EXISTING INTERIOR APPEARANCE

Keeper's Dwelling

General Information

Many of the elements inside the Keeper's Dwelling have been replaced. Most baseboard moldings, doorway and window surrounds, and doors were replaced circa 1992 with standard stock molding. Features that were not replaced, or which are atypical, are highlighted in the description of each room. Where features are typical, they will be noted as such. Typical descriptions follow:

Common Features

Floors. Wall-to-wall beige-colored pile carpeting has been laid in all rooms except the kitchen, bathrooms, and northeast vestibule.

Walls. Interior walls (fig. 67) are covered with plasterboard and painted an off-white color.

Ceilings. Ceilings are covered with plasterboard and painted white (fig. 67).

Doors and Doorways. Doorways and doors are consistently typical throughout the first and second stories except where noted (fig. 68). Doorways range in width from 2 feet 6 inches to 2 feet 10 inches. Surrounds are of standard stock molding 2 1/2 inches wide; doors are wood with six recessed panels. Both are darkly stained on the first story and painted off-white on the second story. Hinges are brass and three-knuckled. The knob is brass, containing a locking mechanism.

Window Openings. Windows are consistently typical throughout the first and second stories except where noted. Window openings range in width from 2 feet 8 inches to 2 feet 10 inches. They are trimmed with standard stock molding 2 1/2 inches wide. The molding is either darkly stained (first story) or painted off-white (second story). The openings contain double-hung, one-over-one wood sashes with a center sash lock at the meeting rail and a single recessed pull in the lower sash.

Electrical Fixtures. Switch plates and outlet covers are made of off-white plastic that matches the wall color. Lighting fixtures differ from room to room except with respect to their location, which is generally at the center of the ceiling.

Heating Elements. Forced hot-water baseboard heating elements with metal white-painted covers (fig. 69) are identical throughout the house. This system was installed in 1957.

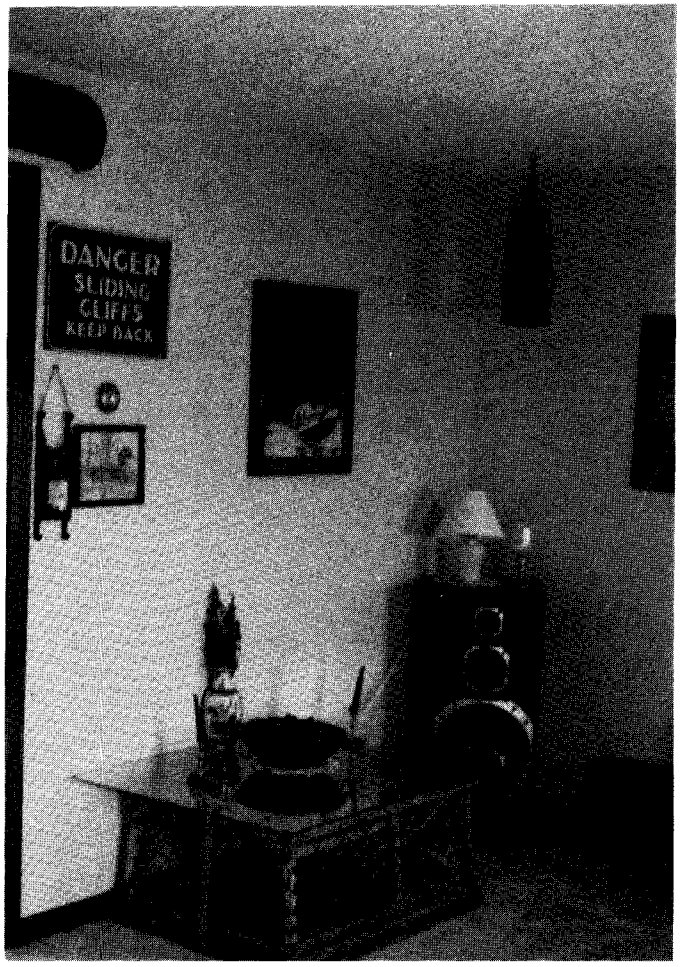

Figure 67. Room 105, showing typical walls, ceiling, and floor.

Figure 68. Room 103, typical doorway and door.

Figure 69. Room 102, typical baseboard heating unit.

Basement

Room B01

A full basement exists in the Keeper's Dwelling. It measures 21 feet 6 1/4 inches by 23 feet 8 1/4 inches. The area under the stair at the north wall is enclosed with screening for storage space. A brick cistern is adjacent to the screened space in the northeast corner. The brick size used in the cistern area is larger than either the bricks used for basement flooring or the bricks used for the foundation walls. In the cistern, the size of the bricks on the east wall is 7 3/4 inches by 4 inches; on the north wall it is 7 inches by 4 inches. A 5-foot-high brick wall forms the perimeter of the cistern on its south and west sides. Here the brick size is 8 1/4 inches by 2 1/2 inches. This south wall has had an opening cut through it. Because the bricks are broken off at their ends, the opening was created after the wall was built and the cistern was no longer used (fig. 70). A brick step, four courses high, was created leading into the cistern when the wall section was removed.

Wooden steps painted gray lead from the basement of the Keeper's Dwelling to the first story along the north wall near the west corner. There are nine treads and eight risers. Treads measure 8 1/2 inches, risers measure 10 inches.

Wire-mesh screen with gray-painted wood frame and supports was used to construct an enclosure with shelves underneath the stairs. A door into the storage area beneath the stairs at the northwest corner of the room is made of wire mesh framed with wood. It is painted gray.

A brick chimney is located at the center of the house. It is painted white and vents the oil-fired burner. At the chimney base is a small iron door used for ash removal.

Floor. The basement floor is red-painted concrete. The concrete was poured over brick, which is exposed at the south wall near the east corner (fig. 71). In several places, level concrete pads have been poured that raise the floor level at their respective locations between 1 and 4 inches. These were probably for mounting station generators or emergency power generators, since it was typical in lighthouses to mount all generators on concrete pads.[1] A drain hole with a square metal cover is located near the center of the floor.

Walls. The walls are brick. The brick is painted white. Several patches exist along the east and south walls. Patches are evident because they are filled with larger-sized bricks.

Ceiling. Exposed wood subflooring and exposed joists compose the ceiling. These are painted white. Metal and PVC piping runs in both directions between and under joists for hot-water heating and domestic plumbing.

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[1]Entry in transmittal letter of HSR draft comments, Lieutenant-Commander D.R. May to Myra F. Harrison, June 20, 1994.

Doorways and Doors. A doorway leading into the bulkhead is located to the north of center of the south wall (fig. 72). It is fitted into the foundation wall, off the floor 11 1/2 inches. The door is composed of vertical beaded boards that are approximately 6 inches wide. Paint ghosts are visible where old strap hinges had been located. A black, rounded metal handle with latch is located in the center of the door. Two new unpainted metal hinges now secure the door. Battens form the pattern of a backwards Z on the door, with an additional half-batten near the mid-section. The door is painted gray.

Window Openings. There are two window openings containing wood window sashes on the west wall. The sashes each have three lights. The north opening is blocked with plywood. A third window is in the east wall. It, too, contains a three-light sash and had been blocked with plywood.

Electrical Fixtures. Five single-bulb, white porcelain fixtures with pull strings are attached to joists, to provide overhead light in the basement.

Heating and Plumbing Elements. There is an oil tank, a hot-water heater, and an oil-fired boiler in the basement. A large industrial basin sits at the northeast corner of the room adjacent to the cistern wall.

Other. Red-painted concrete steps with seven risers exit the building through the metal double bulkhead doors that swing outward. The side walls are of brick painted red. The opening for the bulkhead is 2 feet 11 3/4 inches wide by 5 feet 7 inches deep in plan.

Figure 70. Room B01, cistern area at northeast corner.

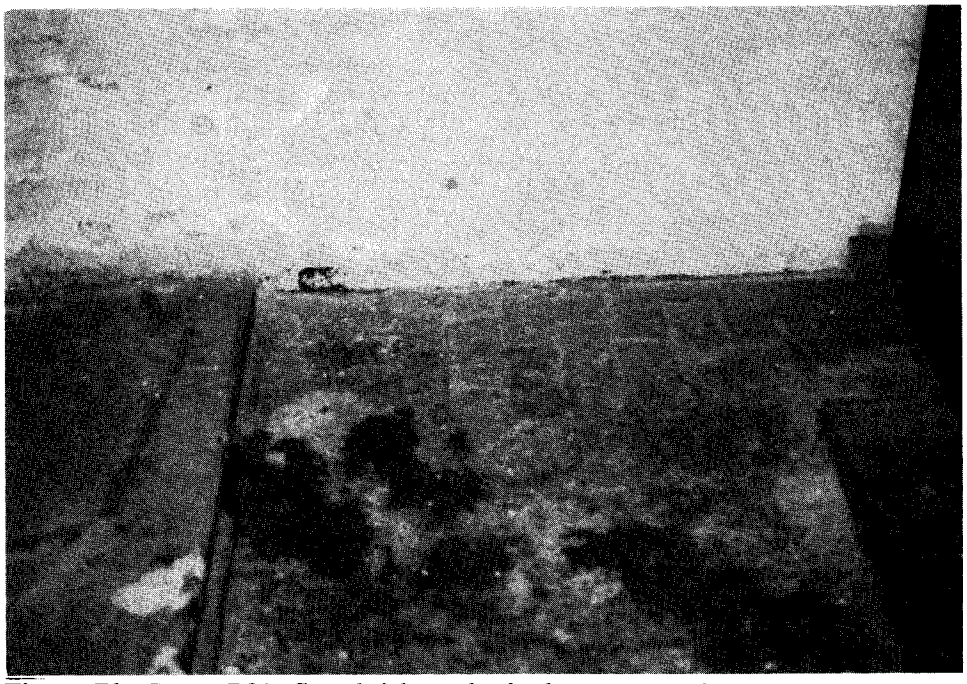

Figure 71. Room B01: floor bricks and raised concrete pads.

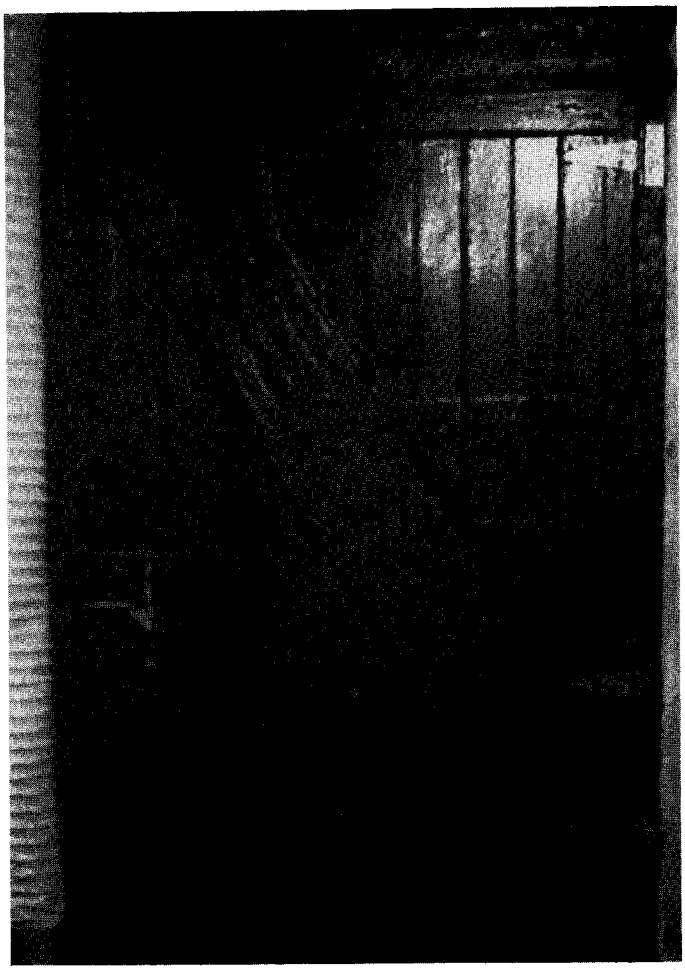

Figure 72. Room B01, doorway to bulkhead on south wall.

First Story

Room 101 - Northeast Vestibule

The room is located off the northeast corner of the kitchen. It extends further north and east than any other enclosed part of the building. The room dimensions are 7 feet by 6 feet 8 inches.

Floor. The floor is covered with broken vinyl tile, painted green.

Walls. These are typical. There is a plain 3-inch baseboard around the walls, which are painted off-white.

Doorways and Doors. Three typical off-white-painted doorways are located in this room. Two are on the south wall, one leading out to the concrete stairs on the exterior and one into the kitchen. Access to the outside porch is gained through a typical doorway on the west wall. Molding around the doorways is typical.

Window Openings. None.

Electrical Fixtures. There is a single-bulb white porcelain fixture on the ceiling at the center of the room.

Heating Elements. None.

Room 102 - Kitchen

The kitchen is located in the ell. Its dimensions are 15 feet by 12 feet 2 1/2 inches. It was completely renovated circa 1992.

Floor. The floor is covered with one-foot-square vinyl composition tiles (VCT). The pattern consists of a beige background with dark brown, gray, and black flecks.

Walls. Typical, except they have a wooden chair rail. The chair rail is 2 3/4 inches high with a cap, and is darkly stained. Standard kitchen cabinets, a sink, and a stove line the east wall.

Ceiling. A single encased beam runs east to west near the doorway to the southeast room (fig. 73). It is darkly stained and does not appear to be original. The ceiling is otherwise typical.

Doorways and Doors. A typical doorway to the southeast room (Room 103) is located on the south wall. A double louvered door to a closet (fig. 74) is located at the northwest corner of the room. It is 2 feet wide with plain wood below louvers. The trim is typical. A door in the northeast corner of the room leads to the north vestibule (Room 101). The doorway and door are typical.

Window Openings. There are two windows in the west wall and one in the east wall. They are typical.

Electrical Fixtures. There is a double-switch plate near the northeast corner on the east wall. There is also a single switch plate on the south wall. The kitchen has an overhead fixture. It is a glass half-globe with a single bulb.

Heating Elements. A typical element exists on the west wall.

Other. The pantry closet (Room 102a), behind the louvered doors in the northwest corner of the kitchen, has all typical fabric. There is no baseboard or chair rail. Unpainted wood shelves are attached to the east wall.

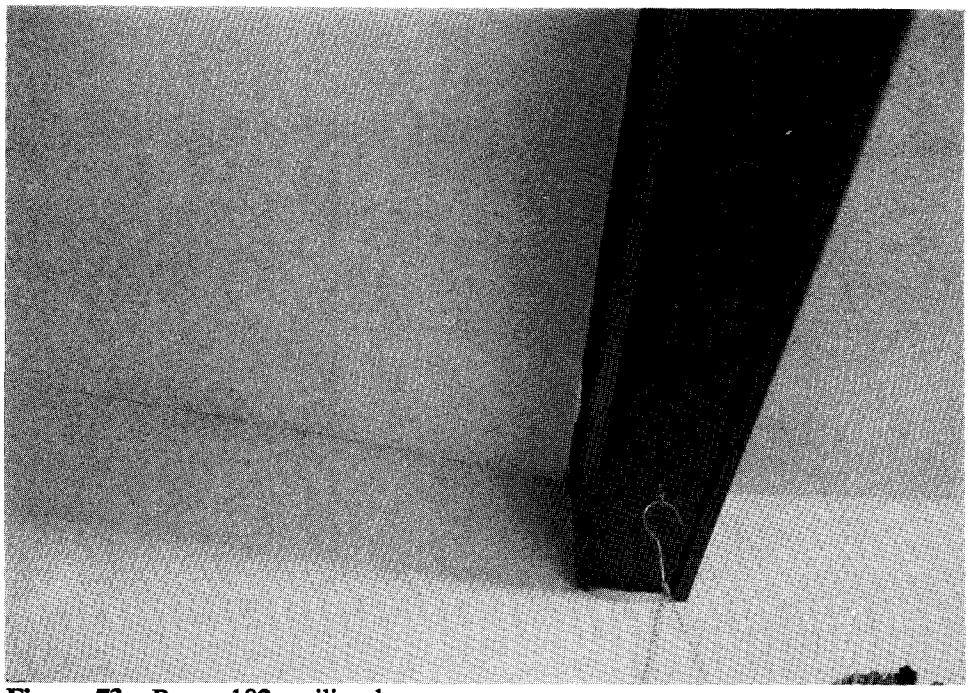

Figure 73. Room 102, ceiling beam.

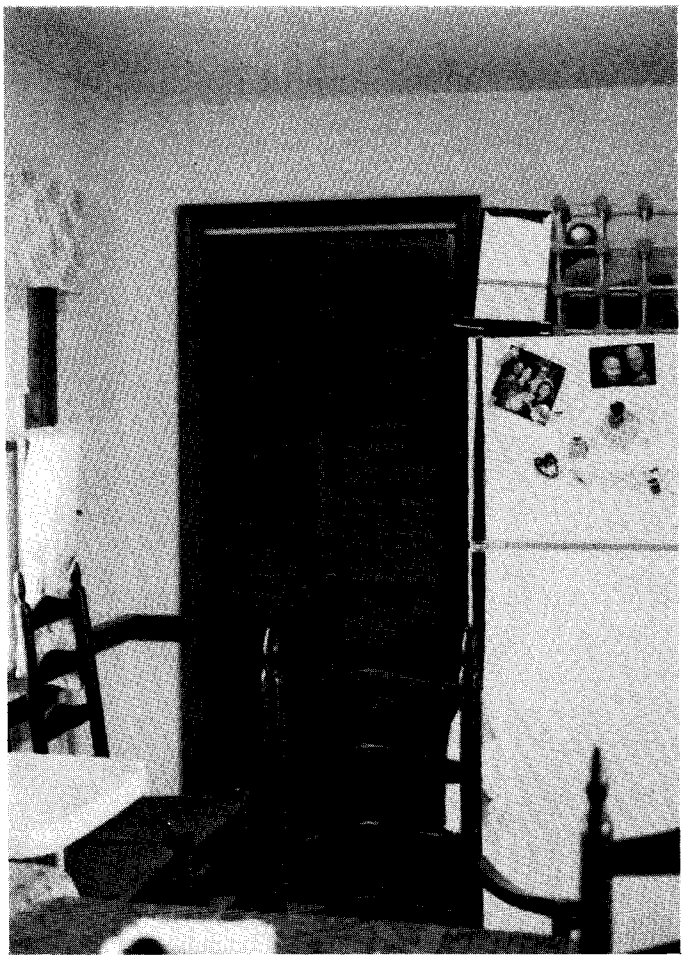

Figure 74. Room 102, louvered doors to pantry closet (Room 102a).

Room 103 - Southeast Room

Room 103 has been stripped of most of its earlier fabric. The dimensions of the room are 12 by 20 feet.

Floor, Walls, and Ceiling. These are all typical.

Doorways and Doors. The southeast room is joined to the southwest room (Room 105) by a doorway in the west wall. The doorway is trimmed typically. A doorway on the north wall provides access to the Kitchen (Room 102). This doorway is also trimmed typically. A doorway to the stair hall (Room 104) is located at the north end of the west wall; it has a typical door. Finally, there is a doorway from this room into the Connector at the Keeper's Dwelling. The doorway is only 2 feet wide, but its trim and door are typical.

Window Openings. Three typical window openings exist in the east wall.

Electrical Fixtures. There is an overhead glass globe with single bulb in the center of the ceiling. Wall switches are located on the south, west, and north walls. These are typical.

Heating Elements. There is a thermostatic control dial on the west wall. A baseboard heating element is located on the east wall.

Room 104 - Stair Hall

The stair hall contains some circa-1900 fabric, including the stair stringer, trim, and baseboards. The room dimensions are 6 feet 3 inches by 9 feet 4 inches. The door to the basement is located in the northwest corner of the room. The stairway is U-shaped with winders. It consists of 12 risers approximately 9 inches high and 11 treads that vary between 10 and 10 1/2 inches deep.

Floor. This is typical.

Walls. The walls are typical. A plain baseboard painted an off-white color exists along the west wall between the basement doorway and the stairway. Paint ghosts (fig. 75) on the top section of baseboard suggest that this fabric was not replaced during the renovation, but that a molded cap was removed. The stringers on either side of the stairway are also plain. They are the same height as the baseboard on the west wall, and also have paint ghosts. Two plain round handrails are attached with brackets to 3-inch boards. These boards are located on the outer wall of the stairway.

Ceiling. This is typical.

Doorways and Doors. There is a doorway on the west wall of the stair hall leading to the basement. The doorway surround may date to circa 1900 (fig. 76). Its south side is 5 3/8 inches wide, while its north side is 4 1/4 inches wide. The door is typical and painted off-white.

Window Openings. None.

Electrical Fixtures. There is a triple light switch on the north wall. It is made of off-white plastic. On the ceiling there is a single bulb fixture and a fire alarm/smoke detector.

Heating Elements. None.

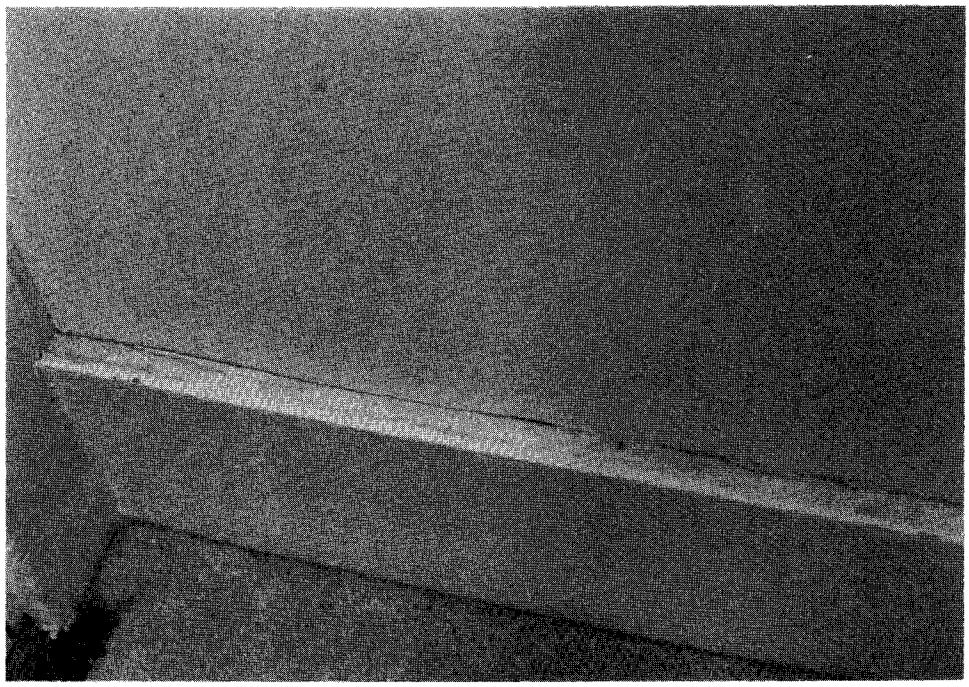

Figure 75. Room 104, baseboard with paint ghost.

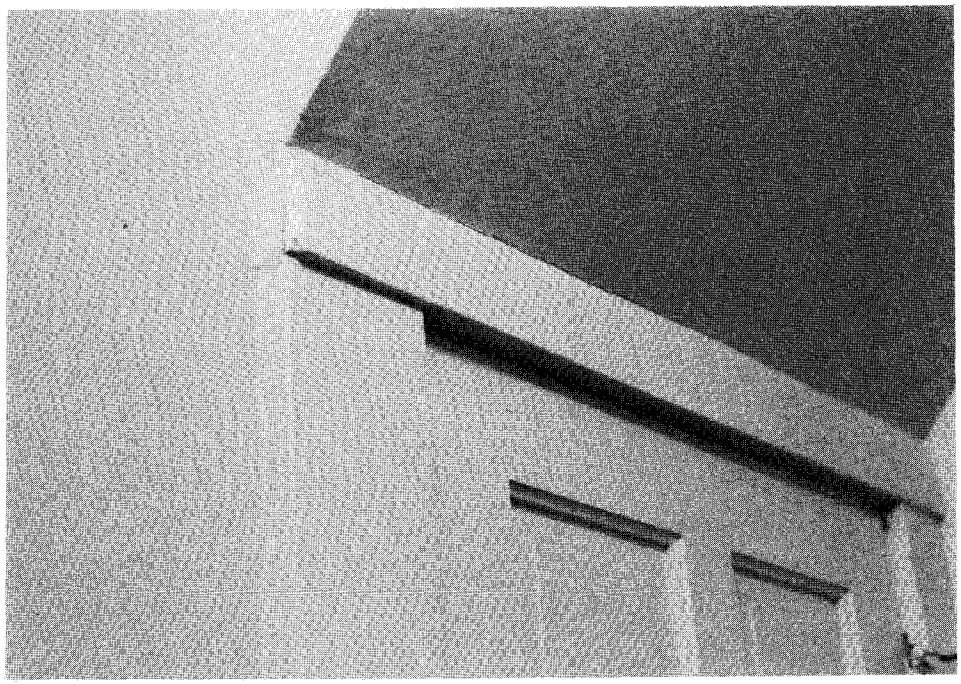

Figure 76. Room 104, trim of doorway to basement.

Room 105 - Southwest Room

The main, west entrance of the Keeper's Dwelling leads into a room that measures 16 feet 3/4 inches by 11 feet 10 3/4 inches. All of the fabric in this room except the exterior door has been replaced.

Floor. This is typical.

Walls. These are typical. A wall jog in the northeast corner extends one foot into the room. (See appendix A.)

Ceiling. This is typical.

Doorways and Doors. There are three doorways in the southwest room, all of which have typical surrounds. The main doorway to the outside is at the south end of the west wall (fig. 77). The wooden door here contains four lights above three recessed horizontal panels. A white vinyl shade covers the glazed portion of the door. A curtain rod with valence hangs above the shade. The hinges are three-knuckled and unpainted. The brass knob is locking and unpainted. The door is painted off-white.

A second doorway is at the west end of the north wall. It leads to a bathroom and is typical. A third doorway, to Room 103 (the southeast room), is located on the east wall. The opening is 2 feet 9 1/2 inches wide but does not contain a door.

Window Openings. Two window openings exist in the southwest room. One is located on the south wall; the other is located on the west wall. They are both typical.

Electrical Fixtures. There is a single-switch wall plate south of the west doorway, and a double-switch wall plate east of the north door.

Heating Elements. Typical baseboard heating fixtures are located on the south and west walls. A thermostat is located south of the doorway on the east wall.

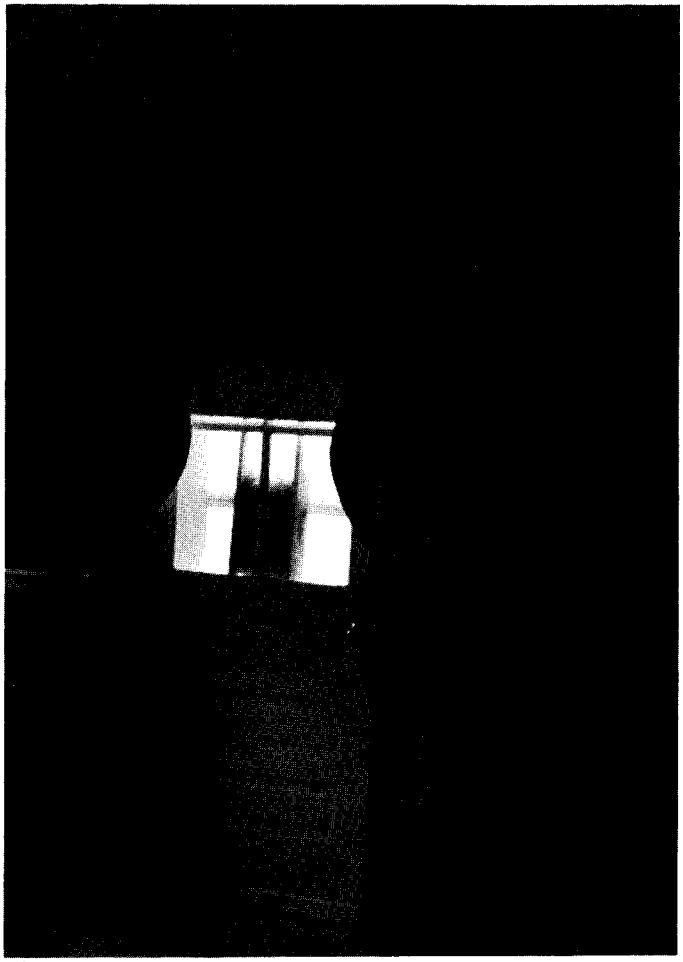

Figure 77. Room 105, doorway to exterior.

Room 106 - Bathroom

A half bath is located in the northwest corner of the main house, off Room 105 (the southwest room). Its dimensions are 6 feet 3 inches by 7 feet 6 inches. The toilet is in the northeast corner, and the shallow-bowl porcelain sink is adjacent to it on the east wall. The floor is covered with of one-inch-square ceramic tiles with white grout. The walls and ceiling are covered with plasterboard. There is a baseboard molding 4 3/4 inches high and a chair rail 4 1/4 inches high. All moldings and walls are painted off-white; the ceiling is painted white. There is a single-tube fluorescent light fixture over the sink.

Second Story

Room 201 - Stair Hall

The stair hall discussed in the first-story section continues to the second story. The overall dimensions of the room are approximately 6 feet by 9 feet. The floor-to-floor height is 8 feet 10 1/2 inches.

At the top of the stairway is a small landing area with a wooden handrail and square balusters along the south and west edges. A plain bead trims the lower end of the landing's fascia board (fig. 78). There are three newel posts: one at either end of the balustrade, and one at the corner. The assemblage is stained dark; it is a recent addition. An extension of the stair hall (Room 201B) leads from an east doorway to the second-story bathroom and southeast chamber.

Floor. This is typical.

Walls. These are typical, with plain baseboards 3 inches high painted an off-white color on each wall (fig. 79). The baseboards were not replaced during the 1992 renovation; they may date from the 1900 renovation.

Doorways and Doors. All doors are typical and painted white. Door heights vary. The doorway to the southwest chamber (Room 205) is located on the south wall. The doorway to the Ell Chamber (Room 202) is angled at the south end of the east wall. The hall extension (Room 201B) leads from doorway at the north end of the east wall to the bathroom and southeast chamber. The moldings around the doors are plain boards of widths varying between 3 and 4 inches. At the top of the doors to Rooms 203 and 202, an additional board has been layered over the trim (fig. 80). The purpose for this is unknown. The door trim around the doorway to Room 204 seems to have been fitted over existing trim (fig. 79). All moldings and trim are painted off-white.

Window Openings. There is one typical window opening on the north wall. The surround is plain and painted off-white.

Electrical Fixtures. A single bare bulb hangs from the ceiling above the stair.

Heating Elements. There are no heating elements in the hallways.

Other. There is a smoke detector located on the ceiling above the stairs.

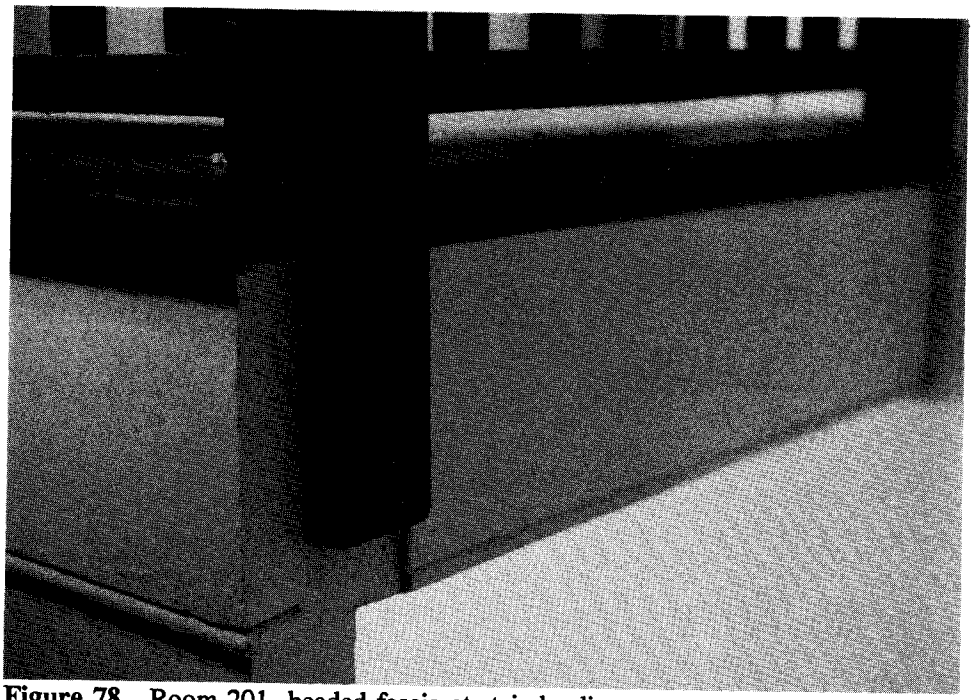

Figure 78. Room 201, beaded fascia at stair landing.

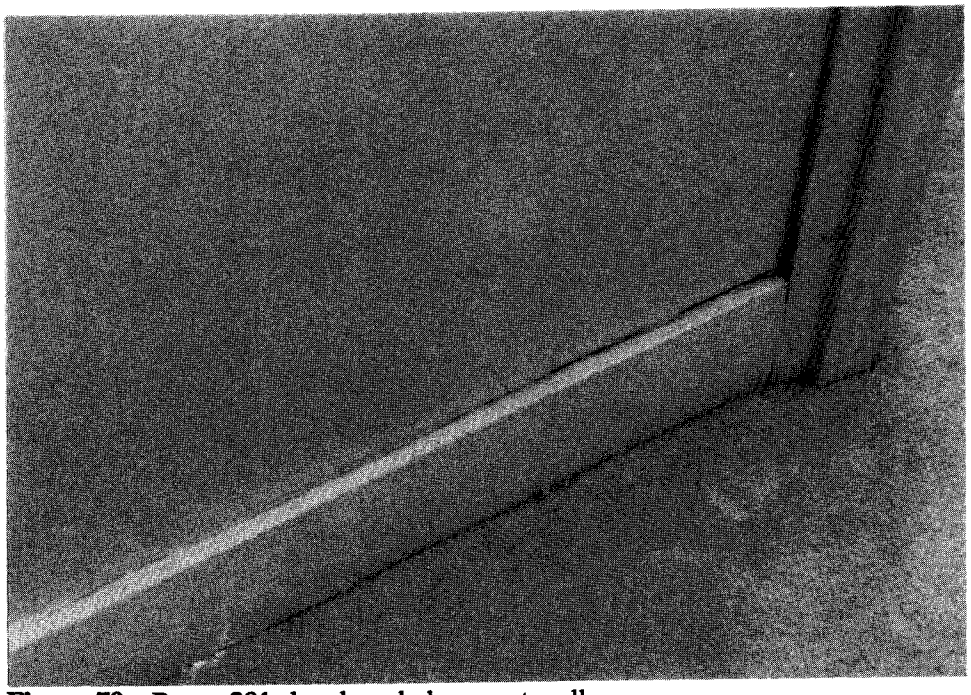

Figure 79. Room 201, baseboard along east wall.

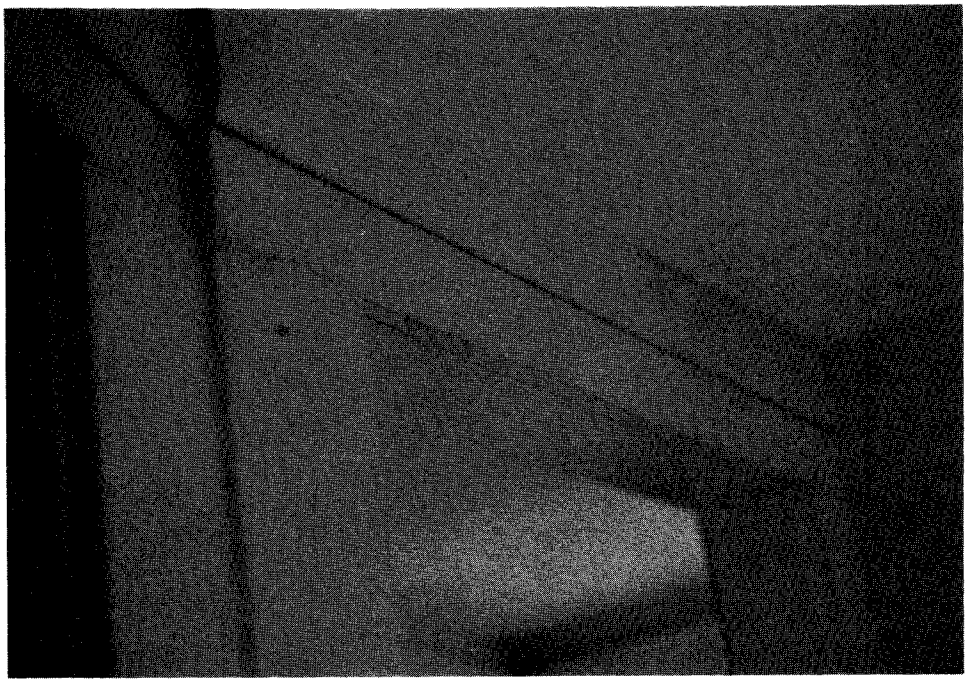

Figure 80. Room 201, layered door trim.

Room 202 - Ell Chamber

The dimensions of this room are 17 feet 9 1/2 inches by 12 feet 4 inches. Nearly all of the ceiling is sloped, reflecting the ell's roof line. There is a crawl space "closet" at the west end of the north wall (Room 202a). The southwest corner of the room has a diagonal wall; the southeast corner has a double jog inward (fig. 81).

Floor. This is typical.

Walls. The east and west walls are knee walls 2 feet 7 1/2 inches high. They are otherwise typical, with a baseboard. The height of the baseboard ranges from 5 1/2 inches at the southeast corner to 7 1/4 inches on the west wall, near the doorway to the room. It consists of a single plain board painted off-white.

Ceiling. The ceiling is typical but painted off-white.

Window Openings. There is one window opening on the west wall and one on the north wall. Both are typical, except the north-wall window opening is smaller than normal: it is only 2 feet 1/2 inches wide.

Doorways and Doors. The doorway into the room is in the diagonal southwest corner of the room; it leads from the stair hall (Room 201). It is typical. On the north wall, a small door to a crawl space is made of plywood that has been painted off white. The door has gold-toned hinges, a rounded handle, and a locking bolt.

Electrical Fixtures. None.

Heating Elements. A typical baseboard heating unit exists along the west wall.

Closet. The flooring of the crawl space is boards that run north-south, and which are painted dark gray. The walls of the crawl space are covered with plaster and wood baseboard. Both are painted off-white.

Figure 81. Room 202, southeast corner.

Room 203 - Bathroom

A bathroom is located between the ell chamber (Room 202) and the southeast chamber (Room 204). It measures 10 feet 11 inches by 8 feet 2 inches. Plumbing for the second-story bathroom was added in 1909. A porcelain bathtub measuring 4 feet 10 1/2 inches by 3 feet 1/2 inches is located along the west half of the north wall. The porcelain toilet is located on the same wall east of the tub. A wall 4 3/4 inches thick separates the bathtub from the toilet and contains an access panel for the plumbing. The white porcelain sink is located at the east end of the south wall.

Floor. The floor is covered with the same vinyl composition tiles used in the kitchen.

Walls. The walls are typical with plain baseboards, all painted off-white.

Ceiling. This is typical.

Doorways and Doors. These are typical.

Window Openings. A typical window opening is located at the center of the east wall. The trim around the window is plain boards. The window and trim are painted off-white.

Electrical Fixtures. A single-bulb fixture is located on the ceiling.

Heating Elements. A typical baseboard unit is located on the east wall.

Room 204 - Southeast Chamber

The dimensions of this room are 13 feet by 10 feet 7 inches. A dormer on the east wall is approximately 4 feet wide. There is a shallow closet (Room 204a) near the center of the west wall.

Floor. Typical.

Walls. The north, west, and east walls are covered with unpainted simulated wood paneling. The south wall is covered with plasterboard, possibly dating from 1950 and painted off-white. There is a plain 6-inch wood baseboard on all the walls. This baseboard is painted off-white. A quarter-round cornice covers the juncture between the walls and ceiling.

Ceiling. The ceiling in the southeast corner of the room is sloped, reflecting the exterior roof line. It is covered with composite-board painted off-white that may date to 1950. The rest of the ceiling is flat; it is covered with plasterboard with battens that run east-west. An additional batten runs north-south near the south wall.

Doorways and Doors. The entrance doorway, at the west end of the north wall, and the west-wall closet doorway are typical. The trim around both doorways (figs. 83 and 84), painted off-white, does not match the trim found typically. It dates to the 1900 renovation.

Window Openings. There is a window just west of center in the south wall, and another in the east dormer. Both windows are typical, with plain trim painted off-white.

Electrical Fixtures. There is a single-switch plate on the west wall. There is a two-bulb fixture with glass and metal cover in the center of the ceiling.

Heating Elements. There is a baseboard heating unit on the south wall.

Closet. The closet on the west wall is 6 feet wide and 1 foot 10 1/2 inches deep. The floorboards inside the closet run north-south. The closet walls are plaster with baseboards, both painted off-white. The closet contains circa-1900 fabric (see app. B.) An opening in the closet ceiling leads to the attic; it measures 1 foot 7 inches by 1 foot 4 inches.

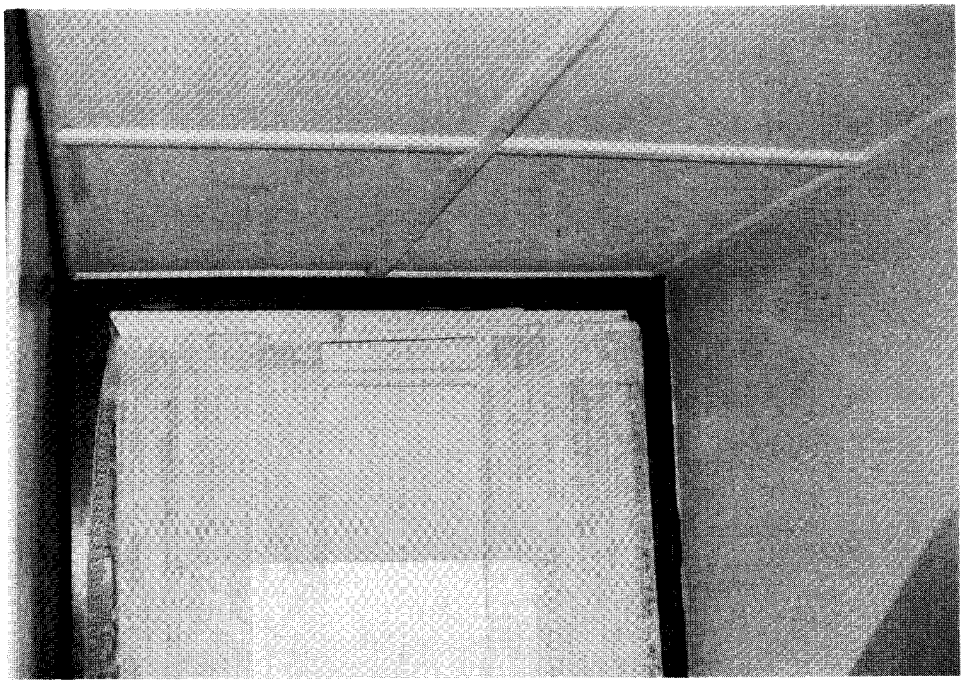

Figure 82. Room 204, ceiling and window of east-wall dormer.

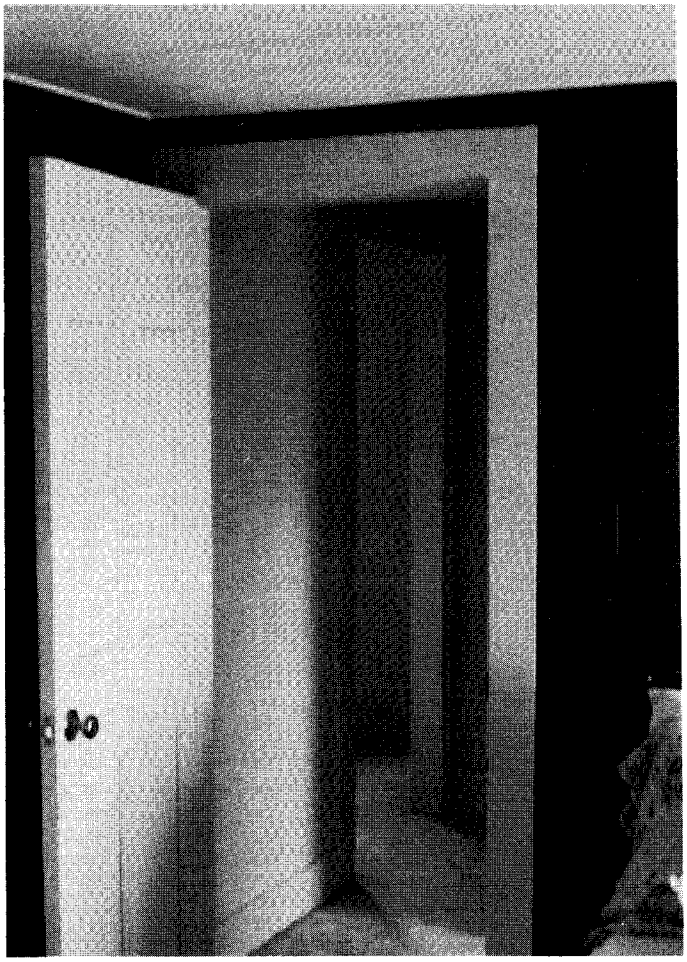

Figure 83. Room 204, trim of north doorway (may date to 1900 renovation).

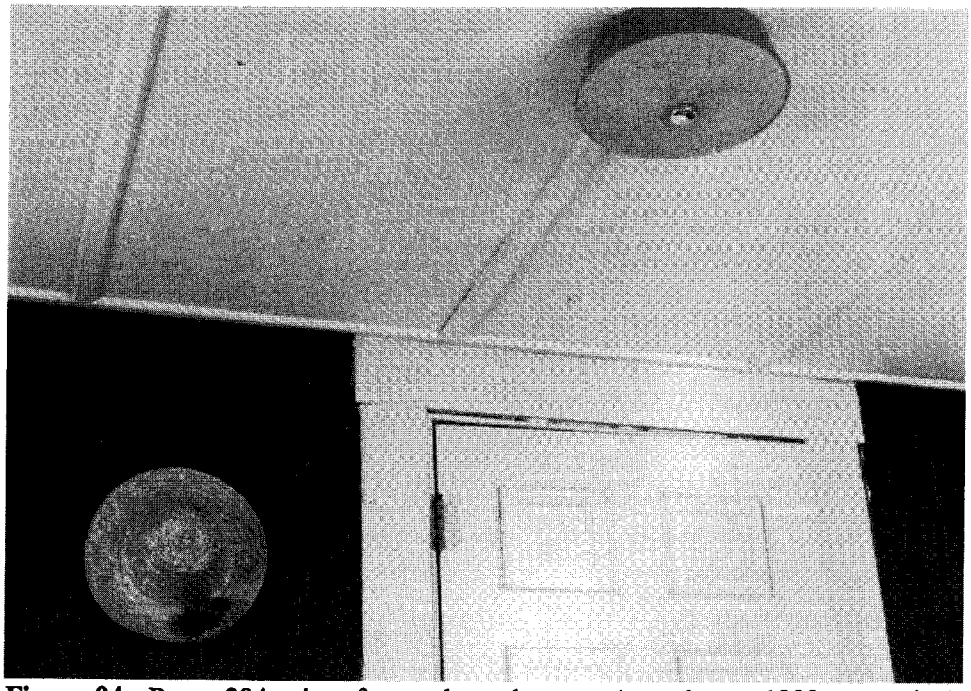

Figure 84. Room 204, trim of west closet doorway (may date to 1900 renovation).

Room 205 - Southwest Chamber

The southwest chamber measures 16 feet by 11 feet 2 inches. A dormer on the west wall is approximately 4 feet wide. A closet (Room 205a) is located at the east wall; a crawl space (Room 205b) is at the west end of the north wall.

Floor. This is typical.

Walls. The walls are covered with simulated wood paneling. The dormer walls are plasterboard covered with wallpaper. Each wall has a plain 6-inch-high baseboard painted white. At the top of the simulated paneling, a black trim bands 2 1/2 inches high meets the 1-inch-high white ceiling trim.

Ceiling. The ceiling is covered with white-painted composite board and wood battens, possibly dating to 1950. The ceiling of the west half of the room is sloped, reflecting the exterior roof line.

Doorways and Doors. The doorway into the room from the stair hall (Room 201a) is at the east end of the north wall. It is a typical doorway with typical door and trim, all painted white. The closet door (fig. 85), located at the south end of the east wall, is a four-panel door with plain gold-toned rounded handle and latch lock. The hinges are five-knuckled. The door is painted white. The interior side of the door has raised panels (fig. 86). The trim around the door is made of plain wooden boards painted white. The door to the crawl space, at the west end of the north wall, is not full height, and only 1 foot 10 1/2 inches wide. It is composed of vertical beaded boards 6 inches wide. The door is painted white and has a gold-toned, rounded handle. The trim around the door is made of plain boards also painted white.

Window Openings. There is a window near the east end of the south wall, and another in the west dormer. Both windows and their trim are typical, painted off-white.

Electrical Fixtures. There is a single-bulb fixture in the center of the ceiling.

Heating Elements. A typical unit is located on the west wall.

Closets. The dimensions of the closet are 5 feet wide by 1 foot 11 inches deep. The building fabric inside the closet dates to circa 1900 (see app. B). The crawl space is 3 feet 4 inches wide and 6 feet 3 inches deep. The floorboards of both the closet and the crawl space run north-south and are painted dark gray. The walls of both are plastered and painted off-white. All walls have plain baseboards, also painted off-white. A vent pipe extends through the northeast corner of the crawl space.

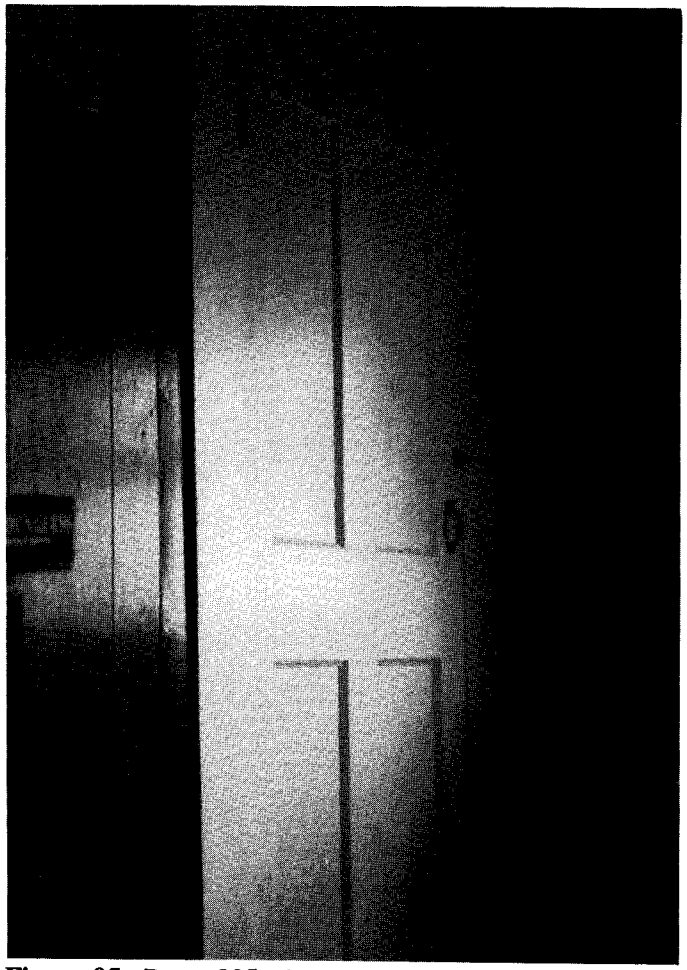

Figure 85. Room 205, closet doorway at southeast corner.

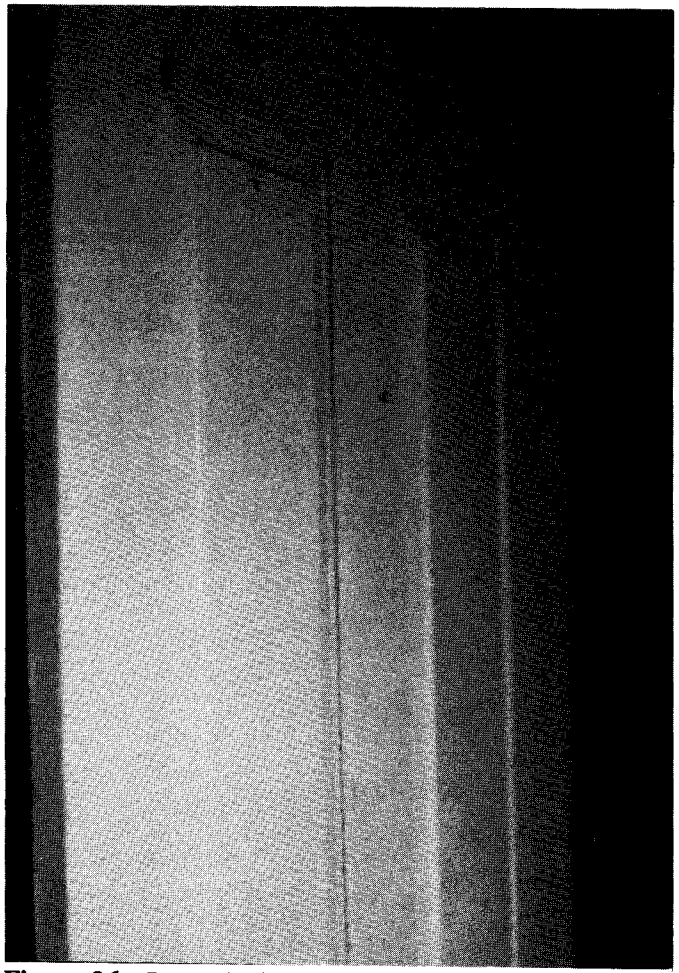

Figure 86. Room 205, interior side of closet door.

Attic

Room 301

The only access to the attic is through the ceiling of the closet of the southeast chamber (Room 204a - see app. A). The floor framing is composed of joists 2 inches by 6 1/2 inches, approximately 2 feet on center. The rafters are 3 inches by 5 1/2 inches and butt at the ridge. There is no access to the space under the dormer gables from the attic. The structure's gable ends have secondary nailers parallel to and approximately 5 inches below the end rafters. The brick chimney passes through the center of the ridge.

Connector at the Keeper's Dwelling

First Story

Room 107 - Vestibule

The north end of the Connector at the Keeper's Dwelling contains a small vestibule. Due to the 5-degree offset of the connector from the dwelling, the room is trapezoidal in plan, with each wall varying in dimension. The west wall is 4 feet 10 inches, the east wall is 4 feet 2 inches, the south wall is 4 feet 1 inch, and the north wall is 3 feet 1 inch. The room is accessed by a doorway from the Keeper's Dwelling kitchen (Room 103). The door is 2 feet wide. One tread descends from the level of the doorway's threshold to the floor of the vestibule. It is 1 foot 3 inches wide at the west wall, tapering to 1 foot in width at its east end. A doorway in the south wall leads to Room 108. Its fabric appears to be early. The four-panel wood door has a burl knob, and is painted white. There are no windows, light fixtures, or heating elements in this room.

Room 108 - Connector Room

The dimensions of Room 108 are 3 feet by 4 feet 10 inches. A partition dividing this room from Room 110 was installed in 1987.

Floor. The floor is covered with red and black industrial carpet.

Walls. The walls are covered in simulated wood paneling with plain wooden baseboards. The plain baseboards are painted white.

Ceiling. The ceiling is covered with white-painted plasterboard.

Doorways and Doors. The doorway to Room 107 (fig. 87) is in the north wall. Its surround is 4 3/4 inches wide, with a half-inch bead, and is painted white. Its door is four-paneled with a burl wood knob, and is painted white.

Window Openings. There is a window opening with double-hung, six-over-six wood sashes in the west wall. A top lock is located at the meeting rails. The window sashes and surround are painted white.

Electrical and Heating Equipment. None.

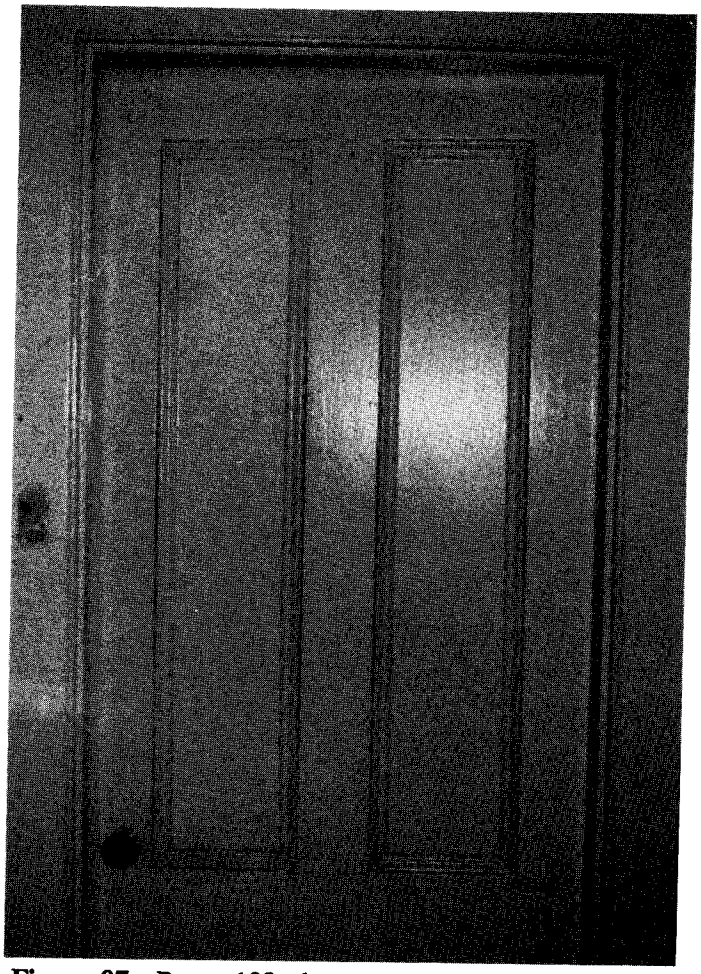

Figure 87. Room 108, door to Room 107.

Room 109 - Tower Entry

This room is located at the jog formed where the west walls of the narrower Connector at the Keeper's Dwelling and the wider Tower Connector meet. It measures 4 feet 8 inches by 4 feet 7 inches. It has a doorway to the exterior in its east wall, and a doorway to Room 110 in its west wall. The west end of the room is a remnant of the connector that formerly linked the Assistant Keepers' Dwelling to the Connector at the Keeper's Dwelling. When the Assistant Keepers' Dwelling was torn down, most of its connector was demolished. Its west end was rebuilt to create a new entry for the Tower.

Floor. The concrete floor is covered with vinyl composition sheet flooring.

Walls. The north, east, and south walls are of concrete block painted white; these date to the addition of the entry. The west wall is brick, also painted white; it is original, dating to the construction of the lighthouse in the 1850's. At the base of the north, south, and west walls, a red stripe 4 inches high is painted in place of a baseboard.

Ceiling. The ceiling is plywood painted white.

Doorways and Doors. The exterior doorway in the east wall contains a large unpainted metal door. The distance from grade level down to floor level is 7 inches. The concrete step was installed circa 1900, and is painted red. The west-wall doorway to Room 110 has had its door removed. The board surround has a half-inch bead, and is an early installation now painted off-white. A section of the north side of the surround was removed near floor level (fig. 88). Ghosts of hinges and locks are seen on the doorway frame.

Window Openings. None.

Electrical Fixtures. An industrial electrical switch box with two red handles is located on the south wall. A single-bulb metal light fixture is located at the center of the ceiling, connected to the switch by gray surface-applied conduit.

Heating Elements. None.

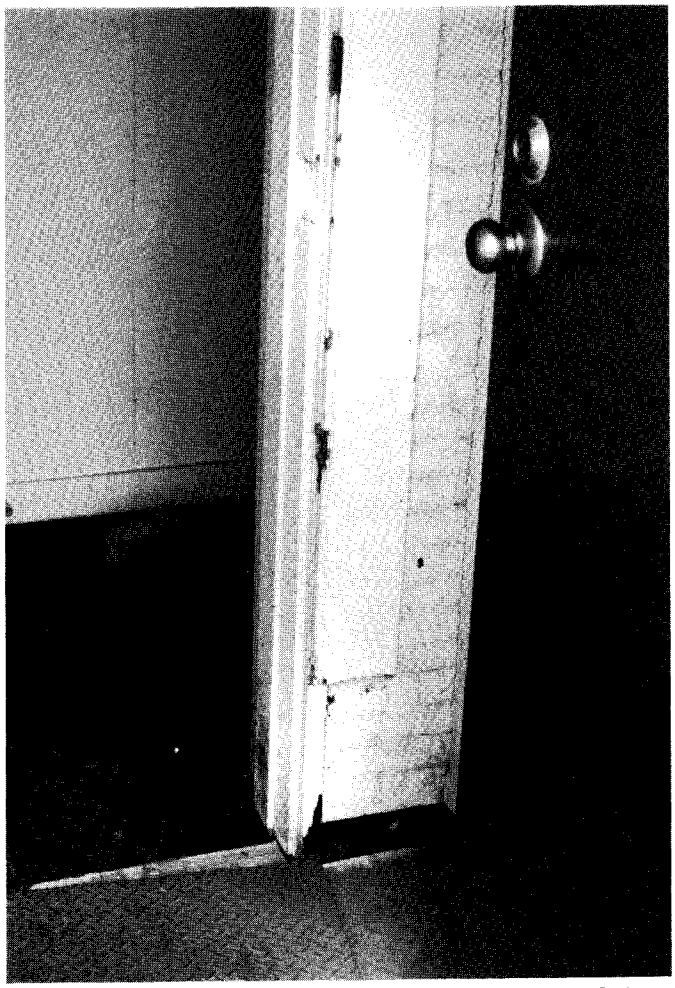

Figure 88. Room 109, west doorway to Room 110 (note trim).

Room 110 - Corridor

Room 110 is bounded on the north by the Connector Room (Room 108), on the east by the Tower Entry (Room 109), and on the south by the Equipment Room (Room 111) in the Tower Connector. It measures 5 feet 4 inches by 4 feet 2 inches. Prior to the construction of its north wall in 1987, the room opened directly to Room 108.

Floor. The concrete floor is covered with brown and black speckled industrial carpet.

Walls. The north wall (above the doorway) and the south wall are of white-painted plywood. The west wall contains a large section of white-painted plywood used to block up a former doorway. The east wall has the doorway to Room 109. A plain white-painted baseboard 4 1/4 inches high is present on all walls.

Ceiling. The ceiling is plywood painted white.

Doorways and Doors. There is no doorway to Room 108. There is no door in the doorway to Room 109. The surround of the south-wall doorway to Room 111 is 5 1/2 inches wide (fig. 89). It is of plain boards painted off-white, and appears to be early.

Window Openings, Electrical and Heating Equipment. None.

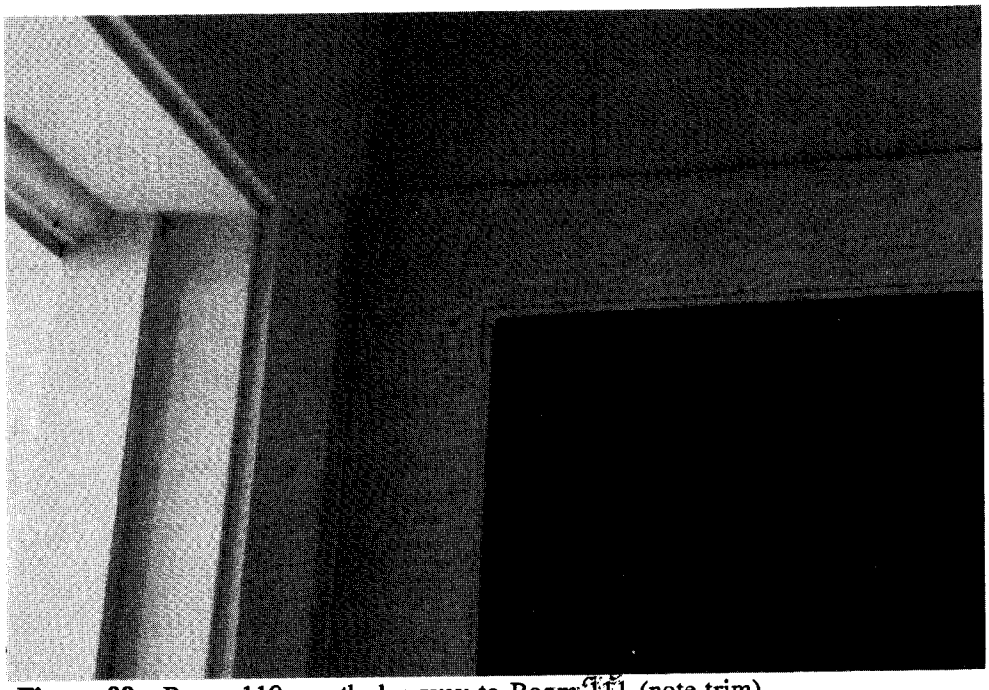

Figure 89. Room 110, south doorway to Room 111 (note trim).

Tower Connector

First Story

Room 111 - Equipment Room

This is the only room in the Tower Connector, which links the Connector at the Keeper's Dwelling to the Tower proper. It measures 10 feet 7 1/2 inches by 11 feet 4 inches. Currently, it houses all of the equipment necessary to run the unmanned light.

Floor. The concrete floor is covered with gray rubber panels in a raised diamond pattern.

Walls. The walls are covered with plywood painted white. The baseboards are plain and also painted white. A passage through the brick wall of the Tower exits at the south end of the room; its brick walls are painted white. The passage narrows from 2 feet 11 inches at its north end to 2 feet 9 inches at its south end.

Ceiling. The ceiling is acoustical tile in a grid 2 feet square.

Doorways and Doors. There are two doors. The north-wall doorway to Room 110 has a new, unpainted wood door. It is recessed 7 1/2 inches from the wall. It has an early, Italianate-style surround (see app. B and fig. 90); a plain silver-tone round knob; and five-knuckle hinges.

The other door (fig. 91) is located at the south end of the passage to the Tower. It has a metal frame painted gray. The four-paneled iron door hangs on strap hinges and has a pull ring. The door measures 29 1/2 inches wide by 72 inches high. The panels are 9 inches wide and 23 inches high. A new slide-bolt is placed directly below the ring pull. A large key hole with curved plate is located near the new lock. The door is painted gray with black paint highlighting the strap-hinge rivets. Black-painted raised letters spell: "U S Truro Light House 1840." This door was apparently installed in the second (circa-1833) lighthouse during alterations circa 1840, and was subsequently salavaged and reused during the building of the third (1857) lighthouse.

Window Openings. There is a fixed double-glazed picture window on the west wall. It dates to 1987. It is 3 feet 9 inches wide, with a plain wood surround and sill, both painted white.

Electrical Fixtures. Many pieces of equipment are located along the east wall of the room. Their functions vary, but most support the operation of the beacon and transmitter. A telephone/intercom system instrument is located on the south wall adjacent to the passage to the tower. The system works by cranking a handle, then speaking into the receiver. Another telephone instrument on the Watch Deck is connected to this one.

Heating Elements. There is a small electric heater mounted at the south end of the east wall about 2 feet from the floor.

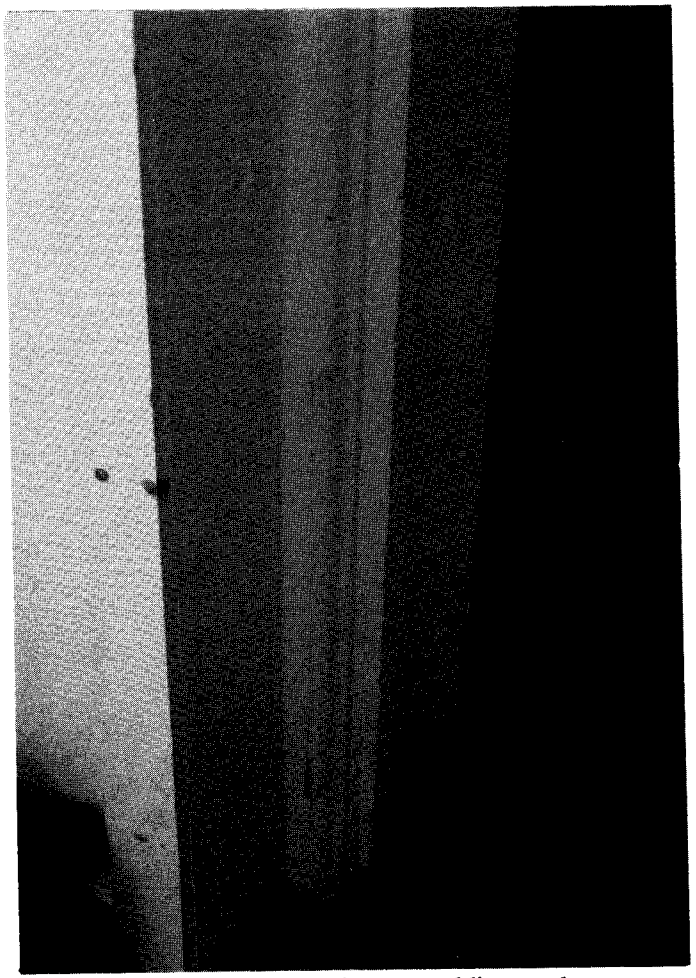

Figure 90. Room 111, Italianate molding at doorway to Room 110.

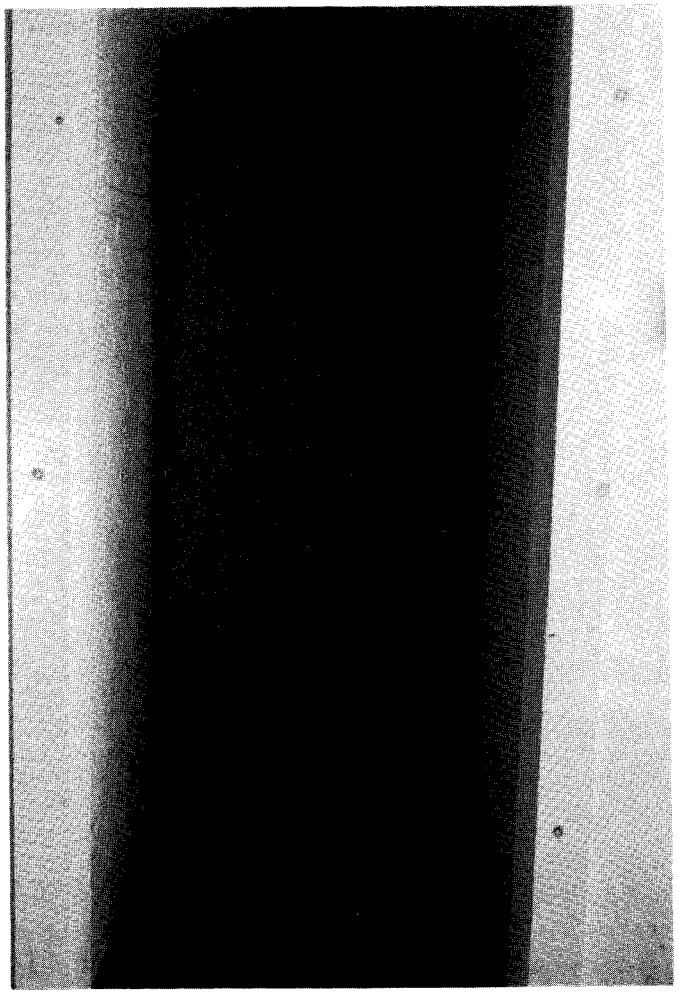

Figure 91. Room 111, iron door leading to tower (Room 112).

Tower

General Information

The entire tower has been assigned the room number 112. There are no heating elements in the space.

First Level and Stair

The diameter of the First Level is 10 feet 1 1/2 inches. A cast-iron stair curves up to the Half Deck, following the inside curve of the Tower walls. While the exterior walls taper from the base as they rise up to the underside of the Watch Gallery, the interior walls of the Tower are plumb).

Floor

The floor on the First Level is concrete painted red. A large rectangular concrete floor patch is located off-center, oriented northwest by southeast. The unpainted patch measures approximately 2 feet 8 inches by 5 feet. A metal plate, secured by screws into the floor, is perpendicular to the entry opening. It is 6 inches wide by 4 feet 4 inches long, painted red.

Walls

The walls throughout the Tower are unpainted red brick. The average brick size is 4 inches wide by 2 inches high, with an average joint width of three-eights of an inch. Although more regular sizes were also used sporadically, it is difficult to tell which are headers and which are simply small bricks. Seven evenly spaced holes are cut through the wall, one course above the floor level (fig. 92). The holes are two wythes high and approximately one brick in length. The purpose for these holes is presumably for ventilation purposes. Pairs of bolt holes are seen west of the window openings on the southwest side of the wall (fig. 93). The purpose of the bolt holes has not been determined. Above the beginning of the stair, the names of those who worked on the exterior repainting and its completion date are painted on the brick wall with black paint on a white background. The date on this sign is "20 September 1991." There are six names associated with the project.

Ceiling

There is no ceiling.

Doorways and Doors

The iron door in the north-wall doorway to Room 111 has been discussed in some detail in connection with Room 111. A brick arch three courses in height forms the header of the doorway on this side. Below the brick arch, a metal plate has been fitted into the opening to form the frame of the door. Bolts from the strap hinges on the opposite side of the door are visible. A large key hole with a rectangular plate is located just above a ring door pull.

Window Openings

Two window openings 9 1/2 inches apart are inset approximately 2 feet 10 inches into the south side of the Tower wall. The bottom of the windows' granite sills are 12 courses above the floor. The openings measure approximately 3 feet 1 1/2 inches wide by 4 feet 3 inches high. Each opening has a lintel 1 foot 7 inches deep, consisting of seven steel angles. They are painted blue-green. The sills are of gray granite 9 inches high. The window openings are filled with glass blocks. Cement patches at the junction between the glass blocks and the jamb, as well as a concrete layer over the brick near the opening, give evidence of an earlier frame (see figure 94). A paint ghost of a former exterior paint finish is evident at the jamb at the glass block.

Electrical Fixtures

Wires and cables lead into Room 111 in the Tower Connector and continue up to the Watch and/or Lantern Deck. A wall outlet is located immediately west of the entry door. A box above the doorway contains the equipment for the intercom telephone system.

Stair

The open stairway to the Half Deck was built in 1903. It begins near the east side of the doorway to Room 111. The treads measure 1 foot 10 1/2 inches wide and 10 1/4 inches deep at the wall, narrowing to 6 1/2 inches at the railing. The treads (fig. 95) consist of steel plate with a raised diamond pattern within a plain border. The stair has two landings. The flight to the first landing has 16 treads; the flight from there to the second landing has 12 treads, and the flight to the Half Deck has 12 treads. The landings are curved, having a steel-plate floor with a raised diamond pattern and painted yellow.

The stair is bolted at intervals to the brick wall of the Lighthouse Tower. There is no stringer: the individual steps are bolted to each other vertically by the threaded rods that serve as the balusters for the handrail, each of which passes through two steps. The bottom of the rod is bolted by a cap nut. All of these elements are painted black.

The stair balustrade has a wooden handrail and newel post, and wrought-iron balusters square in section. The handrail and newel (fig. 96) are unpainted; the balusters are painted black. The handrail shows signs of possible alteration. Its grooved underside has round holes where round balusters may have previously been fitted; the baluster spacing does not correspond to the existing spacing (fig. 97). The end of the rail near the newel post may have been cut.

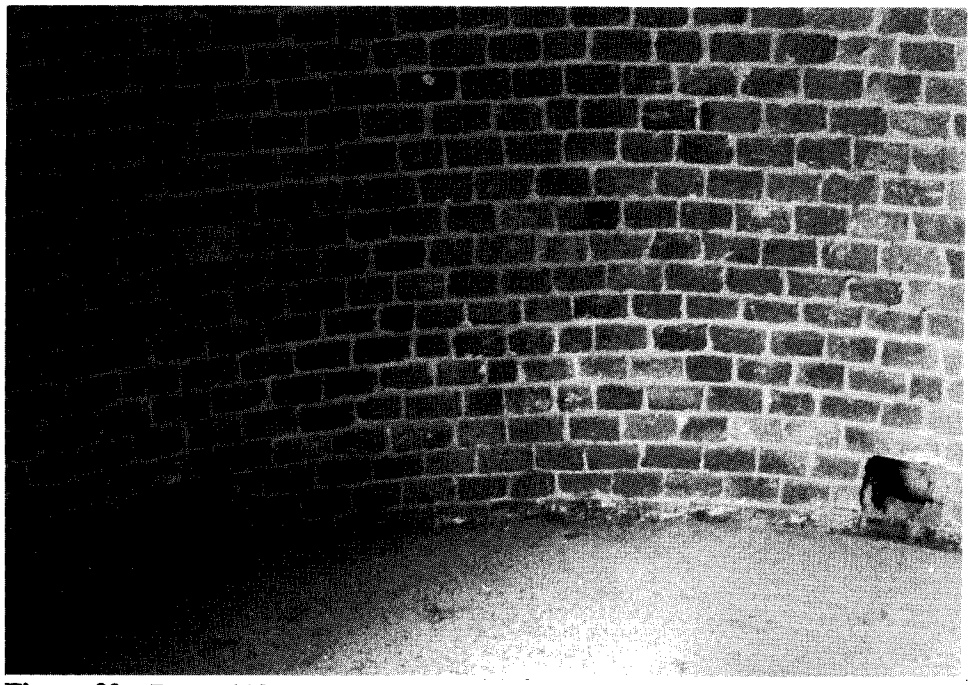

Figure 92. Room 112, evenly spaced holes at base of wall, First Level of Tower.

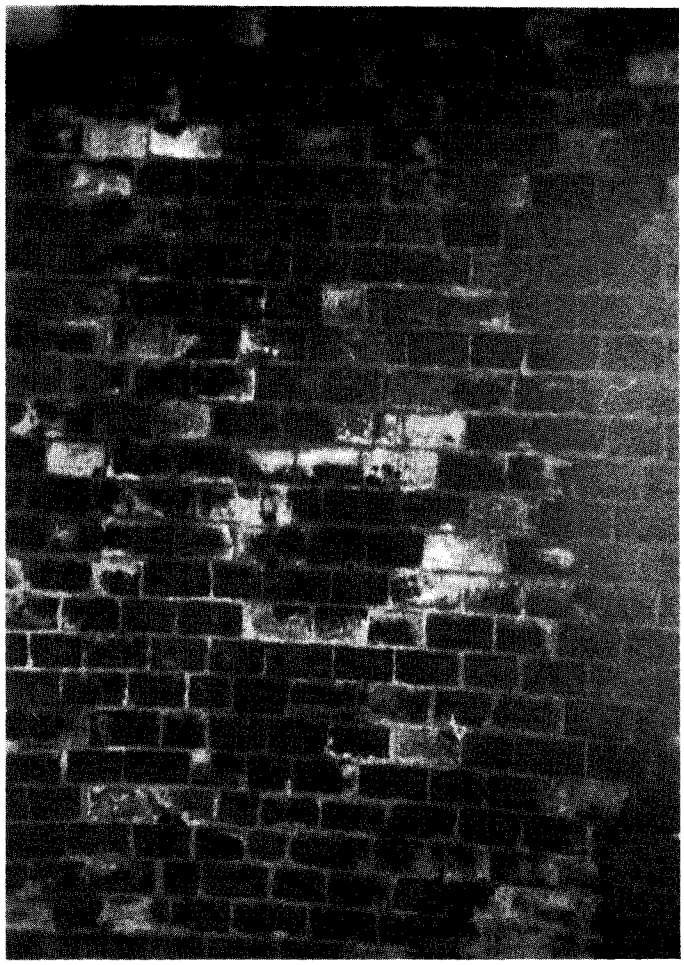

Figure 93. Room 112, bolt holes and anchors visible east of window openings, First Level of Tower.

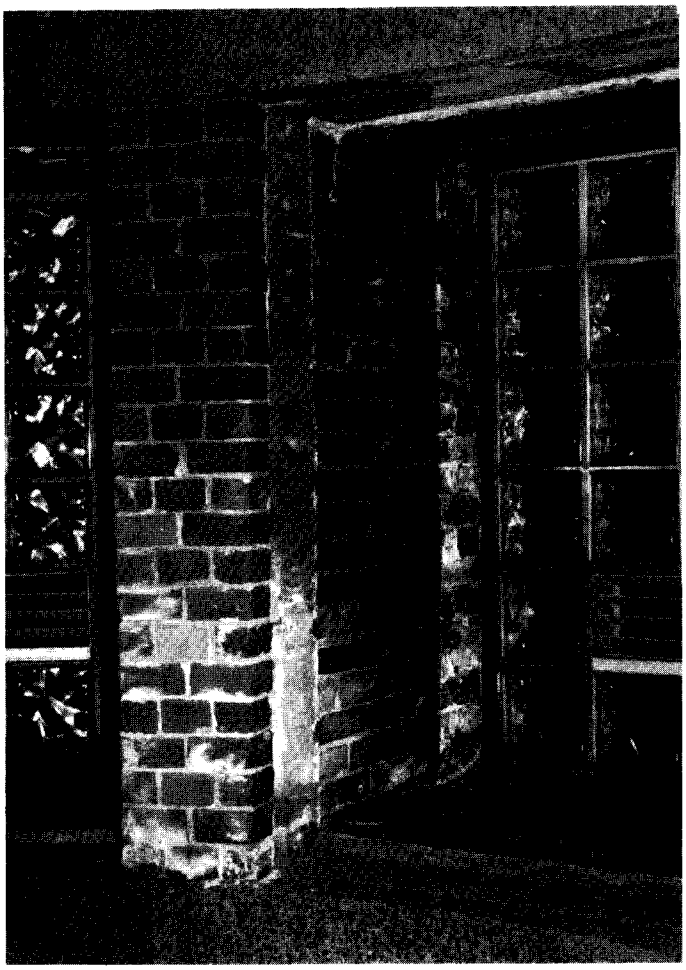

Figure 94. Room 112, window openings in south wall, First Level of Tower.

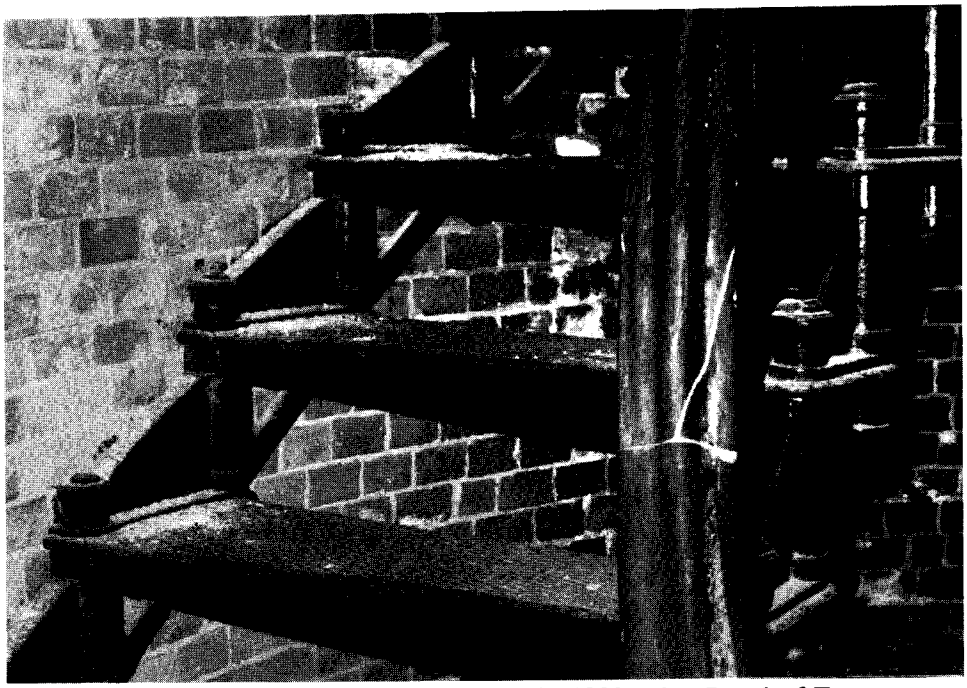

Figure 95. Room 112, curved stair installed in 1903, First Level of Tower.

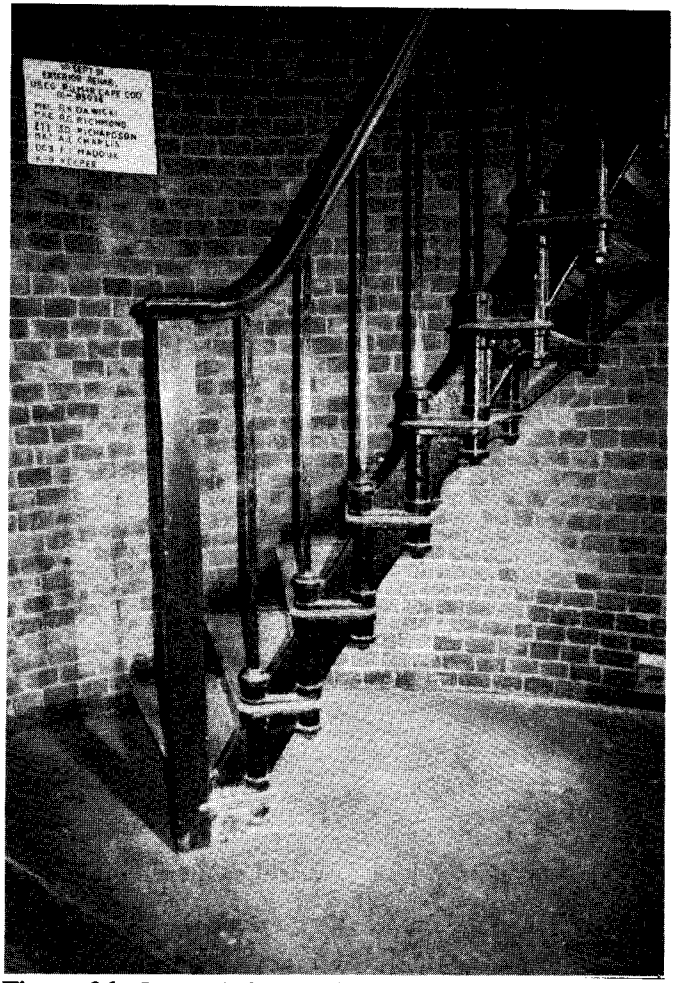

Figure 96. Room 112, newel post and handrail of curved stair, First Level of Tower.

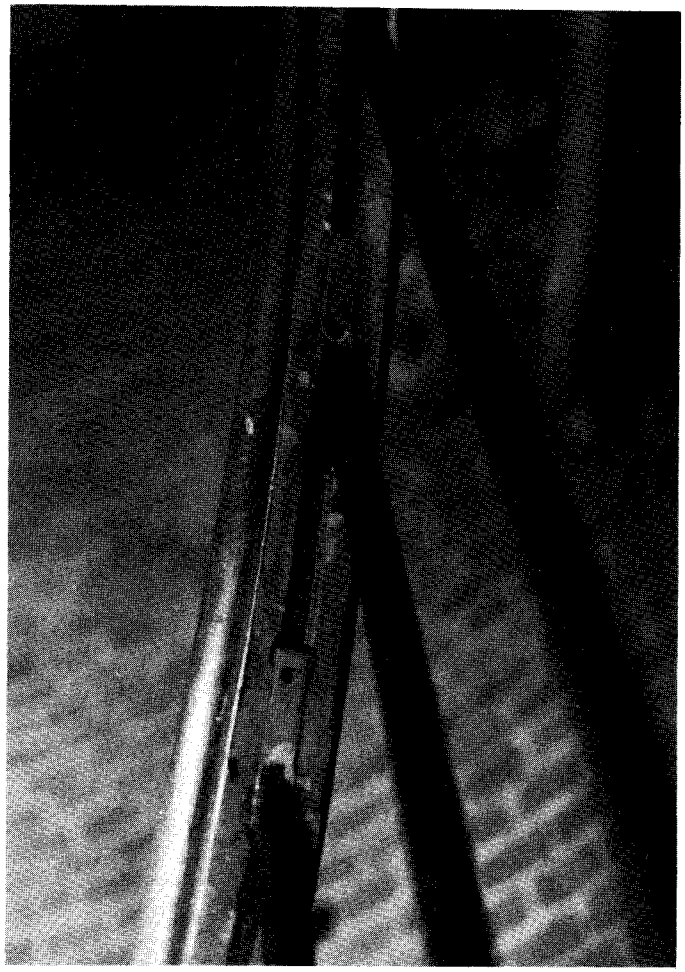

Figure 97. Room 112, underside of stair handrail at First Level of Tower, round holes at location of joint connector.

Half Deck

The Half Deck is semicircular in plan, with a radius of approximately 5 feet 6 inches. The floor is composed of three steel plates bolted together through perimeter flanges. The underside of the deck (fig. 98) is reinforced with intermediate stiffening webs, one set running parallel to the straight edge of the landing, the other set running perpendicular. A curved "ship" ladder with eight open, cast-iron treads ascends from the Half Deck to the Weight Deck (fig. 99). The treads have the same diamond pattern used on the First Level stair and Half Deck floor. The treads are bolted through their ends into two flat steel-plate stringers on each side; the stringers are bolted to the floor and the deck above. The stringers are painted black. The treads are painted red. A pipe rail is bent to form the post and railing on both sides.

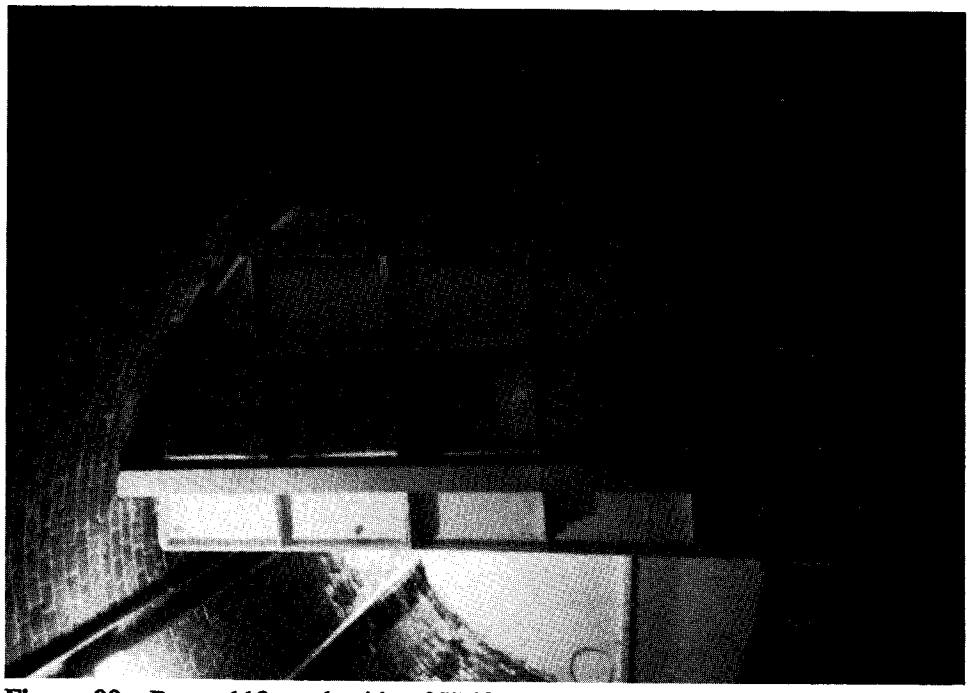

Figure 98. Room 112, underside of Half Deck.

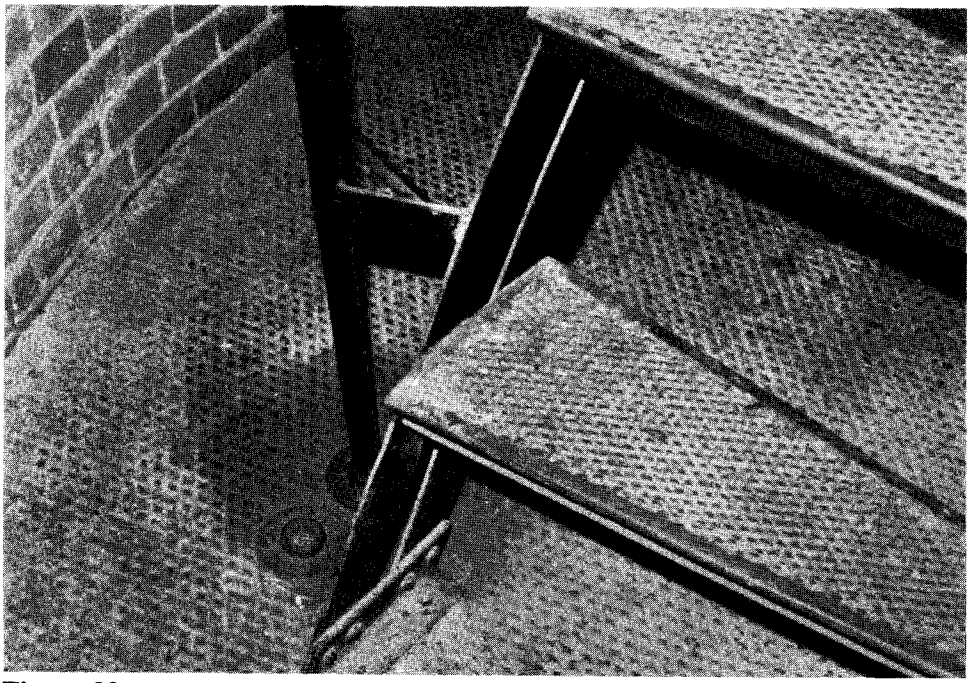

Figure 99. Room 112, base of ladder ascending from Half Deck to Weight Deck.

Weight Deck

Floor

The circular floor consists of four sections of steel plate, all painted red. Two of the four sections have been cut to form an opening for the ship ladder to the Half Deck below. The opening is edged by a balustrade of wrought iron with square balusters. The newel post is topped with a knob. The balustrade follows the perimeter of the stair opening and curves in a half-circle at the center. All elements are painted black. For safety reasons, a yellow-painted plywood disk has been set over the center hole in the floor. Just off-center to the east is a red-painted round metal plate that is bolted to the floor (fig. 100).

Walls

The first course of bricks on this level are all either small bricks or headers. There is no consistent pattern of brick coursing. The three course of bricks nearest the ceiling are corbeled. One brick has been removed six courses below the ceiling in two locations, presumably for ventilation purposes. The granite sill for the doorway from the Watch Deck to the Watch Gallery is visible three courses above the top of the window on the north wall (see "Window Openings," below), off-center to the east. The granite sill is 1 foot 7 inches high, and interrupts the corbeling at that location (fig. 101). An eye bolt is located on the east section of the wall.

Ceiling

The ceiling (fig. 102) is the underside of the steel floor of the Watch Deck. An opening for the stair to the Lantern Deck above is located at the west side. A large cast-iron cone is located at the center of the plates, connected to four heavy I-beams. This cone formerly held the weights that operated the light.

Doorways and Doors

There are none.

Window Openings

A single window opening exists on the northwest side of the Tower wall (fig. 103). The window is one course above the floor level, with a granite lintel 5 1/2 inches high. The window opening is 4 feet 2 1/4 inches high. Steel lintels, steel frame, and the ghost of a former frame indicate that a change occurred to this window opening. It is currently filled with a panel of glass blocks, four units wide by six units high. The panel is inset approximately 1 foot 6 inches into the opening.

Electrical Fixtures

Gray cylindrical pipe conduit carries wires up the side of the north wall. Holes have been cut into the ceiling plates to allow the conduit to pass through to the Watch Deck. There is also a single-bulb fixture on the ceiling.

Stair

The stair between the Weight Deck and the Watch Deck is very ornate. The stringer ornamentation (fig. 104) consists of a double serpentine pattern divided by vertical members. All are painted black. The treads (fig. 105) are also cast iron with a woven elliptical and open-diamond pattern. The treads are painted red; their ends are set into the brick. The handrail and balusters are round and of wrought iron. The balusters are fastened into the handrail with bolted T-shaped plates that extend to fit over the balusters. The stair ascends to an opening in the floor of the Watch Deck that measures 3 feet 4 1/2 inches long and approximately 2 feet wide.

Figure 100. Room 112, floor plates and stair railing at Weight Deck.

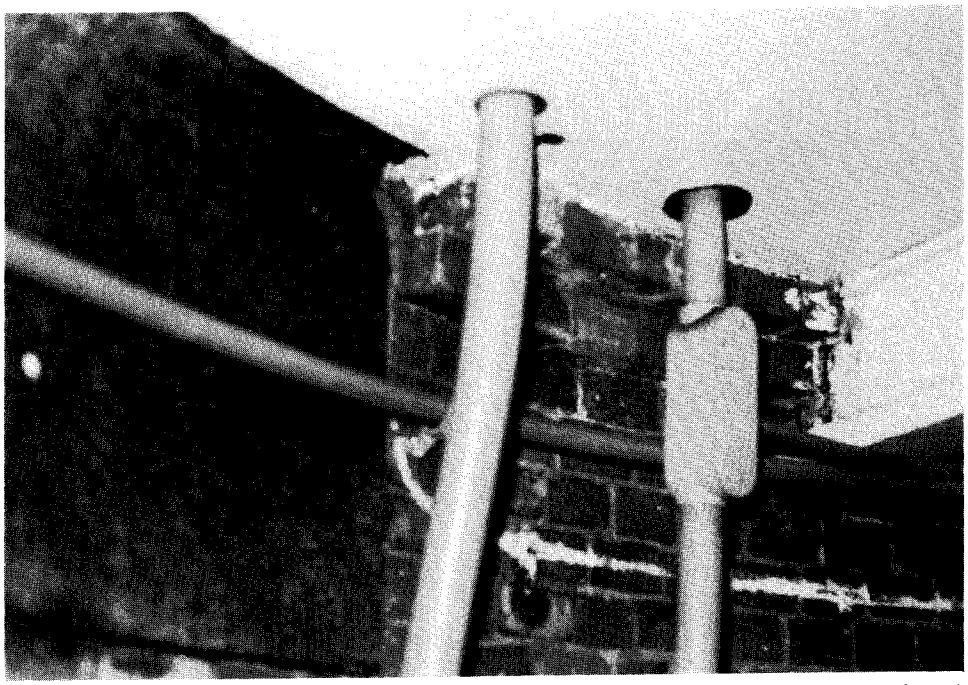

Figure 101. Room 112, granite sill of exterior Watch Deck doorway (above) interrupting corbeling of Weight Deck.

Figure 102. Room 112, Weight Deck ceiling (underside of Watch Deck).

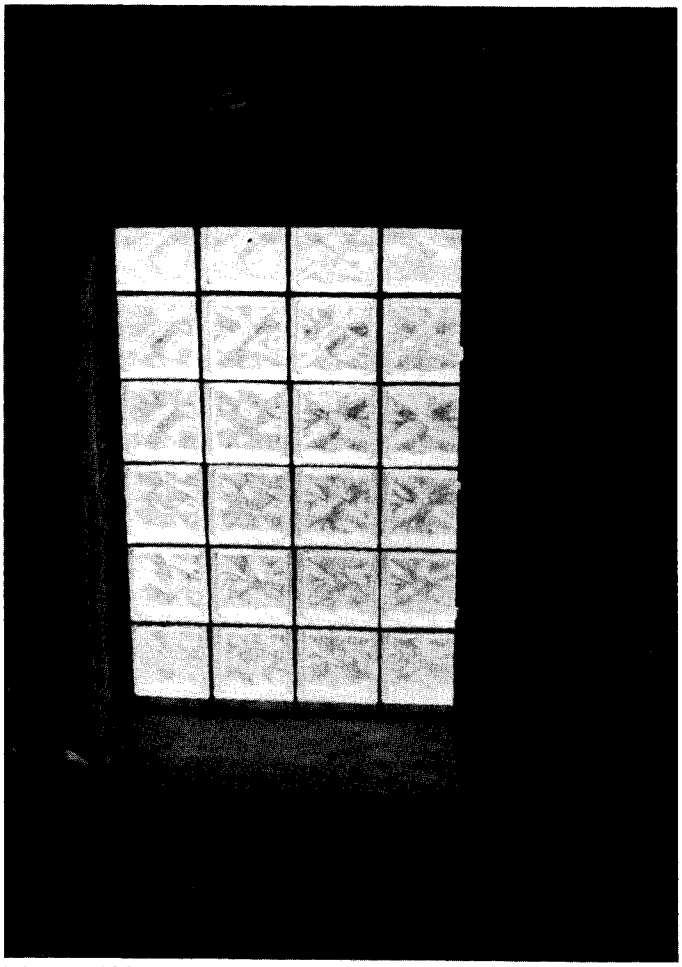

Figure 103. Room 112, Weight Deck window opening in northwest wall.

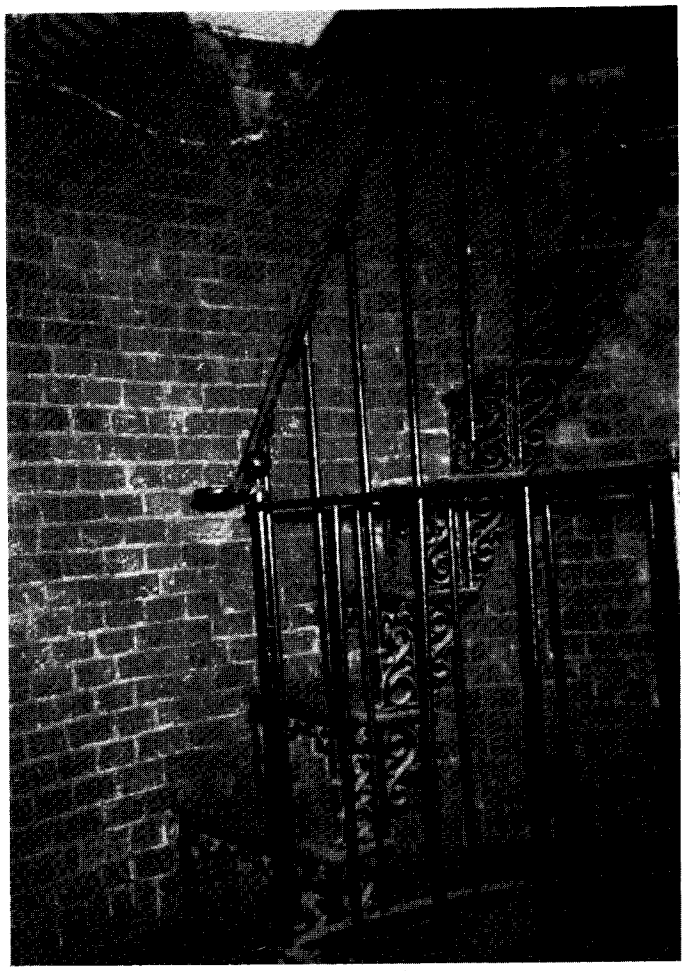

Figure 104. Room 112, Weight Deck stair up to Watch Deck.

Figure 105. Room 112, detail of tread of Weight Deck stair to Watch Deck.

Watch Deck

Floor

The floor consists of four steel plates with a circular plate at the center. The steel plates are bolted together through flanges at their seams. The floor is painted red. The diameter of the deck is approximately 11 feet. A pipe railing edges the opening in the floor for the stair down to the Weight Deck. This railing is painted black.

Walls

The walls are furred out with vertical wood tongue-and-groove boards that are 2 1/2 inches wide (fig. 106). A chair rail consisting of a plain strip of narrow molding divides the wall at a height of 3 feet 3 3/4 inches. Below the chair rail, the wall is painted black, while the wall above is painted white. At the location of the stair down to the Weight Deck, the wall has been recessed 4 1/2 inches to align with the face of the brick wall below.

Ceiling

The ceiling is formed by the underside of the steel-plate Lantern Deck above (fig. 107). The original perimeter-ring floor of the Lantern Deck is visible, which has since been covered by a circular flat steel plate to support the current light.

Doorways and Doors

A doorway to the Watch Gallery is located on the north side of the wall. The doorway opening is 2 feet wide by 5 feet 9 inches high. This doorway contains three doors. Innermost is a pair of four-panel wooden doors with black strap hinges at the top and bottom, and secured with a black bolt lock (fig. 108). The middle door (fig. 109) is a cast-iron door with an arched top, with a single arched panel in the center, painted white. This door is curved in plan to correspond to the curvature of the wall. The handle is a plain ring bolted through the door. A large hook and eye secures the door in a closed position; its hinges are three-knuckled. This door is painted white. The exterior door (fig. 110) is wood; the six vertical boards are held together with three horizontal battens bolted in place at the top and bottom with strap hinges. This door also has a rounded top and is painted white. Again, a simple ring is used as a handle with a hook and eye.

Window Openings

There are none.

Electrical Fixtures

A number of wires in gray conduit with black boxes (fig. 111) are located on the east side of the wall. Some of these devices control the main and emergency light signals. Others control

the intercom/telephone system, connected to the equipment room (Room 111) in the Tower Connector. A single-bulb fixture with a gray metal basket cover is also located on the east wall.

Stair

The open stair leading up to the Lantern Deck (fig. 112) is very steep and almost ladder-like. A short knotted rope hanging from the ceiling is used in place of a railing. There are eight treads; they are 4 1/4 inches at the wall side and taper to 3 1/4 inches at the inner side. They are of cast iron painted black. The furred-out wall is cut around the each tread, indicating that the wall was installed after the stair. The stair ascends to an opening in the floor of the Lantern Deck that measures 35 1/2 inches long along the outside curvature and 22 1/2 inches on the inside.

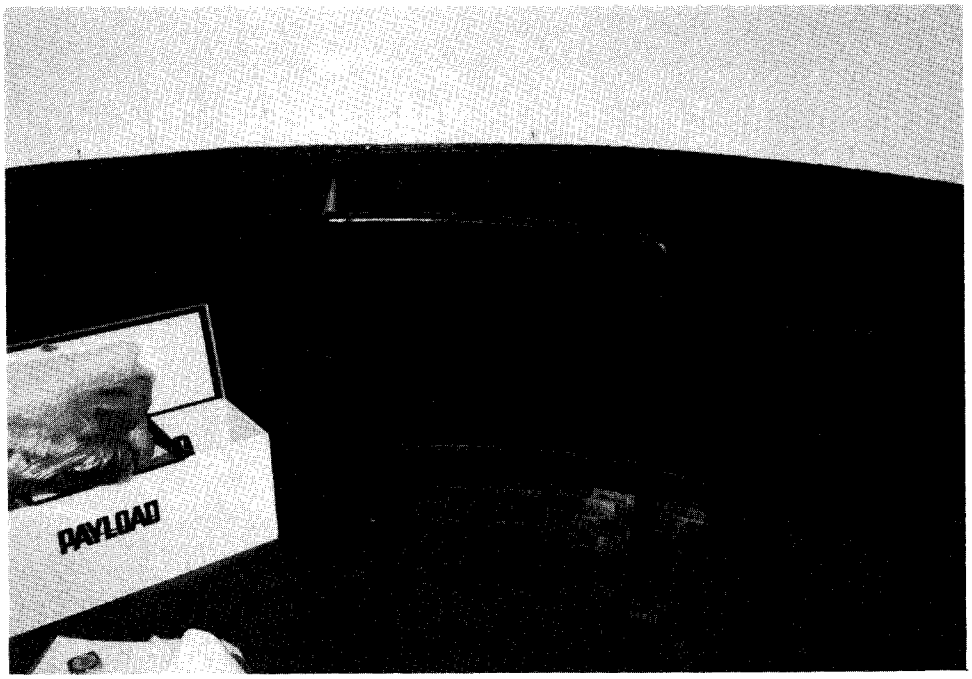

Figure 106. Room 112, furred-out tongue-and-groove wall of Watch Deck, with recess at stair opening down to Weight Deck.

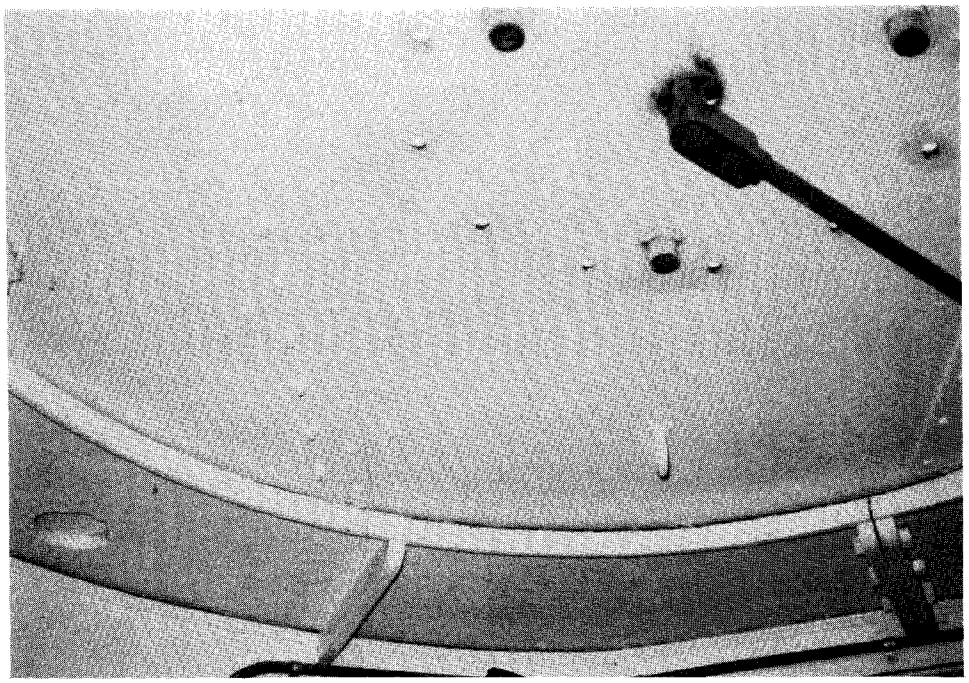

Figure 107. Room 112, Watch Deck ceiling (underside of Lantern Deck), showing original floor and later circular floor added to support 1946 beacon.

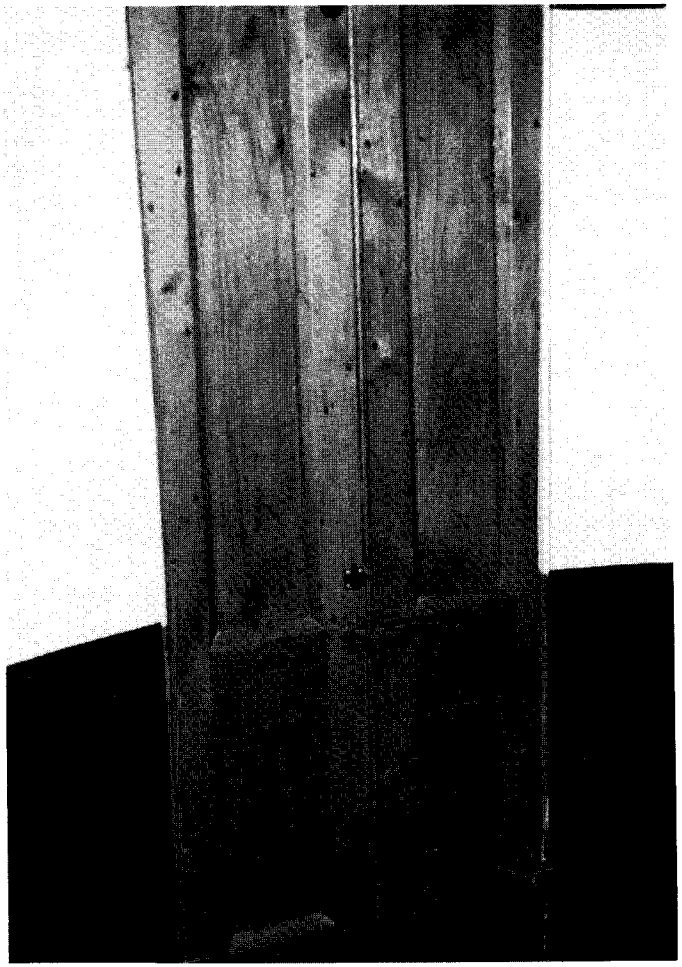

Figure 108. Room 112, innermost of three doors in exterior doorway from Watch Deck to Watch Gallery.

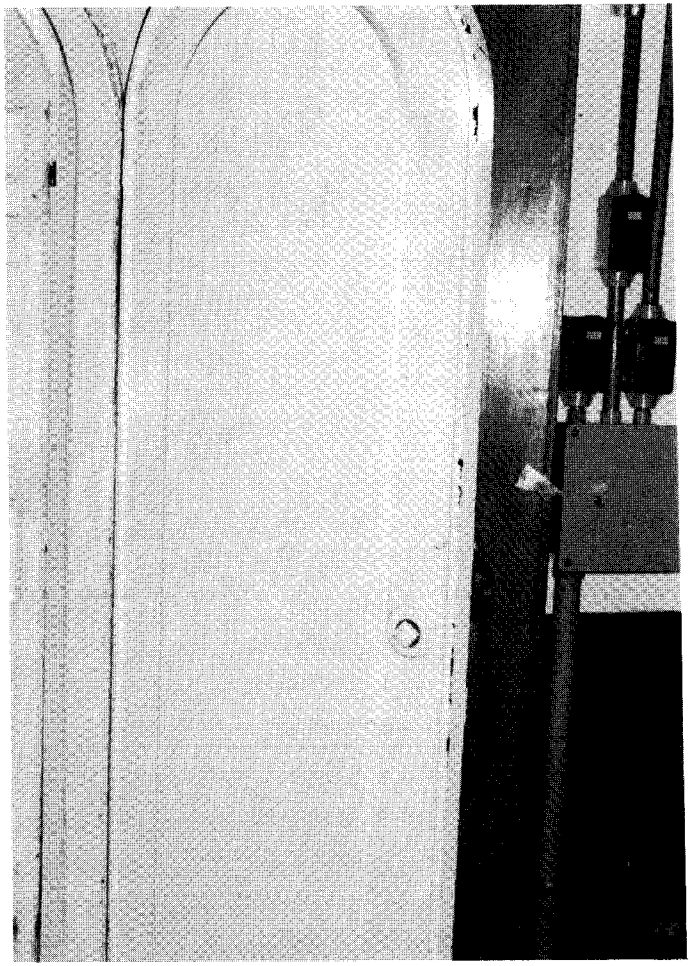

Figure 109. Room 112, middle door in exterior doorway from Watch Deck to Watch Gallery.

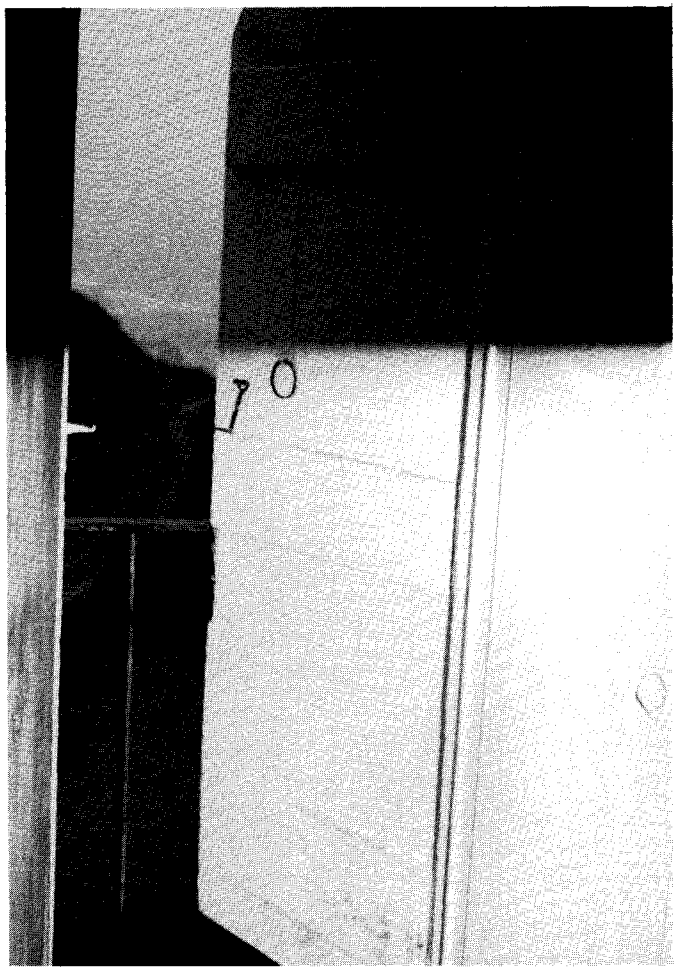

Figure 110. Room 112, outer door in exterior doorway from Watch Deck to Watch Gallery.

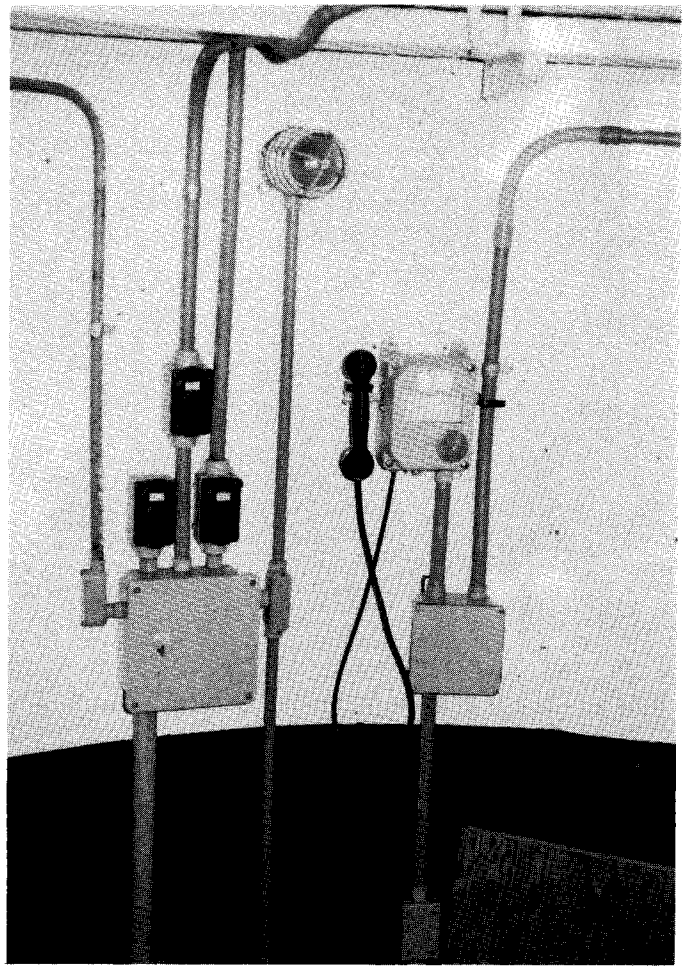

Figure 111. Room 112, telephone intercom system and electrical equipment on northeast wall of Watch Deck.

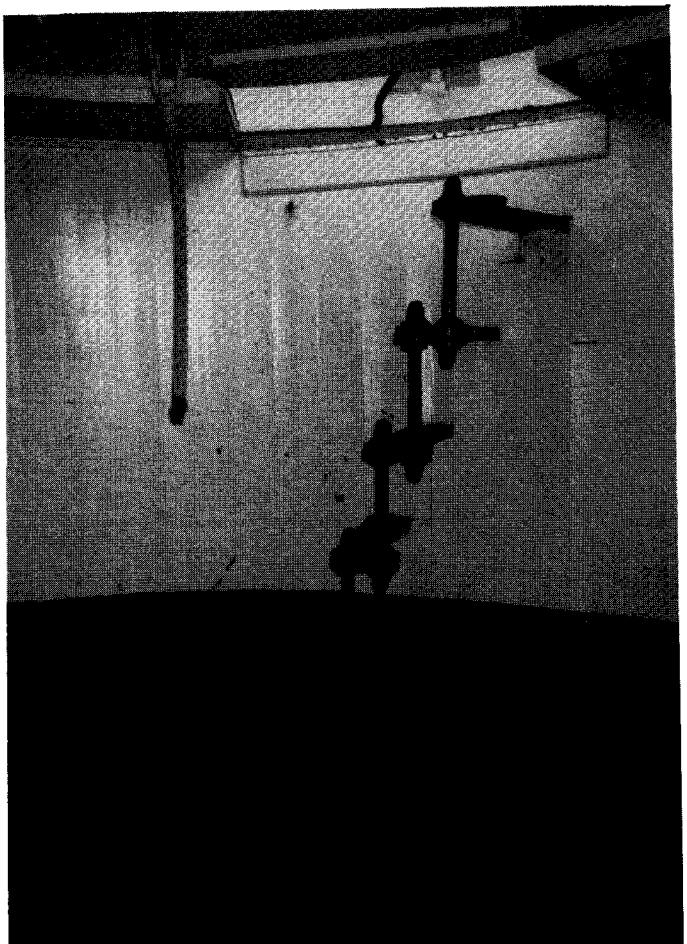

Figure 112. Room 112, stair on west wall of Watch Deck ascending to Lantern Deck.

Lantern Deck

The uppermost or Lantern Deck houses the light apparatus. The current beacon, a Crouse-Hinds DCB-224, was installed when the light was automated in 1987. (It replaced a Crouse-Hinds DCB-36 aerobeacon that had been in operation since 1946.) The light is contained in a revolving steel drum with plexiglass panels on either side. The light is unmanned and battery operated.

Floor

The floor of the Lantern Deck is covered with a circular steel floor in three sections. The original perimeter floor was presumably installed in 1857, and is visible from the Watch Deck below. It is composed of four sections of flanged steel plate, with intermediate stiffening webs, bolted together at the flanges (see fig. 107). A wood quarter-round base molding covers the junction of the floor and wall. The floor has a circular pattern of evenly spaced holes (fig. 113) near the center from previous equipment before the lantern was changed to a beacon in 1946. The floor is painted red. The opening in the floor for the stair down to the Watch Deck has been made narrower by the addition of a plywood section, 3 1/4 inches wide and painted yellow, along the inner side of the opening (fig. 114). On the opposite, outer edge of the opening, the top of the furred-out wall of the Watch Deck is painted bright yellow. A stock iron handrail protects the opening.

Walls/Windows

The "walls" of the Lantern consist of 16 panels of equal size rising from floor to ceiling. Each panel is divided into three horizontal sections. The sill of each panel is bolted to the floor, and intermediate horizontal mullions are bolted to the vertical members (fig. 115). The bottom sections of the panels measure 2 feet 7 1/2 inches high by 2 feet 1/2 inches wide, and consist of painted aluminum. Sheet-metal vent covers with filters are located at the base of each panel (fig. 116). The top two sections of each panel are filled with plexiglass; each measures 3 feet 4 3/8 inches high by 2 feet 1/2 inches wide. The tops of the panels form a continuous iron ring (fig. 117). A vent is centered above each panel. Iron pegs (fig. 118) pin the vertical mullions to the perimeter lintel. Attached to these blocks are eye hooks and eye bolts that may have been used for curtains. All of the metal is painted white.

Ceiling

The ceiling is covered with sections of sheet metal that are painted white, the underside of the truncated cone spaced several inches below the underside of the roof. The lantern lining was replaced in 1906. The sheet metal is secured with bolts of alternating size. At the center of the ceiling, a circle is cut out for a ventilator (fig. 119).

Doorways and Doors

The only doorway is the opening in the floor for the ladder down to the Watch Deck.

Figure 113. Room 112, holes in floor of Lantern Deck made when beacon was replaced in 1946.

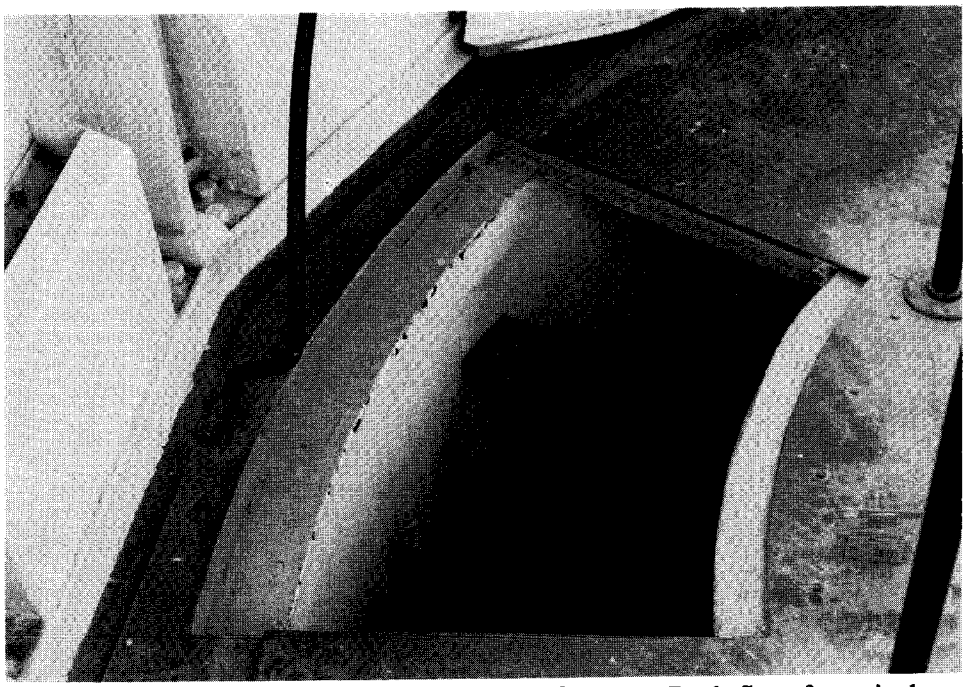

Figure 114. Room 112, opening at west side of Lantern Deck floor for stair down to Watch Deck.

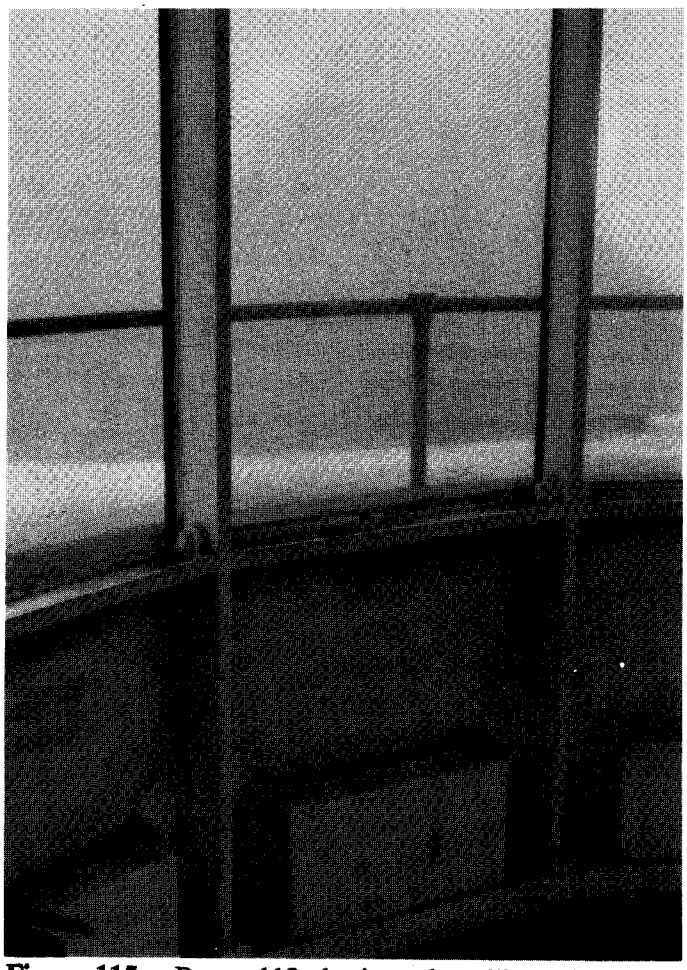

Figure 115. Room 112, horizontal mullion of Lantern Deck window wall.

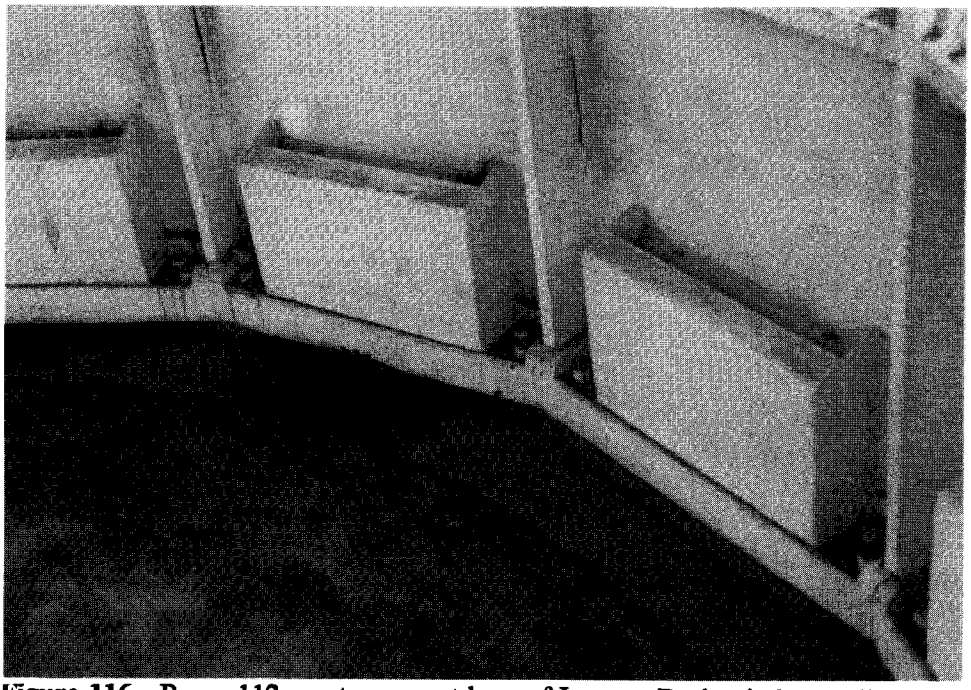

Figure 116. Room 112, vent covers at base of Lantern Deck window wall.

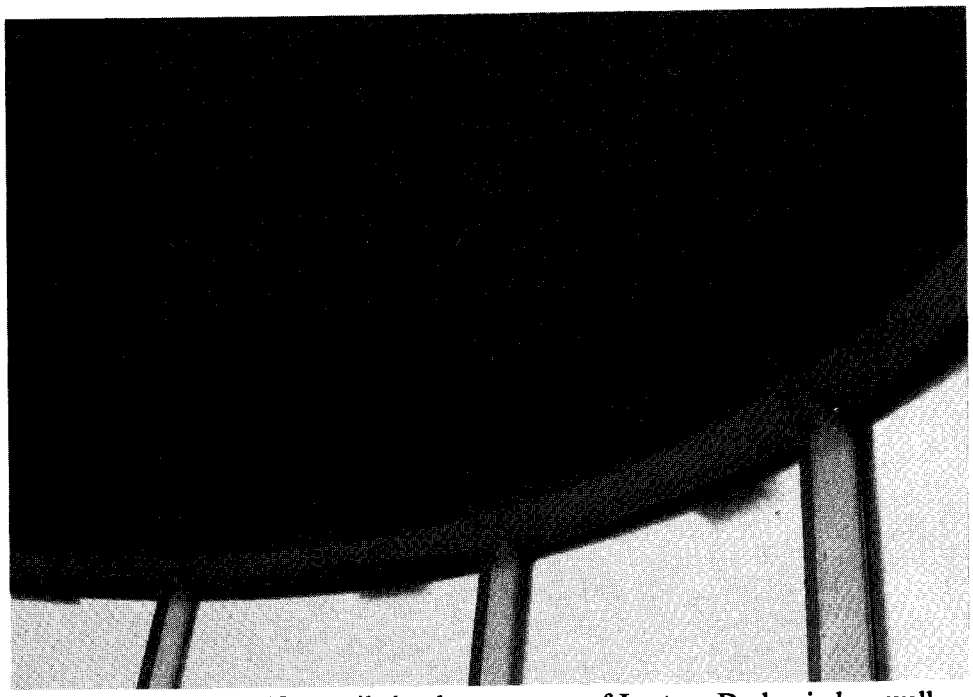

Figure 117. Room 112, ventilation boxes at top of Lantern Deck window wall.

Figure 118. Room 112, iron pegs that pin vertical mullions of Lantern Deck windows to continuous perimeter lintel. (Note curtain hooks.)

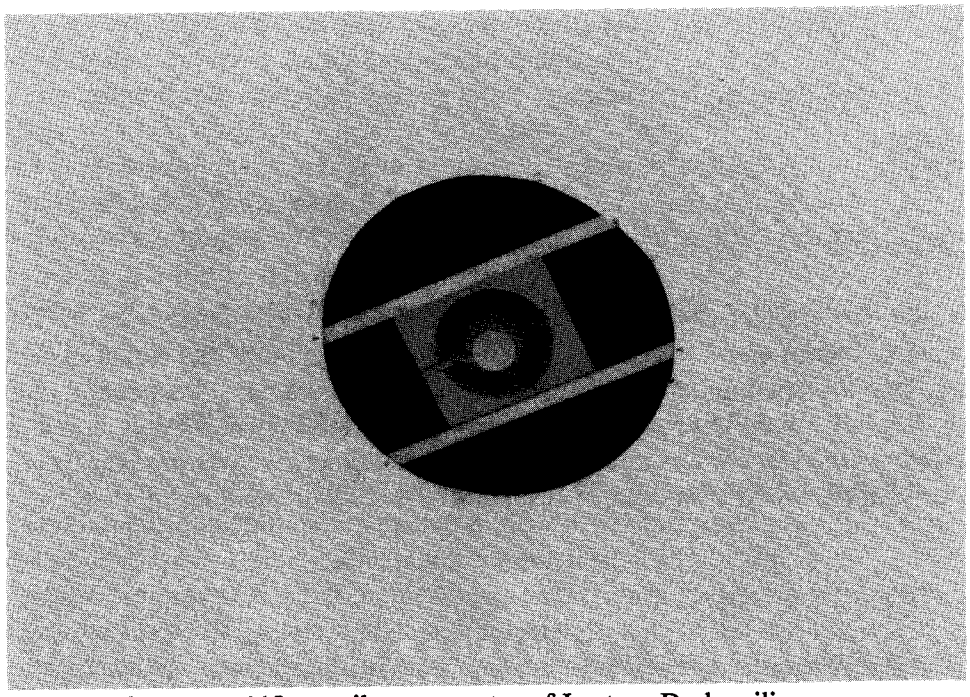

Figure 119. Room 112, ventilator at center of Lantern Deck ceiling.

Recommendations

- Repair the cap of the central chimney.
- Install new step flashing at both chimneys.
- Verify the condition of chimney flues.

Walls

South Elevation - Conditions

- There is a hole in the siding (approx. 2 inches in diameter) with a missing wood shingle adjacent to the east elevation of the connector.
- There are miscellaneous wires; one may possibly be the ground wire for the lightning rod

South Elevation - Recommendations

- Plug the hole in the wood siding.
- Verify the connection of the lightning rod's ground cable.
- Remove superfluous wires and patch holes.
- Remove miscellaneous eye bolts and other fittings not required.

West Elevation - Conditions

- Miscellaneous fittings include a dryer vent and hose bib.
- The downspout at the north end is missing.
- The downspout at the south end empties directly onto grade without a diverting elbow.
- The corner board and wood siding at the northwest corner appear to have been chewed by an animal.
- The basement window sills are deteriorated.
- Due to the lack of a downspout at the north section of the gutter, water is soaking a large portion of the wood siding below the gutter (fig. 124).
- At the eave cut-out (in line with the sill of the second-story window), water is saturating the wood siding. This is partly due to the shallow eave, and water running off the short section of roof edge adjacent to the window jamb.
- The ends of the corner boards, which are close to the roof surface, are splitting from end-grain absorption of moisture.
- The porch is supported by irregularly spaced wood posts, which are supplemented by stacked concrete masonry units adjacent to the wood posts.
- Wood trim is deteriorated, especially at the porch column bases.
- Replacement wood trim at the porch column bases and caps does not match the circa-1930's material in profile and dimension.
- There is a conglomeration of wood steps leading from the porch to the ground, varying in width and height.

West Elevation - Recommendations

- Install leaders, downspouts, elbows, and splash blocks.
- Properly treat the end grain of all wood trim likely to absorb moisture.
- Paint the posts and latticework at the base of the porch to match the house foundation.
- Verify the structural integrity of the porch's support structure.
- Repair and replace the wood trim of the porch columns to match its circa-1930's appearance in profile and dimension.
- Relocate steps from the north elevation to the west elevation to match the circa-1930's appearance.

North Elevation - Conditions

- The lead flashing below the ell window has failed, partly due to improper patching (fig. 120). The metal flashing is trough-shaped and has several holes, which collects water and allows it to penetrate to the interior of the roof structure. This has presumably caused the staining and attendant dark mold on the ceiling of the north vestibule below the window.
- An open joint between the gable end trim where it passes over the ell window's head trim may be admitting moisture.

North Elevation - Recommendations

- Replace all failed flashing.
- Seal the open joint between the gable end trim and the north window's head trim.

East Elevation - Conditions

- All downspouts are missing.
- The grade is built up against the bottom of the wood siding and over the sill of the basement window (figs. 125 and 126).
- The sill of the entry door drops at the east end.
- There is damaged/deteriorated wood trim at the edge of the entry roof.
- The step flashing is improperly installed over the asphalt roof shingles at the entry.

East Elevation - Recommendations

- Install leaders, downspouts, elbows, and splash blocks at both gutter sections.
- Verify the condition of the flashing at the termination of the built-in gutters.
- Scrape and paint the metal vent stack.
- Regrade surrounding soil to a minimum of 6 inches below the bottom of the wood siding, where possible, sloping away from the building.
- Regrade soil to a level below the basement window sill.
- Install a proper scupper at the valley of the interconnected dormer roofs.
- Reset the sill of the entry door sill in a level condition.
- Replace all step flashing.
- Repair/replace deteriorated wood trim.

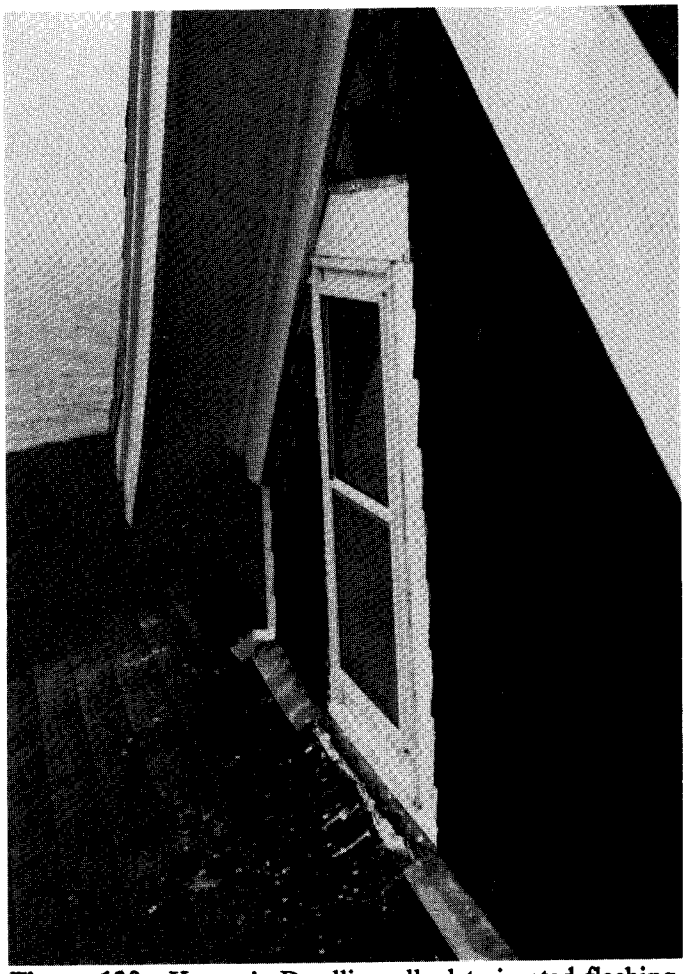

Figure 120. Keeper's Dwelling ell, deteriorated flashing at north elevation.

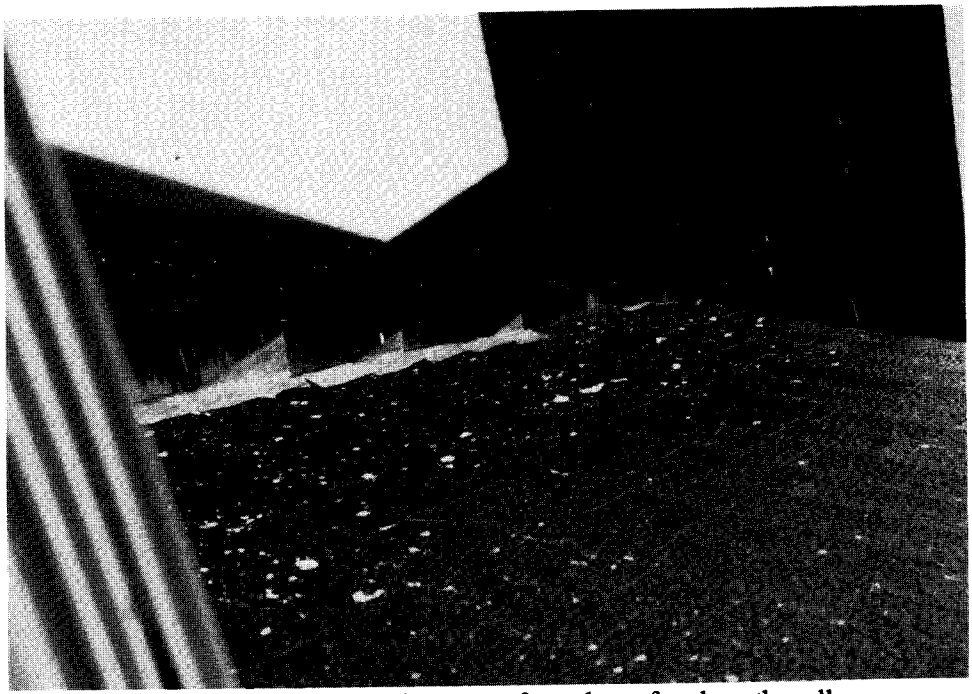

Figure 121. Keeper's Dwelling, juncture of porch roof and north wall.

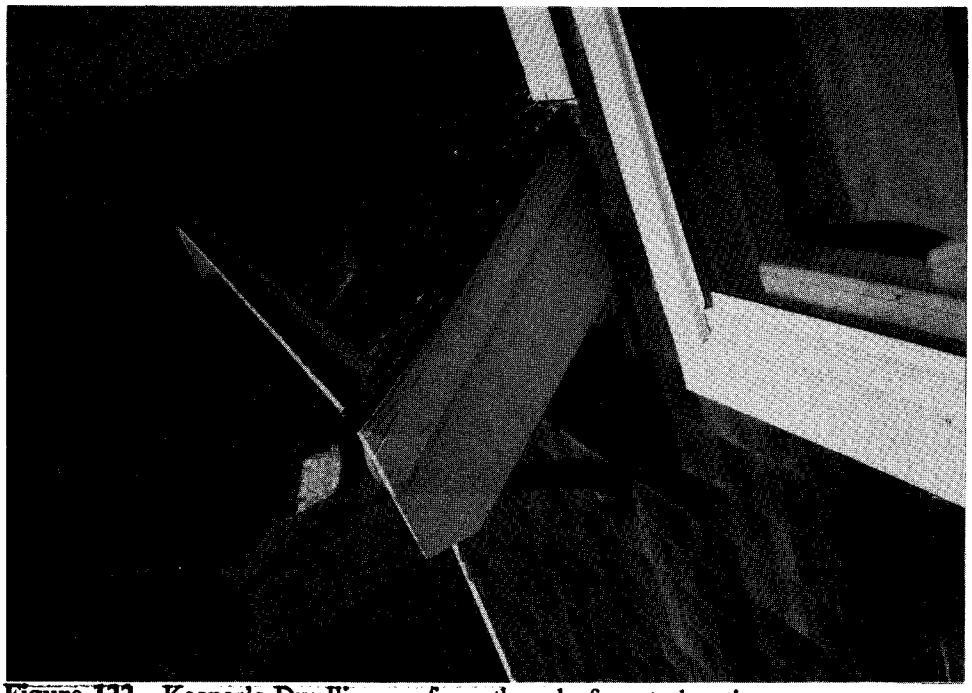

Figure 122. Keeper's Dwelling roof, north end of west elevation.

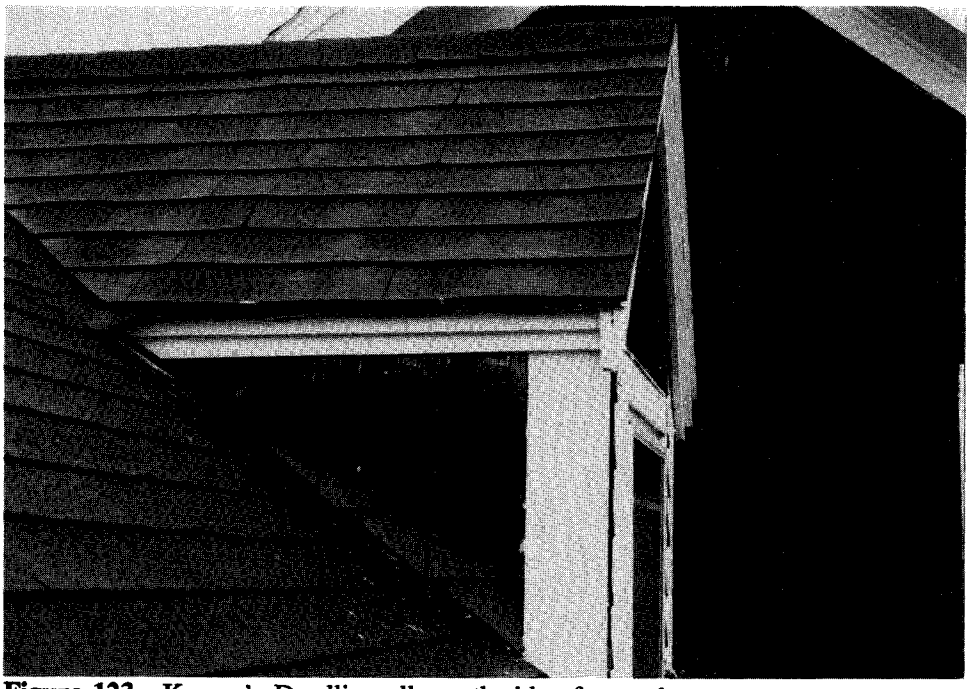

Figure 123. Keeper's Dwelling ell, north side of west dormer.

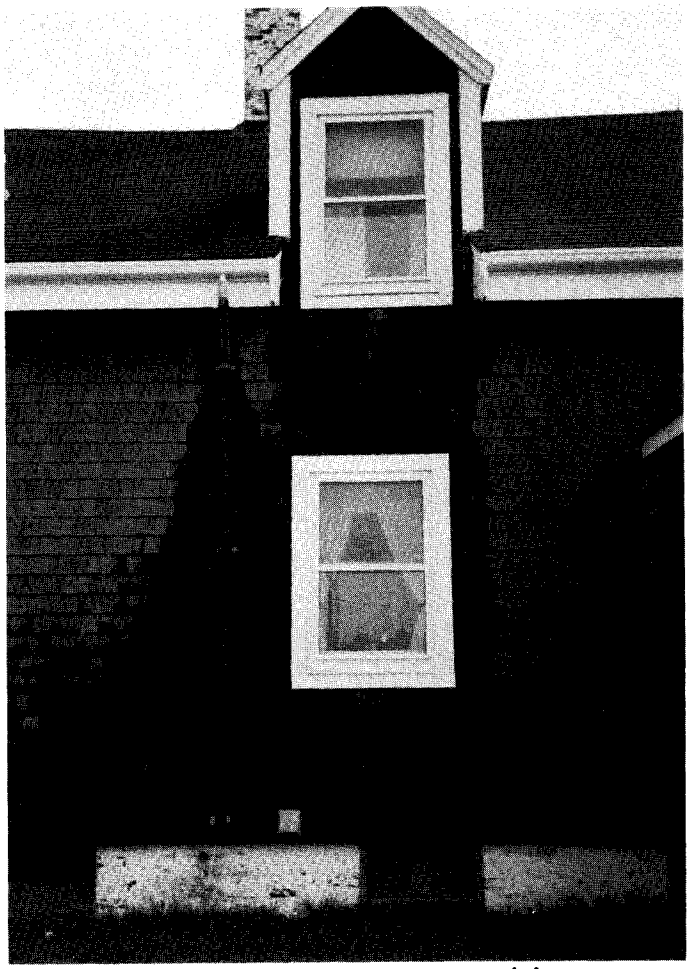

Figure 124. Keeper's Dwelling, water staining at west elevation.

Figure 125. Keeper's Dwelling, built-up grade against wood siding at east elevation.

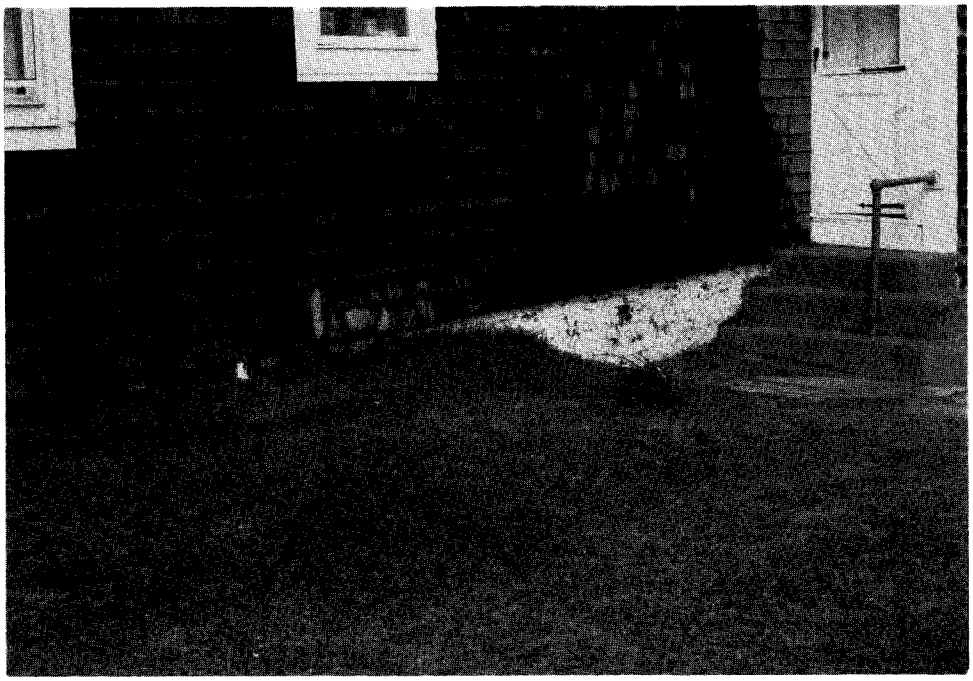

Figure 126. Keeper's Dwelling, built-up grade against wood siding of east elevation.

Interior Elements

General Information

The interior wall and ceiling surfaces of the Keeper's Dwelling are contemporary and in good condition. Sand is being windblown around the window frames on all elevations, occasionally creating a damming effect at the sill, preventing water to drain out (fig. 127).

Basement

Conditions

- There is a leak from holes in the corroded metal bulkhead, especially at the juncture of the bulkhead and the wall.
- Water is seeping into the basement approx. 18 inches above the floor, through brick joints behind the sink on the east wall, and ponding at the low point against the cistern wall (figs. 128 and 129).
- Water is also entering from the 4 1/2-inch metal pipe set in the east wall approx. 12 inches above the floor, which contains water supply pipes for the hot-water heater.
- There are eroded mortar joints and separating brick units in the masonry wall at the north side of the west foundation wall (fig. 130).
- Orange staining is running from the chimney flue opening onto the parged chimney surface.
- The wood cellar sashes and frames are deteriorated.

Recommendations

- Determine the source of the moisture penetration along the east wall.
- Regrade and/or damp-proof the bulkhead retaining walls.
- Install a new bulkhead with proper seal/flashing.
- Rebuild the damaged walls and repoint deteriorated mortar joints.
- Rebuild the cellar sashes with storm panels, and screened panels to ventilate the basement during the summer.

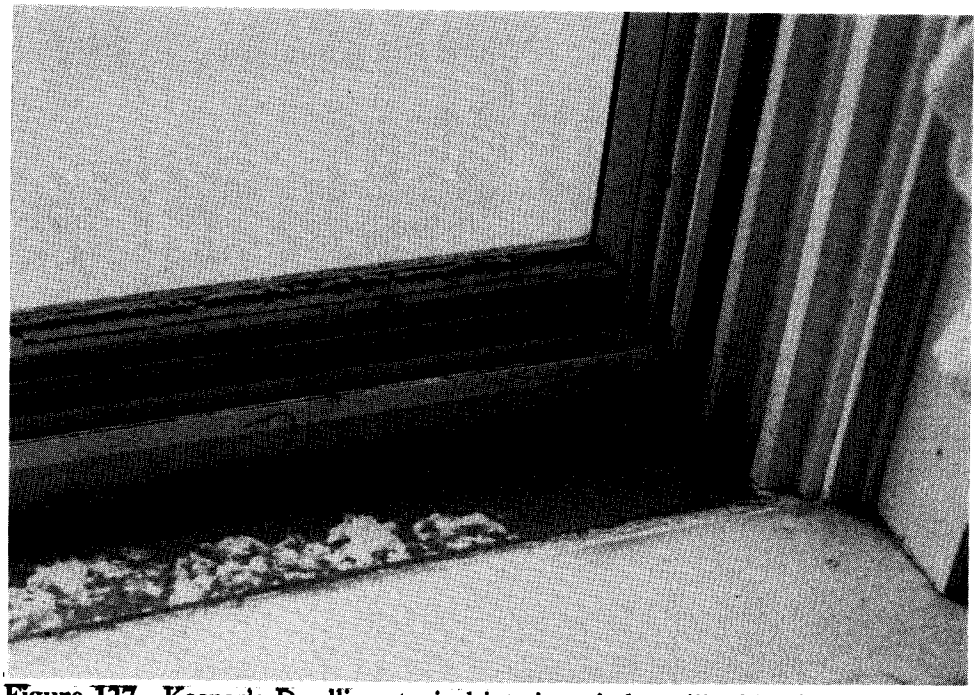

Figure 127. Keeper's Dwelling, typical interior window sill with wind-blown sand.

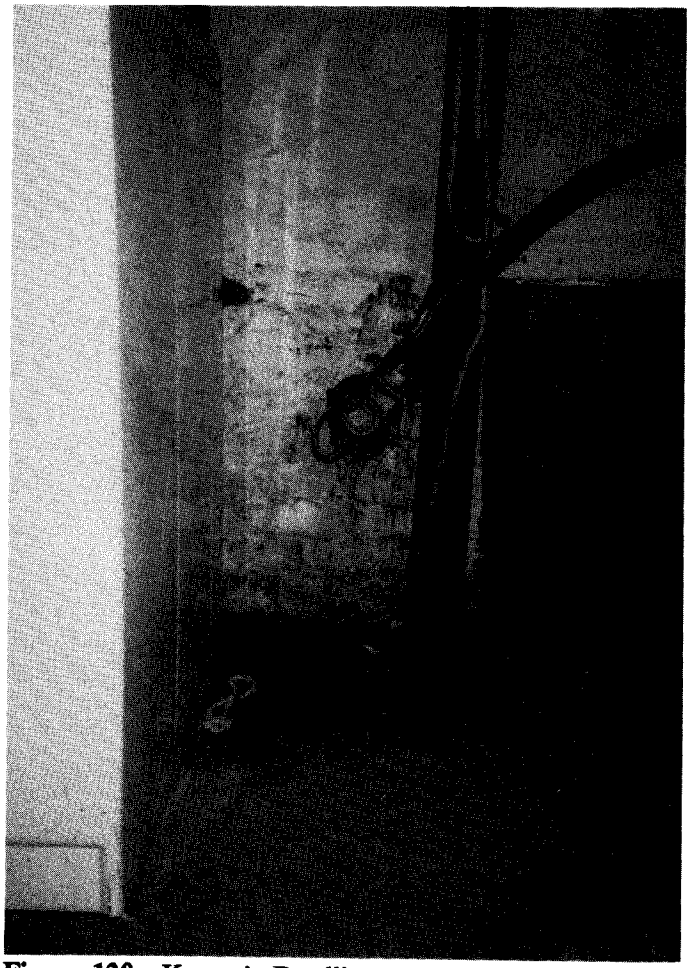

Figure 128. Keeper's Dwelling, water penetration around pipes at east wall of basement.

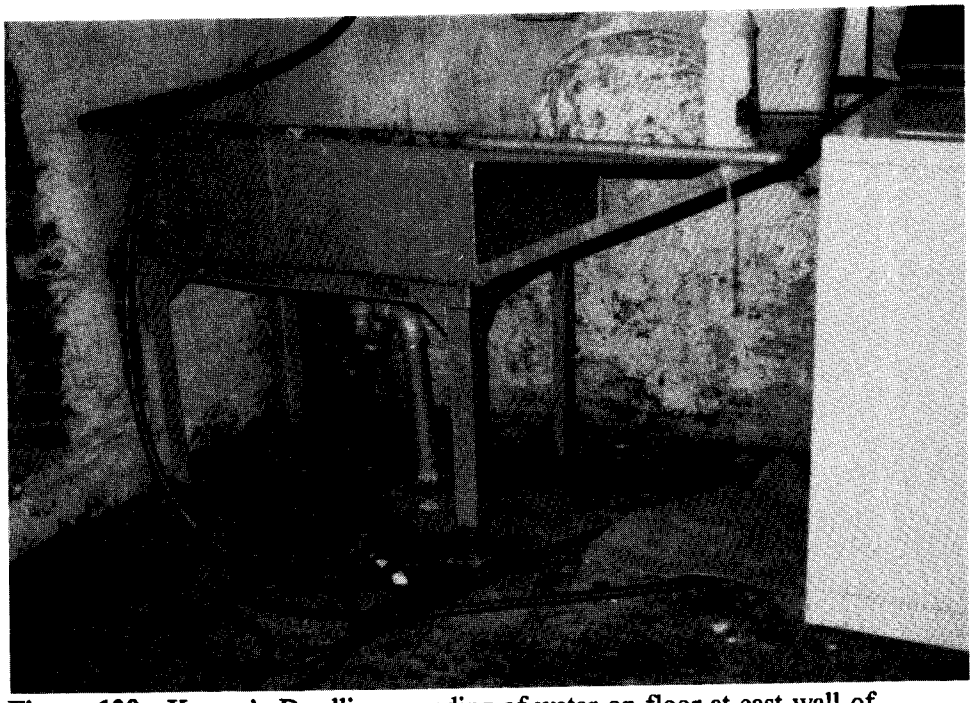

Figure 129. Keeper's Dwelling, ponding of water on floor at east wall of basement.

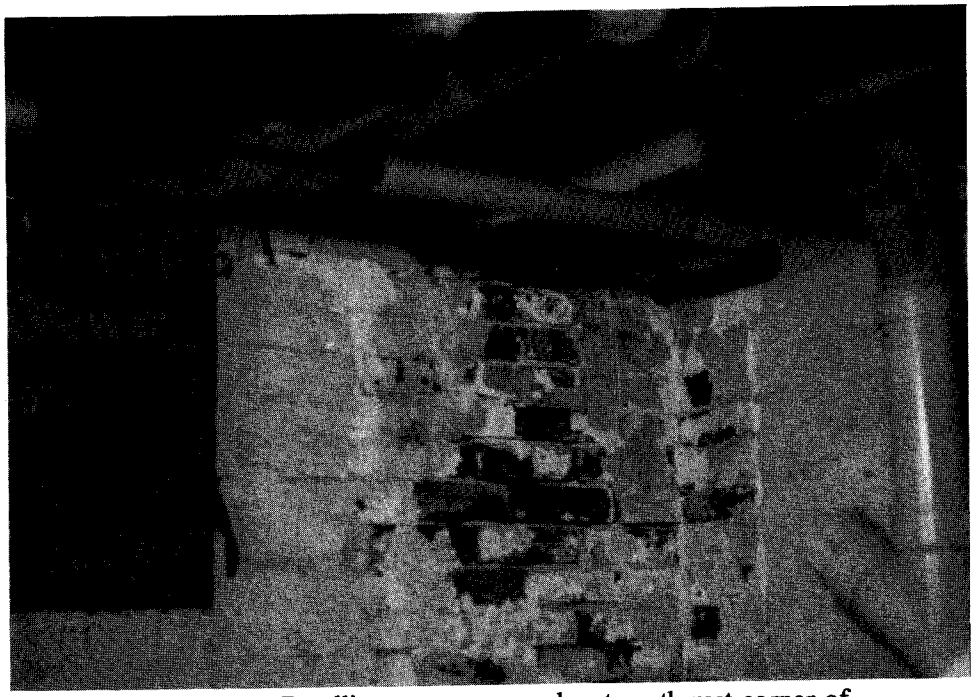

Figure 130. Keeper's Dwelling, masonry cracks at northwest corner of basement.

First Story - North Vestibule

Conditions

- A dark mold growth exists above the kitchen doorway to the north vestibule, and above the north vestibule's doorway to the porch. It is presumably due to the failed flashing at the roof-to-wall juncture below the ell's second-story north window. There is also mold on the wall between the kitchen and porch doorways.

Recommendations

- Repair flashing as per exterior recommendations.

First Story - Southeast Room

Conditions

- A water stain is visible from a previous leak in the bathroom above. (As reported by the current tenant, windblown sand had clogged the window sill, allowing water to flow into the bathroom).

Recommendations

- Monitor sand accumulation and remove periodically.

Attic

Conditions

- There is evidence of previous leaks at the chimney (on top of the insulation), especially on the east and west sides. Daylight is visible at the east side of the chimney, due to a lack of exterior metal flashing there. (The only flashing at that location appears to be the cementitious coating seen on the other sides of the chimney.) Brick dust is visible on the insulation at the north side.
- Burrow-like holes (approx. three-quarters of an inch in diameter) in the rock wool insulation appear to have been made by animals or insects.

Recommendations

- Investigate the cause of the holes in the attic insulation to determine if there is a need for pest control.
- Install new chimney flashing.

Connector at the Keeper's Dwelling

Exterior Elements

Roof

Conditions

- The flashing where the connector roof meets the south elevation of the Keeper's Dwelling is questionable.

Recommendations

- During the next scheduled roof work, all flashing should be replaced.

East Elevation

Conditions

- All downspouts, elbows, and brackets are missing at the east side.
- The metal flashing is loose at the inside of the wood gutter outlet tubes and gutter ends (fig. 131).
- The wood trim at the bottom of the blocked doorway is deteriorated.
- The building joint between the connector and the Keeper's Dwelling has been covered with an undetermined material and painted over, which has not been able to accommodate differential movement between the two structures.

Recommendations

- Replace all downspouts and associated hardware.
- Install a proper building joint with backer rod and sealant to allow differential movement between the structures.

West Elevation

Conditions

- The two downspouts on the north elevation of the Tower Connector empty directly onto the ground adjacent to the Connector at the Keeper's Dwelling.
- There is evidence of corrosion from the nails through the paint at the wood trim along the eave.

Recommendations

- Regrade to provide positive drainage from the base of walls and blocked entry doors.
- Install leader, downspout, elbow, and splash block at the south end of gutter.
- Consider combining the two downspouts between the Connector at the Keeper's Dwelling and the Tower Connector.
- Install proper flashing where the gutter meets the roof edge.
- Install a proper building joint between the connector and Keeper's Dwelling using a backer rod and sealant.
- Use only noncorroding fasteners, such as galvanized or stainless steel nails.

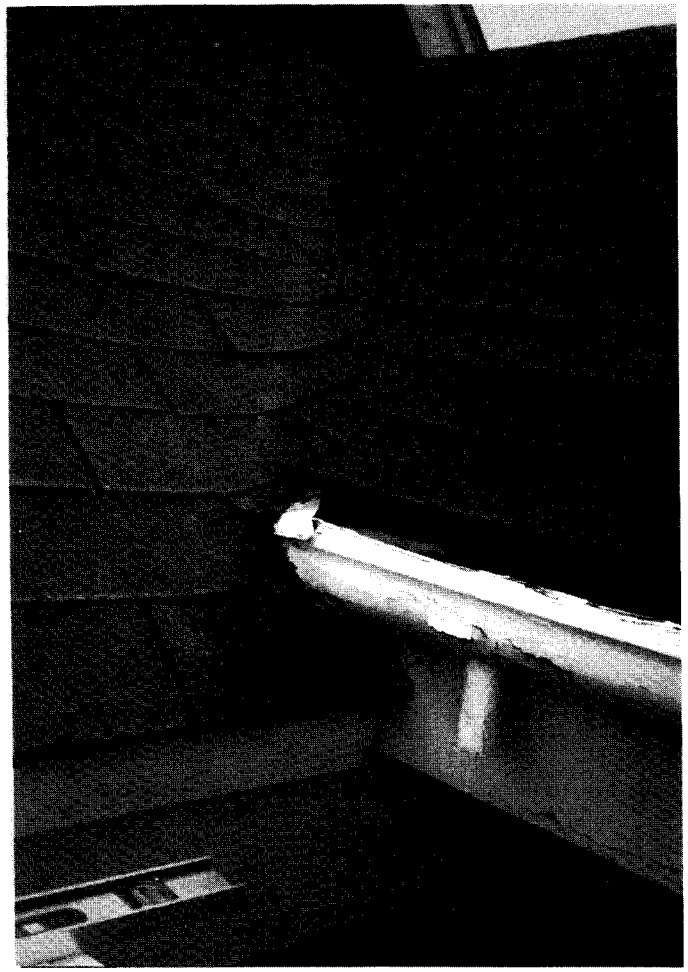

Figure 131. Connector at Keeper's Dwelling, east elevation, south end of built-in roof gutter.

Figure 132. Connector at Keeper's Dwelling, built-in wood gutter at east elevation.

Tower Connector

Exterior Elements

West Elevation

Conditions

- There is no visible cracking or spalling of the white cementitious wash over the brick, which appears to have been recently resurfaced.
- The condition of the metal flashing at the built-in gutter end (by the entry roof) is questionable (fig. 132).

North Elevation

Conditions

- The wood trim at the gable end has peeling paint, with wood sheathing visible behind missing flashing. The flashing is painted over where the Connector at the Keeper's Dwelling intersects the north wall of the Tower Connector.

East Elevation

Conditions

- Paint is peeling from the wood gutters, whose interiors are unfinished, with large splits and cracking.
- The condition of the flashing at the termination of the built-in wood gutters is questionable (it is heavily painted over).
- All downspouts, brackets, elbows, and splash blocks are missing.
- The place where the wooden eave trim meets the Tower wall may be deteriorating due to end-grain absorption of moisture.

Recommendations

- Repair/replace the asphalt-shingle roof.
- Install downspouts and associated flashing.
- Install flashing at all roof-to-wall and roof-to-roof junctures, keeping the end grain of wood trim clear of wetted surfaces.
- Repair the ends of the wood gutter at its intersection with the entry roof.
- Install metal drip edges to keep water away from wood trim.

Interior Elements

Conditions

- Brown staining indicative of several leaks is evident on the acoustical-tile ceiling, especially over the doorway between the Equipment Room and the connector.

Recommendations

- Monitor the leak(s) at the ceiling to determine if they are active.

Tower

Exterior Elements

Shaft

General Conditions

The proximity of the lighthouse to the ocean presents one set of adverse conditions, which are further aggravated by the lighthouse's position on the edge of a bluff. The force of the wind increases proportionally to the height above water or land. Predictably, the east elevation facing the ocean displays a weathered condition distinct from the other elevations, despite the circular plan of the tower. The tower has received a number of cementitious coatings in its history. Presently, the conditions of the west, north, and south elevations are such that there is little evidence of failed surface coating, or spalling or cracking of brick. In contrast, the east elevation reveals minor cracking of the brick and/or coating, peeling/flaking paint, and several areas of brick spalling.

The accelerated weathering of the eastern, ocean side is graphically illustrated by the Lantern Deck windows. The circular plan is divided into 16 even sections, with polycarbonate glass filling the top two horizontal sections of each division. The four windows facing most easterly are severely pitted by the effect of windblown sand, salt, and other debris, while the two adjacent windows on either side are noticeably less pitted. The remaining 10 windows are fairly clear.

Orange staining is evident on the white face of the tower wall from corrosion emanating from the Watch Deck, especially east of the Weight Deck window, but also at several areas at the perimeter of the tower. It was impossible to determine the exact source of the problem due to limitations of visual access at the curved underside of the Watch Deck. The staining may be from water running from the metal deck and/or fittings above. Alternatively, there may be metal pins and/or fasteners associated with the granite deck sections that are corroding.

The surface coating on the exterior limits the inspection of the exterior mortar joints. However, these mortar joints generally appear to be in fair to good condition.

Over time, the grade has built up against the structures. The moving and relocation of the Light Station will provide the opportunity to correct this problem and minimize water infiltration from the ground. At the new site, the structures should be placed on full foundations to limit the moisture-related problems of ground-water infiltration, and to allow the venting of crawl spaces. There should be the minimum amount of grade possible against the exterior walls.

Two copper-weave lightning-rod cables are attached to the east and west elevations; they extend from the roof to grade. It is unclear if the orange staining adjacent to the west cable is a result of corroding iron fittings associated with the cable attachment to the Tower.

General Recommendations

- Regrade surrounding soil to create positive drainage.
- Perform a thorough cleaning of metal elements to remove all corrosion prior to painting.
- Monitor brick deterioration over time.
- Selectively replace deteriorated masonry units.

East Elevation - Conditions

- The east side of the tower (figs. 133-136) exhibits the most severe brick deterioration, with fine cracking of the outer surface-applied coating, and spalled brick faces. Considering the saturated interior wall, freeze-thaw cycles are probably contributing to the deterioration of the brick. The damage is accelerated by the transportation of salt by windblown spray. The ground below the east elevation is littered with brick and fragments of paint and/or cementitious coatings, indicating that the deterioration process is active.

South Elevation - Conditions

- There are two spalled brick ends below each window (figs. 137 and 138).

South Elevation - Recommendations

- Replace/consolidate spalled bricks and recoat them.
- Provide a more controlled means of ventilation to allow drying out of the interior after periods of high humidity.
- Use of a waterproof coating should be considered only if the problem persists after all other remedial and repair work is completed.

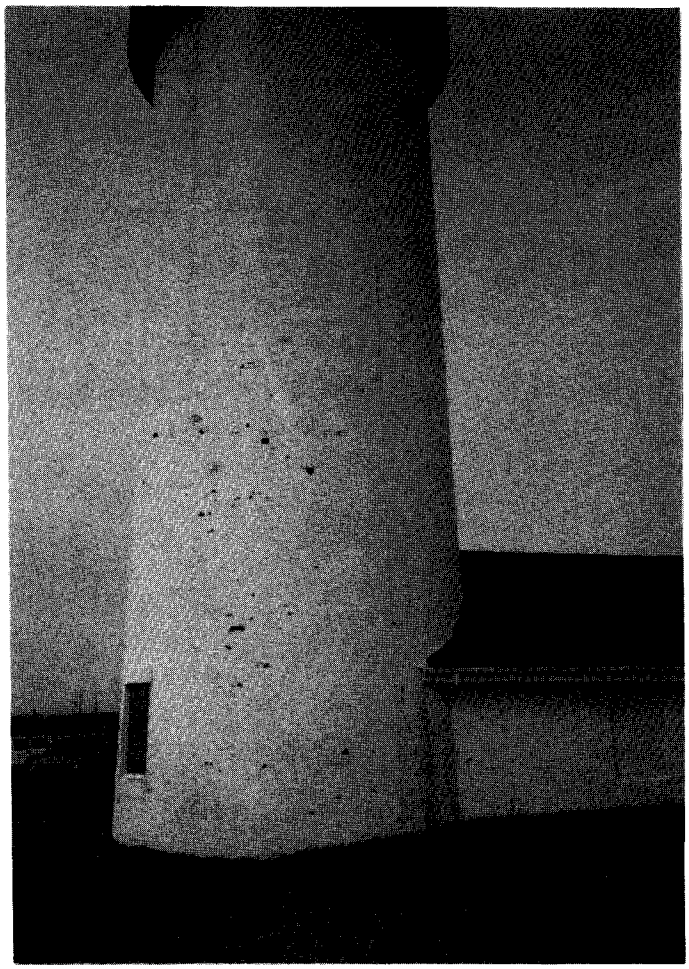

Figure 133. Tower, east elevation.

Figure 134. Tower base at east elevation.

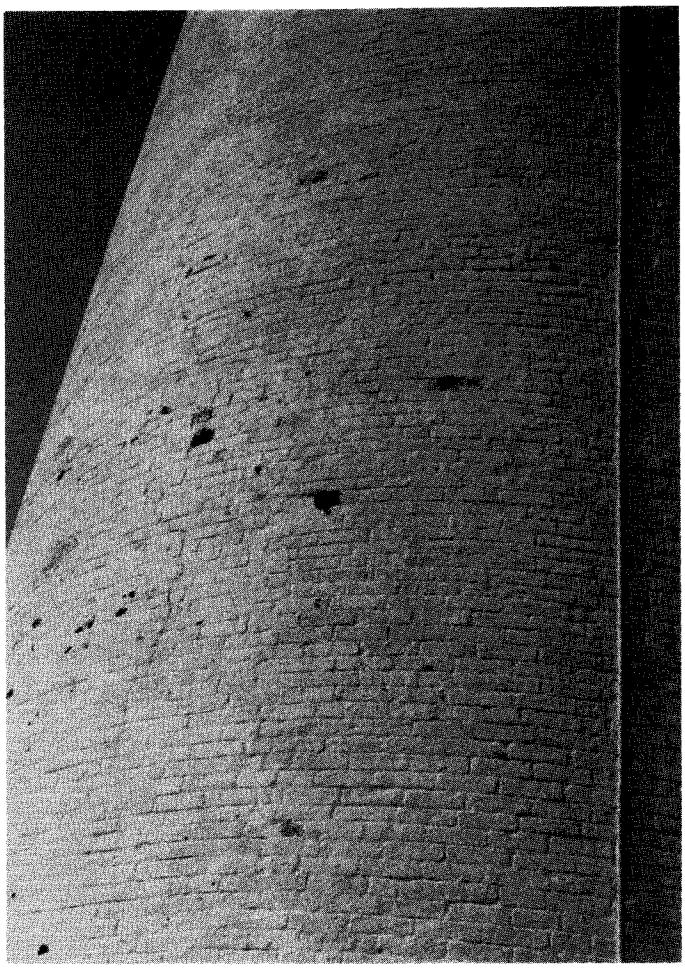

Figure 135. Tower, east elevation.

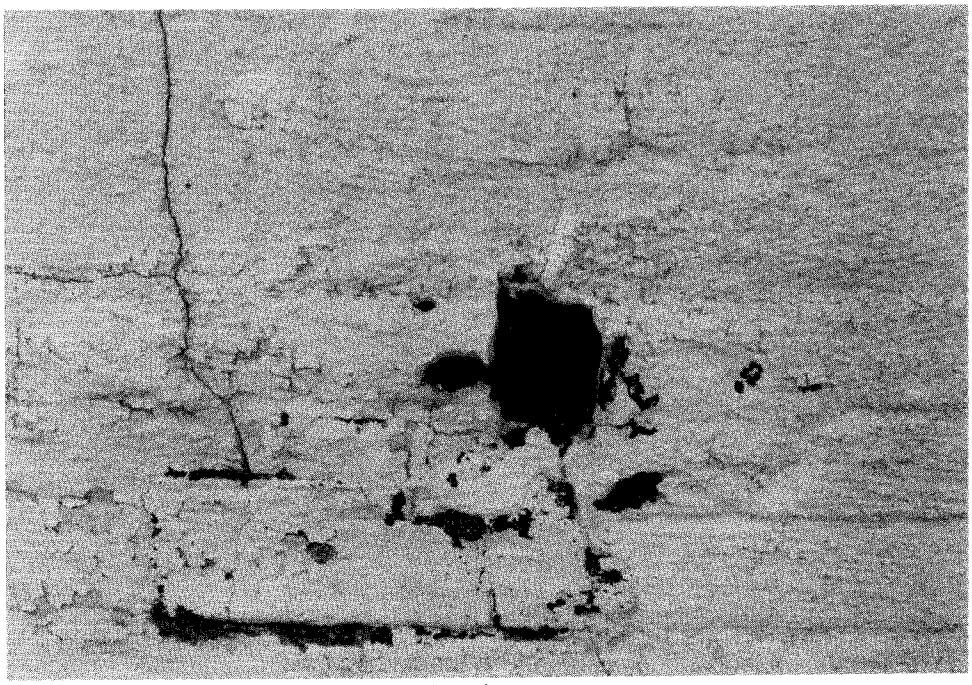

Figure 136. Tower, detail of east-elevation masonry.

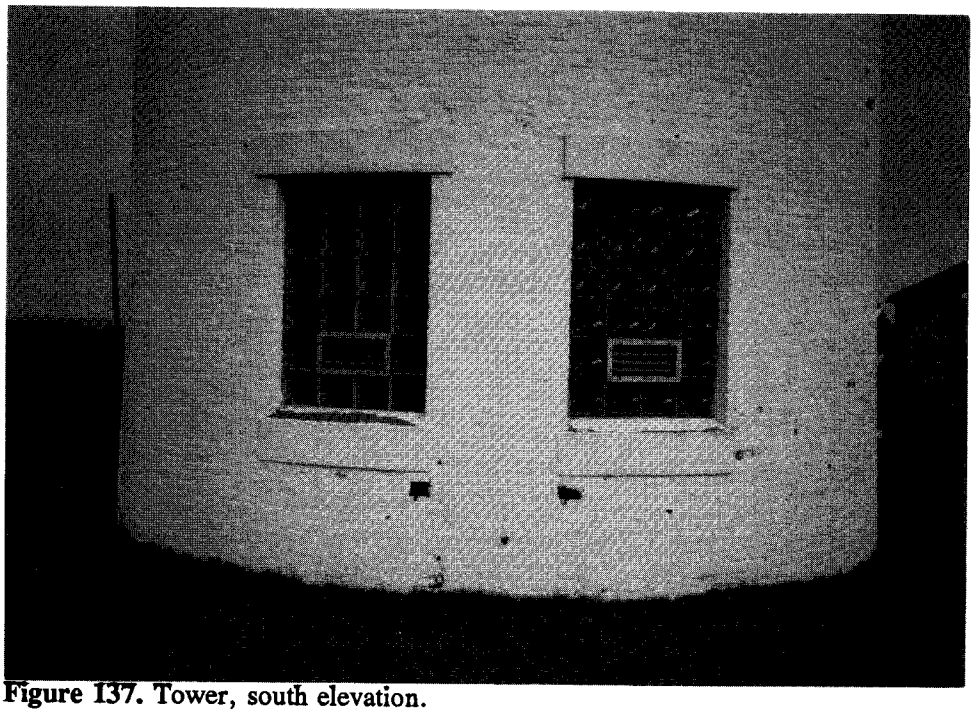

Figure 137. Tower, south elevation.

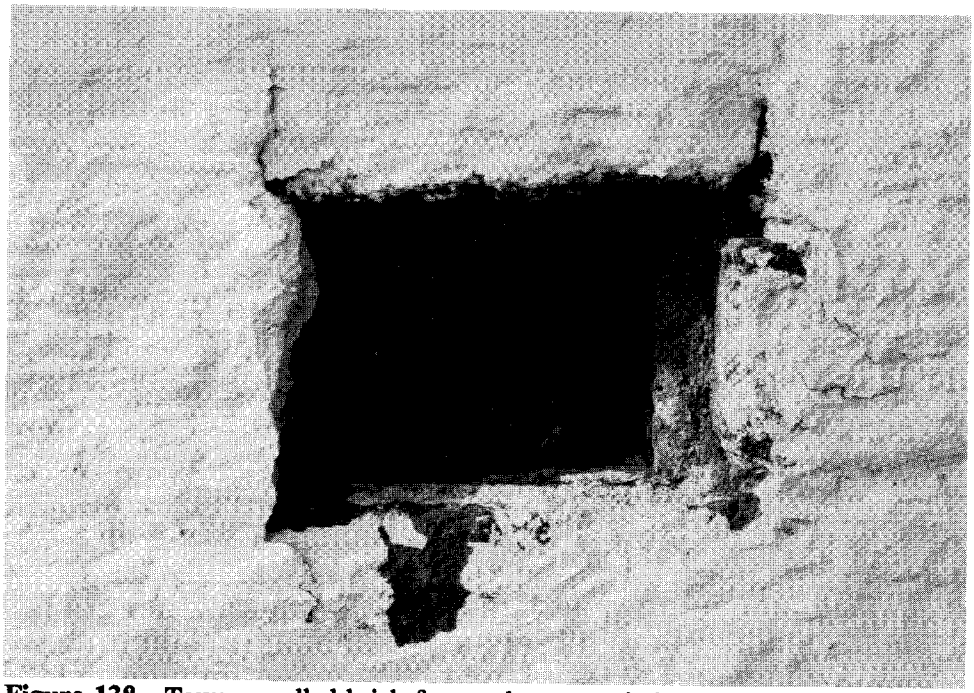

Figure 138. Tower, spalled brick face under west window of south elevation.

Watch Gallery

Conditions

- The floor of the gallery is composed of 15 granite sections, sloping to the exterior, with strips of lead sheet over the joints (fig. 139).
- Sealant runs intermittently at a joint in the brick wall (located one course above the granite floor) where the edge of metal is visible, perhaps from through-wall flashing.
- Eight metal tie rods are anchored in the granite by a rectangular metal plate welded to the end of each rod, with two metal anchor studs retaining the plate in the granite. The top of the rod is threaded and bolted with a hexagonal nut after passing through the metal Lantern Gallery. Several bolts are corroding from water entering the break in paint layer between bolt and gallery. One rod is completely detached from the granite, with the anchors being completely corroded. Several other plates (east and south) have been relocated 90 degrees from their original orientation, with two contemporary anchor bolts reattaching the plates from above to the granite. Presumably, these plates had become detached.
- Some of the granite floor sections (fig. 140) are not level with adjacent sections (e.g., the section under the south end of the ladder to the Lantern Gallery).
- The hinges of the exterior door in the doorway to the Watch Deck exhibit corrosion due to the wearing of paint surface coatings (figs. 141 and 142).
- The Watch Gallery railing appears to be original. Consisting of eight sections, it has flat metal handrails and bottom rails, and round metal balusters. The amount of corrosion visible is consonant with the severity of the location.

Recommendations

- Monitor the granite floor sections for movement.
- Verify the condition of the flashing at the granite joints, and at the juncture of the granite floor and the brick Tower wall.
- Apply sealant to open joints where metal wall flashing is seen.
- Grease exterior hinges to prevent corrosion at points of metal-to-metal contact.

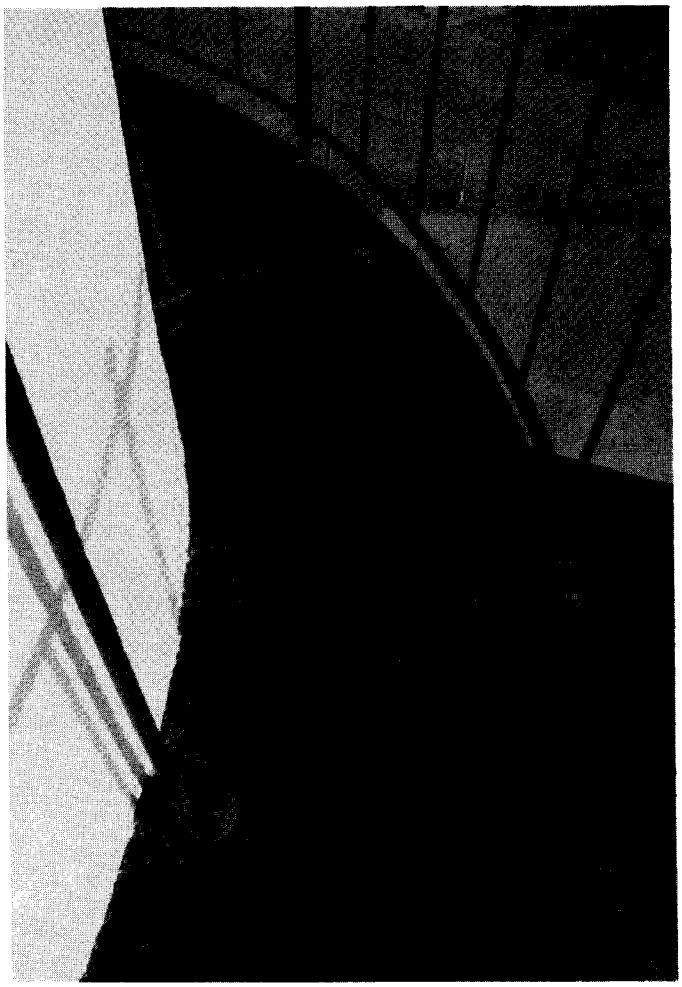

Figure 139. Tower, granite floor of Watch Gallery.

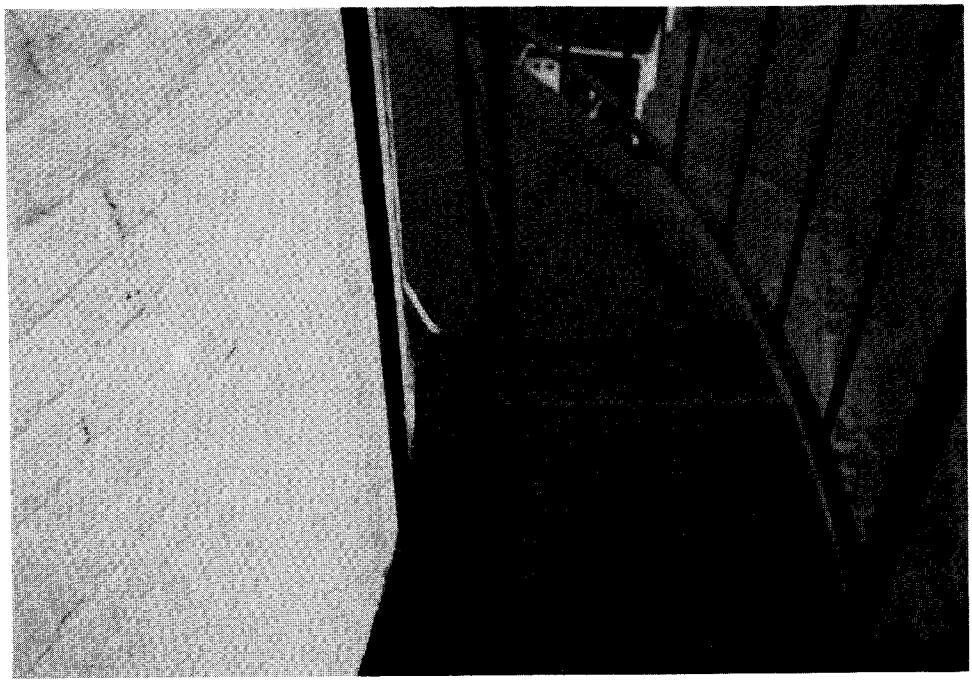

Figure 140. Tower, shifted granite section of Watch Gallery floor.

Figure 141. Tower, head of doorway from Watch Gallery into Watch Deck.

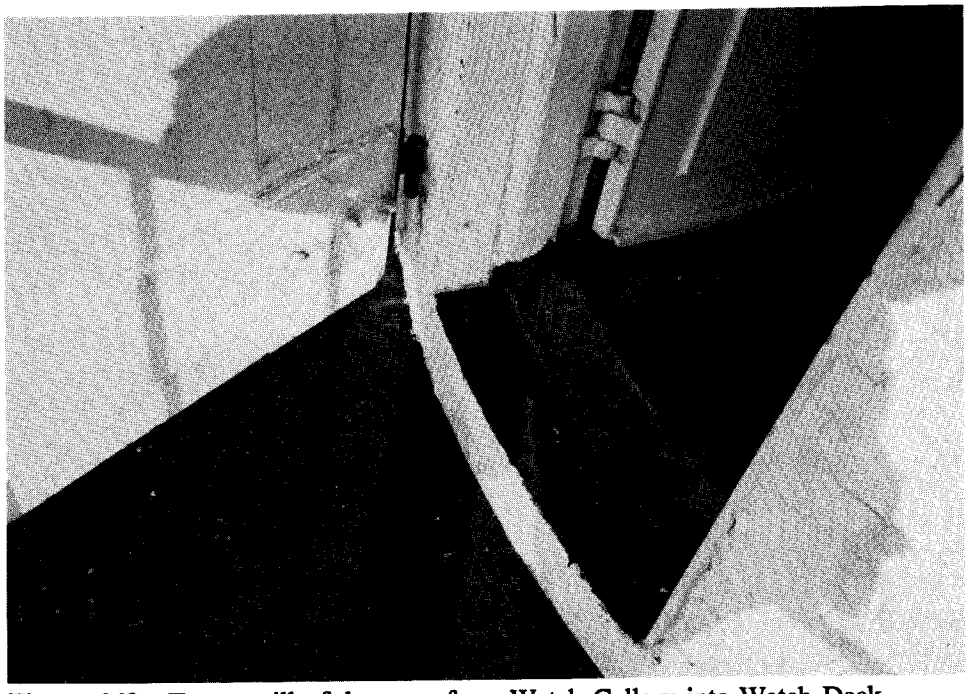

Figure 142. Tower, sill of doorway from Watch Gallery into Watch Deck.

Lantern and Lantern Gallery

Lantern - Conditions

- There is extensive through corrosion at two southeast metal vent covers (fig. 143).
- A metal cable and turnbuckle act as a tension ring at the circumference of the Lantern window head. Its necessity is not obvious.

Lantern - Recommendations

- Remove the corroded sheet-metal vent covers; weld in new sections, matching the dimension and thickness of the originals, and repaint.
- Determine the structural necessity of the cable and turnbuckle, and remove if not required.

Lantern Gallery - Conditions

- The floor of the Lantern Gallery (fig. 144) is composed of four sections of flanged one-inch steel plate with intermediate stiffening flanges corresponding to the 16 Lantern divisions. The sections are bolted together at the flanges.
- Drainage appears to be handled by two holes in the floor, emptying onto the Watch Gallery below.
- Nine holes in a circular configuration are drilled in the metal floor on the east side, with active corrosion on the insides of the holes.
- A metal eye is cantilevered over the southeast side, held by two straps bolted to the deck (fig. 145).
- There is corrosion at several of the metal bolts on the threaded metal tie rods that extend to the granite Watch Gallery floor below. The southeast tie rod is completely detached at the bottom plate.
- The existing railing of the Lantern Gallery is a modern pipe rail with aluminum fittings. It consists of 16 section, corresponding to the 16 divisions of the Lantern. The railing has an intermediate horizontal rail; this differs from the original design, which had only a top rail. The contemporary railing is not in character with the original railing in either design, materials, or proportion.

Lantern Gallery - Recommendations

- Repair the deteriorated metal tie rod by welding a new threaded section to existing, and add a new bolt as required. Provide a flexible means of sealing the joints between bolt, rod, and metal deck.
- Consider the future replacement of the non-historic aluminum handrail with a painted metal railing matching the original in configuration and dimension.
- Remove corrosion at miscellaneous holes in the metal deck and paint with appropriate metal primer and finish coats.
- As much as possible, avoid the use of incompatible brackets, fasteners, and materials to prevent galvanic action, or use appropriate insulation between dissimilar metals.

Figure 143. Tower, corroded metal vent cover at base of Lantern.

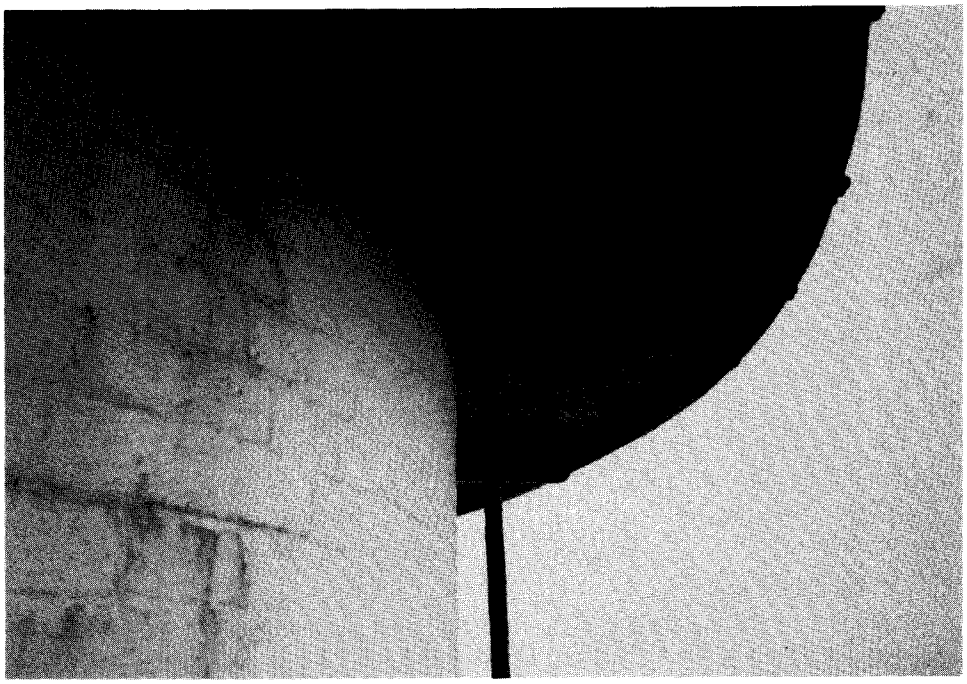

Figure 144. Tower, underside of metal floor of Lantern Gallery.

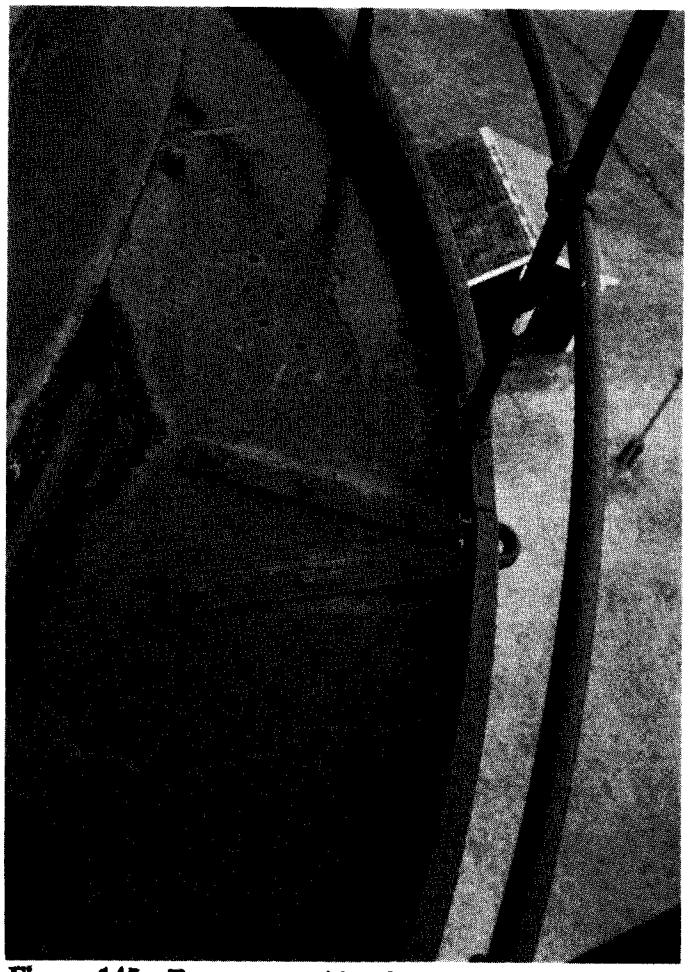

Figure 145. Tower, east side of Lantern Gallery.

Interior Elements

General Information

Conditions

The interior of the lighthouse demonstrates the penetrating effect of wind-driven, salt-laden moisture. There is a band of saturated brick (observed during a period of high relative humidity and intermittent showers) on the east wall, which begins at the Weight Deck and spreads uninterrupted down to the First Level. A tide line of salt deposits defines the outer boundary of this area. Salt crystals from either efflorescence, or salt coming out of solution from ocean spray, or both, are evident on the face of the bricks in two general forms: a heavy surface buildup of white crystals on the face of the bricks, and salt crystals tinted pink by brick powder as a result of the deterioration of the brick face. The base of the brick walls and the top of stair treads adjacent to the wall on the east elevation show accumulations of brick powder and salt crystals from deteriorating bricks above. The precise point of entry for the significant amount of moisture causing this problem is unclear. The condition is first visible associated with the exposed brickwork at the level of the Weight Deck.

The saturated walls and ingress of water has accelerated the deterioration of the metal stairway (and its landings) that ascends from the First Level to the Half Deck, as well as the floors of the Half Deck and Weight Deck themselves.

Recommendations

- Consider increasing ventilation for the interior of the Tower by unblocking selected existing vents at the Lantern Deck level, to assist in drying the interior during periods of high humidity. Vents should be controlled to prevent the ingress of windblown moisture.
- Periodically remove the sand from the interior to reduce abrasion of the painted metal stair and floor surfaces.
- Determine source of moisture penetration and correct.

First Level

Conditions

- The extensive moisture penetration that descends from the Weight Deck continues in a band several feet wide by the time it reaches the First Level, leaving deposits of salt crystals and brick dust on the floor.
- There are six holes along the perimeter of the wall, one course up from the floor. They are two courses high, approx. 4 to 8 inches wide, with a 5-inch air space beyond. Presumably they provide ventilation.
- Water stains are visible at the ceiling and wall between the Equipment Room and Tower.

- Currently, the two window openings at this level are filled with glass blocks that replaced earlier double-hung sashes. The only means of ventilation are two fixed louver vents, one in each opening, that measure approximately 8 by 16 inches.
- There is substantial water leaking at both window heads through the steel lintels, particularly the east window (figs. 146-149). The windows' sills, and the areas of wall and floor below the sills, are wet during periods of rain. A salt tide line is evident below the east window sill (fig. 149). Two lintels are delaminating from the extensive corrosion (figs. 146 and 148).

Recommendations

- Apply a damp-proof course at the new Tower foundation during relocation.
- Determine the source of moisture penetration above the windows.
- Replace the deteriorated metal-angle lintel at each window head.

Figure 146. Tower, head of east window in south wall, First Level.

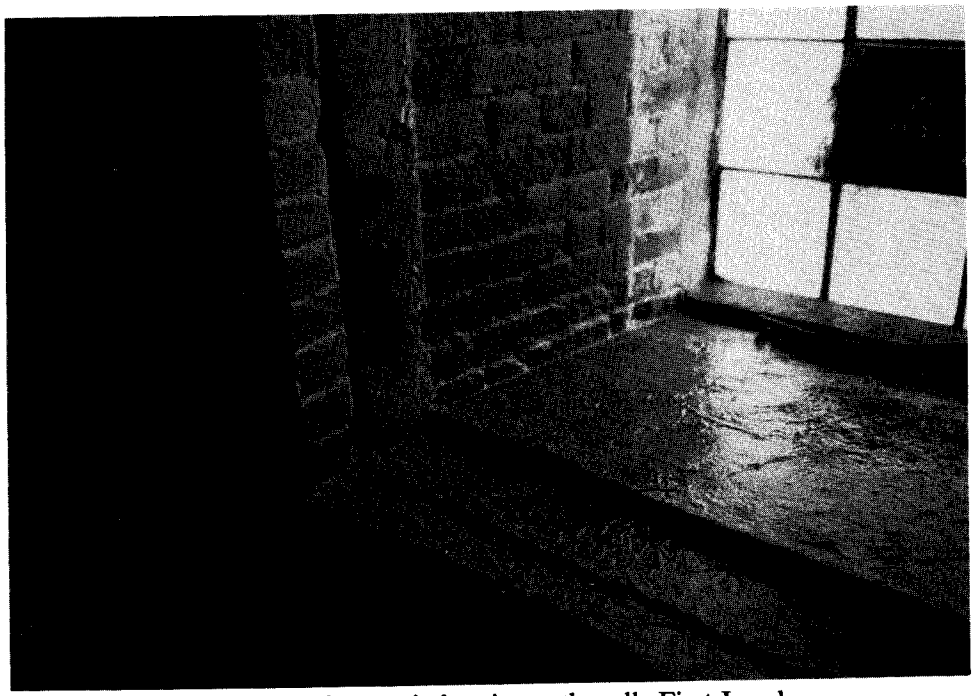

Figure 147. Tower, sill of east window in south wall, First Level.

Figure 148. Tower, detail of deteriorated metal lintels of south-wall windows, First Level.

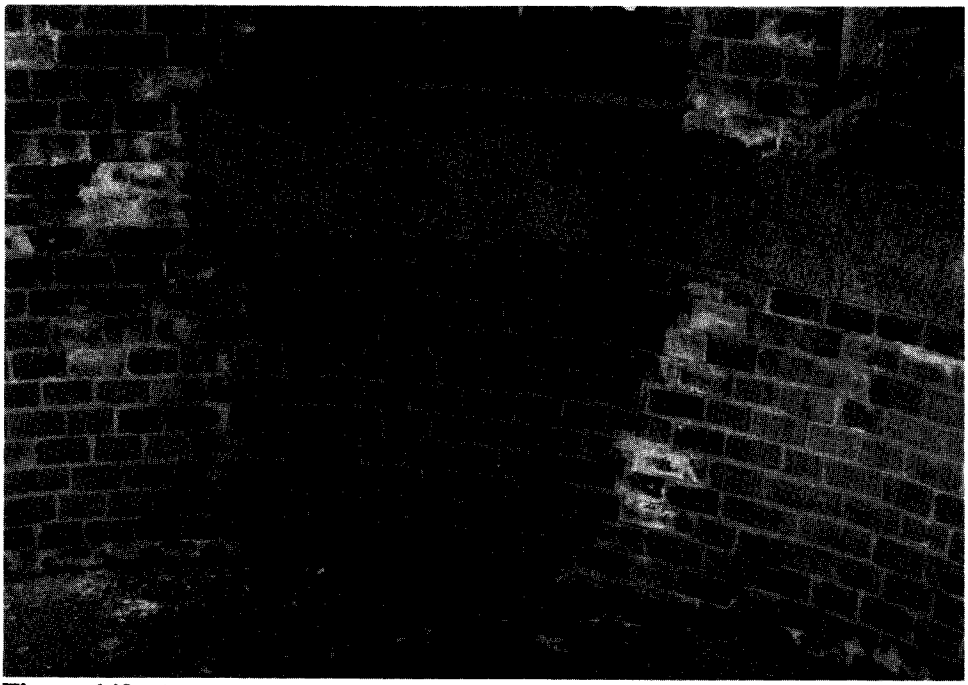

Figure 149. Tower, water saturation below sill of east window in south elevation, First Level.

Stairway

Conditions

- The metal stairway exhibits some corrosion, concentrated mostly on the bottom edges of the treads adjacent to the brick wall, where moisture collects (fig. 150).

Recommendations

- Scrape and paint all surfaces of the metal stairway.

Figure 150. Tower, corroded metal edge at underside of stair landing, east wall of First Level.

Half Deck

Conditions

- The Half Deck (the top landing of the stairway) is composed of three metal floor sections. These are supported by three contemporary steel "I" beams running north-south and pocketed into the brick wall.
- Four holes due to missing bricks are located four courses down from the top of the wall. Through the holes can be seen a 9-inch air space between the brick withes.
- A vertical zone of saturated brick, with several salt tide lines visible on the east elevation, corresponds to the wet area at the Weight Deck above (fig. 151). There are also heavy deposits of salt crystals and brick dust that have collected along the outer edges of the stair treads and landings (fig. 152). The salt crystals are tinted pink from brick powder as result of the deterioration of the brick faces.

Figure 151. Tower, salt crystals on deteriorated brick faces, east wall of First Level.

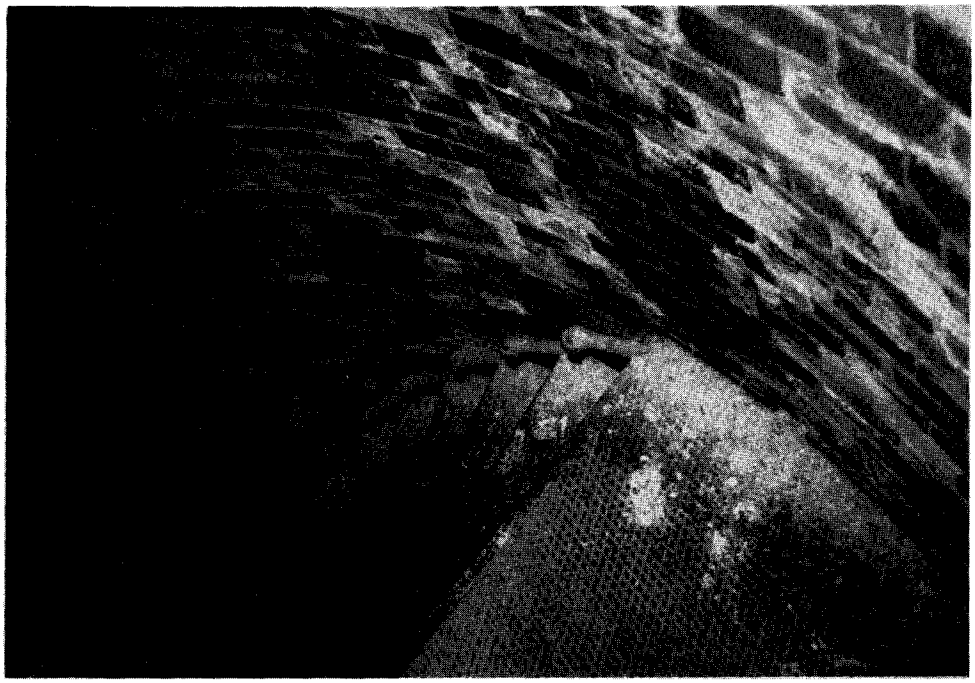

Figure 152. Tower, deposits of salt crystals and brick dust at steps and stair landing, east wall of First Level.

Weight Deck

Conditions

- Water penetration at the interior face of the Tower wall first becomes apparent at the Weight Deck, where the east and south interior elevations were observed to be saturated and glistening wet during periods of rain.
- This water penetration is especially severe where the beam over the stairway to the Watch Deck is set into the southeast wall (fig. 153). The entire wall below the beam pocket was saturated and glistening wet during the period observed.
- This southeast beam pocket is a major source of moisture penetration. A diagonal stepped crack emanating from the bearing point of the beam is presumably easing the passage of moisture.
- The end of the beam is corroding where it enters the south wall. The steel treads of the stairway ascending to the Watch Deck are likewise corroded where they enter the brick wall.
- There is also corrosion along the edges of the metal floor plates here, as well as at the seams of the Watch Deck floor above. This is presumably due to the capillary action of moisture (fig. 154).
- There appears to be selective deterioration/spalling of brick units at various locations.
- Water is also leaking into the Tower underneath the granite sill of the doorway at Watch Deck level; this also runs down the interior face of the brick wall (fig. 155).
- There are two screened brick vents (one each in the east and west elevations) near the top of the wall, approx. 8 square inches in area, with the back of the granite deck visible beyond.
- An iron eye is located on the east elevation, four courses below the ceiling. Diagonal cracks in the brickwork emanate from the collar of the eye, due either to previous loading or to expansive oxidation forces (fig. 156).
- Orange staining of the metal Weight Deck floor adjacent to the wet area at the east wall indicates active corrosion that is insufficiently inhibited by the paint coating.
- By contrast, the west elevation is fairly dry.

Recommendations

- Scrape and paint all corroding metal.
- Repair the diagonal stepped crack in the masonry.
- Determine the source(s) of moisture penetration.
- Treat the ends of the stairway treads where they intersect the brick Tower wall, to provide a moisture barrier.

Figure 153. Tower, beam pocket in south wall of Weight Deck.

Figure 154. Tower, corrosion at edge of metal deck and flanges of Weight Deck.

Figure 155. Tower, granite sill of Watch Deck doorway, as seen from Weight Deck.

Figure 156. Tower, iron eye set in east wall of Weight Deck.

Watch Deck

Conditions

- Orange staining is visible emanating from behind the furred-out wooden interior wall where it is cut out for the top tread of the stairway to the Lantern Deck (fig. 157).
- The interior vertical tongue-and-groove wood siding, which measures 2 3/8 inches wide, has buckled at approximately every two or three boards. This indicates that it has sustained high moisture content for long periods.
- Corrosion deposits around the steel sill of the exterior doorway to the Watch Gallery may be a result of insufficient paint coating.
- There are several areas of active corrosion occurring along the joints between the four sections of metal flooring of the Lantern Deck above. As stated previously, the 1-inch-thick steel plates of the Lantern Deck's interior floor extends continuously to form the floor of the exterior Lantern Gallery. There is some separation of the south joint, presumably from expansive oxidation forces. The west joint appears to be free of corrosion, perhaps due in part to being protected from the ocean side. Water may be entering the joints by capillary action, may be wind-driven to the interior, or may be draining in from the negative slope of the deck.

Recommendations

- Install an astragral seal at the perimeter of the steel door to the exterior Watch Gallery.
- Install hardware to assure tight closure of the door.
- Determine the source of moisture penetration and the consequent corrosion of the top tread of the stairway to the Lantern Deck.
- As a temporary measure to reduce the ingress of water, apply sealant to all of the exterior joints and seams of the four floor plates. Permanent repair of the corrosion evident between the flanges at the connections of the four floor plates will be problematic. To adequately clean the metal surfaces for application of new paint, the sections would have to be dismantled, which would require the Lantern to be lifted off entirely.

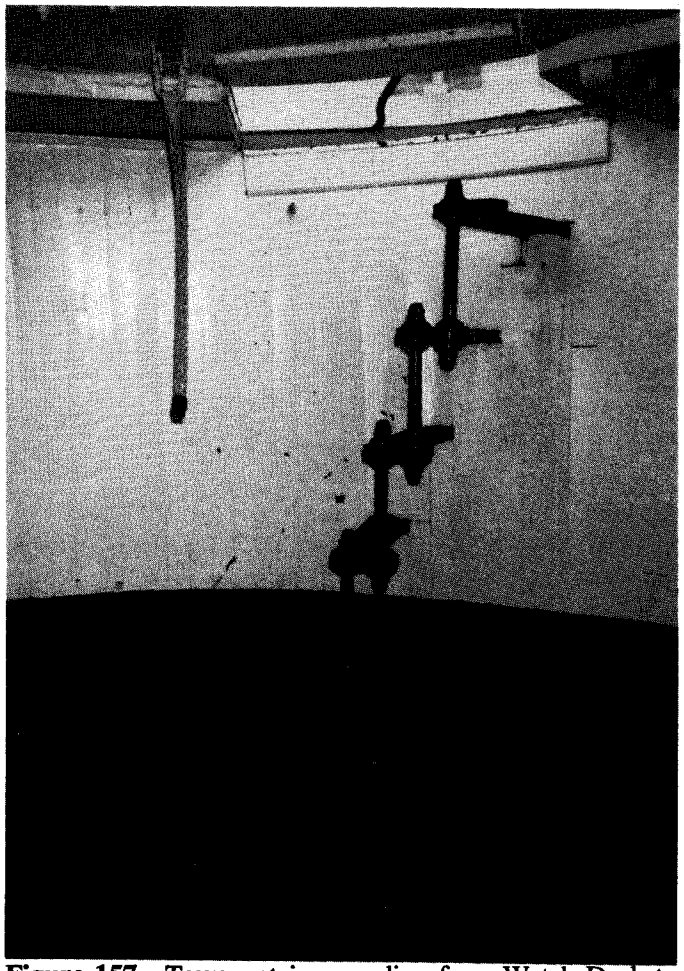

Figure 157. Tower, stair ascending from Watch Deck to Lantern Deck.

Lantern Deck

Conditions

- Orange staining is present on nearly half (7 out of 16) of the top surfaces of the steel channels that form the horizontal mullions between the Lantern's windows. This is a result of leaks at the windows, and is most evident at the east-facing windows (fig. 158).
- At the heads of the windows are small metal ventilation boxes that have three slots in their top surfaces. These appear to originally have been connected to similar, down-facing boxes on the exterior of the lantern. The exterior boxes would have admitted outside air, and the interior boxes would have emitted it into the Lantern Deck. The slots are currently filled in with concrete.
- One of the pins used to secure the vertical mullions to the horizontal window heads is displaced. It is located at the top of the west wall, next to the stair opening in the floor (fig. 159).
- A circular steel-plate floor in three sections has been added on top of the original floor, to support the existing replacement light.

Recommendations

- Consider increasing ventilation for the Lantern Deck by removing the concrete from some of the ventilation boxes at the heads of the windows. Vents should be controlled to prevent the ingress of windblown moisture.
- Consider providing weep holes in the steel channels that form the horizontal mullions between the Lantern's windows, to keep water from pooling in the channel.
- Reseal the window panels in their frames.
- Replace the loose pin at the top of the west wall.

Figure 158. Tower, corrosion staining at horizontal mullions of Lantern Deck window wall.

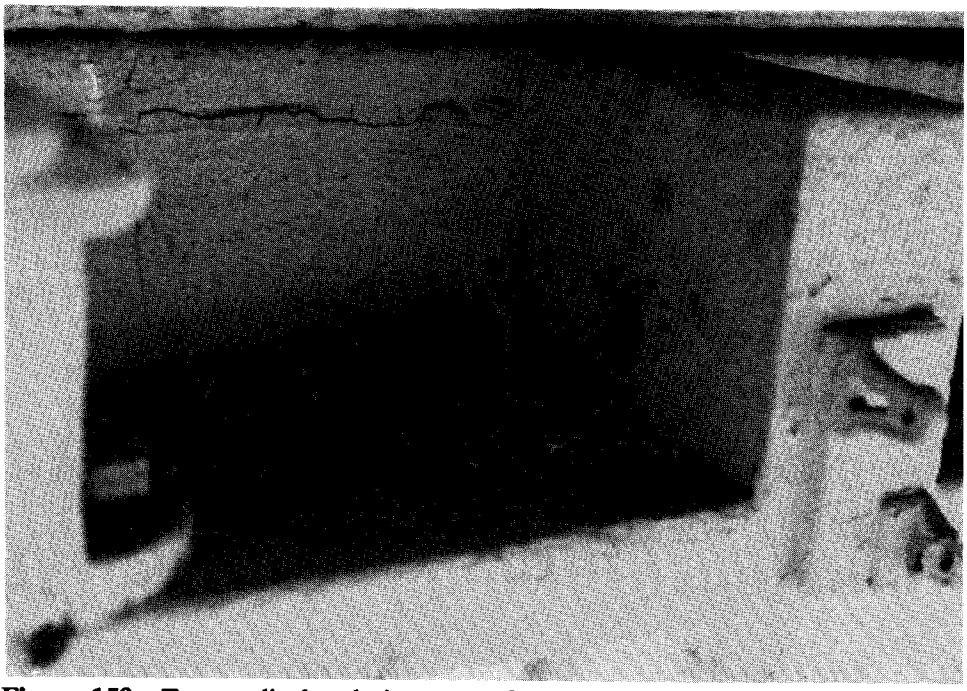

Figure 159. Tower, displaced pin at top of Lantern Deck window wall.