

Barn 1: Hamilton Tract Lot #28 Tenant barn (Holland Township barn survey #1) 1787

133 Hawks-Schoolhouse Road

Ground level, three-bay swing beam barn. Ground level 3-bay, swing beam barns represent the oldest remaining barn type in Holland Township. This barn is an excellent example of its type and is the oldest dated barn in the township. The associated farm was a tenant farm within the Hamilton Tract until 1813 when it was sold to William Miner. Its 1787 construction date suggests that the barn was built by the tenant who leased the farm.

Note: Construction specifications for an earlier barn built elsewhere in the township and before the Rev War indicates that the agents for the British land owner paid for the construction of barns for tenant use. It is highly unlikely if this arrangement continued after the Rev War. All of the barns dated thus far post date the Rev War.



Photo from 2001 showing loft

As with all of the ground-level 3-bay, swing beam barns, in Holland Township, this barn has a side entry plan. North and south wagon doors lead to the center bay that was flanked by animal stables on the west and a swing beam which expanded the threshing floor to the east (based on evidence). A hay loft occupied the east bay above the threshing floor and a straw loft occupied the north end of the center bay (undressed sapling poles remained when first investigated in 2001).

Characteristics:

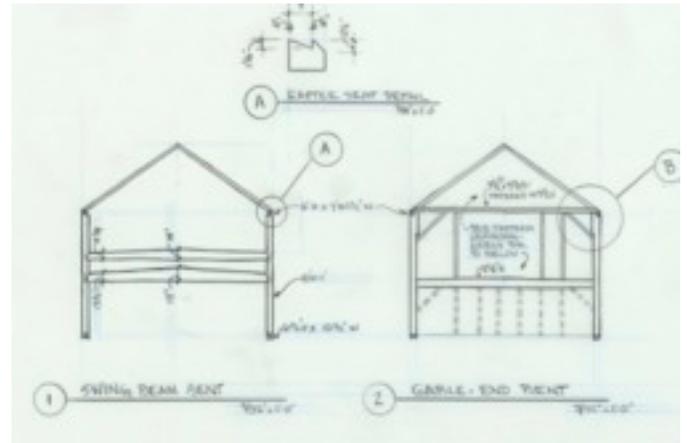
- Bents are framed with one or two full-width, cambered tie beams with no intermediate posts
- Hewn major components, rafters and studs, sawn oak braces
- Two-foot scribe marks
- The upper tie beams of the interior bents are framed into the posts 4'-1" below the post tops
- Cambered swing beam (16½" x 7½" at each end, 19½" x 7½" in the center) is joined to the upper tiebeam with a strut.
- Swing beam supports undressed sapling poles of the hay loft (removed) and expands the threshing floor.
- Diminished shoulders
- Through tenons
- Raising holes
- Double layer threshing floor. Bottom layer attached with square oak pegs, top layer nailed with rose head nails.
- Hefty posts with the widest dimension oriented parallel to the ridge
- Evidence of original animal mangers in the west bay opposite the swing beam
- No purlins

Note: This barn type is often referred to as an English three bay barn. I chose not to use the word English in its title because it is misleading. Its plan may be somewhat similar to the plan of ground barns in England, but the framing is certainly not English and is more related to Dutch practices. There are no swing beams or dropped tie beams in England. The question remains: Was this barn type built during the pre-revolutionary tenant period in Holland Township? If so then perhaps agents for the land owners specified the plan layout but left the framing methodology to the local builders who were likely from the German lowlands. (The first wave of German settlers arrived by circa 1750). The dendro study will continue with the dating of remaining fragments and reused barn sections with the attempts to determine the style of barn built during the c 1750-1775 tenant period

Ground level three- and four-bay swing beam barns dated thus far date to 1787, 1793/4, 1803, 1806, 1809, & 1811. The last swing beam ground barn built in HT was built near the turn of the 20th century (Ht #17).

Barn 2: Holland Township Barn Survey #2 1793/4
642-643 Milford-Mt Pleasant

Ground level, three-bay swing beam barn. This barn is the second oldest dated barn in the township. It is similar to the tenant barn except the gable end bents have gunstock posts that support a traditional English tying joint instead of the Americanized method of framing the upper tie beams into the posts. The farm on which the barn stands was sold in 1765 and therefore this barn was probably not built by a tenant farmer. The presence of a traditional English tying joint in a swing beam barn that also has dropped tie beams in the interior bents, shows the melding of ethnic traditions and the Americanization of framing methodologies.



Characteristics:

- Bents are framed with two full-width, cambered tie beams in each bent with no intermediate posts
- Entirely hewn oak including major components and all remaining original braces, studs and rafters
- Hefty posts with the widest dimension oriented parallel to the ridge
- The four corner posts are gunstock posts (11" deep x 10" wide) and (13½" deep x 10" wide at the flair).
- Double notched rafter seats (all of the ground barns dated after 1800 have single notch seats)
- Hewn oak cambered swing beam (13½" (h) x 9½" (w) at each end 19" (h) x 9½" (w) at the center). Chamfer on the edge that faces the threshing floor. Not joined to the upper tiebeam.
- The upper tie beams in both interior bents were framed into the posts about 5'-3" below the tops of the posts.
- All posts have raising holes
- Pointed auger bit markings
- Scribe rule barn
- Paired wagon doors on both the north and south sides
- No purlins

Barn 3: Philip Burgstresser Barn (Holland Township barn survey # 21) circa 1820
210 Church Road

Stone Standard Pennsylvania forebay with a light Germanic frame

In 1806, Phillip Burgstresser (1778-1841) who was of German ancestry, moved to Holland Township from Tinicum Township in Bucks Co. Pa. and built a “nice brick house and good barn far superior to that of his neighbors at that period” (*Jesse Sinclair 1896*). Even though 1806 may be slightly early for this barn (the presence of sawn rafters and cut nails suggest a circa 1820 date), the 1806 to 1808 period appears to accurately date the easterly migration of the “far superior” Pennsylvania Forebay bank barn type into Holland Township from Bucks County, Pa. The earliest Pa forebay barn dated with dendrochronology, tentatively dates to 1807/08,¹ and was likely built by Philip Fine (Fein). It is a stone forebay barn with similar framing to that of the Burgstresser Barn. It has marriage marks, hewn rafters and the mowstead walls are attached with wrought headed transition nails. It is located on the Holland Township side of Finesville (condition prohibits tour access). In 1806-7, the landscape of Holland Township (which was then part of Alexandria Township) was dotted with small ground-level, three- and four-bay frame barns and possibly some log ground barns. This new barn type must have seemed enormous to the local inhabitants.



This two-level stone bank barn was “far superior” in both form and framing. The lower level offered a space to stable livestock and the forebay sheltered the stable doors. The upper level allowed for crop storage. This barn type began in Lancaster Co. Pa and migrated northeastward. Perhaps unknown to Jesse Sinclair, its German framing was also very different from the heavy timber swing beam frames of the smaller ground-level barns. Both the Burgstresser barn and the Fine barn are engineered with lightly framed bents composed of a large number of smaller timbers and spaced further apart.

A little more than half of the forebay barns in Holland Township have a lighter Germanic frame.

Characteristics:

- Three bay upper level with central threshing floor flanked by haymows.
- Stabling in lower level (reconfigured) with stable doors (removed) facing north (typically facing south)
- 4’-9” deep forebay (expanded for dairy cows)
- Stone perimeter walls parged with a textured, lime-based stucco on both the interior and the exterior surfaces
- Small circular opening beneath the eaves at both gable ends

¹ Dendrochronologist Michael Worthington is currently working to date this barn. Thus far, one post dated winter 1807/08.

- Hewn major components, sawn minor components, sawn rafters (hewn rafters are in the Fine barn).
- Interior bents flanking the threshing floor are lightly framed with two end posts, two internal posts below one full-width tie beam and two sets of interrupted ties with studs below the lower interrupted ties supporting “mowstead” walls lining both sides of the threshing floor.
- Upper tie beams are framed into the plates (half lap, half dovetail in the Fine barn)
- Gable-end upper tie beams are framed into the wall plate and are supported on three corbelled stones.
- Vertical queen posts align with the internal bent posts and support roof purlins at the two interior bents.
- Scribe rule marked with white lettering.
- Bent ladders
- Long diagonal framing members in forebay wall.

Other characteristics typical of Standard Pennsylvania forebay barns with a light Germanic frame

- Rectangular timbers
- End posts oriented perpendicular to the ridge (with the bending stress).
- No raising holes.
- No swing beam.
- No two-foot scribe marks.
- Cambered gable end tie beams (cambered width-wise, not height-wise with the bending stress - only in a few barns).
- No lofts except at either end of the threshing floor

Note: The earliest barn with sawn rafters dated in Holland Township was built in 1811 (HT #11). It is a 4-bay ground-level, swing beam barn.

In 1800 there were 170 farms in Holland Township. Evidence of 25 ground barns and 63 Pennsylvania forebay barns remain (count includes ruins and photographs). Of the remaining Pennsylvania forebay barns 23 have this framing methodology. The last barn of this type was built in 1941 to replace a similar barn destroyed by fire.

Barn 4: Jacob Bunn Barn (Holland Township barn survey #44) 1820/21

405 Javes Road

Frame Standard Pennsylvania Forebay with a heavy timber swing beam frame.

Jacob Bunn purchased this farm in 1806 but did not construct the existing bank barn until 1820-21 suggesting an earlier barn once existed on the property. Jacob Bunn had been a tenant under the proprietary land ownership of James Hamilton and is believed descended from Matthew Bunn, a Quaker who settled in Woodbridge, NJ in 1670. This barn is of extreme importance to the understanding of barn construction in Holland Township. Bunn evidently copied the forebay banked form from the German settlers in the western mountainous section of the township but utilized the heavy timber swing beam framing methodology of the ground-level, swing beam barns. This suggests that Bunn hired a local framer who copied the external barn form but who evidently did not understand or did not know about the lighter Germanic framing techniques. The framing characteristics of this barn are very similar to that of a ground-level, four-bay swing beam barn.



Characteristics:

- 7'-9" (+/-) deep forebay supported by two posts (reconfigured for dairy cows)
- The stable wall was stone and had three split doors and one paired hinged door opening into the basement level
- Heavy swing beam frame with full-width cambered tiebeams in all bents. No intermediate posts
- Hewn oak major components, hewn studs, sawn oak braces, sawn rafters.
- Scribe rule with two-foot scribe marks
- Raising holes
- Cambered tiebeams
- Swing beam 16" x 9" at ends; 21" x 9" at center joined to the upper tiebeam with a strut and passing braces.
- Passing brace peg holes are square shaped
- Hefty posts with the wider side parallel with the ridge.
- Diminished shoulders
- The upper tie beams are 5'-10" below the tops of the posts at the interior bents flanking the threshing floor
- No original purlins
- Slate roof on the publicly visible side (facing the farmhouse) and a wood shingle roof on the back side
- A center post was added to strengthen the east gable-end bent

Of the remaining Pennsylvania forebay barns, 20 have heavy timber, "swing beam" frames. This barn is believed to be the oldest of its type.

Barn 5: A. Apgar Barn 1809 /1888

(Holland Township barn survey #63)

Little York-Mt Pleasant Road

Pennsylvania forebay barn constructed with the frame of an earlier ground-level four-bay “swing beam” barn This frame Pennsylvania forebay bank barn was built in circa 1888 reusing the frame of a 1809 four-bay, ground barn. The reused bents were dated with dendrochronology but the forebay components were not dated. The 1888 reconstructed date is suggested by the inscription “D. Apgar May 14, 1888” which is beautifully carved on a jamb of one of the stable doors. There is also a painted 1883 date on the gable end. This barn illustrates the importance of the bank barn form. Five Standard Pennsylvania bank barns and two “Sweitzers” were built in Holland Township with a reused ground barn frame.

When built in 1809, this barn probably looked very similar to barns 1 and 2 on this tour, albeit one bay longer. The notch on the north post on the left side flanking the wagon doors suggests that animals were stabled in the east bay (directions based on the current configuration). The southeast corner post has notches for a split door which likely led from the stables. The swing beam joined the center bay with the first west bay and likely supported a hay loft. The fourth bay would have been a haymow. The substantially dropped tie between the two haymows (9'-7" drop) apparently facilitated loading and is a common characteristic of four-bay ground barns in Holland Township.

The 1809 date is interesting. The associated house has a 1792 datestone. We initially assumed that the barn could have been as old as the house. The fact that it was built 17 years after the house suggests that it was not the first barn on the site.

Characteristics:

- Two full-width cambered tie beams in each bent except the bent between the haymows which has one tiebeam
- Hewn oak and chestnut major components (fast grown), sawn oak braces and studs
- Hewn oak studs reused in the ell and the basement.
- Tapered, hewn oak rafters were reused as ceiling beams in the granary
- Scribe rule with 2-foot scribe marks noted and very faint marriage marks.
- The upper tie beams are 5'-7" below the tops of the end posts in the interior bents flanking the threshing floor
- The tie beam is 9'-7" below the tops of the end posts at the bent between the haymows.
- Hefty posts with the wider side parallel to the ridge.
- Raising holes on all posts.
- Hewn oak swing beam 11½" x 7" at each end, 16" x 7" in the center joined to the upper tiebeam with a strut and passing braces.
- All of the tie beams are cambered
- Diminished shoulders
- Through tenons

This is the last barn on the tour. We hope you enjoyed it.