

**FIELD REPORT**

**98½ BROAD STREET, CHARLESTON, SC**

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**For Historic Charleston Foundation**

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## **Introduction**

The building known today as 98½ Broad Street is now incorporated into the rear of a two-story masonry building, known as 98 Broad. The combined structure is positioned with its gable front to the street, extends to the north, and is flanked by a mid-twentieth century building to the west and a parking lot to the east. According to tradition, the front building was constructed by Dr. Henry Frost, a Charleston physician, shortly after his acquisition of the property in 1835. The rear section is earlier but of uncertain date. Local tradition holds that 98½ Broad Street dates to the 1730s and was owned in the late colonial period by Dr. Alexander Garden. A medical doctor and prominent figure in Charleston, Dr. Garden is noted for his contributions in botanical and scientific studies.

The building at 98½ Broad Street has become the focal point for preservation concerns due to the forthcoming construction of a large court complex in the interior of this block. At present, 98½ Broad is slated for demolition; alternate suggestions include preservation in place and removal to a new location.

The debate over the future of this building has been complicated by uncertainty regarding its date and significance. To address this problem, Historic Charleston Foundation and the Preservation Society of Charleston sponsored a detailed analysis of the structure with two specific questions in view:

- 1) What evidence survives that can be used to accurately date the original building and successive periods of change?
- 2) How much historic fabric survives?

Inherent in these concerns is the underlying question of significance. With well-defined parameters for the age, construction, integrity, and historical functions of the building, a coherent assessment can be made of the relative significance of the structure. This in turn will provide the preservation community with grounds for establishing realistic preservation options.

To assess the building, a joint investigation was undertaken February 23-25, 1996, by Charles Phillips and Joseph Oppermann on behalf of the Preservation Society, and Willie Graham and Orlando Ridout V on behalf of Historic Charleston Foundation. Research and logistical assistance were provided by Spencer Tolley and Jonathan Poston.

## History and Description

Investigation of 98½ Broad Street was constrained by time, the continuing use of the building as county office space, and the extent to which early fabric was concealed by later finishes. Investigation therefore depended to a significant degree on probing of small areas; conclusions based on such limited access inherently raise as many questions as they answer. In this case, it was not possible from the accessible material to conclusively establish the date of first-period construction. A strong case can be made for initial construction at the end of the eighteenth century. However, certain features serve as a warning that the building may be more complex and earlier.

Several examples may be cited here without digressing into minute detail. First, the second-story floor system, consisting almost entirely of wrought nailed and pit-sawn material, contrasts with the mixture of wrought and early machine nails and pit and sash-sawn timber in the roof frame. Second, while there is clear evidence of two successive chimneys in the north end of the roof, it cannot be established with certainty that the roof is an original feature. Third, early exterior brickwork has only been investigated in a limited area; masonry characteristics for much of the building remain inaccessible at this time.

Regardless of these concerns, the primary architectural significance of the surviving building dates to circa 1800. For the purpose of clarity, the ensuing discussion assumes this to be the primary date of construction. The potential for an earlier construction sequence should be recognized and could be tested by more extensive probing of the building.

For much of its early history, the building at 98½ Broad Street served as a dependency for the dwelling house that fronted on Broad Street immediately to the west, designated in this century as 100 Broad Street. This dwelling was included in the architectural survey of Charleston published by the Carolina Art Association in 1944, but was later demolished and replaced with a modern building. The surviving dependency evolved over time in plan, finish and function, and today is used as county office space.

The building is of brick construction and measures approximately eighteen feet wide by 31 feet long. It is two stories high, with a pitched roof that terminates against a parapet wall at the south end and is hipped at the north end. The exterior appearance of the building has been obscured over the years by a series of changes. The south gable end wall has been altered and concealed by the circa 1836 construction of Dr. Frost's two-story office (98 Broad Street). A two-story, frame extension has been added across the north gable and a one-story, frame extension has been added along the entire west elevation. Both additions date to the twentieth century and obscure but do little damage to the earlier building. The exterior brickwork of the south gable and the east wall is laid in English bond. A "beak" joint can be observed on the south wall and a small section of exposed west wall. It was probably first rendered with stucco when 98 Broad was constructed circa 1836; modern stucco was added along with the construction of the twentieth-century additions.

The interior has undergone equally complex development. Early fabric includes floor framing and flooring, the hipped gable roof, and brick walls. Careful probing of the second-level floor and framing revealed evidence of at least three major periods of development in addition to the more recent cosmetic alterations. The first level has two layers of twentieth-century flooring in place; the existence of early or original flooring or framing could not be confirmed. While the evidence raises many new and as yet unanswered questions, certain basic conclusions can be made.

First, this building employs a plan form in which the chimney (or chimneys) is oriented to the center line of the building. This form was widely used for dependencies in Charleston in the colonial period, but over time was joined by a plan that mimicked the single house form. In this alternate plan, chimneys were placed along one of the long walls, usually backing against the side property line. Fenestration was omitted from this side of the building, increasing the orientation of the building to the domestic yard and garden. Among surviving buildings in Charleston, this appears by the third quarter of the eighteenth century and becomes the dominant form by the end of the eighteenth century.

Second, the earliest observed interior spaces of 98½ Broad Street dependency were extremely simple. Ceiling joists were exposed in both the first and second story, and the joists and flooring above were simply whitewashed early on. The interior wall surfaces were exposed brick; these brick surfaces were whitewashed sometime prior to the nineteenth century addition of a plaster ceiling. No evidence was found to indicate that the ceilings or walls were plastered at any early period. The present chimney stack on the north gable wall is a nineteenth-century alteration, replacing a smaller, earlier chimney with a single flue in the same location.

## Dating Evidence

Dating evidence for the structure is limited. The exterior brickwork, interior framing, mortars and the nails used in each period of construction serve as the primary evidence. English bond brickwork is quite common in Charleston over a long period of time. This was used as one of the primary bonding patterns for much of the eighteenth century (though Flemish bond was clearly preferred), but was passing out of fashion by century's end. Thus the brick evidence is less than definitive. The use of English bond for the entire building could be interpreted as evidence of a colonial period building, but the absence of a watertable is more typical of the Federal period.

The bedding mortars of 98 and 98½ Broad Street were compared at the intersection of the two buildings at the east elevation. The mortar of 98½ Broad is white with a shell matrix, in contrast to the softer, ocher-colored mortar of 98 Broad. The mortar joints are also different. At 98½ the mortar joints are relatively tight and the bricks evenly laid as one would expect of brickwork intended to be exposed. No finish joints were evident on 98 Broad, but a beak joint was observed at the southeast corner and in the top, south exposure of the south end wall of 98½ Broad. Both buildings were evidently stuccoed at the time 98 Broad was constructed.

The framing members of 98½ Broad Street are another source of information. Multiple layers of flooring prevented access to any surviving early first-floor fabric. The great majority of second-floor framing is pit sawn; one joist is sash sawn. The flooring at this level is undercut and wrought nailed. The roof framing is of one construction period employing a mixture of pit and sash-sawn timber. Pit-sawn timbers are standard throughout the eighteenth century and may be found as late as the middle of the nineteenth century. Through documentary sources, mills fitted with sash saws are known to have existed in the Charleston area from the late colonial period. However, a cursory survey of surviving Charleston buildings suggests that sash-sawn lumber does not appear with any regularity until the first decade of the nineteenth century. Indeed, the earliest example identified in a survey of twenty Charleston buildings is Vanderhorst Row, constructed 1799-1800 on East Bay Street. Given the mix of two technologies in a single context, the roof framing at 98½ likely dates to the period of transition from hand-sawn to mill-sawn framing material, which tentatively appears to date to about 1800-1810.

Nail evidence is also helpful. Hand-wrought nails are found in the floor framing and flooring of the second story, and in combination with double-struck wrought and double-struck machine nails in the roof. Wrought nails were universally used until the early nineteenth century and continued in use for decades thereafter for specialized purposes such as clinching. The double-struck machine nail did not appear until the end of the eighteenth century, however, and is most commonly found in the early nineteenth century. Mature cut nails are also evident in later work here, and are useful for interpreting changes to the plan, the third reconfiguration of the stairs, and the reconstruction of the chimney.

Thus certain conclusions are possible. First, based on the cumulative evidence, the

original fabric of 98½ Broad Street dates no later than the early years of the nineteenth century. The building known as 98 Broad is a later structure built onto the south end of 98½ Broad. Second, a number of construction materials and techniques are typically associated with the eighteenth century, including the use of undercut floorboards, spline flooring, pit-sawn framing, wrought nails and the bedding mortar, though any may appear later as well. Third, a great deal of early building fabric remains despite numerous remodelings over the years. And fourth, the original use(s) of the building at 98½ Broad Street cannot be identified specifically at this point. The original plan is not well understood for either floor level, though the building appears to be oriented to the west. The sparse early appearance of the first-floor walls and ceilings suggests a secondary function, yet splined flooring at the upper level may suggest a more sophisticated use.

Two additional avenues remain available to explore the date of this building. Archaeological investigations could be undertaken to search for the builder's trench or other first-period features. The success of archaeological investigation will depend upon the presence of intact features and the condition of the builder's trench. Given the siting of this building, a builder's trench would almost certainly contain detritus from earlier periods of occupation, so a post-quem date likely could be established. A second research alternative is to conduct dendrochronology analysis of the interior framing members. While tree-ring dating has not been tested in Charleston, it has become an important research tool in New England, the Chesapeake and down into North Carolina. With good samples and a sound model for tree growth patterns, dendro analysis permits definitive conclusions regarding the year in which a timber was felled. While time constraints appear to preclude developing an adequate model to test this building with dendro, the present debate over 98½ Broad underscores the long-term value of having this tool available.

## **Significance**

This structure was almost certainly built as a dependency. Based on present evidence, its primary period of architectural significance is circa 1800. The building has been extensively altered and lacks the context of its original domestic setting. However, in a city rich with domestic outbuildings, this structure does appear to possess a combination of features as yet unrecorded elsewhere in the city. The combination of an unplastered interior with a splined floor is the only documented example we have been able to identify. The position of the first-period stair in the front corner of the building is equally surprising and raises questions about the original plan on both the first and second story. The English bond exterior merits comparison with other early outbuildings. Further, the interior plan is only partially defined at present and will require additional investigation to be more adequately understood.

In conclusion, this dependency retains substantial evidence of its early history, even though sorely afflicted by later changes. Questions raised in the process of investigation make clear that it is a complicated building and possesses features worthy of further research. While other dependencies survive from this period in the city, the numbers are modest and continue to decline through alteration, demolition and conversion to modern dwellings. With each loss, the pool of information and the opportunity to understand variation becomes smaller and smaller.



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## Appendix I

### Biographical Chronology for Dr. Alexander Garden

January 1730: Dr. Alexander Garden born in Birse near Aberdeen, Scotland; son of Rev. Alexander Garden. (Berkeley, p. 3)

Circa 1743 to 1746: Garden served an apprenticeship to Dr. James Gordon (professor of medicine at Marischal College) in Aberdeen and studied philosophy at Marischal. (Berkeley, pp. 8-13)

March 6, 1746: Garden qualified to serve as surgeon second mate in the Royal Navy. The date of his commission is uncertain; he qualified as first mate October 6, 1748. (Berkeley, pp. 15-19)

Soon after May 1750: Garden resigned from naval service. (Berkeley, p. 19)

October 1750: Garden began one-year study of medicine at the University of Edinburgh.

Summer of 1751: Garden undertook botanical studies with Dr. Charles Alston; he qualified for a degree, but lacked funds to pay the required fee. The practice of medicine in Scotland required the degree; practice in the American colonies did not. (Berkeley, pp. 19-26)

1751: Garden travelled to Lisbon; shortly thereafter he settled in South Carolina, seeking a milder climate than Scotland for his poor health. (Berkeley, pp. 26-27)

April 1752: Garden arrived in Charles Town, South Carolina. His destination was Rose Hill in Prince William Parish, the home of Dr. William Rose. Garden practiced for several years in rural South Carolina, attempted to raise silk worms, and experimented with growing indigo. He considered himself a scientist and started his native botanical studies. (Berkeley, pp. 28-38)

Spring 1754: Garden traveled to the north and visited John Bartram and Benjamin Franklin in Philadelphia. On this trip Garden asked Jane Colden if she was familiar with a plant he found near New York City; this turned out to be sample no. 153 in her collection, and "Using the privilege of a first discovery" she named it *Gardenia* in Garden's honor. (Berkeley, pp. 44-49; Stearns, pp. 600-601)

On his return to South Carolina, Garden set up a medical practice in Charleston with Dr. David Olyphant (a Scot formerly in practice with Dr. John Lining). Within a year, Garden was the sole heir to Lining's practice. During the decade of 1765-75, Garden brought in an annual income of about £2000. (Berkeley, p. 260; Stearns, pp. 601-602)

Dr. Garden corresponded with John Ellis in London, Carolus Linnaeus in Sweden, and other scientists at an increasing rate. (Berkeley, p. 53; Stearns)

1755: Dr. Garden accompanied Governor Glen's expedition into Cherokee country. (Berkeley, pp. 62-64)

December 25, 1755: Dr. Garden married Elizabeth Peronneau (born ca. 1738 in Charles Town; died in 1805, Cheltenham, England), niece of Dr. Alexander Peronneau, and daughter of Henry and Elizabeth (Hall) Peronneau. At her father's death, Elizabeth received £8,000 and a slave girl, Phillis. (Berkeley, pp. 65, 69-70)

1759: Garden made arrangements with the artist George Roupell (who did the ink and wash drawing of *Mr. Peter Manigault and His Friends*) to do botanical drawings for him. (Anna Wells Rutledge, "After the Cloth Was Removed," in Richard K. Doud, ed., *Winterthur Portfolio 4*, Charlottesville: University Press of Virginia, 1968, p. 56; Stearns, p. 609)

After 1760: Garden was encouraged by Linnaeus to extend his study of natural history to include fauna as well. Garden discovered a new genus of amphibian that included the mud iguana (*Siren lacertina*); this may have been the single-most important accomplishment of his scientific studies. (Stearns, pp. 611-614)

1776: Garden temporarily moved his residence from Charleston to his plantation, Otranto, to recover from poor health. (Berkeley, p. 268)

[1777]: "In January, the house at #26 Broad Street burned and was rebuilt." (Berkeley: 273; footnoted "Garden to John Lewis Gervais, Jr., n.d., probably December 13, 1782, Simon Gratz Collection, Historical Society of Pennsylvania; Inventories Book B (1787-93), Charleston County, pp. 398-99; Charleston County Court; Garden's Memorial, Loyalists' Commission, Vol. 55, pp. 197-245."

1778: Dr. Garden transferred to trustees for his wife and children his plantation, Otranto, the town house where he lived, 450 acres adjacent to Four Hole Swamp, pew 24 in St. Michaels' Church, animals and furniture. His (minor) son was Alexander Garden, Jr., later a major in the American army. (Stearns, pp. 616-617; Berkeley, p. 275)

March 1781: Otranto was turned over to Alexander Garden, Jr., just returned home after two years study at Lincoln's Inn. Much to the family's surprise, Alexander joined the American forces, becoming General Greene's aide-de-camp. (Berkeley, pp. 284-285)

1781 or 82: "Mrs. Garden rented their home [presumably their Broad Street property] to Mrs. Wright for £130 a year. Although it legally belonged to Alex [Jr.], since it would revert to him upon his mother's death, Governor Matthews confiscated it and purchased it himself. Alex offered to take some of his father's property under his protection, but

Garden would not consider such duplicity for a moment. His medical practice was turned over to his friend, Dr. Andrew Turnbull." (Berkeley, p. 289)

October 11, 1782: Garden's property was seized upon directives of the South Carolina Legislature's act of the previous January (in which Loyalists were to be banished and property confiscated). His Friend Street property was seized; the previous year he had completely renovated the six-room house and rented it for £30 per year. (Berkeley, pp. 287-89)

January 1783: Dr. Garden arrived in England and took up residence in London. (Stearns: 617; Berkeley, p. 292)

May 15, 1783: Dr. Garden was admitted to the Royal Society of London. (Stearns, p. 617)

December 17, 1783: Garden's Friend Street and Broad Street properties were sold for £4,920 Sterling. Garden left Charleston minus 25 slaves and £64,327.15 Currency plus £2,278.19.8½ Sterling owed him. (Berkeley, pp. 287-289)

1784: Garden's house (presumably the Broad Street property) reverted to Garden's son Alex. (Berkeley, p. 294)

April 15, 1791: Dr. Alexander Garden died. (Berkeley, p. 324)

## Appendix II

### Property References, 98½ Broad Street

#### 1. ca. 1739-1741:

At least during the years of 1741 to 1754, the property appears to have been owned (or at least occupied) by a Dr. John Martini. The date of the following reference to an adjacent property is not known, but describes transfer of ownership of the Garden property from James Paine to Dr. John Martini:

Eleanor Sandwell, widow, [illegible] Sandwell, formerly widow of Wm [?] Linthwaite, Brazier, who, by will of 1739, devised to her & part of lot 105, measuring 60 feet by 80 feet, bounding east on James Paine but now Dr. John Martini, west on another part of the lot..." (Lewis Green's notes on this property, MS on file Historic Charleston Foundation, Feb. 25, 1970. OO, p. 555)

#### 2. January 8, 1741:

TO be SOLD, two very good Tenements in *Broad-street* over against Mr. *Sandwels*, the one where Dr. *Martini* formerly lived, containing 8 very good Rooms, with four fire places, a very good pav'd Yard, good Store-Room, a Kitchen with two very good Rooms over it, and a good Garden: The other where Dr. *Brisbane* now lives, with four Rooms, 3 Fire places, good Yard, Kitchen, and Store: The Purchaser may have one Year's Credit, giving good Security if required, and paying Interest from the Day of Sale. Enquire of Dr. *John Martini* at *Goose-creek*... (*South Carolina Gazette*, January 8, 1741. Photocopy of original on file, Historic Charleston Foundation)

#### 3. 1754 [references to adjoining property, 102 Broad Street]:

William Hopton to Anna Maria Hoyland--Mentions deed of trust of 1754, 'Bounding eastward on Dr John Martini'... (Lewis Green, E-3, p. 561)

#### 4. May 31, 1760, recorded June 5, 1760:

Power of Attorney transferred from James Michie to Robert Raper. Raper is to "Inspect and take are of the several Houses and Buildings on my lott of land in Charlestown..." (Transcript on file, Preservation Society of Charleston)

#### 5. November 22, 1760:

Inventory and Appraisement of the Estate of the Hon. James Michie Esqr. The following

rooms are thought by Preservation Society staff to be 98 Broad Street: "In the Chair House & Stables", "In the Front office", "In the Dining Room", "In the Library". (Transcription on file, Preservation Society of Charleston)

6. 1776:

Garden temporarily moved his residence from Charleston to his plantation, Otranto, to recover from poor health. (Edmund Berkeley, *Dr. Alexander Garden of Charles Town*, Chapel Hill: The University of North Carolina Press, 1969, p. 268)

7. 1777:

"In January, the house at #26 Broad Street burned and was rebuilt." (Berkeley, p. 273)

8. 1778:

Garden transferred his plantation, Otranto, the town house where he lived, 450 acres adjacent to Four Hole Swamp, pew 24 St. Michaels' Church, animals, and furniture to trustees for his wife and children. (Berkeley, p. 275; Raymond Phineas Stearns, *Science in the British Colonies of America*, Chicago: University of Illinois Press, pp. 616-617.)

9. October 11, 1782:

Upon directives of the South Carolina Legislature's act of the previous January (in which Loyalist were to be banished and property confiscated), Garden's property was seized. (Berkeley, pp. 287-289)

10. December 17, 1783:

Garden's Friend Street and Broad Street properties sold for £4,920 Sterling. Garden left town minus 25 slaves, £64,327.15.0 Currency plus £2,278.19.8½ Sterling owed him. (Berkeley, pp. 287-89)

11. 1781 or 82:

"Mrs. Garden rented their home [presumably their Broad Street property] to Mrs. Wright for £130 a year. Although it legally belonged to Alex [Jr.], since it would revert to him upon his mother's death, Governor Matthews confiscated it and purchased it himself. Alex offered to take some of his father's property under his protection, but Garden would not consider such duplicity for a moment. His medical practice was turned over to his friend, Dr. Andrew Turnbull... (Berkeley, p. 289)

12. January 1783:

Garden arrived in England and took up residence in London. (Berkeley, p. 292)

13. 1784:

Garden's House (presumably the Broad Street property) reverted to Garden's son Alex. (Berkeley, p. 294)

14. March 1786:

"Anna Maria Hogland to Hannah, which totaled 56 feet, i.e., ½ of a house £577-9-2 29 Mar 1786 'Bounding eastward on Dr Garden'." (Lewis Green, V-5 p. 187)

15. December 24, 1835:

"Dr. H. R. Frost mortgaged to Dr. Samuel Wilson, for \$20,000, on 24 Dec 1835, a lot, part of lot 106--74' x 221' 'East on Daniel Legare's part, West on William Bradley, now Anna Marie Hoyland'." Presumably this is when 98 Broad Street is constructed. (Green, L-10 p. 270)

16. April 1, 1866:

Will of Henry R. Frost: "I devise to my Executors the lot of land dwelling house and buildings thereon, situate the West of my residence and in which Dr Geddings and his family live...In Trust to receive the rents and profits thereof and pay the same to my son in Law Dr. Frederick Geddings during the life of my Daughter Henrietta, for the support of her and her children so as not to be subject to his debts, contracts or engagements..." (Labeled "Box 170 no. 16", transcript on file, Preservation Society of Charleston)

17. 1996:

Presently, 98½ Broad Street (that is, the rear of this half lot) is owned by the County of Charleston.

## Appendix III

### Summary History, 98 Broad Street

About 1835 Dr. Henry Frost removed the eighteenth-century house on this lot and constructed the core of the house presently used as the restaurant "Fast and French." This structure is of brick construction, seemingly stuccoed from the outset, and extends from the street to join the earlier dependency known as 98½ Broad Street. The date for construction of the front building is based on the following mortgage document:

Dr. H. R. Frost mortgaged to Dr. Samuel Wilson, for \$20,000, on 24 Dec 1835, a lot, part of lot 106--74' x 221' 'East on Daniel Legare's part, West on William Bradley, now Anna Marie Hoyland'...(Green, L-10, p. 270)

Accessible architectural evidence is relatively limited for 98 Broad Street, but is consistent with this date. A careful survey of the roof was possible during the investigation of the earlier rear section. The roof of Dr. Frost's building appears to date to a single construction phase, extending the entire length of the building from the street to where it abuts the rear dependency. The roof is hipped at the street gable, but directly abuts the brick gable of the rear building. It is of common rafter construction with extremely large framing members and simplified joinery, consistent with the proposed ca. 1835 date for the house.

Structural members are sash sawn (although numerous timbers appear to be reused) and cut nails with machine heads have been extensively used in the frame. Sash saw technology first appeared in Charleston at the end of the eighteenth century, but machine nails date primarily to the period 1830s to 1880s. The rafters, though quite substantial (measuring 3" to 3⅞" by 5¾" to 6") are half-lapped and nailed, and not joined with the center-tenon joint more typical of earlier, refined work. Such joinery passed from fashion around the middle of the nineteenth century, to be replaced with mitred and butted ridge joints secured with nails (as can be seen in the roof of the Russell House nursery wing); thus it is unlikely 98 Broad Street dates as late as the 1850s. The roof of 98 Broad Street is therefore transitional, representing the final phase of traditional carpentry prior to the introduction of lighter balloon framing.

An unusual feature of the roof is that the joists are buried in the perimeter walls, with the wall plates resting directly on top (instead of under the joists, as is more typical). The rafters are supported by the wall plates and secured with a bird-mouth joint. Because so many rafters are reused, it is difficult to say whether collars were originally part of this roof system, or date to a previous installation represented by the reuse of the rafters.

The Frost building is of a different width and the ceiling heights and roof pitches do not match the rear wing, creating a gap between the two roofs. This area is filled with brick, in effect, extending the parapet of the rear wing to enclose the attic of the new front section. It is this parapet that demonstrates the front section and rear-wing roof are of two periods.