Rhode Island History

Volume 43, Number 2 May 1984

Published by The Rhode Island Historical Society, 110 Benevolent Street, Providence, Rhode Island, 02906, and printed by a grant from the State of Rhode Island and Providence Plantations, J. Joseph Garrahy, Governor; Susan L. Farmer, Secretary of State.

Issued Quarterly at Providence, Rhode Island, February, May, August, and November. Second class postage paid at Providence, Rhode Island.

RHODE ISLAND HISTORY (ISSN 0035-4619)

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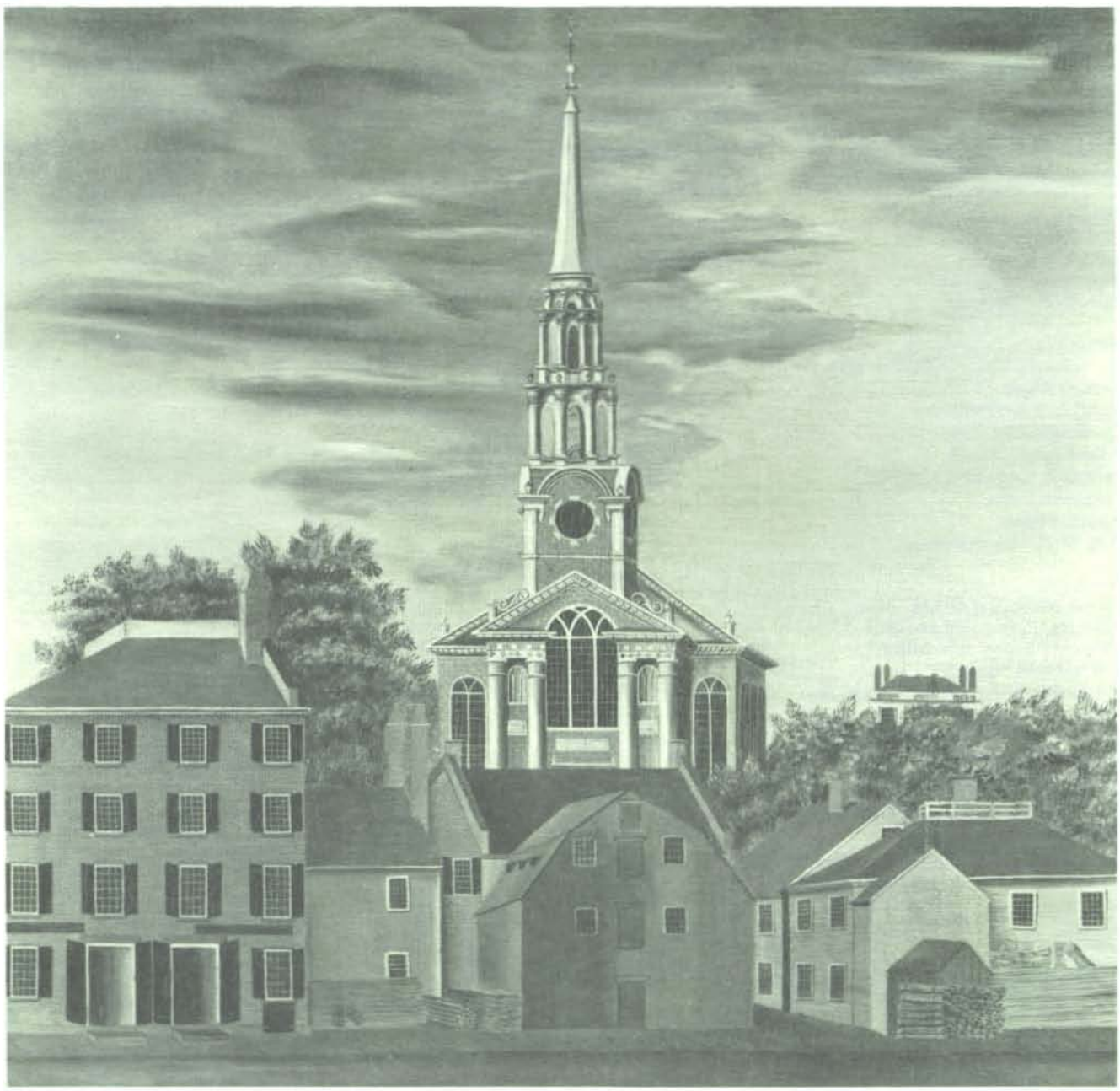


A View of Providence: The Explication of a Landscape Painting

Robert P. Emlen

Early pictures of the Providence landscape have always attracted local attention. Even as they were being painted, John Worrall's "Providence Theater Drop Scene" (ca. 1808–1811) and Joseph Partridge's "View of President Street" (1822) inspired comment in the Providence newspapers. Their topical interest and local color appealed to the people of Providence, who appreciated the recognition the visiting artists brought to their home town.

Over the years, as paintings like these made their way into local picture galleries and institutional collections, they were joined by such scenes as John Russell Bartlett's "Great September Gale of 1815," one of many versions inspired by the original engraving made by James Kidder in 1816 (see fig. 25, p. 60, below), or Alvan Fisher's pair of landscapes "Providence From Across the Cove," painted in 1818 and 1819 (for the latter see fig. 14, p. 52, below). They tended to be panoramic views of the buildings and streets of old Providence, recording for posterity the landmarks of a changing city. While some of them were privately owned, all of them were publicly admired, and in the public consciousness they formed a group of pictures that came to be informally regarded as community assets and antiquarian treasures. Reproduced throughout the twentieth century in innumerable publications, this familiar body of paintings, prints, drawings, and photographs has become part of the pictorial vocabulary of Providence, part of the way we view the cityscape of College Hill.

Therefore the appearance in 1975 of a radically different and previously unknown painting of early nineteenth-century Providence was greeted with some surprise (see fig. 1). First published as a full page color advertisement in the magazine ANTIQUES,[1] the painted wooden panel illustrated what was unmistakably John Holden Greene's First Congregational Church (1816), overlooking a row of nondescript and unidentified buildings painstakingly portrayed against the backdrop of College Hill. Lacking a signature, date, or label, the painting presented an enigma: it came without a recorded history.

The trail of its previous owners led only to an antiques dealer, who had died without sharing specific knowledge about its past. The provenance published with the advertisement alluded in general terms to its once being owned by the "Benjamin Clifford Family of Providence, Rhode Island, and Fall River, Massachusetts." And, most exasperating

Mr. Emlen is the former associate curator of the Rhode Island Historical Society and is now acting associate curator of decorative arts, Museum of Art, Rhode Island School of Design. Initial research for this study, which was used in the preparation of the exhibit entitled "A View of Providence," was accomplished with the assistance of Nina Zannieri and Charlotte Sonnenblick. The author is also indebted to Edward F. Sanderson for valuable suggestions in the preparation of this essay, and to Antoinette F. Downing for advice on the eighteenth-century architecture of Rhode Island.

1. *The Magazine* ANTIQUES, CVIII (Aug. 1975), 161.

Figure 1. "View of Providence." Oil on panel, 28" × 29". Privately owned. Photograph by Helga Photo Studio. Reproduced with the permission of Hirschl & Adler Galleries, New York.

Figure 2. First Congregational Church, Providence. Detail from "View of Providence." Photograph by Helga Photo Studio. Reproduced with the permission of Hirschl & Adler Galleries, New York.

of all, it seemed to have escaped the notice of the keen observers of the Providence landscape throughout the last 150 years.

Yet the absence of knowledge about this unusual picture could not impute its authenticity. Technical examination under ultra-violet light revealed many years of wear and use, indicating that it was indeed an old painting. But, with the unusually forceful effect of its large-scale representation and detailed, hard-edged lines, it was so unlike other views of Providence that there was no real stylistic context in which to place it. The only way to comprehend this painting was to explicate it as a cultural artifact, to examine each detail in it, to learn just what was being pictured, and to extrapolate from the visual evidence what the original scene was meant to represent.

That opportunity arose in the spring of 1982, when the picture again was offered for sale.[2] Newly restored to its brilliant color, and now entitled "A View of Providence," it was acquired by Hirschl & Adler Galleries of New York. Its new owners generously lent it to the Rhode Island Historical Society, where, during the summer of 1982, it formed the nucleus of a special exhibition. Through related prints, drawings, photographs, and paintings, the exhibit entitled "A View of Providence" identified and interpreted the scene portrayed in it.

No artist was identified, no documentation was discovered that shed light on the circumstances of its past. What emerged, however, was a picture of the way Providence appeared in the first quarter of the nineteenth century, outgrowing its past as a riverfront town and growing into its new role as a mercantile port city.

Except for the First Congregational Church, none of the buildings in the painting is extant today. Thus, by necessity, research started with the church (see fig. 2).

When their twin-spired meetinghouse was lost to fire on June 14, 1814, the Benevolent Congregational Society resolved to rebuild with stone. Parishioner John Holden Greene, the noted Providence architect, was employed to prepare plans for a new church, and in six weeks his drawings were finished. The congregation approved the plans, and the building committee instructed him to proceed with construction. By the time the ground had frozen over that winter, the cellar was already dug and the foundation walls laid up. Work on the church continued for two years, until, on August 16, 1816, the steeple was finished and the staging removed.[3] That date provides the earliest point at which this scene could possibly have been painted.

Judging from the awkward slant of the bell tower and steeple, the artist who drew "A View of Providence" was not entirely in command of the rules of perspective. His attempt to carry his three-quarters view above the roofline ended in an alarming off-center tower. Happily, the artist's unsophisticated style is also expressed in his limner-like tendency for literal depiction of detail. Every quoin and muntin on the church was distinctly articulated, theoretically from his vantage point

2. Auction of the Thomas G. Rizzo Folk Art Collection, Sotheby-Parke Bernet, New York (Apr. 29, 1982).

3. Avery Lord, "Some Accounts of the Pew Holders in the First Congregational Church," typescript, 5–6, in Benevolent Congregational Society Records, Rhode Island Historical Society.

hundreds of yards away, providing a precise representation of the architectural details of the building.

His attention to detail was so exacting that it is surprising to find, on close examination, the occulus windows above the pediment filled with black discs instead of clock faces. Since the only contemporary print of this church, William Goodacre's widely published engraving "Unitarian Church at Providence" (1830) clearly shows a clock in the steeple (see fig. 3), this painter was either inaccurate, or he knew something Goodacre did not know. The early records of the First Congregational Society, however, resolve this contradiction:

> August, 1835: Voted: that Messrs. J & H Hamlin, Mr. Bishop, Caleb Earle, & A. D. Hodges be a committee to solicit subscriptions and obtain funds for the purpose of purchasing and placing a clock in the steeple of the meeting house. . . .
>
> Setember 10th, 1836[:] Benevolent Congregational Society, Draft to Kingsley C. Gladding: For painting & gilding three Clock Dials, 21 1/2 feet in each: $48.37 1/2[4]

Thus, as it turns out, William Goodacre's 1830 engraving was inaccurate. The new church had waited twenty years to buy its tower clock, during which time the three openings had remained boarded over. So, in addition to verifying the accuracy of this representation of the church steeple, Kingley Gladding's bill in 1836 for gilding the dials provides the latest possible date when "A View of Providence" could have been painted.

A walking tour of downtown Providence determined that the artist must have used the west bank of the Providence River as his vantage point for painting his picture of the church. The buildings in the foreground, therefore, stood on the east bank. By walking along the river, the site was visually established below the present-day Crawford Street bridge. And once that was determined, the unusual combination of building types so carefully depicted in the painting made it possible to locate the actual structures in early photographs of the area. The buildings were located along South Water and South Main streets, on the two blocks between Crawford and Ward streets (see fig. 4).

The town of Providence was originally divided into long, narrow lots, reaching easterly up College Hill from the river. From the first years of European settlement, the river bank was dotted with boat landings, then with docks, and, by 1680, with wharfs. Later, as the sea merchants began to develop the waterfront, warehouses appeared on the wharfs. In the eighteenth century, in order to provide public access from Towne (now Main) Street to the river, narrow lanes or "gangways" were cut through between the river lots (see fig. 5).[5]

The gangway through the Crawford family's lots was well travelled, and in 1738 the Town Council voted to widen it from twelve feet to thirty-six feet.[6] It became known as Crawford Street, and, just out of

Figure 3. "Unitarian Church at Providence." Engraving by William Goodacre, 1830. Courtesy of Rhode Island Historical Society Library (RHi x3 4887).

4. Vote Passed by the Benevolent Congregational Society, Aug. 11, 1835, Benevolent Cong. Soc. Recs; Bill from Kingsley Gladding to the Benevolent Congregational Society, Sept. 10, 1836, *ibid.*

5. Michael Holleran, "In Defense of Gangways: Memories of the Waterfront," Providence Preservation Society, *News*, XXI (Jan.–Feb. 1983), 9.

6. John Hutchins Cady, *The Civic and Architectural Development of Providence* (Providence, R.I., 1957), 29

Figure 4. Providence waterfront from the northwest, ca. 1868. Courtesy of Rhode Island Historical Society Library (RHi x3 2300).

sight at the left or northern edge of "A View of Providence," it bounds the first lot visible in the painting.

LOT ONE

In the seventeenth century Gideon Crawford owned three contiguous lots south of Crawford Street. His son, Major William Crawford, built a small wooden dwelling house and warehouse on the first lot south of the gangway, and in 1737, between them, Major Crawford's sons, Joseph and William, divided "the three water lots, each Fourty Feet, part of our Father's estate, which fell to us in part of our portion."[7] Joseph took the first lot, with the dwelling house and warehouse. After Joseph's death in 1799, it was purchased by Zachariah Allen,[8] who in turn left it to his daughter Abby. Hit hard by a devastating fire in 1801, South Main Street turned derelict and seedy, and was referred to locally as "Rotten Row." But in 1822, when Crawford Allen purchased the lot from his sister,[9] the neighborhood was picking up. That year William Rea, a Providence native, wrote to his friend, Edwin T. Jenckes:

> There is forty or Fifty new buildings going up . . . a number of stores on Water Street, Rotten Row is pull'd down and Brick Buildings going up.[10]

7. Providence Deeds, Vol. 17. p. 428, Providence City Hall, hereafter cited as Providence Deeds, 17: 428.
8. *Ibid.*, 27: 91, 93.
9. *Ibid.*, 46: 101.
10. William Rea to Edwin T. Jenckes, Sept. 2, 1822, Box 8, Nightingale and Jenckes Papers, R.I. Hist. Soc. See also Walter R. Danforth, "Pictures of Providence in the Past," *Rhode Island History*, XI (1952), 54.

William Rea may have been referring to the brick store Crawford Allen was building on the site of Joseph Crawford's warehouse.[11] Four stories high, the new store spanned the entire width of his forty-foot lot and reached back twice that distance (see fig. 6).

The front of the building faced the river, with large doors opening onto the wharf. On three sides of the store were four bays of iron-shuttered windows and doors, capped by a dentillated cornice and a monitor-hipped roof. It was an ambitious project, not only for the size of the building or the expense of the masonry construction, but in the implications inherent in its design: the fourth side was sheared off asymmetrically at the southern property line. Evidently Crawford Allen foresaw a new era on South Water Street, and expected his brick store to serve as the northern end of a commercial block.

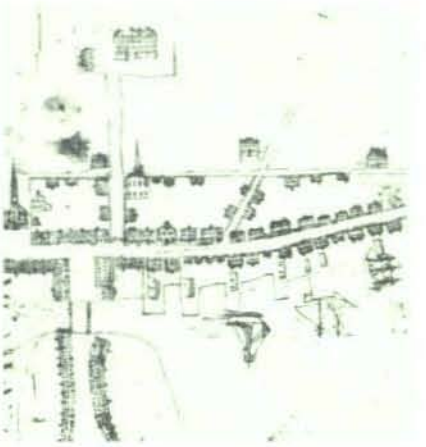


Figure 5. Detail from map of Providence by John Fitch, 1790. Courtesy of Rhode Island Historical Society Library (RHi x3 336). For a full view of this map see fig. 17, p. 53.

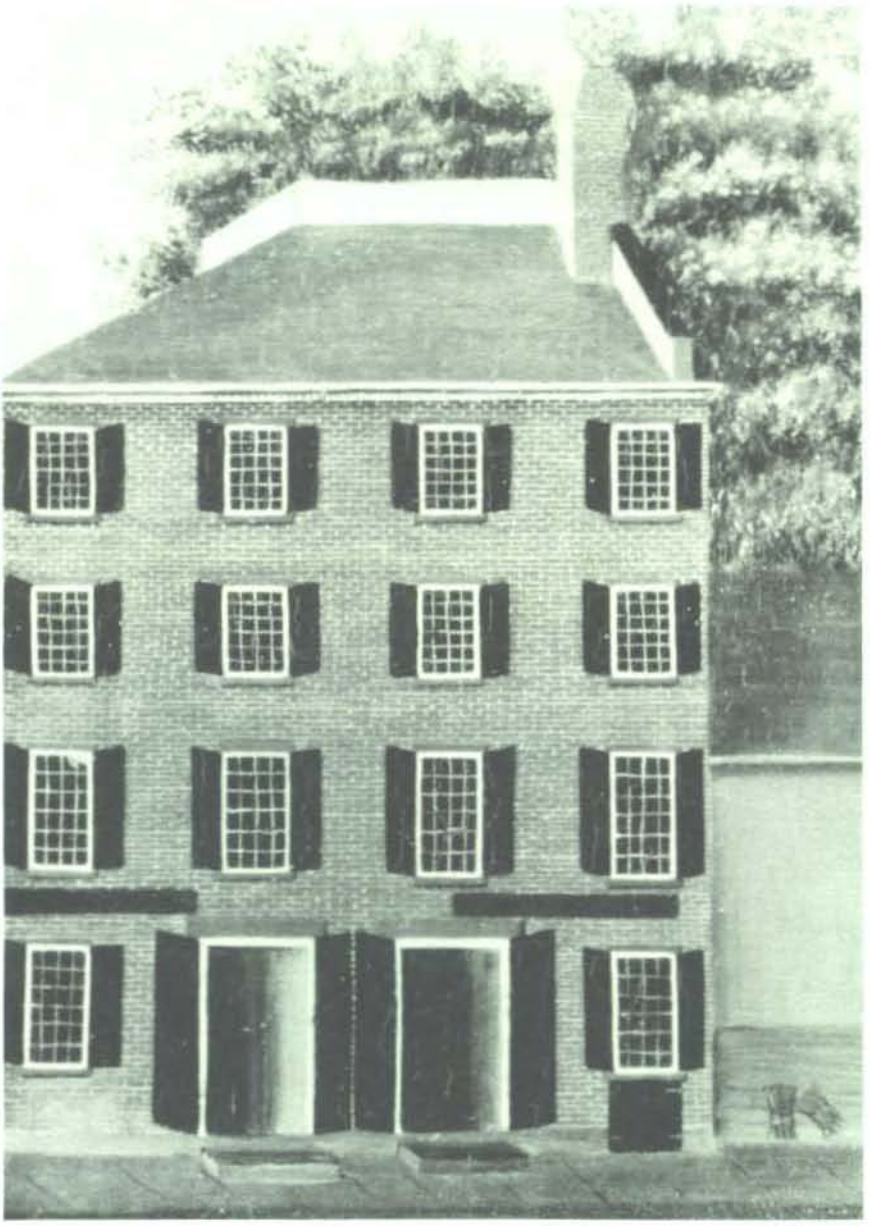


Figure 6. Crawford Allen's brick store. Detail from "View of Providence." Photograph by Helga Photo Studio. Reproduced with permission of Hirschl & Adler Galleries, New York.

11. The assumption that Crawford Allen constructed this building is borne out in the subsequent description of an abutting property, citing "the Brick Store erected by Crawford Allen." See Providence Deeds, 129: 398.

12. *Ibid.*, 43: 85.
13. *Ibid.*, 10a: 267.

In fact, three years later, he built another hip-roofed brick store at the other end of his intended block, 220 feet farther down South Water Street. A symmetrical complement of the northern end of the row, it stood at the northwest corner of Planet Street, to the right of the scene encompassed by this painting.[12]

The waterfront pictured in "A View of Providence" has been dredged and filled to allow deep-draft ships to berth in close to the shore, a distinct improvement over the shallow mud flats of the eighteenth-century river bank. The artist depicts it built up with a sea wall of cut granite blocks, and with a wharf paved in the same way. Because the scene could not have been painted before the brick store was built, it must therefore date, at the very earliest, after the summer of 1822.

LOT TWO

As his part of his inheritance in 1737, William Crawford took the two other forty-foot river lots. There was no dwelling house on his part of the property, and he did not stay to build one. He moved to Warwick, and within the year, sold the land, "together with an old Shopp and Wharf thereon erected," to Ebenezer Tyler, newly arrived from Attleboro.[13] In 1740 Captain Tyler married, and soon thereafter built a two-and-one-half-story dwelling house on the northeast corner of his property, which measured eighty by two-hundred feet (see fig. 7). Unlike the brick store, which fronted on the Providence River, the Tyler dwelling faced east to the residential neighborhood of South Main Street.

Viewed from the rear in "A View of Providence," the Ebenezer Tyler house is undistinguished, except for two tall brick chimneys looming high above the roofline. When it is seen from the front, however, the

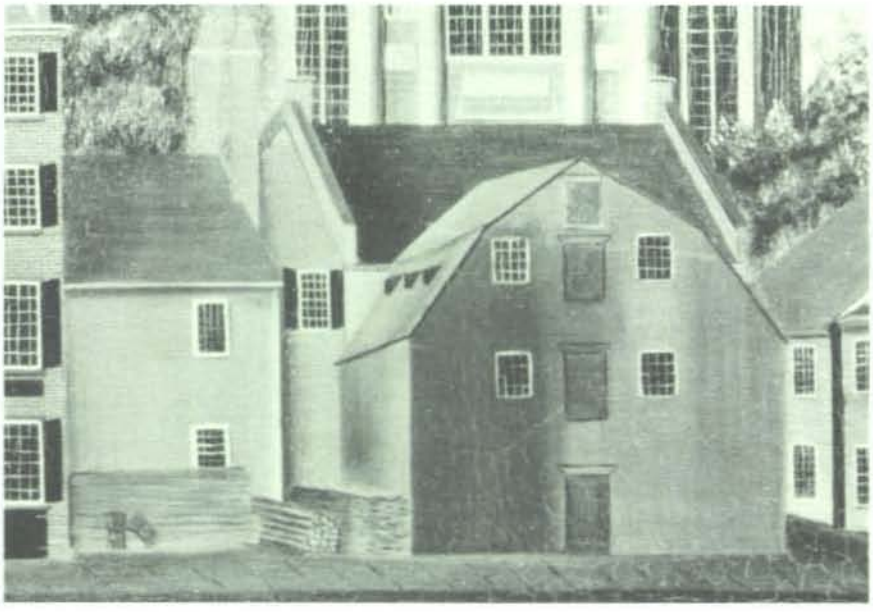


Figure 7. Ebenezer Tyler house. Detail from "View of Providence." Photograph by Helga Photo Studio. Reproduced with permission of Hirschl & Adler Galleries, New York.

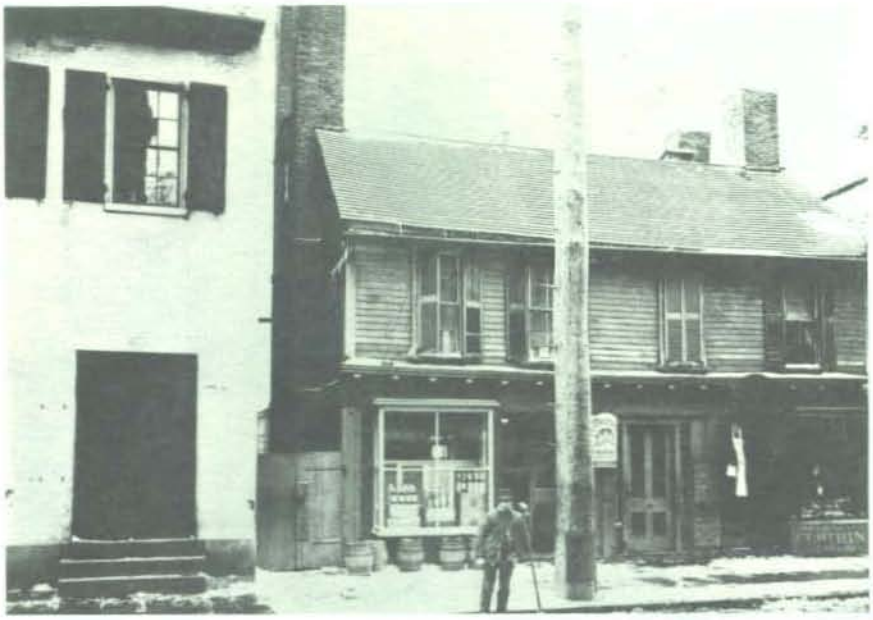


Figure 8. Ebenezer Tyler house, Providence. Photograph by Norman M. Isham, taken from South Main Street, before 1906. From Rhode Island Collection, Providence Public Library. Courtesy of Providence Public Library.

whole plan of the house is revealed, and the reason for the high chimneys is explained (see fig. 8). Measuring thirty-three by twenty-four feet,[14] it was a wood frame house with a pair of chimneys on each of its gable ends. The chimneys on its northern end, to the right in this photograph, rise approximately five feet above the roofline and above the Joseph Crawford dwelling house next door. At just this height on the two southern chimneys, the mortar changes color, and the bricks appear darker and of a more regular surface. Although they were once all the same height, the southern chimney stacks were apparently extended an additional five feet at a later date.[15] The painting tells the story: when its brick neighbor was erected on the lot to the south, the new, taller building must have overshadowed the Tyler house, interfering with the draft of its adjacent chimneys. They had to be built up to clear the obstruction in order to keep the fireplaces from smoking. No taller buildings were constructed on the northern side, and the other pair of chimneys proved satisfactory at their original height.

LOT THREE

In 1790, after Rhode Island ratified the Constitution, a United States customs district was established for the upper Narragansett Bay, and a Customs Office was opened in Providence.[16] From 1790 until her death in 1804, Ebenezer Tyler's widow Anne rented the ground floor of her house to the new agency. Her daughter Hannah inherited the homestead, and maintained this arrangement with the government for another fourteen years,[17] until the Treasury Department built its own brick Customs House next door to the south. Also facing on South Main Street, it is seen from the rear in "A View of Providence."

14. *Providence Journal*, Feb. 12, 1906.

15. These estimates were made by measuring brick courses on the Benjamin Clifford and Samuel Allin Store (1811–1814) at 245 South Main Street, the nearest brick building of comparable nature and date still standing. In photographs of the Ebenezer Tyler house, the tall chimneys can be seen to rise sixty-three courses above the roofline. On the Clifford and Allin Store, sixty-three courses measures ten feet, six inches.

16. National Society of the Colonial Dames of America, *Three Centuries of Custom Houses* (Washington, D.C., 1972), 39–40.

17. Henry R. Chace, "A Descriptive List of All the Houses in the Compact Part of the Town of Providence, R.I., 1799," typescript, 55, R. I. Hist. Soc.

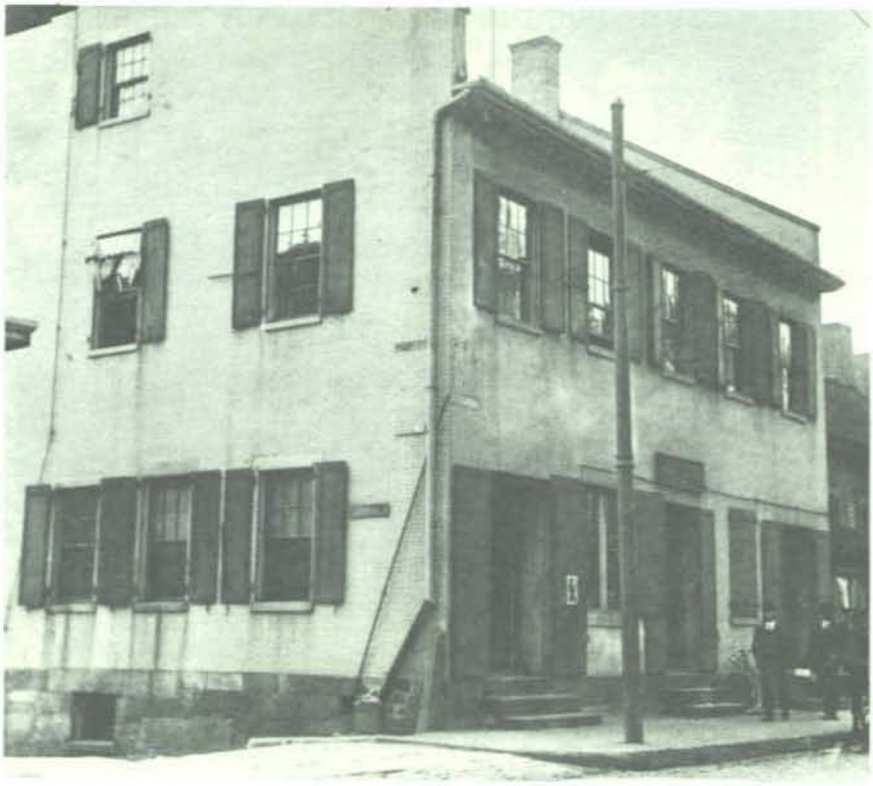


Figure 9. United States Customs House, Providence. Photograph taken from South Main Street, before 1906. Courtesy of Rhode Island Historical Society Library (RHi x3 4395).

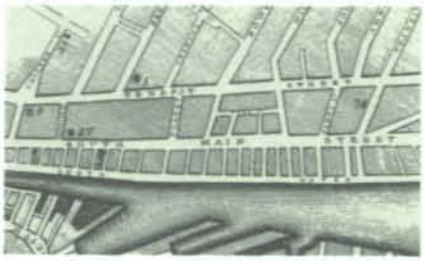


Figure 10. Detail from map of Providence by Daniel Anthony, 1824. Courtesy of Rhode Island Historical Society Library (RHi x3 4891).

The new Customs House stood on the second of Ebenezer Tyler's two lots. That property passed to his daughter Amey, and upon her death in 1810, was sold to Caleb Earle and Sanford Branch, house carpenters and lumber merchants.[18] Earle and Branch were interested principally in the commercial uses of the waterfront, and in 1817 they sold the United States government a building lot on South Main Street off the eastern end of their property.[19]

The new brick Customs House was a fortress (see fig. 9). Every one of its doors and windows—and ten of them opened onto South Main Street alone—were equipped with heavy iron shutters, perhaps setting the style for Crawford Allen's store five years later. Though two-and-one-half-stories high, its raised gable-end walls (which rose approximately three-and-one-half feet above the roofline, to prevent the encroachment of fires from neighboring roofs) gave it an imposing appearance.[20] It soon became a landmark: it rated its own keyed number on Daniel Anthony's map of Providence, printed in 1824 (see fig. 10), and lent its name to the adjacent gangway running from South Main Street to South Water Street. In "A View of Providence," Custom Street can be seen emerging at the bottom of the hill, to the right of the gambrel-roofed shed.

The shed was the warehouse and shop for Caleb Earle and Sanford Branch's house-carpentry business. Sited directly on the wharf, it stored the firm's lumber and buildng supplies on four floors, where large loft doorways can be seen in "A View of Providence," capped by

18. Providence Deeds, 26: 80; 33: 220.
19. *Ibid.*, 39: 528.
20. Twenty courses of brick are visible in a photograph, ca. 1906.

the projecting splayed lintels so distinctive to early nineteenth-century Providence buildings.

Earle and Branch built up the sea wall, not only in front of their shop, but in front of their neighbor's land as well. In an indenture with Miss Hannah Tyler in 1815, they agreed to rent her garden lot, with its forty-foot river frontage, providing that:

> they will, within two years, erect a good and sufficient front wall on said lot adjoining the river, and put a cap log thereon and affix fenders thereto, and fill up with sand as said Earle and Branch's front wall now is.[21]

Six years later Caleb Earle purchased the entire Tyler property outright.[22] Clearly illustrated in "A View of Providence" are the stacks of boards, piles of framing lumber, and bundles of shingles the lumber merchants stored behind the house.

On the hillside next to the First Congregational Church, a Federal-style house peeks through the trees. It was the Waite Smith house, built in the early nineteenth century by the widow of Charles Field, on the present-day corner of Brown and Charlesfield streets.[23] When this picture was painted, the house was inhabited by Benjamin Cowell, clerk of the United States Circuit Court. The house's significance and relationship to the rest of the painting remains a mystery.

21. Providence Deeds, 39: 142.
22. *Ibid.*, 46: 118.
23. Providence Probate Records, Will Book 13, p. 13, Providence City Hall.
24. Providence Deeds, 11: 16.
25. Henry R. Chace, "Houses in Providence, 1770, in the compact part of the Town, with the Location, Occupation, and Taxes Assessed their Owners," manuscript, R. I. Hist. Soc.
26. Providence Deeds, 19: 124.
27. Chace, "A Descriptive List," typescript, 55, R. I. Hist. Soc.
28. Providence Deeds, 36: 82.

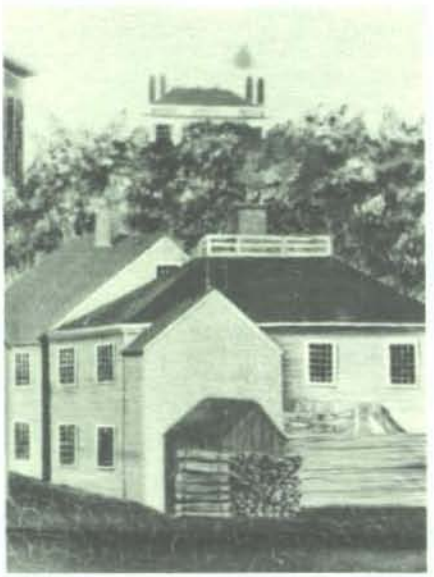
LOT FOUR

Across Custom Street from the Earle and Branch gambrel-roofed shed was an unusually wide piece of land once owned by Toleration Harris. In 1741, when he sold it to Captain Archibald Young, he described it as "One certaine Mansion House and one lott and an half of Land whereon the house now stands, bounded as followeth: Eastwardly on said Towne Streete or Main Highway on which it measures sixty feet front; and holding the same breadth, extends westwardly to the channel of the Salt Water Harbour" (see fig. 11).[24] In their tax assessment for 1770, the town assessors listed the structures as "a small dwelling house, much worn, a wood house, shed & wharf."[25] Archibald Young and his family lived there for thirty years, until his creditors called due their debts. In March of 1771, while Captain Young was on a trading voyage to London, his property was sold at a sherrif's auction.[26]

It was purchased by Joseph Brown, whose improvements were noted by the tax assessors in 1779. It now contained "a pretty good house, improved by Jona Jenkins & Gladden, a small Dwelling House much torn, a store, a wood house, a shed, a good wharf."[27] After Joseph Brown's death in 1785 his widow made it her home.

The Browns continued to live there until the death of the third and last son Obadiah in 1815, when the family's occupancy came to an end. From then on, the property was put out at rent.[28] The dwelling houses

Figure 11. Archibald Young house. Detail from "View of Providence." Photograph by Helga Photo Studio. Reproduced with permission of Hirschl & Adler Galleries, New York.



on South Main Street—one with a gable roof and one with a hipped roof—were desirable residences, thought to be well-located. Years later Sarah Bullock recalled that neighborhood:

> I was born on South Main Street, in this city of Providence in 1840 which seventy and even fifty years ago was a pleasant street. Many of our wealthy and most-respected families occupied the houses and in the blocks on that street. From Crawford St. to Transit street there were many beautiful shade trees on each side. . . . Between the blocks one caught glimpses of a clean clear river where the tide went in and out, and often we saw sparkling white-capped waves dancing over the wharves above Power street. It was a clean salt river, too, where boys could go in swimming and come out clean.[29]

The South Water Street end of the property, with its sixty-foot waterfront, was rented for commercial uses. Judging from the piles of boards and bundles of wood shingles stacked against the brick-end shed, it was probably being leased by Earle and Branch for lumber storage when this picture was painted.

The Joseph Brown homestead remained in the hands of the family, jointly owned by various children, grandchildren, and a great-granddaughter, until 1896.[30] Perhaps it was the tangle of this multiple ownership that prevented any one of his heirs from selling the property for over a century, and, in the process, preordaining that his descendents would derive their incomes from property rentals. At any rate, the Joseph Brown homestead lay in the path of the commercial block Crawford Allen hoped to build along the waterfront. Allen never did fill in the heart of his block, and in 1838 sold the lot containing his first brick store.[31] Similarly, the adjoining lot with the Ebenezer Tyler House, purchased by Caleb Earle in 1822, remained in his hands until his death in 1851, unaltered except for the erection of a riverfront storage shed. And the lot next door, owned jointly by Earle and Branch throughout their lifetimes, was not appreciably altered until their heirs sold the property in 1852 (see fig. 12).[32]

Caleb Earle seems to have been connected with most of the buildings pictured in "A View of Providence." He was a parishoner at the First Congregational Church, head of its building committee for many years, and the principal supplier of its building materials.[33] He personally owned one of the riverfront lots, owned a partnership in another, and over the years his business had rented space in the two others. Though the scene is bereft of human activity, it illustrates the wares of Caleb Earle's lumber yard—the only non-architectural features in the picture—and it may well be that he commissioned the painting. But months of research have produced no evidence to substantiate this: the original story behind "A View of Providence" has long since been forgotten.

29. Sarah Bullock to Mrs. Alexander Burgess, 1910, R. I. Hist. Soc.
30. Providence Deeds, 406: 290.
31. *Ibid.*, 73: 20.
32. *Ibid.*, 129: 397.
33. Various receipts, 1805–1845, Benevolent Cong. Soc. Recs.

Figure 12. Providence waterfront from the southwest. Composite view, part 1, ca. 1898. Courtesy of Rhode Island Historical Society Library (RHi x3 4479).

Sadly, so have most of the buildings portrayed in it. The Joseph Brown homestead fell to real estate development in the nineteenth century, and the Ebenezer Tyler House and the Customs House of 1818 were lost when South Main Street was widened in 1906.[34] Though they survived the hurricane of 1938, Crawford Allen's brick store and the Earle and Branch gambrel-roofed warehouse were demolished to create a parking lot.[35] The Bronson Wing of Brown University's West Quadrangle stands on the site of the Waite Smith House. Even Custom Street disappeared in 1957.[36] Only the Unitarian Church has survived the twentieth century.

Like an unexpected visit from some old relative we had never met, this painting has appeared to tell us about a Providence we had never known. One of our earliest and clearest pictures of Providence, it seems to capture the waterfront at two different times. Here are the vestiges of the eighteenth-century village recalled by Archibald Young's old hip-roofed "Mansion House," and the new look of the nineteenth-century city represented by Crawford Allen's brick store. The Providence pictured in this painting has shed its provincial past and emerged as a bustling center of nineteenth-century commerce. The story is not readily apparent at first, for the scene has changed almost beyond recognition. But although the waterfront has gone, the painting has survived to tell the tale.

34. *Providence Journal*, Feb. 12, 1906.

35. Photographs in the Graphics Collecton, R. I. Hist. Soc., and in the John Hutchins Cady Notebooks, Rhode Island Collection, Providence Public Library, show the site leveled in the early 1950s.

36. Holleran, "In Defense of Gangways," Prov. Pres. Soc., *News*, XXI (Jan.–Feb. 1983).

Figure 13. South Main Street and South Water Street at the Crawford Street Bridge, May 1983. Photograph by Robert P. Emlen. Courtesy of the Rhode Island Historical Society Library (RHi x3 4892).

Another View of Providence: Archaeological Investigation of the Old Stone Square Site

Myron O. Stachiw

While many views of the city of Providence from the late eighteenth century to the mid nineteenth century are available in the form of paintings, sketches, engravings, maps, and photographs, few actually illustrate the processes of rapid growth and change that the city experienced during this period. These episodic impressions of Providence, when combined with documentary sources, provide a chronology and an occasional window on the dimensions of urban growth. But most of these graphic images fail to provide specific answers to questions about the processes that lay behind growth and change in the city and the ways in which these processes altered the lives of people who resided there.

Although panoramic views of Providence such as Alvan Fisher's two paintings of "Providence from Across the Cove," one of which was painted in 1818 and the other in 1819 (for the latter see fig. 14), present fairly accurate depictions of local landmarks, areas of major development and shipping activity, and topography, their broad scope and their incorporation of certain artistic conventions common to landscape paintings limit their usefulness as historical documents. Other images of the city produced during the early nineteenth century, such as the pen-and-ink drawings and the watercolors of local artist Edward L. Peckham, provide a more detailed view of particular historic sites, but their usefulness in helping students to reconstruct the appearance of Providence in the past is also limited. Peckham's views, to be sure, are extraordinary in the way that they illustrate such features of the community as fences, outbuildings, wharves, and even shop signs and advertisements on buildings (see, for example, fig. 15). Yet, despite their attention to detail and the apparent absence of artistic conventions and devices, Peckham's works were still panoramic in scope, though less so than the more formal landscape paintings of the city. Informal sketches and maps of Providence, such as T. M. Sumner's sketch map of buildings and lots along North Main Street in 1775–1777, drawn from memory in 1834 (see fig. 16), and John Fitch's map of town, drawn in 1790 (see fig. 17), provide considerably more detail than the available panoramic views, but fail to include some physical aspects of the com-

Mr. Stachiw is a historian and archaeologist living in Rhode Island. He is also a doctoral candidate in the American and New England Studies program at Boston University. He wishes to thank the following people and institutions for their assistance: Thomas McCarthy, Old Stone Square Associates, and Dimeo Construction Company for their willingness to undertake this project under such short notice and for their generous support; Joan Gallagher Fleming and the staff of the Public Archaeology Laboratory, Inc., for assistance in field work, administration, and cataloging of recovered artifacts; Robert P. Emlen, who shared his research unselfishly in the pursuit of a common goal; Stephen Mrozowski and Paige Newby for the processing, analysis, and identification of the floral remains recovered from floatation samples; John Miller for his photographic recording of the excavations; Ruth Macaulay, who prepared a number of drawings and who assisted with the fieldwork; Maureen Taylor, graphics curator at the Rhode Island Historical Society; and Nancy Mabry, whose patience and comments were invaluable.

Figure 14. "Providence from Across the Cove," by Alvan Fisher, 1819. This view of Providence looks northeast across the lower cove. Courtesy of the Rhode Island Historical Society Library (RHi x3 3052).

munity that are known to have existed or inaccurately depict the location of fence lines and outbuildings.

It is true that the various views of Providence recorded by artists and residents during the town's early history are an excellent source for understanding some of the changes that occurred in the community during its growth from a center for mercantile trade to a burgeoning industrial city. But it is also important to recognize that these graphic sources really tell only part of the story. In a sense, the surviving pictures of Providence speak less than a thousand words. In these panoramas and sketches, details have been overlooked or forsaken. Together they say little or nothing about the changing configuration and use of houselots and yards, the function and appearance of outbuildings and their relationship to main buildings on lots, the location and appearance of gardens and fences, the manner and significance of refuse disposal, the housing of animals on urban lots, the location of wells

Figure 15. The head of the Providence Harbor in 1840, looking southwest from South Water Street. Watercolor by Edward L. Peckham. Note the gambrel-roofed warehouse across the river and its similarity to the Caleb Earle warehouse (see fig. 7, p. 44, above) Courtesy of the Rhode Island Historical Society Library (RHi x3 4472).

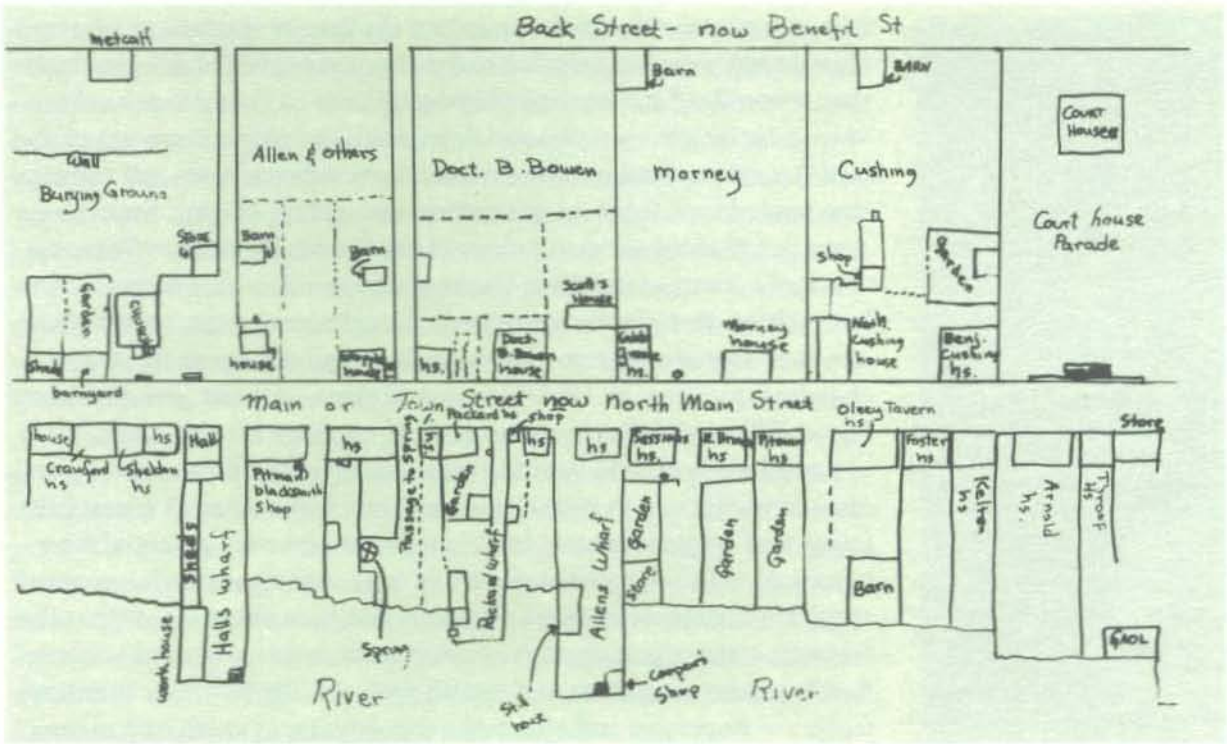


Figure 16. North Main Street, Providence, in 1775–1777. Redrawn from a sketch (now lost) by T. M. Sumner, 1834. An important feature of this drawing is its location of distill houses and craft shops, such as a cooper's shop and a "workhouse," on the wharves. Courtesy Myron O. Stachiw.

and privy pits, the type of vegetation found on sites at different times, or the nature and sequence of landfilling—all of which played a part in the dramatic transformation that took place in Providence and in other seaport cities during the years between the American Revolution and the Civil War.

The deficiencies of pictorial materials as historical sources have been underscored recently by the work of archaeologists, who have conducted intensive research and a number of excavations on several historical sites in Providence (see fig. 18). What these archaeologists

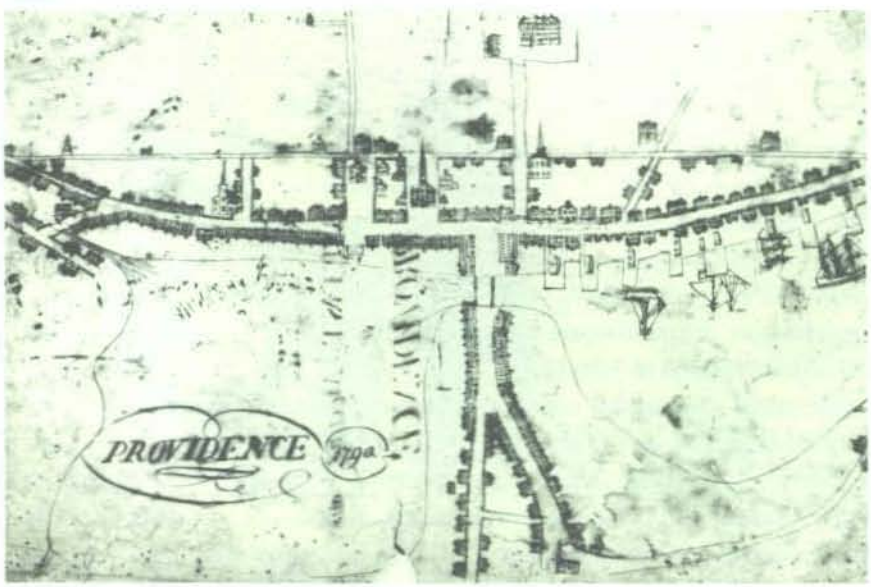


Figure 17. Map of Providence by John Fitch, 1790. Fitch did not include any outbuildings or yards in his drawing, and in the case of the waterfront north of the bridge, he did not show any of the wharves or waterfront buildings that Sumner's sketch (see fig. 16) and documentary evidence indicate were present between 1750 and the early nineteenth century. For a detail of Fitch's map see fig. 5 (p. 43, above). Courtesy of the Rhode Island Historical Society Library (RHi x3 336).

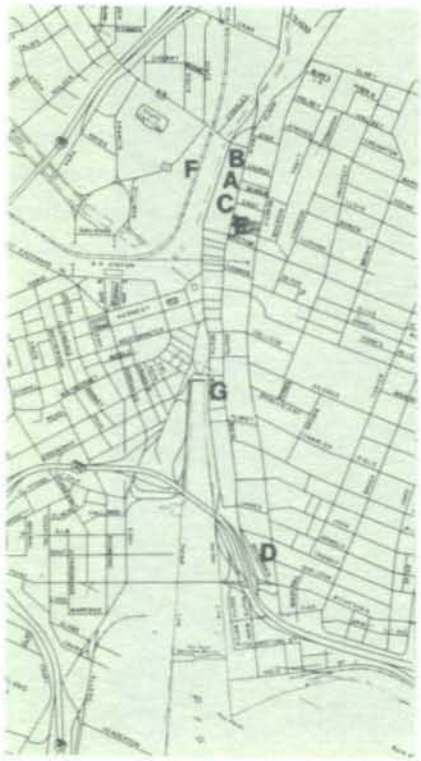


Figure 18. The location of archaeological excavations in Providence, 1971–1983. A. Roger Williams National Memorial (RWNM), Espinosa et al., 1972. B. RWNM, Bartovics, 1974. C. RWNM, Rubertone and Gallagher, 1981. D. South Main Street, Margolin and Stachiw, 1974. E. Old State House, Ferguson, 1975. F. Providence Covelands, Artemel et al., 1983. G. Old Stone Square, 1983.

have discovered, to a great extent, are the details of urban change and growth that were not recorded in the surviving pictorial sources. More than a decade of archaeological investigations in Providence have provided new insights into the social, cultural, and physical growth of the city. Recent excavations, for instance, have exposed sites and features that include evidence of prehistoric occupation (dating back about 5,000 years) along the north shore of the former Providence Cove, evidence of a community of free blacks and poor whites that thrived in the late eighteenth and early nineteenth centuries on the same north shore site, and specific data on the chronology and nature of fill deposits, changing patterns of land use, and a sense of what the historian Fernand Braudel calls the "structures of everyday life."[1] Casting aside assumptions long held by many archaeologists and preservation planners, investigators in Providence and in similar coastal cities have found that waterfront areas often possess the greatest potential for recovery of relatively undisturbed and very significant archaeological sites. Through their findings, they have also been able to show that the treatment and changing uses of waterfront areas in coastal communities, whose economies and wealth were usually based on maritime trade, are important indicators of a community's growth and maturation.[2] Excavations in Providence since 1972 have particularly broadened our understanding of the process of expansion that occurred as a result of landfilling, a method of growth common to coastal towns and cities. Other details about the configuration of the community, about the density of buildings and residential occupation, about the problems of refuse disposal and the role it played in the process of landfilling, and about the location and uses of buildings have also come to light as a result of these investigations.[3] Archaeology, then, has enhanced our historical perspective in a way that few documentary sources or two-dimensional graphic images can communicate by providing data that gives us a sensual understanding of process, lifestyles, and setting.

But archaeologists have also discovered—both here in Providence and in other localities—that their research is nevertheless dependent upon documentary evidence and the sometimes valuable information illustrated in pictorial materials. Such proved to be the case in the most recent archaeological investigation conducted in Providence, an excavation of the site of the new Old Stone Square office building, located between South Main and South Water streets just below the Crawford Street bridge (see fig. 19). A set of circumstances combined to make the site particularly important: its location in or near the commercial core of the historic waterfront made it the first site of this type to be investigated in Providence; five wood-framed and brick buildings constructed during the eighteenth and early nineteenth centuries remained standing on the site until the early twentieth century, suggesting little subsequent disturbance of earlier deposits by landfilling or construction; an extraordinary painting of the site, executed in the early nineteenth century, was available for study (see fig. 1, p. 38, above), and a considerable amount of research on the painting and the

1. See, for instance, Paul Espinosa, Brenda Lockhard, Lisa Margolin, and Myron Stachiw, "Preliminary Excavations in a Colonial Site" (unpublished paper, 1972, on file at Anthropology Department, Brown University); Albert Bartovics, "Excavation Notes on Gray House Site" (unpublished paper, 1974, on file at Division of Cultural Resources, North Atlantic Regional Office, National Park Service, Boston, Mass.); Susan Ferguson, "A Study of the Archaeology of Refuse Disposal Based on the Excavation of an Eighteenth Century Cellar Hole in Providence, Rhode Island" (unpublished master's thesis, 1974, Brown University, on file at Anthropology Department); Lisa Margolin

site had already been carried out by Robert P. Emlen, then associate curator of the Rhode Island Historical Society.[4] The site gained additional significance as a test of the archaeological potential of the lower waterfront area as a result of the extensive improvement plans being proposed at the same time for the future revitalization of the Providence waterfront.[5] Taken together, these circumstances offered an unusual opportunity to use archaeological research and excavation, coupled with documentary research and an analysis of available pictorial evidence, as a means toward uncovering some of the lost details and events that had occurred in the development of Providence's lower waterfront during the city's early history.

Archaeological investigation of the Old Stone Square site did not begin until the construction of the office building was already underway. The Dimeo Construction Company and the Old Stone Square Associates—the project developers—agreed to the archaeological investigations and generously provided the necessary funds, facilities, and heavy equipment. Due to the pressures of the construction schedule, excavations were limited to five workdays. Much of the work was conducted at night, under lights provided by the Dimeo Construction Company, after the regular workday was over.

The excavation and subsequent analysis yielded a number of significant results. First, the excavations revealed the survival of a largely intact seventeenth- and eighteenth-century surface lying beneath five to ten feet of fill. This surface, which sloped down from South Main Street towards the river was identified as a dark brown, humic, midden layer rich with kitchen and domestic refuse such as bone, shell, ceramics, glass, and metal objects. Second, careful floral analysis by flotation and microscopic examination of plant remains from several contexts identified a number of different plant species and allowed a tentative,

and Myron O. Stachiw, "The Archaeology of South Main Street, Providence, Rhode Island" (unpublished senior honor's thesis 1974, Brown University, on file at Anthropology Department); Susan G. Gibson, Stephen Cole, Peter Thorbahn, Cynthia Wood, and Myron O. Stachiw, *Archaeological Resource Study: Roger Williams National Memorial, Providence, R.I.* (Washington, D.C., 1979); Patricia Ruberton and Joan Gallagher, *Archaeological Site Examination: A Case Study in Urban Archaeology, Roger Williams National Memorial* (Washington, D.C., 1981); Janice Artemel et al., "The Providence Covelands Phase III Report" (unpublished report, 1983, prepared by DeLeuw, Cather/Parsons, Washington, D.C.,, copy on file at the Rhode Island Historical Preservation Commission, Providence). For Braudel's influential study see Fernand Braudel, *The Structures of Everyday Life: The Limits of the Possible* (New York, 1981).

2. See especially John H. Geismar, "A Suggested Model For Determining Increasing Commercialism and Urbanization in a Nineteenth Century American Seaport" (unpublished paper, 1984, presented at the annual meeting of the Society for Historical Archaeology, Williamsburg, Va). For studies of other coastal cities see, for instance, Diana Rockman, "An Archaeological Investigation of the Telco Black, New York, New York: Interim Report on the Results of Field Excavations" (unpublished paper, 1982, prepared by Soil Systems, Inc., Marietta, Ga.); James W. Bradley, Neill DePaoli, Nancy Seasholes, Patricia

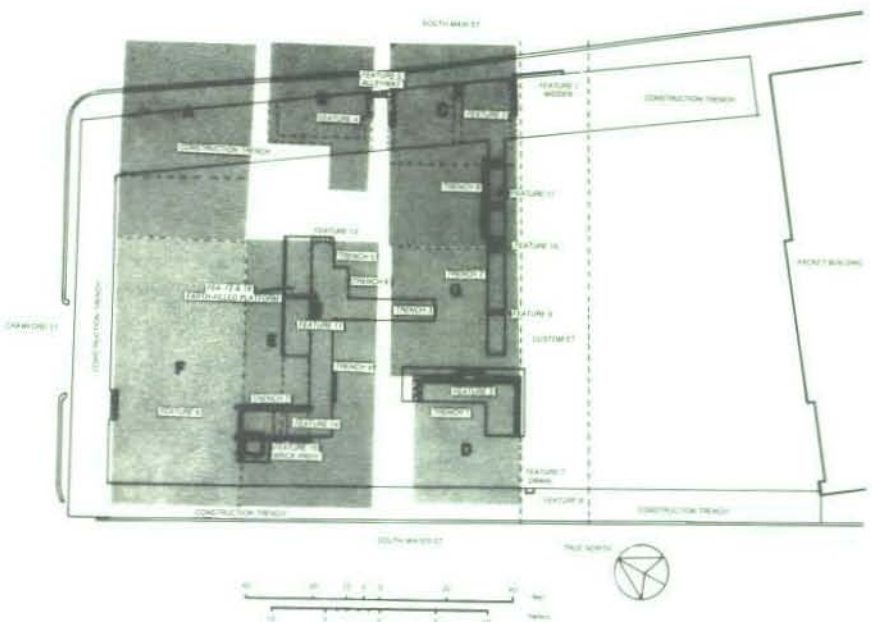


Figure 19. Excavation of Old Stone Square site, superimposed over 1889 site configuration. A. Joseph Crawford house (before 1737). B. Ebenezer Tyler house (1742). C. United States Customs House (1818). D. Caleb Earle warehouse (ca. 1811). E. One-story warehouse (ca. 1870). F. Crawford Allen brick store (ca. 1822). G. Warehouse addition (ca. 1880). Brackets on trench walls indicate location of profiles illustrated. Drawing by Myron O. Stachiw. Courtesy of Old Stone Square Associates.

McDowell, Gerald Kelso, and Johanna Schoss, *Archaeology of the Bostonian Hotel Site* (Boston, 1983); John Cheney, P. J. E. Gorman, H. J. Merrick, and Nancy Seasholes, "Archaeological Survey of the Third Harbor Tunnel/Central Artery, Boston, Massachusetts," 2 vols. (unpublished report, 1983, prepared by the Institute for Conservation Archaeology, Cambridge, Mass.). On urban archaeology see also Andrea Heintzelman-Muego, "Construction Material and Design of Nineteenth Century and Earlier Wharves: An Urban Archaeological Perspective" (unpublished paper, 1983, presented at the annual meeting of the Society for Historical Archaeology, Denver, Colorado), and *Livability Digest*, II (Winter 1982–1983), an entire issue devoted to current issues in urban archaeology.

3. See the studies cited in note 1, above.

4. Mr. Emlen had researched and mounted a small exhibit at the Rhode Island Historical Society in the summer of 1982 in which he identified the structures depicted in "A View of Providence." Through the use of old photographs, maps and prints of the area, and documentary evidence, he showed the buildings and their changing setting from the mid nineteenth century to the mid twentieth century. For the fruits of Mr. Emlen's research see his essay that begins on p. 39 of this issue.

partial reconstruction of the vegetation found on different parts of the site.[6] Third, the excavations have shed light on the landfilling process at this site with important implications for the entire waterfront area. Filling on the site had begun by the early eighteenth century and proceeded in an episodic manner into the twentieth century. Identifiable midden-like surfaces and surviving features from four major occupational surfaces were uncovered (see fig. 20). These middens provided additional evidence of refuse disposal practices. Broadly cast disposal of organic and inorganic materials was common practice from the eighteenth century through the nineteenth century, and construction and industrial debris was often carted from site to site.

A much thicker, rich midden layer dating from the eighteenth to the early nineteenth centuries was uncovered in the gangway between South Main and South Water Streets, later known as Custom Street. Apparently, this public space was seen by many as a convenient place for disposal of trash.

The most recent use of the site was as a parking lot; because of the asphalt paving and an expectation of deep fills, excavation was assisted by a backhoe (see fig. 21). Properly supervised, this machine can easily and rapidly excavate trenches and remove fills, allowing more careful hand excavation to proceed on the buried occupational surfaces and features.

Eight trenches of varying size were excavated (see fig. 19). The initial strategy was to locate the outside walls and corners of the building foundations and focus on the yard areas or open spaces among the buildings. The best opportunity for examining undisturbed fill sequences and any surviving former living surfaces and features was in this area. Along the eastern and western edges of the site, wide trenches were excavated by the construction company to facilitate the driving of piles that would later support retaining walls. The eastern trench revealed in profile the foundations of the Ebenezer Tyler house (1742) and the United States Customs House (1818), a cross section of Custom Street, and a foundation wall of the John Brown house, built in

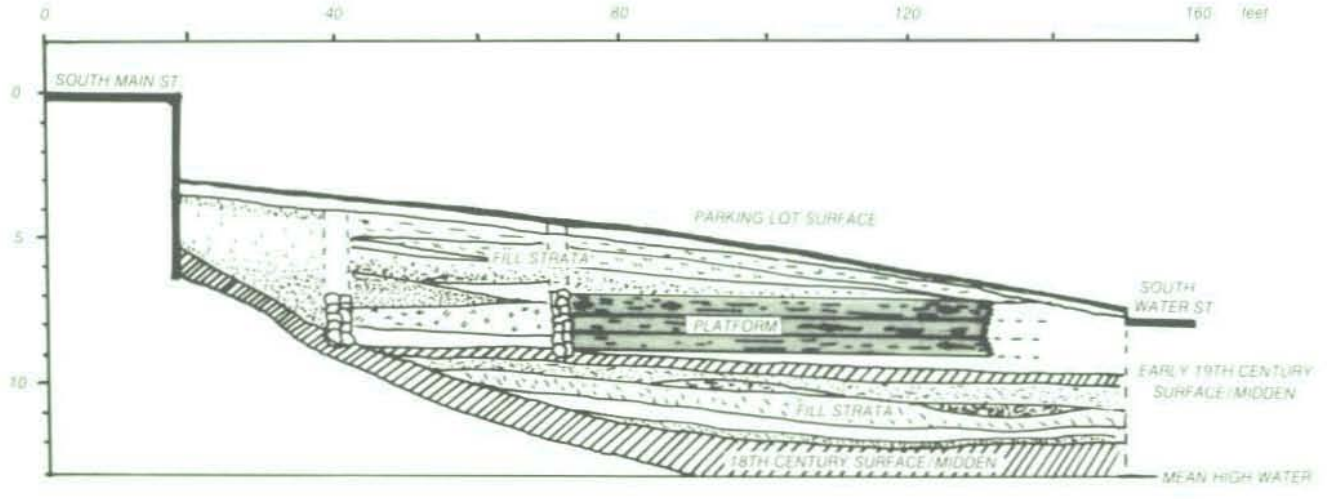


Figure 20. Reconstructed profile through the site from east to west. Based on a combination of profile drawings. Drawing by Ruth Macaulay. Courtesy of Old Stone Square Associates.

the 1770s. On the South Water Street side, the trench exposed parts of the foundation of the Crawford Allen brick store (1822), a mid nineteenth-century surface of Custom Street with a buried stone drain, wood pilings from an early wharf or sea wall, and partial foundations of other buildings on the former Joseph Brown lot.

Prior to the construction of the houses on the site, the land on the western side of Main Street was known as the "warehouse lots," since most dwellings were initially built along the east side of Towne (Main) Street during the seventeenth and early eighteenth centuries. The wharves and warehouses of the town's traders, sea captains, and merchants were located at the ends of the warehouse lots. By the 1740s, wharves were recorded at the west ends of the Crawford, Tyler, and Young lots. When Ebenezer Tyler built his house in 1742, the lot already contained a wharf and old shop; in 1770, the Providence tax assessors described Tyler's homeplace as a good house, with a large garden, small store, and small wharf.[7] The same assessors described the Young property as "a small dwelling house, much worn, a wood house, shed and wharf." By 1779 a second house had been built and the property was described as a "pretty good house, a small dwelling house much torn, a store, a wood house, a shed, a good wharf."[8] If we accept as schematically correct T. M. Sumner's sketch of how North Main Street looked in 1775, we can then assume that these lots—containing dwellings, gardens, shops, stores, and wharves—were probably similar in configuration (see fig. 16).

The earliest occupation levels exposed by the excavations at the Old Stone Square site were the surface midden discovered in Trench 8 behind the Customs House and the lower fill of the Custom Street midden. Located at a depth of four feet, six inches below the modern asphalt surface, or about four feet above current mean high water, the midden dates to the second half of the eighteenth century and is probably the domestic refuse of the occupants of the Joseph Crawford house, built before 1737, the Ebenezer Tyler house, and the neighboring Archibald Young house, built sometime before 1741 (see fig. 22). Documents also suggest that by 1810 a tenement occupied the later site of the Customs House.[9]

These midden layers were extremely rich and full of mid eighteenth- to early nineteenth-century ceramics and glass, and organic kitchen refuse such as bone and shell. This manner of refuse disposal conforms with patterns discovered at many other sites of the period. Particularly interesting is the thick deposit in Custom Street (see fig. 23). Apparently, this public space was a convenient dumping place for refuse. As early as 1749, the proprietors of Providence complained that the gangways had become common depositories for rubbish. In September of that year, the town council was approached by a committee from the proprietors requesting that the gangways be cleared of trash and made open for public use.[10] This action obviously was not very successful, as datable artifacts recovered from the midden indicate continued refuse disposal in the gangway until the early nineteenth century.

Figure 21. Excavation of the asphalt surface and upper fill deposits was assisted by a backhoe. Photograph by John Miller. Courtesy of Old Stone Square Associates.

5. William Warner, a Rhode Island architect, working with Albert T. Klyberg, the director of the Rhode Island Historical Society, and with the Providence Foundation, has prepared an extensive plan for the revitalization of the decayed and neglected waterfront. The plan calls for such changes as the reopening of the Providence River to its late nineteenth-century banks, rerouting the river near Memorial Square, and the development of housing, parks, and commercial complexes in the area below Wickenden Street.

6. Floatation and identification of plant remains was carried out by Stephen Mrozowski and Paige Newby, Anthropology Department, Brown University.

7. Providence Deeds, Vol. 10a, p. 267, Providence City Hall (hereafter cited as Providence Deeds, 10a: 267); Henry R. Chace, "Houses in Providence, 1770, in the compact part of the Town, with the Location, Occupation, and Taxes Assessed their Owners," manuscript, Rhode Island Historical Society.

8. Chace, "Houses in Providence, 1700," R.I. Hist. Soc.; Henry R. Chace, "A Descriptive List of All the Houses in the Compact Part of the Town of Providence, R.I., 1799," typescript, R.I. Hist. Soc.

9. On Aug. 8, 1810, Dexter Brown, yeoman, sold the lot measuring forty by two-hundred feet just north of Custom Street to Caleb Earle and Sanford Branch, who had established the firm of Earle & Branch, house carpenters and traders, "to

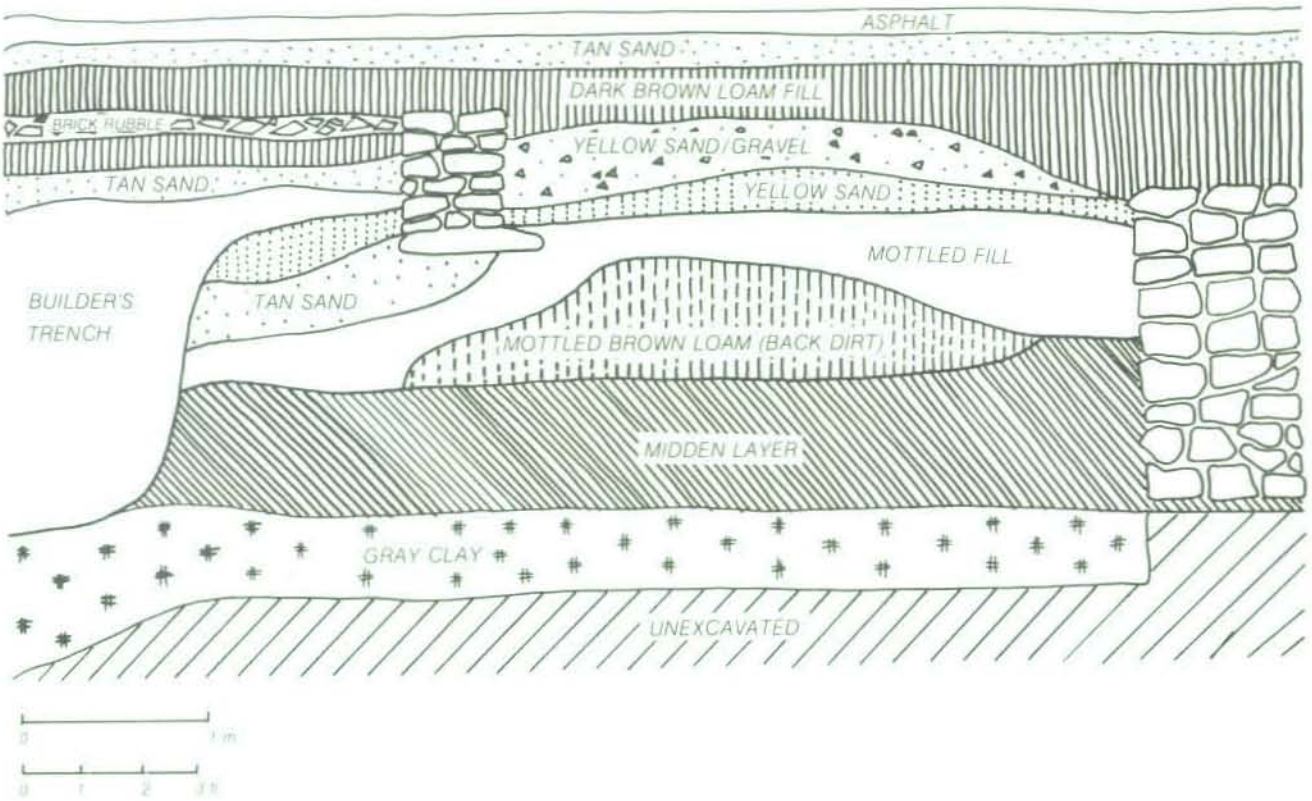


Figure 22. North profile view of Trench 8, showing west foundation of Customs House (1818) at right. The dark layer running beneath the foundation of the Customs House is the eighteenth- and early nineteenth-century surface and midden layer. Drawing by Ruth Macaulay. Courtesy of Old Stone Square Associates.

The construction of the Customs House in 1818 provides a convenient *terminus post quem*, or date before which the deposits had to be laid down. Since the builders' trench for the south wall of the Customs House foundation was cut through the midden deposit in Custom Street and the foundation of the west wall in Trench 8 was built on top of the midden, it is clear that the deposits predate the construction of the Customs House.

Analysis of floral remains recovered in soil samples from these two midden deposits consisted of seeds from several different species. The sample from the midden in Trench 8 contained several seeds of the goosefoot plant (Chenopodium album) and smartweed (Polygonum persicara). Plants of the Chenopodium genus are perennial weeds of the roadside and waste places. In 1883, E. H. Rollins wrote in *New England Bygones*: "About my grandfather's gate smartweed and dockweed and plaintain grew profusely." Goosefoot and smartweed were also found in a sample recovered during excavations at the Rice House near the waterfront in Newport, suggesting they were common plants growing in the yards of houses during the eighteenth century. The sample from the Custom Street midden contained more than 300 seeds from plants of the genus Solanum, or the nightshade, a weed often used medicinally and found growing by the wayside or on rubbish heaps.[11]

The same dark brown, humic soil containing sherds of eighteenth-century pottery and glass, bone and shell was exposed in the western end of Trench 5 at a depth of seven-and-one-half feet to ten feet below

have and to hold—except the tenements built and owned by others on ground rent, which they have a right to remove off the granted premises in case the said Earle and Branch and they do not agree otherwise." See Providence Deeds, 33: 220. The remains of this building or buildings were probably obliterated by the construction of the United States Customs House, but the residents of the tenements must have contributed to the midden layer discovered in Trench 8 and in Custom Street.

10. See Gibson et al., *Archaeological Resource Study*, 28.

11. Stephen A. Mrozowski, "Middle Range Theory, Households, and Floral Analysis in Historical Archaeology" (un-

the asphalt surface (see fig. 23). This end of the trench was probably very close to the former shoreline, as water was encountered at a depth of eight feet below the surface.

Some landfilling had probably occurred on parts of the site by the 1740s, burying the original surfaces dating from the seventeenth and eighteenth centuries. Construction of wharves usually required some buildup of stone, wood cribbing, and earth on the landward end of the wharves, as well as some dredging of the adjacent slips. This may be the source of some of the gray marine clay, sand, and shell layers that were found in Trenches 4 and 5 above the dark brown midden layer.

Another source of fill on the river end of the Tyler lot was the construction of a "front wall" or sea wall in 1816 or 1817. In March 1815, Hannah Tyler, the unmarried daughter of Ebenezer Tyler, executed an indenture with Caleb Earle and Sanford Branch, merchants, to lease for thirteen years (beginning on January 1, 1816) a water lot, forty feet wide, extending easterly from the river for 120 feet. Earle and Branch, owners of the adjoining lot to the south since 1810, agreed that they would "within two years, erect a good and sufficient front wall on said lot adjoining the river, and put a cap log thereon and affix fenders thereto, and fill up with sand as said Earle and Branch's front wall now is, and at the expiration of said terms surrender to the said Hannah Tyler" the premises including the sea wall. In 1822, Earle purchased the entire lot, which measured forty by two-hundred feet, including the dwelling house, wharf, and other buildings on the lot.[12]

It is probable that Earle and Branch had to do much more filling and repair to the waterfront property in 1816 than they originally anticipated. The flooding and damage caused by the Great Gale, a hurricane that struck in late September 1815, is portrayed in the engraving by James Kidder (see fig. 25). The Great Bridge at Market Square was washed away, thirty-five ships in the harbor were battered against each other and against buildings or were driven aground on the north shore of the cove, wharves were destroyed, and about 500 homes and smaller structures were washed away or flattened.[13] Likely the storm damage suffered by most of the small, exposed, and old wharves below Market Square led to a rebuilding of the waterfront and the laying out of South Water Street in 1817. Instead of rebuilding the individual wharves and slips which extended out from the shore as illustrated in Fitch's drawing of 1790 (see fig. 17), a long sea wall allowing wharfage along its entire length was constructed for much of the length of upper South Water Street. Both Fisher's view of Providence in 1819 (see fig. 14) and Peckham's view of the waterfront in 1840 (see fig. 15) show ships berthed parallel to the shoreline along a sea wall/wharf. The dredging and landfilling necessitated by this new construction were probably responsible for most of the sand, clay, and shell fill strata found above the lowest midden layer. Additional fill material for portions of the site probably came from the cellars excavated during the construction of the Customs House in 1818, the Crawford Allen brick store built in 1822, and the gambrel-roofed Earle and Branch warehouse.

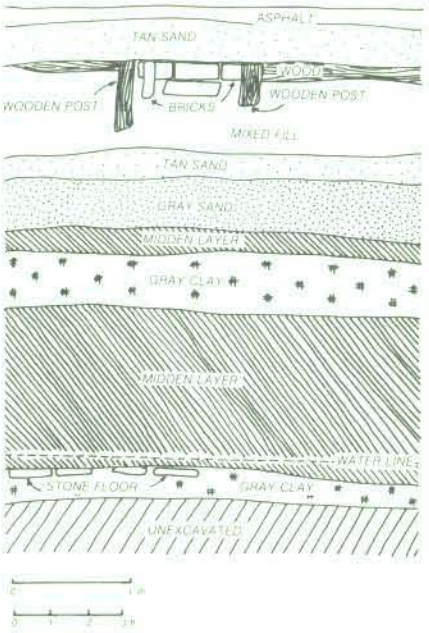


Figure 23. South profile view of Trench 5. The dark organic layer located approximately seven-and-one-half feet below the asphalt surface represents the earliest midden surface. Drawing by Ruth Macaulay. Courtesy of Old Stone Square Associates.

published paper, 1984, presented at the annual meeting of the Society for Historical Archaeology, Williamsburg, Va.); Mrs. M. Grieve, *A Modern Herbal* (New York, 1971), 582, 743, 854; *Compact Edition of the Oxford English Dictionary* (New York, 1982), 2878.

12. Providence Deeds, 39: 143, 46: 118.

13. Patrick T. Conley and Paul R. Campbell, *Providence: A Pictorial History* (Norfolk, Va., 1983), 45. One of the three buildings uncovered during the archaeological excavations on the north shore of the Providence Cove in 1982 was probably washed away by the storm. Archaeological evidence indicated that prior to the storm, the corner and mid-wall posts of the structure were sunk directly into the ground. After the storm had apparently carried the building away and deposited up to twelve inches of clay and sand, the building was rebuilt on the same site, only this time its posts were placed on stone slabs sunk into shallow holes dug through the storm deposited sand. No attempts were made by the residents to dig away the sediments left by the storm; a new midden layer was formed over the deposits.

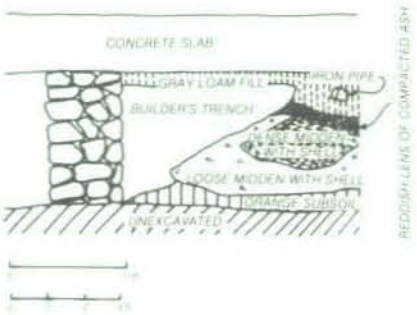


Figure 24. East profile view of Customs Street. The south foundation wall of the Customs House is to the left. A builders' trench for this foundation wall was cut through the eighteenth- and a early nineteenth-century midden layer. Drawing by Ruth Macaulay. Courtesy of Old Stone Square Associates.

The next living surface or midden layer was created on top of these fills, and was probably the ground surface shown in the "View of Providence" (see fig. 1, p. 38, above). At this time, the ground surface in the area of Trench 7 was still well below the parking lot surface. Figure 26 shows the builders' trench along the south wall of the Crawford Allen store beneath nearly three feet of later fills. The remains of a wooden pole, probably scaffolding used by the bricklayers, were discovered in the builders' trench, cut off at what was then the ground surface.

During the 1820s and 1830s, the site area probably remained much as it appears in the painting. In 1824, a shoemaker resided in the former Crawford house on the northeast corner of the block; his shop was located either on the ground floor of the house or in a small building behind the house. The former Tyler house was occupied by several male boarders. Earle and Branch continued their lumber and building business in the gambrel-roofed building, storing their materials in the adjacent lot. Several commission merchants (among them Crawford Allen) and agents for various manufacturing companies maintained offices in the Allen building. From Crawford Street north to Market Square, the area between South Water and South Main streets was quickly becoming built up with brick stores and warehouses. These buildings housed the offices of many merchants and agents for manufacturing companies with factories in eastern Connecticut, Rhode Island, and Massachusetts, particularly in the Blackstone Valley after the opening of the Blackstone Canal in 1828.[14]

By the late 1830s, all the residents of the former Tyler and Crawford houses were boarders. Just to the south of Custom Street, the former Joseph Brown house was also used as a boardinghouse. Its occupants were stonecutters, machinists, and jewelry workers employed in the Tingley Marble and Stone works, in jewelry shops, and in the machine shop that was the predecessor of Brown & Sharpe—businesses that were all located within a few blocks on South Main Street. Although boardinghouses and the workshops of gunsmiths, machinists, shoemakers, chairmakers, tailors, and tin and coppersmiths were present, the area remained a mixed neighborhood containing the residences of

14. *Providence City Directory, 1824.*
15. *Providence City Directory, 1838–1839.*

Figure 25. "A Representation of the Great Storm in Providence, September 23, 1815," engraved by James Kidder. Courtesy of Rhode Island Historical Society Library (RHi x3 116).

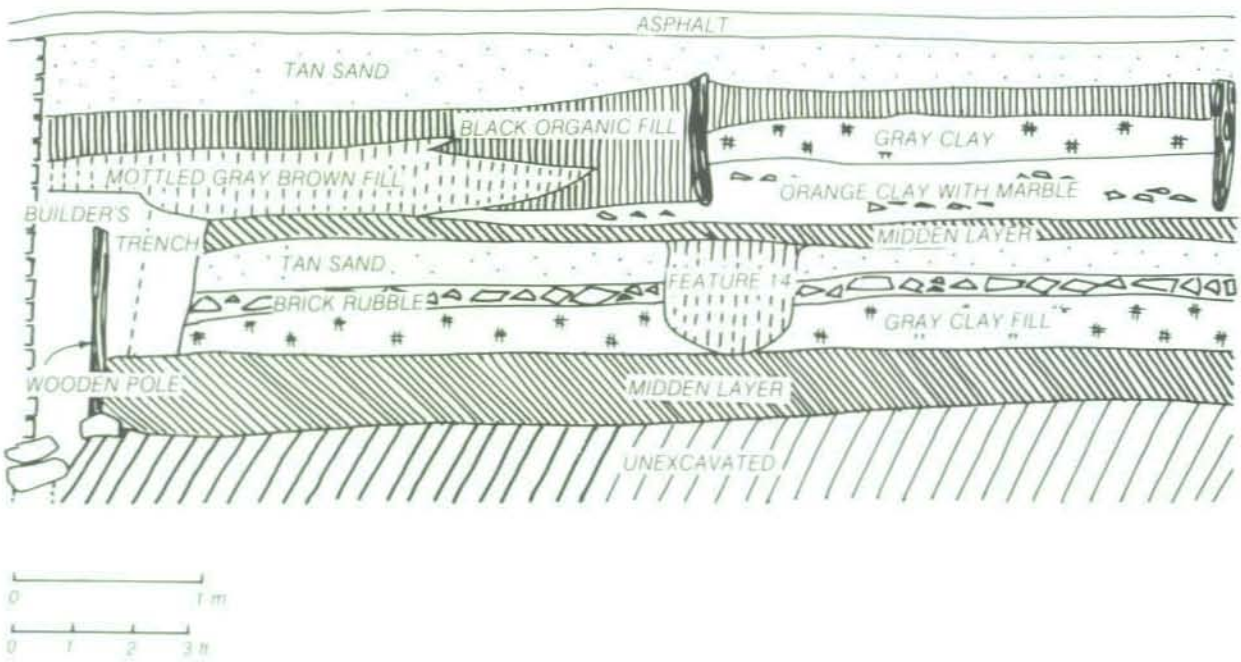


Figure 26. East profile view of Trench 7. The south wall of the Crawford Allen store is to the left. A builders' trench, containing part of a wooden scaffolding pole, is visible beneath the 1820s surface. Drawing by Ruth Macaulay. Courtesy of Old Stone Square Associates.

doctors, the preceptor of the Westminster School, and merchants like Benoni Cooke, who lived in one of two elegant, matching Federal period houses opposite the northeast corner of the block. The former Earle and Branch lumber warehouse and shop had become an oil factory by 1838.[15] It is unclear exactly how or what kind of oil was processed on the site, though possibly whale oil was refined in the building or in the adjacent yard area, or perhaps oil was pressed from seeds (such as cotton or flax).

Two features dug through the surface midden created during this period were encountered. Feature 11 was a rectangular pit measuring at least three-and-one-half feet by six feet and located in Trenches 4 and 5, approximately five feet below the modern surface. Filled with a jumble of wood, brick, and some domestic refuse dating to the first three decades of the nineteenth century, its function could not be determined. Parts of shoe soles and uppers—probably refuse from the nearby shoemaker's shop—were found in the fill, and analysis and identification of floral remains recovered from a floatation sample yielded many raspberry and grape seeds. The presence of these indigestible fruit seeds suggests the feature may have been a privy pit, but its shallowness, lack of structure, and absence of characteristic organic fill cast doubts on this conclusion. It is possible the plants were growing nearby or that the seeds represent the disposal of a container of the fruit into a refuse pit. Further identification of plant remains and artifacts from the feature may provide the solution.

Feature 14, a second pit feature, was discovered in the profile of Trench 7 (see fig. 26). However, no diagnostic artifactual material was recovered from the feature and its function was not determined.

Figure 27. South wall of the wood-lined, earth-filled platform, looking west. Photograph by John Miller. Courtesy of Old Stone Square Associates.

The midden-like stratum that represented the 1820s and 1830s ground level was a hard-packed, brown humic layer. Trenches 4, 5, and 6 allowed the exposure and sampling of at least ten square yards of the surface. Large numbers of small glass and ceramic sherds, crushed from repeatedly being walked upon, were recovered. Late eighteenth-century and early nineteenth-century imported ceramic types such as creamware, white saltglazed stoneware, Chinese export porcelain, hand-painted and transfer-printed pearlwares, and red earthenwares were found. The largest quantities were recovered from the creamware and pearlware categories, dating the deposit with some certainty to the 1820s and 1830s.

The next alteration to the site occurred during the late 1830s or early 1840s. Additional filling occurred over the site and a long loading dock or wharf-like platform was constructed behind the Tyler house. The portion of the platform exposed by excavations in Trenches 4 and 5 measured fifty-six feet long and consisted of two parallel wood plank walls approximately eight feet apart and filled with two distinct strata of earth and stone fill (see fig. 26 and fig. 27). The plank retaining walls were built of one-inch thick boards nailed to vertical wood posts irregularly spaced between three and four feet apart. Several stone paving cobbles were found on the top of the platform, suggesting that the entire surface of the feature was paved. The platform was nearly two feet high, and its top was about two feet beneath the modern surface. Since no mention of the feature was found in documentary records, its function and association with a particular activity is unclear. It could have served as a platform to aid in the loading and unloading of carts and wagons. In 1850 a cotton merchant had his office in the Allen building, and a silk dyer kept a shop in the former Tyler house. Either of these businesses, or even the Shaw and Earle oil factory, could have made use of the platform. Perhaps they all did.

The origin of the two lower fill strata of the platform is clear (see fig. 26). Numerous broken pieces of cut and polished marble and white marble dust and clay strongly suggest that the fills came from the Tingley Steam Marble Works, located only one block to the south. The waste stone and subsoil, perhaps from the excavation of a new cellar or construction of a new building, were carted to this site and used as fill.

In 1857 the Ammi Burnham Young Customs House was constructed on Weybosset Street and the Customs House moved its offices from the building on South Main Street to the new accommodations just across the river. For sixty-seven years the presence of the Customs House on South Main Street had assured the area of an important position in the financial and mercantile affairs of the city. But the gradual shift of the financial district and major wharves further to the south and across the river by the 1840s (see fig. 15) foreshadowed the decline of the Main Street area. Nevertheless, in 1860 the area along South Main and South Water streets, between Crawford Street and Market Square, still contained the offices of at least ninety-one commission merchants, cotton and wool merchants, and agents of manufacturing

companies. South of Crawford Street, the area continued to develop commercially and industrially. Along South Water Street the businesses were oriented towards servicing the shipping industry and receiving and distributing raw materials: ships' chandleries, coal and lime dealers, brick dealers, lumber dealers, fish dealers, a grain elevator and grist mill, and sail lofts were present. Grocers, bootmakers and shoemakers, clothing dealers, and painters conducted their businesses in the many shop fronts and back lot buildings.[16]

The increased commercial and industrial activity brought many changes. Dry goods dealers, milliners, and fancy goods stores selling fine fabrics, stylish hats, and clothing were largely gone from the area. Most had moved their shops to the more fashionable area along Westminster Street or to the Arcade. The neighborhood along South Main and South Water streets had become more densely populated as most houses took in boarders. A house at 102 South Main Street, across the street from the old Customs House, was occupied by fifty-two boarders, while the next house to the south contained thirty-three residents. Most were single young men and women in their twenties and thirties; more than half were recent Irish immigrants. In addition to the fairly large number of sailors present along the waterfront, these people were drawn to the neighborhood by the employment provided by the growing manufacturing companies located in this area. In the two blocks south of Custom Street were located Tingley & Bros. Marble Works, which employed sixty men; the Palmer & Capron jewelry shop, which employed twenty men in the manufacture of gold and silver jewelry; and the Brown & Sharpe machine shop, with sixty employees who produced sewing machines and clocks (see fig. 28). The Fuller Iron Works and the Providence Steam Engine Company were located further south on Main Street.[17]

16. *Providence City Directory, 1860.*
17. *Ibid.*; Eighth United States Census, 1860, Manuscript Population and Manufacturing Schedules, R.I. Hist. Soc.

Figure 28. Brown & Sharpe Company, founded in 1833, moved to 115 South Main Street by 1848, expanding its production from clocks to precision tools and later sewing machines. Next door was located the Tingley Steam Marble Works, at this location since before 1824. By 1872, when this photograph was taken, Brown & Sharpe employed over 200 workers. The following year, the company relocated to Promenade Street in Providence. Courtesy of the Rhode Island Historical Society Library (RHi x3 4492).

Occupancy of the buildings on the site also increased. The former Crawford house contained the shops of two bootmakers and a dyer. Five residents occupied the upper apartments: a fifty-eight-year-old widowed seamstress, her son and daughter, and two male boarders. In the old Tyler house, one of the ground floor shops was occupied by Charles Kelsey, a cigar manufacturer who employed six men and two women in his shop. Eight people lived above the shops: a young machinist, probably employed at Brown & Sharpe, and his wife; three single men who worked as mason, brass founder, and student; and three single women, ranging from a twenty-five-year-old dressmaker to an eighty-nine-year-old widow. The adjoining apartment contained a married couple and their young daughter; the father was a painter, born in New Brunswick. The former Customs House was occupied by a fifty-year-old gunsmith and his wife, an unmarried sixty-year-old woman who worked as a seamstress, and a young Irish-born woman, who worked as a domestic servant, probably in this household. Along South Water Street, the Crawford Allen store was occupied by a cotton dealer and commission merchant and by a flour and grain merchant, who may have used some of the building for storage. The former Shaw and Earle oil factory was no longer in operation and sat vacant.[18]

The next phase of major surface modifications to the site occurred during the late 1860s and during the 1870s. An 1874 Sanborn Insurance map showed a new one-story building on the former open lot behind the Tyler house. A small addition to the rear of the Crawford house was also made at this time. During the late 1870s or early 1880s, a two-story addition was built to the rear of the Earle warehouse. It is likely that the fills around the loading platform and around the Earle warehouse were deposited during the construction of these buildings, bringing the ground surface of the site to within a foot or two of the modern parking lot surface. Some of the fill material probably came from the excavation of the cellar for the addition to the Earle warehouse. The extremely mixed textural and temporal nature of the fills found in the upper strata of the site can be explained by this process of excavation and redeposition of soils that were originally fills. The excavation of this new cellar was also deep enough to disturb the earlier, buried, midden-like occupation surfaces, further confusing the temporal range of artifacts within the upper fill strata.

With the construction of these new buildings, very little open space remained on the block (see fig. 29). Only narrow alleyways and a small yard behind the Tyler house were left open. Unfortunately, this area was inaccessible for excavation due to construction activity in the area. But the partial excavation of the alleyway between the Tyler house and the old Customs House was possible. Figure 8 (see p. 45, above) shows the alleyway closed off by a crude wooden gate or door. Excavation revealed the alleyway was paved with brick, now located almost five feet beneath the modern surface of South Main Street. A layer of coal ash and domestic refuse nearly one-foot thick lay over the paving (see fig.

18. Eighth United States Census, 1860, Manuscript Population and Manufacturing Schedules, R.I. Hist. Soc.

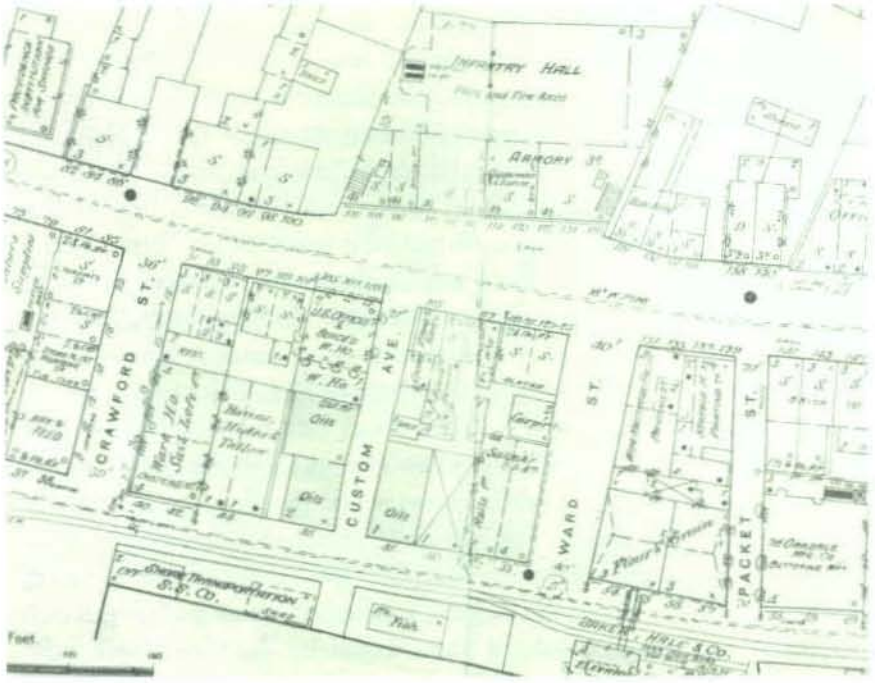


Figure 29. The site area in 1889. Sanborn Insurance Map of Providence, Rhode Island, Vol. 2, plate 47. Courtesy of the Rhode Island Historical Society Library (RHi x3 4886).

30). Artifacts recovered beneath the paving indicate that it was probably laid soon after the construction of the Customs House in 1818.

South Main Street continued to change during the last decades of the century. The neighborhood became rundown and less densely populated. As Brown & Sharpe, the Tingley Marble Works, and the Palmer & Capron jewelry factory moved to other locations or closed by 1880, the area lost its remaining vitality. In 1870, one-fourth of the seventy-four boardinghouses recorded in the Providence City Directory were located on South Main or South Water streets; by 1880 only six of the sixty recorded in the city were in this same area, probably because many of the employees of the relocated factories had moved closer to their jobs.[19]

Toward the end of the nineteenth century, new types of businesses moved into the area. Oil and chemical works became common along South Water Street. The Rumford Chemical Works maintained a store and office in the block just south of Ward Street; the Providence Oil & Chemical Company occupied the former Earle warehouse; and in the next block south, a third chemical manufacturer was located. By 1880, seven oil manufactories and dealers were located on South Water Street; in 1890 eleven of the twenty-five listed in Providence were in this area.[20]

Saloons, second-hand clothing and furniture stores, and other small shops predominated. By the 1880s, Jewish immigrants moved into the South Main Street area and set up tailor shops and operated the clothing stores. The block between Crawford and Custom streets contained a fairly good representation of the area's mixed residential and commercial character. In 1890, the top floor of the Allen building was

19. *Providence City Directory, 1870; Providence City Directory, 1880.*
20. *Providence City Directory, 1880; Providence City Directory, 1890.*

Figure 30. The alleyway between the Customs House (on right) and the Tyler house (on left), with the brick paving exposed. Photograph by John Miller. Courtesy of Old Stone Square Associates.

21. *Providence City Directory, 1890.*

occupied by R. J. Payne, maker of sails, awnings, tents, and flags; the lower floor contained the wholesale and retail oyster business of Robert Pettis. Next door, the single-story building between the brick store and the former Earle warehouse had housed, since the 1870s, the business of Edwin G. Baker, dealer in hides, tallow, and horns. The Earle warehouse and adjoining buildings to the rear contained the Phetteplace & Company Oil Manufactory. Along South Main Street in the Crawford house, a confectioner and clothing dealer operated shops; next door at the Tyler house a second-hand clothing dealer had his shop downstairs and lived in the apartment upstairs, while a liquor dealer occupied the southern half of the building. The photograph in figure 8 (see p. 45, above) was taken about this time and shows the shopfronts of these two establishments. The old Customs House served as offices of the Internal Revenue Service and the Appraiser's Office.[21]

In contrast to the dilapidated buildings, cramped shops, and odorous oil and chemical manufactories and fish and oyster dealers west of South Main Street, stood the elegant, four-story Infantry Hall. Built in 1879–1880 on the east side of Main Street by the Providence First Light Infantry Brigade, this building became the principal civic auditorium in the city. It contained an assembly hall on the second floor that could seat 2,000 people, and fancy shops on the ground floor (see fig. 31).

In addition to the building foundations, only one subsurface feature from this period of site occupation was uncovered during excavations: a brick privy found in Trench 7 (see fig. 32). Located inside the one-story building that housed Baker's hide, tallow, and horn dealership, it

Figure 31. Infantry Hall in 1886. It stood on the east side of South Main Street, almost directly opposite the site area. Courtesy of the Rhode Island Historical Society Library (RHi x3 4888).

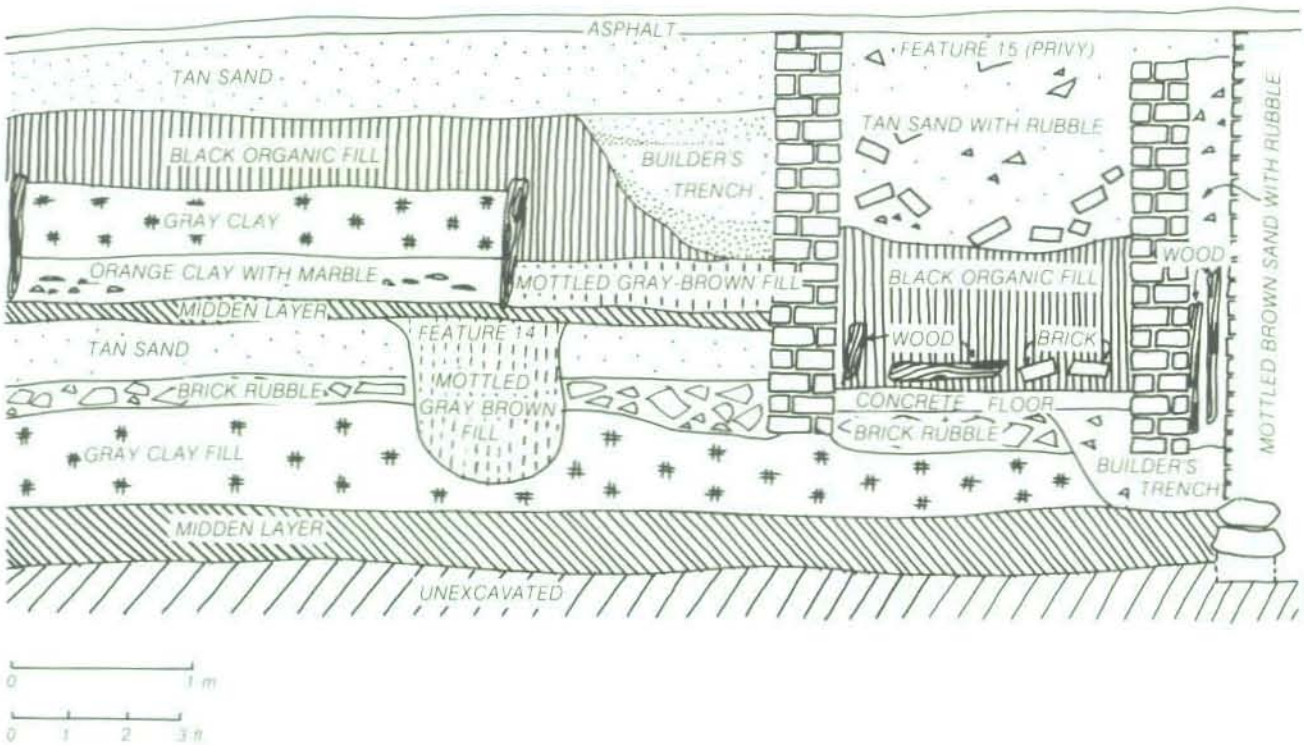


Figure 32. Late nineteenth- and early twentieth-century brick privy pit, in the west profile of Trench 7. Drawing by Ruth Macaulay. Courtesy of Old Stone Square Associates.

apparently remained open, if not in use, until the early twentieth century. The upper layers of the feature were filled with building debris, probably deposited when the buiding was demolished, while the lower fill consisted of dark, organic material.

In 1906 the City of Providence advertised for the demolition and removal of the old Customs House and the Tyler House to allow for widening of South Main Street.[22] At this time, the road surface was raised about five feet as well as widened. The Crawford Allen brick store and the Earle warehouse remained on the site until the mid twentieth century, when they too were demolished and the site was paved for use as a parking lot. The final surface modifications occurred at this time. Some excavation and cutting occurred on the South Main Street side of the lot as a cement retaining wall was built. Over the rest of the site, about one foot of clean, tan sand was deposited as a base for the asphalt paving, sealing the site for more than twenty-five years.

The archaeological excavations at the Old Stone Square site have provided an opportunity to study intensively the growth and changing uses of a small part of the city. The site went full circle from commercial warehouse lots in the seventeenth and early eighteenth centuries, to mixed residential and commercial uses in the later eighteenth and nineteenth centuries, back to an entirely commercial, albeit passive, use by the mid twentieth century.

Landfilling was an operation that punctuated and defined the occupational stages throughout the site's history, and many of the changes the site had undergone were reflected in the various strata. The floral, faunal, and artifactual material recovered in the occupation

22. *Providence Journal*, Feb. 12, 1906.

midden surfaces provided evidence of the changing materials lives of the site's occupants. By the late nineteenth century very little refuse was being deposited on the site; few people actually lived in the buildings, and most of their trash was probably disposed elsewhere. What little was found was deposited into the cellars of the buildings as they were demolished.

Archaeological study of the landfilling process in Providence and in other costal cities has shown that landfilling occurred as a response to a variety of factors. Rapid population growth and increased material wealth generated large quantities of refuse, and crowded housing created unsanitary conditions. Landfilling became a convenient method of easing this problem, while also creating new areas on which to build. In other instances, landfilling was a result of civic improvement, as in the filling of Providence's tidal cove and the creation of an oval cove basin during the late 1840s. Filling also indicates changes, both technological and economic, in the requirements of individual industries. Viewed as the artifacts of important processes in the formation of the city, fills can help us to understand the changing stresses and forces of urban life.

The discovery of intact surface middens and deep fill strata on the Old Stone Square site has important implications for development along the Providence waterfront as well as for other cities. Recent studies of the Providence waterfront have identified the locations of numerous eighteenth- and nineteenth-century wharves and several shipyards, now buried beneath the modern shoreline.[23] Their survival under the buildings and roadways along the waterfront must now be assumed as probable; in the past, their destruction was assumed to be certain.

Study of towns like Warren, Rhode Island, where shipbuilding and maritime commerce were also important activities but where urbanization did not occur, are very valuable. In Warren, most of the eighteenth- and early nineteenth-century wharves and many of the wharf buildings remain intact and provide a rare image of what Providence's waterfront must have looked like 150 years ago.[24]

The process of urbanization is extremely complex, influenced by such diverse forces as geography, politics, the economy, and population size and composition, acting on local, national, and international levels. If we are to approach an understanding of these forces in the formation of the modern city, all bodies of data must be studied, from buildings to fill strata, paintings to written documents. A better knowledge of how the various components of the city looked, functioned, and changed, can only improve and inform our understanding of the historical process of urbanization—a continuing process for which we are now the engineers.

23. Ruth Macaulay, "The Written and the Unwritten Word: A Study of the Documentary and Material Culture Sources for the Maritime Industries of Providence and Warren, Rhode Island, from their Beginnings to 1860" (unpublished paper, 1983, on file at the American Civilization Department, Brown University). Michael Halleran has recently completed extensive research on the former configuration of the Providence waterfront and the general chronology of shoreline change as part of the waterfront development plan.

24. Macaulay, "Written and Unwritten Word."

Book Reviews

Yankee Enterprise: The Rise of the American System of Manufactures. Edited by Otto Mayr and Robert C. Post. (Washington, D.C.: Smithsonian Institution Press, 1981. xx + 256 pp. Illustrations, bibliography, and index. $19.95 cloth; $9.95 paper.)

The nine essays in this volume analyze from diverse perspectives the uneven development of mechanized factory production in the United States, particularly in the field of metalworking. Recent research has suggested that American industrialization was not an inexorable process that passed, like the horse, through clear evolutionary stages toward a logical culmination in the automated factory and the private corporation. The scholars whose works are presented in *Yankee Enterprise* further redress uncritical celebrations of America as a nation of wholesale innovators; their research may also be used to correct theorists of "modernization" who postulate a universal model of industrial development. As students of technology, political economy, business and labor, the contributors grapple with such hoary and amorphous themes as mass production and precision manufacture. Though they have not arrived at interchangeable conclusions or a compelling synthesis, the diversity of their approaches and interpretations accurately reflects the complex phenomena under study.

Many contemporary historians envy the ability of physical science to detect the unity underlying seemingly unrelated events, and some have sought to emulate its methodology by undertaking quantitative investigations predicated on capital- and labor-intensive research techniques: such efforts have yielded mixed results to date. The authors in this volume did not resort to anonymous data samples or deductions from theoretical models. Treating cases, industries, and personalities concretely, avoiding (in most instances) implicit behavioralism or functionalism, their empirical work is informed by traditions of historical inquiry that resist the temptation to confine a subject within the twin Procrustean beds of methodology or ideology (a foreward by the President of the U.S. Chamber of Commerce notwithstanding). In conceptualizing the course of American industrial capitalism and metalworking, that is the most satisfactory procedure.

These essays on the "American system of manufactures" extend a debate which, in its narrowest formulation, concerns a problem in comparative industrialization: what accounts for Anglo-American differences in the manufacture of such light consumer durables as firearms during the nineteenth century? Observers first discerned distinct

national production styles in this category at the 1851 London Exposition, and the variations were examined at length in subsequent Parliamentary inquiries. English engineers visiting American factories during the 1850s were struck by the manner in which machinery had been devised to perform specialized operations in a rationalized sequence. They also felt that limited liability laws and the corporate form of ownership facilitated investment in the large plants housing the array of equipment. These procedures were perceived as economizing on the use of labor to the advantage of both masters and mechanics. Over a middling range of standardized consumer goods, though not in the luxury trades or heavy engineering, American commodities came to compare favorably with English products where the old country had continued to rely on general-purpose machine tools and the minute division of handicraft labor once advocated by Adam Smith. David Hounshell, a contributor to *Yankee Enterprise*, has noted that in the mid-nineteenth century there was no necessary connection between high-volume mechanized metalworking and precision manufacture using gauges: except in the New England armories interchangeable parts were uneconomical. Certain industries in the United States making complex products did gradually adopt armory techniques of machining components to close tolerances and assembling rather than hand fitting them after the English manner. Outside the orthodox genealogy of armory descendants other mechanized methods of quantity production had also bubbled up in the Connecticut light metal and hardware trades, as indicated by the more recent investigations of Matthew Roth along lines not represented in this volume.

In order to account for the original Anglo-American divergence, as well as the particular patterns of domestic industrialization, it is necessary to examine both the forces of production, such as machinery, and the relations of production, such as the individual and collective collisions of capitalists, supervisors and production workers. Diverse approaches in *Yankee Enterprise* do give the collection as a whole the necessary dual focus, though integration of the various findings remains the task of the reader.

In the opening essay Eugene S. Ferguson reviews recent historiography on the American system and provides an overview of the issues that his colleagues will be taking up in detail: the prevalence of interchangeable parts; economic and social explanations for the behavior of investors and innovators; the integration of production with management and marketing; the role of engineers; the fate of workers. He also urges that the results of new research be communicated to general audiences, thereby correcting some prevailing misconceptions: to cite an example, it has been clear for some time that while Eli Whitney was adept at touting interchangeable parts, he was inept at manufacturing them.

Arguing in terms of comparative hardware rather than comparative culture, A. E. Musson contends that major characteristics of the American system, including machining to gauge, originated in the heavy

capital-goods engineering industries of late eighteenth- and early nineteenth-century Britain. Skilled emigrants and Yankee spies conveyed this body of knowledge to America where it was applied by manufacturers confronting different market conditions. Only in the 1850s, according to Musson, did distinctive American contributors to mass production, such as the turret lathe, begin to appear. In this and other essays, the authors' conclusions clearly have been colored by their individual definitions of such concepts as "mass production" and other ambiguous terminology.

Assuming that the course of technological change is not an independent variable, Nathan Rosenberg offers a sophisticated explanation of the American predilection for capital- and energy-intensive mass production. His analysis is couched in terms of supply and demand constraints which differed from prevailing European conditions: population growth rate, availability of land and other natural resources, scarcity of certain types of workers; he lays particular stress on the process whereby the capital goods sector inseminated diverse industries with common metalworking techniques forged in a peculiar American environment. Some might wish to translate Rosenberg's economic vocabulary into the language of class and power relationships while others could question his summary of the manner in which market relations swaggered into the sphere of household production and elbowed moral economy aside during the early national period. However, Rosenberg is by no means indifferent to the complexity of human motivation, as it is clear from his discussion of the part played by persisting English preindustrial craft traditions ("protoindustrial" might be a more accurate term) in suppressing mechanized standardization. Those long-decayed craftsmen nurtured an instinct for individual workmanship akin to the elegant construction of this economic historian's cause-and-effect argument.

In the book's longest piece Merritt Roe Smith focuses on the antebellum national armories at Springfield, Massachusetts, and Harpers Ferry, Virginia—the hothouses of the American system. He traces the policies of the Army Ordnance Department in several key areas: promulgating notions derived from the French of uniformity in weapons components; underwriting the costs of introducing new technology to attain that ideal (much as the Air Force later fostered numerically-controlled machine tools); devising bureaucratic structures to insure comparable consistency in the management of the separate armories, thereby anticipating certain strategies later adopted by private corporations. With more detail than Rosenberg, Smith also considers the impact of these changes on the work methods and traditions of artisans in the armories.

Paul Uselding's contribution stresses the significance of measuring devices in attaining and maintaining close tolerances while machining workpieces. Seizing on a distinction first propounded by Charles Babbage in 1832, he compares the measurement requirements of a "making" system with those called for in a "manufacturing" system. The

English making system was oriented toward unit or small batch production; the American manufacturing system spawned large batches of standardized items. Elements of both traditions frequently coexisted in Victorian factories, though the trend in modern methods engineering has been toward elaboration of techniques for achieving exact size accuracy rather than precise duplication, the hallmark of interchangeability in the original American system.

David Hounshell's research infuses substantive information into the discussion of Anglo-American industrialization. In this generally strong collection his article is outstanding for its discriminating treatment of the state of the art in different industrial establishments. Using the company records of early sewing machine manufacturers, he documents an uneven and episodic adoption of precision gauging techniques and bureaucratic production management, particularly in the case of Singer. Hounshell concludes that the labor process in nineteenth-century metalworking plants cannot be described by simple extrapolations from the (atypical) ideal type of New England armory practice.

Alfred D. Chandler is concerned with establishing the institutional lineage of line and staff management, whose ancestry he traces back to the trunk line railroads of the 1850s. Some metalworking plants adopted analogous procedures and elaborated on them because inside contracting, the prevailing mode of decentralized management, failed to assure factory owners of adequate control over costs and the routing of materials through various departments. Though Chandler delves into the past in order to unearth the antecedents of current factory and corporate management, his research may also be interpreted as implying that Victorian industries were not merely immature versions of their contemporary counterparts; heterogeneous authority relations at the point of production makes the earlier plants seem like a separate species.

This is a point to which Daniel Nelson has devoted considerable attention, and his essay differentiates the situations of workers in plants that exhibited characteristics of the American system from those who toiled in other hives of nineteenth-century industry: iron mills and foundries or textile and shoe factories. Because of the character of technology and the organization of production, precision machinery workers of the Gilded Age felt less aggrieved over working conditions or managerial meddling and consequently their participation in trade unions and strikes was less frequent. Arguing that implementation of precision manufacture inadvertently benefited a segment of the working class, Nelson points out that inside contracting provided opportunities for personal mobility, and mechanization created demands for novel skills within the wage system, though it also obliterated the world of the partisan gunsmiths described by Merritt Roe Smith.

A concluding contribution by Neil Harris considers the consumers who purchased these standardized products of the American system, showing how they have been subjected to advertising and depicted in

fiction. Much of Harris's evidence is drawn from the period 1880 to 1940. In the context of this volume it would have been more germane to investigate the political and economic forces underlying the initial conversion of antebellum household producers into consumers.

Since it is difficult to do justice to complex arguments in a synopsis, readers are encouraged to sample the wares in *Yankee Enterprise* for themselves. Rhode Islanders interested in local contributions to the American system will discover, for example, accounts of sewing machine manufacture at Brown & Sharpe and the influence of the Providence Tool Company on production techniques at Singer. In the light of contemporary deindustrialization, general readers may be most astounded by Alfred Chandler's assertion that the basic forms of American factory management have remained unchanged since 1910. If an eminent business historian detects such petrification, it should come as no surprise that the current health of domestic manufacturing is less robust than when the American system was a novelty.

Slater Mill Historic Site THOMAS E. LEARY

The Afro-Yankees: Providence's Black Community in the Antebellum Era. By ROBERT J. COTTROL. (Westport, Conn.: Greenwood Press, 1982. xviii + 200 pp. Tables, selected sources, bibliography, and index. $27.50.)

The recent renascence in the long untended field of early New England black history that brought us *Black Bostonians: Family Life and Community Struggle in the Antebellum North*, a collaboration between James Oliver Horton and Lois E. Horton in 1979, and *The Free Black in Urban America, 1800–1850: The Shadow of a Dream*, by Leonard Curry in 1981, continues. Published in late 1982, Robert J. Cottrol's book covers similar ground in a similar, though less satisfactory, way. Like its predecessors, Cottrol's study employs printed sources and a traditional institutional approach to trace "the development of the black community, its separate churches, temperance and uplift societies, and schools, and the manner in which they were influenced by white society."

Cottrol's point of departure is Julian Rammelkamp's pioneering essay of 1948, "The Providence Negro Community, 1820–1842," which was published in these pages. Rammelkamp ties the rise of the second largest New England black community to the creation of key institutions, such as the African Union Meeting House (1820), and most importantly, to "the growing movement of democratization" that swept Jacksonian America, and in Rhode Island erupted in the Dorr War. Rejecting Rammelkamp's thesis as "semi-spontaneous," Cottrol substitutes the proposition that "heightened racial regulation" in the

1820s "set the free Negro apart from the rest of the population" and prompted a "turning inward" that ultimately produced the community cohesion necessary for local organization and institution building. In short, "the formation of black community spirit in Providence [became] . . . a defensive reaction to an increasingly hostile white society." The resulting black culture and community identity closely resembled the dominant white ethos: "Christian, democratic and thrifty." Both the black ethic and parallel black institutions, then, were "not the result of a lack of cultural similarity with the white population but rather the result of white prejudice."

Locating "the origins and persistence of racial conflict in northeastern cities like Providence . . . in the growth of the industrial economy and the expansion of political rights"—processes that relegated blacks to the margins of political and economic society where they remained clients of "aristocratic" patrons—Cottrol seeks the roots of black community in the preindustrial period. In the first chapter, he temporarily abandons the fine focus on Providence because "little information remains of the lives of most Providence slaves," and instead ranges across 150 years of New England colonial history, wherein he discovers a "golden age" for blacks that fostered a rapid and complete "transformation from African to Afro-Yankee." Throughout New England, "a pre-modern social structure" blurred racial distinctions and rendered "life for white servants . . . as difficult as life for black slaves." Indeed, bound blacks and whites labored at the same broad range of occupations, fraternized in churches and taverns, coexisted peacefully in integrated neighborhoods, occasionally intermarried and generally "recognize[d] their common bondage more than their differences." The resulting slave culture in an era when class mattered more than race was "semi-autonomous," the black community was "limited" and "embryonic," and black consciousness was "under-developed."

Black institutions, covered in the second chapter, emerged in the "racially liberal" atmosphere of the Revolutionary Era following the creation of a free Negro class that appeared in the wake of a Rhode Island emancipation act of 1784. "Culturally American" (Africa was now but a "fading memory"), blacks founded their first institutions during "an ambiguous time in American race relations and Afro-American community development." Paternalism persisted, but *de jure* equality gradually disappeared, the victim of "modernization." Freemanship and attendant voting rights, for example, survived until 1822 when a hostile legislature formally barred blacks from the ballot box. Within a decade, status-anxious and, by now, clearly racist white laborers and seamen had pillaged black neighborhoods twice in major riots, the second of which, in 1831, spurred a terrified white populace to finally trade town for city government.

The struggle to recapture lost political rights during the Dorr War forms the core of the third chapter. By following their white patrons into the Landholder party (and later Whig party) in return for a promise to reinstate the black franchise, black leaders discovered yet another

route to "respectability and . . . vindication." "More aristocratic" in outlook than their white, working class, Dorrite (and later, Democratic) counterparts, owing to a prolonged history of paternalistic contact with upper-class whites, blacks found that "Whig affiliation satisfied a need for status." Abundant newspaper coverage and the revealing recollections of black "ward healer," William J. Brown, make this by far the best documented and most readable section of the book.

The fourth chapter, the final chronological chapter, analyzes the 1850 and 1860 Federal manuscript censuses to discover patterns of "occupation, status, and population." The major conclusions are depressingly familiar: drastically limited economic opportunities almost exclusively confined to unskilled, preindustrial positions, literacy levels well below those of native-born whites, a minute propertied class and a sex ratio skewed in favor of women, the result of stunted employment opportunities for male breadwinners. But, Cottrol concludes, somewhat surprisingly, "despite persistent discrimination, Providence was probably the best city, in one of the better states, in the best region for a free Afro-American to live."

Readers may challenge such a premature assertion and may also want to take issue with numerous other characterizations of the period and the blacks who peopled it. The "golden era" hypothesis, it might be mentioned, briefly tempted historians of women in early America ten years ago, and they have now dismissed it. Other critics will give much more weight to Winthrop Jordan's emphasis on early American racism than does the author. Still others may contend that Cottrol's own evidence is suspect and at times contradictory. Examples: a runaway slave who speaks "broken English" cited as a highly acculturated and typical colonial bondsman, racially defined laws of social control factored out of the "golden era" equation, and a depiction of the Providence African Union Society, a mutual benefit/emigrationist group, that ignores its own dismal assessment of black life in Revolutionary America, its officer's two trips to Sierra Leone, and the Society's suppression. Some may wonder at the omission of heretofore mandatory chapters on the black church and family. Finally, some may simply balk at the notion that status obsessions can explain everything from why poor whites riot to why poor blacks pick a political party. Surely, Providence blacks had other—perhaps even higher—priorities.

Transcending such reservations is a more fundamental limitation, one that is responsible—in this reviewer's opinion—for the problems of framework, focus, fact, continuity, chronology, and thesis that plague this study. In short, both the research strategy and the execution of that strategy are inadequate to the tremendously difficult task of resurrecting a relatively small black community, devoid of national leaders, newspapers, and institutional records, and located in a late blooming New England town that printed little of its voluminous public record prior to 1850. By confining his search to printed materials and carrying out that search in a cursory fashion, Cottrol twice handicaps the project at the outset and guarantees its failure. He cannot even

meet the minimum obligation of the historian of institutions to correctly identify the community's crucial organizations. Among the missing, for example, are a black church and the African Union Society's nineteenth-century successor, the central black institution in Providence prior to the founding of the African Union Meeting House.

Examining the author's research effort on its own terms reveals more missing material than can be listed here. Among the most critical omissions are local city directories, which he inexplicably insists do "not indicate race"; vital statistics records; a black autobiography; voter registration lists from the 1840s on; and newspapers. Admittedly, thorough research never guarantees good history; poor research, however, precludes it.

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