

HERSHBERGER FARM, BARN  
.4 mile east of Business Route 220,  
.35 mile southeast of Cessna  
Cessna Vicinity  
Bedford County  
Pennsylvania

HABS No. PA-5392-B

HABS  
PA  
5-CESS.V,  
IB-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY  
National Park Service  
Northeast Region  
Philadelphia Support Office  
U.S. Custom House  
200 Chestnut Street  
Philadelphia, PA 19106

HISTORIC AMERICAN BUILDINGS SURVEY

HERSHBERGER FARM, BARN

HABS No. PA-5392-B

HABS  
PA  
5-CESNA  
IB-

Location: .4 mile east of Business Route 220, .35 mile southeast of Cessna, Cessna vicinity, Bedford County, Pennsylvania

USGS Bedford, Pennsylvania Quadrangle  
Universal Transverse Mercator Coordinates:  
17.4440400.711480

Present Owner: Bedford County Air Industrial Park Authority  
203 South Juliana Street  
Bedford, Pennsylvania 15222

Present Occupant: Not applicable

Significance: Built at an unknown date in the 19th century, this barn is framed by an unusual hybrid combination of two typical structural systems--the queen-post and the roof-stool. It offers a valuable opportunity to document vernacular barn construction methods employed by the 19th century owners of this farm.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: The date of the Hershberger barn is not known. Barns of this type were common locally from the late 18th to the mid-20th century. However, the structure is shown in a photograph dating to ca. 1900-1910, indicating that it was built between 1821 and about 1900.
2. Architect: Unknown.
3. Original and subsequent owners: The chain-of-title for the land on which the barn stands is the same as that for the Hershberger Farmhouse, HABS No. PA-5392-A.
4. Builder, contractor, suppliers: Unknown.
5. Original plans and construction: The understory of the barn presently is a large open space, with its original arrangement unknown. It originally featured a forebay on the north side. The main floor is divided into four equal bays, each 20' wide; the two end bays feature hay mows, and the two central bays are used to store farm machinery. There is no indication that the original arrangement of the main story has been altered.
6. Alterations and additions: The only known major alteration of the barn was the enclosure of the forebay by Fred Claycomb after he acquired the property in 1979. A concrete block wall was built along the north side of the understory, completely enclosing the forebay.

B. Historical Context:

The history of the farmstead and its relationship to the surrounding area was discussed in the overview report, HABS No. PA-5392.

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The barn on the Hershberger farmstead is a Pennsylvania bank barn with the heavy timber framing found in such structures. Regionally, barns of this construction were common from the late 18th to the mid-20th century.
2. Condition of fabric: The exterior fabric of the barn is seriously deteriorated, but the timber frame remains in excellent condition. The stability of the structure is threatened by the cracking and shifting of the stone foundation under the southeast corner and by

the collapse of a concrete block wall underpinning the north side.

B. Description of Exterior:

1. Overall dimensions: The barn is 80' wide by 50' deep.
2. Foundations: The structure has a foundation of coursed, natural limestone blocks running the length of the west side and extending approximately 5' under the west and east ends. The end foundation walls then step down to little more than footers, supporting the heavy framing of the first story along the remainder of the end walls and under the forebay. A later concrete block foundation wall was built under the north wall, enclosing the forebay.
3. Walls: The walls of the barn are rough-cut boards applied vertically with narrow spaces between them. Battens cover the spaces between the boards on the east end.
4. Structural system, framing: The barn is framed by an odd hybrid combination of two typical structural systems--the queen-post and the roof-stool. In the queen-post system, the principal posts extend in a single piece from the floor to roughly the mid-point of the roof slope, supporting a full-length purlin across which the rafters are laid. In the roof-stool system, the posts rise only to the height of the square, and heavy braced diagonals (the roof-stools) placed atop the tie beams which lie across the posts, support the purlin under the rafters. The hybrid system in this barn has two purlins under each roof slope, one atop the queen-posts and one on roof-stools which sit on the tie beams between the queen-posts. An attached sketch diagram illustrates the Hershberger barn framing system, also shown in Photograph #PA-5392-B-3.

While this framing method might seem designed to provide the roof with extra support, the barn displays another structural oddity that suggests that its builder may have lacked a thorough understanding of standard framing systems. The barn lacks the framing necessary to enable the bent (the basic unit of timber-frame barn construction) to fulfill its second function, in addition to supporting the upper part of the roof: that is to brace the sides of the barn against wind (and possible racking of the frame) and to support on the outer posts a plate capable of bearing the weight of the roof. This barn displays minimal connection between its interior frame and its outer skin, having only 6" posts under the rafter plate which are tied to the queen-posts by unbraced 4" x 4"s; some of these tie beams have even been removed.

The principal timbers used in this structure are hewn 10" x 10" white oak queen-posts, with tie beams and a shorter center posts of the same dimensions and diagonal 4" x 4" bracing. The log joists supporting the barn floor are hewn top and bottom, creating a roughly 12" bearing surface, and are laid across the two 12" squared summer

beams (see Photograph #PA-5392-B-4). Many of these log joists have V-notched ends, indicating that they were used previously in the walls of a log house. The possibility that this frame barn replaced a previous log barn, whose crib walls were reused in this way, was considered. It is possible, but seems unlikely because barn crib logs are almost never so carefully V-notched.

5. Porches, stoops, balconies, bulkheads: Not applicable.

6. Chimneys: Not applicable.

7. Openings:

a. Doorways and doors: The sliding doors which give access to the barn's two central bays are relatively new. The entry doors under the forebay were removed to create a larger area for cattle in the understory of the barn.

b. Windows: Four louvered openings are symmetrically placed in each end of the barn, and one in each gable.

8. Roof: The barn's gable roof is covered with rusted corrugated metal roofing, applied in three tiers of standard-length sheets.

C. Description of Interior:

1. Floor plans: The first floor or understory of this barn is a single open space, even its forebay wall having been removed. Its original arrangement into entries and stalls is unknown.

The main barn floor, accessible from the barn bridge on the uphill side of the structure, is divided into four equal bays, approximately 20' wide: the two end bays are mows for storage of hay and straw; the two central bays are solidly floored to allow heavy equipment to be driven into the barn. A 5-bin granary occupies the southeast corner of this level. It is as high as the square, covered with approximately 8" tongue-and-groove planking, applied horizontally, and has a board-and-batten door leading into a narrow alley along the south wall. Bins are divided by horizontal 4" tongue-and-groove boards; the front of each bin has a groove into which similar boards can be dropped to hold the contents of each bin as it is filled or emptied. A sketch plan of the barn's main floor is attached.

2. Stairways: Interior stairs have been removed.

3. Flooring: The floor of the understory is either dirt or concrete (covered with bedding material and manure). The main floor has solid 2" oak planking in the two central bays, and thinner board flooring laid with spaces for air circulation in the mows.

4. Wall and ceiling finish: Not applicable.
5. Openings: Not applicable.
6. Decorative features and trim: Not applicable.
7. Hardware: Not applicable.
8. Mechanical Equipment: Not applicable.
9. Original furnishings: Not applicable.

D. Site:

1. General setting and orientation: The Hershberger barn is located near the crest of the same hill on which the house is placed. The slope allows for the access on two levels which gives the bank barn its name and characteristic layout. The lane linking the farm with Cessna and Route 220 passes just south of the barn.
2. Historic landscape design: Not applicable.
3. Outbuildings: The only outbuilding in the immediate vicinity of the barn is the double corn crib and wagon shed (HABS No. PA-5392-D) that stands on the south side of the lane. It is described separately.

PART III. SOURCES OF INFORMATION

A. Architectural drawings:

No architectural drawings of the barn are known to exist.

B. Historic Views:

A thorough search produced one historic photograph of the Hershberger Barn. It is contemporary with the circa 1900-1910 photograph of the farmhouse, and also appeared in the Bedford Gazette with no source given. The project photographer did not believe that it could be photographically reproduced with satisfactory results. The photo was taken from the same position as Photograph PA-5392-B-1, and is a view of a group of farm workers bringing a wagon load of hay in from the field. The appearance of the barn was identical to its present appearance.

C. Interviews:

Same sources as listed in the section on the Hershberger House, HABS No. PA-5392-A.

D. Bibliography:

None specific to this structure.

E. Likely sources not yet investigated:

None known.

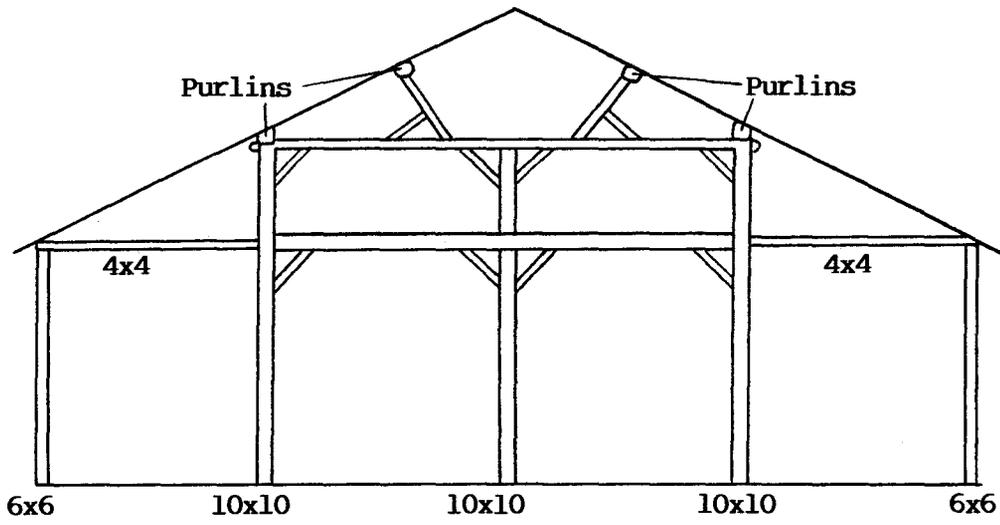
F. Supplemental material:

None.

PART IV. PROJECT INFORMATION

Same as discussed in the report on the Hershberger Farmhouse, HABS No. PA-5392-A.

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Date: May 1, 1990

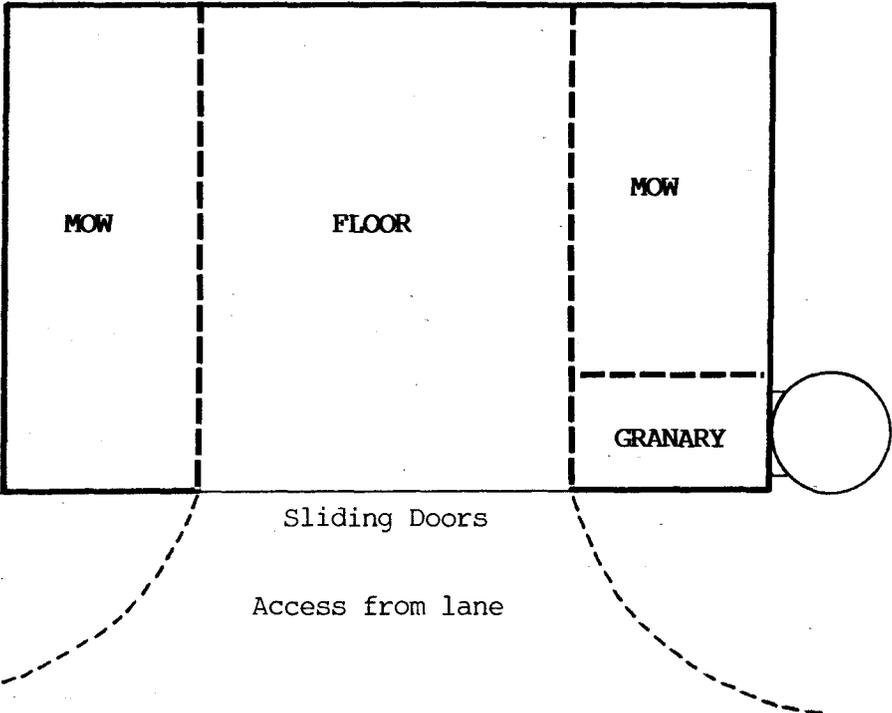


Diagonal braces all 4"x 4"

**HERSHBERGER BARN  
FRAMING SYSTEM**



**MAIN STORY**



**HERSHBERGER BARN**

**FLOOR PLANS**