

Merkel Farmstead, Wine Press Building  
8570 Louella Lane  
South Side of U. S. 64  
Vicinity of Shiloh  
Shiloh Valley Township  
St. Clair County  
Illinois

HABS No. IL-1191-B

HABS  
ILL  
82-SHIV,  
IB-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey  
National Park Service  
Department of the Interior  
Denver, Colorado 80225-0287

HISTORIC AMERICAN BUILDINGS SURVEY

MERKEL FARMSTEAD, WINE PRESS BUILDING

HABS NO. IL-1191-B

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PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural Character:

In its present condition, the wine press building has the appearance of a small timber frame barn with multiple lean-to additions. With its prominent overshoot roof and exterior frame stairway, the original wine press building would have looked considerably different than most American outbuildings. The small frame structure, with its domed cellar beneath, represents a specialized agricultural outbuilding type little seen in Illinois. Although its original function is unknown, commercial wine production was attempted by the early German immigrants in the region. Additionally, small two-story structures with subsurface cellars located within the German settled area of Missouri have been documented by Charles van Ravenswaay and referred to as wine press houses<sup>1</sup>. Although no documentary evidence has come forward to suggest that this structure was used for commercial wine production, its unique form, coupled with the underground domed cellar, suggests to us that it may have functioned in this capacity.

Like the house, the wine press building is oriented approximately 5 degrees west of north.

2. Condition of Fabric:

The original wine press building has been modified substantially over the years. The original lean-to wings and northern overshoot roof have been removed. The area beneath the southern overshoot roof has been enclosed, and the stairs leading to the loft have been removed. The above-ground structural remains are deteriorated and in a bad state of repair. Although the cellar remains in good condition, the entrance has been rebuilt during the twentieth century, using more modern material (concrete).

B. Description of Exterior:

1. Overall Dimensions:

The central core of the original wine press building measures 17'-0" (east/west) and 24'-5" (north/south). A lean-to addition has been constructed onto each side of the original building (and probably replaced earlier, original wings). The width of the west wing measures 9'-6" while the eastern wing is 15'-9". The inside dimension of the cellar room is 14'-8" (east/west) by 23'-4" (north/south).

2. Foundations:

The foundations for the wine press building consist of stone piers located beneath each of the upright posts. These piers, constructed of locally quarried stones, measure approximately 16" square. The location of the quarry is unknown.

3. Walls:

The walls of the wine press building are constructed using timber frame technology. The sills consist of large (10"x10") hand-hewn oak beams. The northern end of each sill extends past the corner post approximately 3-1/2" and is rounded along its top surface. Although it is suspected that the southern end of each sill was originally finished in the same manner, these ends had apparently been sawn flush with the end posts within the more recent past. No sill was present in either the north or south gable end walls. No evidence was present (such as mortice holes) that a sill ever was present in these two locations. As such, it appears that the lower floor probably functioned as a central driveway or aisle.

Resting upon the sill are four H-shaped bents. The distance between each end bent and the corresponding interior bent was 7'-0". The distance between the two interior bents is 7'-5". The upright posts in each bent are stout (8-1/2"x8-1/2"), hand hewn oak timbers. The horizontal beams (or girts) within each bent that connect the uprights are 6"x8" hand hewn oak. Diagonal braces (6-1/2" square, hand hewn oak) reinforce each of the bents. Additionally, hand forged iron straps reinforce each of the girt/upright post joints within each bent. The four bents were tied together with a 5-3/4"x8" hand hewn oak plate. Each of the west and east wall plates are constructed with two separate timbers joined with a keyed and pegged scarf joint. The wall plate once present along the south gable end wall had been removed. Within the loft, the gable end walls were infilled with approximate 4" square hand hewn oak studs (possibly old rafters reused as studs) placed at approximate 2'-8" centers. The

exterior surface of the walls are covered with vertically sawn, 1/2"x6" walnut siding (non-taper cut with 4-1/4" exposure).

The side walls (and domed ceiling) of the cellar were constructed of locally quarried limestone and are approximately 1'-8" thick. Although the lower portions of the wall had been constructed with large blocky pieces of limestone, the roof had been built with tabular fragments of stone. The north end wall of the cellar was constructed of both quarried limestone and brick. The lower portion of the wall as well as the upper portion east of the door was built of stone. The upper portion of the wall west of the door (and incorporating into it a wall niche) was constructed of hand manufactured brick. The south end wall (with its two wall niches, air vent and chimney) was built entirely of hand manufactured brick.

As with the main house, three wall niches of varying size are present in the cellar. Upon entering the cellar, a small niche is located immediately to the right (west) of the doorway. This niche is 2'-3" wide by 2'-11" tall. There is no evidence for doors associated with this wall niche. Built into the south end wall were two niches, one flanking each side of an air vent and associated chimney. The smaller of these two niches is 2'-4" wide while the larger is 2'-6" wide. Although there is no evidence for doors associated with the smaller of these two wall niches, the larger niche has wood blocks imbedded into the wall indicating the location of door hinges once associated with this niche. All three niches are constructed of brick, and have round brick arched lintels. The two smaller wall niches are 9" in depth while the larger niche (once with wood doors) is 13" deep. Often found in groups of three (some with doors, others without), these wall niches may have been associated with food storage or may have served multiple functions.

Also incorporated into the south end wall is an air vent and chimney. The air vent is 1'-11" wide by approximately 2' tall; its floor is even with the floor of the cellar and is centered within the south wall of the cellar. With its round arch, brick lintel the air vent is similar in appearance to the wall niches. A chimney connects the air vent with the outside world and exits the ground surface beneath the area once associated with the stairs leading to the loft. The inside dimensions of the air shaft is 1'-10" by 1'-6".

4. Structural System, Framing:

The ground story of this building has a dirt floor. The lack of a sill on both the north and south ends of the building suggests that this may have functioned as a driveway through the building.

The original loft floor joists consist of large (6-1/2"x7-1/2"), hand-hewn oak timbers notched at their ends and resting on the heavy girt connecting each of the bents. Many of the original second story floor joists have been replaced with newer, circular sawn joists. The original loft flooring consists of vertically sawn oak planks.

The original rafters for the wine press building consist of round, 4" diameter, oak poles slightly flattened on the upper surface, and placed at approximate 3'-3" to 3'7" centers. The bark has been removed from these pole rafters. At the ridge, each of the rafters have been half-lapped and pegged. Between each of the original rafters, a newer, circular sawn oak rafter has been installed. Although a wood shingle roof originally was associated with this building, a corrugated sheet metal covering is presently in place.

Notching within the top surface of both the west and east rafter plate indicate that another set of rafters were once present and associated with frame wings on both the west and east sides of the building. Similarly, notches within the girts connecting the four bents (and supporting the floor joists) indicate that heavy timber floor joists were associated with each of these lean-to wings. As such, it would appear that the original wine press building had shed roofed wings on both the west and east sides of the structure.

Incorporated into the northwest corner of the building's frame is a round vertically-set post. This post is approximately 6" in diameter, rotates freely in sockets, and has a hole through the center to receive a lever to rotate the post. It is suspected that this post represents the remains of a hoist system designed to lift heavy objects (such as barrels) from the cellar.

5. Porches, Stoops, Balconies, Bulkheads:

The original wine press building had a small landing at the loft level located along the south gable end wall. It is suspected that this covered landing was associated with a set of exterior steps that lead to the loft and were protected by the overshot roof system.

6. Chimneys:

A brick air vent is associated with the stone arched cellar and exits the ground in an area that would have been located beneath the original steps leading into the loft.

7. Openings:

a. Doorways and Doors:

No original doors are present on the ground level of the wine press building. The entrance to the cellar is gained via a bulkhead entrance and door located along the north end wall of the building. The opening for this door is 5'-0" in width by 6'-0" in height. Two wood blocks were incorporated into the west wall of the opening and indicate that the large door once present pivoted around the inside corner adjacent to the wall niche. A single, handforged pintel (once associated with a strap hinge) is still present in one of the hinge blocks. A large, wide door once present has long since disappeared. Remnants of the wooden door casing is still visible along the edge of the opening.

b. Windows and Shutters:

No windows are present within the wine press building.

8. Roof:

a. Shape, Covering:

The wine press building has a gable roof with a slope that approximates an 8" rise in a 12" run. Although the original roof was covered with circular sawn wood shingles attached to 1"x16" circular sawn, locally procured softwood planks, it currently is covered with a corrugated, sheet metal roofing.

A distinctive characteristic of the roof is its overshoot gable on both the south and north end walls. The roof extended 4'0" past the wall plane along the south end. Although most of the original overshoot roof system had been dismantled along the north gable end, the east wall plate is still present (and incorporated into the structure of the adjacent east wing) and indicates that the roof line originally extended 3'-6" past the wall plane along the north gable end.

b. Cornice, Eaves:

The eaves have exposed rafter ends with no fascia boards. No gutters are present.

c. Dormers, Cupolas, Towers: None

C. Description of Interior:

1. Floor Plans:

a. First Floor Description:

The Wine Press Building consists of a central bay (presently used as a garage) with a shed roofed wing on each of its long sides. Although each of the wings were rebuilt, the original structure appears to have had wings on both sides of the building. Sometime during the middle twentieth century, that area surrounding the bulkhead entrance into the cellar was enclosed with a frame wing.

Within the lower floor, there is approximately 8'-9" clearance between the dirt floor and the bottom surface of the ceiling joist.

b. Second Floor Description:

Above the central bay of the Wine Press Building is a loft. Along the outer walls of the loft, the height from floor to the top edge of the wall plate is 4'-0". In the center of the loft, along the gable ridge line, the ceiling height is 8'-0".

The interior wall surface of the loft appears to have originally been unlined. Sometime during the nineteenth century (evidenced by the presence of machine cut nails), the interior surface of the loft was lined with white pine planks and a loft door was added to both the north and south gable end walls. After that time, the loft was used as a granary for small grain (i.e., wheat or oats) storage.

c. Cellar Description:

A large stone arched cellar is located beneath the Wine Press Building. The inside dimensions of this cellar are 14'-8" by 23'-4". Both the east and west walls, which are the base of the arched ceiling, were constructed of quarried stone, approximately 18" in thickness. The south end wall, which has incorporated into it two wall niches and an air vent, was constructed entirely of brick. The north end wall was built both of stone and brick (although mostly of stone construction, the area around the door and wall niche were constructed of brick). At the apex of the domed ceiling, the cellar had a 10'-0" clearance.

2. Stairways:

Access to the upper story loft was originally provided by an exterior, presumably open, stairway located along the south gable end of the building. The stairway was protected by the south overshoot roof. The landing at the top of the stairway is still present and incorporated into the structure of the existing building. This small landing measures 4'-3" wide by approximately 4' long and was constructed by cantilevering two hand hewn timbers across the heavy timber floor joists. No remnants of the original stairs have survived. When the south overshoot was enclosed, a simple ladder replaced the steps to the loft.

Although a set of steps once would have been present leading into the cellar, no remnants of these steps have survived to the present. The concrete walled bulkhead leading into the cellar, which represents a twentieth century modification to the original structure, has been partially filled with dirt and other debris.

3. Flooring:

No wood flooring is present in the ground floor of the building. The loft floor consists of vertically sawn oak planks. Although difficult to determine with any certainty because of the water within the cellar, it appears that the cellar floor (although presently dirt and badly disturbed by large rodent burrows) originally had a plank floor.

PART III. ENDNOTES

1. van Ravenswaay, 1977, 129.

PART IV. SOURCES OF INFORMATION

Charles van Ravenswaay, The Arts and Architecture of German Settlements in Missouri; A Survey of a Vanishing Culture.  
Columbia: University of Missouri Press, 1977.

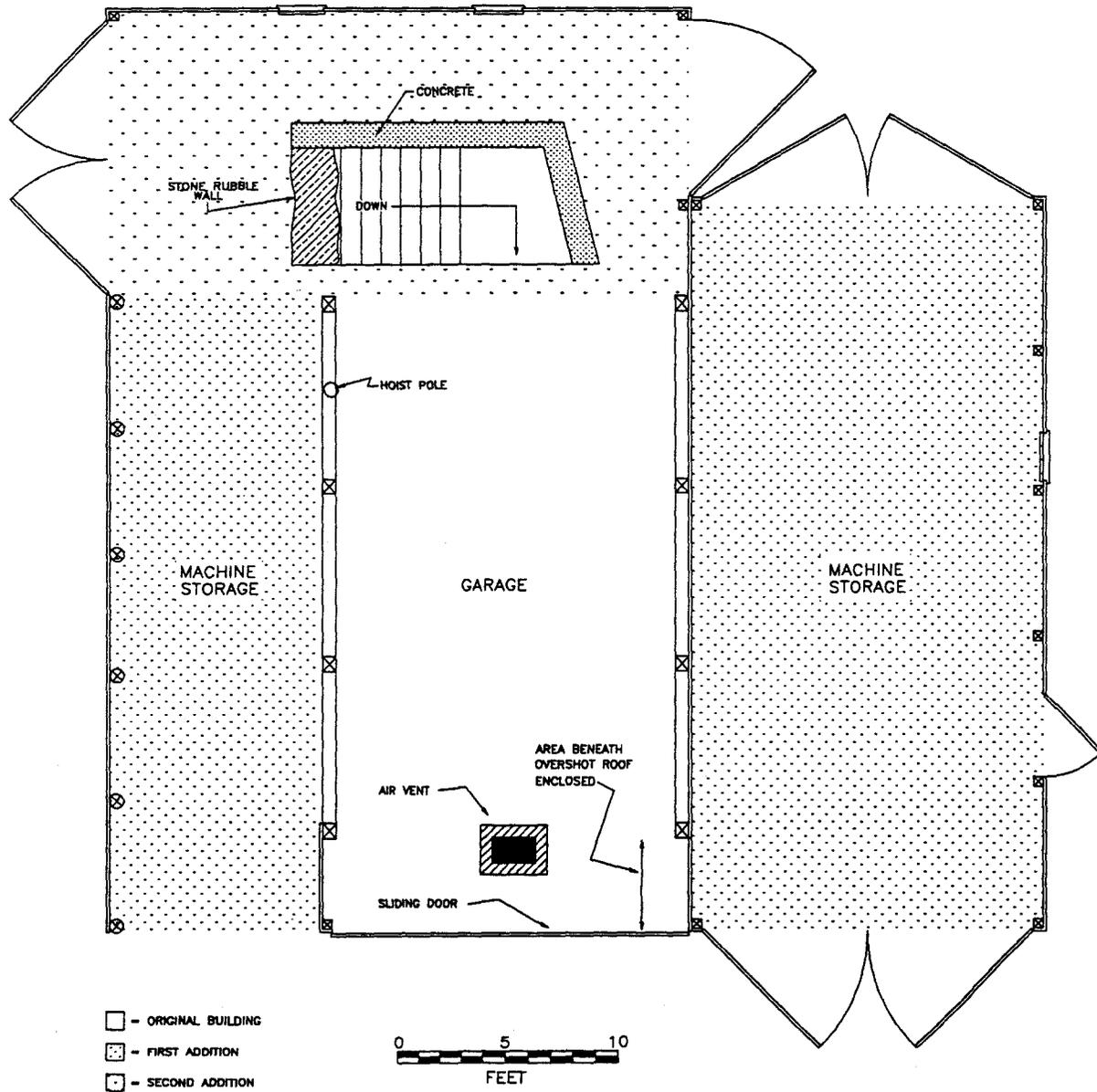


Figure 1. Floor plan of the Wine Press Building at the Merkel Farmstead.

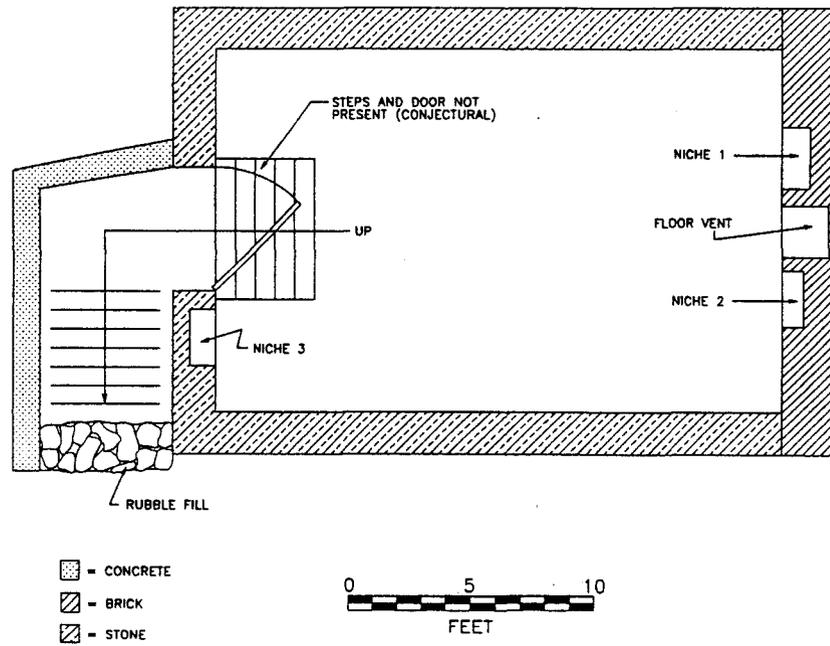


Figure 2. Cellar floor plan of the Wine Press Building at the Merkel Farmstead.

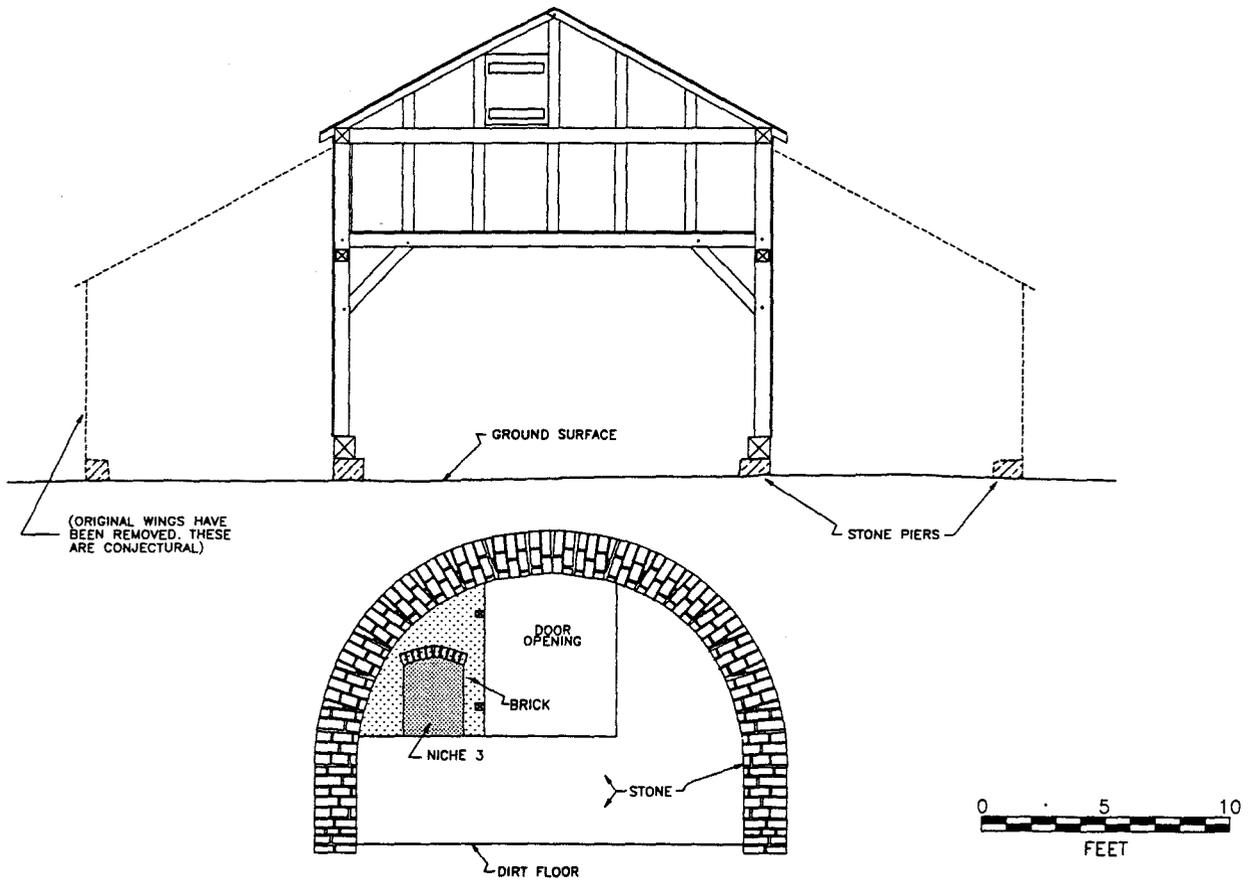


Figure 3. Idealized sectional view of the Wine Press Building and associated cellar.

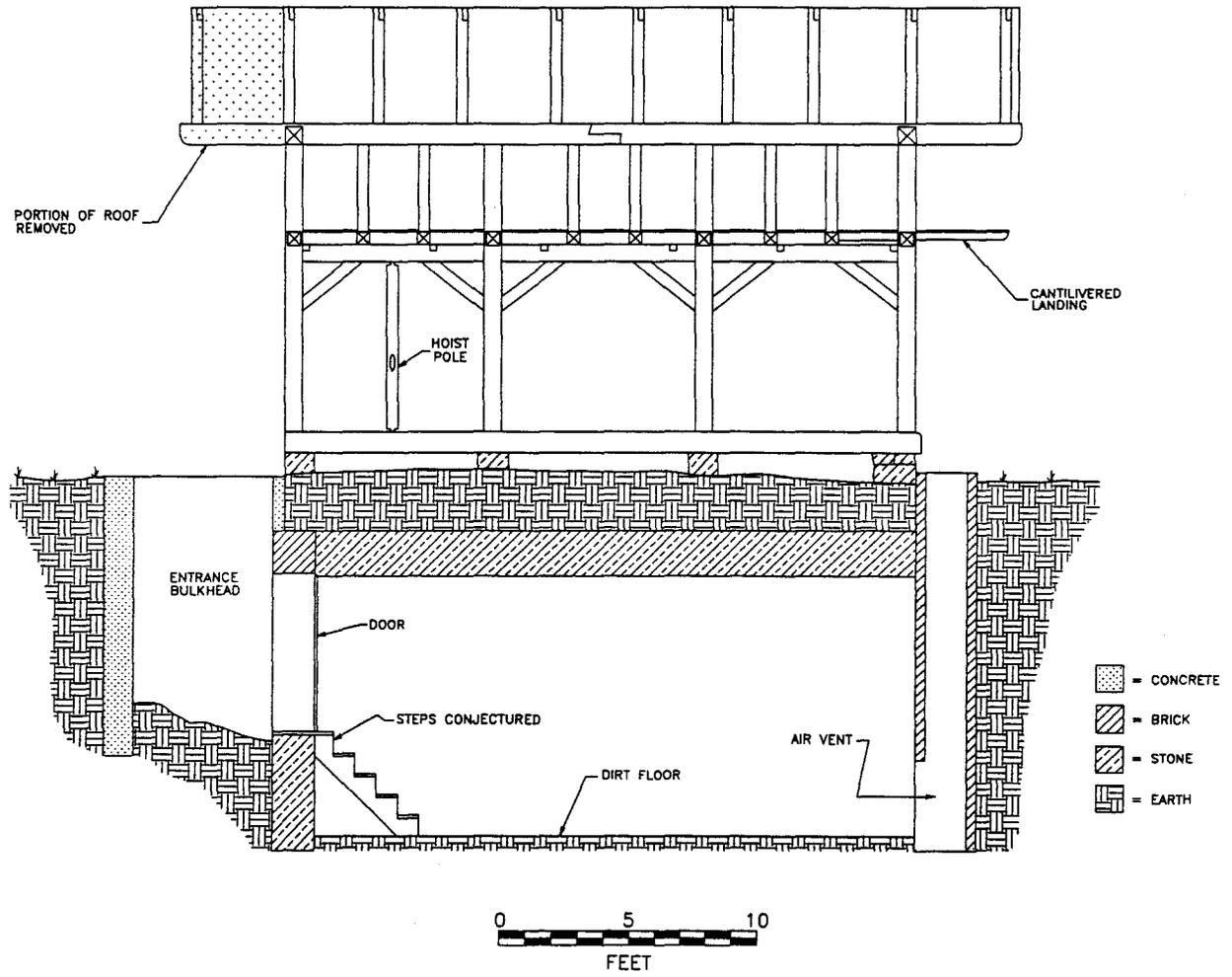


Figure 4. Idealized longitudinal view of the Wine Press Building and associated cellar.

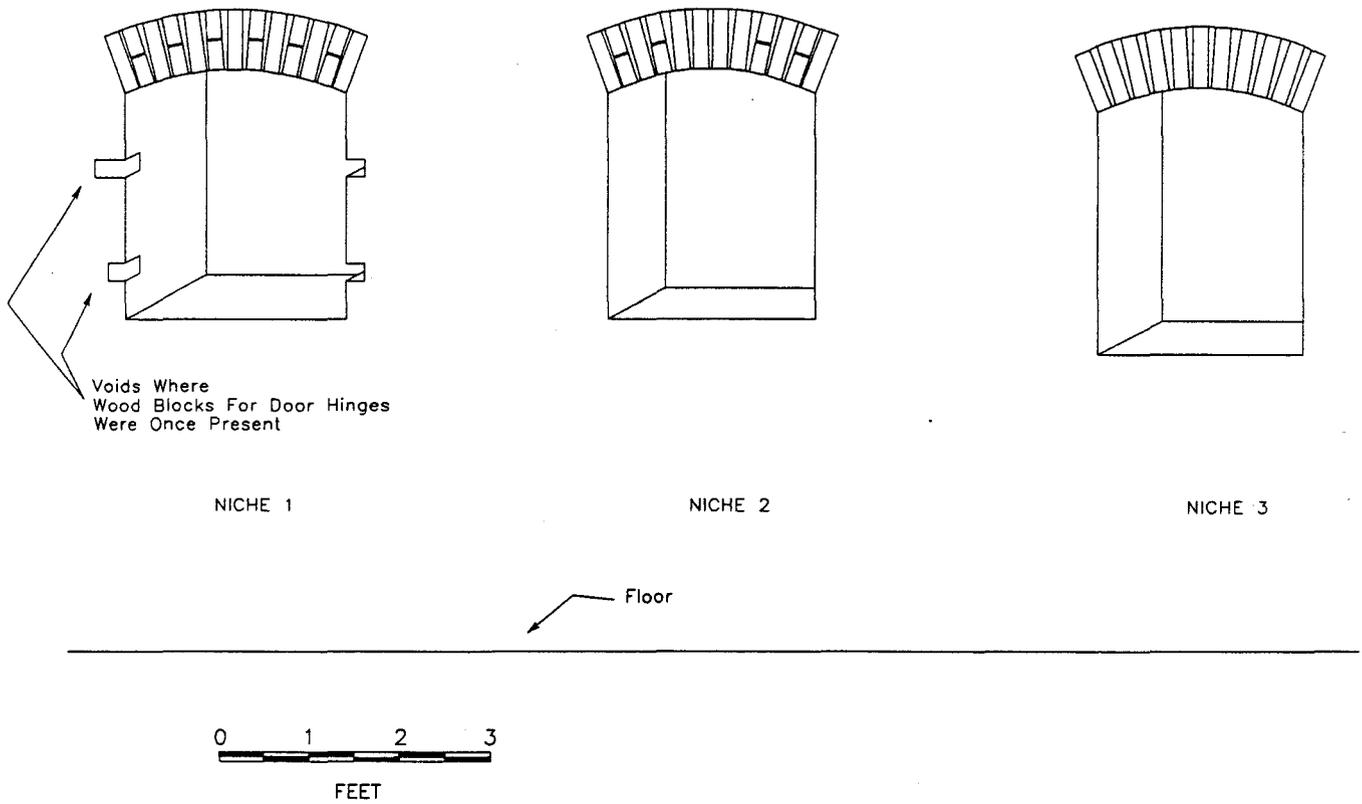


Figure 5. Detail of wall niches within the cellar of the Wine Press Building.