REPORT ON THE DENNETT HOUSE
TRADITIONALLY CALLED "THE BEEHIVE"
73 PROSPECT STREET
PORTSMOUTH, NEW HAMPSHIRE
NOVEMBER 26, 2017

ARCHITECTURAL HISTORY HISTORIC PRESERVATION

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Dennett "Beehive", South (Front) and East (Side) Elevations

Summary:

This report is based on an inspection of the Dennett House, traditionally called "the Beehive," on November 13, 2017. The purpose of the inspection was to observe and identify the character-defining features of the dwelling. Of special interest were the longstanding beliefs that the house dates from 1680 (or other attributed dates in the late seventeenth century), that it is one of the two oldest surviving buildings on Christian Shore and therefore one of the oldest buildings in Portsmouth, and that its walls are constructed of "solid square timbers." The latter assertion would suggest that the building began its existence as a log-walled structure of a type first documented in Portsmouth in a meeting house built near the South Mill Dam in 1659.

The inspection of November 13th was made possible through the courtesy of Mr. Glenn Walker of Ten Walker Street Realty, LLC, owners of the property.

Inspection of the house revealed that the existing structure dates from the first half of the eighteenth century, and that it was a large dwelling for its period. It has a frame of a type that is now represented by few surviving examples but that seems to have been a standard type for large, two-room-deep central-chimney dwellings from the late seventeenth century until the 1720s, and perhaps later. There is no trace of log wall construction in the house. The rumor of "solid square timber" construction may have derived from the memory of an older log garrison house that reportedly occupied the same property (see Appendix).

The house has been remodeled on a number of occasions throughout its history. Recent alterations have erased most traces of older interior finish in the dwelling, leaving only remnants of the types of physical evidence that are normally used to define the original architectural character of a house and of its subsequent remodelings. From these clues, it is clear that the house was originally finished with characteristic eighteenth-century joinery, as described in this report, but underwent some modernization in the early 1800s and again in the mid-1800s. The house retained its central chimney and fireplaces until the late 1800s. The chimney was eventually removed and replaced by two single-flue stove chimneys, which merge in the attic to become a single stack of modest dimensions. Recent remodeling of the several apartments that fill the interior of the building has obliterated most traces of earlier apartments, but it appears that the house has been a multi-family dwelling for many years.[1]

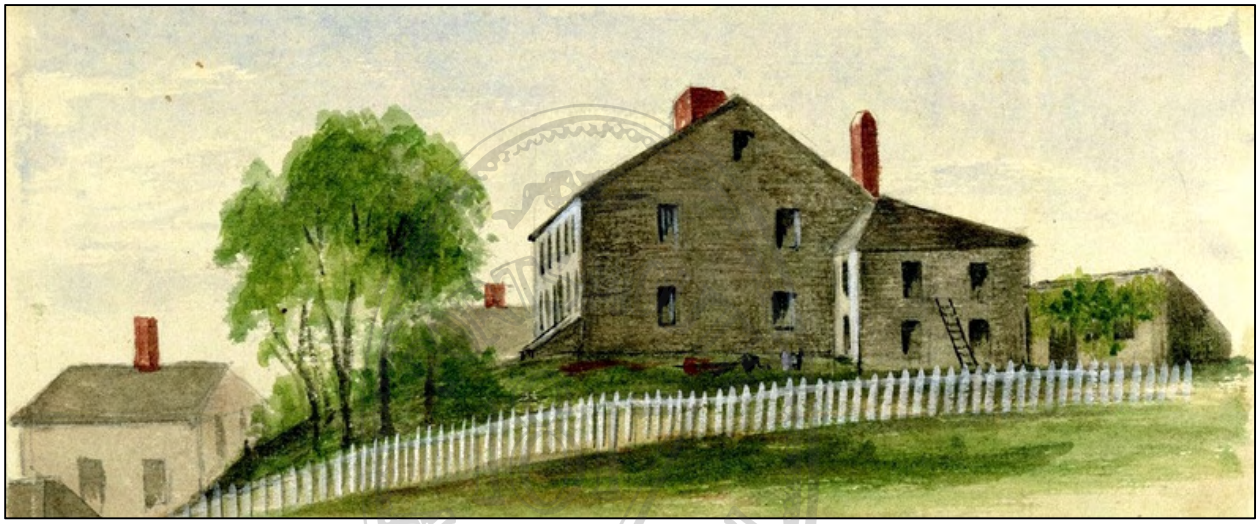
Exterior Description

The Dennett House stands at the summit of a hill whose ridge extends westerly from today's Maplewood Avenue. North, west, and south of the house, the land drops steeply away from the summit, elevating the building above neighboring structures to the south and west on Walker and Dennett Streets and giving the house a view across these lower dwellings toward the North Mill Pond to the south and the Route 1 Bypass on the north. As described in the Appendix to this

[1] The Dennett House has had various street addresses, including 8 Prospect Street, 69 Prospect Street, and the current 73 Prospect Street. The *Portsmouth City Directories* list single occupants in the house through 1934. The 1937 directory shows four people living at 69 Prospect Street, suggesting that the house was first divided into apartments between 1934 and 1937.

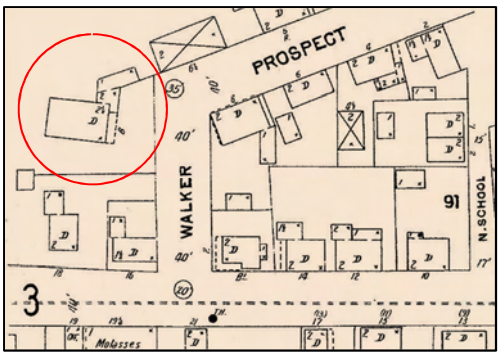
report, the house long stood alone on a site comprising many acres and including a natural spring, and until 1900 was accompanied by a family burying ground.

As seen on the cover of this report, the house is a large framed dwelling, formerly having a central brick chimney that projected above the ridge. The building is clad with clapboards and marked by an open porch on its eastern elevation, a two-story wing (formerly with its own chimney) that envelops the northeastern corner of the main dwelling, and a shed-roofed addition that extends along the north wall of the wing and projects beyond the wing's eastern wall. To the east of the house stands a detached and much altered building, now adapted for apartments but once apparently serving as a stable and carriage house for the dwelling.

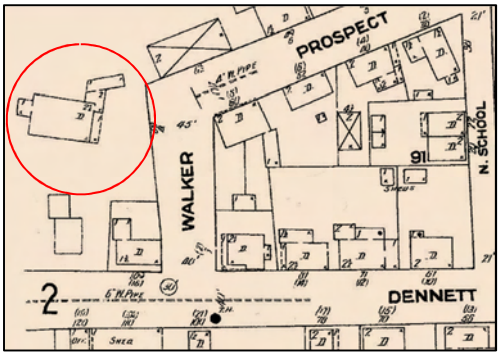


Sarah Haven Foster (1827-1900). Watercolor, "Dennett House (Beehive)," mid to late nineteenth century. Sarah Haven Foster Views of Portsmouth, Portsmouth Public Library.

As shown in the watercolor painting above, the principal features of the house, with the exception of the porch, were present in the late nineteenth century. As seen in the Sanborn fire insurance maps below, the porch had been added by 1904. The map of 1910 indicates a small projection on the west elevation of the house, of which little evidence is now visible.



Left: Detail, Sanborn Fire Insurance Company Map of Portsmouth, 1904.



Right: Detail, Sanborn Fire Insurance Company Map of Portsmouth, 1910.

Earlier Portsmouth maps, including the J. Chase, Jr. Rockingham County map of 1858 and the D. H. Hurd *Town and City Atlas of the State of New Hampshire* of 1892, indicate the Dennett House with lesser detail than the Sanborn maps above; they do not show the location of the family cemetery that is described in the appendix of this report.

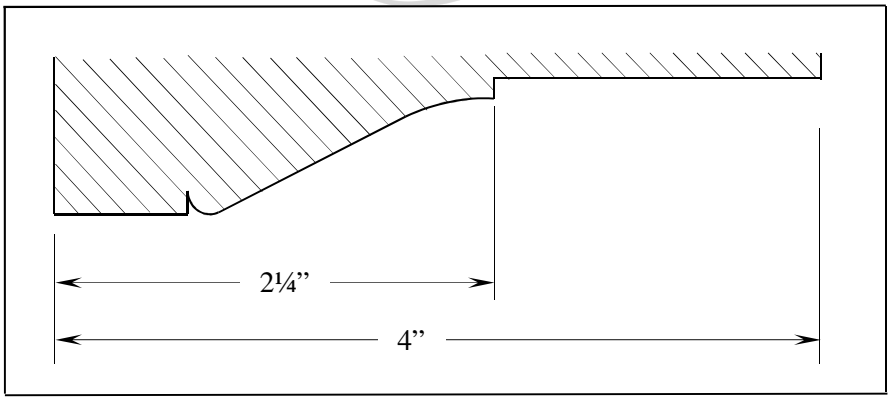
By comparison with other Portsmouth houses of the early-to-mid 1700s that have survived or are known through reliable records, it is clear that the Dennett House was an ambitious dwelling for its general period, especially if, as rumored, it was the second house to be erected on Christian Shore. The frame measures 42'-7" in width and 30'-6" in depth, excluding the wing at the northeastern corner.

The walls of the house are clapboarded and the roof is covered with asphalt "architectural" and three-tab shingles. The clapboards that presently cover the house are relatively new; no areas of riven and shaved clapboards, fastened with wrought nails, are evident. As seen below, the sheathing beneath the clapboards retains both wrought and cut (machine-made) nails. Where noted, all clapboards have square-cut rather than skived and lapped ends.

Dennett House, southwestern corner, camera facing north. The exposed sheathing bears a combination of forged and cut nails, with the latter predominating. Cuts in the sheathing above the windows indicate that the windows were lowered or reduced in size at some time.

As seen in the photograph above, the window sashes of the house are new. A photograph in the collections of Historic New England, probably dating from circa 1935, shows that the house then had six-over-six sashes, which were common in the mid-1800s and probably relate stylistically to the window casings now seen on the first story. These casings indicate a remodeling during the mid-nineteenth century. As seen below, they incorporate backband moldings of a characteristic Greek Revival pattern.

Detail, photograph, Dennett "Beehive," circa 1935. Historic New England Collections: https://www.historicnewengland.org/explore/collections-access/gusn/225576/



Exterior window casings, first story

As seen in the photograph at the left, the front doorway of the Dennett House also suggests a Greek Revival design, reinforcing the suggestion of the first-story window casings that the house was remodeled around 1850. It should be noted the present door enframement has been rebuilt and is mostly constructed of modern elements, so the stylistic evidence of the frontispiece is not fully trustworthy. It may be supposed, however, that modern repairs to the doorway more or less duplicate what was found by the carpenter who made the recent repairs. As described below, surviving interior features of the house, with the exception of changes to the front staircase, do not reveal evidence of changes to the building during the mid-nineteenth-century Greek Revival stylistic era.

Dennett House, front doorway, camera facing north. The transom sash seen in the photograph of circa 1935 on the preceding page is no longer extant.

Basement

For a building this large, the Dennett House is unusual in having a fully excavated cellar along the entire front, beneath the eastern rooms, and beneath the original extent of the northeastern wing. The area that was left unexcavated during construction lay beneath the central chimney and the areas west and north of the chimney; the area west of the former chimney location has recently been excavated to provide access for plumbing and electrical utilities beneath the northwestern rooms of the house.

As seen in the preceding images, the cellar is entered through a bulkhead at the southeast corner of the main dwelling, to the east of the front doorway.

The cellar walls are constructed of a combination of glacially rounded fieldstones and fractured stone, well pointed with lime-sand mortar. The fractured stone is a metamorphic type that is frequently seen in Portsmouth foundations. Its apparently unweathered appearance suggests that it was extracted by quarrying or blasting with black powder, but this appearance may result from its manner of weathering. Geological studies of the Portsmouth area identify this stone as deriving from the "Kittery formation." The Kittery formation underlies all of northern Portsmouth from Little Harbor to the Newington town line, extending into Kittery as the bed of the Piscataqua River and often lying exposed along the shores of the river.[2] Like adjacent geological formations, the Kittery formation is composed of metamorphic rocks that derive from

[2] Robert F. Novotny, *The Geology of the Seacoast Region, New Hampshire*, T. R. Myers, ed. Concord, N. H.: New Hampshire Department of Resources and Economic Development, 1969.

ancient sediments. A principal component of the Kittery formation is dark-colored, impure quartzite, a brittle rock that disintegrates into irregular and angular fragments as weather erodes softer rocks such as slate and schist within the formation.

Southern wall of basement, showing natural fieldstones near the base and angular stone near the top. The wall was originally pointed with lime mortar and retains remnants of lime wash (whitewash). The house lacks split granite underpinning at grade level; the mortared angular stone extends above grade to support the house sills.

The foundation walls of the main house continue with uniform construction beneath the portion of the northeastern wing that lies closest to the house, showing that this offset two-story wing was an original (or very early) component of the dwelling. A section of the northern foundation of the wing has been breached to provide access to a later, dirt-floored cellar that was excavated under a shed-roofed addition that was placed against the northern wall of the original wing.

Evidence in the basement of the original wing indicates that the former chimney of the wing, seen in the Sarah Haven Foster watercolor, served a summer kitchen. As seen from the main cellar, the chimney foundation displays a brick vault that was probably open when first built, but was later partially filled by a furnace or boiler chimney when the house was first provided with central heating. This chimney was provided with a cleanout door that was fashioned from a cast iron door from a former brick oven, probably taken from the room on the first story. The style of

this door reflects the period of the 1800s, a time when traces of other interior improvements were made in the house.

Left: South face of summer kitchen chimney base, showing brick vault (top) and re-used oven door (bottom).

Right: East (side) and north faces of summer kitchen chimney base, showing evidence of former Stairs from the room above.

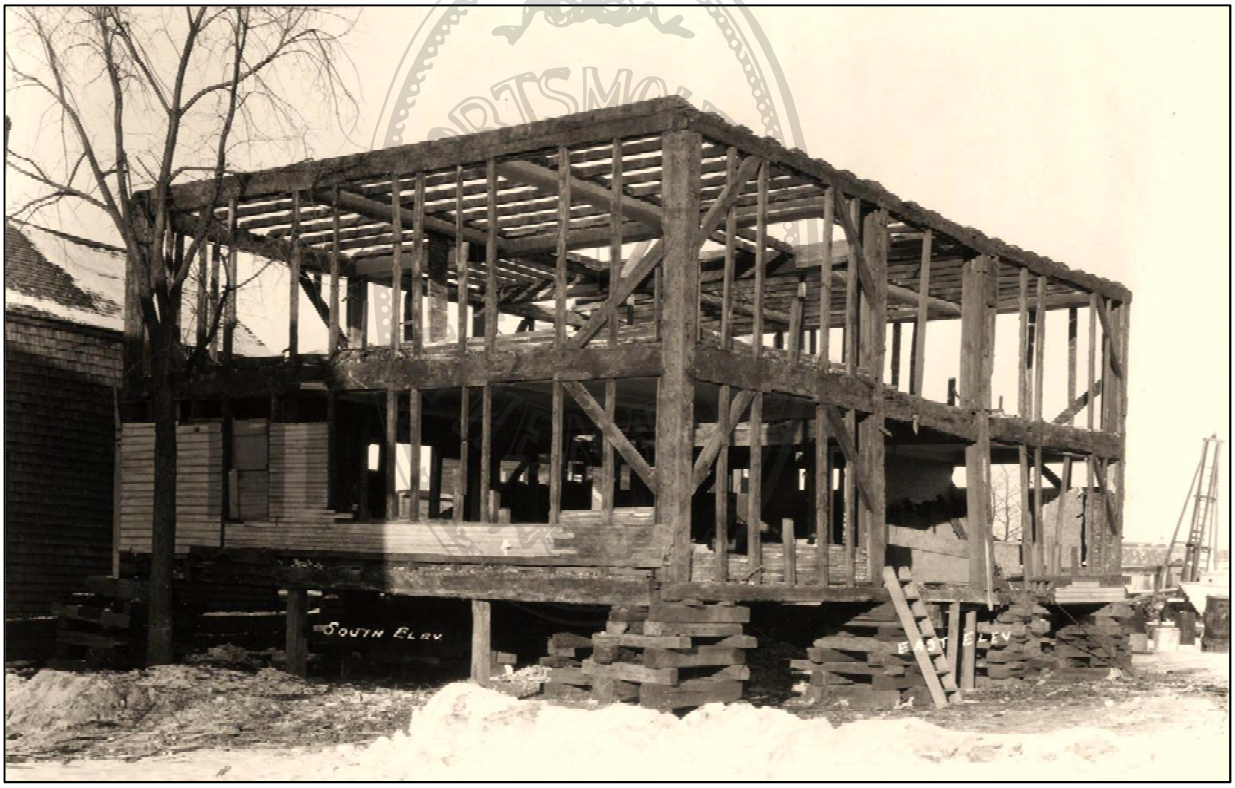
House Frame

The frame of the Dennett House is an example of a now-rare form that was apparently utilized in the Piscataqua region for large, two-room-deep central-chimney dwellings in the late 1600s and early 1700s. Like earlier and later house frames, this form uses four "bents" or assemblages of vertical posts linked together by horizontal members. Bents are assemblages of posts, girts at the second-story level, and tie beams at the roof level. Each bent is a structural frame that runs through the depth of the house from front to back. Two of the bents define and support the end walls of the house. The two inner bents define the chimney bay at the center of the structure.

While later house frames for central-chimney houses had three posts in each framing bent, these earlier frames had only two posts in each bent: one at the front wall of the house, and the second at the rear wall. In the Dennett House, the front and rear corner posts are visible as projections in the corners of the front and rear rooms. On the first story, where lath and plaster have been removed from the two southern (front) rooms, the corner posts are fully exposed to view. The front and rear chimney posts may be harder to see. At the rear of the first story, in an area of the former main kitchen of the house (more recently a bathroom), one chimney post was hewn back to the depth of the wall, rendering it invisible until lath and plaster were removed. In the second-story room above (a modern kitchen), the western chimney post is seen were it projects in its full depth from the rear wall.

By contrast to this early form of two-room deep frame, houses built after the first quarter of the eighteenth century generally adopted three-post bents. Each bent has three posts: one in the plane of the front wall (façade) of the house; one in the plane of the rear wall; and a third, called a prick post, defining a plane that lies just behind the rear face of the central chimney. The prick posts mark the transition from the front rooms of the house to the rear rooms, and help to support partitions that separate front rooms from rear rooms.[3]

Typically, the subordinate framing members in a house with two-post bents tend to be uniform in size and layout in the front and rear rooms of the house. By contrast, in a house with three-post bents, the girts that connect the front post to the prick post are heavier than the girts connecting the prick posts to the rear posts. This change in size may be accounted for by the fact that the front rooms are generally deeper than those at the rear of the house. The lighter dimensions of the girts in the rear portion of such houses may also denote the carpenter's sense of structural hierarchy; carpenters may have regarded the rear range of rooms as a subordinate addition at the back of what was then seen as the standard, one-room-deep frame of a hall-and-parlor house.



Lieutenant-Governor John Wentworth House (after 1695), shown in 1926 after being moved from its original site and partially disassembled for the sale of its interiors to the Metropolitan Museum of Art, New York. Metropolitan Museum of Art, Sage Fund, 1926. Neg. No. SF 294.

[3] The earliest dated example of a Piscataqua-region house with a frame that incorporates three-post bents is the Benjamin James House in Hampton. The frame of the building was dated to 1723 by dendrochronology, or tree-ring dating. See Lisa Mausolf and James L. Garvin, "James, Benjamin, House," National Register nomination, 2002, National Register Information System ID: 02000168.

The earliest documented example of a two-room-deep central-chimney Portsmouth house with two-post bents is the Lieutenant-Governor John Wentworth House, which was built between 1695 and 1701 and stood until 1925 on the southern shore of Puddle Dock in Portsmouth's South End. As seen in the photograph above, this house had a frame that matched that of the Dennett House in having four framing bents with two posts (front and rear) in each bent. The Wentworth House also matched the Dennett House in having two equally-sized summer beams spanning the intervals between end wall bents and chimney bents, as seen with greatest clarity in the attic framing, silhouetted against the sky in this photograph.

There were, however, important differences between the Wentworth House frame and that of the Dennett House, and these differences reveal that the Dennett House dates from a somewhat later period than the Wentworth House. While the framing principles of the two houses are similar, the treatment of the framing members differs in these two dwellings. In the Wentworth House, the principal framing members were carefully planed and were meant to be exposed in each room. To emphasize its decorative quality, each principal framing member had chamfered edges, and the chamfers on especially important members such as the summer beams were molded, as seen in the detail at the left from a photograph taken in 1925.

Such chamfers, sometimes flat and sometimes quarter-round or even ogee (S-curved), are seen on the summer beams of all seventeenth-century houses in the Piscataqua River region of New Hampshire, including the Jackson House of about 1664 in Portsmouth, the region's oldest surviving building.[4]

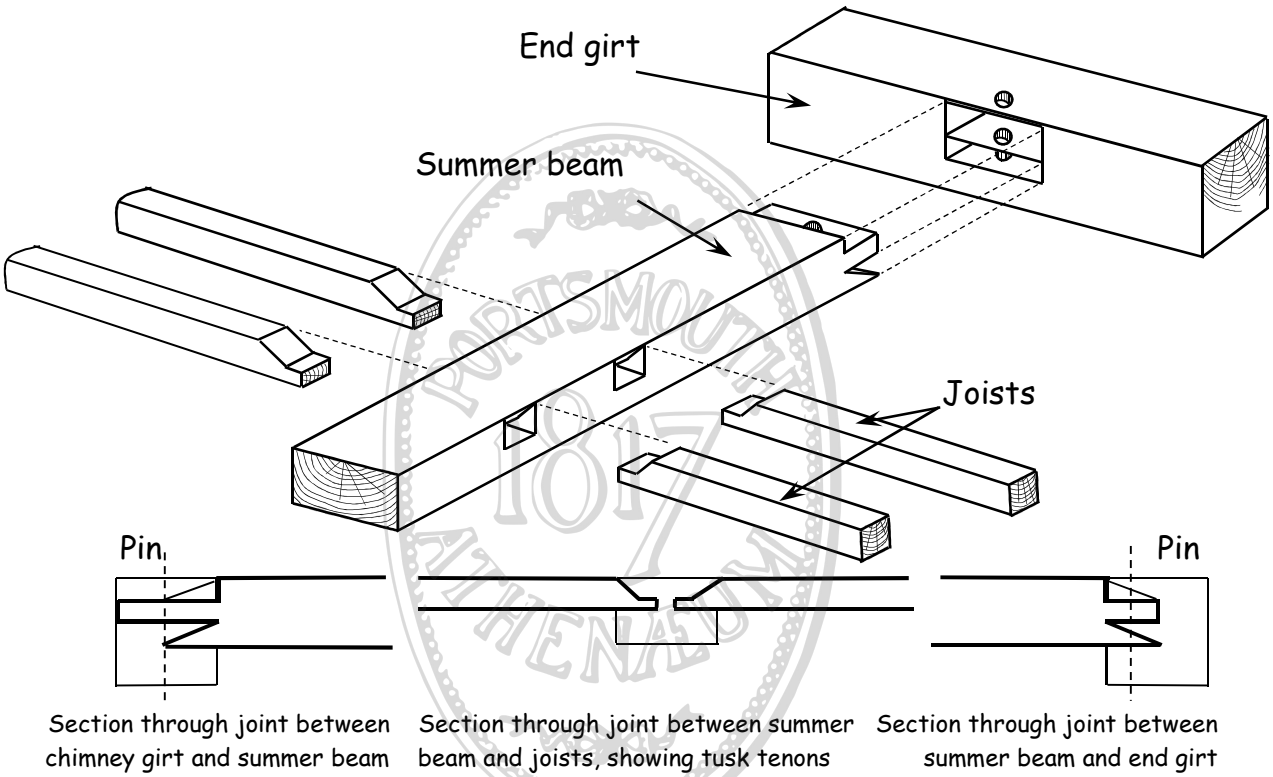
By contrast, the principal framing members of the Dennett House are expertly hewn, but not planed or chamfered. This fact indicates that these members were intended to be covered with applied casings fashioned from planed one-inch boards, a practice that remained universal during the remainder of the eighteenth century. It is possible to see the "shadow" or change of coloration in the summer beams on the western side of the house even though the casings here have been removed and the hewn surface of the beams exposed to view. The first known instance of the use of applied casings on summer beams was observed in the now-destroyed John Lowe House of 1702, formerly standing on Deer Street in Portsmouth.[5]

Left: Summer beam in southeast first story room of Dennett House, showing hewn surface and lack of chamfering at lower edges.

[4] For a discussion of the evolution of chamfering, including the increasing occurrence of flat (rather than quarter-round) chamfers in southeastern New Hampshire by the late 1600s, see Richard M. Candee, "Wooden Buildings in Early Maine and New Hampshire: A Technological and Cultural History, 1600-1720" (Ph.D. dissertation, University of Pennsylvania, 1976), pp. 217-19.
[5] Ibid., 219.

Another post-1700 attribute of the Dennett House frame is the use of simple joints where joists are framed into supporting members like summer beams, girts, or tie beams. The builders of older houses like the Jackson House (c. 1664) employed more complex forms of tenons, referred to as "tusk tenons" or "bare-faced tenons with diminished haunches," in connecting joists to supporting members, as seen in the drawing below.

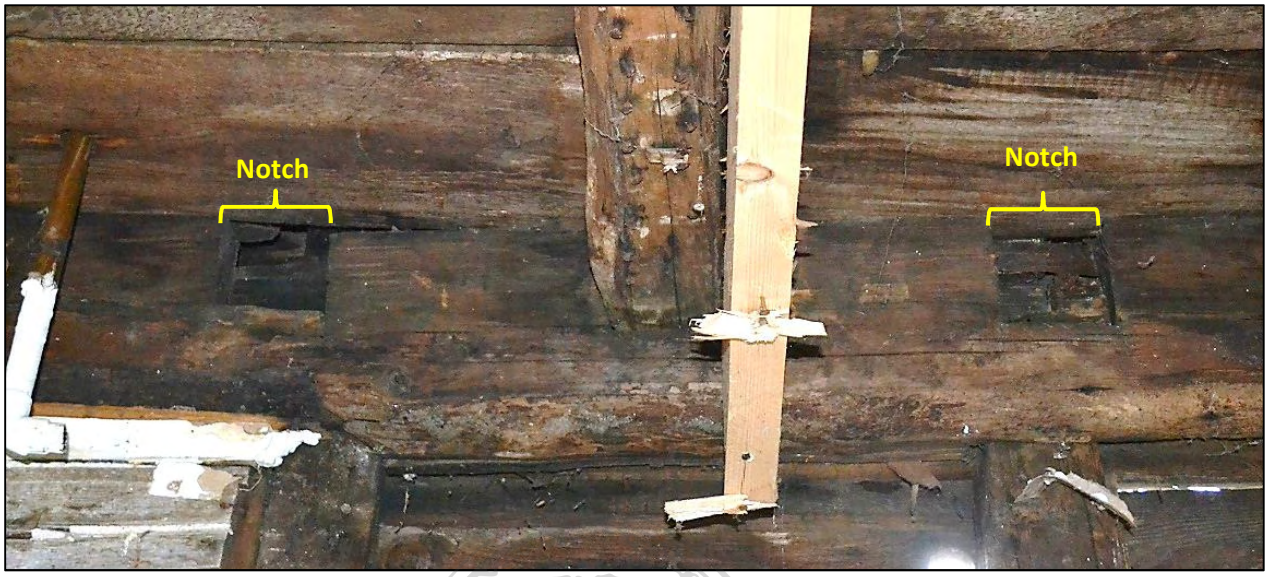
Framing details of the Richard Jackson House, c. 1664, adapted from Richard M. Candee, *Wooden Buildings in Early Maine and New Hampshire, a Technological and Cultural History, 1600-1720.* (Ph.D. dissertation, University of Pennsylvania, 1976).



These joints required a fairly complex shaping of both the tenons at the ends of the joists and of the mortises that received the joist ends. The joists of the Dennett House, by contrast, are square-ended. These ends simply drop into square notches that are cut into the upper edges of summer beams or girts. These simple joints are called "butt-cogged" joints. While butt-cogged joints cut more wood from the supporting members, weakening their capacity to function as beams, such joints offer greatly increased economy of labor and time in fashioning the frame.

The use of butt-cogged joints in New Hampshire can be traced to the years just before 1700. Several Portsmouth houses, including the extant Sherburne House of 1695 and the lost John Lowe and John Jones Houses on Deer Street (both 1702), employed such joints throughout.[6]

[6] Ibid., 217-19.



Front girt of Dennett House, southwest first floor room, looking south and showing an original second floor joist (center) and two empty notches for joists (left and right). These details illustrate the use of butt-cogged joist connections and suggest a construction date after 1700.

In general, the ceiling framing of the Dennett House is composed of pine common joists, as seen in the photograph above, that measure about 4 inches in width and 4½ inches in height. The bridging joists or summer beams that receive these common joists measure about eleven inches in width by 7½ inches in height.

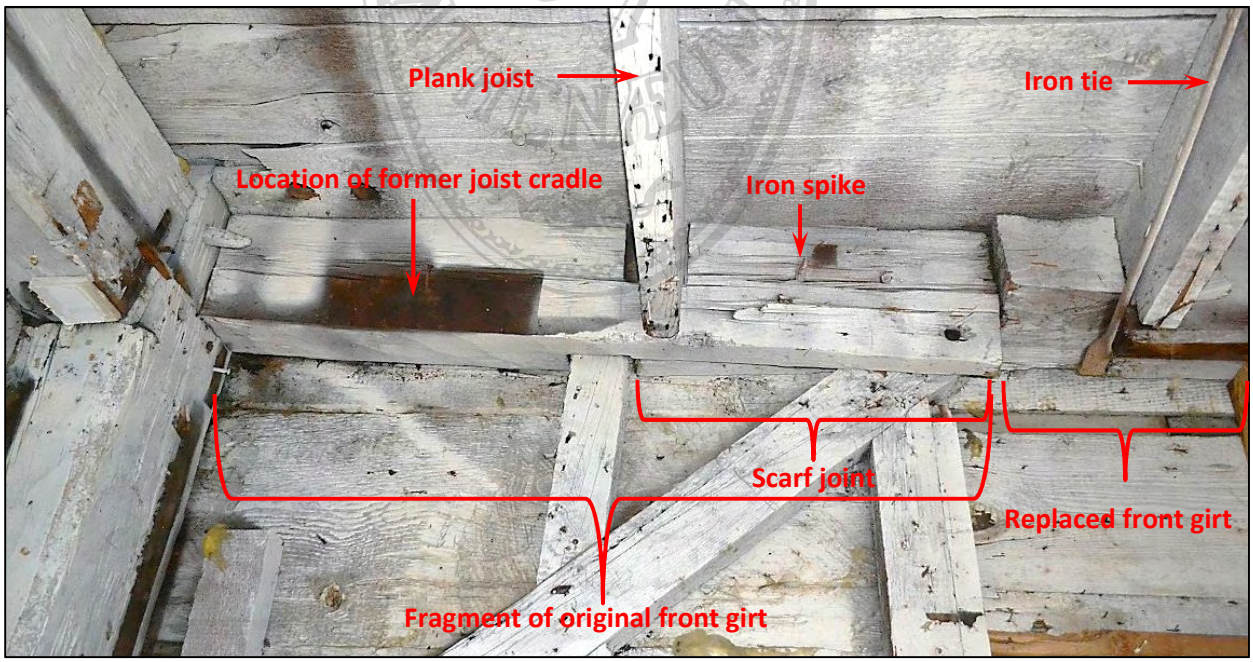
As may be seen by the remnants of wrought nails in the bottom of the joist shown above, the lath that held the original ceiling plaster in the southwest first floor room was nailed directly to the joists, creating a ceiling plane that was higher than the projecting bottoms of the summer beams. As noted, the summer beams are roughly hewn and show evidence of originally having been covered with planed board casings that provided a finished appearance below the plaster of the ceilings. Ceiling lath, now missing, was riven from pine and fastened to joists with wrought nails.

Section of riven (split) pine lath, seen from the southwest front room looking toward the staircase wall and showing the back of the lath strips and the protruding plaster "keys."

The western rooms on the first story show evidence of having retained ceilings with summer beams that projected below the plaster until recent remodeling, but both eastern and western rooms reveal a change in floor joist layout that apparently occurred during construction of the house. In the western front room, this alteration is indicated by the empty joist notches shown on the preceding page. For some reason, the spacing of the common joists was altered during construction, but only in the zone between the front girt of the house and the first summer beam. Behind (to the north of) the summer beam, there was no alteration in joist spacing either in the ceiling of the former front room or in the room(s) behind, at the rear of the house.

The eastern front room reveals a more dramatic change. At the time of construction, the builders evidently decided to abandon the small, square common joists that had always been traditional. In their place, they substituted sawn two-inch planks about 7½ inches deep. By nailing the ceiling lath to these plank joists, the builders dropped the plaster ceiling to the elevation of the bottom of the summer beam, hiding the beam above the plaster, as shown in the drawing below. This employment of deep, sawn plank joists and hidden summer beams may have begun as early as circa 1730 in grand houses such as the George Jaffrey House, which formerly stood on Linden Street, off of Daniel Street in Portsmouth. This construction method had become common, and expected, by the 1760s.

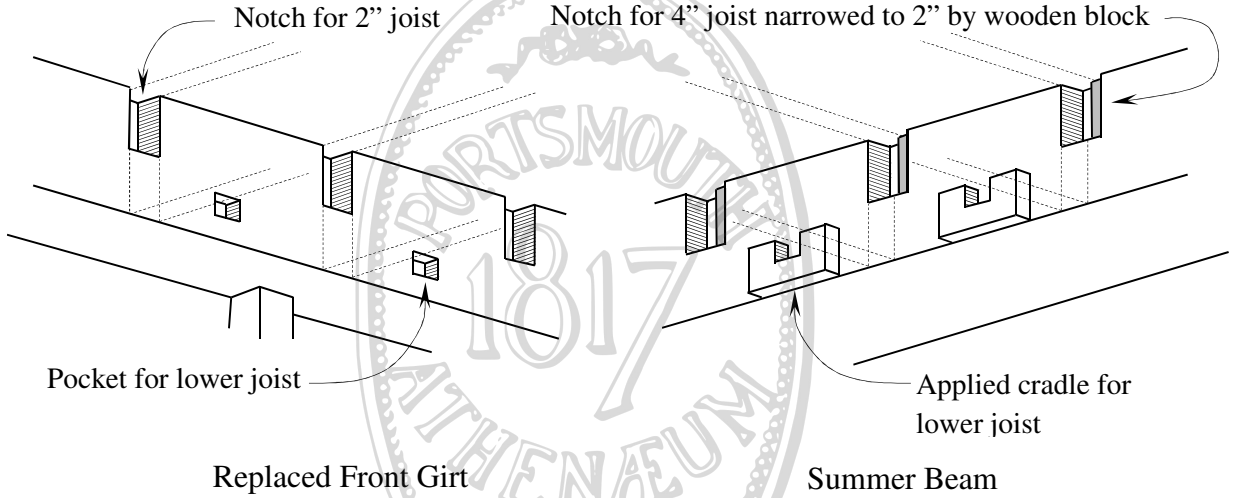
One anomaly obscures the original framing layout of the ceiling above the southeastern first story room. At some point following completion of the house, a catastrophic event fractured the girt above the front windows of the room, necessitating the replacement of all but the two ends of the broken member. As seen in the photograph below, a new girt was spliced onto the shattered ends of the original timber, using pinned or spiked half-lap joints.



Southeast corner of first story room, looking south to show the broken girt (left), the spliced replacement girt (right), and the deepened plank joists used to lower the ceiling in this room. The room was spray-painted white after the lath and plaster were removed from walls and ceiling.

The story of this accident will probably never be known, but the most likely source of the damage is probably the falling of a large tree against the house.

The drawing below shows the replaced front girt (left) and the southern face of the summer beam (right). The replaced girt has narrow notches to receive the ends of the plank joists. The summer beam has four-inch-wide notches that were intended for nearly square joists like those seen in the western rooms of the house. When the decision was made to substitute two-inch plank joists for the square joists, wooden fillers (shown in gray) were inserted in each notch beside the narrower plank joists. The northern face of the summer beam, by contrast, has narrow notched adapted to the plank joists, showing that the decision to use the latter was made as the frame was being prepared.

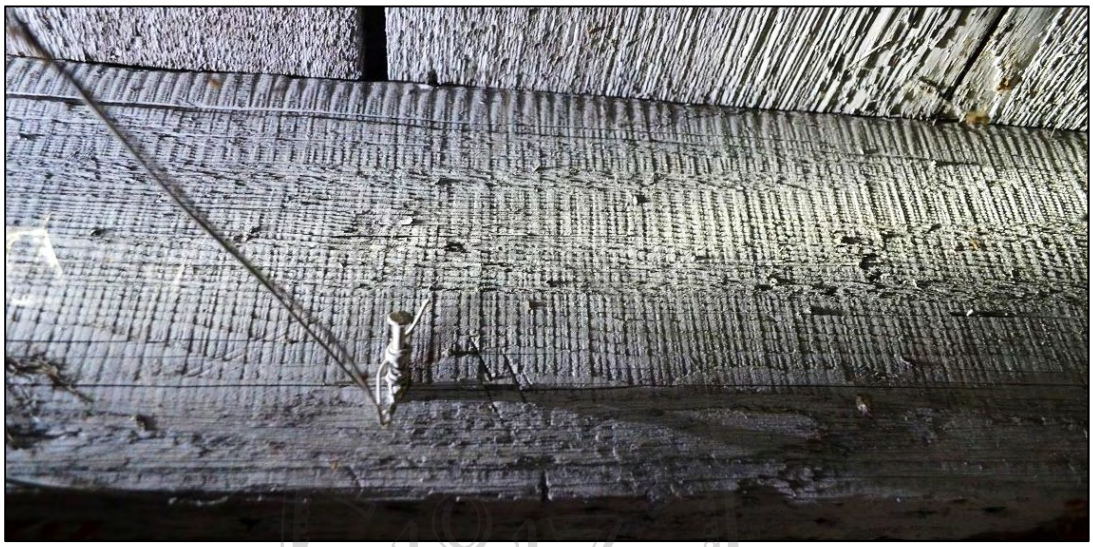


Front Girt and Summer Beam in Southeast Room, showing the change from Square Joists to Two-Inch Plank Joists During Construction

The joists that span between the front girt and the summer beam are spaced at 27" on centers, whereas those north of the summer beam are 24" on centers. Apparently because of the wider joist spacing south of the summer beam, an additional set of non-load-bearing joists was added at the bottom of the summer beam to act as nailers for the ceiling lath. These joists are supported by nailed wooden cradles, as shown. Cradles were likewise applied to the original front girt, where examples remain on the broken ends. When the replacement front girt was inserted, square pockets were cut into the face of the girt to receive the ends of the supplementary joists, as shown. All of these lower joists have been removed.

As seen from the southeast room on the first story, the two-inch plank second-floor joists span between the replaced front girt and the southern summer beam, and between the southern and northern summer beams; the framing north of the northern summer beam is hidden above

modern ceilings. These joists were sawn on an upright (reciprocating) sawmill and show the characteristic parallel vertical marks of such a mill. John Cutt built a sawmill at the stream that runs into the western end of the North Mill Pond in 1659, so a local source of boards and planks stood nearby. As seen below, the vertical striations are spaced unusually closely, producing a surface that resembles that of a modern band-sawn plank, and the teeth of the saw blade were not strongly set, producing less tearing of the wood fiber than is usual. Possibly the advance on the sawmill was set for oak rather than pine.



Plank joist and subflooring seen from Southeast First-Floor Room. White paint is modern.

The wall framing of the house is standard, as seen in the detail of the southern wall of the southeast room on page 12 and in the photograph of the eastern wall of that room, below.

Eastern wall, southeast room. Principal studs may have been sistered during sill repairs.

Roof Frame

The roof frame of the Dennett House is a standard frame for a two-room-deep house, composed of six sets of hewn rafters. The rafters are braced at about mid-height by horizontal collar beams. Each plane of the roof has six original purlins, with two supplementary purlins added near the bottom of the roof frame.

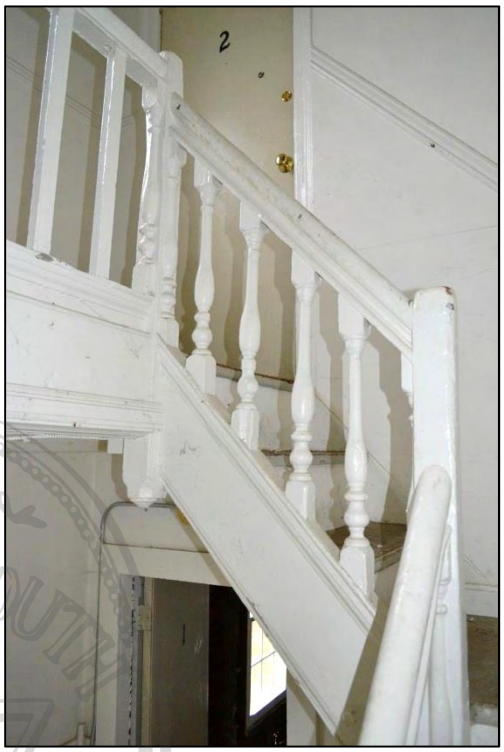
As seen below, the roof frame was damaged and charred by a chimney fire that occurred after the original central fireplace chimney was replaced by two stove chimneys that converge in the attic to form a single stack. The charring makes it difficult to study the roof in close detail. This form of chimney, frequently employed in Portsmouth when central fireplace chimneys were replaced by stove chimneys, is colloquially called a "pair of pants" chimney and is difficult to clean, increasing the threat of chimney fires.

Left: Roof frame, camera facing southeast. *Right: Chimney, camera facing southeast.*

Interior Joinery

Little of the original interior joiner's work remains in the house. As described below, remaining features display a style that is characteristic of the 1700s. Some details, such as the closed stringer of the triple-run staircase, are conservative in style. Others such as the paneling in the southeastern first-story room, which was apparently finished as the parlor or best room, are characteristic of work of the mid-1700s. Together with the loss of most diagnostic interior details, the scarcity of documented Portsmouth houses that date from the first half of the

eighteenth century makes it difficult to place the interior features of the Dennett House in a well-developed context and to date these features closely.



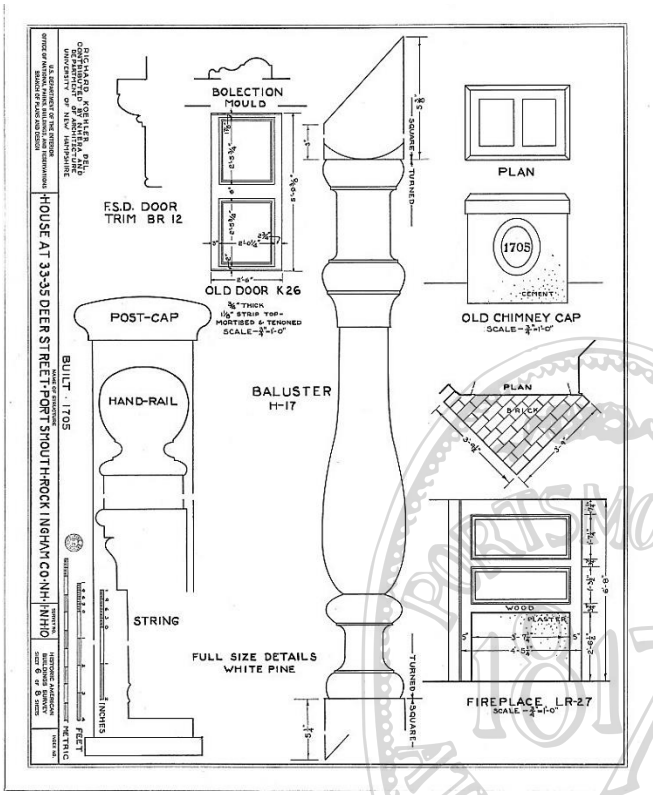
As seen above, the staircase is a closed-stringer type, in which the balusters are supported on the upper surface of a slanted stringer rather than on the level treads of the staircase. This detail is generally regarded as characteristic of the "First Period"—the seventeenth and early eighteenth centuries. Relatively few closed stringer staircases have been recorded in Portsmouth, and the more opulent houses from as early a time as the Macpheadris-Warner House (1716) have grander staircases with open stringers.

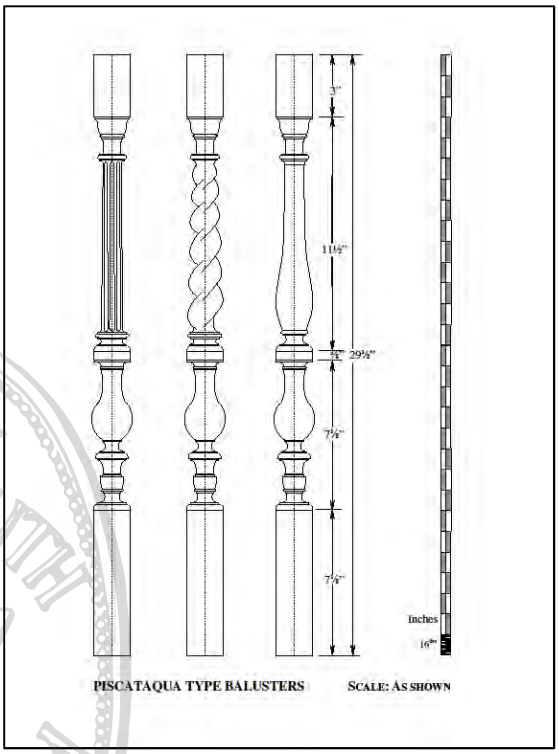
As noted earlier, only a sampling of original balusters remain in the Dennett House staircase. In the staircase runs that are more visible to the eye, the turned balusters were replaced at some point—perhaps the mid-1800s—by the then fashionable square sticks seen in the photographs.

One of the now-lost Portsmouth dwellings of the very early 1700s, the John Jones ("1705") House on Deer Street, which actually dated from 1702-4, was unusual for its early date in having turned balusters, as seen below. These, however, were heavy and comparatively simple in detail when contrasted to the more graceful vasiform balusters of the Dennett House. At the same time, the Dennett balusters, while well-turned and reminiscent of Portsmouth balusters of the mid-1700s, are simpler than the most refined of these mid-century turnings, shown below.

The fully developed Portsmouth balustrade of the eighteenth century was introduced by turner John Mills, who arrived in Portsmouth from Bristol, England, around 1725, married there in

1726, and by 1736 is documented as fashioning balusters for merchant John Moffatt.[7] Mills and his son, Richard, continued to turn balusters during most of the remainder of the eighteenth century, developing the characteristic triple pattern (below, right) that is seen in the more elaborate dwellings of the Piscataqua region.





Left: Baluster from John Jones House, 1702-4 Historic American Buildings Survey, HABS NH,8.

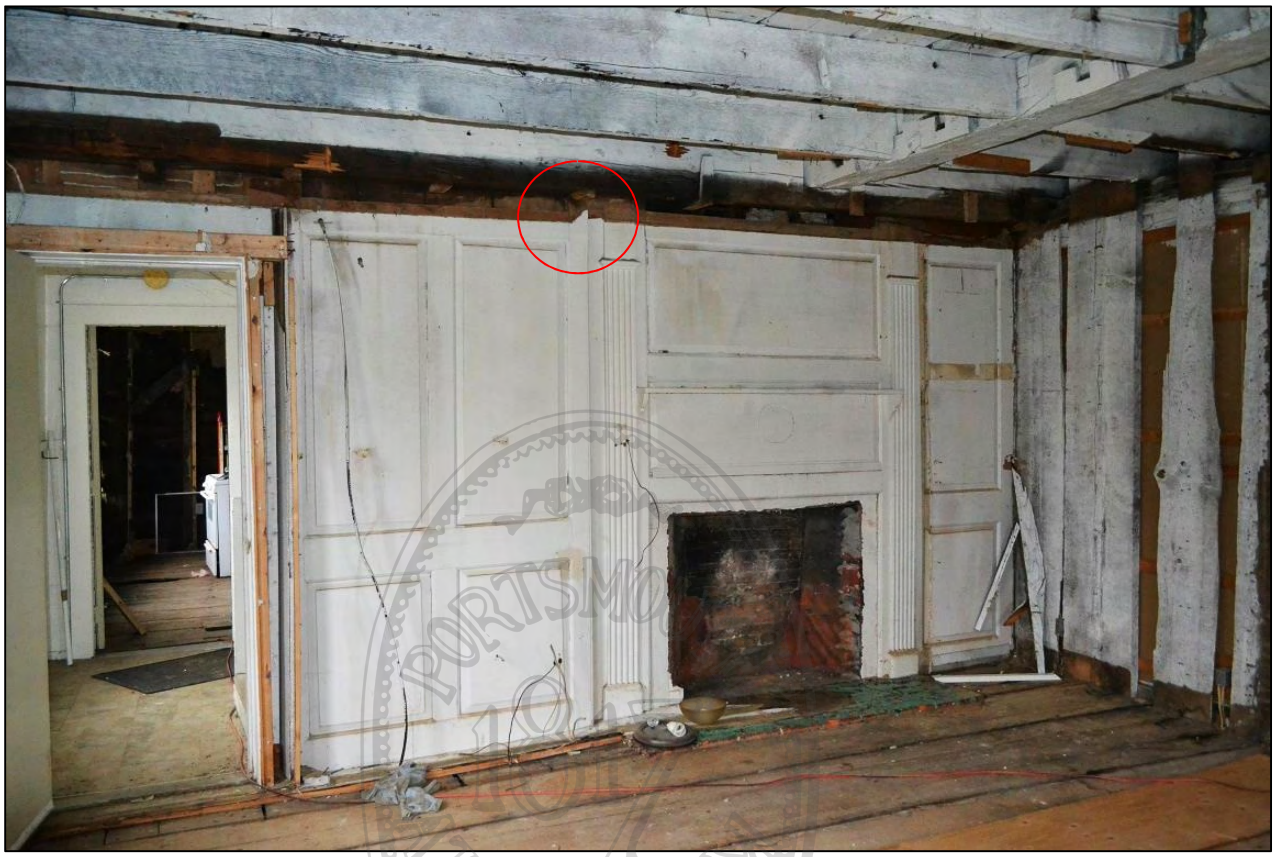
Right: Characteristic Portsmouth baluster set, eighteenth century.

The Dennett House balusters are a close match to the eighteenth-century Portsmouth baluster shown on the far right, lacking only the small urn-shaped turning at the bottom. Based on what is known of John Mills and his work, it seems that the Dennett balustrade must date from after 1725, and possibly considerably later.

Apart from the staircase, the most fully preserved interior feature of the house is the paneled chimney wall in the southeastern first floor room. Given the elaborate detailing of this feature, and the fact, previously described, that this room was provided with a lowered ceiling that hid its old-fashioned summer beam, it seems certain that this room was treated as the parlor of the house, reserved for the most formal uses. Although the parlor has been stripped on the remainder of its interior finish and does not express its full architectural character, there is evidence that the molded cornice formerly present on the chimney wall was at least partly

[7] James L. Garvin, "Academic Architecture and the Building Trades in the Piscataqua Region of New Hampshire and Maine, 1715-1815," Ph.D. dissertation, Boston University, 1983, pp. 75-6.

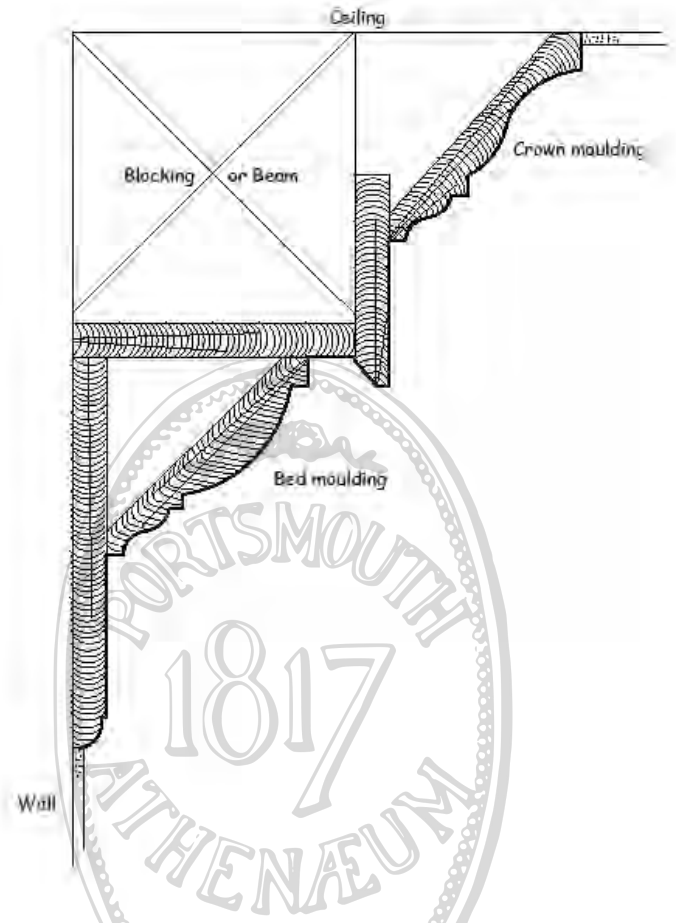
echoed on the eastern exterior wall opposite, and probably on the room's north and south walls as well.



Southeast first-story room (parlor), Dennett House. The panel arrangement and fluted pilasters are common features of Portsmouth houses from the 1750s, but comparable features appeared as early as circa 1730 in the George Jaffrey, Jr., House on Linden Street, off Daniel Street.

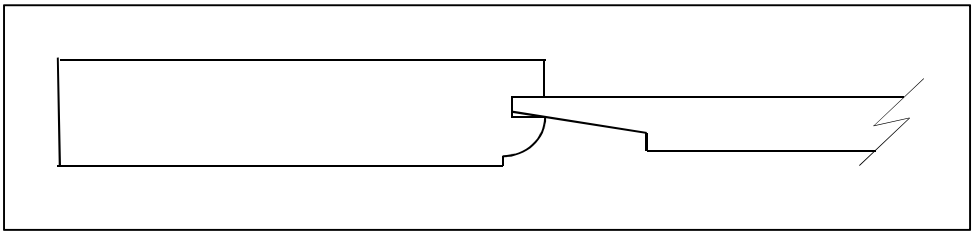
As seen in the detail photograph at the left, enlarging the circled area in the room photograph above, a paint outline near the ceiling level shows that the chimney wall originally had a molded cornice. The chimney girt above this molding is furred out with wooden shims. This indicates that the molding profile is that of a bed molding and that a full cornice, with a crown molding, enveloped the girt above. An enlarged section of such a cornice is shown on the following page.

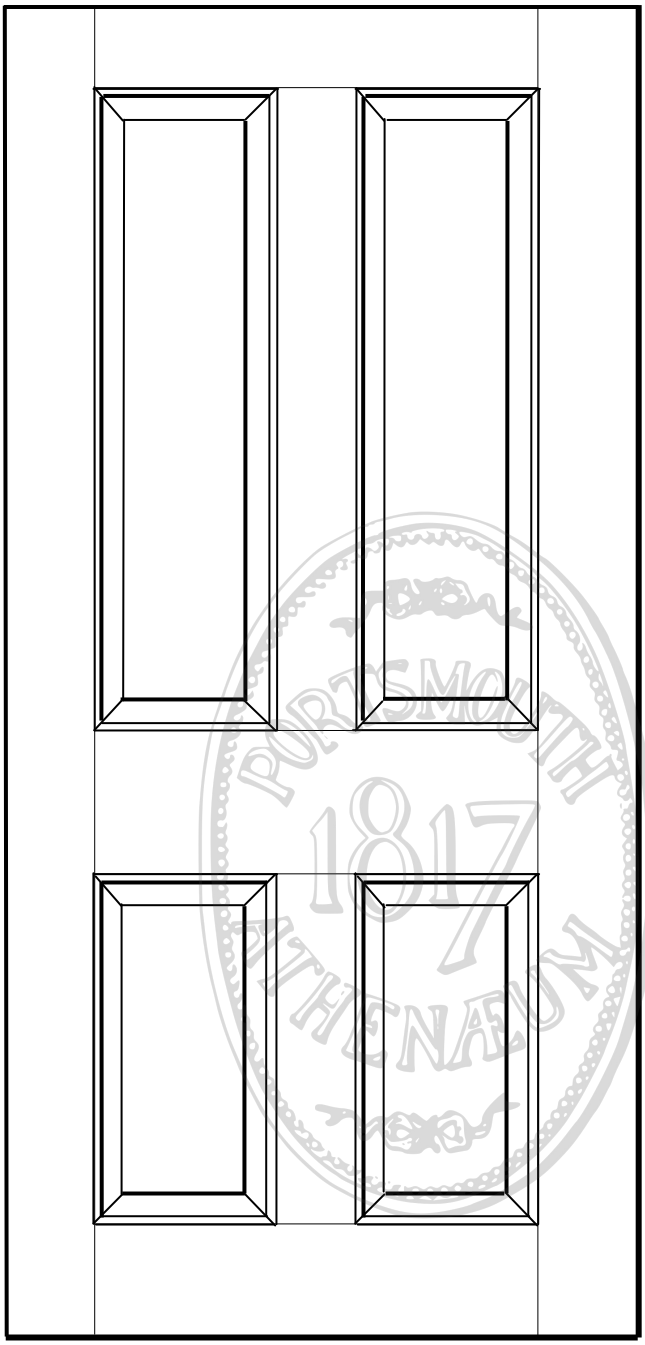
Other paint evidence in the room suggests that the full cornice existed only on the chimney wall and possibly on the projecting girt of the exterior wall opposite the chimney. On the other two walls of the parlor, only the upper or crown molding is likely to have been applied below the plastered ceiling.



Full classical cornice as employed in Portsmouth buildings of the 1700s.

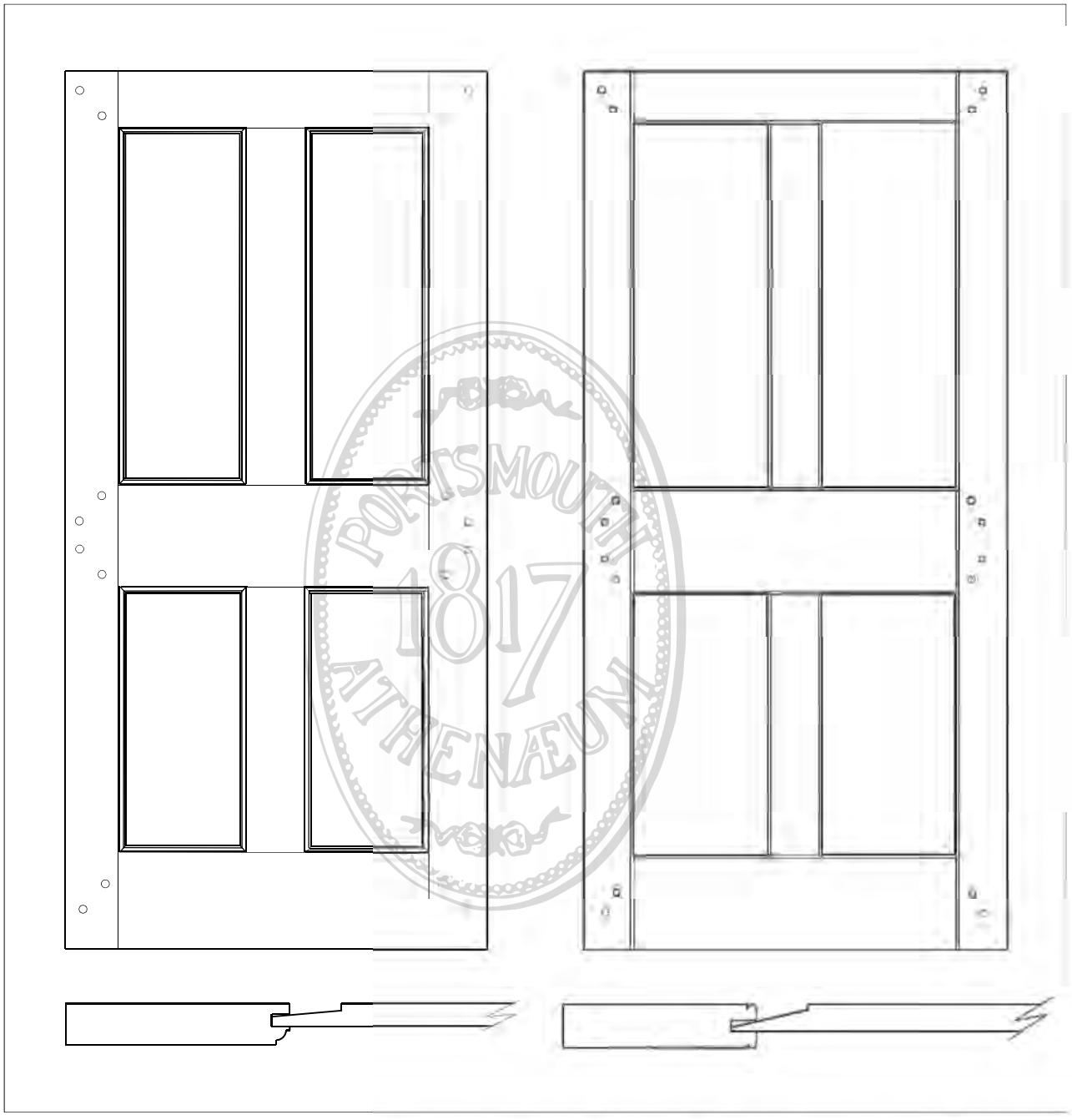
Most of the remaining features of the original joinery of the Dennett House are concentrated in the southwesern bedchamber and include sections of the crown molding (but not the full classical cornice) illustrated above and of a small area of paneling and a two-panel door hung with foliated H hinges. All of these features, whether paneling or doors, share the classic profile of eighteenth-century joinery, shown below:





Characteristic four-panel door of the eighteenth century. The Dennett House retains one or two such doors.

In addition to its diagnostic remnants of original eighteenth-century joinery, the Dennett House retains two doors of differing Federal-period patterns, denoting a date after 1800. The presence of these doors, unless they were salvaged and installed from other houses, suggests some degree of modernization of the Dennett House in the early 1800s. As noted above, the exterior window casings and the square balusters in the front staircase similarly suggest a further remodeling in the mid-1800s. In all cases, there are too few remnants of joinery from these periods to permit a definitive statement of the extent of remodeling.



Above: Two types of Federal-period four-panel doors found in the Dennett House. The door at the left is located on the first story, behind the location of the original chimney. The door at the right leads from the southwestern second-story room to a bedchamber at the northwestern corner of the house.

Dendrochronology

As noted throughout this report, most of the older stylistic features of the Dennett House have been removed, making the house difficult to date on the basis of its joinery. Normally, dating can be approximated through analysis of door and window patterns, style of fireplace details, especially mantelpieces, balustrade details, and other features that evolved over time to reflect changing architectural fashions. Except as described above, most of these datable features have disappeared from the Dennett House.

The frame of the Dennett House, however, remains largely intact and offers the possibility of dating the construction of the building through dendrochronology, or tree-ring analysis.

Dendrochronology uses datable sequences of annual growth rings in structural timber to determine the period of time through which the tree grew. To determine the construction date of a structure it is necessary to ascertain when the trees that were used in the framing were felled. To determine that, it is important 1) to have a species of wood for which tree-ring sequences have been worked out and 2) to have timbers for sampling that retain the cambium layer, which lies just under the bark. The cambium is the layer of living cells, which divide each summer to form new wood and a visible new tree ring. If tree ring sequences have been worked out for a given species of timber, it may be possible to date the portions of the tree that are retained in the hewn or sawn timber of a building by matching the tree rings in the timber to known sequences. But if the cambium layer is not present, it is not possible to determine the year in which the tree was felled and, hence, the approximate date of the building. The presence of the cambium layer is most easily detected by the retention of tree bark on a timber.

Fortunately, several of the heavy framing members of the Dennett House, presumed to be eastern white pine, retain the cambium of the trees from which they were hewn, as do a few of the smaller common joists.

William Flynt of Historic Deerfield in Massachusetts has become a leading authority and proponent of dendrochronological dating of buildings. In May 2005, Historic Deerfield hosted a wide-ranging conference on dendrochronology. The papers that were delivered at that conference have been made available on a compact disk under the title of "Tree-Ring Dating in the Northeast: Dendrochronology and the Study of Historical Forests, Climates, Cultures, and Structures." This compact disk is available from the Historic Deerfield Museum Store at:

http://www.historic-deerfield.org/museum-store/online-store/books-music/cdsdvds/

Most dendrochronological research has focused on white and red oak in Massachusetts, and the oak sequences permitted the dating of the James House in Hampton, referred to earlier in this report, to 1723.

Christopher Baisan of the University of Arizona Laboratory of Tree-Ring Research has made a long-term practice of coming to southeastern Vermont for a few weeks each summer. There, he has developed tree-ring sequences for several of the tree species that grow in our zone of New England. A description of Professor Baisan's professional (not his Vermont avocational) dendrochronology can be seen at:

http://ltrr.arizona.edu/people/baisan

Given the early but indeterminate date of the Dennett House, and its ability to help date the introduction of framing features such as two- and three-post framing bents and deep plank joists, or of stylistic features such as closed and open-stringer staircases and turned balusters, it would be worthwhile to attempt to salvage a few datable timber elements from the house for later dendrochronological analysis.

APPENDIX

From Charles W. Brewster, Rambles About Portsmouth*, First Series (originally published 1859; second edition, Portsmouth, N. H.: Lewis W. Brewster, 1873). Note: Many of the "Rambles" in this book were originally published in earlier years, beginning in 1840, as columns in Brewster's newspaper,* The Portsmouth Journal of Literature and Politics. *It would be worthwhile to determine the date of original publication of Brewster's sketch of the Dennett House, transcribed below.*

Excerpt from Ramble LXXV, Deer Street . . . Tradition of the Beehive.

Passing a variety of places of historic interest, we find ourselves on Christian-shore, or as now called, North Portsmouth. We cannot learn why it ever received the name of Christian-shore. Previous to the building of the mill-bridge in 1764, there were only three or four houses on that side of the river. There was the Jackson house on the point, the Ham house on Freeman's point, one or two near where the hay scales now are, and the large Dennett house, sometimes called "the beehive," on an elevation west of the old schoolhouse. The latter mansion is more than one hundred and forty years old. Of its early days, when the boys from Christian-shore passed round the head of the creek to attend school on the South road, and of the troubles which arose when the boat was not at hand to pass the river in the evening, —and of the hundred other little incidents which might be brought up, we will say nothing, although tradition is full. We will give only one sketch relating to the "beehive" or Dennett mansion.

One of the ship masters employed by Sir Wm. Pepperell was Capt. Colby, who married Lydia Waterhouse. More than ninety years ago she became a widow, and afterwards was married to Ephraim Dennett, and resided in the above old mansion on Christian-shore. Years rolled on, and she again found herself a widow. Like a good housewife, in those days when no factories were in operation, she kept her flock of sheep, and attended to the various processes of converting their product into cloth; and her fame extended beyond the limits of the town. Near the house is a good spring which still flows on as of old. It was a time for wool washing. Laying aside the widow's weeds, dressed in a leather apron, a man's broad brim hat, and other apparel to match, she was washing her wool at the spring, when a stranger on horseback approached, and inquired for the residence of the widow Dennett. Nothing daunted, she pointed to the house, directed him to the front door, while she stepped round and entered the back way. He was not long in waiting before the lady of the house in comely apparel appeared. The gentleman introduced himself as John Plummer of Rochester. He had heard of her good reputation. Said perhaps it was too soon to come a courting, but would ask the privilege in proper time of proposing himself to her favorable consideration. In due time Judge Plummer came again, and they were married. They lived happily together many years, and their grave stones in Rochester record the ages of each at about ninety years.

Whether he ever inquired who it was he found washing wool at the spring, we have never been informed. If the events at the well where Rebecca was found were of sufficient importance to be perpetuated, there is certainly enough of the primitive simplicity in the meeting at that spring to keep it in lasting remembrance by the descendants of that respectable family. To us, whenever we pass the premises—or are reminded of its history by seeing the elevated old mansion even across the mill-pond, there ever appears the vision of the Judge on his horse, and the industrious widow disguised under her broad-brim and leathern apron.

Transcription from Sarah Haven Foster, The Portsmouth Guide Book, Comprising a Survey of the City and Neighborhood, with Notices of the Principal Buildings, Sites of Historical Interest, and Public Institutions. *Portsmouth: Portsmouth Journal Job Print, 1896.*

Christian Shore.

The origin of this name is uncertain, but tradition ascribes it to some families of strictly Puritan principles who resided here in the earliest times. There but few houses built here before the construction of the bridge. This place is sometimes called North Portsmouth.

Dennett House.

The date of the building of this fine old mansion is uncertain, but it is said to have been the second house built on the Shore. The lower part is constructed throughout of solid square timbers. The terraced grounds in from extended as far as the river, and it must have presented a fine appearance when it stood alone on the hill. It is probable that it was built by an ancestor of the Dennett family, as the name has always been associated with it. Ephraim Dennett, who married Lydia, a daughter of Timothy Waterhouse, lived here at the time of the Revolution. His widow afterward married Judge Plummer of Rochester. The house is known in the neighborhood by the cognomen of the Beehive.

Transcription from Caleb Stevens Gurney, Portsmouth . . . Historic and Picturesque *(Portsmouth: C. S. Gurney, 1902)*

Dennett House

This is the second house erected on Christian Shore, and was built in 1680, by John Dennett, who came here in 1668. The house faces towards Dennett Street, which was named in his honor, and in early times his land extended to the shores of the North Mill Pond. The dwelling was constructed in a substantial manner, the lower part being built throughout of square timbers. During the Revolutionary War the house was owned by Ephraim Dennett, whose widow in later years, after a courtship savoring a little of the romantic, married Judge Plummer, of Rochester, the two living together happily for many years, he dying at the advanced age of ninety years. The house was at one time known as the "Bee Hive."

Transcription of a newspaper article describing the Dennett House and former Dennett Cemetery, from a scrapbook at the New Hampshire Historical Society.

This article is dated by hand "Nov. 9, 1901" and is believed to have been clipped from the *Portsmouth Times.*

AN OLD CEMETERY

The Last Traces Being Obliterated at Christian Shore

NEARLY FIFTY BODIES REMOVED TO PROPRIETORS' BURIAL LOT

The Dennett Family Had Their Burial Place On This Spot

On a little hill in the midst of a field off Dennett street, and overlooking the North Mill Pond, for generations has stood a little cemetery. The fence, of recent years over-grown with blackberry vines, the stones inclosed and almost hidden in a tangled mass of wild roses, grass and shrubs; at the corner, wild cherry trees loaded with their black fruit drooping over moss grown grave stones, and at one side a black currant bush stood sentinel, an odd ornament to the old burial ground, whenever the fruit had a somber hue. At the foot of the hill was the pond; on three sides, buildings edged the field; at first glimpse one wondered what the place was, and only on close inspection were the stones seen, hidden in a perfect screen of vines and foliage which seemed to fairly run riot here.

What was the place, and who laid buried here? It was called by the neighbors he old Dennett lot, but beyond that little seemed to be known of it until recently.

Within a week or two there have been great changes in the old field; the march of progress and building has reached that vicinity, and now workmen are busy removing the bodies, destroying all trace of the old burial place and leveling the hill on which for over two centuries the dead have laid at rest.

An in connection with the changes there being made, the following will doubtless be of interest to many of the TIMES readers. According to what has been learned, the old cemetery owes its name to John Dennett who come [sic] to this city in 1668; he was a man very prominent in town affairs, noted for his integrity and industry, very wealthy for those days, being the town's largest tax payer. He owned a great deal of real estate including 1320 feet on the westerly side of Mill creek or North mill pond. In 1680 he built the old Dennett house, called the Beehive, still standing on Prospect street, fronting on Dennett street, which was named for him. Whether he or his son laid out the burial lot is undecided, but probably the son, as John Dennett himself is buried at the old Point of Graves cemetery on Mechanic street.

In 1681, a year after the old house was built, Joseph Dennett, son of John, was born. His death occurred in 1714, and during his short but exceedingly active life, he was very prominently identified with the affairs of the town. He served in the provincial army, was in the French war of

1712, and his descendants are many; an inventory of his property at the time of his death estimated it at £683:125:2. Undoubtedly he was the one who laid out the family burial ground, and it is supposed he was buried there, for among the fifty or more graves in one corner are found a lot of field stones, such as were used in those days for head stones, and the remains of unidentified bodies, undoubtedly the early members of the family.

The field in which the cemetery stood covers six acres, and in one corner is the cellar of an old garrison house; the identity of the house is unknown, but probably it was built by one of the early members of the Dennett family.

The next and indeed the only authorized account of the cemetery is when it was owned early in 1800 by Seth Walker, a ship master and descendont (sic) of the family, on Dec. 26, 1804, Walker sold the entire field to Abraham Martin, who carried on a brick yard, and Isaac Martin, his brother, who had a joiner's shop on the land. Later the Martins sold the land to Joseph Ela, a trader, and Asa Dearborn, a butcher; from them it descended to Susan Ela, daughter of Joseph, and on April 6, 1833, she sold the property to Robert Gray; he in turn, April 27, 1839, sold it to Philip Currier, a butcher, and Jan. 17, 1842, it was again sold to Catherine Jackson. At this time, it went by the name of Martin's point.

From the Jackson family, the property descended to Benjamin Lake, whose mother was a Jackson, and recently Lake has sold the property to Harry Freeman, the present owner, by whom it is being graded and cut up into house lots.

Mr. Freeman, on purchasing the property, bought a fine lot in Proprietors' cemetery, and to this he has had all the bodies transferred, M. J. Griffin doing the work. And so far about fifty bodies have been found and moved. In many instances two or three bodies were found in one grave, children being always buried in the graves of older people. Many of the graves had neither headstones nor plates to distinguish their occupants. There were seventeen headstones, while other were traced by the coffin plates found in the graves of those moved. The following is a list of the bodies known to be buried there:
Nathaniel Dennett, died April 15, 1808, aged 68 years.
Margaret Dennett, wife of Nathaniel, died May 6, 1796, aged 56 years; this is the oldest body of which there was any record.
Ephraim Dennett, March 25, 1832, aged 16 years.
Abigail Dennett, widow of Ephraim, Jan. 2 1847, aged 57 years; these were the great grand-parents of J. Howard Dodge od Maplewood avenue.
Nancy Dennett, Nov. 20, 1831, 60 years.
John Dennett, March 3, 1826, 57 years.
Thomas Dennett, 1824, 22 years.
Benjamin Dennett, December 11, 1835, 8 years.
Edmund Clark, March 20, 1841, 64 years.
Elizabeth Clark, wife of Edmund, Feb. 18, 1855, 79 years.
Mary E. Brown, wife of George Brown, Feb. 22, 1889, aged 82 years.
George A. Merrill, 1867, aged 25 years.
Edmund Clark, Sept. 26, 1887, 75 years.
Dorothy Clark, wife of Edmund, Jan. 18, 1886, 69 years.

Charles H. Clark, March 31, 1886, 46 years.

Others buried there are John H. Lyons, U. S. N.; several children; Anne E. Downing, Nellie Hanson, William Dennett and wife Olive, and their son Samuel Dennett.
One body was found eight feet deep in the ground, and in the same grave, a second casket was also found; these bodies were the remains of William Dennett and his wife, Olive; and of them the following is related. He was credited with being of an especially ugly disposition and could not keep peace with anyone, consequently the life of his wife was not a happy one, and on her he vented his worst spite; when at last the poor woman died, his orders regarding the burial were in keeping with his other actions. He caused the grave to be dug ten feet deep and the body was placed in the coffin, face downwards; then he ordered that at his death, his coffin be placed in the same grave, on top of his wife's coffin, to keep her down safely out of the way. The grave was dug according to orders, but when the grave diggers filled it in the coffin of the poor wife was raised two feet to where it was found, his coffin being also in the same grave. There was no stone, for he would provide none for his wife.

Doubtless many another legend and bit of history is connected with the old burial spot, now a thing of the past, and until the land is leveled entirely more bones are likely to be discovered, but as to their identity there is no reliable trace. Of John Lyons, U. S. N., whose stone was founds, it is related that the old garrison house was owned by his ancestors, descendants of the Dennetts, and was known as the Lyons garrison house.

And now gradually all trace of one of the oldest family burial lots in this city is being obliterated. The strange, wild looking mound on the top of the hill, overlooking the pond, will soon be a thing of history only. The cherry trees have been uprooted; the wild currant bush taken away; the blackberry vines are trampled under foot and the wild flowers and shrubs mingle with the earth which is carted away. When the first owner laid out this resting place on the shore of the then, pretty pond, he looked across it to fields and woods. Where now is a busy city; tall chimneys and church spires take the place of the pines and spruces. Where a field sloped to the water, the big shoe factory and breweries stand. Where the railroad wends its way, all was water, and the resting-place he chose, seemed in the very heart of the wild country, beautiful, peaceful, and lovely, with only the birds overhead to disturb the quiet, the ripple of the water and the sound in the trees to break the stillness.

The march of progress, the growth of a city has changed all this, and the bones of those who have for over a century, possibly for twice that time, rested in peace, are moved to other and more suitable places, the trees are all gone, the fields are streets and house lots, the whirr of the trolley takes the place of the rustling leaves, the whistle of the train is heard instead of the music of the birds, and the pretty pond is yearly narrowing down until its very end seems imminent. And another page is turned in the history of old Strawberry Bank with the passing away of the old Dennett family burial lot.