

## V

# ARTIFACT ANALYSIS

## A. INTRODUCTION

This chapter presents the results of the artifact analyses, focusing on description of the material culture associated with the burials. The initial section of this chapter outlines the procedures followed for artifact cataloging, analysis, and treatment. Section B presents the descriptive results of the artifact analyses organized according to artifact types. Section C contains a discussion of the coffin construction techniques evident at the site. A complete catalog listing of the artifacts associated with the burials is provided in Appendix A. Prehistoric artifacts recovered during excavation are described in the companion report dealing with the site's prehistoric component.

Preliminary processing of the collections was undertaken immediately after completion of the fieldwork and included cleaning, marking, and rough-sorting. All artifacts were washed or dry-brushed as appropriate, then sorted according to major artifact classes and placed in separate resealable plastic bags along with cards indicating provenience. Information on the cards includes the field provenience information as well as the assigned accession and catalog numbers.

Artifacts were marked using india ink on a base of clear nail polish. After marking, the ink was covered with a coat of clear nail polish to seal and protect the label. Artifacts were labeled with the accession number assigned by the Island Field Museum as well as with the catalog numbers assigned by LBA to record specific proveniences within the site. The assigned accession number for the Phase III excavations at Site 7S-F-68 is 92/159. Within the site, catalog numbers assigned by LBA designate specific field proveniences.

Artifacts requiring conservation were segregated from the collection and treated according to material type. Treatment was applied to a sample of the coffin nails representing a number of the features. The coffin nails were treated as follows: After cleaning with a wire brush to remove wood and debris, the nails were boiled in purified water to remove salts. They were then treated with tannic acid to remove rust and finally with carbowax to prevent any further deterioration.

After cleaning of the artifacts, the collections were sorted by major material classes such as ceramics, curved glass (bottle, table and furniture glass), and small finds/architectural. The collections were then analyzed by specialists.

Artifact cataloging was accomplished using a computerized relational database. The database for the site includes the field provenience information, historic artifacts, prehistoric artifacts, and the floral material recovered by flotation procedures. A brief description of the database is provided below, and a detailed discussion of the database architecture and coding procedures has been prepared to accompany the artifact collection.

Historic artifacts were cataloged according to standard typologies (e.g., Noel Hume 1970; South 1977), using the class, type, and variety approach (for example, class = glass, type = bottle, variety = case). LBA's database system allows recordation of up to 24 attributes and descriptors for each artifact. Data processing speed and optimization of disk storage were enhanced by the use of alphabetic and numeric codes for the various attributes. Some of the attributes (date ranges, for example) were automatically entered by the computer for commonly encountered artifact types. Also, more lengthy text "translations" can be generated from the artifact codes. The database system has the ability to generate a number of standard reports, including sorted lists, Termini Post

Quem (TPQs), Mean Ceramic Dates (MCDs), and results of Artifact Pattern Analysis (South 1977). The system also allows ad hoc data queries and data exports to other microcomputer systems for analysis at remote locations.

In LBA's cataloging system, historic ceramics are analyzed using a standard format based on the South/Noel Hume typology (South 1977), as modified for use in a computerized system (Stehling in Geismar 1983; Stehling and Janowitz 1986; Louis Berger & Associates 1987a, 1987b). Because of the small number of ceramic sherds in the collection, no cross-mending, vessel reconstruction, or estimates of Minimum Number of Vessels (MNVs) were undertaken. The cataloging of curved glass proceeded according to functionally distinct groupings based on "Bottle," "Table," "Lighting," or "Other" use categories. Window glass and other architectural glass were subsumed for analysis under Small Finds, described below. The glass analysis primarily involved the recording of descriptive attributes of the glass sherds, such as form, color, finish, and/or base type, manufacturing technique, motif, and embossment. Because of the small amount of glass recovered, MNV estimates were not considered appropriate. The cataloging procedures for tobacco pipes included recordation of bowl shapes, maker's marks, decoration, use-wear descriptors, stem-bore diameter, and standard comments. The "Small Finds/Architectural" category is a catch-all that includes all manufactured items other than ceramics, curved glass, and pipes; these items were cataloged according to the South/Noel Hume typology (South 1977). In addition, small finds were coded according to material composition and other descriptive information such as color, weight, manufacturing technique, decorative characteristics, maker's mark, patent marks, and trade names.

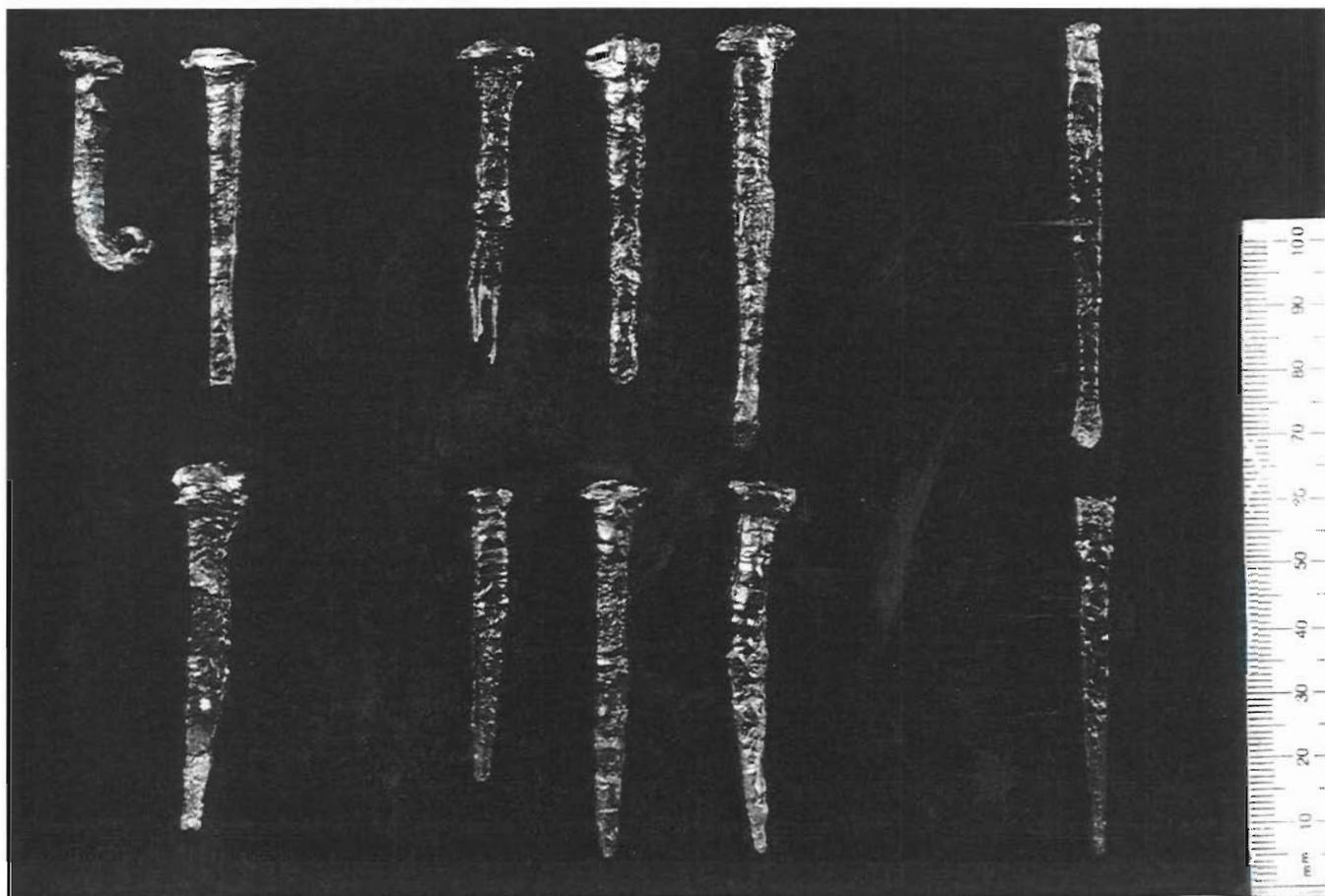
## B. DESCRIPTION OF ARTIFACTS

The artifact collections associated with the burials were dominated by coffin nails, shroud pins, and buttons. A few other items were recovered during excavation of the coffin pit features, such as a ceramic sherd, a clay tobacco pipe stem fragment, a brick fragment, and prehistoric lithics. For the most part, these items represent accidental inclusions in the burial pit fills. The following discussion is limited to the items found in direct association with the burials.

Each of the nine burial features yielded coffin nails, while a few also contained shroud pins; only one of the burial features had buttons. It was anticipated that these artifact types could be dated and therefore could assist in establishing the identities of the deceased individuals. The dates provided for the coffin nails, shroud pins, and buttons are based on known dates of manufacture representing either ranges or end dates. They cannot be interpreted as absolute dates, but should be considered general chronological markers of stylistic change or development in manufacturing technology.

Coffin nails were the most numerous artifact type associated with the burials, and they were recovered from all of the burials. They were categorized based on manufacturing technique, nail length, head treatment, and point treatment. The most sensitive chronological indicator was the manufacturing technique. Table 3 summarizes the types of nails recovered from the burial features, omitting a few nails recovered from non-feature contexts in the excavation units. Most of the nails were handwrought, although one machine-cut nail with applied head was also found in Feature 30. Plate 14 shows the full variety of nail types encountered.

Nelson (1968) states that handwrought nails were used during the seventeenth, eighteenth, and early nineteenth centuries, and gives them an end date of 1820. He dates early machine-cut nails with applied heads to the mid-1790s to 1805. Handwrought nails exhibited three types of heads: T-Heads, Roseheads, and Headless. Of these three types, T-head nails were the most common. Handwrought nails also varied in length, being categorized as brads and sprigs. Brads are defined as nails two inches or more in length, while sprigs are defined as nails shorter than two inches.



**PLATE 14: Handwrought Coffin Nails.**

*Top row, left to right shovel-shaped tips 1) clinch nail; 2) rosehead nail 3-5) t-head nails; 6) headless nail. Bottom row, left to right 1) rosehead nail; 2-4) t-head nails; 5) headless nail.*

Brads were much more plentiful than sprigs. The handwrought nails exhibited two different types of points. One point type was a flat, shovel shape, the other had a sharp point. It is not known whether these point shapes are chronologically significant, but nails exhibiting both types of points were recovered together from Features 5, 9, 15, 29, and 40. Flat points were more frequent than sharp points. One clinch nail was recovered from Feature 29. All of the unidentified nail fragments were tabulated as cut/wrought fragments.

The shroud pin was the second most common type of artifact associated with the burials, with examples recovered from Features 5, 9, 15, 29, and 30 (Table 4). Features 36, 38, and 40 did not yield any shroud pins although the staining associated with this type of fastener was noted on the Feature 40 skull. The recovered shroud pins were made of copper alloy, probably brass, fashioned with wrapped heads, and were most likely plated with tin or gold. Shroud pins are straight pins used for fastening a shroud wrapped around a body. According to Noel Hume (1970), the use of brass or copper alloy in making straight pins began in the sixteenth century, while the shaping of the head with a second piece of wire started in the seventeenth century. Noel Hume gives the straight pin with wrapped head an end date of 1824. In that year Lemuel W. Wright obtained a patent for making a stamped head straight pin. All of the shroud pins in the collection were made in the same way, a few still exhibiting traces of plating (Plate 15).

Buttons were recovered only from Feature 5. Each button was mapped and assigned an artifact number during excavation in the event that some distinction might become apparent among them. In fact, they consisted of two types of eighteenth-century buttons: two were wedges and six were tombacs (Plates 16 and 17). The tombac and wedge buttons are distinguished by the materials used to make them and in the form of attachment. Tombac buttons were finely cast buttons, frequently plated and made of various metals. Wedge buttons on the other hand were always cast in copper alloy. The tombacs recovered in the feature were made of a copper alloy, probably brass, the plating still visible. The wedge buttons were also made of a copper alloy. The quality of the material was not as fine as that of the tombacs and no trace of plating remained on either specimen. The attachments on the two wedge buttons were noticeably different even though they are both technically referred to as loop shanks (Plate 17). The tombac button attachment is known as a cone shank. The wire shank was looped and set into the body of the cast and enclosed in a cone of metal. The whole button was then turned on a lathe. In Plate 16 the striations caused by turning on the lathe are visible. Tombac buttons were typically undecorated. The wedge button attachment is cast with the body in one piece. The shank through which a hole was drilled later is flat or "wedge shaped." Neither type of button in this collection was decorated or marked in any way. These two types of buttons are firmly dated to the mid eighteenth century (Johnson 1942; Luscomb 1967). By the end of the century they were no longer common.

The two wedge buttons (Artifact #s 2 and 4) were located on either side of the pelvis of the interred individual, close to the forearms. Two tombac buttons (Artifact #s 3 and 5) were also located on either side of the pelvis and close to the forearms. The locations of these four buttons suggest they were sleeve buttons. The other four tombac buttons were located in the center of the pelvis.

In summary, there were three types of artifacts recovered from the cemetery for which dates were derived. The coffin nails, shroud pins, and buttons all pre-date the first quarter of the nineteenth century. As a group, the nails and shroud pins were consistent from one burial to the next. Only one nail was noticeably different. This was the early machine-cut nail with applied head, which dated to the turn of the nineteenth century; this example was recovered from Feature 30. The buttons from Feature 5 are in excellent condition and do not show a great degree of wear. They have been given an end date of 1800 but it is well documented that they went out of fashion well before this. The lack of variation and the consistency in the appearance of both the nails and the shroud pins suggest that most of these individuals, with the possible exception of Feature 30, were interred during the eighteenth century.

TABLE 3  
SUMMARY OF COFFIN NAILS

NAIL DESCRIPTION	FEATURE									
	5	9	15	29	30	35	36	38	39	40
Handwrought T-Head Nails										
Brad -- Sharp Point	16	7	1	4	2	.	.	.	.	2
Sprig -- Sharp Point	1	.	8	.	1	.	.	.	.	.
Brad -- Flat Point	3	13	6	4	.	.	5	3	6	17
Sprig -- Flat Point	.	1	.	.	.	.	.	.	.	.
Head Fragments	26	11	7	9	7	.	.	3	13	24
Handwrought Rosehead Nails	.	1	1	2	.	1	6	.	10	.
Handwrought Headless Nail	1	.	.	.	.	.	.	.	.	.
Flat Tip Nail Fragments	.	7	.	3	.	.	.	.	.	4
Clinch Nail	.	.	.	1	.	.	.	.	.	.
Early Machine-Cut Nail With Applied Head	.	.	.	.	1	.	.	.	.	.
Unidentified Nail Fragments	17	4	4	6	5	1	17	2	12	14

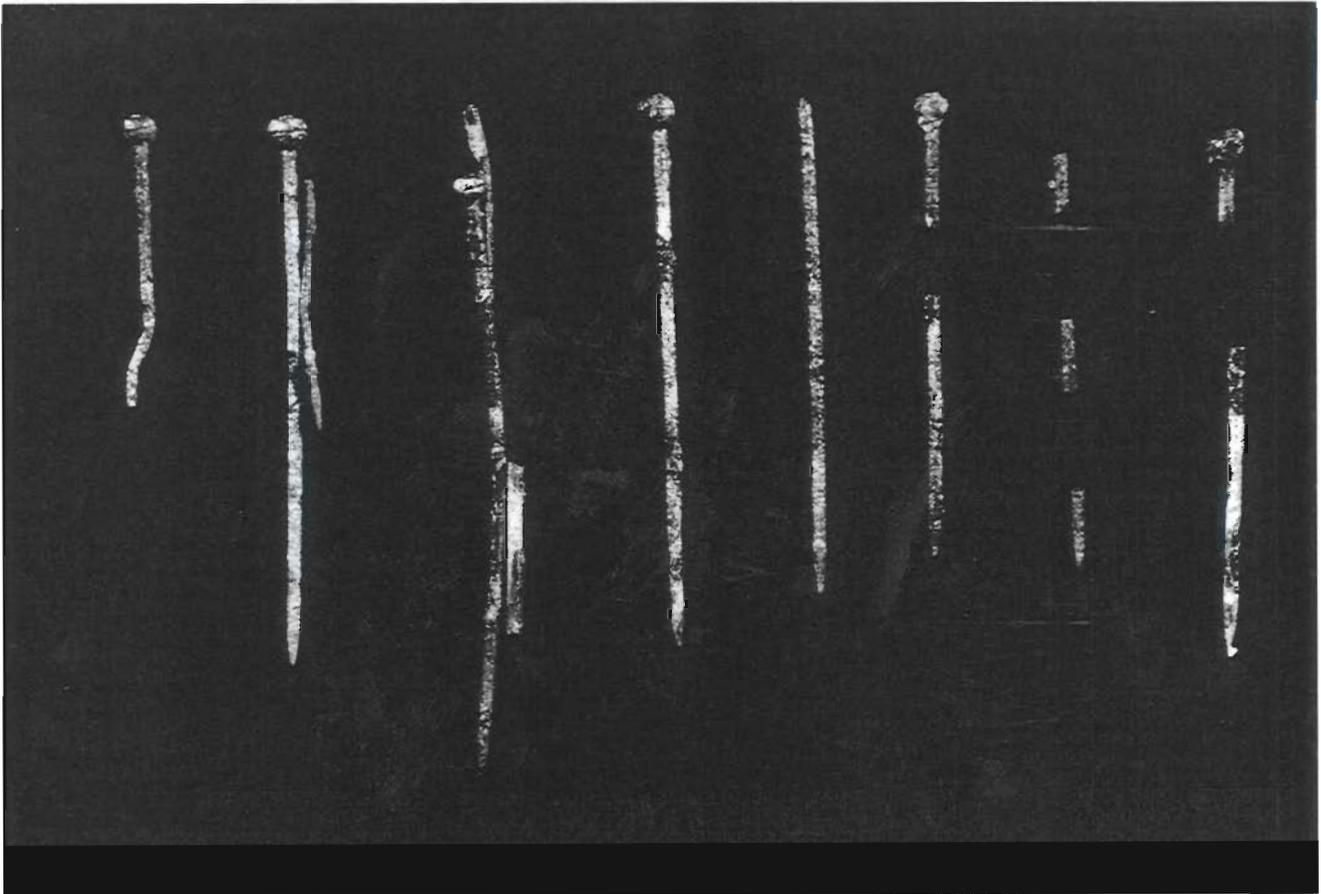
TABLE 4  
SUMMARY OF SHROUD PINS AND BUTTONS

ARTIFACT DESCRIPTION	FEATURE				
	5	9	15	29	30
Shroud Pin*	5	2	2	2	7
Tombac Button	6	.	.	.	.
Wedge Button	2	.	.	.	.

\* Counts for shroud pins reflect Minimum Number of artifacts rather than total number of fragments. Pins recovered from Units 15 and 30 have been assigned to Feature 15; pin recovered from Unit 50 has been assigned to Feature 30.

### C. COFFIN CONSTRUCTION

The coffins used at Site 7S-F-68 appear to have been of the hexagonal form which was widely used in America until the mid- to late nineteenth century, when more elaborately decorated, rectangular caskets became popular (Crowell et al. 1992; Garrow 1989; Habenstein and Lamers 1955). The total lack of coffin hardware, aside from nails, indicates that the coffins used at the site were plain, utilitarian vessels. Aside from the presence of nails, coffin preservation at the site was poor. A small quantity of coffin wood was noted during excavation of Feature 5, but in most cases, the coffins themselves were represented only by dark stains in the surrounding soil. The patterning of soil stains and associated nails was sufficiently clear to determine that the typical hexagonal or "shoulder" coffins were used at the site.



**PLATE 15: Shroud Pins.**

*Gilt copper alloy with wrapped heads of varying lengths.*

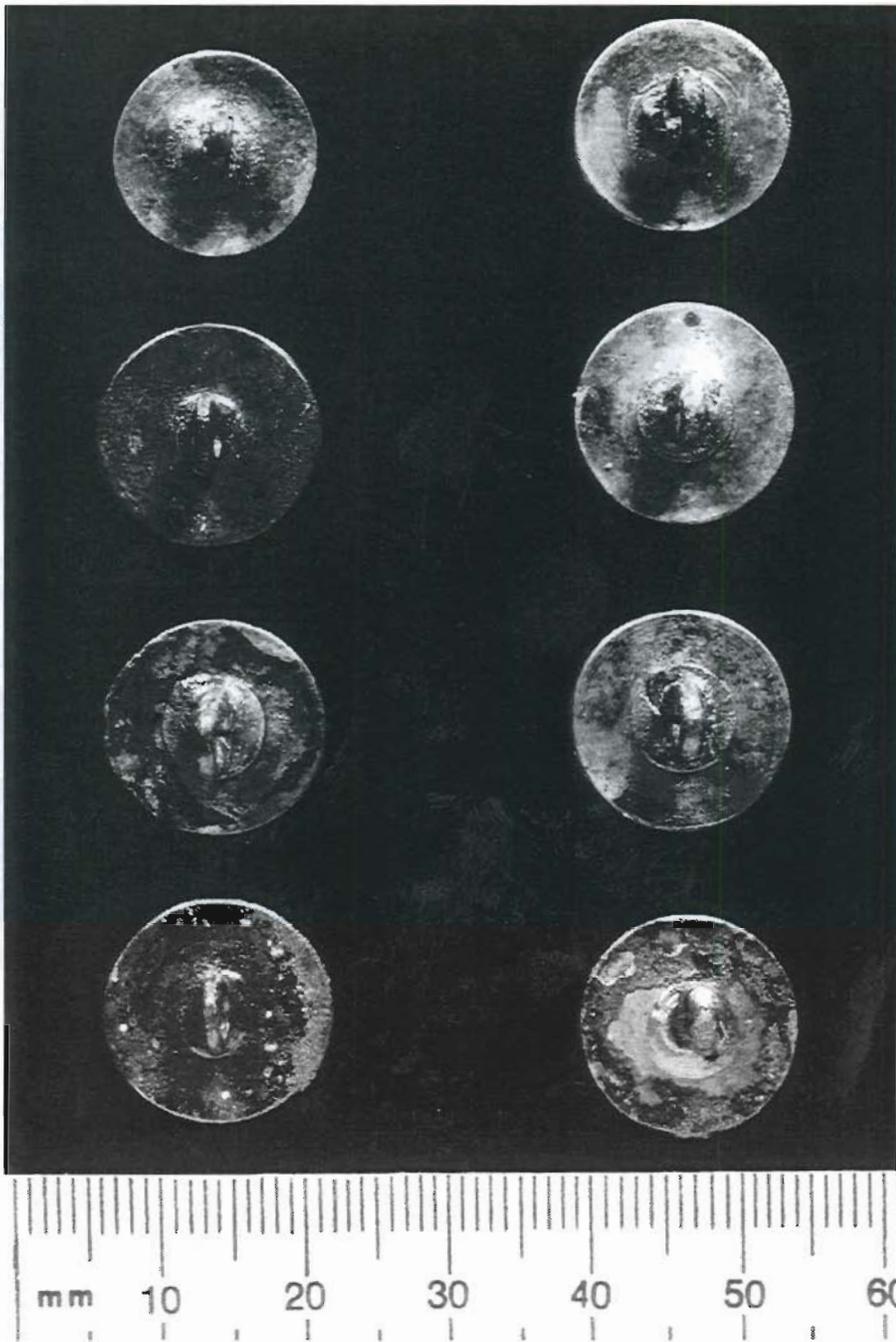
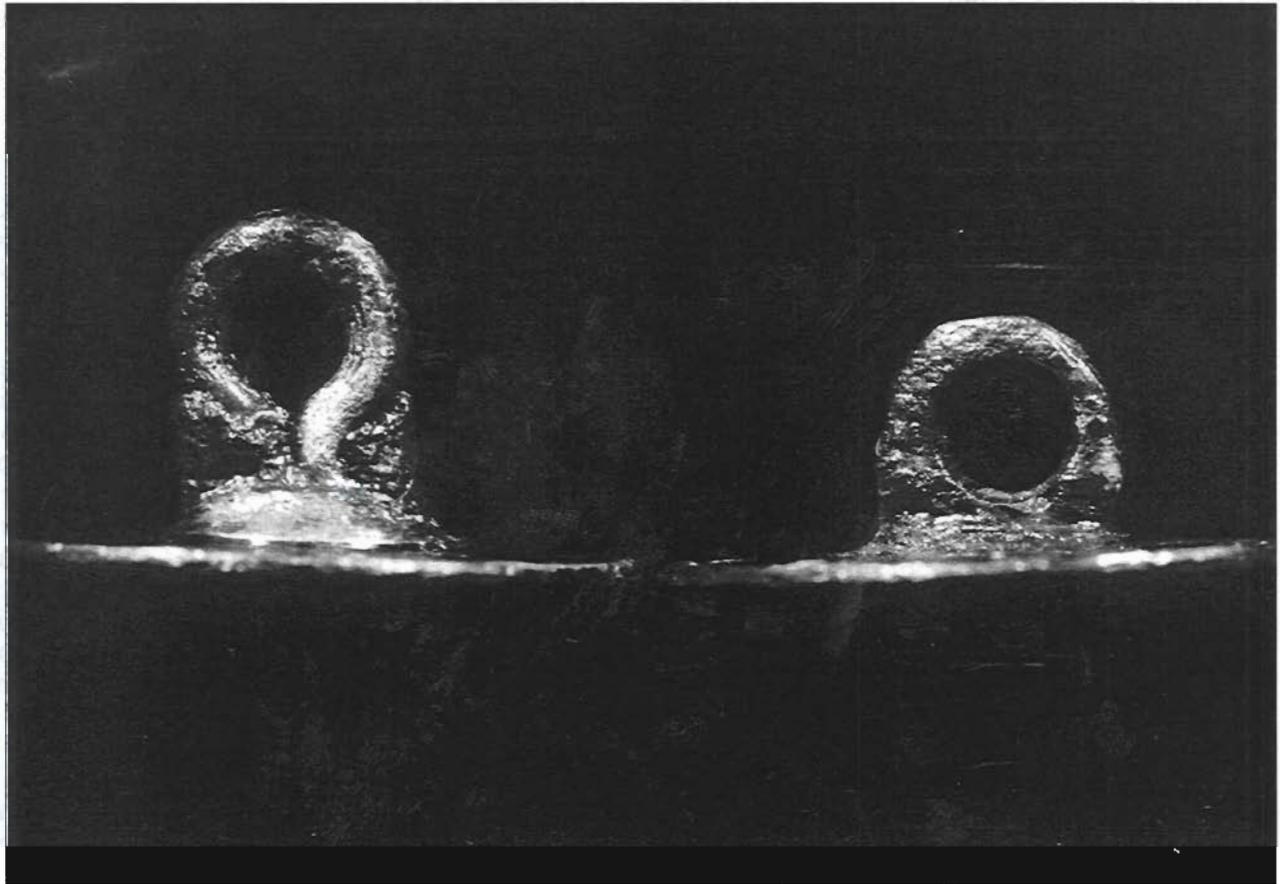


PLATE 16: Gilt Buttons from Feature 5.



**PLATE 17: Close-up of Two Distinct Types of Gilt Buttons from Feature 5.**

*The button on the left is a tombac with a cone shank. The button on the right is a wedge with a flattened "wedge" shaped shank.*

Despite poor coffin preservation, mapping of the coffin nails during excavation provided sufficient information to determine coffin shape, sizes, and construction technique. Figure 6 illustrates the range of coffin shapes and sizes, while Table 5 summarizes the coffin dimensions. It is apparent that while the basic hexagonal form was employed throughout the period of the cemetery's use, there was much individual variation. The lack of standardization indicates that each coffin was custom built to fit a deceased individual.

During excavation, the spatial patterning of coffin nails associated with each intact burial was mapped, providing specific information regarding the construction of the coffins. Figures 7-13 illustrate the coffin nail patterns for Features 5, 9, 29, 30, 36, 39, and 40. Comparison of the seven examples shows a common pattern wherein the majority of nails were used at the head and foot of the coffin.

The traditional hexagonal or "shoulder" coffin was built with a flat lid. Another coffin form that was occasionally used in some areas during the Colonial period was the gable-lidded form. This type of coffin was built with straight sides, either in a rectangular or trapezoidal shape, with the gable ridge running along the length of the coffin. Noel Hume illustrates European examples of this coffin form and demonstrates that it was used at Martin's Hundred, a seventeenth-century Virginia site. At Martin's Hundred, the coffin outlines had straight sides, and a distinctive pattern of coffin nails was found along the centerline, indicating use of a two-piece lid (Noel Hume 1982:78-83). There are other occasional reports of gable-lidded coffins, based on the recovery of nails along the burial centerline (e.g., Basalik et al. 1987; Parrington 1987). However, it is doubtful that hexagonal coffins would have been fitted with gable lids, given the difficulty of the joinery required. In the burials under consideration here, the pattern of nails along the medial line would more likely be attributable to the fastening of a brace along a flat lid.

By the early nineteenth century, coffin building began to emerge as a specialty in the urban centers of the Middle Atlantic region. In Philadelphia, which was a major center of cabinetmaking during the late eighteenth century, there was some specialization in coffin making, but coffins were generally made to order, rather than ready-made. Some of the earliest known coffin builders include Jacob Knorr of Germantown, Pennsylvania, who added coffin making to his lumberyard and cabinetmaking business that was founded in 1761, and Michael Jenkins of Baltimore who added coffin making to his cabinetmaking business as early as 1799 (Habenstein and Lamers 1955).

Prior to the late nineteenth century, coffin building in rural areas would have been done by a local carpenter, cabinetmaker, or wheelwright. Coffins were made only on special order after a death took place. Since coffins were built to order rather than ready-made in standard sizes, the carpenter needed to take a few measurements from the corpse before beginning work. Generally, two measurements were sufficient, the length from head to foot and the width at the shoulders or elbows. The coffin itself was built of six pieces -- bottom, head, foot, two sides, and top or lid, and the only tools required were a few saws, planes, a hammer, and various marking tools. The only unique tool required for coffin making was the template or pattern board, which was used to transcribe the standard hexagonal form onto the bottom board before cutting it to shape. This was a long narrow board, straight on one side and with a wide angle on the other. Construction began by marking the bottom board according to the length and width measurements of the corpse. After cutting the bottom to shape, the two side boards were applied. Each side board was cut slightly longer than the floor board, to extend along the broad angle formed at the elbows and to allow sufficient overhang to cover the thickness of the head and foot boards. Before nailing the sides to the bottom, a series of kerf cuts were made across the side boards at the elbow, so that the sideboards could be bent to the shape of the bottom board. After both sides were nailed to the bottom, the head and foot boards were cut and nailed into place. The overhanging ends of the side boards were then trimmed from the head and foot, completing the bottom assembly. The lid was then marked and cut to fit the coffin (LeeDecker 1994; Salaman 1990).

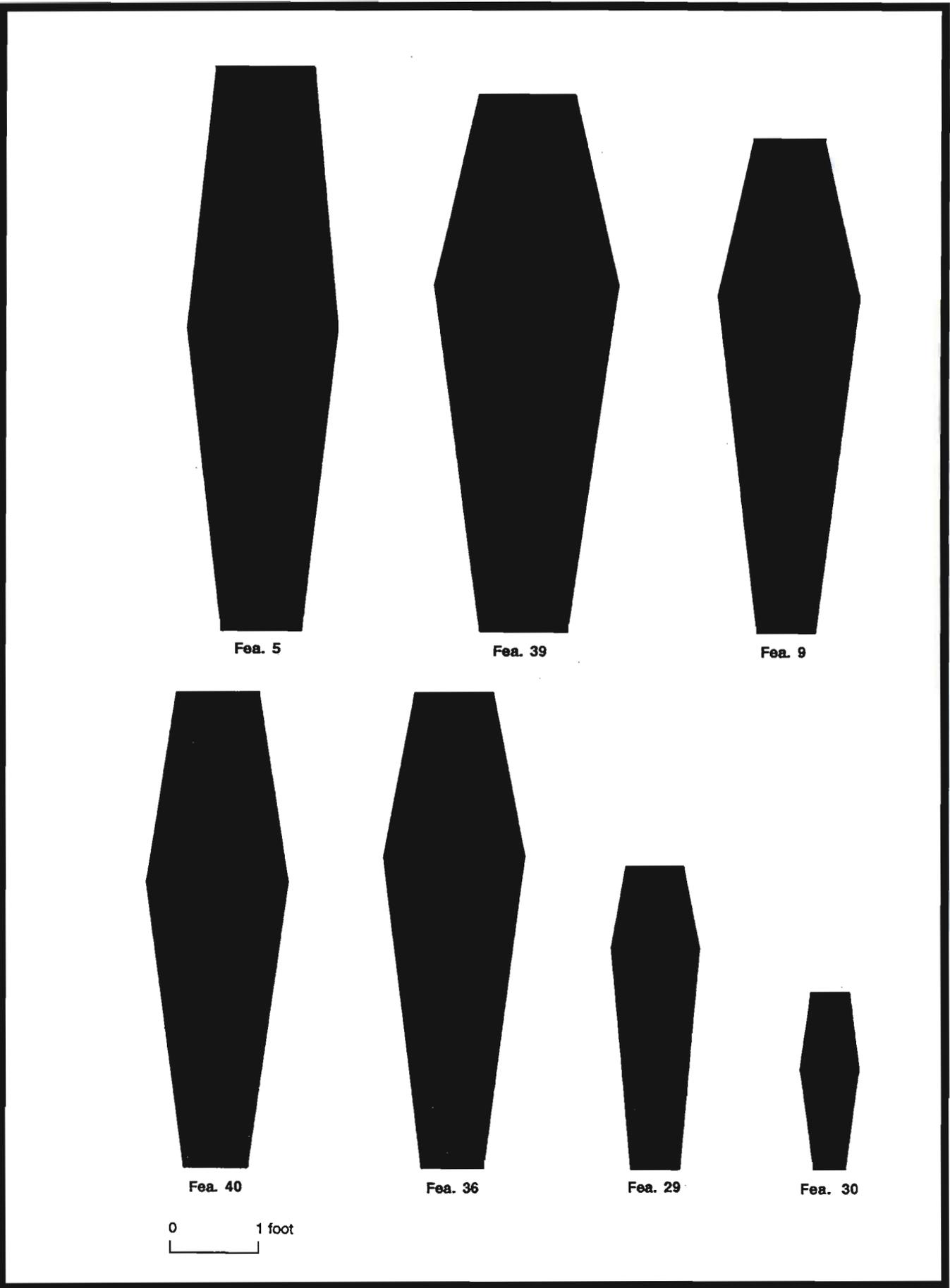
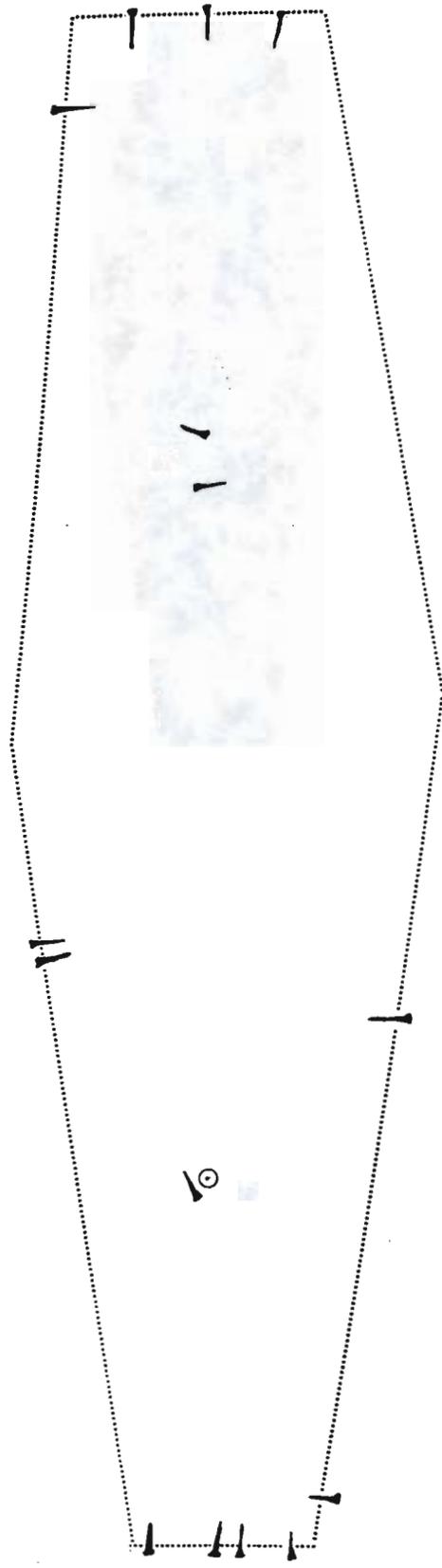


FIGURE 6: Coffin Outlines

# FEATURE 5 COFFIN NAIL PATTERN

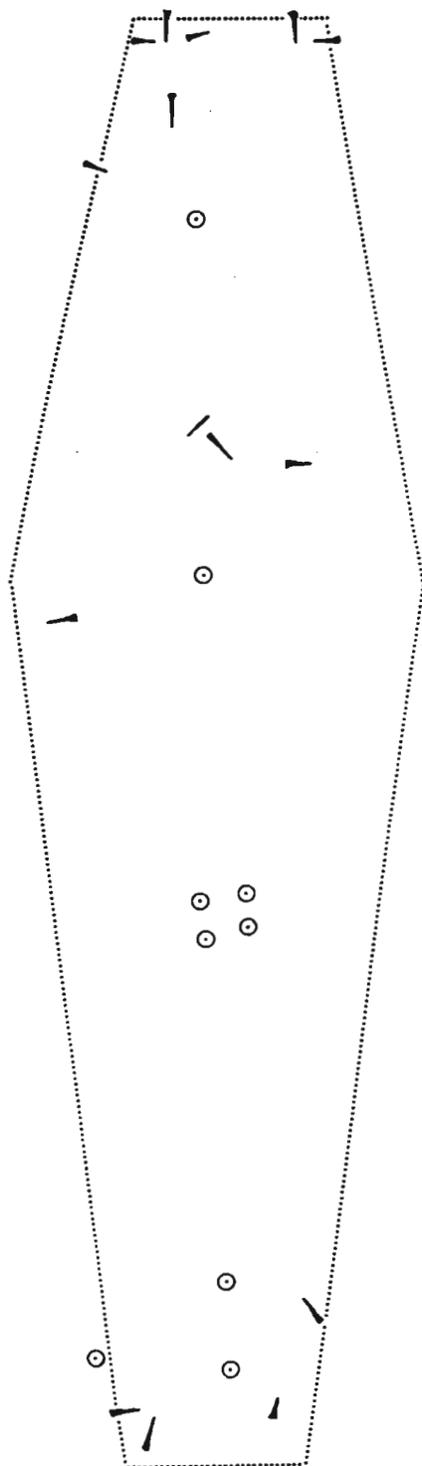


- KEY**
- ⊙ Nail, pointing down
  - ⊗ Nail, pointing up
  - Nail, horizontal
  - Nail fragment
  - ..... Coffin outline

one foot

FIGURE 7: Feature 5 Coffin Nail Pattern

# FEATURE 9 COFFIN NAIL PATTERN

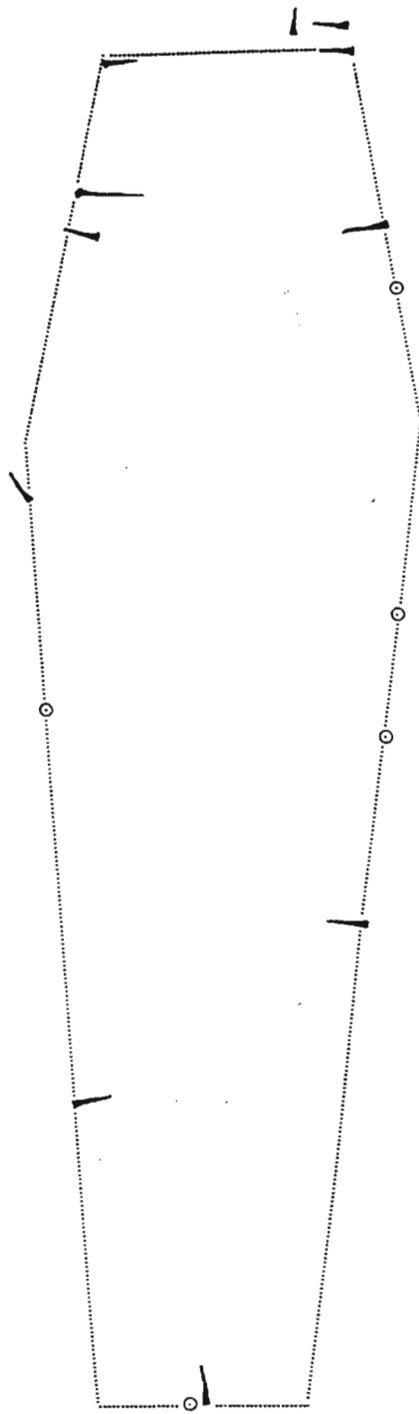


- KEY**
- Nail, pointing down
  - ⊗ Nail, pointing up
  - Nail, horizontal
  - Nail fragment
  - ..... Coffin outline

one foot

FIGURE 8: Feature 9 Coffin Nail Pattern

# FEATURE 29 COFFIN NAIL PATTERN

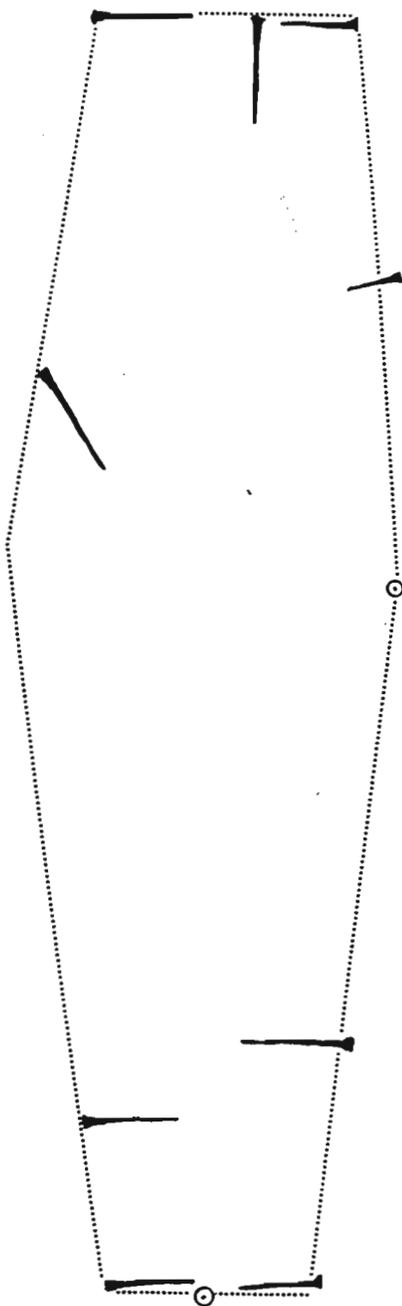


- KEY**
- Nail, pointing down
  - ⊗ Nail, pointing up
  - Nail, horizontal
  - Nail fragment
  - ..... Coffin outline

one foot

FIGURE 9: Feature 29 Coffin Nail Pattern

# FEATURE 30 COFFIN NAIL PATTERN

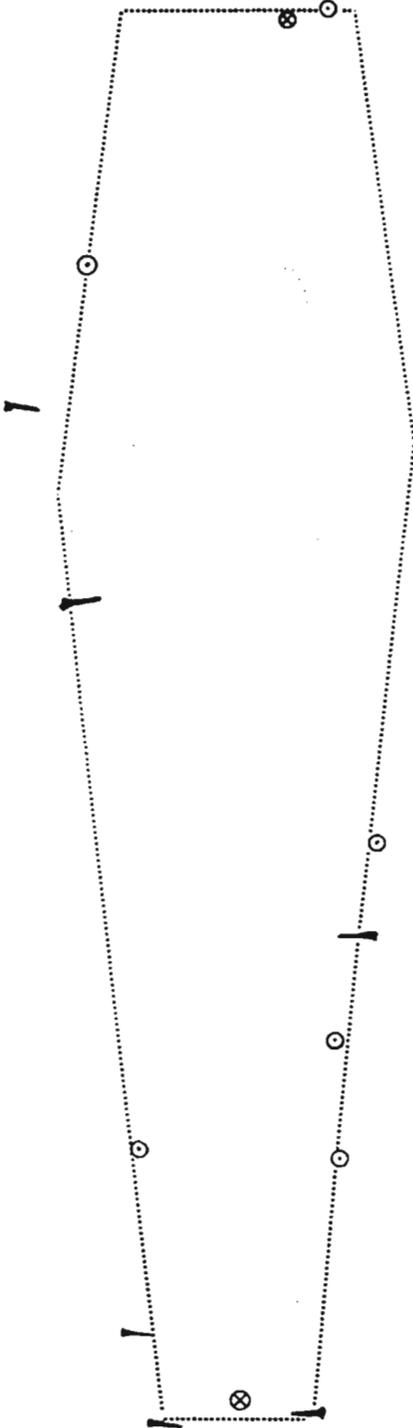


- KEY
- ⊙ Nail, pointing down
  - ⊗ Nail, pointing up
  - Nail, horizontal
  - Nail fragment
  - ..... Coffin outline

one foot

FIGURE 10: Feature 30 Coffin Nail Pattern

# FEATURE 36 COFFIN NAIL PATTERN

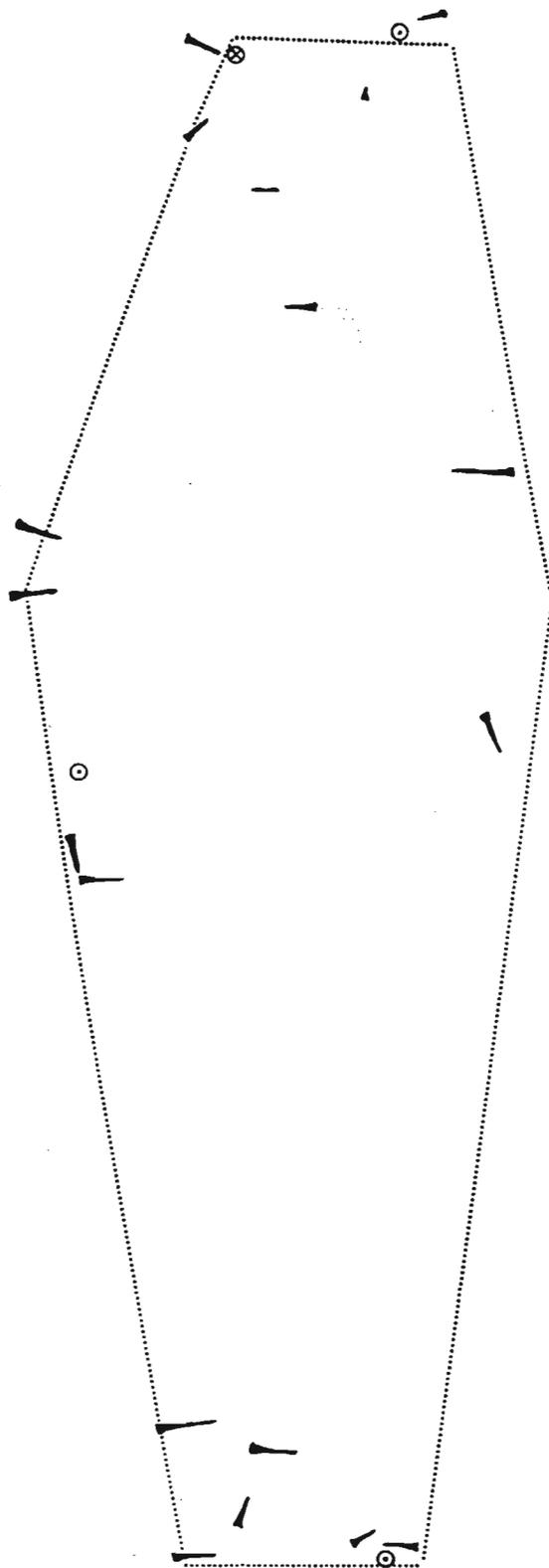


- KEY**
- Nail, pointing down
  - ⊗ Nail, pointing up
  - Nail, horizontal
  - Nail fragment
  - ..... Coffin outline

one foot

FIGURE 11: Feature 36 Coffin Nail Pattern

# FEATURE 39 COFFIN NAIL PATTERN

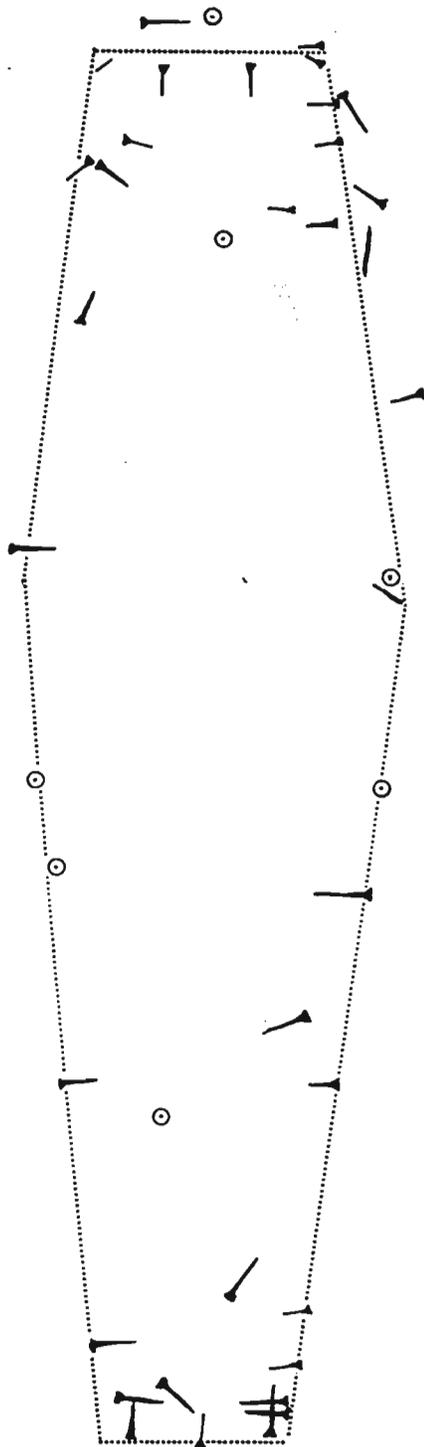


- KEY**
- Nail, pointing down
  - ⊗ Nail, pointing up
  - ▶ Nail, horizontal
  - Nail fragment
  - ..... Coffin outline

one foot

FIGURE 12: Feature 39 Coffin Nail Pattern

# FEATURE 40 COFFIN NAIL PATTERN



**KEY**

- ⊙ Nail, pointing down
- ⊗ Nail, pointing up
- ▲ Nail, horizontal
- Nail fragment
- ..... Coffin outline

┌──────────┐  
│ one foot │  
└──────────┘

FIGURE 13: Feature 40 Coffin Nail Pattern

After completing the basic construction, the carpenter may have sealed the joints or added decorative hardware or molding. When necessary, joints were sealed by pouring molten pitch inside the coffin and turning the coffin so that the pitch flowed across the joints to provide an airtight seal (Salaman 1990). There was little use of decorative hardware until the late nineteenth century, and none of the burials at Site 7S-F-68 contained any evidence that the coffins were adorned. In contemporary urban areas, such as Philadelphia, coffin hardware made of tin, pewter, or lead was available at the end of the eighteenth century (Habenstein and Lamers 1955). An upholstery lining may also have been added to the coffins of wealthy, urban clients, but there was no evidence that upholstery was used in the coffins excavated from Site 7S-F-68.

The woods used in coffin making varied widely according to local availability and the status of the deceased. In large urban areas, such as Philadelphia and Baltimore, hardwoods such as mahogany and walnut were chosen for the most well-to-do patrons. In rural areas, locally available elm, oak, and chestnut were commonly used. Elm was one of the most widely used woods for traditional hexagonal coffins, as it was easily bent and took nails without splitting. Pine was used for those of the most limited means. If the coffin was made of inexpensive wood, the carpenter may have applied a dark stain to give the coffin the appearance of an expensive wood such as walnut or mahogany (Salaman 1990).

TABLE 5  
COFFIN DIMENSIONS

FEATURE	LENGTH	WIDTH AT HEAD	WIDTH AT FOOT	MAXIMUM WIDTH
5	6.50	1.10	0.90	1.70
9	5.70	0.80	0.65	1.80
15	.	.	0.70	.
29	3.50	0.65	0.53	0.95
30	2.05	0.44	0.35	0.65
36	5.50	0.90	0.70	1.60
39	6.20	1.10	1.00	2.10
40	5.50	0.95	0.72	1.60

Note: all dimensions given in feet.