

Higgins House Assessment

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The Robert Higgins house is located on Winchester Avenue and Elm St., Moorefield, WV. It was known as lot 33 in a plan of Moorefield dated 1924 and was deeded to Robert Higgins, in 1786. Robert Higgins seems to have been a builder of some experience. He was paid one hundred pounds to construct Moorefield's first courthouse and jail.ⁱ

Main aspect of the log building traditionⁱⁱ as found in the Potomac Highlands migrated from the "cultural hearth" area of the Delaware Valley, where it was introduced from Sweden in 1638. Robert Higgins Sr and family would have observed the tradition during his stay in Bucks County, Pennsylvania, after removing from New York. Apart from a few stone and brick houses, he would have encountered this type of log construction within practically every house he saw from there to the South Branch Valley of today's Hardy County. Other ethnic aspects of the Higgins House and log construction tradition in general were introduced by the Pennsylvania Germans (roof system) with some cabin forms contributed by the Scots-Irish (gable end chimney). These groups, along with English, make up the largest ethnic influences in the area. Several Dutch were among the earliest arrivals to this area of the South Branch, including the wives of Robert Higgins and his father, Robert Sr.

The original ½ acre lot would historically have included some outbuildings. Most likely an outhouse, woodshed, and a stable. An alternate summer kitchen, while often detached, was an attached room addition, now removed.

House Form

The house is a single pen house,ⁱⁱⁱ It is of oak log construction, using V notched cornering^{iv} with clapboarded exterior. Original (and still current) access and egress was through off-centered, low-height doors aligned front and back. As such, it fits the description of a modified continental-plan house, that is ascribed to German provenance.^v At barely five feet in height, the two original low doors were not unusual for this early time period. They were later altered to more modern standard height. Many houses from this early date were "hall plan" houses, meaning one room within the log pen.^{vi} This is the most common house type in the whole Appalachian region.^{vii} This house appears to have had an original partition on the first floor, creating two original spaces, one is 8' X 18', the other being 15' X 18'. In its original form, one small south-facing "window light" was the sole natural light afforded the house in cold weather, when doors needed to be shut. This window, if glass, may have been taxed.^{viii} A glass window of any kind was regarded as a luxury. It is very possible that the one first floor window opening, beside the doors, was only opened using wooden shutters.

The center 4" X 6" beam and posts (Figure 01) are utilized to support the second floor and are a modern installation. The original first-floor ceiling joists were spaced at 6' centers. These are hand-hewn. Five joists were interspaced and are more modern sawn and chamfered beams. These were probably added when the second floor was replaced. The original beams at 6' centers indicate the original flooring was wider and had thicker more stout planks.

Log Construction

The V notched (or "steeple" notched) hewn logs used are seen on most of the pre-1850 houses of the Potomac Highlands (See Figure 02).^{ix} The original single pen 18' X 24' log construction has been altered in several ways through the years, to be explained in detail below. The original and succeeding wood shingle roofs have been replaced with a standing-seam metal roof that has some condition issues, however a section on the northwest side has been replaced with more modern tin, not the standing seam type (The entire roof is currently (5-20-20) being replaced with a standing seam roof).^x The clapboard siding was most likely first done after the first alteration of the front wall fenestration. Recent modern cement chinking has replaced the original. But the original may be seen in the loft stairwell, which consisted of wooden billets filling the larger gaps, and clay mixed with animal (probably horse or hog) hair sealed the space (see Figure 03).^{xi} This loft stairwell was once whitewashed to increase visibility in this otherwise very dark space, but it was done after the c. 1840 stairwell was built as there is no whitewashing under the frame of the constructed stairs. Some older scribed graffiti (See figure 04) and some more modern "I was here" type is seen in this stairwell. The recent chinking utilizes wire mesh filler and cement. The original is wooden billets with mud/clay with animal hair.

Fireplaces and Chimney

The house has an original center gable-wall chimney of well-laid cut sandstone on the east-side gable end, with well-quoined corners. It is placed outside of the gable wall.^{xii} (Figure 05) Both first and second floor fireplaces are more modernly reconstructed than their original form, and there is no way of knowing the exact original configuration. At the point where plastering was accomplished (c.1890), both fireplaces were sealed and hidden as no fireplaces were seen by a mid-twentieth century occupant.^{xiii} A stove pipe hole was added to the first floor above the fireplace and a grate was inserted into the second floor to allow heat to the upper room from the first floor stove. The first-floor fireplace was originally used for cooking, as it was the only indoor heat option. It would have had a crane that

swung over the heat for hanging kettles. A stove was installed after plastering was completed. A mantel removed was marked 1886.^{xiv} It is not known if this was put on at installation or removal. At that point, the stovepipe hole (Figure 06) was put into the chimney at the higher level. The east-side addition (see Figure 07), was most likely added before the west-side larger addition. It was for cooking/kitchen use and served to alleviate heat in the main house during summer weather. At this point, the main floor stovepipe hole would have been used for a heating stove. A lowered framework was installed to support a brick hearth on the second floor. This place also indicates that the house was nearly burned down! This is seen on scorched and burnt timbers that support the brick hearth. Luckily, someone must have been present and awake when this caught fire. Some older wide planking at this spot may have been taken from the older removed flooring and repurposed.

Upper Floor Access

The original access to the second floor and loft is undiscoverable but was probably very steep stairs. The current more elaborate stairwell was installed at the time the larger house addition was completed. This large addition is estimated to have taken place in circa 1840, after the house was purchased by John Hopewell.^{xv} This alteration coincides with the access door on the west side, first floor, under the stairs that leads to the large addition that has been removed. The actual door to the loft, may have been repurposed from an earlier use, as indicated in early period rose-headed clinch nails that were used in its construction. The original plan for access to the loft was to be in the northeast corner, as identified by original morticed joists creating an approximate 5.5' square space (Figure 08). This is the traditional place for stairwells that reside by chimneys (See Figure 09).^{xvi} It was to be a steep boxed stairway.^{xvii} This space was never used. We know this because the floorboards of the loft are original, as indicated by their vertical saw marks which can be seen on the undersides. They are wider than the replaced floors and the nail type used is older than the lower floors. The original nails used to lay this floor are a type that have hand-wrought heads and may be completely hand wrought. They are of a late eighteenth century type (see Figure 10). I believe when the log building was constructed, no flooring was immediately installed in the loft, until a slightly later date. At this time, it was determined that the access should be aligned with the access to the second floor from the first. This loft floor was laid slightly after original construction, but it is the original floor. This is the only explanation for not using the original boxed stairs plan. The original flooring of the loft has not been altered in the northeast corner. When the much-later plastering was done, a doubled board was used in the gap to support the lath on which the first-floor ceiling plaster adhered. After this floor was installed, it is possible that then the

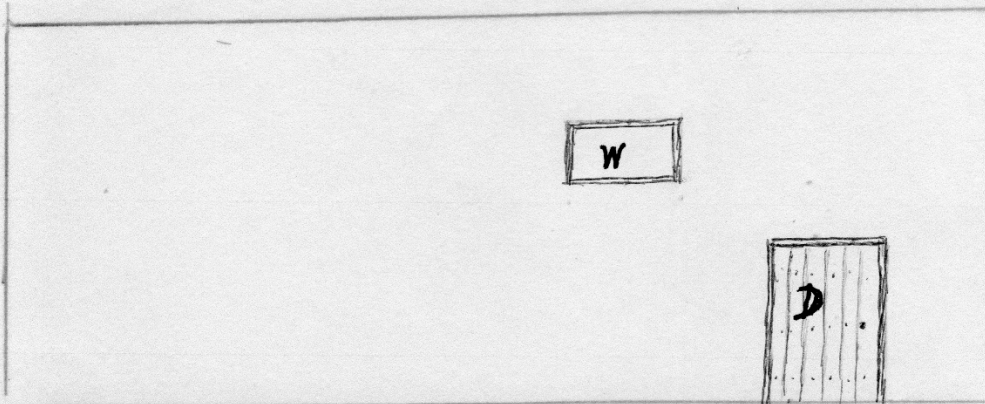
small window to the right of the chimney in the loft, was put in to afford some light in this newly created usable space. (Figure 11) This shows the corner which was the originally intended location of the access to the loft. The door in (Figure 12) is not original and was added for access to a second story porch (now gone). The two staircases affording access to the second floor and the loft, are circa 1840 renovations. These probably replaced much simpler steep stairs, or even ladders. In both cases, in the renovation, landings were added. Because of this, original joists were shortened, and various means used to sure up the landings and surrounding floors, to the extent that vertical posts have been installed at a recent date to support the structure of the second-floor landing.

Major Exterior Wall Renovations

South Wall, First Floor, Interior View (Sketch 1, below)

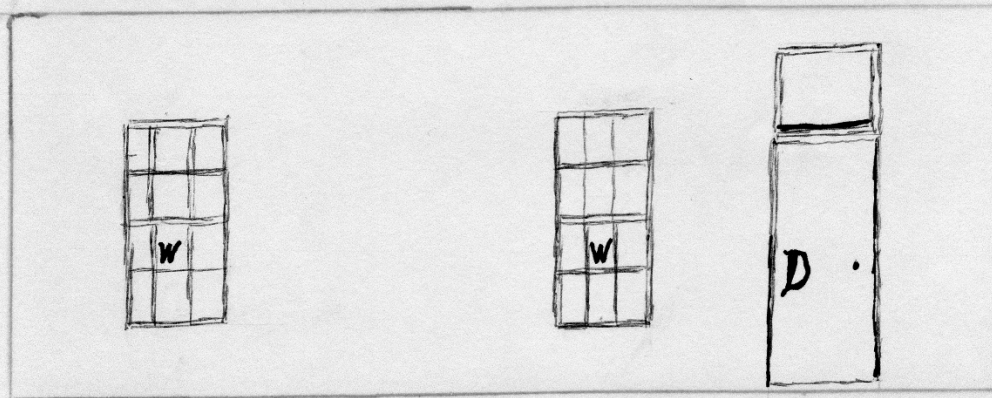
Renovations to the south first floor wall show a progression of reconstruction. At the same time, all the first alterations of the north and south walls on both floors were similarly accomplished as well. There are more minor renovations on the east and west sides. The horizontal opening in the top log of the 1st floor front (south) wall was originally the top of the original window opening. The log below it, also has a similar opening on its lower side (See Figure 13) If this second (lower) log was flipped 180 degrees, both openings would correspond and align with each other, making it the original window opening, most likely, the only window of the original house first floor plan. This could be proven by nail holes if modern chinking and clapboards did not hide the evidence. During later reconstruction, this log was flipped over to minimize the opening that had to be chinked and filled. Instead of the larger original window opening, two smaller areas were filled with billets and mud (now modernly re-chinked). (See Figure 14)

Higgins House, Original Plan

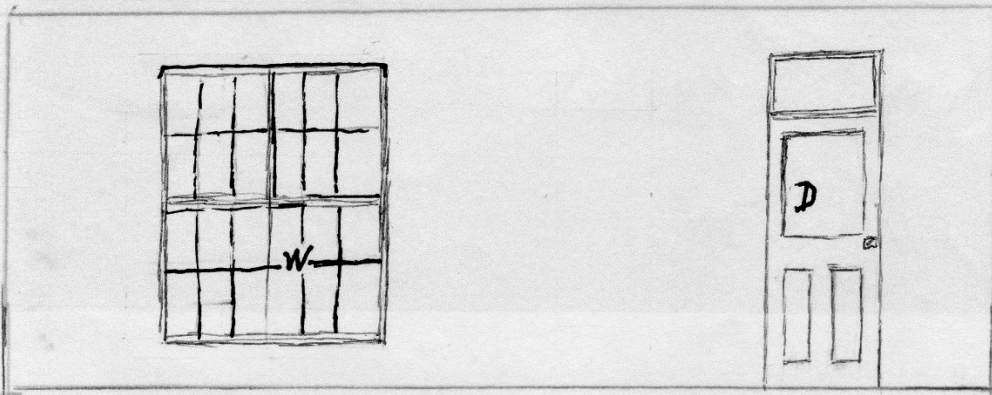


First Floor, South Side

First Renovation



Second Renovation



Sketch 1

There were two successive alterations to the original first-floor front of this house (See Figure 15, and Sketch 1). The first deviation from the original plan created two windows. One was bordered on the right by the vertical board and the other is marked by the brick filler^{xviii} (marking the left side of this former window, see Figure 16). Probably at this c. 1840 juncture, both the front and back doors were heightened to conform with more up-to-date practice. The front door may have had its transom added at this point, or during the later alteration. At this c. 1840 point, the occupants wanted more light in the room, but also, they wanted to alter and formalize the fenestration as societal values modernized and shifted, and popular forms had begun to usher in new ideals and sensibilities. The older period log homes and ways of life were being scrutinized. These “improvements” may be seen in the south upper and lower walls, as well as the first and second floor walls on the north side, which have alterations like the first-floor south wall.

The second major first floor alteration, circa 1890, added the large casement windows that are in the spaces now present, replacing the two first-floor windows with a dual window. Current windows, facings, and trim probably replaced more traditional 6 over 6 windows at the modern date when the plaster was removed. This took place after the demolition of the large house addition in 1988.^{xix} During the c. 1890 alteration, logs were shifted again for this newer large casement window. In measuring the logs, these two successive alterations are possible. It explains the vertical board seemingly inserted into the walls, as the logs were shifted (to the right) on the three instances on both floors where the vertical boards appear mid-walls.

North Wall, First Floor, Interior View (Sketch 2, below)

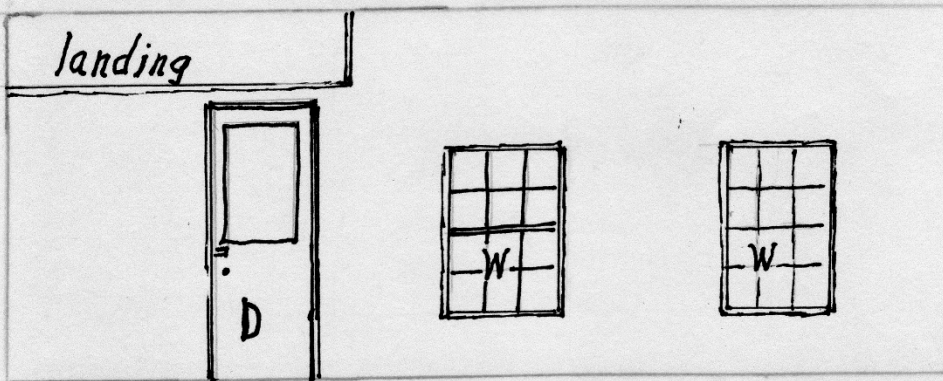
Original plan included the low height door on the left, but no windows. The first renovation installed two windows, one delineated by the vertical board marking its left side, seemingly inserted in the wall, and one replaced and filled with brick. The second and final renovation slid the logs to the left, butting up to the vertical board, and shortening them. This allowed the large window, seen at present, to be installed. These alterations mirrored similar alterations on the first floor, south wall. (See Figure 17)

Higgins House, Original Plan

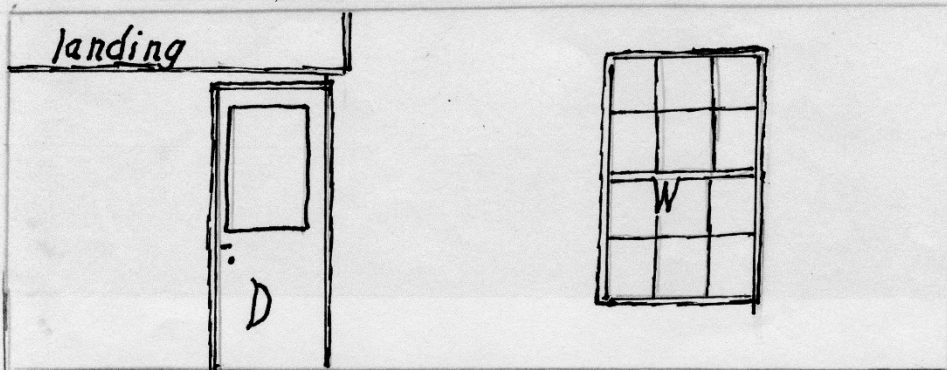


North Side, First Floor

First Renovation

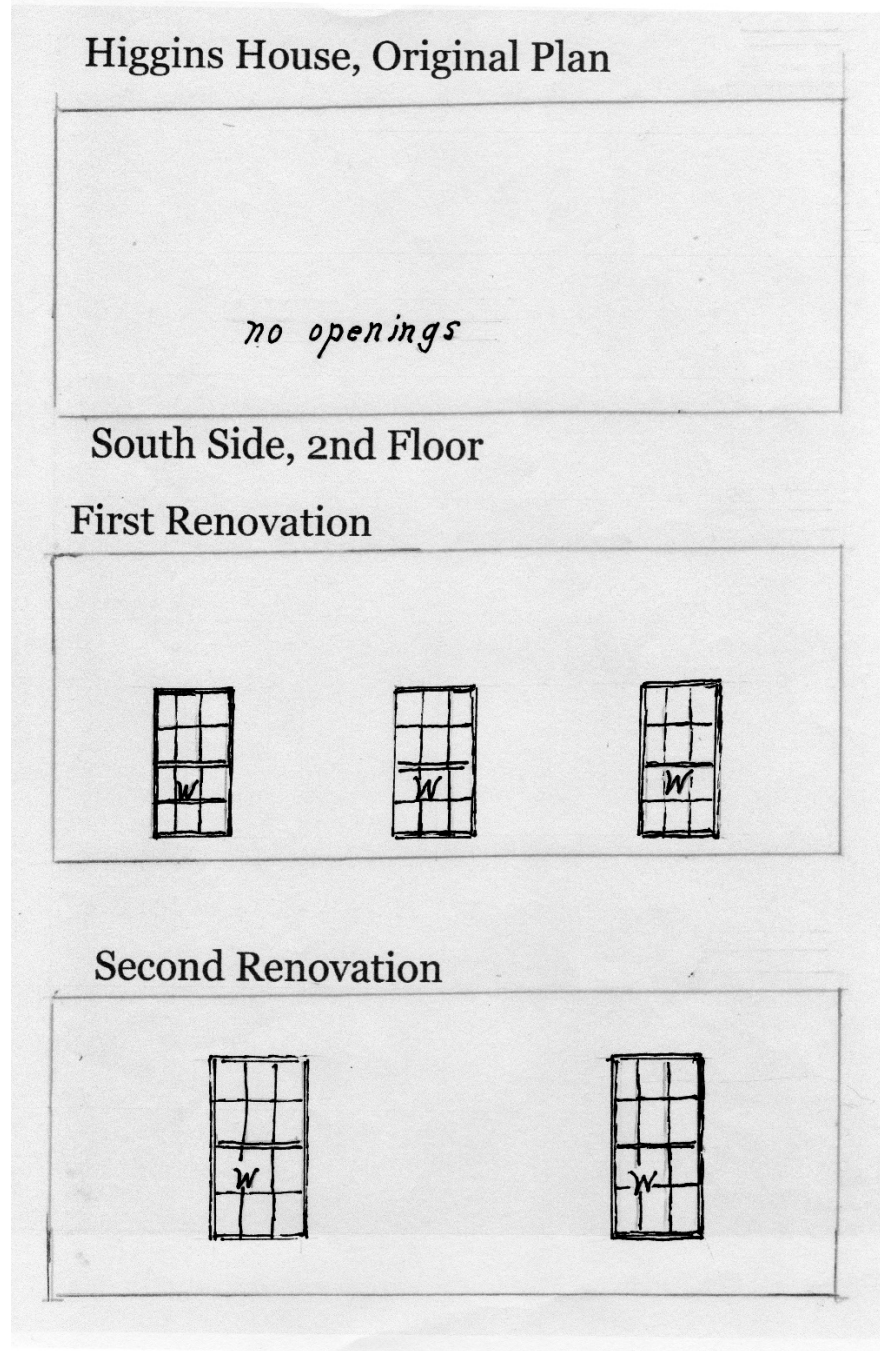


Second Renovation



Sketch 2

South Wall, Second Floor, Interior View (Sketch 3, below)

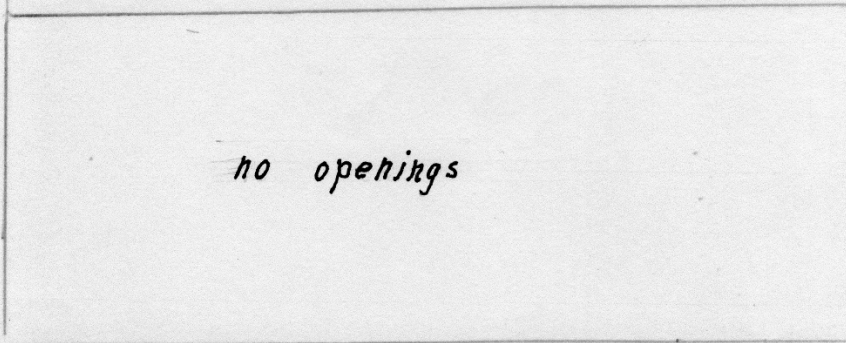


Sketch 3

The original plan included no windows. The first alteration placed three equally spaced windows in this south wall, during the c. 1840 renovation. The final renovation, c. 1890, positioned two windows, equally spaced, and was accomplished by sliding logs to the right to butt the vertical board. (See Figure 18)

North Wall, Second Floor, Interior View (Sketch 4, below)

Higgins House, Original Plan

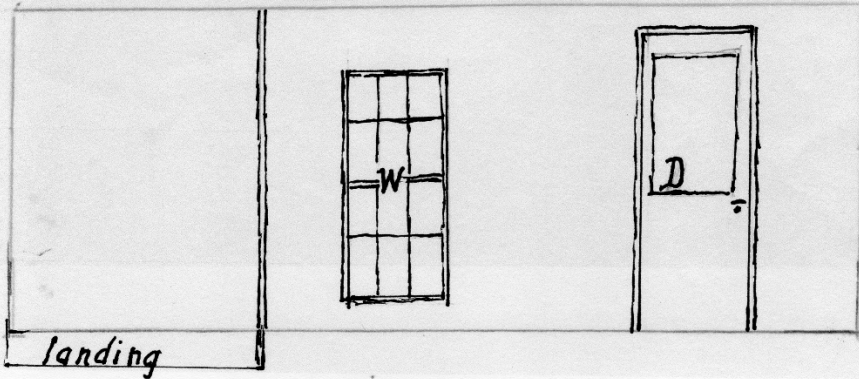


Second Floor, North Side

First Renovation



Second Renovation



Sketch 4

Originally this wall was blank. As with both north and south walls, two successive alterations took place. The first alteration placed two windows (as seen by log notches at top of both door and window, and bottom of window. (see Figure 19), at the time the stairwell was incorporated. A landing-level window was added for light. At the c. 1890 juncture, a window of a slightly less height was installed and a door to the new back-upstairs porch was added, replacing the right-side window. (See Figure 20). The window to enlighten the stairs, installed c. 1840, was filled with brick at this time and plastered over (See figure 21).

Stairwells

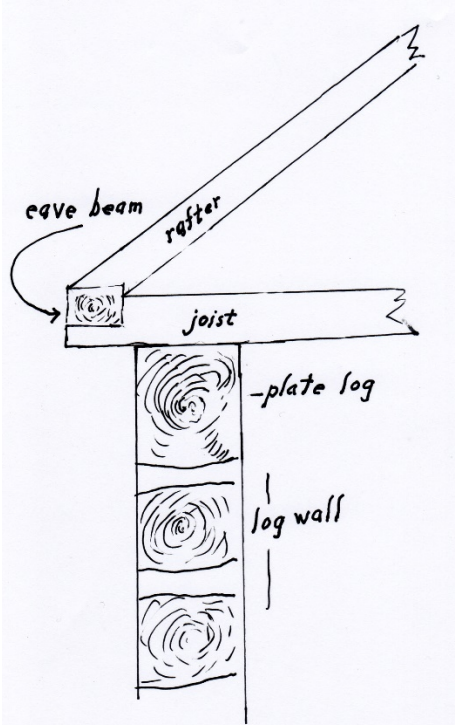
I believe the access to the upper floors were always in the current area where they now exist, but of what style is not observable having been replaced by the current structures. At first, simple ladders were common, as many period single floor log cabins have ladders placed either on the outside or inside for access to the loft. Steep stairs may have been used in this case, positioned between joists. The current staircases were designed and constructed when the attached “Queen Ann-style” house was constructed after 1840. The access door to both that new addition and to the loft would have had to be planned at the same time, so there was no interference. This stair placement may have had to be moved to allow for first floor access to the c. 1840 addition. This first floor access door (still present) may have been impeded by the original stairs if they had been retained.

Floors

As stated, I believe the loft floor is the only original floor, but it was not laid until five or more years after the house was constructed. Both the first and second floors are constructed with more modern more narrow boards using more modern straight-cut nails. The loft floor has early cut nails with hand-wrought heads (See Figure 10).^{xx} Whether made on site or imported cannot be known. MacMaster states that some building of the early houses was delayed because of “the difficulty in procuring materials.”^{xxi} This may explain the later installation of the loft floor. All floors are of tongue and groove lumber. Usually, original late eighteenth century floors would have much wider boards, than the ones seen on the lower floors. The first floors of some early buildings in this era had puncheon floors, but it is not the case here.

Roof

The gable roof rafter structure at present is original. It consists of hand-hewn tapered rafters, notched into the eve beams (See Sketch 5, Below). These are lap-joined and pinned at the apex with a “tree nail” (See Figure 22). They are on 36” centers.^{xxii} The gable end has framed trapping above the tie beam, consistent with this type of rafter system. There is no center roof board which is common in this era. The joists notched into the eve beam (See Sketch, below) and joists rest on the plate log to create an overhang from the wall logs. The one loft window is traditionally placed. However, the current window is a replacement of the original.



Doors

The two original outdoor access door spaces (north and south) are surprisingly low—slightly less than five feet high. They are traditionally placed directly corresponding to each other in the front and back. Their existence is confirmed by them being the only two original open spaces that reached the floor, as observed in the bottom log (See figure 23). There were slight log sills over which stooping persons (if over five feet tall) would have had to overstep. The door on the east wall, first floor, is a later addition, and was added when the kitchen addition was made to east side of the original house. I believe this to be the first addition made to the house, but the date is unknown.

Partitions

There were partitions that existed on the bottom two floors, effectively creating two rooms on each, in a modified hall and parlor house layout. The remnants of these are observable. The upstairs partition created two rooms and perhaps some privacy. It is not inconceivable that originally, in a large family, people slept on all three floors.^{xxiii} Different paneling was used on both floor's partitions, with the first floor appearing to have older, wider beaded boards. The first-floor paneling, creating two rooms, is original. I believe the second-floor paneling was done during the 1840s era renovation. At the same time, original wider plank floors were replaced by updated tongue and groove flooring on the first and second floor. Both partitions consisted of one thickness of board, tongue and groove beaded lumber, but the first-floor paneling appears older. No nails are retrievable, which could confirm this as the tongue and groove paneling nails are hidden. Remnants of both partitions may be seen. When the second-floor partition was removed, it created the necessity of the modernly installed balustrade (Figure 24) to prevent accidents.

Plastering

A later alteration affecting the whole house was accomplished at the time of plastering, during the c. 1890 alteration. This is based on several clues. A scrap of lath, including a cut nail was found. By the latter 1890s, wire nails were accessible and in common use. Both fireplaces were covered at the time of plastering, and a mention in a Moorefield newspaper article states that an 1886 date was located on the back of the mantel. In several areas, vertical lath was used. This is unusual, but it would have served to help straighten out the crookedness of the log walls. In several areas, notches were cut into the logs to accommodate vertical boards onto which horizontal lath was nailed, and no doubt shims were used under the lath in places to keep the plastered walls vertically straight.

Condition

The original roof structure (the part observed) was in good condition. The pen logs are in good shape except for two small places (Figures 25) and one small place on the top plate log, northwest corner, over which more modern tin has replaced the standing seam tin roof (which itself altered the original wooden shingle roof). The sleeper logs under the house (Figure 26) are original, look to be white oak, and are in fair condition. They are supported in various places in

various ways with rocks and boards. Most still have bark attached. The supporting apparatus should be redone with footers and more permanent structure where needed, if, as I have been told, the floor is to be removed. Also, the crude modern plumbing and electrical work that is underneath could be easily removed if exposed by floor removal. Dual holes in some joists (Figure 27) and rectangular spaces in some logs show that crude electrical modernization was used at some point. The chimney needs some minor repointing.

Removed additions

The large complete L-shaped house, before the additions were removed, housed three different residencies.^{xxiv} The large timber-framed addition, had brick “nogging” utilized to insulate the building.^{xxv} This English construction technique is considered rare in West Virginia.^{xxvi} The estimated construction date of the larger removed addition is the early 1840s.^{xxvii} This would also be the estimated date of the first major alteration of windows and doors in the Higgins house. The smaller (removed) east side addition to the Higgins house was a kitchen.^{xxviii} No date is known, but it would have alleviated open fireplace cooking in the original Higgins house.

Unexplained Artifacts

The notch in the log positioned above-right of the first floor south-side door (See Figure 28) This notch, in the top log that has never been removed, seems to have been used to support an outdoor door covering. When the door was redone taller and narrower, it was shifted to the left. If there is a corresponding notch on the left side, it is now covered with chinking. No clues are evident on the outside clapboard siding. The purpose of the long notch on the second-floor north side above the windows is unknown. It spans two openings (See figure 19), but the log underneath it is not similarly notched except for the window openings and is not cut anywhere else. Its length may have just been an easier way to create notches for the windows that align with the ends of this notch. It is not known for what purpose two joists near the rear north-side first-floor door were cut.

Chronology Summary

The house alterations may be summarized in four stages; the original plan, the first major alteration, and the second major alteration, and the modern era rehab

after the east and west additions were removed. The original plan, circa 1787 (to be determined by dendrochronology) reflected the original owner-builder's objectives. The first alterations were made circa 1840, at the time the house was sold to Thomas Hopewell. The second and final major alteration, circa 1890, was when the present fenestration was accomplished, and the interior was plastered. The fourth (modern) work removed the plaster and replaced the 1890-era windows with single pane sashes, clapboarded the west side after removal of the large addition, and shored up the second-floor joists with posts and beams.

Glossary

Chinking: The material used between logs to fill in the gaps

Eave Beam: This is the top log on the gable end of the house

Fenestration: The arrangement of the windows on the exterior of a house

Pen: A square or rectangle of logs forming the outer walls of a house

Plates: These are the top logs on the north and south (long) eave side of the house

Pointing: the filler between stones on a chimney or stone wall

Purlin: Longways roof structure logs used on early log cabins

Nogging: Brick work used between timbers on timber framed buildings

Notch: The way log walls are joined at the corners

Puncheon Floor: This is a floor constructed of hewn logs

Quoins: Cut stones used on the corners of chimneys and stone houses

Rabbit Joint: A type of joint used to secure two boards together

Sleepers: Cross braces or joists under a house

Summer Kitchen: a common outbuilding in the nineteenth century

Tie beam: The top log on the gable end

Trapping: The material used to fill the gable end of a wall

Tree Nail ("trunnel"): A wooden pin used to secure wooden joints

Window Light: The eighteenth-century term for a window

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ⁱ Surprisingly, diamond notched corners were specified, an extremely rare notch-type, once thought not to exist in the southern Appalachians but only further east.

ⁱⁱ Horizontal chinked log construction.

ⁱⁱⁱ The house would have to have been built by Robert Higgins, as the lot was purchased with the stipulation that a house had to be built on it within eighteen month (stated in Moorefield Examiner, Sept. 21, 1988).

^{iv} Of Swedish origin, see Weslager, 1988.

^v Noble, Allan G. 1984, p. 43.

^{vi} Two-story eighteenth-century houses recognize some degree of economic well-being and are seen as an advancement over rustic one-story cabins according to some scholars. See Morgan, 1990, p.33.

^{vii} Rehder, 2012, pp.56-62.

^{viii} For instance, in Pendleton County at, this time, this tax was one shilling per window. Morten, 1995, p.62.

^{ix} This notch type was introduced to America from Sweden in 1638. See Jordon and Kaups, 1986, p. 141.

^x The roofers report the existence of "rose headed" nails, that were used on previous clapboards, possible original or from the first replacement of clapboards, before the succeeding tin roof.

^{xi} Chinking is from Swedish and Northern European tradition, Jordan and Kaups, pp. 162-5. MacMaster, p. 109, documents diamond notches being stipulated when a courthouse and jail was authorized to be built. These buildings were built by Robert Higgins. Diamond notches were not thought to exist in this region.

^{xii} This is generally considered the Irish plan. English (or Georgian) tradition placed the chimney on the gable wall, but inside of the exterior wall. See Glassie, in Upton and Vlach, 1986, p.403. German tradition usually placed the chimney in the center of the house.

^{xiii} Judy Rice, email, 8 May, 2020.

^{xiv} The Moorefield Examiner, April 27, 1988, states that when the mantel was eliminated, the date of 1886 was noted on the back. If this date was written at the time of removal, it would affirm an approximate date of 1886 for the plastering, during the Carpenter family ownership.

^{xv} Mike Crites email, 5 May, 2020.

^{xvi} Figure ?, from Hutslar, 1992, Illustration 36.

^{xvii} Glassie, 1975, p.146, states this was the traditional plan in England, Scotland, and Ireland.

^{xviii} Bricks used for filler of windows are not uniform, indicating locally made, rather than machine made bricks.

^{xix} Date confirmed by Mike Crites email, 5 May, 2020.

^{xx} *Cut nails, were cut from iron plates, unlike the wrought nail, which was hammered from "nail rods." Both have rectangular shanks, but the wrought nail tapers on all four sides; the cut nail tapers only on the two opposing sides. The early cut nails were "Headed" by hammering, as were all the wrought nails.*

[https://www.oldhousefix.com/history-of-american-nails.](https://www.oldhousefix.com/history-of-american-nails)

^{xxi} See MacMaster, 1986, p. 112.

^{xxii} This rafter form is of German provenance and replaced earlier and cruder purlin roof structures with pole-press roofs on the earliest frontier cabins. Pole press roof structures did not need nails, making them the only roof construction choice when blacksmiths and or manufactured cut nails were not available.

^{xxiii} Robert Higgins had eleven children.

^{xxiv} Judy Rice, email, 8 May, 2020.

^{xxv} Mike Crites, email, 5 May, 2020. He states this form was commonly found around Moorefield.

^{xxvi} Allen, 2011, p. 204.

^{xxvii} Mike Crites, email, 5 May, 2020.

^{xxviii} Judy Rice, email, 8 May, 2020.

Addendum To: Milnes Higgins House Assessment; 11 June, 2020

After my assessment of changes made to the outer wall fenestration of the Higgins House, believed to be built in the late 18th century, dendrochronology (tree ring analysis) has been accomplished by Kristen de Graauw. This new evidence gives proof that at some point, radical changes were made to the log structure of the house. This condition was here-to-for not known to exist in regional log houses examined by de Graauw or myself. So, unless the house was moved, or had to be taken apart to replace deteriorated logs, we can assume the house was deconstructed on site for other reasons.

This deconstruction and reconstruction are proven by varying dates ascribed to logs within both stories of the building. It is conceivable that changes could have been made to the east, south and north sides of the house without too much interruption of the basic log pen, based on the logs that were tested. However, logs tested on the west side show that first story logs, as low as the 3rd course, prove to be felled well after the 1790 felling dates of most of the original logs on the first story. But even that lower log (HHW104A) could have been inserted when the lower right door was cut out, after original construction, when an addition was added. But given that the log immediately above the lower right door (HHW108A) is complete end to end, and is of a later felling date, this points to the fact that this entire house was deconstructed and reconstructed at some point.

Why was this house deconstructed?

Reason 1: I rule out deconstruction because of deteriorating logs. This house was too young at a circa 1827 date (date after newly felled logs could have been added) to have that degree of deterioration.

Reason 2: The house was moved, possibly to accommodate alignment of the new, c. 1840 addition. I also reject this. It would involve chimney removal, new foundation, etc.

Reason 3: The house was deconstructed to allow for major renovations (new windows and doors) to upgrade these dark spaces and to allow for access to the new addition. I think this took place c. 1840, as in my original assessment. I believe the original house was one story high as there would be no need for so many newly felled (1827) logs if only openings had to be cut out for new windows and doors in the original structure. Kristen de Graauw also points to and questions why some darkened logs exist, as logs next to them are not darkened through smoke exposure. The only answer is that these logs were repurposed from another building, probably built shortly after the 1827 felling date, but suffered a fire. Salvaged logs from this other house, although some are marked with smoke, were sound, and were used as additional logs to raise the Higgins house by another story. I accept this Reason 3.

My reckoning for Reason 3, above:

Reason 3 is proved by numerous other artifacts in the building. Foremost is that there would be no reason to acquire and add more logs if the building was originally two stories high. However, if a story was added, numerous new logs would be needed. Some of these are the c. 1827 logs

identified by de Graauw. It is also possible that the original house was only 1 ½ stories, common at this period.

The only hewn (18th century) rafters in the building occur at the first-floor ceiling, spaced six feet apart. Rafters interspersed at three feet spacing are sawn. With the house deconstructed, notches for the interspersed and sawn first-floor ceiling rafters (to make for 3' centers) could be easily sawn out, rather than painstakingly chiseled (now modernly plastered over and unobservable). To add these interspersed rafters, the original tongue and groove plank ceiling (original loft floor) had to be taken up. These planks were then used for the current loft floor (second floor ceiling). Since tongue and groove floors have hidden nails (driven through the tongue edge) we can't determine if obsolete nail holes on 6' centers exist. Since nails were a valuable commodity at these early dates, it would have been practical to reuse nails, which (per one that was found) are 18th century rose-headed cut nails. Second floor ceiling rafters are sawn, indicating the rafters for the loft floor were added later (19th century, c. 1840).

The date (c. 1840) major rehab of the house still stands, based on local oral history and my dating of changes. This would correspond to the radical disassembly and reassembly of the house with the newly acquired logs and added second story. Since we know the house was first constructed on this lot, and the large addition was added at about this point. The "Queen Anne Style" large corner addition (now removed) would have been a reasonable time for major renditions to be made to the original log cabin structure.

At this c. 1840 juncture, the house was disassembled, and cut outs for numerous windows and doors were made. This allowed for the free use of non-corner notched logs from both felling dates to be used throughout the building (see de Graauw's illustrations). Corner V notched logs of both dates (1790 & 1827) could be easily integrated at this point as well.

There is no evidence of upstairs access until the c. 1840 reconstruction. As stated, it was most likely a simple ladder, perhaps outside of the house, for access to the original loft. Not being a full usable story that needed a proper access, a simple ladder is commonly found within 18th century cabins with crude lofts only used for sleeping.

There is remaining evidence of two partitions in the house. The upstairs partition is of a newer construction, again, pointing to a later (c. 1840) second story being added. As stated, I believe the first-floor partition pre-dates the second floor partition.

I believe that the first chimney was probably of a cruder rubble type, possibly even a wooden "catted" chimney (common in the era). It was replaced by the full two-story chimney, with fireplaces on both floors, that are now present. This would be at the c. 1840 juncture.

The later 1890 plastering and relocation of windows (as per my assessment) is responsible for the brick noggin used to fill the more original spaces that were completed at the c. 1840 reconstruction. This also may have been the time when variously dated logs were moved about to allow for the new cutout locations.

This explains the baffling arrangement of variously dated logs used throughout.