)	Tonnage (*Western Journal*)**	Averaged Tonnage	Estimated Tonnage Carried
Alexander Hamilton	3	na	261; 213	212	212	249.5	748.5
Algoma	2	229;375	209; 285	209	200	251.17	502.34
Alton	2	na	344; 344	344	344	344	688
Amaranth	6	na	290; 234	165	330	254.75	1,528.5
Amelia	22	na	152; 152	151	150	151.25	3,327.5
Bertrand	12	148	146; 146	145	na	146.25	1,755
Boreas No.3	3	na	249; 249	264	na	254	762
Cora	13	na	159	144	144	149	1,937
Dolphin	1	na	125; 90	99	na	105	105
Duroc	1	na	220	220	na	220	220
Eliza Stewart	7	na	170	169	na	169.5	1,186.5
Fayaway	1	na	102	na	102	102	102
Haydee	13	na	147; 145	144	na	145.34	1,889.42
Highland Mary	6	na	159	158	159	158.6	951.6
John J. Hardin	1	na	na	na	na	0	0
Julia	19	na	234	234	na	234	4,446
Kansas	9	na	276	276	na	276	2,484
Kit Carson	19	na	280	280	na	280	5,320
Lake of the Woods	14	na	86	86	86	86	1,204
Light Foot	3	na	145	145	na	145	435
Little Mo.	1	na	198	198	na	198	198
Mandan	13	na	na	204	204	204	2,652
Martha	10	na	180	180	180	180	1,800

Table A6 — *Continued.*

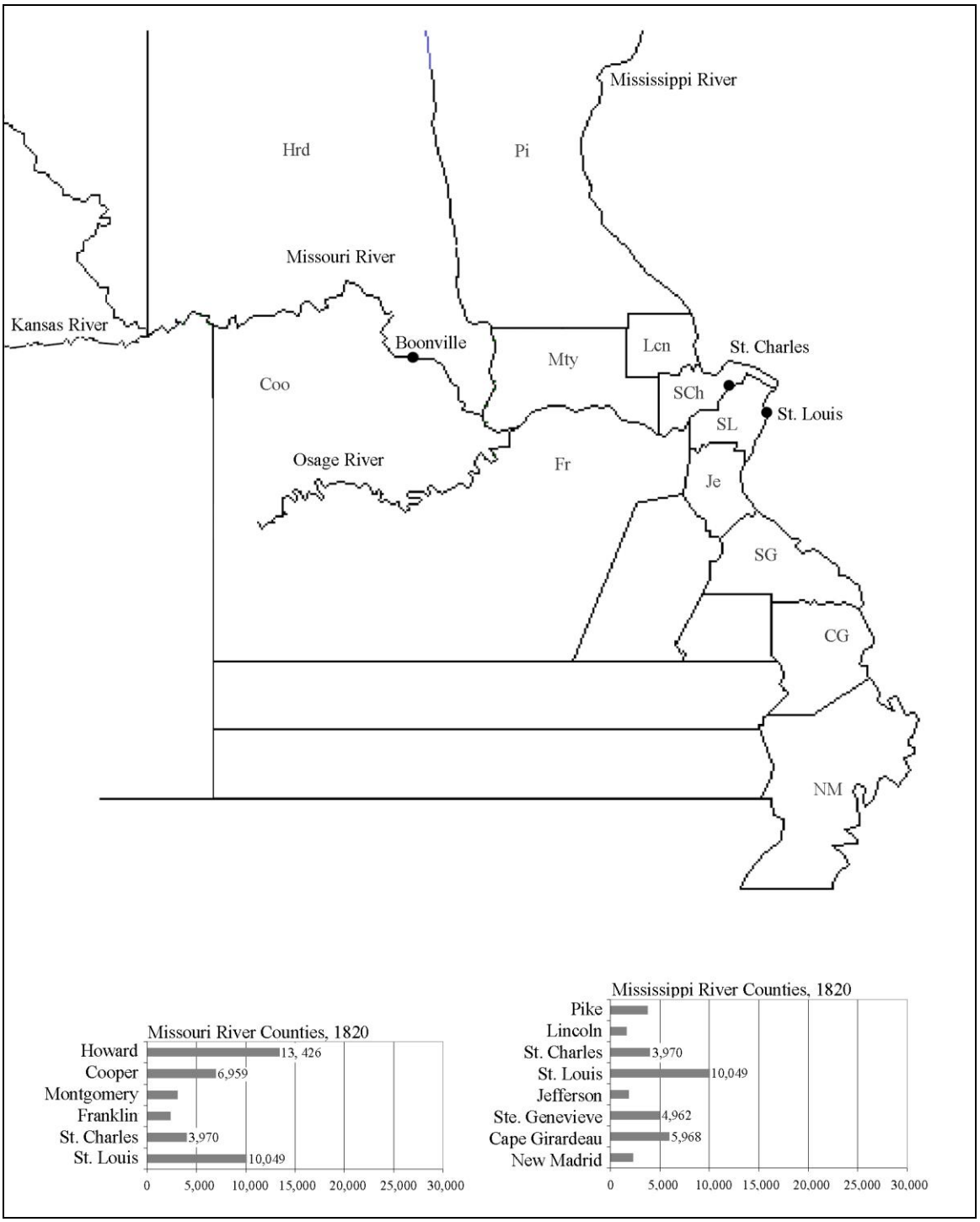
1848	Trips*	Tonnage (Pope†)	Tonnage (*Western Boatmen*‡)	Tonnage (Way§)	Tonnage (*Western Journal*)**	Averaged Tonnage	Estimated Tonnage Carried
Mary	1	na	280	276	276	277.34	277.34
Mary Blane	8	na	na	181	na	181	1,448
Mustang	8	na	129	128	128	128.34	1,026.72
Plough Boy	2	na	na	248	248	248	496
Revenue Cutter	na	na	101	na	na	101	na
Rowena	20	225	220; 250	230	230	231	4,620
Sacramento	1	na	230	221	na	225.5	225.5
St. Joseph	14	na	218	217	220	218.34	3,056.76
St. Croix	12	na	159; 180	158	150	161.75	1,941
St. Louis Oak	4	na	109; 108	108	100	106.25	425
Tamerlane	13	na	na	132	125	128.5	1,670.5
War Eagle	2	na	na	155	na	155	310
Whirlwind	11	na	225	226	na	225.5	2,480.5
Wyandotte	9	na	315	na	314	314.5	2,830.5
Total boats (36 boats)	286	na	na	na	na	6,904.4	55,050.2

Source: *Lawrence E. Giffen, *Walks in Water* (Jefferson City, Mo., 2001), table 7-3, 108; †Pope, "A History of Steamboating on the Lower Missouri," tables 5, 48; ‡*Western Boatmen* (St. Louis) 13 Jan. 1841; §Frederick Way Jr., *Way's Packet Directory* (Athens, OH, 1994); **Western Journal* (Jan. 1849).
Note: Cells with two tonnage figures represented conflicting measurements reports. Totals excluded *Revenue Cutter* because it was unknown how many trips she made in 1848. Pope compiled his figures from the St. Louis newspapers: *Missouri Republican, New Era*, and *Evening Gazette*. Because Way listed steamboats alphabetically, reference to page numbers were not provided here.

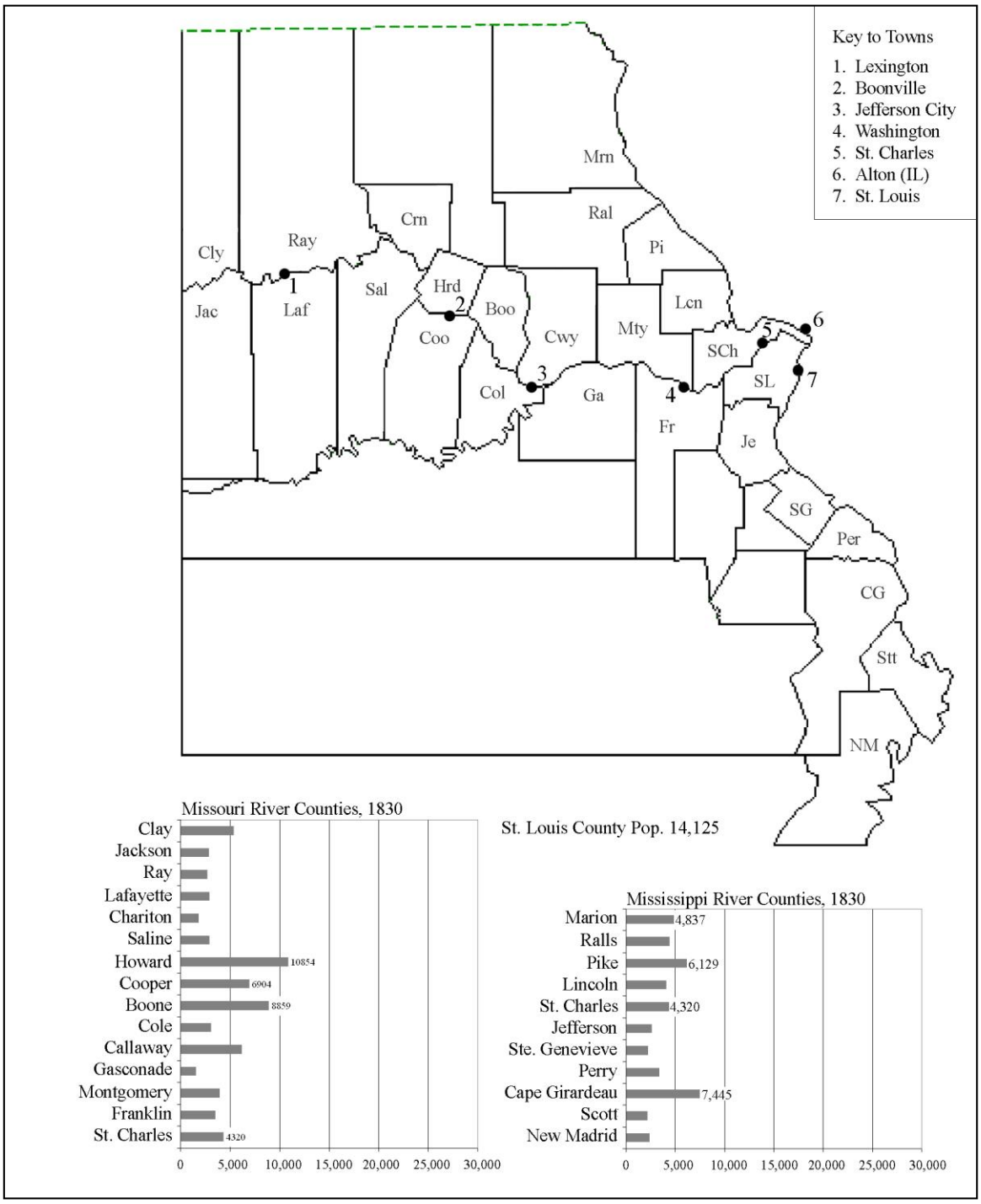
Appendix B. Missouri population maps from 1810 through 1860. Showing the growth and delineation of county borders, along with population statistics of Mississippi and Missouri river counties.



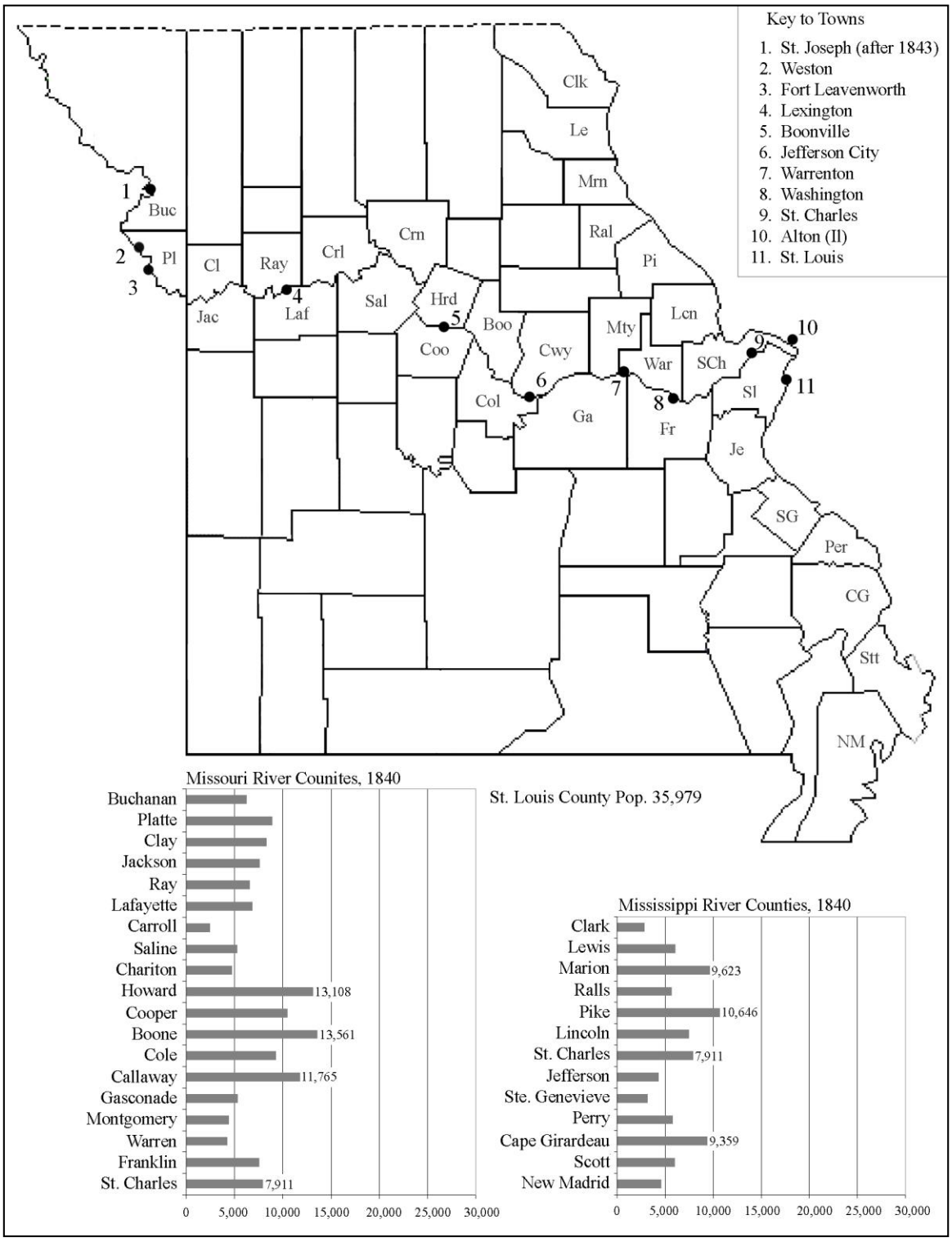
Map B1. Territory of Missouri in 1810 showing county lines, and selected river towns. United States Census data is unavailable. Abbreviations for the bottom three counties stand for Ste. Genevieve, Cape Girardeau, and New Madrid



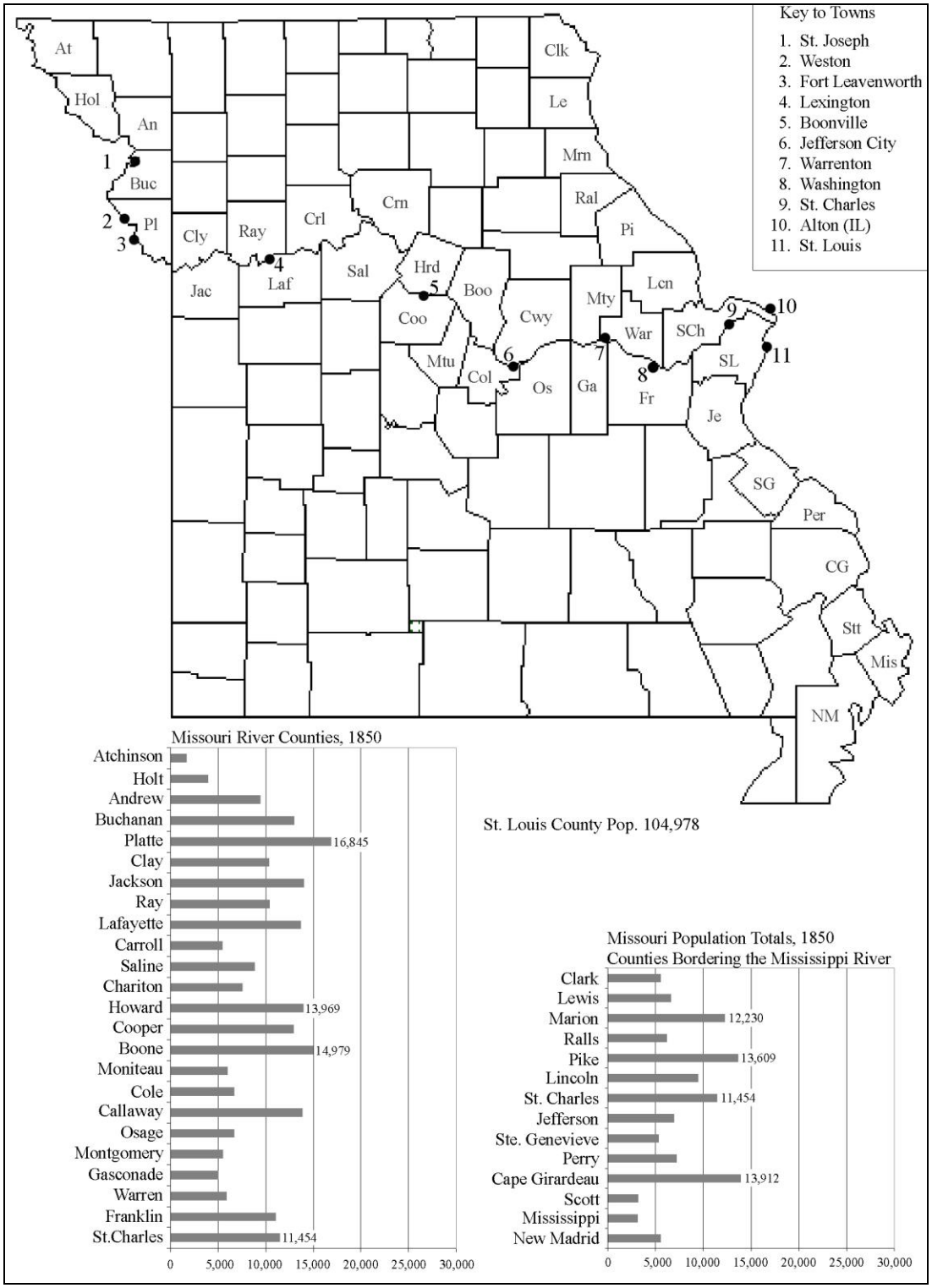
Map B2. Territory of Missouri in 1820, showing county lines, selected river towns, population tables from the Third United States Census.



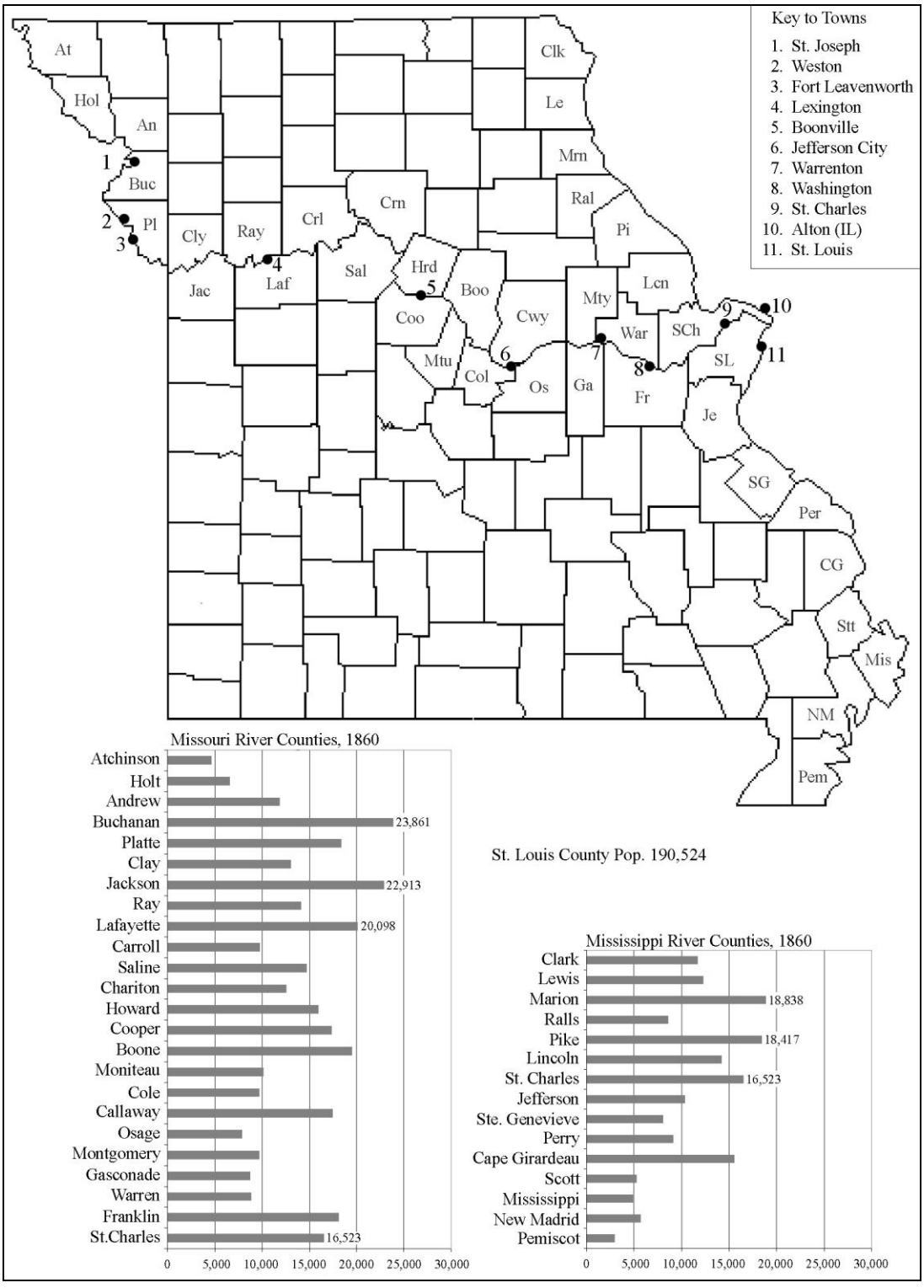
Map B3. State of Missouri in 1830, showing county lines, selected river towns, population tables from the Fourth United States Census.



Map B4. State of Missouri in 1840, showing county lines, selected river towns, population tables from the Fifth United States Census.



Map B5. State of Missouri in 1850, showing county lines, selected river towns, population tables from the Sixth United States Census.



Map B6. State of Missouri in 1860, showing county lines, selected river towns, population tables from the Seventh United States Census.

Appendix C. Condensed typescript of George C. Sibley's travel log April–June 1844.

George C. Sibley, Commonplace Book No. 3, George C. Sibley Papers, Missouri Historical Society, St. Louis, 1844, 23–77

Table C6. Travel Expenses Transcribed from Sibley (1844:77)

1844	Transcript of Sibley's Entry	$
Apr. 13	Passage from St. Charles to St. Louis [stage coach]	1.50
Apr. 15	Boots $2.50 - Socks $1.37 1/2¢ - Umbrella 75¢ - Handkerchief & Soap $1.12 1/2¢	5.75
Apr. 16	Bill at The Planter's House $2.75 - a Book 87 1/2¢	3.62 1/2¢
Apr. 20	Boot Buckles: 12 1/2¢ - Shaving Glass 18 3/4¢	0.31 1/4¢
Apr. 24	Passage from St. Louis to Wheeling (St. B. *Manhattan*)*	10.00
"	Passage from Wheeling to Baltimore (Stage & R.R. carr)*	11.00
Apr. 25	Road expenses (Tavern at Wheeling, & along the Road to Baltimore)	3.25
Apr. 27	Clothing &c. Purchased in Baltimore Vest Hat $4.50 - Dress Coat $17 - Dress pant $7 - Dress Vests $8 - Handkerchiefs $5.50 Drawers $1.50 - Summer Coats $8 - D. pants $2.50 3 Shirts $6 - Collar $1.50 - Stockings $1.37 1/2¢ - Bracer $1.75 Umbrella $4.50 - Knife $2.50 - Spectacles $2.50 - Books $1 Pictures, badges, paper, newspapers &c, Say $10	85.12 1/2¢
May 4	Bills and Expenses at the Eutaw House [Baltimore]; Washington &c.	13.87 1/2¢
"	Passage to Washington City & porterage (carr)	3.00
May 8	Bill & Expenses at Washington City [DC]	6.75

Table C6. —– *Continued*.

1844	Transcript of Sibley's Entry	$
"	Passage to Norfolk (including Carpet Bag $4)	6.00
May 9	Bill & Expenses. at Norfolk (St. B. *Osceola*)*	7.00
May 10	Passage from Norfolk to Baltimore (St. B. *Jewess*)*	6.00
"	Passage Baltimore. to Phil & porterage - R.R. Carr	4.50
May 15	Bills & Expenses. in Philadelphia	2.75
"	Passage from Phil to New York City: porterage &c.*	3.25
May 18	Bill & Expenses - Astor House $4.25 - Omnibus &c. $1.00	5.25
"	Tweed Pants: $5 - Under Shirts $4 - in New York City	9.00
May 18	Passage from New York City to Albany (St. B. *Knickerbocker*) including porter & Cabs*	3.00
May 19	Passage Albany to Rochester (Carr) & other Expenses.	9.75
May 20	Expenses. at Canandaqua (including 87 1/2¢ for razor strap)	2.37 1/2¢
"	Passage from Rochester to Buffalo (Carr)	2.25
"	Expenses at Rochester to Buffalo (Books 87 1/2¢)	2.87 1/2¢
May 21	Passage Buffalo to Chicago (St. B. *Great Western*)*	14.00
May 27	Expenses at Chicago & on Road to Peru [Illinois]	1.75
"	Passage from Chicago to Peru (Stage)*	6.00
May 29	Expenses at Peru	1.00
May 30	Passage Peru to St. Louis (St. B. *Chicago*)*	4.00
June 1	Bill Virginia Hotel porterage &c.	2.00

Table C6. — *Continued*.

1844	Transcript of Sibley's Entry	$
"	Lamp $12.50, Socks 50¢, Collars 37 1/2¢ & 25¢	13.62 1/2¢
June 4	Passage St. Louis to St. Charles (mail Stage)*	1.50
	Whole Amount	252.06 1/2¢
	Add a Book & Map at Buffalo	56 1/2¢
	[total expenses]	[252.63]
	Actual expenses of traveling	129.00
	Necessary purchases (Clothing chiefly)	97.63
	Expenditures Somewhat Superfluous (of this $15 was for a Lamp & a portrait of Henry Clay)	26.00

Source: George C. Sibley, Commonplace Book No. 3, George C. Sibley Papers, Missouri Historical Society, St. Louis, 1844, 23–77

Condensed typescript of George C. Sibley's travel log April–June 1844.

Whig National Convention:

April 12, St Charles: ...preparing to set out for Baltimore to attend the Whig National Convention on the 1st day of May [1844] as the Delegate from the First Electoral District of Missouri to which I was duly appointed in November last.

Steamboat *Manhattan*:

Apr. 16, St. Louis: ...the *Manhattan* set out for wheeling having on board about 40 delegates from Missouri & Illinois, and many other passengers. The boat is very much crowded. Before we started there was some parade and speechifying on board, none of which was to *my* taste, or very edifying to anybody … accommodations so so.

Apr. 19, Ohio River: ...the Ohio is *not* in very good order, and the *Manhattan* is *not* a fair runner. She will only rank about *third* rate. Capt. King, who is a very young man, is attentive and kind and certainly does his best. There are several Mormons on board, men, women, and children, among them are preachers. Our company is large and much mixed, Whigs, Socos [?], Mormons, &c., but we get along very harmoniously. Among the passengers, we have Dwarf 24 years old, 37 inches high of perfect form, called "General Tom Thumb." A man and woman claiming to be his father and mother are exhibiting him through the country for money. At sunrise this morning we were about 100 miles below Louisville. At about midnight we had got through the canal and lay at the wharf at Louisville ready to proceed. Putting out and taking in some freight detained the boat about 3 hours, during which time "The Boys" [Whig delegates] were pretty noisy and merry.

Apr. 20, above Louisville: ...at 3 o'clock this morning we continued our voyage up the Ohio.... Landed at Madison, Ind. at 7 o'clock and lay half an hour.... Madison is a very pretty place and appears to a thrifty business town..... At 10 p.m. we arrived at Cincinnati, and laid up for the night, having much freight, principally wheat from Illinois to land. "The Boys" went ashore, visited most of the hotels, singing Whig songs and making Whig speeches in all which they were joined most heartily by hundreds of the Whigs of Cincinnati – *I did not go from the boat*. I was very fearful that in their frolic "The Boys" would trench upon the Sabbath [Christian], but I was glad to find that such was not the case.

Apr. 21, Cincinnati: ...We left Cincinnati this morning at 10 o'clock. The boat has but little freight on board now, but does not get along any the faster for that.

Apr. 22, Marietta, Ohio: ...At noon arrived at Marietta where we were detained aground some two hours or more. The Ohio is falling and is now shallow in many places.

<u>Wheeling to Baltimore by Stage and Railroad</u>:

Apr. 23, Wheeling, Virginia: ...We arrived here at 1 o'clock this morning, took a short nap and afterwards a hearty breakfast, and then at 5:30 [a.m.] set out for Cumberland (in 7 coaches) on the National Road, 131 miles, stopped an hour at Washington....dined just at sunset at Uniontown and then went on all night.

Apr. 25, Cumberland: ...We reached this place at 7 o'clock this morning, had time to wash and take breakfast and then at 8 o'clock, set out on the rail road for Baltimore which is 180 miles from Cumberland. Dined at Harper's Ferry (rather poor fare) and at 6 p.m. reached Baltimore, all safe and sound, though much fatigued, dusty, and drowsy...thus have we completed the journey from St. Louis to Baltimore in 8 days and 2 hours...took a warm bath and went to bed.

Steamboat Osceola:

May 5, Washington City: ...visited the office of the American Colonization Society, and paid over to Mr. Lain the Secretary $650 on account of the estate of Thomas Lindsay (for transportation of his Negroes to Liberia) for which I took his receipt. [In early March 1844, Sibley had accompanied Lindsey's former slaves to New Orleans.] From Mr. Lain I learn that those Negroes arrived at Norfolk from New Orleans on last Friday the 3rd of May (they left New Orleans on the 7th of April) and that one of the children had died on the passage, which one he knew not. I suggested to Mr. Lain that I would probably go down to Norfolk and see the conditions and dispositions of those people; which he said he thought very desirable. The expense would not be much and possibly if there was anything like wavering discouragement or dissatisfaction among them, I might be able to remove it.

May 8, Steamboat *Osceola*: ...at 9 o'clock a.m. the boat left the wharf at Washington [D.C.] and proceeded rapidly down the river on her way to Norfolk. The distance is 120 miles to the mouth of the Potomac and then 100 miles down the Bay to Norfolk. The time of arrival at Norfolk varies according to the wind, tide, and weather, neither of which being favorable today. The captain says we shall hardly make the trip before midnight.... At 8 p.m. we entered the Chesapeake Bay.... The boat is quiet comfortable, pretty well found, and very well managed. The passage to Norfolk is $6 in the best cabin. The *Osceola* is a middle sized boat and is reckoned a swift runner. At night it became cloudy and dark and the wind pretty high. Some became "sea sick;" and we all soon betook ourselves to our berths as being the most eligible position under all the circumstances.

May 9, Norfolk: It was 3 o'clock this morning when the *Osceola* landed here.... [7 a.m.] I then called on Soutter & Belle, agents of the Colonization Society, to enquire for the Lindsay Negroes; and afterwards went to see them. I find them in comfortable quarters, all in good health and in fine spirit. So far from being at all discouraged by their long and rough voyage from New Orleans, they are more resolute and determined than ever to proceed to Liberia. They are all at work, that are all able to earn wages. (I desired the agents to keep them employed while here so as at least to defray them expenses, and also enjoined on them all to be industrious and economical which they promised to do.) Betsy, the daughter of Jenny about 9 years old, died of dysentery the day after they left New Orleans. Her mother says she died very happily, expressing full faith and hope in the Savior...I gave them some advice and instructions and again bid them all goodbye.... After supper went on board the steamboat *Jewess* bound for Baltimore, to leave this place tomorrow morning at 4 o'clock - went to bed in my berth.

Steamboat *Jewess*:

May 10, *Jewess*: ...The *Jewess* set out this morning at the hour appointed. The weather

fine, but the wind is rising. This is a larger and better boat than the *Osceola*. Not many passengers, passage $6 to Baltimore. Distance 160 miles, expect to arrive in time for the Philadelphia carr [sic].... The Bay is very rough today, and several of the ladies are very seasick. Among the passengers is a maniac, youth of about 19 years of age. His father, and a physician from Georgia, have him in charge. They are taking him to the Lunatic Hospital near Philadelphia..... Boxes of strawberries and barrels of peas in large quantities are here on passage for Baltimore. Reached Baltimore just in time for the carr, and in 5 minutes, just at dark, was on the way to Philadelphia. Carr crowded and inferior.

Philadelphia to New York City:

May 15, Philadelphia: ...I took leave of my sister and other friends, and crossed the [Schuylkill] River at the foot of Walnut Street to the rail road carr, and was quickly on the way rapidly to New York. At South Amboy we were shifted from the carr to a steamboat (rather a shabby one, the regular packet in repairing they say).

New York City to Albany:

May 17, New York: ...I am tired of this great city, bustling City of "Gotham," and am determined to pursue my journey homeward without any further delay, and have arranged to go up to Albany tonight in the steamboat *Knickerbocker* which leaves here this morning at 7 o'clock. The Astor House, as now kept, is by no means "what it is cracked up to be." The buildings, plan, and position are all doubtless very well, and I dare say the establishment sits very well with those who regard bustle, show, and extravagance more than comfort.... I think the Plantation House at St. Louis far better than the Astor House is now, and there are several smaller houses in St. Louis far preferable, in my opinion, to either of those - "everyone to his own notion" about such things.

May 18, Albany: ...The *Knickerbocker* is a very fine boat, at least equal in all respects to her pretensions. We landed at Albany this morning at 4 o'clock.... Employed a cab to convey me to the railroad depot, where I found a few shabby looking men and women, with their luggage, dosing near a dirty stove, waiting for departure of the carr northwardly; which is to take place at 7 o'clock. I deemed it prudent to keep a sharp look out for my baggage, having a good reason to think there are thieves and pick pockets about.... Precisely at 7, the train carr was in motion. The carrs are comfortable and we are not crowded.... Our route took us through, or in sight of, many pretty towns and villages: Schenectady, Amsterdam, Little Falls, Utica, Rome, Syracuse, Geneva, and Canandaqua, which last named place is 250 miles from Albany. We ran at the rate of about 15 miles an hour nearly the whole way (frequent short stops deducted), so that a mere glimpse of the country was all that we could get. I don't like this hurry scurry mode of traveling.

Steamboat *Great Western*:

[After visiting relatives in Canandaqua, Sibley took a short railroad trip to Rochester.]

May 20, Rochester: ...tomorrow the *Great Western* is to leave Buffalo for Chicago, and I am so desirous of taking passage in that fine vessel that I must go on in the carr today.... [In Buffalo] I secured a berth on board the *Great Western*, which is to sail for Chicago this evening at 4 o'clock.

May 22, steamboat *Great Western*: ...left Buffalo at 4 o'clock yesterday evening, the boat much crowded. The weather cold and unpleasant, the Lake [Erie] quiet rough...arrived at Detroit about midnight, 318 miles from Buffalo. I enjoyed the Lake scenery for an hour or two this evening, from the upper deck - it is extremely grand and beautiful.

May 23, Detroit: ...the boat lay here till 9 o'clock this morning. I availed myself of the opportunity to take a morning walk about the city. It is an interesting and pretty place, opposite on the Canada Side is the little town of Sandwich, which does not appear to be growing or improving. The Detroit River here is about as wide as the river at St. Charles [ca. 100 yards].... The scenery along the shores is pretty as seen from the boat. We entered Lake St. Clair at a little after 10 o'clock, and about 1 p.m. entered the River St. Clair. The breaking of a wheel detained us several hours today. A little after sundown we passed Fort Gratiot, 75 miles from Detroit, and entered Lake Huron. Along the shore of the river St. Clair (which is about 3/4 mile wide and nearly 40 miles long) are several thriving villages on the western or American side. The few that are on the British side are strikingly inferior.... Our entrance into Lake Huron just after sunset was exceedingly fine. The current of the river for 3 or 4 miles, where it pours down from the Lake, is said to run 17 miles an hour, requiring great power to stem it. This power being duly applied, our boat ascended majestically, though slowly passing the Fort and a light house, and we were fairly through the pass and on the bosom of the Lake before it was quite dark.

May 24, Lake Huron: ...the Lake is rough yet from the wind of last night...[the Lake] is very deep, water very blue and clear, abounds with fine fish: salmon, trout, white fish, and sturgeon.... We reached Mackinaw Island at half past 6 this evening...at 8 o'clock we entered Lake Michigan and continued our course all night.

May 25, Lake Michigan: ...the morning boisterous and the Lake rough, and many of our female passengers are very seasick. The fog and mist on the Lake last night impeded our progress somewhat. At 7 o'clock this morning stopped for wood at one of the Manitou Islands (about 100 miles from Mackinaw). The whole of this day was stormy, wet, and unpleasant. The Lake was so rough and so shrouded in fog that we could see nothing if we looked out.... There are many emigrants on board from the New England states, going to Wisconsin and Illinois, some of them have their

families, wagons, furniture, and nearly all of them are stowed in the "steerage" and must have a hard time of it. Altogether, there are now about 400 souls on board. There were 600 when the boat left Buffalo. The *Great Western* is one of 19 boats now employed by one company, carrying freight and passengers from Buffalo to Chicago (both ways) and the intermediate places. Besides these, there are many sail vessels and "propellers" employed in the same way. The whole distance is from Buffalo to Chicago is about 1100 miles and the average trips of this boat are 5 days up, and 4 days down. The *Great Western* is a large fine well found and well managed boat, though I am of opinion, much inferior so far as relates to comfort and speed to our largest V class Mississippi Boats, with one exception (the *Wisconsin* a new boat). She is preferable to any other boat now on these Lakes. The *Wisconsin* is said to be better.... Great quantities of white fish and salmon trout are here taken and salted in barrels for transportation. Whenever the Michigan and Illinois Canal is completed, or a paved or railroad established between Chicago and Galena (both of which are in contemplation and will doubtless be effected in a few years), then their fish trade will take a new direction, and become a very important item of subsistence and luxury throughout the great valley of the Mississippi. The salmon trout weighing from 8 to 80 pounds (I was offered one weighing 45 pounds for one dollar) inferior to no other fish...may be taken fresh packed in ice to St. Louis, New Orleans, etc., at cheap rates and this will all soon be realized. I doubt not.

May 26, Lake Michigan: ...The boat landed at Milwaukee about 1 o'clock this morning and put out a number of emigrants and their effects.... At half past 3 o'clock p.m. landed at Chicago.

<u>Stage Coach from Galena to Peru</u>:

May 27, Chicago: ...I had made up my mind "pretty much" to go from here to Galena, 160 miles, and from thence down the Mississippi to St. Louis; howbeit I had also a desire to see the country along the Canal Route to Peru and also the Illinois River from Peru down. From Chicago to Peru it is 98 miles, and the line of coaches are said to be very good. Owning to the immense rains, all the roads are reported decidedly bad, that to Galena decidedly the worst. I decided last night however, to take the Peru Route, and secured my passage in the mail coach for this morning..... After breakfast, at a little after 8 o'clock, I left Chicago in the stage for Peru. The stage is quite full and very much overloaded with baggage. It was near sunset before we got to Juliet (40 miles) a very pretty romantic town on the canal and Juliet River. The country thus far is exceedingly beautiful and fertile and rapidly filling up and improving - roads *very very* bad. Our stop here was only for half an hour, to change horses and the mail, and then we proceeded *very* slowly and roughly, all night. Of course, saw no more of the country, the night being cloudy and dark, till morning; which found us moving at a snails pace about 30 miles from Juliet. We got to Ottoway (a pretty thriving place at the mouth of the Fox River and near the canal) at about 10 o'clock, and stopped an hour to get breakfast, etc. After which, the weather being fair and

pleasant, we had a pleasant drive (in 2 coaches) to Peru (16 miles) where we arrived safely, though fatigued.

May 28, Peru, Illinois River: ...We arrived here at 2 o'clock this evening. The boat that we expected to find here was gone and none looked for till tomorrow. So we must submit to stay in this *poor* place till then. Our route from Chicago was along the valley of the canal, or in view of it, and at many points presented views of surpassing beauty. The terminus of the canal is at La Salle, a new town on the Illinois River. Occupying an elevated and very pretty position about 3 miles *above* Peru, La Salle is, I think, destined to grow up to considerable importance after the completion of the canal. The immense water power that will there be afforded, must itself, cause the town and its vicinity to flourish rapidly and permanently. And for the same reason, Peru must decline, as in fact it has already begun to do very evidently. This point (up as far as La Salle) may be considered as the head of navigation of the Illinois River. The distance by water from Peru to St. Louis, is reckoned from 280 to 300 miles.

Steamboat *Chicago*:

May 29, Peru (270 miles up the Illinois River): ...The steamboat *Chicago*, Captain Field, arrived here at 11 o'clock this morning, and at 12 was on the way back again to St. Louis. Of course, our party all embarked in this boat.

It seems proper here, to say what I think is due in relation to the Line of Stage Coaches between here Chicago and Peru. Our trip through was certainly tedious and uncomfortable enough, owing however to the bad weather and bad roads. The coaches, houses, and drivers – I pronounce good, very good. The only fault I could in conscience find was the enormous load of baggage that our coach governed under from Chicago to Ottoway. At Ottoway, our breakfast was *super excellent*, and well deserves a special notice.

We proceeded rapidly [on the *Chicago*] down the Illinois, stopping only at some small towns to exchange mail, and at a little before sunset landed at the beautiful town of Peoria (80 miles from Peru, at the lower end of Peoria Lake). Here we were detained till near dark, and then proceeded all night.

May 30, steamboat *Chicago*: ...At a little after sunrise we landed for an hour at Bardstown, 80 miles below Peoria, and about 100 miles from the mouth. The Illinois is now in a very high flood, overflowing its banks and a wide extent of the adjacent country. Farms, and villages even, are completely submerged and all looks like destruction and desolation.

May 31, St. Louis: ...We landed here this morning at a little after one o'clock. At Chicago, I had undertaken, by particular request, to take care of a young girl on the journey to St. Louis. She is from Genesea, New York, and was a passenger from Buffalo in the *Great Western*, under the care of a gentleman, a friend of her brother's.

The gentleman (I did not learn his name) came no further than Chicago, where he requested me to take charge of her, which it was out of my power to refuse. Her name is Emily Treat, sister of Mr. Treat of St. Louis: co-editor of the *Reporter*, attorney at law. She is about 16 years old, I suppose, and I think a sensible, well educated, and deserving young lady. My first business this morning, as soon as people were a stir, was to acquit myself of my duty towards Miss Emily, by finding her brother and conducting her to him; which I was able to accomplish in an hour or two....

I must make a note here concerning the boat *Chicago*. She is small, but very decidedly the neatest, best provided, best managed, best running, most comfortable boat of her class that I have ever been a passenger in. Captain Field is a polite, gentlemanly, clever fellow; and deserves the support and patronage of the public.

Mail Stage from St. Louis to St. Charles:

June 4, St. Charles: ...at length I have got *home* again, after an abundance of 52 days. Having traveled about 4000 miles, I came up from St. Louis in the mail stage, which owing to the badness of the road (especially through the Missouri Bottom, which is full of water and swimming in some places) was pretty busily employed from 8 o'clock this morning till after 3 this evening getting up to St. Charles. I find all well at home and pretty well to do....

Appendix D. Distance to locations in the Missouri Valley by land and water.

Table D1. Road Distances from St. Louis to Independence, Jackson County, Mo.

to	Mileage between	Mileage from St. Louis
St. Charles	20	20
Pittman's	12	32
Pond Fort	8	40
Taylor's	15	55
Camp Branch	12	67
Danville	18	85
Loutre Lick, Van Bibbler's	3	88
McMurtry's in Nine Mile Prairie	7	95
Grant's	7	102
Fulton	12	114
Columbia	25	139
Booneton or Leintz's	12	151
New Franklin	18	169
Arrow Rock	12	181
Smith's	10	191
Carthay's	20	211
Grand Pass	12	223
Demoss'	2	225
Webb's	6	231
Lexington	25	256
Rennick's	12	268
Independence	28	296

Source: Alphonso Wetmore, *Gazetteer of the State of Missouri: with a Map of the State, from the Office of the Surveyor-General, Including the Latest Additions and Surveys, to which is Added and Appendix Containing Frontier Sketches, and Illustrations of Indian Character, with a Frontispiece, Engraved on Steel* (New York, NY, 1837), 269.

Table D2. Distances by Water from St. Louis to Fort Leavenworth, Mo.

to	Mileage between	Mileage from St. Louis.
Mouth of the Missouri River	20	20
Charbonniere	12	32
St. Charles	8	40
Tavern Rock	20	60
Mount Pleasant	10	70
Washington	5	75
Marthasville	5	80
Newport	5	85
Pinckney, or Griswold City	10	95
Loutre	10	105
Gasconade	10	115
Portland	10	125
Smith's Landing	10	135
Cote sans Dessein	8	143
Jefferson City	12	165
Marion	12	177
Nashville	12	189
Rocheport	15	204
Franklin and Boonville	10	214
Arrow Rock	15	229
Glasgow	15	244
Jefferson	8	252
Doylestown	12	264
Mouth of Grand River	10	274
Caton's Landing	25	299
Webb's Landing	5	304

Table D2. –– *Continued*.

Fine's Landing	10	314
Lexington	15	329
Camden	20	349
Sibley	12	361
Richfield	10	371
Independence	8	379
Chouteau's	12	391
Cantonment Leavenworth	40	431

Source: Wetmore, *Gazetteer of the State of Missouri*, 270.

REFERENCES CITED

Manuscript Collections

Missouri Historical Society, St. Louis.
Circulars Collection, 1801–1973
Dexter P. Tiffany Collection, 1808–1902
Filley Family Papers, 1810–1953
George Champlain Sibley Papers, 1803–1853
Hamilton Rowan Gamble Papers, 1787–1876
Homer Stanford Papers, 1820–1848
James C. Lackland Papers, 1769–1935
Kenneth MacKenzie Papers, 1796–1918
Missouri History Collection, 1803–1977
Mullanphy Family Papers, 1780–1951
Saint Charles, Missouri, Collection, 1789–1962
Saint Louis History Collection, 1762–1976
Steamboats Collection, 1802–1986

Saint Charles County Historical Society, St. Charles, Mo.
Saint Charles County Circuit Records, 1834–1949

Western Historical Manuscript Collection, Columbia, Mo.
A.D. Harmon, and Zebulon Papers, 1835–1841
George W. Garriott Papers, 1838–1850
John J. Buse Jr. Collection, 1860–1931
McDonald and Cole, St. Charles, Missouri, Papers, 1849–1850

Published Primary Sources

Abbot, Ephraim, ed. *Valley Farmerr* [sic]*: A Monthly Journal of Agricultural, Horticulture, Education, and Domestic Economy, Adapted to the Wants of the Cultivators of the Soil in the Valley of the Mississippi.* Joyner Library, East Carolina University, Greenville, N. C.; St. Louis, Mo.: n. p., 1850. Text-fiche.

Alderson, B. A. "Wheat Growers' Association of St. Charles County." *Western Journal of Agriculture, Manufactures, Mechanic Arts, Internal Improvements, Commerce, and General Literature*. 1, no. 4 (1848): 588–595. Joyner Library, East Carolina University, Greenville, N. C.; American Periodical Series, reel 699; St. Louis, Mo.: n. p., 1848. Text-fiche.

Brokmeyer, Henry C. *A Mechanics Diary*. Joyner Library, East Carolina University, Greenville, N. C.; LAC 11616. Washington, DC: E. C. Brokmeyer, 1910. Text-fiche.

Franklin, Benjamin. “Ben Frankiln Gives Some “Advice to a Young Tradesmen,” 1748. In *The Colonial Merchant: Sources and Readings*, ed. Stuart Bruchey, 113–114. New York, NY: Harcourt, Brace, and World, 1966).

History of St. Charles County, Missouri (1765–1885): Written and Compiled from the Most Authentic Official and Private Sources, Including a History of Townships, Towns and Villages, Together with a Condensed History of Missouri; a Reliable and Detailed History of St. Charles County, Its Pioneer Record, Resources, Biographical Sketches of Prominent Citizens; General and Local Statistics; Incidents and Reminiscences. Illinois: publisher unknown, [1885]. Reprint, with an introduction by Paul R. Hollrah, St. Charles, Mo.: unknown publisher, 1997.

Hooper, E. J., ed. *The Western Farmer: Devoted to Agriculture, Horticulture, and Rural Economy*. Joyner Library, East Carolina University, Greenville, N. C.; American Periodical Series, reels 699–700. Cincinnati: n. p., 1839–1840. Text-fiche.

Lewis, Henry. *Das Illustrirte Mississippthal.* (*The Valley of the Mississippi Illustrated*). Dusseldorf, Germany: Arnz and Company, 1854. Reprint, A. Hermina Poatgieter, trans. and Bertha L. Heilbron, ed. St. Paul: Minnesota Historical Society, 1967.

Lyford, W.G. *The Western Address Directory: Containing the Cards of Merchants, Manufacturers, and Other Business Men, in Pittsburgh, (Pa.), Wheeling, (Va.), Zanesville, (O.), Portsmouth, (O.), Dayton, (O.), Cincinnati, (O.), Madison, (Ind.), Louisville, (K.), [and] St. Louis, (Mo.). Together with Historical, Topographical & Statistical Sketches for the Year 1837, of Those Cities, and Towns in the Mississippi Valley. Intended as a Guide to Travellers to which is Added, Alphabetically Arranged, a list of the Steamboats on the Western Waters.* Allen County Public Library, Ind.; Baltimore, Md.: J. Robinson, 1837. Text-fiche, New Haven, Conn.: Research Publications, reel 337, no. 3334, 1975.

Melville, Herman. *Typee.* New York: Wiley and Putnam, 1846. Reprint, New York: Oxford University Press, 1996.

Michaux, Andre. “Historical Anecdote of Robert Fulton.” *Journal of the Franklin Institute* 48, (1849): 39–40.

Missouri Historical Society. *Pierre Chouteau Maffit Collection, Papers of the St. Louis Fur Trade, Part I: The Chouteau Collection, 1752–1925*. Reel 21. Bethesda, Md.: University Publications of America, 1983. Text-fiche.

The Missouri Patriot. eds., Orear, N. C. and E. D. Bevitt. St. Charles City-County Public Library–Kathryn Linnemann, St. Charles, Mo.; St. Charles, Mo.: n. p., 1846–1847. Text-fiche

Tarver, M., H. Cobb, and F. R. Chateaubriand, eds. *Western Journal and Civilian*. Joyner Library, East Carolina University, Greenville, N. C.; American Periodical Series, reels 699–700.; St. Louis, Mo.: n.p.,1851–1856. Text-fiche.

Tarver, M. and T. F. Risk, eds. *Western Journal of Agriculture, Manufactures, Mechanic Arts, Internal Improvements, Commerce, and General Literature.* Joyner Library, East Carolina University, Greenville, N. C.; American Periodical Series, reel 699; St. Louis, Mo.: n. p., 1849–1851. Text-fiche.

United States Bureau of the Census. "Population Schedules of the Sixth Census of the United States, St. Charles, St. Francois, and St. Genevieve Counties, Mo." St. Charles City-County Public Library–Kathryn Linnemann, St. Charles, Mo.; Reel 230, vol. 6 (1840): 1–85. Text-fiche.

_____. "Population Schedules of the Seventh Census of the United States, St. Charles, St. Clair, St. Francois, and St. Genevieve Counties, Mo." St. Charles City-County Public Library–Kathryn Linnemann, St. Charles, Mo.; Reel 413 (1850) Text-fiche.

_____. "Population Schedules of the Eighth Census of the United States, St. Charles and St. Clair Counties, Mo." St. Charles City-County Public Library–Kathryn Linnemann, St. Charles, Mo.; Reel 644, vol. 20 (1860): 501–1030. Text-fiche.

Wetmore, Alphonso. *Gazetteer of the State of Missouri: with a Map of the State, from the Office of the Surveyor-General, Including the Latest Additions and Surveys, to which is Added and Appendix Containing Frontier Sketches, and Illustrations of Indian Character, with a Frontispiece, Engraved on Steel.* Joyner Library, East Carolina University, Greenville, N.C.; New York: C. Keemle, 1837. Text-fiche.

Secondary Sources

Arrighi, Giovanni. "The Development of Illusion: A Reconceptualization of the Semiperiphery." In *Semiperipheral States in the World Economy,* ed. William G. Martin, 11–44. New York: Greenwood Press, 1990.

Billington, Ray Allen, *The American Frontier: Attack and Defense*. Washington DC: American Historical Association, 1958.

———–. ed. *The Frontier Thesis: Valid Interpretation of American History?* N.Y.: Holt, Rinehart, and Winston, 1966).

———–. "Frederick Jackson Turner Visits New England: 1887." *New England Quarterly* 41 (Sep., 1968): 409–436.

————————. “Frederick Jackson Turner: The Image and the Man.” *Western Historical Quarterly* 3 (Apr., 1972): 137–152.

Braudel, Fernand. *Civilization and Capitalism 15th–18th Century: The Structures of Everyday Life: The Limits of the Possible,* vol. 1. Translated and revised by Sian Reynolds. London: William Collins Sons & Co, 1981.

Cassagrande, Joseph B., Stephen I. Thompson, and Philip D. Young. “Colonization as a Research Frontier: The Ecuadorian Case.” In *Process and Pattern in Culture: Essays in Honor of Julian H. Steward*, ed. Robert A. Manners, 281–325. Chicago: Aldine, 1964.

Chappell, Phil E. *A history of the Missouri River: Discovery of the River by the Jesuit Explorers; Indian Tribes Along the River; Early Navigation and Craft Used; the Rise and Fall of Steamboating*. Kansas City, Mo.: O Bryant & Douglas Book and Stationery Co., 1911.

Chittenden, Hiram M. *History of Early Steamboat Navigation on the Missouri River: Life and Adventures of Joseph La Barge, Pioneer Navigator and Indian Trader, for Fifty Years Identified with the Commerce of the Missouri Valley*. New York: F. P. Harper, 1903. Reprint, Lincoln: University of Nebraska Press, 1962.

Clark, Christopher. “Rural America and the Transition to Capitalism.” *Journal of the Early Republic* 16, no. 2 (1996): 223–236.

Corbin, Annalies. *The Material Culture of Steamboat Passengers: Archaeological Evidence from the Missouri River.* New York: Kluwer Academic/Plenum Publishers, 2000.

Cronon ,William. “Revisiting the Vanishing Frontier: The Legacy of Frederick Jackson Turner.” *Western Historical Quarterly* 18, (Apr., 1987): 157–176.

————————. *Nature’s Metropolis: Chicago and the Great West.* New York: W. W. Norton & Co., 1991.

Deane, Phyllis and William A. Cole. *British Economic Growth, 1688–1959: Trends and Structure,* 2d ed. University of Cambridge Department of Applied Economics Monographs viii. Cambridge, UK: University of Cambridge Press.

Doerflinger, Thomas M. “Commercial Specialization in Philadelphia's Merchant Community, 1750-1791.” *Business History Review* 57, (Spring, 1983): 20–49.

————————. *A Vigorous Spirit of Enterprise: Merchants and Economic Development in Revolutionary Philadelphia.* Chapel Hill: Unversity of North Carolina Press (1986).

Drago, Harry Sinclair. *Roads to Empire: The Dramatic Conquest of the American West*. New York: Dodd & Mead, 1968.

Dunaway, Wilma A. *The First American Frontier: Transition to Capitalism in Southern Appalachia,1700–1860.* Chapel Hill: The University of North Carolina Press, 1996.

Faragher, John Mack. *Sugar Creek: Life on the Illinois Prairie.* New Haven, CT: Yale University Press, 1986.

————————. *Rereading Frederick Jackson Turner*. New York: Henry Holt and Co., 1994.

Giffen, Lawrence Everett. "*Walks in Water": The Impact of Steamboating on the Lower Missouri River.* Jefferson City, MO: Giffen Enterprises, 2001.

Gillespie, Michael. *Wild River, Wooden Boats: True Stories of Steamboating and the Missouri River*. Stoddard, WI.: Heritage Press, 2000.

Graves, Joseph L. Jr. *The Emperor's New Clothes: Biological Theories of Race at the Millennium*. New Brunswick, NJ: Rutgers University Press, 2002.

Groover, Mark D. *An Archaeological Study of Rural Capitalism and Material Life: The Gibbs Farmstead in Southern Appalachia, 1790–1920.* New York: Kluwer Academic/Plenum Publishers, 2003.

Haines, George IV and Frederick H. Jackson. "A Neglected Landmark in the History of Ideas." *The Mississippi Valley Historical Review* 34, no. 2 (1947): 201–220.

Hancock, David. "'Domestic Bubbling': Eighteenth-Century London Merchants and Individual Investment in the Funds." *Economic History Review*, New Series 47, (Nov., 1994): 679–702.

Hanson, Joseph Mills. *The Conquest of the Missouri: Being the Story of the Life and Exploits of Captain Grant Marsh*. Chicago, IL: A. C. McClurg & Co., 1909. Reprint, Mechanicsburg, PA: Stackpole Books, 2003.

Horan, James D. *The Great American West: A Pictorial History from Colorado to the Last Frontier*. New York: Crown Publishers, 1959.

Hunter, Louis C. *Steamboats on the Western Rivers: An Economic and Technological History*. Cambridge, MA: Harvard University Press, 1949. Reprint, New York: Dover Publications, 1993.

Jacobs, Wilbur R. "Turner's Methodology: Multiple Working Hypotheses or Ruling Theory?" *Journal of American History* 54 (Mar., 1968): 853–863.

Jackson, Donald Dean. *Voyages of the Steamboat Yellow Stone*. New York: Ticknor & Fields, 1985.

Kulikoff, Allan. "Households and Markets: Toward a New Synthesis of American Agrarian History." *William and Mary Quarterly,* 3d ser., 50, no.2 (1993): 342–355.

_____. *The Agrarian Origins of American Capitalism.* Charlottesville: University Press of Virginia, 1992.

Larson, John Lauritz. "Grasping for the Significance of the Turner Legacy: An Afterword." *Journal of the Early Republic* 13 (Summer, 1993): 241–249.

Lass, William E. *A History of Steamboating on the Upper Missouri River*. Lincoln: University of Nebraska Press, 1962. Reprint, Lincoln: University of Nebraska Press, 1977.

Lewis, Kenneth E. *West to Far Michigan: Settling the Lower Peninsula, 1815–1860.* East Lansing: Michigan State University Press, 2002.

Lightfoot, Kent G., Thomas A. Wake, and Ann M. Schiff. "Native Responses to the Russian Mercantile Colony of Fort Ross, Northern California. *Journal of Field Archaeology* 20 (1993): 159–17.

Matson, Cathy. "'Damned Scoundrels' and 'Libertisme of Trade': Freedom and Regulation in Colonial New York's Fur and Grain Trades." *William and Mary Quarterly*, 3rd Ser. 51, Mid-Atlantic Perspectives (Jul., 1994): 389–418.

McCusker, John J. "Sources of Investment Capital in the Colonial Philadelphia Shipping Industry." *Journal of Economic History* 32, (Mar., 1972): 146-157.

————. *How Much Is That In Real Money?: A Historical Commodity Price Index for Use as a Deflator of Money Values in the Economy of the United States,* 2d ed. Worcester, MA: American Antiquarian Society, 2001.

McCusker, John J. and Russell R. Menard. *The Economy of British North America, 1607–1789.* Chapel Hill: University of North Carolina Press, 1991.

McCusker, John J. and Kenneth Morgan, eds. *The Early Modern Atlantic Economy.* Cambridge, UK: Cambridge University Press, 2000.

Macfarlane, Robert C. E. *History of Propellers and Steam Navigation: with Biographical Sketches of the Early Inventors*. New York: G. P. Putnam, 1851.

Nobles, Gregory H., ed. *American Frontiers: Cultural Encounters and Continental Conquest.* New York: Hill and Wang, 1997.

Oglesby, Richard E. *Manuel Lisa and the Opening of the Missouri Fur Trade*. Norman: University of Oklahoma Press, 1963.

Patterson, Thomas C. *Marx's Ghost: Conversations with Archaeologists.* Oxford, UK: Berg, 2003.

Petsche, Jerome E. *The Steamboat Bertrand: History, Excavation, and Architecture.* Washington, DC: National Park Service, U.S. Government Printing Office, 1974.

Pope, James Sterling. "A History of Steamboating on the Lower Missouri 1838–1849, Saint Louis to Council Bluffs, Iowa Territory." Ph.D. diss., Saint Louis University, 1984.

Price, Jacob M. "The Rise of Glasgow in the Chesapeake Tobacco Trade, 1707–1775." *William and Mary Quarterly,* 3d Ser., 11, Scotland and America (Apr., 1954): 179–199.

————————. "What Did Merchants Do? Reflections on British Overseas Trade, 1660–1790." *Journal of Economic History* 49, The Tasks of Economic History (June, 1989): 267–284.

————————. *The Atlantic Frontier of the Thirteen American Colonies and States.* Brookfield, VT: Ashgate Publishing Company, 1996.

Price, Jacob M. and Paul G. E. Clemens. "A Revolution of Scale in Overseas Trade: British Firms in the Chesapeake Trade, 1675–1775." *Journal of Economic History* 47, (Mar., 1987): 1–43.

Richardson, William H. *John Fitch: Patriot, Martyr, Pioneer Steamboat Inventor.* New York: American Society of Mechanical Engineers, 1932.

Riley, Glenda. "Frederick Jackson Turner Overlooked the Ladies." *Journal of the Early Republic* 13 (Summer, 1993): 216–230.

Roseberry, William. "Understanding Capitalism – Historically, Structurally, Spatially." In *Locating Capitalism in Time and Space: Global Restructuring, Politics, and Identity,* ed. David Nugent, 61–79. Palo Alto: Stanford University Press, 2002.

————————. "Political Economy." *Annual Review of Anthropology* 17 (1988): 161–185.

————————. "Marx and Anthropology." *Annual Review of Anthropology* 26 (1997): 25–46.

Savage, William W., Jr. and Stephen T. Thompson. The Comparative Study of the Frontier: An Introduction. In *The Frontier: Comparative Studies,* vol. 2, ed. William W. Savage, Jr. and Stephen I. Thompson, 3-24. Norman: University of Oklahoma Press, 1979.

Shepard, James F. and Gary M. Walton. *Shipping, Maritime Trade, and the Economic Development of Colonial North America*. Cambridge, UK: Cambridge University Press, 1972.

Steffen, Jerome O. "Insular vs. Cosmopolitan Frontiers: A Proposal for Comparative Frontier Studies." In *The American West, New Perspectives, New Dimensions*, ed. Jerome Steffen, 94–123. Norman: University of Oklahoma Press, 1979.

Steinberg, Sharon Y. "A Bold and Calculating Spirit – Capt. Oliver Filley (1784–1846)." Wintonbury, CT: Wintonbury Historical Society, 2002. Available from www.bloomfieldhistory.org.

Sutcliffe, Alice C. *Robert Fulton and the "Clermont"; The Authoritative Story of Robert Fulton's Early Experiments, Persistent Efforts, and Historic Achievements. Containing Many of Fulton's Hitherto Unpublished Letters, Drawings, and Pictures.* New York: The Century Company, 1909.

Taylor, George Rogers. *The Transportation Revolution, 1815–1860*. White Plains, New York: M. E. Sharpe, 1951.

Turner, Frederick Jackson. "The Significance of the Frontier in American History." *Annual Report of the American Historical Association for the Year 1893* (1893): 199–227.

————————. "The Colonization of the West, 1820–1830." *American Historical Review* 11 (Jan., 1906): 303–327.

————————. "Social Forces in American History." *American Historical Review* 16 (Jan., 1911): 217–233.

Wallerstein, Immanuel. *The Modern World-System: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*. New York: Academic Press, 1974.

————————. "From Feudalism to Capitalism: Transition or Transitions?" *Social Forces* 55, no. 2 (1976): 273–283.

————————.*The Modern World-System II: Mercantilism and the Consolidation of the European World-Economy, 1600–1750*. New York: Academic Press. 1980

———————. *The Modern World System III: The Second Era of Great Expansion of the Capitalist World-Economy, 1730–1840s.* New York: Academic Press, 1989.

———————. *Historical Capitalism with Capitalist Civilization.* New York: Verso, 1983.

———————. "Households as an Institution of the World-Economy. In *Creating and Transforming Households: The Constraints of the World Economy,* ed. Joan Smith and Immanuel Wallerstein, 3–26. UK: Cambridge University Press, 1992.

Way, Frederick Jr. *Way's Packet Directory, 1848–1994: Passenger Steamboats of the Mississippi River System Since the Advent of Photography in Mid-Continent America*. Athens: Ohio University, 1983. Reprinted revised, Athens: Ohio University, 1994.

Woodward, C. Vann. *The Comparative Approach to American History.* New York: Basic Books, 1968.

Wolf, Eric, *Europe and the People without History*. Oxford, UK: Oxford University Press, 1982.