MAY 1991

Rhode Island History

A RHODE ISLAND HISTORICAL SOCIETY PUBLICATION

Volume 49, Number 2

MAY 1991

Rhode Island History

Volume 49, Number 2

Published by
The Rhode Island Historical Society
110 Benevolent Street
Providence, Rhode Island 02906-3152
and printed by a grant from the State of
Rhode Island and Providence Plantations,
Bruce G. Sundlun, Governor;
Kathleen S. Connell, Secretary of State.

CONTENTS

RHODE ISLAND HISTORY (ISSN 0035-4619)

RHODE ISLAND HISTORY is published in February, May, August, and November by The Rhode Island Historical Society. Second-class postage is paid at Providence, Rhode Island. Society members receive each issue as a membership benefit. Institutional subscriptions to RHODE ISLAND HISTORY and the Society's quarterly newsletter are $15.00 annually. Individual copies of current and back issues are available from the Society for $4.00. Manuscripts and other correspondence should be sent to Albert T. Klyberg, editor, at the Society. Postmaster: Send address changes to Rhode Island Historical Society, 110 Benevolent Street, Providence, Rhode Island 02906-3152.

A MAP

of the

BLACKSTONE CANAL

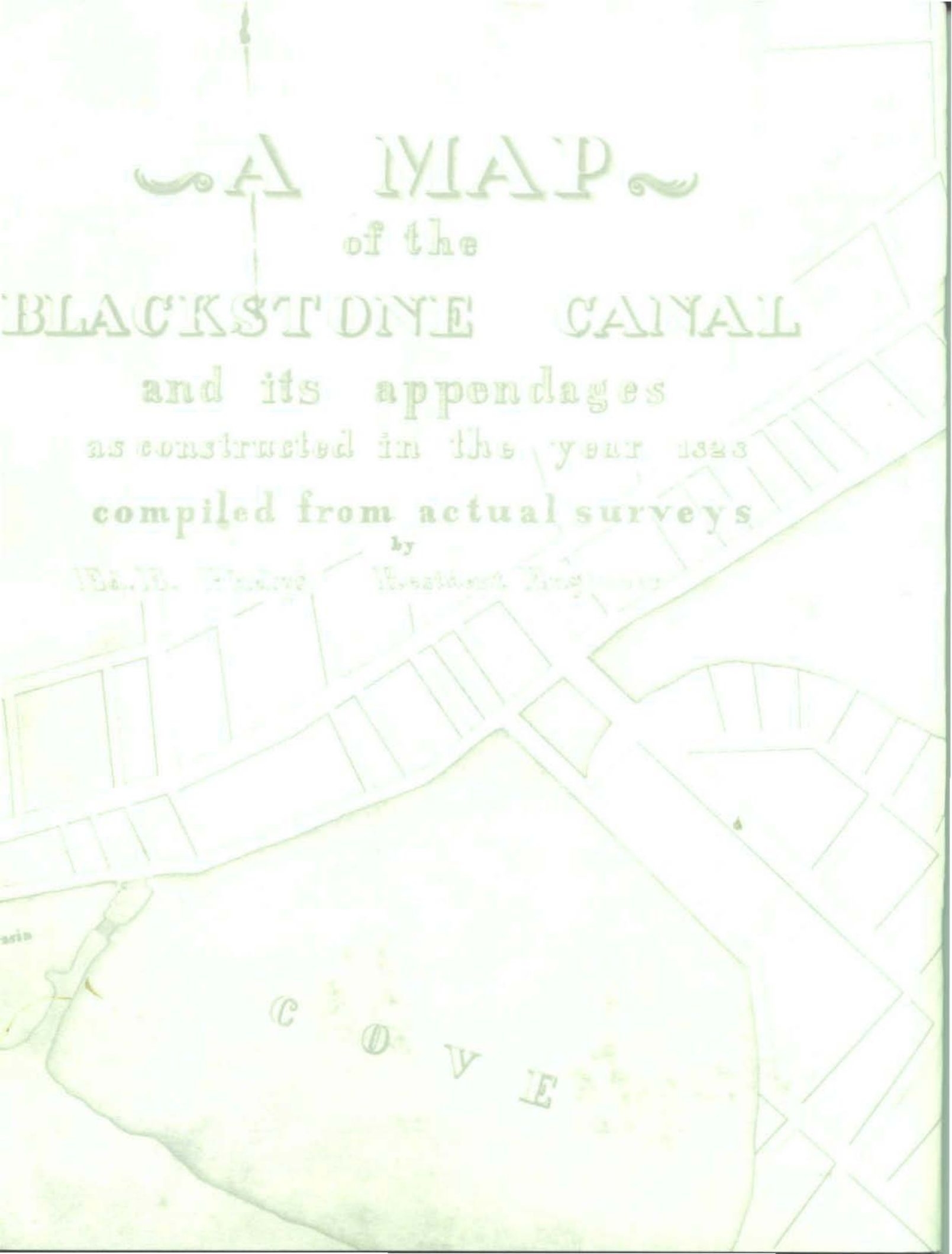
and its appendages

as constructed in the year 1823

compiled from actual surveys

by

B. H. Latrobe, Assistant Engineer



Introduction

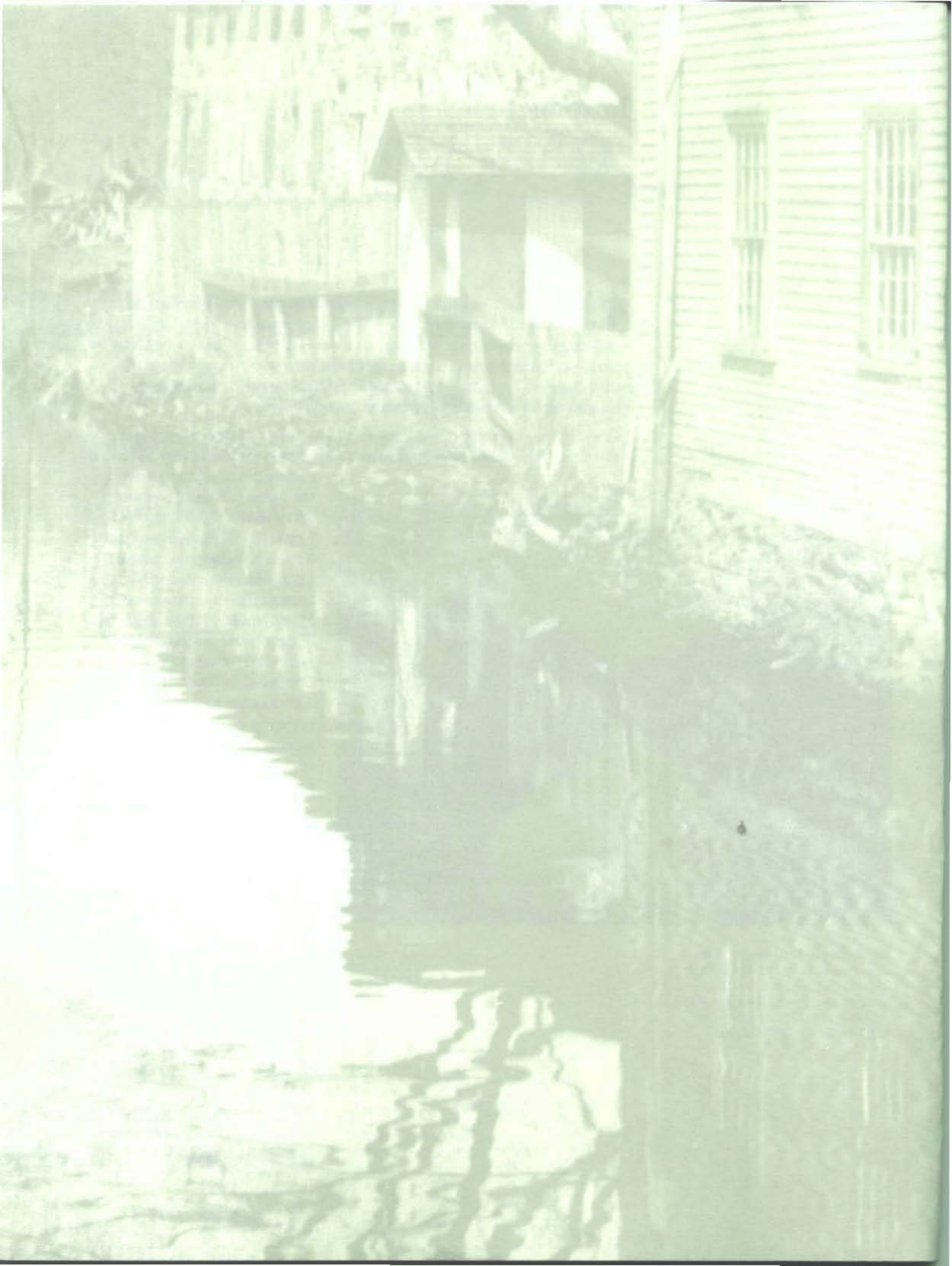
This issue of *Rhode Island History* focuses on the period of industrialization in the Blackstone River valley. Our principal articles deal with two significant enterprises of that period: the Blackstone Canal, an impressive though short-lived project of ambitious local entrepreneurs, and the early mill village at Old Ashton in Quinnville, in many ways a microcosm of changes that the Industrial Revolution brought about.

Besides examining these enterprises, this issue has an additional purpose: to show the interrelationships among the efforts of those working to make the history of the past accessible to the present. Toward that end we have also included notes by the Rhode Island Historical Society's manuscript curator, a planner for the Rhode Island Department of Environmental Management, and the chairman of the Blackstone River Valley National Heritage Corridor Commission. The latter two authors represent agencies currently involved with preserving the artifactual history of the Blackstone Valley in conjunction with the creation of a linear park along the river.

Together with these agencies, then, we invite you to tour the Blackstone River valley, both in this issue of *Rhode Island History* and in person.

Looking north along the Blackstone Canal at the Kelly mill site at Old Ashton, Quinnville, this 1903 photograph shows the original 1815 mill and its 1845 stone addition. RIHS Collection (RHi X3 86).

"A Map of the Blackstone Canal and Its Appendages as Constructed in 1828," 40 plates. Compiled from surveys by Ed. E. Phelps. RIHS Collection (Mfilm G 3762 .B48 1828).

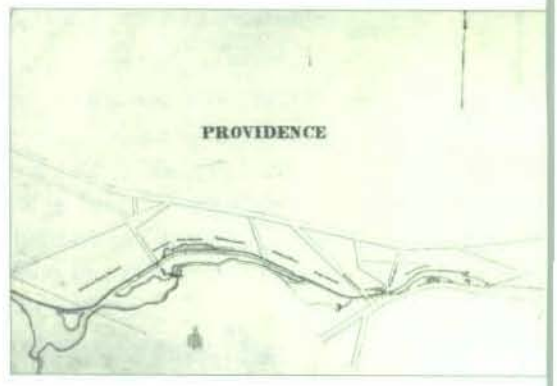


Ship's Captain, Shop's Cotton: Wilber Kelly and Early American Industrialization

DOUG REYNOLDS

In the village of Quinnville in Lincoln, Rhode Island, across the Blackstone River from Ashton in Cumberland, lies the Wilber Kelly house and mill site. The only remaining structure on the site is a one-and-a-half-story Greek Revival single-family house, probably built in 1835 as a home for Wilber's son Christopher, then the manager of the Lonsdale Company's factory there. From the mid-1820s to 1831 Wilber Kelly oversaw this factory and its mill village (which still exists nearby) as the company's chief agent, while at the same time maintaining an involvement in the construction and operation of the Blackstone Canal, which ran, not coincidentally, through the middle of the site. Less well known than some of his business associates, Kelly nonetheless has a place in the history of the Industrial Revolution in Rhode Island: he was one of the men who directed the monumental economic and social changes that were transforming the face of the state during the early decades of the nineteenth century.[1]

Wilber (variously Wilbur or Wilbour) Kelly (Kelley) was born in 1782 in Barnstable, Massachusetts. Raised an Episcopalian like many in the Rhode Island elite to which he aspired, Kelly moved to North Providence as a young man. Little else of his early years is known.[2]



Kelly went to sea as a youth in the mid to late 1790s, when coastal and international shipping under the United States flag reached an all-time high. The success of this carrying trade was a direct result of the British navy's blockade of Europe during the French Revolution and Napoleonic Wars, a blockade that left the way clear for American shippers to fill an international transportation void and help the nation pay off its debts from the American Revolution. While this trade resulted in an undeclared naval war with France in 1796-97, it also resulted in a tremendous demand for naval stores, ships, and sailors. The shipping boom lasted until 1807, when President Jefferson declared an embargo on all European trade to and from American ports in order to avoid the European conflicts and to punish Britain for its restrictions on neutral shipping by withholding raw materials.[3] Kelly was twenty-five years old at that time and probably had a decade of sea experience behind him.

Many young men were drawn to the sea in the early national period, but Wilber Kelly's rise and success were less common. When he married Abby Eliza (sometimes Elizabeth) Whipple, the only daughter of a prominent Rhode Island family headed by Christopher Whipple, in 1810, he was twenty-eight years old and a ship's captain for the Providence merchant firm of Brown and Ives.

Doug Reynolds is the staff historian of the Blackstone River Valley National Heritage Corridor Commission.

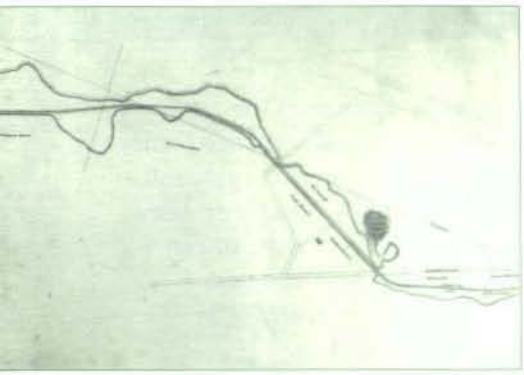
Abby was about twenty-three.[4] Kelly appears to have continued in the service of Brown and Ives during the War of 1812, captaining a coastal merchant vessel in those dangerous times.[5]

As captain of the second *Ann and Hope*, owned by Brown and Ives (and named for the wives of partners Nicholas Brown and Thomas Poynton Ives), Kelly sailed from the port of Providence on 14 August 1815 bound for the Orient. The ship carried 56,495 tons of cargo and had thirty-two men on board. Kelly made the 4,641-mile voyage from Newport to Canton in only twenty days, setting a speed record for that route. The entire journey, as recorded by the ship's log, covered 12,400 miles in eighty-four days. Kelly returned with nine hundred tons of tea from Nanking, China. Iron and blocked tin were used as ballast.[6]

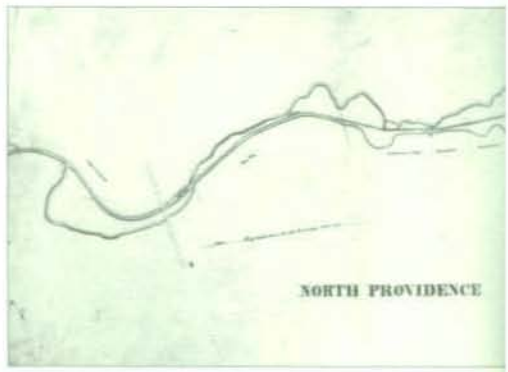
Voyages sometimes proved perilous. The *Ann and Hope* once suffered severe damage in a storm and was almost wrecked while sailing to Europe under Captain Kelly's direction. On another occasion, while the vessel was in Canton partially loaded with cargo, Kelly took the unprecedented action of ordering the crew to stay on board and guard against thieves and pillaging, then a common problem for ships in that port. Kelly had to quell the ensuing rebellion by threatening to stop the wages of any man who disobeyed his order.[7]

Kelly had more than a managerial problem to think of when he faced the seamen's rebellion. As with all mercantile voyages of the era, the captain had a financial stake in this voyage. Merchants (or factors), like the firm of Brown and Ives, bought goods and consigned them to ship captains for delivery. The captain then acted as an agent in selling the goods upon his arrival in the destination port, finding buyers, determining prices, making credit arrangements, and otherwise overseeing transactions. For this he earned a substantial commission. The captain also purchased goods to be returned to his home port, or elsewhere as he saw fit, thereby gaining a commission on those goods as well. A successful voyage could bring both captains and merchants a small fortune.[8]

In 1816 Kelly became an investor in cotton manufacturing when he and several partners, including fellow Rhode Island mariner Samuel Young, purchased the Wenscutt mill in North Providence. But difficult economic times ruled the postwar world, and Kelly lost his investment in a sheriff's sale in September 1816. (Edward Carrington, a prominent merchant and later a leader in the formation of the Blackstone Canal Company, bought the mill at auction.)[9] Such bankruptcies were a common occurrence at this time.



In the early to mid 1820s Kelly captained small packet ships, including the sloop *Richard Rush*, making regular voyages to Philadelphia and other Atlantic seaports. Kelly also served as a director of the Union Insurance Company of Providence during this time.[10] The insurance industry had its roots in shipping, with joint-stock companies being formed as far back as the early seventeenth century in order to share the burden of lost ships. The corporate model developed for shipping was easily transferred to insurance and banking and thence to industrial activities such as textile manufacturing. Brown and Ives was among the largest and earliest commercial firms to follow this



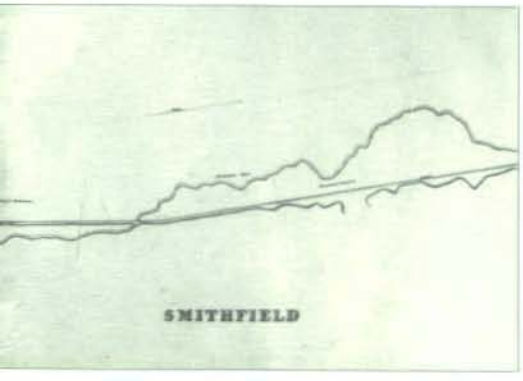
evolutionary course, and Wilber Kelly's close association with the firm put him in a good position to both understand and follow his employers' lead.[11]

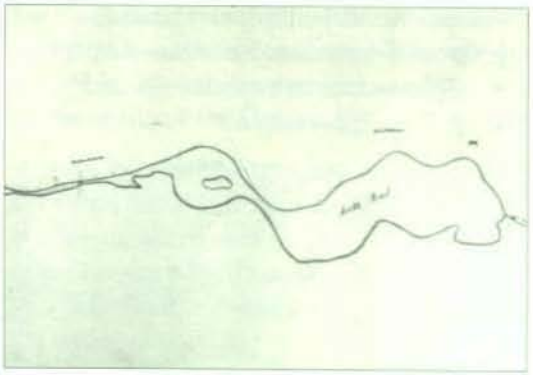
The effects of Rhode Island's shift from merchant capital to manufacturing capital cannot be overestimated. Investments undertaken by Rhode Island capitalists led the nation in transforming both the social relations of production and corporate structure by creating radical changes in standards of living, consumption patterns, the logic behind reproduction, gender and ethnic relations, and other areas of social and economic life. Yet business practices, including the use of agents, bookkeeping, marketing, and billing, changed little in the transition.

Kelly's move into insurance and manufacturing was prompted by a number of factors that would have led him to conclude that his future lay on land rather than at sea. First was the decline of the China trade and the continued rise of coastal shipping, surely a more mundane kind of commerce for the world-traveled Kelly. Further, the Whipple family, into which he had married, had land holdings along the Blackstone River, holdings which could be exploited for canal use in a region that was being transformed into one of the densest manufacturing areas in the world.[12] Finally, the Kellys had brought four children into the world, and Kelly was no doubt motivated by his family responsibilities.[13]

On 28 November 1823 Kelly purchased a controlling interest in the former Smithfield Cotton and Woolen Company from George Olney for five thousand dollars, obtaining fourteen of twenty-seven shares as well as the company's land, buildings, and equipment. In addition, Kelly acquired the rights to use an access road crossing the neighboring land of Simon Whipple. The Quinnville site, a little more than ten acres split down the middle by the Blackstone River and a sluiceway for the mill's waterpower, also contained a sawmill, mill privilege, and four dwellings.

The Smithfield Cotton and Woolen Company had been formed by George Olney and six partners in 1809. Their mill represented one of the first efforts, outside those of the Slater family, to bring mechanized textile spinning to America. Formation of the company was part of a veritable boom of industrialization along the Blackstone River from 1809 to 1811. During this period investors founded several dozen mills along the river in Pawtucket, Cumberland, Mendon, Uxbridge, and Millbury, as well as in communities on ancillary rivers like the Mill, Branch, Peters, West, and Mumford.





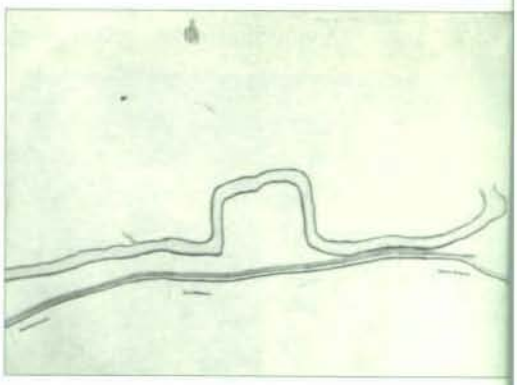
Olney and his partners—Simon Whipple, George Smith, Thomas Arnold, Joseph Wilkinson (all of Smithfield, which then included present-day Lincoln), and William and Joseph Whipple (of Cumberland)—founded their firm as common tenants, or on-site shareholders, on 11 December 1809. Other agreements on that date empowered the Smithfield Cotton and Woolen Company to assume collective control of the site's waterpower and stipulated that Simon Whipple was to build a dam, which was to be tested thoroughly before other structures were erected. The owners also agreed to use surrounding woodlands as their source of timber for the new mill, and shortly thereafter they erected a small sawmill for that purpose.[14]

Between 1810 and 1820 Olney and Whipple also erected a gristmill and four small but comfortable workers' homes. The largest and most elaborate of the dwellings was reserved for the agent, or mill manager. Local farmer and mechanic Dexter Ballou was hired to oversee the development and installation of carding and spinning equipment for the factory. The investors eventually erected the mill itself, a two-and-a-half-story 30-by-60-foot structure, in 1815, only after flood damage to the dam had been repaired. Ballou built five carding machines and spinning machines, with a total of 252 spindles. A fifth home was added to the site by 1819.[15]

Despite the rapid creation of the company and agreements to further develop the site, the mill failed to produce any significant amount of cloth goods. This failure came about largely because of the economic depression that befell American manufacturers with the end of the War of 1812. Water-flow troubles continued to plague the mill as well. In 1817 Ballou, who had stayed on to manage the factory for investors, pulled out all the machinery and sold it to the new Lyman and Bartlett mills at Woonsocket Falls. At that point the mill temporarily closed.[16]

As a result of an unrecorded joke by local politician and landowner Henry Scott, the mill became known as the Sinking Fund Mill. "The establishment is small and been in operation but a short time," the Census of Manufactures reported in December 1820. The census taker, Joseph Mann, noted that the mill operated 350 spindles, using about three hundred pounds of cotton per week.[17] These figures suggest that fewer than a dozen men, women, and children, including management, were involved in operating the mill.

Olney and his partners apparently had had no new economic or social ideas in mind when they created their small factory and community. As their counterparts would elsewhere, they simply imitated the efforts of Samuel and John Slater. They built the homes only to house workers, and they bought their manufacturing equipment, including new power looms to weave thread spun on the site, from the Wilkinson machine shop and other local establishments. Yet the erection of gristmills and sawmills, as well as the continuation of such agricultural activities as livestock raising, marked a significant economic mix. Just how "revolutionary" Smithfield's industrial revolution was remains an open question. The firm's founders did not necessarily challenge the prevailing agricultural way of life, as industrialists did most notably at Lowell, Massachusetts. Instead, mechanized production was offered as a complement or supplement to agricultural life and family-based production.[18]

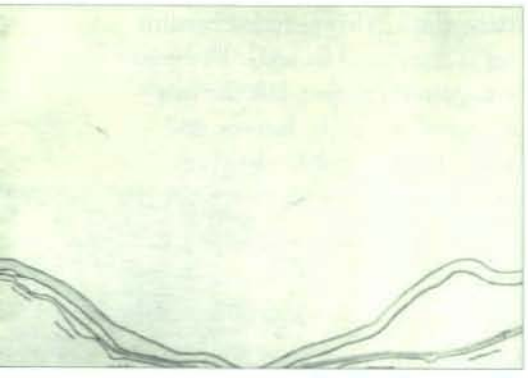


There was, in fact, considerable debate as to what role the factory should play in American life. Opposition to the growth of factories was fanned by the example of England; American travelers there saw firsthand the squalor, poverty, and slums associated with the earlier English industrialization and often concluded that such ills were the direct result of the new capitalism. The debate subsided only when Rhode Islanders saw the coming of the factory as both imminent and necessary, a realization precipitated by the Embargo of 1807 and the War of 1812, which prevented the importation of goods from abroad.

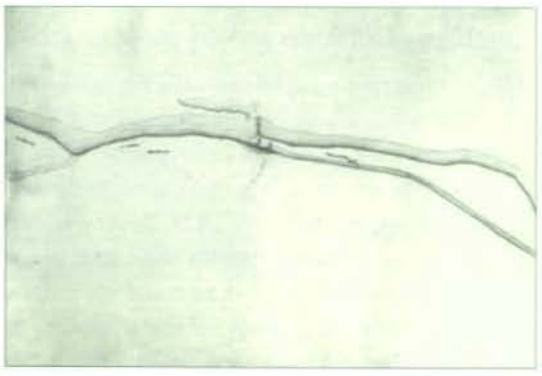
In strong and purposeful contrast to English manufacturing practices, there emerged in this country two separate and distinct models of factory development and management, both based in large part on moral considerations. The most visible model was the Waltham system, which was fully developed at Lowell. This system was characterized by large urban factories, jointly owned by mostly absentee stockholders, which carried out all manufacturing operations in the mass production of goods. These huge factories employed hundreds, even thousands, of unskilled young female hands from rural farms. Strict control of both leisure and work time assured concerned parents of their daughters' continued moral purity.[19]

The Rhode Island system, on the other hand, was characterized by smaller mills performing only certain manufacturing operations and generally employing fewer than a hundred workers. These mills often hired several members of a family, or even entire families. Millowners housed some employees and their families in small individual homes—not in large, closely managed boardinghouses, as at Lowell—while also drawing on nearby farm families for labor.[20] The housing owned by Kelly consisted of separate structures with small yards, erected within a hundred yards of the mill. Goods and services were provided through a local store operated by Charles Whipple, who apparently worked closely with Kelly. Civic institutions such as churches and temperance societies were founded and overseen by the millowners.[21] Like most other Rhode Island mills, Kelly's mill was owned (as shipping businesses were) by a small circle of investors who closely held a limited issue of stock. Owners maintained continuing contact with village life, factory work, and the world of investment.

The mill may seem like a far less ambitious enterprise than it actually was. Kelly had purchased perhaps the smallest mill village ever founded in Rhode Island; little had been added to the Smithfield Cotton and Woolen Company since 1819, and the site still consisted of one factory building, five dwelling houses, a stone sawmill, and small outbuildings. The entire village occupied seventeen acres of land, much of it pasture. Kelly lived at the site between 1823 and 1831 only sporadically while also maintaining a residence in North Providence. About 1830 he settled on affluent Benefit Street in Providence, where he would live the remainder of his life.



A writer recorded his impression of the site during the first boat voyage on the Blackstone Canal (then still under construction) on 4 July 1827: "At Kelly's factory, a remarkably neat establishment directly up on the canal, we were greeted by the smiling faces of scores of neatly dressed females who thronged the windows of the factory. The banks for some distance here are lined with good stone wall, and it is perhaps the prettiest section of the route up to Albion."[22]



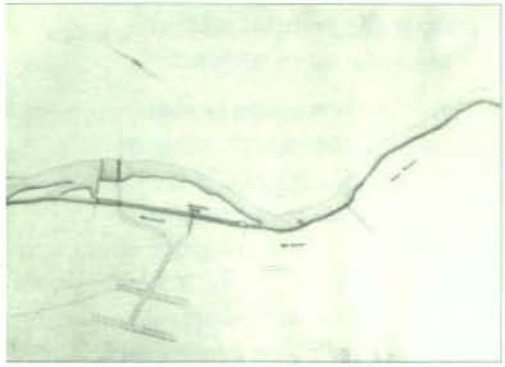
Those workers living in mill housing at the site, probably no more than thirty, paid rent through deductions from their earnings, as was the practice of the era.[23] An account book from the canal company records the main items delivered to the mill

site from December 1829 to May 1830. These included 20 hundreds (casks) of molasses, 386 bushels of corn, small amounts of flour and butter, more than a thousand bushels of salt, 1,268 pounds of hay, and 66,838 pounds of plaster.[24] The importation of foodstuffs in late winter and early spring, for human and beast alike, bespeaks the difficult farming of the region. Many of these goods were directly distributed to mill workers through credit at the company store. The large amount of plaster delivered indicates that the store supplied other individuals in the region besides mill workers, as there was no significant building program at the site at this time.

Two years later a census of manufactures recorded more detail about the site, describing it as a 1,200-spindle cotton mill whose sole source of power was water. The structure housed thirty-four looms. Total capital investment was reported at $30,000. Twelve men, 37 women, and 11 children were employed, but there was no listing of wages by sex or age. The average annual wage was $250, with a work-week of six 12-hour days. These figures were comparable to those of other mills in the Blackstone Valley, although there were larger mills in the area. In Rhode Island some 119 cotton mills existed in 1832. These employed 1,744 men, 3,301 women, and 3,550 children and paid an aggregate wage of $1,214,515; the total value of their production was $1,627,134.[25]

A comparison of surnames on the few surviving early payroll records and on maps showing land ownership within a mile or so of the mill offers a picture of where some of Kelly's labor force came from. About 40 percent of the workers listed on the payrolls had surnames that appear on local maps, suggesting that Kelly's workers came from small nearby farms. The names Whipple, Tillinghast, and Angell in these documents probably represent the poorer, distant relations of some prominent Rhode Island families. Names of male adults are not common to both payrolls and maps—Philip Tillinghast is the sole exception—indicating that men probably stayed on the farm while young women turned to the mill to supplement family income. Males listed on the payrolls most likely lived with their families in one of the four mill houses (no records of tenants has been found). These homes were probably reserved for artisans, mechanics, and supervisors.[26]

The mill site contained not only the factory but substantial elements of preindustrial and mercantile culture as well. Kelly in fact operated a farm at the mill, growing hay and keeping livestock, including horses for the canal tow barges, and he apparently put valued factory operatives to agricultural work in order to retain their skills when demand for textiles became slack. This practice became common at each of the Lonsdale Company's later factory sites as well. The grist-mill seems to have been shut down before Kelly acquired the site, but the saw-mill remained operational. Also on the site were barns for cattle, horses, and hay, a hog shed, an ice house, and a two-story company store where workers could buy foodstuffs and dry goods on credit.



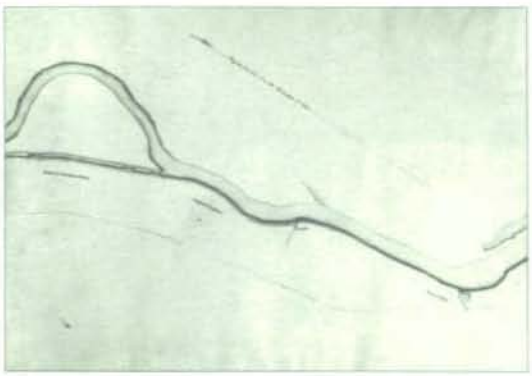
Kelly probably bought the mill because of its proximity to the proposed Blackstone Canal. Like Nicholas Brown and Thomas Poynton Ives, he was closely associated with the Blackstone Canal Company, serving on its board of directors, and he had no objection to allowing the canal to be cut through the middle of his little village in 1827 and 1828. To the contrary, Kelly bought the mill site while the preliminary planning for the canal was being carried on, and it is likely that his purchase was more than mere speculation; his access to inside information and his service as a front for the investors suggest that it was more of a sure bet. The canal would lower freight and production costs at his mill and create an opportunity to expand both his commercial and his manufacturing interests.

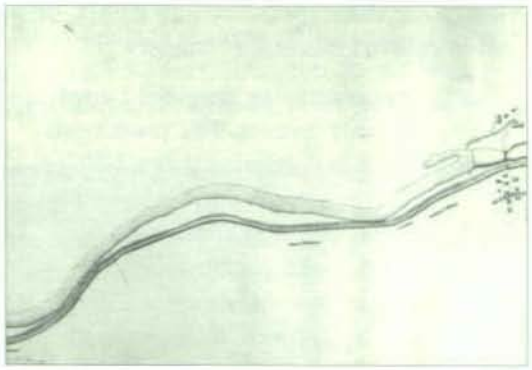
In September 1826 Kelly sold to the Blackstone Canal Company, for one dollar, the "free right and privelege [*sic*] to make a navigable canal, towing paths, locks, and bridges" through his factory site. The parties agreed that the existing mill trench would be widened to thirty-five feet and deepened to six feet to meet canal specifications. In order to make the route navigable and "give greater security to the said dam and abutments in times of flood and frost," Kelly also agreed to extend the eastern abutment of his dam to create a pond for as far as his land extended above the dam.[27]

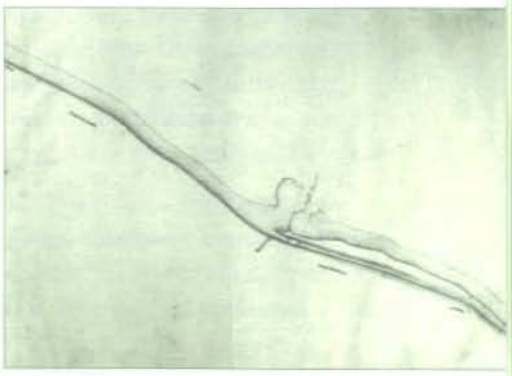
A second agreement extended the canal southward through Kelly's land at a level consistent with the water level at his dam. The agreement stipulated that rock walls would be installed on both sides of the canal. Below the factory the canal would be widened to forty-four feet at the top and twenty-four feet at the bottom and deepened to six feet. The canal company would build two bridges over the canal, one near the sawmill at the dam "suitable for teams to pass" and another near the factory for foot passengers.[28] Kelly retained all fishing rights and was allowed to take water from the canal to power his mill so long as the water level did not drop more than a foot below his dam and "a mean velocity or current of not more than one mile per hour . . . be maintained." Kelly agreed to keep the dam in good repair at his own expense.[29]

In addition to serving on the board of directors of the Blackstone Canal Company, Kelly also sat on the board of the Lonsdale Water Power Company, an unchartered corporation founded by Brown and Ives with Edward Carrington and others in 1825. A majority of that board's members, including Carrington, also served on the canal company's board. In an agreement signed on 18 May 1826, Kelly turned over direct control of his mill and village to the Lonsdale Water Power Company (they are listed among the company's first assets) in exchange for nine hundred dollars, stock, and a position for five hundred dollars a year as the company's head agent. As agent, Kelly was given full charge of purchasing raw stock, coordinating the sale of finished goods, and maintaining the mill site's structures and machinery.[30]

Under Kelly's guidance the company bought additional estates and water rights along the Blackstone River in Smithfield and Cumberland. By 1835 Lonsdale officials had extended control to about 435 acres from Scott's Pond northward. The idea behind the company's formation and land acquisitions was to use the Blackstone River both as a source of power and as an inexpensive means of transportation. Together the canal and Lonsdale companies represented the best interests of shipping and manufacturing in American economic change, interests that included a continued dependence on agricultural activity.[31]







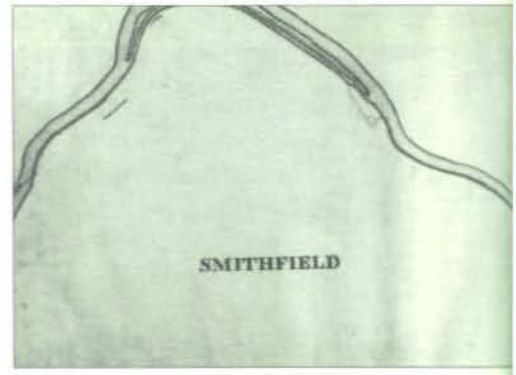
Rhode Island's transition to industrialization, physically and socially less drastic than what occurred at Lowell, proved to be both pragmatic and idyllic. The mill village, not the city or the farm, came to be seen as the most efficient and aesthetically agreeable locale for industrial development. Rural mills could be located close to available labor, as well as to ports and urban areas; they offered a means of survival to desperate farm families; and they were relatively inexpensive to establish.

The evolution of factory management allowed time for considering the terms of industrial development. Rural values and ideals came to be mixed with the new capitalist ideology in a persuasive argument for both the moral and the material salvation of yeoman farm families, an argument reflecting a recipe for millowners' paternalism.[32] Proponents of the Rhode Island system of manufacturing argued that workers sought the mills out of desperation, and that mill work, mill housing, and company stores were far better than perpetual deprivation, rural starvation, or urban slum living.[33] Moreover, mill villages improved the civility and morality of their inhabitants, who otherwise would be among the meanest and lowest class of people. The system was commended not merely by an economy of scale but by a *moral* economy of scale. Wilber Kelly reflected the nature and extent of this paternalism, for example, when he responded to concerns about a boy sent to work in the Lonsdale mills. Kelly's emphasis on wage labor rather than charity, an emphasis reflecting the substitution of industrial time discipline for the task discipline of subsistence farming,[34] is significant here also:

> In answer to your inquiries respecting young Gogin, I have to observe that he is in one of our mills and is getting on very well. He appears to be very well satisfied and happy. I conversed with him yesterday at the mill. He said he should write you in a day or two. Our superintendent at the mills takes an interest in his welfare and will give him good advice and will watch over his morals—from present appearances the young man will get on very well. Should he stand in need of money or any other assistance we will see that he is supplied agreeably to your requests. If he has his health, his wages will supply him with all the necessities he may need.[35]

Like paternalism in the use of child labor, sexual divisions of labor along patriarchal lines also made the leap from farm to factory work. In preindustrial households the assignment of day-to-day tasks was determined not only by gender traits such as strength but also by male cultural dominance in matters of religion, politics, and trade. Significantly, women typically performed the "hidden" work of food, clothing, and other household production, while men were expected to perform more visible public work. With increasing industrialization, however, women found themselves even more isolated in the home or factory, while males, who were more apt to become agents, mobile repairmen, or other "public workers," often enjoyed increased visibility.[36]

Textile manufacturing provided a good example of this process. The transitional period of industrialization, from 1793 to about 1820, was marked by the "putting out" or cottage system of textile production, under which male merchants provided women with raw cotton or wool for spinning into thread or weaving into cloth in their homes.[37] By 1820, after the introduction of the power loom in Rhode Island, both weaving and spinning began



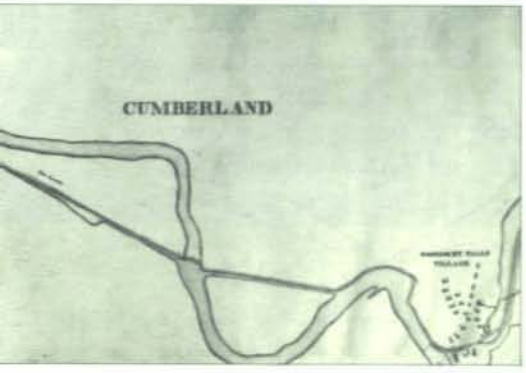
to occur under the factory roof.[38] With the rise of the large-scale factory in the 1830s and 1840s, production tasks began to be consistently joined, and sexually defined, as standard management practice.[39]

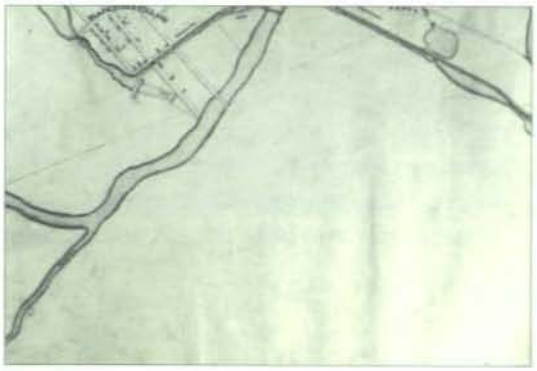
As Gary Kulik has pointed out, many of the men and women who came to the mills carried a perception of factory work that defied the encroaching world of industrial production. Joining the factory work force often proved a severe blow to individual egos and economic expectations (as well as to familial patriarchal authority) because workers frequently came to the factory after having failed at more traditional means of survival. Factories were a disruptive force for farmers as well. Farmers had to accept a loss of control over production and individual decision making, but they did not like it; publicly they resisted the flooding of lands by new mill ponds, "unfair" taxation, road building, political divisions, and the usurpation of water for mill power. The widely divergent worlds of industry and agriculture were separated by social, economic, and political tensions, tensions exemplified by the Pawtucket weavers' strike of 1824.[40]

Millowners capitalized on such threats to survival as drought, flood, and indebtedness to draw labor to the mill, and they used threats of expulsion to control wage-earning families once they came. Eviction could occur for alcohol abuse, adultery, or other acts of social deviance. The close contact that mill managers and lower-level mill officials had with workers allowed them to enforce discipline not only on the shop floor but also in the home and community.

Women were encouraged to send children to mill jobs by necessity. As in farm labor, large families were seen by both Irish and French Canadian immigrant workers as a way to supplement family income. Catholicism, the predominant religious affiliation not only of these groups but also of later Polish, Italian, and other immigrants, did little to discourage the practice of having large families or the widespread use of child labor.[41]

The Blackstone Valley's industrial revolution adopted existing preindustrial social patterns, such as divisions of labor based on age, gender, and even ethnicity, and applied them to the new world of the factory. Slavery too contributed to the valley's industrial development by furnishing a rapidly increasing demand for cotton. The spread and strengthening of slavery in the 1830s and 1840s fueled the increasingly vocal and articulate abolitionist movement in Rhode Island and elsewhere. Yet Kelly believed, like other paternalists, that the institution of slavery was beneficial not only to the textile industry but to African-Americans as well. In 1835, in fact, Kelly joined a Rhode Island antiabolitionist movement which sponsored large rallies in Providence, Pawtucket, Lime Rock, and Woonsocket. The organizers of these rallies included Kelly, executives from the firm of Brown and Ives, Edward Carrington, John Slater, and other textile magnates.[42] Although these men were shaping a new set of industrial and social structures, their work was firmly rooted in existing institutions, including slavery, and thus their collective reaction to abolitionism was also a defense of their lives and work.





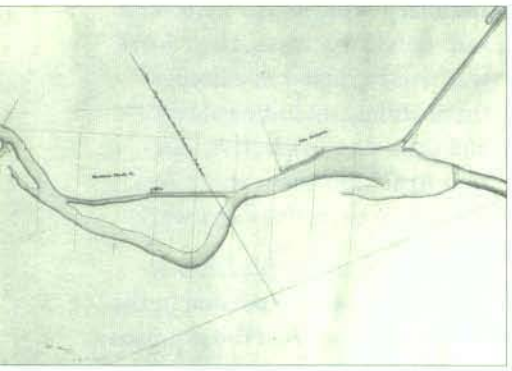
Kelly's role in the Blackstone Canal Company expanded in the 1820s, but the canal did not prosper. Although it remained a vital

link to both interior and exterior trade, it never blossomed in profits or trade as had been optimistically predicted. Total tonnage leaving the Kelly site rose dramatically in the canal's first years of operation, peaking at 298 tons in 1831, but thereafter it appears to have leveled off at around 250 tons. Goods arriving at the site dropped precipitously from a high of 275 tons in 1831 to under 50 tons during the remaining years of the canal's life. Most of this latter tonnage was probably cotton.[43]

Prosperity and growth gave Lonsdale Water Power Company officials the opportunity to define and create a vernacular mill village in Lonsdale, one that preconceived ideological and practical needs. In 1831 Wilber Kelly and the company began building Lonsdale Mill No. 1 and the village of Lonsdale several miles south of the Quinnville site. A small army of carpenters, masons, and laborers built the mill, houses, a school, a church, a store, offices, and other buildings. People were also hired to staff the village's institutions and provide other services in the community. In the following year spinning and weaving operations began at the new village, as did construction of Lonsdale Mill No. 2. A good overland road for year-round transport was also built.[44]

Included at Lonsdale were the central features and institutions of New England village life: an Episcopal church, a school, an orderly town layout, and open areas, all situated on a peninsula next to the river. But to the northwest, where the canal separated from the river to cut the community off as an island of industrialism, lay the huge factory complex of Rhode Island's second generation of mills. The three 4-story mill buildings dominated the physical landscape. The village, constructed for $65,000 between 1831 and 1833, was one of the largest and most modern mill complexes in New England.

Kelly's role as chief agent placed him at the head of much of the company's growth. Lonsdale became the second largest textile firm in New England under his direction, and Kelly himself became a major player in the nation's budding industrial economy. Like other head agents, he was dependent upon a number of people for his own success. He hired wholesalers and brokers, for example, to sell goods outside of Rhode Island. (In competitive or economically depressed times, such agents sometimes unknowingly sold products at a loss, even undercutting prices among themselves.)[45] Kelly's success was affected too by national events, like President Jackson's discontinuing the second national Bank of the United States in 1832. The ensuing depression forced Kelly to suspend the production of heavy cloth and yarn in December 1834, continuing only the manufacture of lighter cloth. He even temporarily stopped shipping goods to brokers and sold only from the mill as a way to raise demand and prices for finished cloth in urban areas. Kelly saw these measures as "good management," by way of which he could "control the market for several years."[46] He apparently put his most skilled or valued workers to farm work in order to retain their talents; less-skilled workers were simply sent away. Unemployed laborers probably returned to farm work elsewhere, as other mill employment was generally unavailable.



When Kelly's duties took him farther and farther from his small mill (now called the Upper Mill) in Quinnville, he put his son Christopher in charge of the site, and Lonsdale Company directors agreed to erect a new one-and-a-half-story dwelling for him. The company also agreed to build a home for Wilber in Lonsdale, but he seems never to have left his Benefit Street home in Providence for it. As the

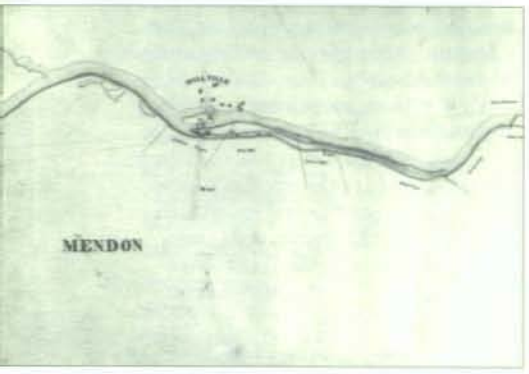
company matured and recovered from the depression of the 1830s, its villages took on a more definitive and prosperous appearance. Farming operations were continued at each of these villages even while the company built larger and larger mills.[47]

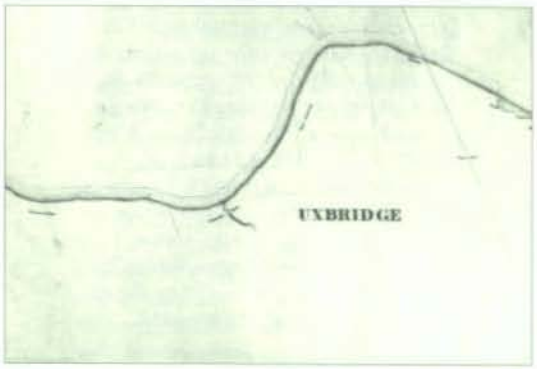
Kelly helped the Lonsdale Company grow into a truly national firm by cautiously pushing both forward and outward. In 1844 a group of investors—including Kelly—who had created both the Blackstone Canal Company and the Lonsdale Company joined together to create the Providence and Worcester Railroad. The Providence and Worcester built track (sometimes on the canal's towpath), bought engines and cars, and began operations in 1848. The new railroad would serve all the Lonsdale Company's communities longer and more regularly than the canal ever had.[48]

In 1845 the Lonsdale Company built a 44-by-36-foot stone addition to the company's first factory at Quinnville, nearly doubling the mill in size, and added a new turbine wheel. New textile equipment was also installed and the old machinery sold to the Albion Mill. On 4 June 1849 the Lonsdale directors paid $335 to the Blackstone Canal Company for land along the river and two canal locks near Scott's Pond, thereby consolidating that company's remaining land and waterpower in the hands of the Lonsdale Company.[49]

By the time Wilber Kelly died in 1846, his work as Lonsdale's head agent had helped propel the firm into a leadership position as one of New England's largest textile manufacturing companies. Merchants all along the East Coast carried Lonsdale Company cloth, which had a solid reputation as a well-made and consistent product. The company had contacts with most of the major brokers and large retail firms in the nation, and it was profiting too from the country's westward growth, which helped create new markets for retail sales as well as a continuing expansion of cotton-growing districts in old and new slave states.[50]

Wilber Kelly died a successful and prosperous man. He had both seen and overseen the fundamental economic and social transitions of his era, from international shipping to manufacturing, and he had shaped new cultural constructs. His influence can be seen today in Quinnville, where his son's home, the last remaining structure at the mill site, still stands. Near the house lie visible elements of both his life and the formidable story of nineteenth-century industrialization: pastures, the canal, a mill dam, factory housing, and the factory site itself. Across the river stands the culmination of what Kelly had begun: the Lonsdale Company's huge factory at Ashton, surrounding the Providence and Worcester Railroad and almost under a modern highway bridge. This site represents the first and last generations of mills and mill life, the growth of transportation from dirt roads to canals to railroads to highways, and the transitions from gristmills to deindustrialization. The site brings the intersecting elements of American economic and social history toether; transportation, mechanization, factory discipline, and political and economic power are represented here, all as Kelly's legacy.





Notes

1. The Wilber Kelly house and mill site has been acquired by the Rhode Island Department of Environmental Management for interpretive and recreational purposes. The Rhode Island Parks Association is helping to restore the house, and the Blackstone River Valley National Heritage Corridor Commission has assisted in historical research. The present essay is intended not as a definitive work on the site's social or transportation history, the Lonsdale Company, or Kelly, but rather as an introduction and as a stimulus to further interpretation and research.
2. The Kelly obituary can be found in the minutes of the annual meeting of the Lonsdale Company, 29 Oct. 1846, Lonsdale Company Records, MSS 9, subgroup 2, series B, Minutes, at the Rhode Island Historical Society (RIHS). The obituary was also published in several Rhode Island newspapers on that date. Birth information is from Swan Point Cemetery Records, RIHS.
3. Douglass C. North, *The Economic Growth of the United States, 1790-1860* (New York, 1966), 50-51.
4. *Rhode Island American*, 28 Sept.1810.
5. See James B. Hedges, *The Browns of Providence Plantations: The Nineteenth Century* (Providence, 1968), 138-42.
6. Ibid.; "Ship's Log of the *Ann and Hope*," RIHS; Survey of Federal Archives, Division of Community Service Programs, Works Progress Administration, "Ships Registers and Enrollments of Providence, Rhode Island, 1773-1939," 1:79, copy at RIHS.
7. Hedges, *Browns*, 138-40.
8. Peter J. Coleman, *The Transformation of Rhode Island, 1790-1860* (Westport, Conn., 1963), 81.
9. Deed from sheriff's sale, 28 Oct. 1816, Edward Carrington Papers, box 240, RIHS. Kelly may have been the mill's agent. The site consisted of a three-story mill, a store, three houses, and a dye house. The mill appears to have been heavily capitalized and therefore more subject to economic problems than later mills constructed under the Rhode Island system.
10. Providence *Microcosm*, 15 June 1827.
11. Brown and Ives sold their last vessel, the *Hanover*, in 1836 as they and other families used their trading wealth to begin manufacturing operations. Zachariah Allen and Joshua Maurin were two other prominent textile manufacturers, among many, who also received the patronage or had the contacts and wealth necessary to successfully make the transition from shipping. Other prominent Rhode Island mercantile families to make this transition include the Nightingales, DeWolfs, Olneys, Arnolds, and Lippitts. Between 1810 and 1840 Rhode Island's economic (and eventually its social and cultural) lifeblood gradually changed from a mercantile to a manufacturing basis. See Edward Field, ed., *State of Rhode Island and Providence Plantations at the End of the Century* (Boston, 1902), 2:486.
12. A number of genealogies for various branches of Rhode Island's Whipple family have been compiled and are available at the Rhode Island Historical Society Library. None, however, list the specific branch from which Abby was born. Abby and Wilber were married 16 August 1806 in Providence. *Arnold's Vital Records* (Providence, 1906), 15:177.
13. The children were Abby Whipple Kelly, Christopher Whipple Kelly, George Kelly, and Robert Lewis Kelly. Daughter Abby (born in 1821) married into the prominent seagoing Maurin family. Christopher and George followed their father in a manufacturing career. Robert went down on a U.S. Navy vessel during the Civil War. Rhode Island Department of Health, Division of Vital Statistics, *Rhode Island Death Index*, 26 Feb. 1873, copy at RIHS; "Estate of Wilber Kelly," Providence Municipal Court Records, Providence Wills, vols. 14-15 (1836-48), on microfilm at RIHS; further genealogy courtesy of Jeff Kelly, a descendent of Wilber Kelly.
14. Smithfield Town Deeds 12:98-103, city clerk's office, Central Falls City Hall. The tenants were not equal; they proportionally divided shares by the amount of land or money that each contributed or invested. Of the 30 shares, Simon Whipple had 10; George Olney, 8; Joseph Wilkinson, 5; William Whipple, 2; Joseph Whipple, 2; George Smith, 2; and Thomas Arnold, 1. Simon Whipple was at least partially bought out by Olney shortly after the company was founded.
15. "Wilber Kelly Agreement to Manufacture at George Olney Factory," 18 May 1826, Carrington Papers, box 241. The mill is variously referred to in primary sources as the Olney or Smithfield Cotton and Woolen Mill (ca. 1810-1818), Sinking Fund Mill (ca. 1816-1830), Kelly Mill (ca.1823-1832), and Upper, Ashton, or Lonsdale Mill No. 1 (from ca. 1832).
16. Richard Bayles, ed., *History of Providence County* (New York, 1891), 2:302.
17. "United States Census of Manufacturing for Massachusetts and Rhode Island," 1820, on microfilm at RIHS. Most millowners, including those of the Smithfield Cotton and Woolen Company, refused to provide information to the census; census taker Joseph Mann did not actually visit the factory but recorded hearsay information.
18. Alison Wheeler, "The Forces of Industrialization and the Blackstone Manufacturing Company" (unpublished honors thesis, Brown University, 1991), 5, 157.
19. Thomas Dublin, *Women at Work: The Transformation of Work and Community at Lowell, 1826-1860* (New York, 1979); Hannah Josephson, *The Golden Threads: New England Mill Girls and Magnates* (New York, 1949).
20. Perhaps the best overview of the Rhode Island (or Slater) system of manufacturing is Jonathan Prude's "The Social System of Early New England Textile Mills," in *The New England Working Class and the New Labor History*, ed. Herbert Gutman and Donald Bell (Urbana, Ill., 1987), 90-127. Prude's *The Coming of Industrial Order* (Cambridge, Mass., 1983) examines the emergence and problems of the Rhode Island system in the Webster, Massachusetts, area.
21. For the work of temperance societies, see, e.g., "Circular to the Temperance Societies in Rhode Island" (ca. October 1832), Providence Association of Mechanics and Manufacturers Collection, series 3, oversize box 7, RIHS. This circular, which reads like a who's who of Rhode Island's manufacturing elite, notes that in Slatersville "an address was given by Mr. Arnold Buffum, and a constitution proposed, on the principle of Total Abstinence, to which 48 persons, of both sexes, at once subscribed their names. The wife of one of the principal manufacturers was the first to set an example to the females to give their countenance to this surest safeguard for their husbands, sons and brothers, against the fatal influence of the social glass, so destructive to domestic happiness."
22. Providence *Microcosm*, 5 July 1828.
23. See daybooks and journals in Lonsdale Company Records, MSS 9, subgroup 2,

series B. All of the volumes in this series variously list such accounts, but they do not distinguish the Upper Mill site from the company's other manufacturing locations. Christopher Whipple Kelly is listed as paying two dollars a week for board and earning eight dollars a week for wages as supervisor of the Kelly site through 1834 in vol. 101, pp. 110, 167.

24. Account book of Anthony Chase, Blackstone Canal Company Collection, American Antiquarian Society, Worcester, Mass.

25. "Documents Relative to the Manufactures in the U.S." (1832), reprinted in Gary Kulik et al., *The New England Mill Village* (Cambridge, Mass., 1982), 178. Larger mills were the Natick Mills complex in Warwick, with 250,000 spindles, and Almy, Brown, and Slater at Slatersville, with 240,000 spindles. Further wage data drawn from Lonsdale Company Records, MSS 9, subgroup 2, series B, vols. 82 and 101.

26. Lonsdale Company Records, MSS 9, subgroup 2, series B, vols. 82 and 101.; "Smithfield," 1830 United States Census, Massachusetts and Rhode Island, on microfilm at RIHS.

27. Smithfield Town Deeds 17:250-51.

28. Ibid. The reverse occurred. The factory was built on top of the canal wall where the towpath would have gone, making horse passage for barge towing impossible.

29. Ibid., 249.

30. Ibid., 250-51; "Kelly Agreement to Manufacture at Olney Factory."

31. "Land Owned by the Lonsdale Company at Upper Mill," Lonsdale Day Book, Lonsdale Company Records, MSS 9, subgroup 2, series B, vol. 115; Smithfield Town Deeds 17:250-51. Continued land acquisitions between Lonsdale and Ashton in 1863 would lead to charges that the company was attempting to monopolize land and water rights. See Edward J. Hayden, ed., *Cumberland, Rhode Island*, 3rd ed. (Cumberland, 1976).

32. See, e.g., Richard E. Greenwood, "Zachariah Allen and the Architecture of Industrial Paternalism," *Rhode Island History* 46 (1987-88): 117-135.

33. Brooke Hindle and Steven Lubar, *Engines of Change: The American Industrial Revolution* (Washington, D.C., 1988), 197; Gary Kulik, "Pawtucket Village and the Strike of 1824: The Origins of Class Conflict in Rhode Island," *Radical History Review* 17 (Spring 1978): 13.

34. See, e.g., Herbert Gutman, *Work Culture and Society in Industrializing America* (New York, 1973), 81-83.

35. Kelly to Joseph Hatch, 18 Apr. 1843, Lonsdale Company Records, MSS 9, subgroup 2, series D, vol. 3. Hatch was the parent or guardian of the boy in question.

36. Jacquelyn Dowd Hall et al., *Like a Family: The Making of a Southern Cotton Mill World* (Chapel Hill, N.C., 1987), 152-55. A concurrent argument for males suggests less isolation at work but greater isolation in the community, contributing to problems such as male alcoholism.

37. See, e.g., Records of the Blackstone Manufacturing Company, RIHS.

38. Power looms came to Rhode Island in 1815. See Gail Fowler Mohanty, "All Other Inventions Were Thrown into the Shade: Development of the Power Loom in Rhode Island, 1810-1830," in Douglas M. Reynolds and Marjory Myers, eds., *Working in the Blackstone River Valley: Exploring the Heritage of Industrialization* (Providence, 1991), 79-82.

39. Hindle and Lubar, *Engines of Change*, 196.

40. Gary Kulik, "Pawtucket Village," 18-19.

41. By 1820 over 50 percent of the operatives in any given Blackstone Valley textile factory were juveniles. The percentage declined with technological improvements in the next decade, but child workers remained integral to factory production in the valley. Their chief tasks involved moving raw stock through the production process or assisting adult operatives in their jobs. They worked the same long hours as adults but suffered more long-term effects, including early death from brown-lung diseases. See *Rhode Island Factory Inspector Annual Reports*, 1894-1921, most of which include information on the conditions of child labor. The 1894 report noted that the true conditions of young workers were difficult to determine fully and accurately because there were no penalties against employers and no accurate record-keeping systems, and because parents as well as employers and schools often lied about a child's age. In 1894 the inspector was responsible for accurate inspections of 158 factories in seven months. Child labor persisted in Rhode Island until the passage of the Fair Labor Standards Act in 1938.

42. John Gilkeson, *Middle-Class Providence, 1820-1940* (Princeton, N.J., 1986), 39.

43. Tonnage index by site (1832?), Blackstone Canal Company Collection, box 1.

44. See Minutes, 14 Feb., 7 June, 22 Aug. 1834 and 25 Feb., 30 May 1835, Lonsdale Company Records, MSS 9, subgroup 2, series A, vol. 1.

45. See Kelly to J. M. Brown and M. L. Lewis, 6 Mar. 1834, Lonsdale Company Records, MSS 9, subgroup 3, series D, vol. 1.

46. Kelly to ——— Forsyth, 22 Dec. 1834, Lonsdale Company Records, MSS 9, subgroup 2, series D, vol.1.

47. Lonsdale Water Power Company officials changed the name of the firm to Lonsdale Company in 1834. The incorporators were Nicholas Brown, John Carter Brown, Thomas Poynton Ives, Moses Brown Ives, Robert Hale Ives (all partners in the firm of Brown and Ives), Edward Carrington, and Wilber Kelly. Numerous account books in series B of the Lonsdale Company Records list Upper Mill weekly production by dollar value. Series B account books for 1835 indicate that Christopher Kelly was still the on-site mill manager; see, e.g., vol. 4, p. 215. George Kelly was fully involved in the company at Lonsdale; see vol. 83, p. 39, of the same collection. Robert Kelly, the youngest son, would leave Rhode Island for New York; see letter from H. A. Smythe to Wilber Kelly, 4 Apr. 1845, Wilber Kelly File, RIHS.

48. Richard E. Greenwood, "History of the Blackstone Canal" (unpublished manuscript in possession of the author), 92. The transfer of canal company assets to the Providence and Worcester Railroad is further detailed in Minutes, 21 Nov. 1846, 9 Mar. 1847, and 29 Oct. 1849, Lonsdale CompanyRecords, MSS 9, subgroup 2, series A, vol. 1.

49. Kelly, with other investors, asked the Rhode Island legislature to dissolve the canal company in 1841 and succeeding years, but millowners feared that aresulting lack of dam, canal, and reservoir maintenance would be destructive to the factories they had built and delayed dissolution until 1848. Lonsdale Company Annual Statement, 1849, Lonsdale Company Records, MSS 9, subgroup 2, series A, vol. 1, Minutes, January 1850.

50. The company's extensive business correspondence has been saved in letter books. See Lonsdale Company Records, MSS 9, subgroup 2, series D.

Natural Run and Artificial Falls: Waterpower and the Blackstone Canal

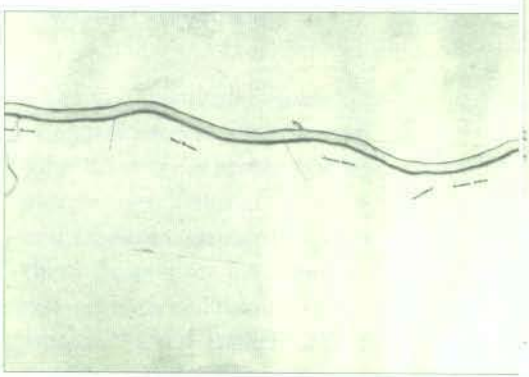
RICHARD E. GREENWOOD

On 7 October 1828 the *Lady Carrington* arrived in Worcester, Massachusetts, the first vessel to complete the forty-five-mile trip from Providence on the Blackstone Canal. The *Worcester Spy*, which proudly reported the event under "SHIP NEWS For Port of Worcester," described a celebration worthy of the Fourth of July, marked by "incessant cheers, thunders of cannon and peals of bells." With Governor Lincoln at their head, a host of dignitaries boarded the vessel—a handsome white packet boat with red curtains and cushioned and carpeted interior—edified the crowd with a series of speeches, and concluded the affair with a celebratory banquet.[1]

The fervor of this reception (which echoed a similar response to the *Lady Carrington*'s maiden voyage in Rhode Island several months earlier) exemplified the great expectations that the canal excited through the Blackstone River valley. The canal's chief promoters, the merchants and businessmen of Providence and Worcester, had begun in 1822 to make grand predictions for the success of the venture and the beneficial effects it would have on the surrounding countryside. With its dramatic improvement over the existing means of overland transportation, the canal promised to forge a mutually beneficial economic link between farmers, artisans, manufacturers, and merchants, from the fertile expanses of Worcester County, where commercial production was hampered by the lack of affordable markets, through the burgeoning industrial corridor along the Blackstone River, to the busy wharves of Providence, where the owners of coastal traders and far-ranging East Indiamen assembled diverse cargoes for export and dispersed their equally varied imports for local retail.

Despite this enthusiastic beginning, the Blackstone Canal proved to be a major disappointment to its backers. By 1849, when the canal company officially dissolved, the project had absorbed $750,000 in costs while paying back in dividends the grand total of $2.75 per share. As Welcome Arnold Greene noted in his *Providence Plantations for Two Hundred and Fifty Years*, the canal was a commercial "failure, the most disastrous one that, up to that time, Providence capitalists had ever been engaged in."[2]

But as Greene also pointed out, the full measure of the canal's effect on the Blackstone Valley cannot be found in the company ledgers that now repose in the Rhode Island Historical Society Library. As early as 1837 William Lincoln observed that the canal was of greater benefit to the public than to the owners. The canal may in fact be said to have benefited the valley as a whole, and particularly the town of Worcester, where it proved to be a powerful catalyst in stimulating growth



Richard Greenwood is the project review coordinator of the Rhode Island Historical Preservation Commission.

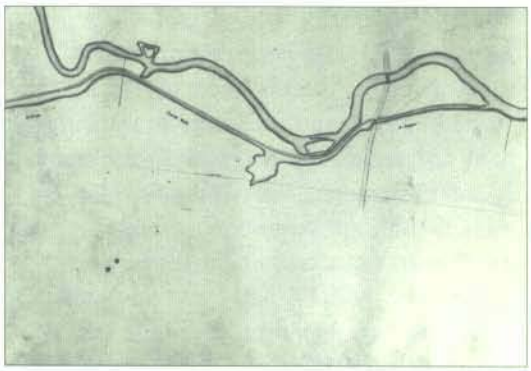
in commerce, industry, and population. Between 1825 and 1835 Worcester's population swelled from 3,600 to 6,600, a greater increase in one decade than had occurred in the previous six decades combined.[3]

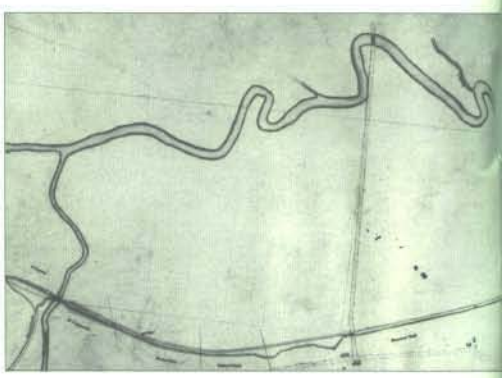
This stimulating effect on the Blackstone Valley demonstrated the fundamental accuracy of the canal promoters' economic analysis. Technical limitations and, finally, obsolescence kept the canal from realizing its full potential. Yet at the same time that its inadequacies as a transportation system were hampering its commercial success, the Blackstone Canal acted as a great hydraulic engineering system, a major force in the industrial development of the Blackstone River as the "hardest-working river in America." In fact, long after the canal company ceased operations, elements of the canal remained in productive industrial use, exploited for both power and water.

The story of the canal's failures and successes provides an illuminating perspective on the interplay between transportation, industry, engineering, and economic development at a time when the Blackstone Valley was at the forefront of America's Industrial Revolution. Like much Rhode Island history, it is also a story rich in irony and contradiction.

The Blackstone River rises in the eastern uplands of Worcester County, Massachusetts, and makes its way south over rocky upland to the head of Narragansett Bay at Providence, draining an area of 540 square miles, one-third of which is in Rhode Island. Though not a large river, the Blackstone is an active one, descending 438 feet in a rapid 45-mile course. As early as 1672 the energy of the river's fall was being harnessed by settlers at the Pawtucket Falls; by the time of its peak industrial use in the twentieth century, there were thirty-four dams along the river, eleven of them in Rhode Island, utilizing 409 feet of the river's fall.

While the river itself was not readily usable for travel, the Blackstone Valley did serve as a natural transportation corridor for north-south travel. Indian trails were adapted for colonial roads, and by the early nineteenth century turnpikes ran from Providence to northern Rhode Island and central Massachusetts along the ridges above the river. The idea of a canal up the Blackstone River to Worcester and beyond was first proposed by John Brown, of Providence's leading merchant family, in the 1790s. The source of Brown's inspiration was the extensive system of artificial waterways, built by private companies, that he had observed in England.[4] A company was chartered in Rhode Island to construct the canal, but the merchants of Boston, fearful of Rhode Island's engrossing the products of their hinterland, succeeded in blocking passage of a Massachusetts charter, thereby frustrating the plan.





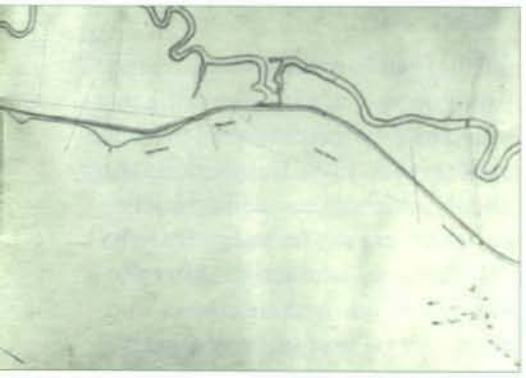
The building of the Erie Canal (begun in 1817) served to reawaken interest in a Blackstone Valley canal in the early 1820s. Arguments that John Brown had made for the canal in 1796 still held true. Overland transportation remained slow, laborious, and costly; it could take up to two days to travel only thirty-five miles in a light coach, while heavily laden wagons took even longer, with a freighting cost—eight dollars per ton—that was exorbitant. As Brown had noted, "A great number of valuable articles such as Timber, Wood, Stone, Ore, Coal &c. at a greater distance than twenty Miles from any Market cannot bear the Expence of Land Carriage with profit to the Proprietor & consequently must either lie useless, or be sold in the neighbourhood at very low prices."[5]

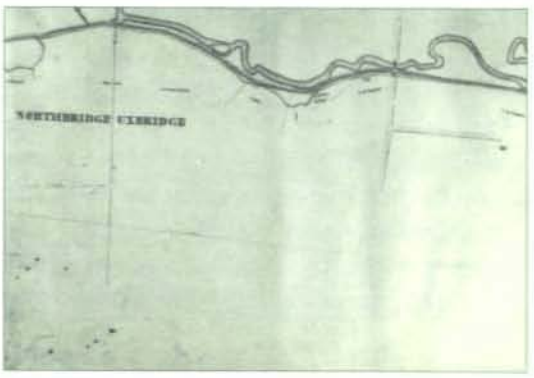
This country produce was an essential ingredient for maritime and domestic commerce. If it could be brought to market more cheaply and efficiently, it would stimulate both production and commerce, thus benefiting both the countryman and the city merchant.

The argument was further bolstered by the recent emergence of a new economic force—textile manufacturing—which had spread up the Blackstone Valley from its point of origin in Pawtucket. New textile factories, which had to locate where waterpower was available, often in remote locations, had considerable transportation needs both in obtaining raw materials and equipment and in supplying finished goods to market. Moreover, the villages associated with these factories represented significant new markets for domestic traders.

In 1822 meetings were held in Providence and Worcester, committees were formed, and Benjamin Wright, chief engineer of the middle section of the Erie Canal, was hired by the canal promoters to undertake a topographical survey of the proposed route. Holmes Hutchinson, another veteran of the Erie Canal, conducted the survey under Wright's supervision. The engineers' report was a favorable one and called for a forty-five mile canal, partially in a dug trench and partially by slackwater navigation in the Blackstone and Moshassuck rivers. Wright proposed sixty-two wooden locks on the canal, though this proposal would later be amended to forty-eight stone locks and one of wood.

As in 1796, the principal support for the canal project came from the merchants of Providence. Investment capital was relatively plentiful in Providence in the early 1820s. Over the preceding decades the town's merchants had prospered in trade in the Orient, the Baltic Sea, and the South Seas, and large and small merchants alike were searching for places to invest their profits. Textile manufacturing had already attracted much of their capital and would continue to do so. However, for a generation of businessmen who had served their apprenticeships on merchantmen and in countinghouses from Providence to Canton, the commercial orientation remained strong, and the Providence-to-Worcester canal, which promised to enrich the town through domestic commerce, became an attractive proposition.

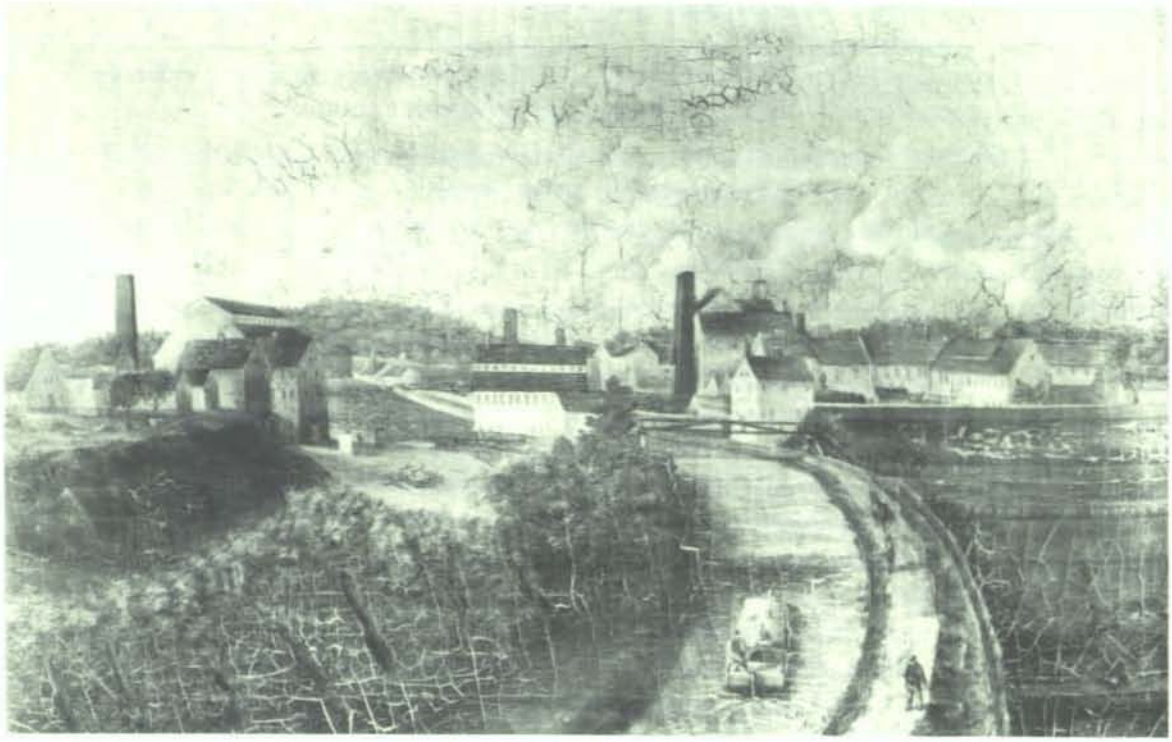




The major promoters were Nicholas Brown, a nephew of John Brown; his brother-in-law and partner, Thomas Poynton Ives; and Edward Carrington. Between them these three men owned one-seventh of Providence's total wealth. As was traditionally the case in a society of maritime

traders, the launching of a venture by major capitalists attracted the support of other investors, both large and small.

The canal proposal was enthusiastically greeted in Worcester, where business and political leaders took the initiative in promoting it. Chief proponents included John Davis, who was to become Massachusetts governor in 1834;



"Blackstone Canal." Oil painting by an anonymous artist, circa 1828-1848. RIHS Collection (RHi X3 3307).

Levi Lincoln, who preceded him as governor; and Stephen Salisbury, a merchant and capitalist who was a major sponsor of Worcester's industrial growth. The Worcester promoters placed their petition before the General Court of Massachusetts in January 1823. This petition met with none of the obstacles that had hindered its predecessors, a success which probably reflected the increased strength of Worcester's legislative delegation. The General Court issued a charter for the Blackstone Canal Company in the same session.

The Rhode Island promoters, headed by Edward Carrington, petitioned the General Assembly in January as well, but consideration was postponed until the June session. The legislature's delay was a significant one that marked the presence of serious concerns about the canal among a powerful interest group, the manufacturers along the lower Blackstone River.

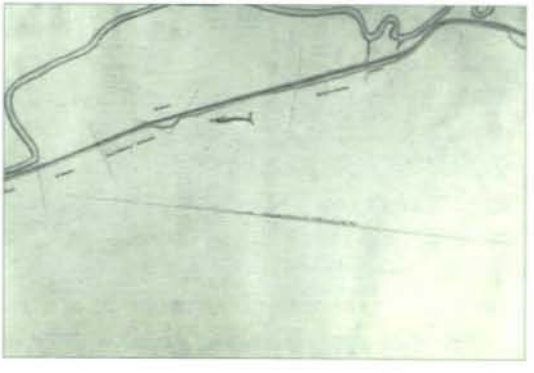
The contiguous villages of Valley Falls, Central Falls, and Pawtucket constituted one of the oldest and densest concentrations of water-powered manufacturing in the region and the country. Manufacturing was already a long-established presence at the Pawtucket Falls when Samuel Slater arrived there in 1790. Ironworking was the village's best-known activity at that time, though shipbuilding and a variety of crafts flourished as well. The principal ironworkers were the Jenks family, who established the first forge here in 1671, and the Wilkinsons, who arrived after the Revolution. These men enjoyed considerable reputations for their enterprise and their inventiveness. Slater's establishment of the country's first successful textile factory, an undertaking largely dependent on this community of artisans, began to change the character of Pawtucket industry almost immediately, and it had

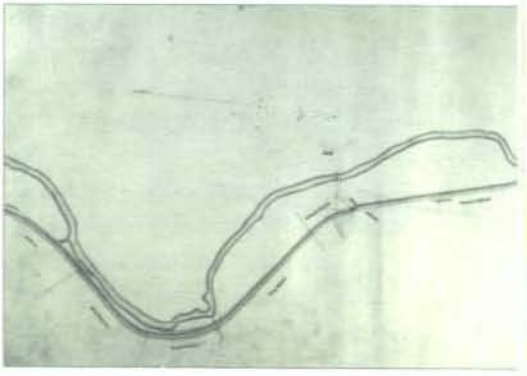
considerable impact on the village.[6] Over the next three decades large cotton mills began to appear alongside the small workshops that had traditionally housed local industry as Slater, his associates, and his competitors took full advantage of the waterpower of the upper and lower Pawtucket Falls as well as the Central Falls and Valley Falls a short distance upstream. In a succession of court cases beginning in the eighteenth century, these millowners demonstrated their ability to establish and defend legal rights to the river's water (and the power it represented) in disputes among themselves and with other interests. By 1823 the general tenets of law regulating mill privileges and water rights provided strong protection for the rights of millowners to enjoy the "natural run," or flow, of the river.[7] It was their rights to the natural run that was at the heart of the manufacturers' objections to the canal.

In the projected plan for the southern end of the canal, the engineers had laid out a route that ran north from Providence harbor up the Moshassuck River valley, then passed through a pair of landlocked ponds and entered the Blackstone River valley. While this route had the virtue of tapping the two ponds as feeder reservoirs and sending traffic directly to the Providence wharves, it also served to channel all the water that entered the canal from the Blackstone River into the Moshassuck River. With each locking-through representing five thousand cubic feet of water, an active canal would constitute a major diversion of water out of the Blackstone before the river reached the mill wheels of Valley Falls and the villages downstream.

At a meeting of "persons interested in the water of the Blackstone River" held in Pawtucket on 10 June 1823, the manufacturers of the lower Blackstone formed a committee to confer with the canal organizers, "with a view to introduce such provisions or limitations in the charter of incorporation applied for as would preserve a sufficiency of the waters for the owners of mill privileges." After meeting with the millowners, the canal petitioners realized that they would have to demonstrate that the canal would not reduce the Blackstone's natural flow or infringe on the millowners' prior rights. To that end Edward Carrington had Holmes Hutchinson prepare testimony asserting that the reservoirs and feeders to be built by the canal company would create a surplus of water that could be used to replace any water diverted from the river by the canal. Although this testimony forestalled an outright dismissal of the canal petition, it did not prevent the charter—finally granted in June 1823—from being drawn in a way that would seriously impede the canal's operation.

Sections 3 through 6 of the Rhode Island canal company's charter introduced a series of measures designed to regulate water diversion and to provide means of redress if the manufacturers suffered any loss of the natural run. Sections 3 and 4



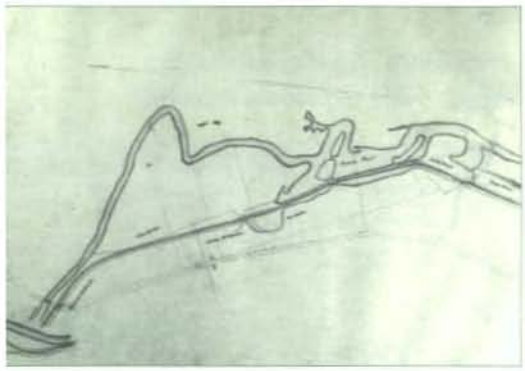


established a commission for fixing monuments on the sources of the Blackstone to mark the mean low-water level and prohibited the canal company from drawing the ponds down below these marks. Section 5 required the company to replace any river water taken off during locking with an equal amount of water from a canal reservoir within one hour, at the risk of a fifty-dollar penalty. Section 6 established the canal company's basic responsibility for ensuring that the millowners on the Blackstone enjoyed the natural run of the river; and to enforce the rule, it provided for fines of three hundred dollars for every twenty-four-hour period that the run was impeded.

Despite the encouraging compromises, the granting of the canal charters did not immediately lead to the beginning of construction; over a year passed before the petitioners took steps to form their companies. In the meantime the Providence newspapers voiced doubts about the canal's viability. "The scheme for cutting a canal from this town to Worcester seems about to be exploded," observed the *Providence Beacon* on 16 October 1824. "In consequence of the numerous restrictions with which the Legislature of Rhode-Island has loaded the charter granted to the proprietors of the enterprise, nothing has been effected."

While little was being said in public about the canal, the canal promoters in Providence, far from being inactive, were negotiating with the concerned millowners, trying to reach a compromise on their differences. One agreement they apparently came to was to increase the number of reservoirs. The main reservoirs, all but two of which were in Massachusetts, were natural ponds, enlarged by damming, which fed the Blackstone River through tributaries such as the Mumford and Branch rivers. There were nine ponds, ranging from 150 to 2,300 acres in size, representing a total of 5,100 acres. From north to south, these were North Pond, Worcester (300 acres); Long Pond, or Lake Quinsigamond, Worcester (2,300 acres); Dority Pond, Millbury (150 acres); Manchaug Pond, Douglas (400 acres); Ramshorn Pond, Millbury (200 acres); Mendon Pond, Mendon (150 acres); Badluck Pond, Douglas (200 acres); Herring Pond, Burrillville (200 acres); and Allum Pond, Burrillville (1,200 acres). In addition, the smaller Scott's and Cranberry ponds in Lincoln were to serve as feeder reservoirs as well as slackwater canal sections.

While the idea of the mill storage pond was not new, the concept of a systematic series of reservoirs in a river watershed to retain the winter floodwater for allviating summer drought was relatively novel. Only a year before, Zachariah Allen and fellow millowners received a state charter for building on the nearby Woonasquatucket River what is generally considered to be the first such system in New England. In the case of the Blackstone River, with its greater watershed and numerous tributaries covering a two-state area, the system would necessarily be more complex both politically and technologically, though the benefits would be proportionately greater as well. The reservoir proposal sufficiently allayed the manufacturers' fears, and the canal company proceeded to sell its stock in April 1825 and began construction two months later.



The greater part of the construction work was the excavation and embankment of the trench that would carry the canal where it did not run in the river. The trench was designed as a prism, averaging widths of thirty-four feet at the top and eighteen feet at the bottom and containing four to six feet of water. The towpath running the length of the canal was generally ten feet wide and no more than five feet higher than the surface of the water. In some locations the towpath was carried over the water by wooden bridges. Large gangs of unskilled workmen, armed with shovels, picks, wheelbarrows, and black powder where necessary,

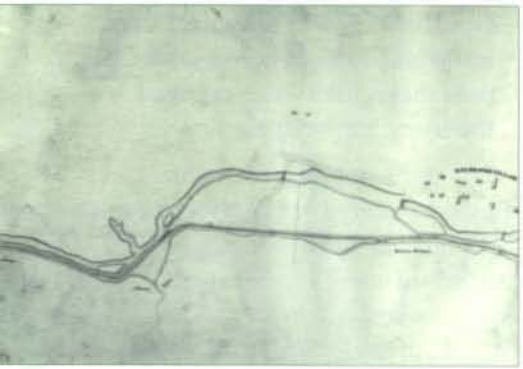
carried out this job under the direction of individual contractors. These contractors included local farmers and builders and men who had worked on canals in New York or New England or on other large construction projects.[8]

One distinctive feature of the work teams was the participation of Irish immigrants, many of whom were employed by their fellow countrymen Patrick O'Connor and Tobias Boland. Boland, who was to play a major role in the development of Worcester, had agents in Boston and New York who directed immigrants in search of work to the canal project in Worcester. These Irishmen and their families were the first representatives of the several waves of immigrants that were to come to the Blackstone Valley in the nineteenth and early twentieth centuries.[9]

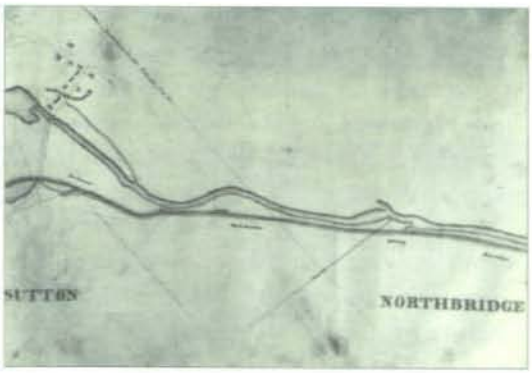
Construction of the forty-eight granite locks that would enable the canal boats to manage the 438-foot difference in elevation between Worcester and Providence required the services of quarrymen, stone sawyers, and skilled masons, as well as ironworkers and carpenters to manufacture the lock gates and the necessary hardware. Building the canal was a major undertaking for the time, and it had major manpower requirements; in the 1827 season a thousand men were at work on the Massachusetts section alone.[10] It took the better part of four construction seasons before the canal was opened for operation in the fall of 1828.

The canal's first full operating season was blighted by a general economic depression and fall floods. The next few seasons, however, saw slow but steady increases in traffic and revenues. In 1832 tolls peaked at $18,907, and the company paid out its first dividend, a return of 2 percent, or $1 per share.[11] Then, in the dry summers of 1833 and 1834, the uneasy compromise with the manufacturers on the lower Blackstone came undone.

During the droughts in September 1833 and the following year, millowners on the lower Blackstone hired an observer to record the number of lockings at Scott's Pond. They also consulted with Daniel Webster, whose legal reputation was already well established. Then they submitted writs to the court, claiming that the canal company had exceeded its allotment of river water. One hundred and forty-nine of these claims from September and October 1833 and October 1834, each carrying a penalty of fifty dollars, were judged in favor of the plaintiffs in a state Supreme Court decision. This 1838 decision settled eight suits and 288 specific instances of locking. Subsequent appeals by the canal company failed to reverse the decision.[12]



The millowners' suit hinged on the amount of surplus water contained in the canal's reservoirs. The company had set up low-water monuments as required by its charter, but it had failed to erect gauges to measure seasonal flow above those low-water marks. Consequently the company could not provide proof of its claim that it had a sufficient surplus of water above the natural flow of the river to operate according to the terms of its charter. The court cases brought to light the crucial fact that the reservoirs discharged much less water than the canal commissioners had estimated.

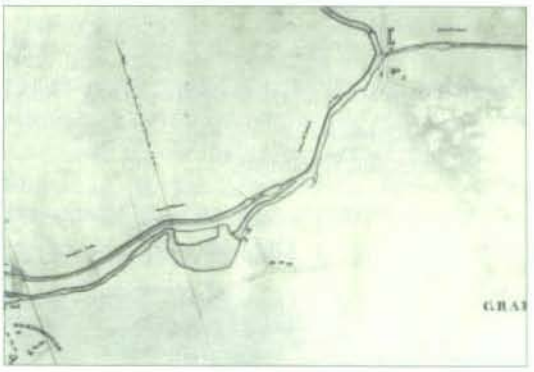


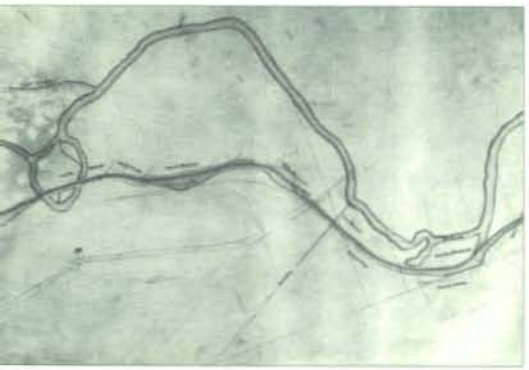
Instead of the 698 million cubic feet reported by Edward Carrington, the court-appointed commissioner found that the five principal reservoirs provided only 264 million cubic feet annually.

As a result of the suits, the millowners and the canal company came to a new agreement on water use. As of February 1837 the millowners relinquished their right to claim a discharge of reserved water within an hour of every lockage at Scott's Pond, a right that everyone agreed was impractical. Instead, if a millowner at any of the Rhode Island mill dams on the Blackstone failed to receive enough water to run at full speed, he was to send a letter to the canal commissioners in Providence. If after three days the conditions still persisted, the commissioners were to close the lock at Scott's Pond, which would effectively stop transportation between Providence and the northern forty miles of the canal.

The 1837 agreement and associated court cases largely resolved controversy over the natural run on the lower Blackstone River. Ironically, however, settling this issue did not end the company's problems with other manufacturers. When the company repeatedly sought to dissolve itself in the 1840s, manufacturers on the upper Blackstone argued against the legislature's granting its petitions for dissolution. In the twenty years since the canal was chartered, industry along the Blackstone River had passed from an era of experimentation into one of expansion.[13] The capacity and power requirements of the factories had grown, and their reliance on the canal's system of reservoirs, dams, and associated waterways for regulating the river's flow had increased proportionately. The manufacturers' claims that they would suffer if the canal company was allowed to abandon this system helped delay the legal demise of the Blackstone Canal until 1849.

Apart from the issue of water rights, the canal was troubled by a host of other problems that limited its success and its life. One problem, seasonal closures due to ice, was inevitable, but it was intensified by the new industrial economy. Whereas the farmers' productive cycle was tied to the seasons, manufacturers had year-round transportation needs, and many acquired their own horse teams for winter hauling and then continued to use them, rather than the canal, during the rest of the year.





A second problem was the canal's susceptibility to flood and drought. This was a problem that could largely have been avoided if the canal's slackwater sections in the rivers had been eliminated.

The third and greatest problem was the advent of the railroad. Jealous of Providence's incursion into Worcester County, Boston first contemplated its own western canal but then decided that the newly matured technology of the steam-powered railroad offered a more promising alternative. Begun in 1831 and completed in 1835, the Boston and Worcester Railroad served to redirect much of Worcester's trade from Providence back to Boston. In 1836 revenue from the canal's tolls dropped by 20 percent, and the canal company's dividends, minimal though they were, disappeared completely. From that point on, the canal's demise was inevitable, though the facility lingered on in limited use through 1848, when its role was taken over by the Providence and Worcester Railroad.

Plagued though it was by these problems, the canal proved remarkably valuable to one small group of investors for reasons other than its revenues. Nicholas Brown, Thomas P. Ives, and Edward Carrington, acting through an intermediary agent, Wilber Kelly, had succeeded in a major real estate coup in 1825-26 by acquiring control over the lands and waterpower rights along a four-and-a-half-mile stretch of the Blackstone just north of Valley Falls. The men had purchased a relatively small textile factory called the Smithfield Cotton and Woolen Company (also known as Sinking Fund) and several adjoining farms on both sides of the river in Smithfield and Cumberland. Not at all coincidentally, the route of the Blackstone Canal had been projected to pass through these lands on the west side of the river. In the agreement that he made with the Blackstone Canal Company, Kelly—the titular owner of the textile firm and the past and future agent of Brown, Ives, and Carrington—received the right to tap the canal for waterpower in return for allowing it to pass through his land. Kelly and his silent partners chose to exercise this right at the southern terminus of the canal's passage through the land, thereby providing the Providence investors with a power canal that captured not only the waterfall at Sinking Fund but also the additional fall of the river over the next four and a half miles. With the aid of the canal, the single dam at Sinking Fund no longer powered only a sawmill and a cotton mill with a couple of thousand spindles; it now harnessed twenty-three feet of head and enough power to drive twenty-five thousand spindles.

In 1831 Brown, Ives, Carrington, and Kelly, together with a handful of others, formed the Lonsdale Company and began construction of the first of three large mills on the canal just north of Scott's Pond. These mills and the associated village of Lonsdale became the centerpiece of one of the largest textile firms in New England. In 1834 the firm obtained a charter for incorporation, which was still a novelty for Rhode Island businesses. The Lonsdale Company's initial success was followed by the construction of a second mill village at Ashton, across the river from the original Wilber Kelly factory, in 1867. These two mill complexes used all the waterpower available on this stretch of the river, but the Lonsdale Company continued to expand its land holdings, building the steam-powered Berkeley mill and village in Cumberland (1872) and the "new village" of Lonsdale (begun in 1861) and its immense Ann and Hope steam mill (1886), also in Cumberland.

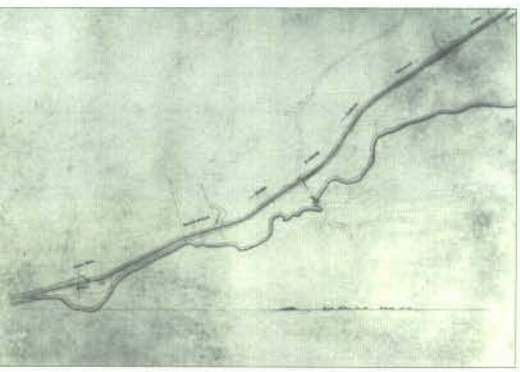
Clearly the construction of the Blackstone Canal provided the major impetus to the development of Rhode Island's first great textile corporation, and the success at Lonsdale compensated its investors for the loss they took on the canal. It is less clear, however, how closely this industrial development and the initial plans for the canal were intertwined and whether they

took root simultaneously. Certainly Carrington and Ives, as canal company commissioners, were ideally positioned to anticipate and capitalize on the new opportunities that the canal would create. To the suspicious mind, the development of Lonsdale seems to be a striking illustration of that conspiracy of the moneyed and privileged few, seeking private gain under the guise of public improvements, that played such a major part in the political rhetoric of the Jacksonian era.[14] However, if Carrington and Ives typified one political concern of the time, a few miles upstream from Lonsdale another canal-inspired development illustrated a very different theme in contemporary political discourse, that of the self-made man.

Darius and Welcome Farnum, brothers from the Uxbridge, Massachusetts, area, began their careers as mill hands and eventually acquired enough capital to set up their own operation in rented quarters in a Woonsocket mill. In 1824 Welcome purchased a 150-acre parcel on the west bank of the Blackstone just north of the Rhode Island line, where he built a woolen factory. When contractors began digging the canal trench along the east bank of the river opposite his mill in 1826, Welcome Farnum (with his brother as coplaintiff) protested, claiming that the excavated earth being dumped in the river was causing backwater in his tailrace. Rather than press charges, he offered the canal commissioners an alternative: if they shifted the canal to the west side of the river, he would contribute five hundred dollars toward building a towpath bridge across the river above his dam and release the company from responsibility for any flowage damages and from obligations to build fences or bridges on his land.

The canal company accepted the proposal and granted the Farnums the same right it granted Wilber Kelly, the right to perforate the canal at any point on land they owned and to use its water, provided that they maintained an acceptable water level in the canal. With this agreement in hand, the Farnums proceeded to purchase the property immediately south of theirs from Stephen Smith, one of the canal commissioners, who had just bought the property on the brothers' advice. With the canal providing an improved headrace, the Farnums then extended their tailrace to the south, which enabled them to capture more of the river's fall. The result was an increase in waterpower that enabled them to erect a second factory in 1827.

This factory had barely begun production when the canal company began to raise the Woonsocket dam two feet. The Farnums immediately protested that the extra water would flow back into their lower mill and impede its operation. The canal commissioners argued that because there had been no viable mill privilege on the southern portion of the Farnum land when the canal route was laid out, the Farnums' claim was faulty. However, as in Pawtucket, the manufacturer's rights took precedence over those of the canal, and the Farnums' claim was upheld in court. With their mill privilege assured, the Farnums went on to replace the 1827 mill with the far bigger brick Mammoth Mill, the centerpiece of the village of Waterford in the 1830s. If the development of Lonsdale was evidence of a conspiracy of money and privilege, the Farnums' accomplishments demonstrated that these self-made men, though less privileged, were no less canny in their ability to take advantage of the opportunities created by the canal.[15]



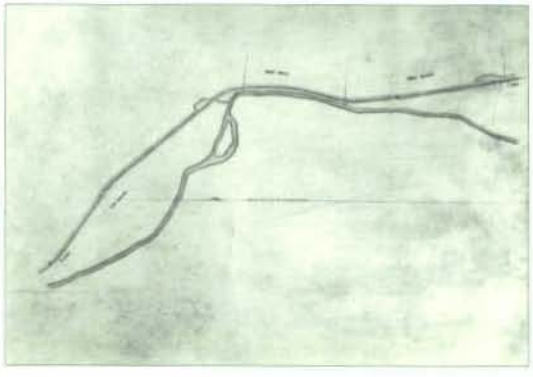
The Blackstone Canal's mixed legacy of failure and success mirrored the powerful changes that were affecting society as a whole in the Blackstone Valley in the first half of the nineteenth century. The canal's story also illustrates the rapid and often abrupt course of what economic historian George Rogers Taylor has termed the transportation revolution.

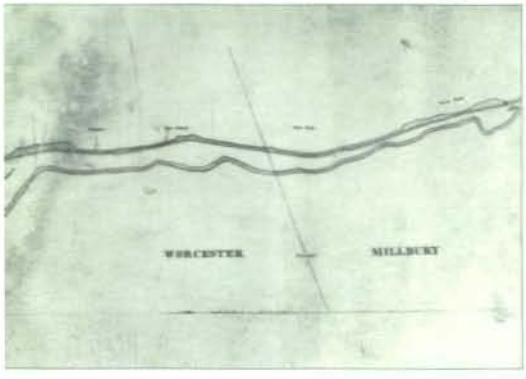
Though the canal may be justly termed a failure for its investors (or at least the majority of them), it did successfully demonstrate the value of an improved transportation system through the Blackstone Valley. In Worcester there was a savings of $3.80, or nearly 50 percent, per ton on goods shipped from Providence by canal over those carried by road from Boston. It even became cheaper to transport goods from Boston to Worcester by shipping them on sloop and canal boat via Providence rather than carrying them the shorter distance overland.[16] Even after the canal's successes had spurred Boston to build the Boston and Worcester Railroad, the canal remained in use, albeit at a reduced level, until the Providence and Worcester Railroad began providing the same service more efficiently. Significantly, when the Providence-to-Worcester rail line was proposed, a large number of canal investors were able to overlook the losses they had already sustained and supported the new venture.

The canal did much to foster new patterns of growth and development during the period of its operation. In most cases these were sustained rather than disrupted by the railroad, which followed essentially the same route that the canal did. To a large extent the canal promoted effects on the valley that a Providence newspaper writer had predicted in 1826:

> There is, no doubt, but at every site for a factory upon the whole length of the Blackstone Canal, there will be factories erected and other works, with flourishing villages in their train, and ere long of merchants and traders; those, instead of being located in the country towns, remote from business, as heretofore, they will locate themselves in the villages on the canal, that country produce brought to them may go down the Canal in a cheap, safe and expeditious way to market, as well as bring up their merchandize with safety to their stores, with one quarter of the expense that cartage cost them now. . . . It is a fair conclusion . . . that there will be village nearly adjoining village . . . on the whole distance, and to passengers passing in the boats on the canal, the buildings on the shores will represent a thick settled city or town.[17]

Although the settlements in the Blackstone Valley grew more like individuals beads on the necklace of the river than like the continuous band the writer envisioned, they did indeed grow from isolated hamlets into prosperous components of a thriving regional economy, the social and economic centers of the surrounding countryside.

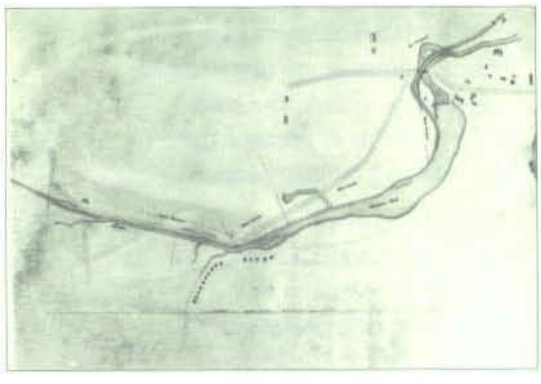


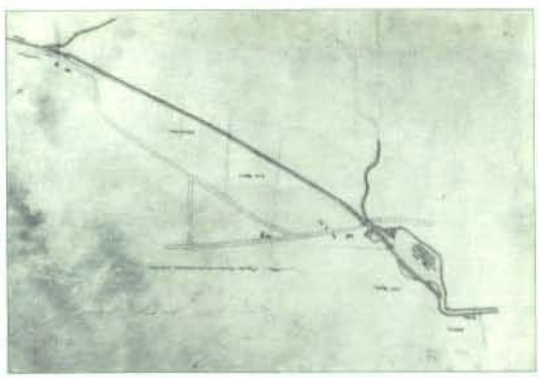


This new growth represented not just a physical change in settlement patterns but a transformation of the valley's agrarian culture. In the new villages such as Lonsdale, the factory supplanted the household farm as the center of economic life, and the factory owners, as employers and landlords, became to a large degree the arbiters of community life both inside and outside the factory. In this reorganization and reorientation of a traditional world, the people of the Blackstone Valley were in the vanguard of the country's movement into a fundamentally new society, one that we term modern. The Blackstone Canal was one of many agents in this transformation, and like many of those agents it was itself overtaken by the process of change. Today it survives in fragments, with placid waters moving slowly between quiet, tree-lined banks, summoning up images of leisurely travel in simpler days. Yet, while such images are pleasant to consider, we will do well to remember that the canal was, in its brief life, a powerful force for modernization.

Notes

1. *Worcester Spy*, 8 Oct. 1828.
2. Welcome Arnold Greene, *The Providence Plantations for Two Hundred and Fifty Years* (Providence, 1886), 75.
3. William Lincoln, *History of Worcester* (Worcester, Mass., 1837), 340.
4. John Brown to Benjamin Bourn, 26 Nov. 1792, Peck Collection, IX, 8, RIHS. For a discussion of the English turnpike system's influence in the United States, see Daniel P. Jones, "Commercial Progress versus Local Rights: Turnpike Building in Northwestern Rhode Island in the 1790s," *Rhode Island History* 48 (1990): 21-32.
5. Quoted in William Greene Roelker, "The Providence Plantations Canal," *Rhode Island History* 5 (1946): 20.
6. See Brendan F. Gilbane, "Pawtucket Village Mechanics—Iron, Ingenuity, and the Cotton Revolution," *Rhode Island History* 34 (1975): 3-11.
7. See Morton J. Horwitz, *The Transformation of American Law, 1780-1860* (Cambridge, Mass., 1977), 34-40.
8. This information has been culled from construction contracts and other canal company records contained in the Edward Carrington Papers, RIHS, and the Brown Papers, John Carter Brown Library, Brown University, Providence.
9. Charles Nutt, *A History of Worcester and Its People* (New York, 1919), 188-89.
10. Blackstone Canal Company minute book, 19, Thomas Jenckes Papers, RIHS.
11. Ibid., 20ff.
12. This discussion is based on information found in the untitled journal of legal settlements between millowners and the Blackstone Canal Company in the Thomas Jenckes Papers; "Opinion of the Judges of the Supreme Court . . . in the Cases [of] William Allen and Others . . . vs. Blackstone Canal Company," 1838 (bound copy in RIHS Library); and Douglas Cumming, "The Blackstone Canal and Its Water Rights," seminar paper, Brown University, 1978.
13. See Peter Coleman, *The Transformation of Rhode Island* (Providence, 1963), 121-23.
14. See Eric Foner, *Free Soil, Free Labor, Free Men* (London, 1970), for a discussion of Jacksonian-era distrust of privilege and the "money power."
15. See the manuscript summary of the Farnums' complaint in the Brown Papers.
16. John Hayward, *A Gazeteer of Massachusetts* (Boston, 1849), 427.
17. Providence *Microcosm*, 15 Dec. 1826.





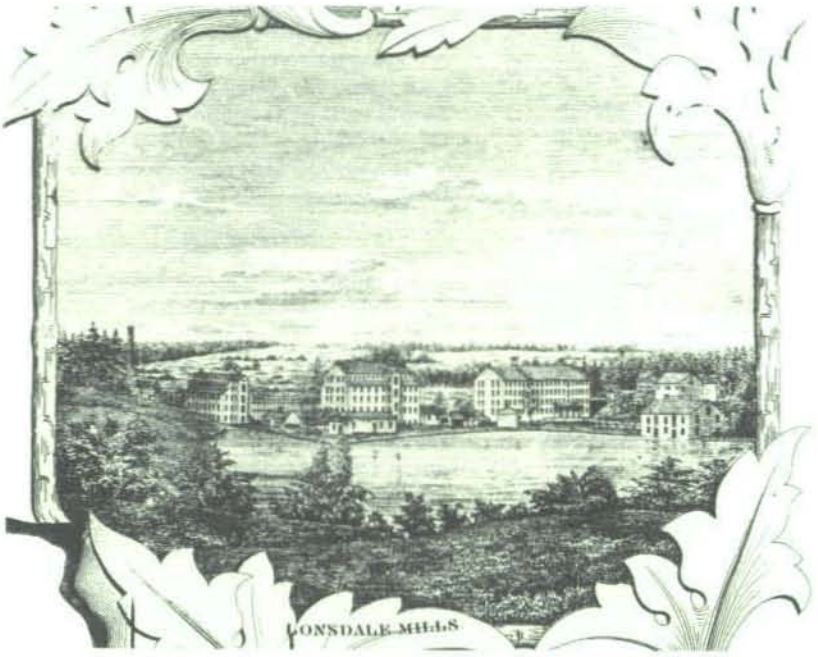
Observations

Rhode Island's Blackstone River State Park

The idea for a linear park along the Blackstone River, combining recreational and historical features, has been in the imaginations of Rhode Island-area residents and park planners for over two decades.

The Rhode Island Department of Environmental Management (RIDEM) acquired its first land along the Blackstone in the early 1970s, when a family that once headed up a textile empire in the valley donated land in the Lonsdale/Valley Falls area. This 25-acre donation of land in three municipalities was a preview of the natural and historical park system of the future. It combined considerable acreage in the biologically critical Lonsdale/Valley Falls Marsh, the largest freshwater wetland in Providence County and a wildlife haven in a very densely populated area, with a 2-acre parcel containing the fascinating ruins of the Valley Falls mill complex, dating from 1820. Most of the marsh is now protected, and the town of Cumberland has not only bought additional property there but has also started developing what promises to be one of the river's most intriguing historical parks at the site of the old mill's ruins.

The park system was given another boost in 1983 when RIDEM received a unique gift of land and water: a three-mile segment of the 1828 Blackstone Canal and canal towpath. The last remaining watered segment of the canal in Rhode Island, this section survived because the Lonsdale Company used it for waterpower and fire protection well into the twentieth century. Planning for a state park stepped up with the gift, and in 1986 a master plan for the park was created. This plan identified natural and historic sites in the six Rhode Island cities and towns through which the river flows, thereby providing a blueprint for land acquisition, park development, visitor centers, and a circulation system of "riverways"—routes for canoeing, hiking, biking, and driving. Contributors to the master plan included historians, planners, town and state officials, and local citizens.



Lonsdale Mills complex, 1851. Under Wilber Kelly's direction the Lonsdale Company grew into one of Rhode Island's largest textile manufacturing firms. Cartouche from H. F. Walling's "Map of Providence County," 1851. RIHS Collection (RHi X3 1529).

Since the plan was published, significant progress has been made by this complex constituency towards the creation of a linear park system along the river. RIDEM has focused its land-acquisition efforts in Lincoln and Cumberland, and it now owns approximately 150 acres between the mill villages of Albion and Lonsdale. Additionally, RIDEM has acquired in North Smithfield 84 acres of the last remaining natural stretch of river at the remarkable Blackstone Gorge. This site straddles the border of Massachusetts and is being developed in partnership with that state.

The first phase of Blackstone Park development has just been completed. This has meant site improvements at the head of the canal section in the Old Ashton Historic District in Quinnville, Lincoln, including repairs to 160-year-old hand-laid stone walls, enhanced canoe put-ins and portages, a new pedestrian bridge, improvements to the road and parking areas, and landscaping. The heart of the effort is historic preservation of the Kelly House, built in 1835 for the supervisor of the Old Ashton mill. The site around the house, formerly a junkyard, was cleaned up during massive volunteer Earth Day efforts in 1990 and 1991.

One of the most eagerly awaited aspects of the developing linear park is the Blackstone Bikeway, which will link dozens of local parks, conservation land, mill villages, and historic-interpretation areas. The bikeway from the Kelly House north to Woonsocket should be completed by 1995. Like the river, the path will ultimately connect the entire Blackstone River Valley National Heritage Corridor from Worcester to Providence.

GINNY LESLIE
Planner
Rhode Island Department
of Environmental Management

Preserving History in the Blackstone River Valley

The Blackstone River valley was recognized by Congress in 1986 as one of the nation's best repositories of landscapes, sites, and structures recalling the development of American industry. Complex patterns of eighteenth- and nineteenth-century production and social structure remain visible there today. Few places in the nation exist where such a concentration of integrated historic, cultural, and natural resources has survived and can be made accessible to a broad general public.

Historically, the valley is significant because it was the first region of the New World developed by and for the Industrial Revolution. It witnessed the birth of modern industry at Slater Mill, the first widespread use of waterpower, and the establishment of transportation and power systems crucial to the development of New England's second- and third-largest cities. The valley was also the first ethnically and religiously diverse region in New England.

The responsibility for recognizing and maintaining the valley's history and resources is being taken up by twenty communities, two states, and the federal government, acting through the Blackstone River Valley National Heritage Corridor Commission. The commission, an affiliate of the National Park Service, is charged with providing a management framework for its partners and with offering technical assistance in such areas as specialized land use and historical preservation.

The Rhode Island Department of Environmental Management's Blackstone River State Park in Rhode Island is one of several projects being developed under the auspices of the Corridor Commission. Others include a Massachusetts state park along the Blackstone River and Canal, a "greenway" to protect water and open space, a Providence-to-Worcester bikeway, a new forty-page canoe guide to the river, a series of walking tours, and a score of other interpretive efforts. We are pleased to join the Historical Society in the ongoing work of remembering and defining the history of Rhode Island and the Blackstone Valley.

EDWARD F. SANDERSON
Chairman
Blackstone River Valley National Heritage Corridor Commission

A Look at the Sources: Why Collect?

The Rhode Island Historical Society is fortunate to have rich collections detailing early industrialization in the United States. Some of the early members of the Society, either out of a desire to preserve their past or from a feeling of self-importance, deposited their business and organization records and personal papers at the Society for safekeeping. Little did they know that their paper legacy would later be used to develop interpretive signs for houses and parks and interpretive talks for tours where their mills once stood, that it would be used to encourage children to learn about the workers in the old mills and to study the landscape and the man-made environment of industrialism.

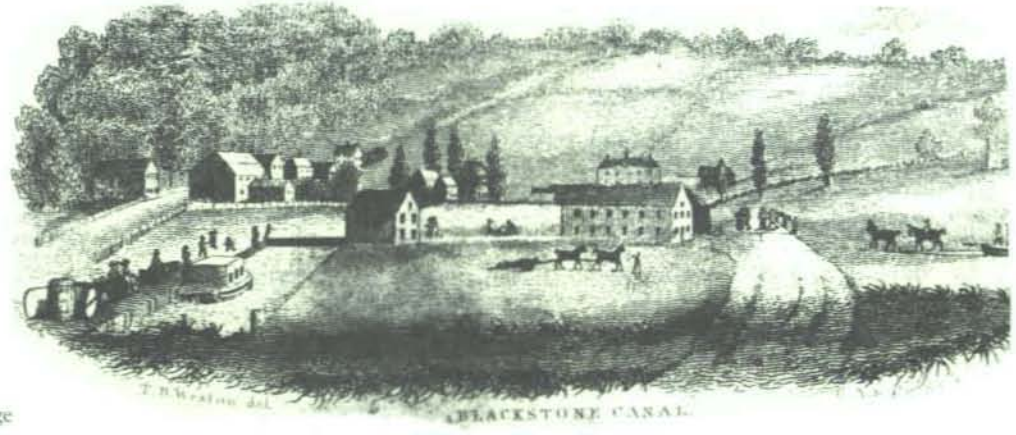
Two extraordinary collections that well demonstrate the use of archives and graphics collections at the Society are the Edward Carrington Papers and the Lonsdale Company Records. The Edward Carrington Papers, first described in the January 1963 issue of *Rhode Island History*, came from the attic of the Carrington House in Providence. Two grants helped organize the material to improve accessibility. The collection was noted at first primarily for its wealth of information on the China trade, but because of Carrington's interest in other enterprises, it also contains ledgers, bills, and pay books from the Hamlet Mills in Woonsocket and the Blackstone Canal Company.

Presently the Carrington Papers are being used to research the text of an exhibiton on the China trade which is to be held at the Rhode Island School of Design.This exhibit will be staged with the help of a National Endowment for the Humanities grant awarded to the Society for "What a Difference a Bay Makes," an educational series for public libraries. The Carrington Papers (as well as the Society's Stephen Allen Jenckes Legal Papers and Green Legal Papers) were also useful in Rick Greenwood's examination of Blackstone Canal history. Recently the Carrington records have been used by the Rhode Island Historical Preservation Commission to develop archeological surveys for placing the canal on the National Register of Historic Places.

The Lonsdale Company Records were given to the Society by the John Carter Brown Library in 1958 and the Grant Capital Management Corporation of Providence in 1978. These records evidently sat for many years in the basement of 50 South Main Street, a Providence business office. The records are actually included in a larger collection, the records of the Brown and Ives Manufacturing Company, of which the Lonsdale Company was a part. The Lonsdale records tell us of real estate transactions, daily accounts from the mills, including pay and costs of cotton, and transactions at the company store. Doug Reynolds drew on these records extensively in developing his history of the Wilber Kelly site in Lincoln.

Such collections as these come alive only when they are taken off the shelves and used to develop historical context for the public, whether in traditional scholarly articles, genealogies, or archeological reports. The Manuscript Division of the Society is open to the public, by appointment, Wednesday through Saturday, 10:00-5:00, from Labor Day to Memorial Day; summer hours are Tuesday, 12:00-8:00, and Wednesday through Friday, 10:00-5:00.

CYNTHIA BENDROTH
Manuscripts Curator
Rhode Island Historical Society



Engraving of the Blackstone Canal from an advertisement for the Providence and Worcester Boat Company. 1829. RIHS Collection (RHi X3 2739).