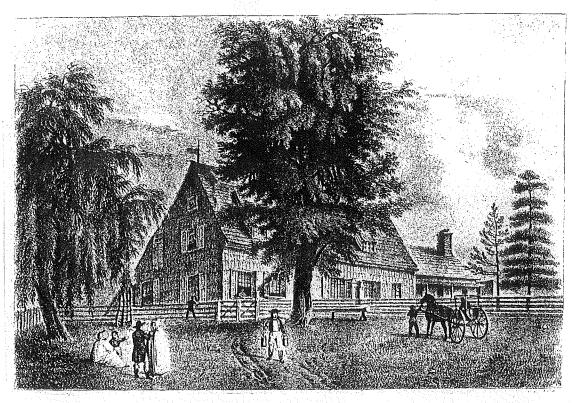
The John Bowne House

Flushing, Queens County, New York
A Preliminary Architectural Analysis Report
Prepared by
John R. Stevens



Lithograph. View of the Bowne House: as it was in 1822 From: A Series of Picturesque Views in North America: Paris 1825 Title:

"View of Flushing (Long Island) North America. Mr. Bowne's House.

It remains in the possession of his family
since 1661 time it was built."

J.Milbert Del. Lithog. de C. Motte

Published October, 2003 by Hudson Valley Vernacular Architecture Box 202, West Hurley, NY 12491 (845) 338-0257

The oldest house in Queens County, the original section was built in about 1661 by John Bowne, a member of the Society of Friends. Bowne's successful opposition to Governors Stuyvesant's religious intolerance restored freedom of religion to the colony of New Netherland. It is believed that the house served as a station on the Underground Railroad

The eastern (kitchen) wing of this house has been dated to circa 1661, the date painted on the west end of the house. It measures about 22-feet, 6-inches in length and 19-feet in width. A large fireplace occupies most of the east end wall, a massive masonry construction. A bake oven is set within it, its opening towards the north side. The massive dome of the oven protrudes on the exterior. The opening of the fireplace is about 11-feet wide and its flattened semi-elliptic arch is supported on side-by-side iron bars that are suspended in the middle from a timber set higher up in the masonry.

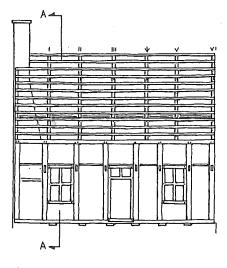
The frame of the wing is set about one-foot east of the end wall of the main part of the house. It consists of two story-and-a-half end bents (H-bents) connected in the front and rear walls by girts that support the intermediate joists. The framing is of vertical-sawn softwood with the possible exception of some of the first floor joists. The material and style of the framing is characteristic of the beginning of the 19th-century. The enormous fireplace is an anomaly. It does not date from the 17th-century and yet it seems very unlikely to date to the early 19th-century either. The position of the bake oven opening on the back wall of the fireplace tends to confirm this. How can this be explained? perhaps the fireplace and oven pre-date the existing framing, and is really part of Stage III (mid-18th-century)

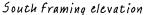
The main part of the house was built in three or four stages or possibly only two. The front of the eastern part (that faces south) may date from the 1660s or it may date to circa 1680. Dendrochronology could possibly settle this. Borings have been taken, but the analysis of these was not carried out under proper conditions. The results are not satisfactory and the procedure needs to be done again.

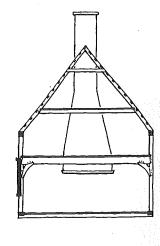
Stage 1. Circa 1660s or circa 1680. The earliest surviving part of the house measures about 31 feet in length, eastwest, by about 20 feet in depth. The framing is entirely of oak. It is built in the Dutch style with seven H-bents. The height from the top of the first floor joists to the top of the second floor anchorbeams is about 8-feet, 5-inches. From the top of the beams to the top of the plate is 3-feet, 9-inches. exterior anchorbeams measure about 10-inches deep by 8-inches in thickness.

JOHN BOWNE HOUSE, FLUSHING, QUEENS CO., N.Y.









Section A-A

The bottom of the western internal anchorbeam was hewn off in Stage III for a level lath-and-plaster ceiling. This was very likely the hood-beam for a jambless fireplace. Further support for this is the evidence of braces on either end, like the hood-beam in the original part of the Pieter Wyckoff house in Brooklyn. The fourth bent from the east end also had braces. A partition had been located here. The first-floor boards are jointed in this location, and the anchorbeam has mortices in its underside, toward the west side of the beam, for the jambs of a doorway, 2 feet, 8 inches wide near the center of the partition wall.

As far as can be seen, the first floor joists, that are set flatwise, about 11-inches in depth by 12- to 14-inches in width, extend the full width of the house. The sills, that are 8-inches in width by about 6-inches in depth, are let into the ends of the joists about 2 1/2-inches so that part of the sills are exposed in the rooms. The first-floor boards are of oak, about 1 1/4-inches thick and random 12- to 15-inches

wide, laid square-edge, and fastened with oak pins. As previously noted, the floor boards were jointed under the partition. Dust strips, about one-inch by 4-inches are gained into the joists below the floor boards where they lie side by side.

The wall posts measure about 8-inches in width, matching the anchorbeams, and about 6-inches in depth. The spaces between the north and south wall posts are infilled with clay with a binder of pine needles worked around horizontal sticks on about 6-inch centers set in holes in the sides of the posts. The end walls may also have been infilled this way. The interior of the panels was smoothed with a skim of plaster, revealing about one-inch of the posts. The only other example of this construction the author has seen is in the Coeymans Secondary House in Albany County, although reused wall posts have been seen with holes for horizontal sticks and infill in the Peter Cooper house at Hempstead Long Island (now at Old Bethpage Village Restoration). and the stone wing of the Winne-Creble house at Bethlehem, Albany County.

The first cladding of the original section of the house is not known. In the 1660s John Bowne had a barn built that was to be clapboarded (*) and it is possible that the house was covered with this material also. Inspection of the exterior faces of the wall posts might determine what the original cladding had been.

First floor

J.R.S. 2003

The roof has six pairs of rafters numbered from west to east. Rafter pair one was not part of the west gable. It is approximately 5-feet east of the original end-wall location. There were two tiers of collar ties. The lower collars for rafters marked "V, V, and VI" remain. The upper collar for rafter pair VI (gable) survives. The lower collars are mortice-and-tenoned to the rafters. The upper collars were square-gained into the east side of the rafters. Marriage marks are also on the east side (see appendix I) The rafters are pit-sawn. Also pit-sawn are the shingle lath, set on about 16-inch centers and trenched into the rafters. About half of the shingle lath of the south side of the roof survives, including the topmost (ridge) lath.

The barn built for John Bowne in the 1660s previously referred to, had a thatched roof and it is tempting to think that the steep roof of the house was similarly covered. An inspection of the accessible outside surface of a length of the shingle lath was made with a flashlight and a mirror by the writer with the assistance of William McMillen of Richmondtown Restoration. A pattern of nail holes, and several broken off nails were found, indicating that the roof had been shingled from the earliest period. When the stage II addition was built (circa 1680 or circa 1692) shingle lath was not used, and instead the whole roof was covered with mill-sawn oak boarding, only about 5/8-inches in thickness. It was laid on top of the shingle lath of the Stage I part of the house. Since the shingles that were removed to install the boarding were relatively new, it would seem probable that they were the original roof covering.

The nature of the west (fireplace) wall remains in doubt. It could have been mostly of masonry, more likely stone than brick. The hood beam for the jambless fireplace has been mentioned, but there may have been some kind of jambed fireplace in consideration of John Bowne's English background. Mortices for hearth and hood trimmers have not been found. Where they would be is presently inaccessible.

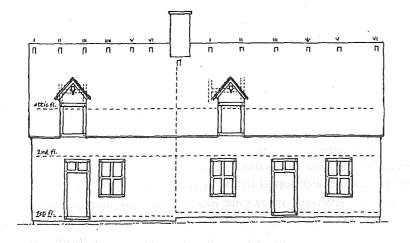
The Nature of exterior wall construction has already been discussed. There were probably two windows and a doorway in the south (façade) wall. The windows would likely have been Dutch-type cross windows, and there would probably have been a mullioned transom opening over the doorway, which, like the upper openings of the windows would have been filled with small lights (about 4 by 6-inches) of leaded glass. The easternmost window is a problem because the spacing of the second and third bents from the east end is not known and remains to be determined.

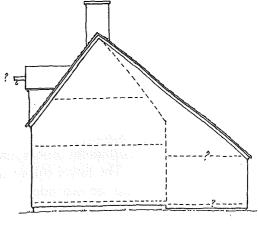
Much investigation needs to be done on this part of the house which is the most important historically. Exploratory openings in the walls are required, as was recently done for the writer in his investigation of the Lefferts house in Brooklyn's Prospect Park.

Whether built in the 1660s or 1680s, the Stage I part of the Bowne house shows the early use of constructional features seemingly unique to the New World. These include the use of dust strips under the floor board joints, and the trenched shingle lath. The almost contemporary Jan Martense Schenck house, formerly at Canarsie (Brooklyn) and now in the Brooklyn Museum, also had trenched shingle lath for which the author knows of no Dutch or English precedent.

JOHN BOWNE HOUSE, FLUSHING, QUEENS CO., N.Y.

STAGE II





East elevation

South elevation

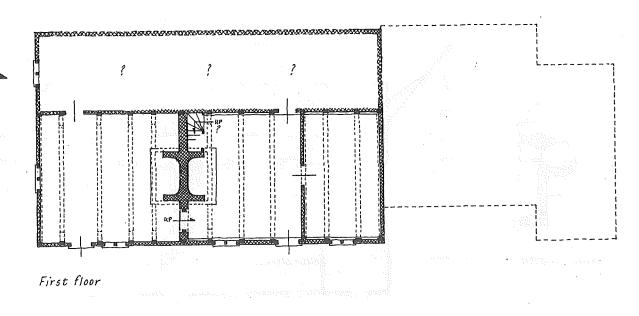
Stage II The house was lengthened 21-feet to the west, either circa 1680 (**) if Stage I was built in the 1660s, or circa 1692 if Stage I was built in circa 1680. For some reason, the floor in the addition was made about 6 inches lower than the stage I section. It would seem that the leanto, about 12-feet wide, was built across the back (north side) of the house. Possibly a leanto of some kind predated Stage II. In the last few years the north wall of the house was rebuilt and the framing of the 17th century leanto was exposed. It was in extremely deteriorated condition and was mostly, if not completely replaced. Some framing elements from the east end of this north wall were saved, and their replicated counterparts can be seen from inside the leanto. The writer has not had access to drawings, photographs or reports describing and illustrating what was found and cannot express an opinion whether the leanto was all built at one time, or in stages.

The main part of the addition would appear to be constructed in the Dutch H-bent system, but the framing is so completely concealed that one can only surmise what happens under panelled and plastered surfaces. On the north end of the second bent from the west end there is a curved soffit anchor beam brace (corbel brace) protruding through a panelled wall. The writer's first thought, when he examined the house in 1968, was that this brace was a counterpart of the ones on the hood beam of Stage I and there had been a fireplace on the west wall. However, the original second floor boards exist and there is no evidence that a fireplace/chimney had been located there. The fireplace in the addition was undoubtedly built against the back of the Stage I west wall masonry.

So how can one make sense out of the one anchor beam brace? The writer's suspicion is that all the interior anchor beams originally had braces and they were removed in Stage III except for this one survivor. But why is it left? Adjacent to the east side of the post with the anchor beam brace is a doorway into the leanto that appears to be in mostly original condition. Its jamb boards are molded in a style indicative of a very early date. While the first floor joists exist, the flooring was replaced in the recent past without any effort to duplicate the width of the old material.

OHN BOWNE HOUSE, FLUSHING, QUEENS CO., N.Y.

STAGE II



5 10 15 20 25 f

J. R.S. 2003. Rev. YIII-11-103 On the second floor, the floor boards are the only original material visible. The nailing pattern of them indicates the very irregular spacing of the bents. In two places it was possible to take up sections of flooring and it was seen that anchor beams are about 10-inches in depth, smoothly planed and with no evidence of their ever having been painted or stained.

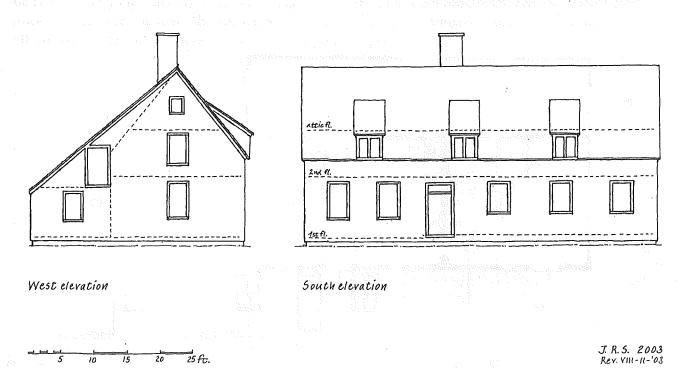
There are six pairs of rafters. The gable rafters are complete, but aside from short pieces left at the upper ends, the north rafters from Stages I and II were removed in Stage IV. They were numbered from the west end and are hewn. As in the Stage I part of the house, there were two tiers of collar ties, none of which survive except those in the gable rafters. The upper surface of rafter pair I (gable) is exposed for a good part of its length. The writer has carefully examined this looking for a pattern of nail holes that would indicate roof boarding applied to the north slope of the roof. No pattern was found, although there is one broken-off wrought iron nail. This is important in indicating that the north leanto was constructed at the same time as the Stage II addition. Examination of this rafter by other eyes would be helpful.

The distance from the west wall to the east face of rafter pair VI is about 18 feet. From the east face of rafter VI to the west face of Stage I rafter I is about 9-feet. The rafter in this interspace (on the south side) has a plumb cut at its upper end, suggesting that it was set against the side of an earlier chimney, predating the existing one from Stage III.

Horizontal timbers are set between south rafters II and III of the Stage II part, and Rafters I and III of the Stage I part. These are placed on their diagonals and are presumably gained into the rafters. Flats are cut into them to receive horizontal timbers that projected outward and may have been hoisting beams or perhaps ridge timbers for dormers. The projecting timbers were pinned to the bearers into which they were lodged. As noted in Stage I, in Stage II the roof was boarded with 5/8-inch thick mill sawn oak boards, and there are clearly defined holes in this boarding for the hoisting beam/ridge timbers, whichever they were.

IOHN BOWNE HOUSE, FLUSHING, QUEENS CO., N.Y.

STAGE III



A doorway in the south wall is a probability, as is also one and possibly two windows. There might have been a window in the west wall in the main part and one in the leanto. Such doors and windows would probably have been similar to the Stage I units. Determination of early doors and windows can only be made through the examination of the sides of the wall posts. Also, while it can be presumed that the exterior walls of the Stage II addition were infilled, we do not know if this was done the same way as in Stage I.

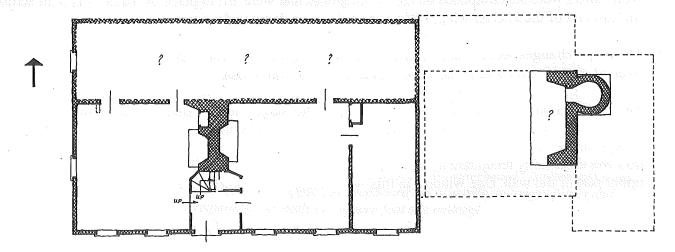
Stage III The house was drastically remodeled circa 1750 at which time it achieved, essentially, its present appearance from the south. The existing chimney stack was removed and replaced with the existing one that has two fireplaces on the first and two on the second floors.

The Stage I and II door and window units were discarded. The present front door, although it has been modified, retains its original wood-muntined transom. New double-hung sash units were installed. The original frames of the two windows of the south wall west of the doorway, and the west window in the main room remain in place. These windows originally had 12 over 12 sash. The three windows to the east of the doorway originally had 12 over 8 sash. It is difficult to assess the status of the frames. They do not seem to be original. They do not match the frames on the west side of the doorway. The three shed roofed dormers with mullioned windows on the south slope of the roof replaced the Stage II dormers. The window frame in the west wall of the leanto does not appear to be original. An early 19th century lithograph (circa 1820) shows a granary door in the west wall of the house on the second floor within the leanto.

The walls of the house were shingled. How much of the shingling is original cannot be determined, but it is evident from within the attic at the west end that the existing shingle lath and shingles pre-date Stage IV. The shingle lath and shingles of the east gable are original. Presumably much of the Stage I and II wall infill was retained, but it is obvious that much of the earlier infill of the end wall, as can be seen in the attic spaces, was replaced. Pre existing material was removed, pieces of split lath were nailed vertically to the shingle lath and daubed with clay and straw binder. The surface was worked smooth on the interior. The east gable retains its original window frame and 8 over 8 broad-muntined sash.

IOHN BOWNE HOUSE, FLUSHING, QUEENS CO., N.Y.

STAGE III



First floor

The west main room was given an elaborate treatment with a plastered ceiling and a fully paneled fireplace wall (east wall) with a built-in china cupboard. The north wall of this room is also fully paneled. There are two doorways in it, the westerly one, previously discussed, dating from Stage II. Adjacent to it is the curved-soffit anchor beam brace, the presence of which is difficult to understand. A section of paneling at the east side of the south wall survives. The rest of the south wall and all of the west wall is plastered. One would have expected this room to have been fully paneled, and the reason for this partial treatment has to be questioned. The writer's suspicion is that it was fully paneled. Why was it removed and when was this done? It is also a mystery why the anchor beam brace was left in place.

The stair hall remains in essentially original condition. The east main room has a partially paneled fireplace wall, mostly it is of vertical tongue-and-groove boarding. It originally had plastered walls and ceiling. The Stage I partition was removed and a new one constructed about 18 inches to the east. At the north end of it, facing into the large room, is a china cupboard of 18th century date which may be original to this location, but may also have come from another location. The interior of this room is heavily disturbed in an attempt to restore it to an earlier appearance in the 20th century.

The small east room is now divided into a lavatory and an office, separated by a hallway leading to the kitchen wing. The walls and ceiling of the office space is completely covered with matchboarding from the late 19th or early 20th centuries, concealing all earlier work.

Most of the second floor was altered in Stage IV. The south east room and stair hall are the only parts that retain the original ceiling height. The chimney, visible in the attic space, is in original condition. The drip course on its south side can be seen as well as the way the roof shingles had been fitted against the brick. The joint had been pointed with mortar that has preserved the outline of individual shingles. The exposed part of the chimney had been painted red at some time before Stage IV. The fireplace and bake oven in the kitchen wing, discussed at the beginning of this report, probably dates to Stage III.

Stage IV The construction of the east (kitchen) wing as it now exists, and as discussed in the beginning of this report, fits the beginning of Stage IV (circa 1800 to 1810). It was seemingly built to include a pre-existing fireplace and bake oven that may date to Stage III. What could be the reason that this earlier structure had to be replaced? The kitchen wing was expanded in width, possibly circa 1840. New rafters were superimposed on the existing ones that were left in place. A leanto was built across the east end of the kitchen wing, putting the bake oven dome under cover.

The major changes seem to date to circa 1840. The façade and west wall windows that had been 12 over 12, and 12 over 8 sash had these replaced with 6 over 6 sash.

The north leanto was raised to a two-story height. The Stage I and II rafters of the north slope of the roof, as well as the existing leanto rafters, were removed. Only short lengths were retained of the north rafters for the support of the new leanto rafters. The Stage II north wall framing was retained, although this was essentially redundant as new framing was installed inside it for the adequate support of the upper part of the wall. One window in this wall retains 18th century sash.

Within the house, the north knee wall above the second floor level was removed. A partition was built on top of the second floor supported by the Stage I and II anchor beams extending through the length of the house and set back about 16-feet 6-inches from the front wall. Its main purpose was to carry a purlin that supports the leanto rafters. It also functions as a corridor to connect a back stairway to the second floor rooms. Except for the three lower collar ties at the east end, and ones in the stair hall south of the chimney, and the one in the west gable, the lower collar ties were removed to create higher ceilings in the two large second floor rooms in the main part of the house. The new attic floor was laid level. This shows clearly that the house had already settled about 4-inches at the south side by about 1840.

Changes made to the house after the middle of the 19th century have been relatively insignificant. Old photographs show a kind of Victorianization of the large east first floor room. As mentioned previously, the room at the east end had its ceiling surfaces covered with matchboarding that remains in place.

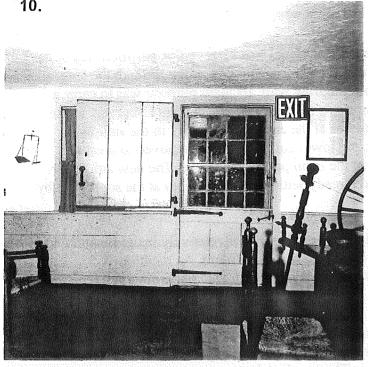
Some kind of "restoration" seems to have been attempted in the main east room in the 20th century. The Stage III lath-and-plaster ceiling may have been earlier removed when paneling of some sort was installed on the ceiling as part of the Victorianization. The paneling in turn was removed, exposing the anchor beams and the second floor hearth framing. The Stage III lath-and-plaster on the north and south walls seems to have been removed, exposing the inside faces of the Stage I wall posts. These are cased in 3/4-inch boards. Possibly the posts had been hacked to hold plaster or had otherwise been disfigured and it was decided to cover them.

The Historic American Building Survey drawings of the house, prepared in 1936 (17-sheets plus 31 photographs) record the house as it was after Stage IV alterations and show it essentially as it remains today.

Gordon William Fulton, a student at the Graduate School of Architecture, Planning and Historic Preservation at Columbia University in 1981 produced a "Historic Structure Report" for the Bowne house. This consists of 206 pages, and is especially valuable for the historical documentation it supplies on the house. The following appendices derived from John Bowne;s records supply interesting information about 17th century building technology. They have been freely transcribed by the writer.

^{(*) &}quot;Clapboard" is a type of horizontal siding associated with early New England houses. It is split from a bolt of oak (see Appendix I) and measures about 3/4-inches by 3 to 4-inches. "Weatherboard" is sawn and measures about 1-inch by 6- to 12-inches. It is nailed and lapped like clapboard but is usually in longer pieces and because it is wide, weatherboard requires fewer nails per square foot of c overage.

(**) see Appendix IV.



Doorway in south wall of kitchen wing.



East wall of the kitchen wing showing fireplace with bake oven door in its back wall at north side. Fireplace may be from Stage III.



East gable of house, original Stage I pit-sawn rafters. Stage II rafter boarding and Stage III window and infill. Intermediate rafters added in Stage IV



Dome of bake oven within leanto on east end of kitchen wing

APPENDICES

Appendix I A Barn – March 12, 1665/6

AGREEMENT with John Feake, John Bowne's brother-in-law.

JOHN FEAKE undertakes to build for my brother John Bowne a strong, sufficient barn, 40-feet long, 20-feet wide and 9-feet from the ground to the top of the plates. All main posts 12-inches square with the rest of the timber answerable. A leanto on one side 9-feet wide within. Sides and ends clapboarded. Roof to be lathed fit for thatching. To make all the doors for loft and below [?]. To lay a good threshing floor and [complete] all work that belongs to this building I am to do, finding my own diet. Only my brother [John Bowne] is to cart the timber and get the clapboard bolts...clean out [?] the planks for the floor and provide help to raise the heavy timber...

Appendix II House alterations, December 21, 1669

AGREEMENT between Francis Blodgood [Blodtgoet] and John Bowne to make a standing bedstead and a cabin bedstead, "...two doors to be very smoothing and ledging a table, to put up a shelf and dresser and a few clapboards and to close up the old trap hole and make a new one and to hang a door and make a sled [?] and a wheelbarrow..."

Appendix III House alterations, September 15, 1676

ACCOUNT with Francis Blodtgoet. "...for making a bedstead by the chimney in the chamber and a smooth partition and a door above it for a little closet & a shelf for a shelf round above..."

Appendix IV An addition, January 31, 1680

AGREEMEDNT with John Feake. "[who is] to frame the house I intend to build providing the timber ready hewn or sawn. He [Feake] is to smooth the frame and set by joining it sufficiently to the house already built...finish all framing both for doors windows and chimnies leaving it fit for clapboarding, and shingling and cobbing [infill] as it shall require..."

Appendex V An Addition, January 31, 1680

AGREEMENT with John Hinds and Narthaniel Lynas, with John Clay's help "to get and lay on the shingles and clapboard of a house for me [John Bowne]...and to shingle me a stable..."

Appendix VI An addition, January 31, 1682

ACCOUNT with John Feke "...working one day in the woods and for framing the house..."

Appendix VII House alteration, August 9, 1684

ACCOUNT with John Feake. "...6 days work toward the laying of the house floor...5 days work about stairs and other work. By a spade mending, by mending a saddle, a panel and making lathbrads (nails)..."

Apendix VIII An addition, before April 3, 1695/6

LETTER from Mary Becket Bowne. "We are about to build an ordinary house I think there is about one weeks work done toward it when the rest will be done I cannot tell but we expect to be in it before winter. I am quite wary [?] of living here in this house, it is not wide enough for my husband and his father. He many times threatens to turn us out of his house, and I do not know but in a short time he will do it..."

Appendix IX An addition, March 26, 1696

AGREEMENT with John Thorne. [Thorne] "...was to build my house the same bigness as it now is and to finish all the carpenter's work thereunto belonging..."

This report is an enlarged and revised version of the report that appeared in the Hudson Valley Vernacular Architecture Newsletter, August 2003, Vol. 5 No., 8