CHAPTER 10

Coffins

Jean Howson and Leonard G. Bianchi with the assistance of Iciar Lucena Narvaez and Janet L. Woodruff

Coffin remains (wood and hardware) were by far the most ubiquitous artifacts recovered from graves at the New York African Burial Ground. In this chapter we report on the distribution of coffins among demographic and temporal groups and examine the historical context for coffin use. We then provide descriptive information on the shapes, sizes, material, construction, and decoration of coffins represented at the excavated cemetery. Finally, we describe the material remains that were recovered from coffins and their treatment, identification, and quantification.

Presence/Absence of Coffins

As discussed in Chapter 5, the vast majority of the graves excavated at the New York African Burial Ground had coffins (Table 31, which includes burials for which presence or absence of a coffin could be determined, whether or not human remains were recovered). All of the children's graves had coffins. Of adults, 85.7 percent of our sample (186 of 217 adult burials for which the presence or absence of a coffin could be determined) was buried in coffins. (See Tables 23, 25, 27, and 29 for coffin presence/absence by individual burial.)

As discussed in Chapters 4 and 9, the presence or absence of a coffin co-varied with spatial location within the excavated site and with the age and sex of the deceased—this patterning suggests that coffinless burial took place in the context of economic and social disruptions during the Revolutionary War and British military occupation of New York (1776–1783). Prior to this, coffin burial appears to

have been the norm in the African community of New York.¹

In addition to the distribution of coffins by age, sex, and temporal group, we examined coffin presence/absence in relation to other types of artifacts. Burials with coffins were much more likely to have pins (205 of 301, or 68.1 percent) than those without coffins (6 of 31, or 20 percent).² It is possible that the presence of a coffin enhanced the preservation environment and therefore increased the survival of pins. However, a more likely explanation for the observed frequency distribution is that pins, like lumber for coffins, were in short supply during the war and/or that refugees who died during the British occupation had no family to provide a shroud. As noted in Chapter 4, clothing and jewelry items were present in clear association with the deceased in 6 coffinless burials, which argues against interpreting the lack of a coffin as strictly a function of poverty.

¹ Our specific historical explanation for coffinless burial as well as our chronological sequence contrast with those advanced for Newton Plantation in Barbados. There, the earliest (seventeenth century) rather than the later (late eighteenth and early nineteenth century) burials were without coffins, and change over time in mortuary practice, with increasing adoption of coffins owing to European influence, is suggested (Handler and Lange 1978:162, 192–193). We do not know if any of the burials excavated at the New York African Burial Ground are as early as the earliest graves at Newton Plantation—the earliest New York graves may have lain outside the excavated area. It is possible that, as in Barbados, seventeenth-century African burials in New York were without coffins, but our data do not speak to this or to the issue of European influences on the use of coffins.

² Percentages are based on 326 burials (296 with coffins, 30 without) where coffin presence/absence could be determined and preservation was "y," in addition to 5 coffin burials and 1 coffinless burial with "n" preservation that also had pins.

Burials		Count		Percent		
Duriais	Present	Absent	Total	Present	Absent	
			By Sex and Age			
Adult male	83	22	105	79.0	21.0	
Adult female	74	8	82	90.2	9.8	
Adult, sex undetermined	29	1	30	96.7	3.3	
Subadult, sex undetermined	150 ^a	_	150	100.0	0.0	
Sex and age undetermined	16 b	1	17	94.1	5.9	
Total	352	32	384 c	91.7	8.3	
		E	y Temporal Gro	up		
Early	49 b	1	50	98.0	2.0	
Middle	172 a	3	175	98.3	1.7	
Late-Middle	51	3	54	94.4	5.6	
Late	79	25	104	76.0	24.0	

Table 31. Coffin Presence or Absence, by Sex, Age, and Temporal Group

352°

Total

384 c, d

Clothing and jewelry were actually somewhat more frequent proportionally in well-preserved coffinless burials (6 out of 30, or 20 percent) than in well-preserved coffin burials (39 out of 284, or 13.7 percent). It is possible that in some cases, the families of the deceased actually sold clothing or other items to pay for a proper funeral, defined as including a coffin. The co-variance of coffin absence and burial in clothing may support the idea that less investment was made in the preparation of the body for burial in these cases.

Coffin Production and Provision

Joiners, carpenters, and cabinetmakers typically built coffins in colonial and early federal period American towns. These artisans were sometimes also "undertakers," providing other funeral accoutrements in addition to the coffin, as well as various services.³ The men who made and sold coffins in New Amsterdam/ New York, and the enslaved and free laborers who worked in their shops, would have followed the artisanal traditions of their home countries and regions. Coffins were used commonly in Europe by the middle of the seventeenth century, and travelers' accounts from West Africa suggest their use there by the eighteenth

91.7

8.3

^aExcludes two subadults that were inside coffins shared with another individual.

b Includes one possible coffin.

^c Burial 124 appears to have had a coffin and is included in the count but has not been assigned to a temporal group.

^d The total sample used to calculate this table includes burials for which presence or absence of a coffin could be determined, whether or not human remains were recovered.

³ The more general term "joiner" referred to any woodworker. After about 1760, the term cabinetmaker came to refer specifically to men who made both furniture and coffins (Rauschenberg 1990:26). Upholsterers also served as undertakers, although they did not build the coffins. Bells and palls for the procession; portable biers and coffin stools; decorations for the church; rings, scarves, and gloves to give out to mourners; and funeral foods and beverages are some of the items undertakers could provide. See Habenstein and Lamers (1981) on the history of American undertaking. The first "undertaker" to advertise in colonial New York was a woman, Blanche White, who hailed from London and offered a range of services in 1768 (see the advertisement in Gottesman [1938:141–142]).

century, though examples are known archaeologically only from the nineteenth century (Armstrong 1999:181). The ethnic backgrounds of coffin makers probably reflected the diversity of the town as a whole, and individual training and skill must have contributed to variation in coffin construction, so that coffin styles might be expected to vary from shop to shop. Still, based on historical and archaeological research, there was a very limited range of basic coffin styles used in the seventeenth and eighteenth centuries in the American colonies and in Europe.

As Julian Litten (1991:88) points out, most specific information on English coffins prior to the nineteenth century has been gathered from archaeological research and vault openings. Prints, drawings, paintings, sculpture, trade cards, and advertisements also can provide details, and Litten (1991:89–90) provides information on early coffin shapes used in England based on such sources: gable-lidded coffins, four sided and tapering toward the foot (i.e., trapezoidal), are depicted for the fourteenth through the seventeenth centuries. This style was also used in seventeenth-century America, as evidenced at Carter's Grove (Noël Hume 1982). Gable-lidded, shouldered coffins are found in England from about 1575.4 Litten (1991:99–100, Plate 11) states both that the latter were common from 1600 to 1675 and that gablelidded, trapezoidal types "gave way" to shouldered, flat-lidded types during 1660–1675. In his sample, coffins from the period 1725–1775 were "almost without exception" of the flat-lidded, shouldered variety—what we term "hexagonal" in this report. Litten does not specifically discuss flat-lidded, trapezoidal coffins. It seems possible they were the less expensive versions of the gable-lidded, trapezoidal style. It should be noted that Noël Hume (1982:38) had difficulty finding actual examples of gable-lidded coffins from the seventeenth century and stated that the "hundreds" of coffins he examined in London vaults had lids "made from a single, wide board," so the flat-lidded variety may well have been the more common. Noël Hume does not suggest dates for flatlidded, trapezoidal types.

If the shift to shoulder-shaped, flat-lidded coffins was indeed virtually complete in England by 1725,

we may surmise that English cabinetmakers setting up shop in New York after that date would have produced wares in this style. The trapezoidal (four-sided tapering), flat-lidded coffins found at the New York African Burial Ground may represent an earlier and/or less expensive style, a simple style resulting from lack of up-to-date training, or a style preferred by non-English coffin makers. As noted, where graves are superimposed, burials with four-sided, tapered coffins usually predate burials with hexagonal-shaped coffins, so the hypothesis that the style shifted from the former to the latter over time is supported. If nonartisans built coffins on an as-needed basis with minimal tools and expertise, a simple style without shoulder or gable may have resulted.

We know that at least in some cases, the master of a household was expected to provide the coffin for an enslaved member (and probably also for free or indentured servants or other dependents). Blacks who died at the Almshouse (presumably free persons or enslaved persons who had been handed over to the Almshouse when their slaveholders died) also were provided coffins, as least during the 1750s. Surviving records of New York cabinetmaker Joshua Delaplaine, covering a period from 1752–1756, list coffins made at his workshop (New-York Historical Society, Joshua Delaplaine Papers, 1721–1779, 1815– 1817, Day Book of Joshua Delaplaine, 1752–1756). Delaplaine worked for a variety of customers, from wealthy merchants to the Almshouse warden. Thirteen orders for coffins for "Negroes" were recorded (Table 32). A basic adult coffin cost 11 or 12 shillings, perhaps based on size. Charges for two children's coffins were 4 shillings 6 pence and 5 shillings. The less expensive one was painted black; it may have been smaller in size.

Records from Charleston also indicate that coffins were frequently "blacked" and that no other color was used to paint them (Rauschenberg 1990:38). The black paint apparently usually added 1 shilling to the cost of a coffin, screws and rosin added 1 or 2 shillings each, and an extra-large size increased the price by 1 shilling. Thus Christopher Fell's bondwoman received the fanciest and most expensive of the "Negroes" coffins at 14 shillings; it included screws, rosin, and paint (see Table 32).

Compared with other entries in Delaplaine's day book, the prices paid for most of the blacks' coffins were at the very low end, reflecting the use of few embellishments and presumably the less expensive woods. Handles, breastplates or other lid decora-

⁴ A surviving early example of the shouldered, gable-lidded coffin in wood (Litten 1991:Color Plate 11) is the Easingwold, Yorkshire, parish coffin, dated to ca. 1645, which has metal braces straddling the gable ridge (it is not clear whether these are original, however). The gable is quite shallow.

Date	Person Placing Order	Person Placing Order Description	
November 14, 1753	Joseph Ryal	"coffin for his negro boy"	10s
January 22, 1754	Abraham Leffer[t]s a	"coffin for Jane a negro" (poorhouse)	11s
March 27, 1754	Robert Livingston	"a large coffin for his negro"	12s
April 30, 1754	Abraham Lefferts	"coffin for Mo[lly?] a negro"	11s
August 6, 1754	Christopher Fell	"black coffin for his negro woman rozind and with screws"	14s
December 20, 1754	Daniel Gomez	"coffin for his negro woman"	12s
March 4, 1755	Caleb Lawrence	"coffin for his negro child"	5s
March 4, 1755	Robert Griffith	"coffin for his negro man"	12s
July 9, 1755	Christopher Fell	"coffin for a negro woman"	12s
July 19, 1755	Caleb Lawrence	"rough coffin for Joseph Castins negro"	9s
August 12, 1755	Estate of Peter Vergerau	"coffin for negro woman w/screws"	13s
August 27, 1755	Thomas Dobson	"coffin for his negro girl"	11s
February 29, 1756	John Stephens	"black coffin for a negro child"	4s 6d

Note: From New-York Historical Society, Joshua Delaplaine Papers, 1721–1779, 1815–1817, Day Book of Joshua Delaplaine, 1752–1756.

tions, linings, and special wood increased the price for many of the coffins Delaplaine furnished for deceased whites. Examples include a child's coffin 4 feet 3 inches in length, covered and lined in Holland cloth and "trimmed with polisht nails" for £3.10; a coffin for a woman that was covered, fully trimmed, and lined with sasinet for £5; bilsted (liquidambar) coffins for children priced at 11 shillings lined and 7 shillings unlined; a man's coffin covered and lined with a breastplate on the lid for £3.15; a child's coffin lined and "struck with name & age" for 14 shillings; and a man's coffin of bilsted with a heart, name, age, and date "struck" on the lid for £2.2. The term "struck" probably refers to forming the letters and numerals in nails or tacks.

At the very end of our period, the cost of a basic coffin had apparently risen slightly. A 1796 price list (Table 33) informs us that they were sold in standard lengths increasing in 6-inch increments. Prices were set according to size, with the cost rising 1 shilling

sixpence per 6 inches of length up to 5 feet.⁵ A shilling was charged for putting on handles and a sixpence for a breastplate (exclusive of the cost of these coffinfurniture items themselves).

The provision of a coffin may not always have been the duty of a household head. For some—maybe most—enslaved Africans and for free persons, it might have fallen to family and friends to see to the coffin. The prices listed would have had to be paid to the woodworking shops; otherwise, materials and labor would have had to be donated. Many blacks worked for and as cabinetmakers and carpenters in early New

^a Abraham Lefferts, one of the two city Church Wardens, placed numerous orders for coffins for the poorhouse, two of which were for deceased black inmates.

⁵ The coffin prices, from the *Cabinet-Makers' Philadelphia and London Book of Prices*, are reprinted in Rauschenberg (1990:34). Because we do not know the types of wood represented in either the Delaplaine accounts for "Negroes" coffins or the 1796 price list, we cannot be certain whether the price differential was contingent on inflation, different materials, or a change in the availability of wood.

Table 33. Coffin Prices, 1796

Coffin Features	Cost (shillings and pence)
2-foot length	6s 6d
2-foot-6-inch length	8s
3-foot length	9s 6d
3-foot-6-inch length	10s 6d
4-foot length	12s
4-foot-6-inch length	13s 6d
5-foot length	15s
Above 5-foot length	18s
Above 5 feet of poplar, deduct	3s
Application of handles	1s
Application of breastplate	6d
Full trimming with lace	1s 6d

Note: From Rauschenberg (1990:34).

York, so their access to tools and materials may have been relied on.

In addition, participation in own-account economic activities would have afforded some the means of purchasing coffins outright. Also, as suggested in Chapter 2, the existence of informal burial societies probably predates the formal establishment, in the late eighteenth and early nineteenth centuries, of mutual aid societies in New York. The primary benefit of such societies would have been the provision of a proper burial with a coffin.

Coffin Variation at the New York African Burial Ground

Coffin Shape

As shown in Chapter 4, coffin shapes at the New York African Burial Ground were shouldered (hexagonal), tapered (sometimes called trapezoidal), and rectangular. Many small and poorly preserved examples are simply listed in the database as "foursided" (i.e., although the shoulder bend could be ruled out, it could not be determined whether they were rectangular or trapezoidal). One exception (Burial 257) appeared to be eight sided, the head

comprised of two boards that came to a point. Many coffins that were poorly preserved were tallied as tentative (indicated by a question mark). Table 34 lists coffin shapes, including uncertain ones, by general age category.⁶

Some of the coffins had footboards that sloped outward toward the top. Fourteen of these were made note of and drawn in cross section at the time they were excavated (a drawing is reproduced in the section on coffin construction), and examination of drawings for in situ nail locations indicates there were at least five additional examples. This feature was found in coffins of both tapered and shouldered varieties and in all time periods. It was probably a common variant. The sloped-foot coffins identified thus far were in Burials 23, 31, 40, 44, 48, 51, 68, 71, 100, 122, 130, 145, 151, 241, 266, 299, 321, 342, 354, 416, and 418.

There was no evidence of gable-lidded coffins at the New York African Burial Ground. Such coffins would have had a distinctive pattern of nails aligned down the centerline of the lid, as did those at the seventeenth-century Martin's Hundred site in Virginia (Noël Hume 1982:38-39, 70), and either the headboards and footboards would have been gable shaped, or the lids would have had gable ends. Hexagonal, gable-lidded forms in North America seem to date to the nineteenth as well as the seventeenth century. Fourteen of 19 identifiable coffin shapes from Philadelphia's First African Baptist Cemetery excavation were gable lidded (Parrington et al. 1989:144). Gabled coffins are more complex in construction, requiring additional boards and five-sided ends. We were particularly interested in determining whether any of the four-sided coffins we believe to be earliest had gable lids. Field drawings for all of the four-sided coffins from our sample were examined carefully for evidence of this form, but none was found. In the best-preserved and recorded examples (Burials 18, 23, 68, 78, 177, 202, 221, and 282—see drawings in Part 2 of this volume), the headboards and footboards had straight-cut top edges, and no centerline nails were found. There is no evidence that headboards or footboards were shaped to fit a gable lid.

The identification of four-sided, tapering (trapezoidal) adult coffins as earlier than hexagonal coffins is based on analysis of archaeological data, mainly

⁶ Two subadults were buried inside coffins that held another individual. (These coffins were counted once in Table 34.)

Shape	Adult	Subadult	Undetermined	Total
Four sided	8	15	1	24
Four sided?	_	4	1	5
Tapered	20	13	_	33
Tapered?	_	_	1	1
Rectangle	2	16	2	20
Rectangle?	3	_	_	3
Hexagonal	109	53 a	2	164
Hexagonal?	5	15	_	20
Other	1	_	_	1
Unidentifiable	38	34	9 b	81
Total	186	150	16	352°

Table 34. Coffin Shape, by Age Category

stratigraphic relationships.⁷ Information on changing coffin shape over time, although not conclusive, supports the use of shape to seriate the coffins and of the trapezoidal variant to characterize the earliest group. Thus all adult coffins of the Early Group were, by definition, four sided, mainly tapered, although two were identified as possibly rectangular, and eight can only be characterized as "four-sided." For later groups, adult coffin shapes (when clearly defined) were mostly hexagonal, with just four exceptions: two from the Late-Middle Group were rectangular, one from the Late Group was possibly rectangular, and one Late Group coffin (Burial 207) appeared to be tapered.

Coffins of children were much more varied in shape than coffins of adults. And, although the numbers are small, the distribution of coffin shape by age of child (Figure 108) suggests that the coffins of infants and young children were more varied in shape than the coffins of older children. Also, although hexagonal coffins were the most common shape for children in the Middle to Late Groups, four-sided varieties

remained in use, accounting for 23.7 percent of the total (Figure 109). We suggest that the shape of children's coffins was less standardized than the shape of adult coffins because children's coffins were more likely to be made by families rather than purchased from workshops. Coffins for the youngest children and infants were most likely to be homemade.

Coffin Size

Coffin measurements (maximum length and width) were recorded in the field for most burials, but because we were only interested in tabulating sizes of whole coffins, we used the final burial drawings to obtain length, width, and head-to-shoulder measurements. This information is presented in Appendix J, Part 3 of this volume. The distribution of coffin lengths is shown in Figure 110. One question that we wished to address was whether coffins seemed to be constructed "to order"—in other words, made to measure—for individuals or, alternatively, whether they represented standard sizes built from a limited set of templates or kept in stock by coffin makers. There was a high degree of variation in coffin size, suggesting that either numerous templates were used and/or that coffins were built to accommodate the measurement of the deceased.

^aExcludes two subadults that were inside coffins shared with another individual.

b Includes one possible coffin.

^cThe total sample used to calculate this table includes burials for which a coffin was determined to be present, whether or not human remains were recovered.

⁷ As discussed in Chapter 4, we initially thought that all four-sided adult coffins might have been in use earlier in our sequence than those that were six sided, but upon examination of the stratigraphic evidence, the rectangular variant appeared to be used later as well.

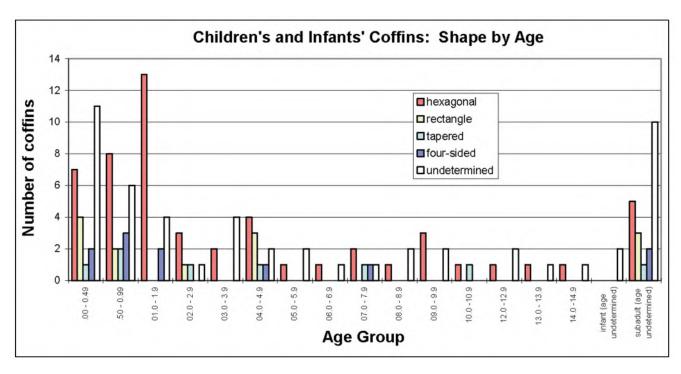


Figure 108. Shapes of children's and infants' coffins by age bracket.

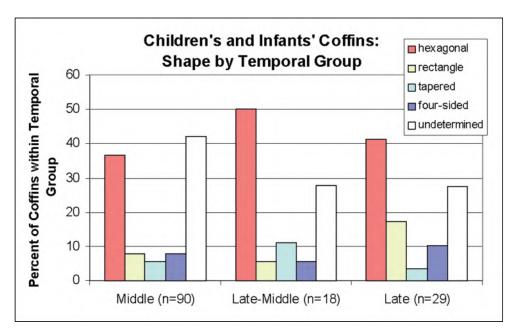


Figure 109. Shapes of children's and infants' coffins by temporal group.

For 88 individuals with measurable coffins, stature could also be calculated (stature data supplied by Sue Goode-Null of the Skeletal Biology Team). Figures 111 and 112 show the relationship between stature and coffin size in two ways. The average difference between the calculated stature of the deceased and the coffin length was 0.52 feet, or approximately

6 inches. The average ratio of length to stature was 1.12, with a standard deviation of 0.1. The covariance of coffin size and stature is clear. Yet it can be seen that for individuals of approximately equal height, coffin lengths could vary by as much as a foot or more. For example, for 12 individuals whose height was calculated at approximately 5.6 feet, coffins

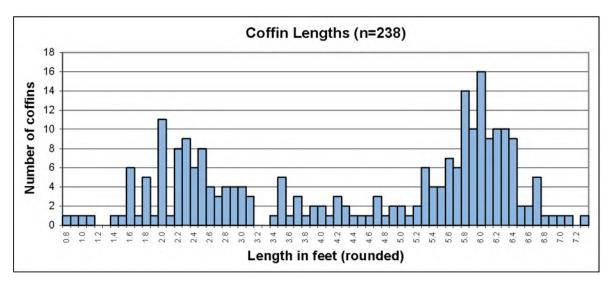


Figure 110. Distribution of coffins by length. Includes only coffins that could be measured for length. Rounded to nearest 0.1 feet.

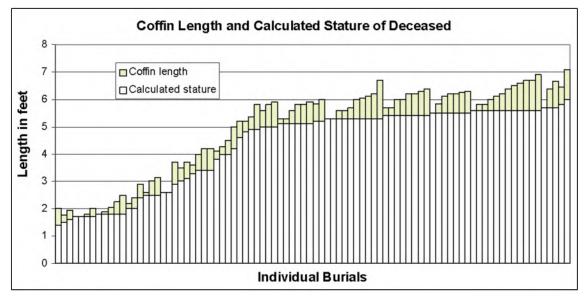


Figure 111. Coffin length compared to calculated stature of the deceased.

were from 0.3 feet shorter to 1.3 feet longer than the deceased.

Owing to the margin of error in calculating both stature and coffin length, we hesitate to draw conclusions about coffin production. However, we would suggest that the coffin maker was given at least an approximate height and built the coffin a few inches longer. For six-sided coffins, the closest template was probably used, whereas for four-sided shapes, the wood may have been measured and cut without a template (see below for a discussion of coffin construction).

Coffin widths as measured in the field ranged from just under half a foot to over 2 feet. It is likely some "splaying" occurred during decay. There were 83 cases for which coffins measured greater than 18 inches wide and 8 where coffin remains measured 2 feet wide or more. In the case of the longest and widest coffin measured, from Burial 47 (at 2.3 feet wide by 7.3 feet long), it is possible the ground had shifted, displacing the sides. One other "extra-wide" coffin, that of Burial 376, appears to have been built that way, and it is possible the man interred in it was heavyset (Figure 113).

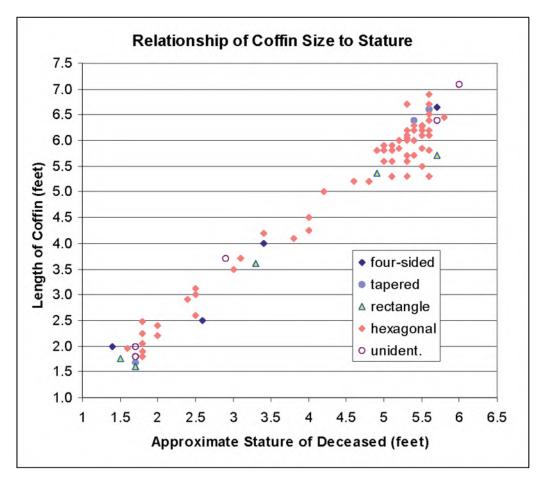


Figure 112. Coffin length in relation to calculated stature of the deceased, by shape.

The ratio of length to width ranged from 1.6 to 6.4, increasing with the coffin length, although for coffins 5 feet long or longer, the length was typically between 3 and 5 times the width. The only outliers were the coffins of Burials 387 and 388 (Figure 114). These two were slightly tapered and exceptionally narrow, just less than 1 foot wide although 6 feet long, and they were in adjacent graves. The same maker probably crafted both.

Coffin Wood

There were 104 coffins at the New York African Burial Ground for which at least one wood sample was identified in the laboratory. The number of coffins with each type of wood or combination of woods is listed in Table 35, with percentages shown in Figure 115, and all identified samples are listed by burial in Table 36. Tables and figures follow showing the frequencies of woods by coffin shape and by temporal group.

The most frequently identified woods were varieties of cedar. Because this wood is the slowest to rot of the soft woods, more samples of it may have been retrievable archaeologically, and its predominance may be the result of sampling error. All coffins that yielded identified samples, with the exception of one, were built of soft woods. Cedar, pine, and spruce were the top three woods in all time periods (Table 37). However, although all three were approximately equal in the Early Group, cedar and pine clearly predominated by the Middle Group, and in the Late Group, cedar was the clear favorite, barring sampling error. Research on the relative availability of these woods over time would be needed to determine whether wood can be used as a temporal indicator. Coffins made of combinations of different woods made up similar proportions of the sample in each temporal group, suggesting that expediency dictated the selection.

The one hardwood coffin identified, from Burial 290, was of black walnut. There was no other distinguishing

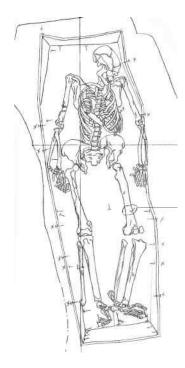


Figure 113. Drawing in situ of Burial 376. The coffin was 3 feet wide at its "shoulder." It held the remains of a 45–65-year-old man (drawing by M. Schur).

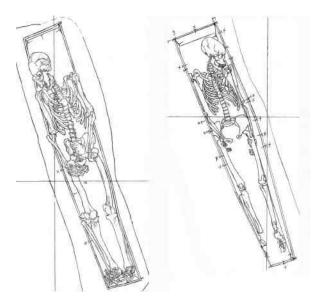


Figure 114. Drawings depicting unusually narrow coffins: *left*, Burial 387; *right*, Burial 388. The two graves were adjacent and precisely aligned. Scale is 1 inch = 2 feet; north is to the right (drawings by M. Schur).

feature of the coffin, and there were no artifacts found in association with the deceased other than a single straight pin on the cranium. It is perhaps significant that the deceased was a man between 45 years and 55 years old, one of the older individuals in the sample population. The burial is assigned to the Late-Middle Group. Larch (also called tamarack) was identified in only two coffins, from Burials 97 and 101, both later

in our sequence and both of men. One, in Burial 101, was one of the very few decorated coffins at the New York African Burial Ground.

The wood types were used in similar proportions for adult and children's coffins (Table 38). The only two coffins made of yew (a tough but flexible softwood) were children's coffins, whereas the other infrequent woods (fir, larch, and black walnut) were all in adult coffins.

Table 39 shows the distribution of woods by coffin shape. The rank order among the top three woods is essentially the same, but it was mainly the hexagonal coffins that used combinations of woods, and the least frequent woods were all found in hexagonal coffins.

Coffin Construction

Historical sources and analysis of surviving examples from opened vaults indicate the following construction method and details for plain, flat-lidded, shouldered coffins (Litten 1991:90–92; Julien Litten, personal communication 1999; Salaman 1997:150):

- The coffin bottom and top were marked using a template and sawed.
- The sideboards were soaked and while damp were "kerfed" on the inside at the shoulders with six or seven crosscuts sawn almost through the boards.
- The headboards and footboards were nailed to the bottom.
- The sideboards were bent around the bottom board and nailed (or sometimes screwed for strength) in place. The bottom, headboards, and footboards were set inside the sides.
- The head of the coffin was 2 (or "a few") inches wider than the foot.
- Corners were butt jointed.
- The lid spanned the sides (thus the lid would have been larger than the bottom, which was inset).
- The inside was sometimes coated with pitch to seal the joints.

Construction of the tapered and rectangular shapes would have followed the same steps, minus the soaking and kerfing of the sides, and probably would not have required a template. Surviving evidence, such as the locations and the orientations of nails, of the majority of coffins at the New York African Burial Ground, appears consistent with this basic construction method. There were a few coffins, however, that deviated from the standard.

Table 35. Categories of Coffin Wood

Category	Sample Identifications	Number of Coffins
Cedar	cedar	31
	red cedar	3
	cedar, red cedar	1
	eastern red cedar	1
	cedar, eastern red cedar	1
	white cedar	1
Cedar/pine	cedar, eastern white pine	1
	cedar, pine	3
	cedar, red pine	1
	cedar, pine, eastern white pine	2
	red cedar, eastern white pine	1
Cedar/spruce	cedar, spruce	2
Pine	pine	11
	eastern white pine	6
	red pine	8
	red pine?	1
	pine, red pine	1
	sugar pine, pine	1
	loblolly pine	1
	pine, loblolly (soft pine)	1
Pine/spruce	pine, spruce	2
Spruce	spruce	9
	white spruce	3
	white spruce, red (eastern) spruce	1
Fir	fir	3
	balsam fir	1
Fir/pine	fir, eastern white pine	1
Fir/pine/spruce	eastern white pine, Scots pine, white spruce, fir	1
Larch	larch	2
Yew	yew	2
Walnut	black walnut	1

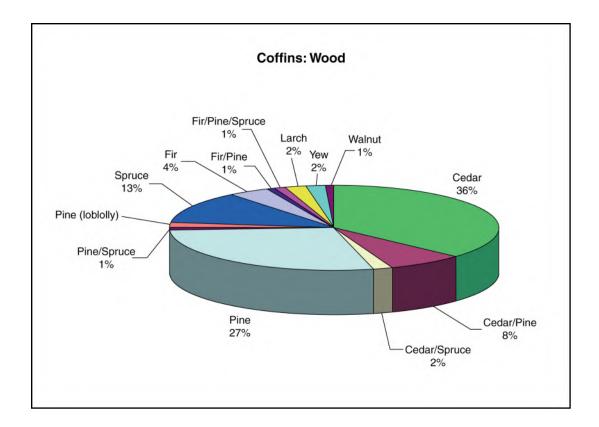


Figure 115. Frequencies of identified coffin woods.

The coffins in adjacent Burials 23 and 68 were virtually identical; the bottom board had been nailed into the sides rather than vice versa, so that vertical nails pointed upward (Figure 116). The coffins were four sided, tapering toward the foot, the walls sloping outward at the top. Around the perimeter, vertical nails attached the lid to the sides; there were four nails at each corner of the head attaching the sides to the headboard and three at each corner of the foot attaching the sides to the footboard. These two coffins were probably from the same maker.

Our evidence points strongly to the use of single boards for lids and bottoms, but there were at least two exceptions. Eighteen inches is a width that, according to Noël Hume (1982:38), "would have posed no problem to colonial . . . sawyers." As noted, however, 83 coffins were measured as wider than 18 inches. The use of narrower and presumably cheaper boards for lids and bottoms might be expected in these cases, but the boards would have to have been cross braced. There was only one coffin (in Burial 352) in which the bottom had a batten nailed to it crosswise for support and one coffin (in Burial 392) in which at least two crosspieces were nailed onto the lid (Figures 117 and

118). The apparent excess width of so many of the other coffins in our sample may be because of splaying, resulting in inaccurate measurement.

One uniquely constructed hexagonal coffin was found. For the coffin bottom of Burial 196, instead of a lengthwise board, numerous short crosswise boards had been used, and these were nailed from the bottom into the coffin sides (Figure 119). The lid and bottom were identified as pine, the sides as cedar. Several other coffins (in Burials 237, 250, 258, and 361) had the bottoms nailed from the bottom up into the sides, and although no crosswise boards were preserved well enough to be noted in the field, it is possible these too had more than one board forming the coffin floor. Alternatively, this is simply a variant construction method, possibly with the bottom attached after the sides, head, and foot had been joined.

Finally, Burial 194 had the only coffin for which a wooden marker had been nailed to the headboard (Figure 120; see Figure 103 in Chapter 9).

Nail Locations

Nail locations based on drawings were recorded for a subset of coffins, those that were complete and

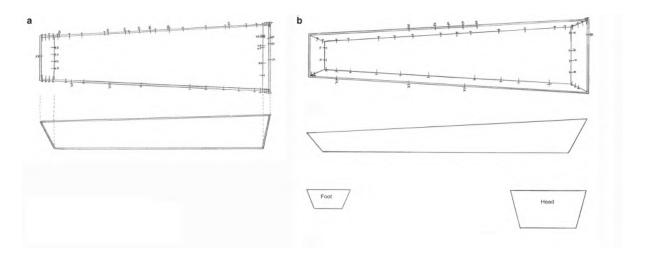


Figure 116. Renderings of coffins: (a) Burial 23; (b) Burial 68. The coffin bottoms were nailed into the headboards and footboards from the bottom up. Scale is 1 inch = 2 feet (drawing by B. Ludwig).

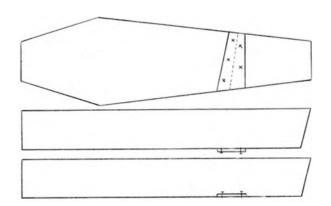


Figure 117. Possible reconstruction of the Burial 352 coffin bottom. The crosspiece may have been made of two butted boards. It was not possible to determine whether the piece was on the outside (center sketch) or the inside (bottom sketch) of the coffin. Scale is 1 inch = 2 feet (reconstruction by B. Ludwig).

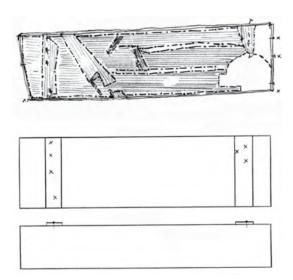


Figure 118. The lid of the coffin in Burial 392: *top*, field sketch; *bottom*, on-site reconstruction. Two crosspieces were nailed to the top of the lid board or boards. Scale is 1 inch = 2 feet (reconstruction by B. Ludwig).

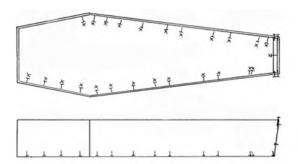


Figure 119. Possible reconstruction of the Burial 196 coffin showing unusual bottom construction. Numerous boards had been nailed crosswise. Scale is 1 inch = 2 feet (reconstruction by B. Ludwig).



Figure 120. In situ photograph of the board nailed to the head of the coffin in Burial 194. The board, a grave marker, was of cedar (photograph by Dennis Seckler).

had what appeared to be the best in situ recordation (Table 40). Many nails were found at the corner joints of the coffins, as expected, because the strength of the box depended on these joints. There were also usually two or three (sometimes four) nails along the bottom of the footboard and headboard, attaching these boards to the bottom, as well as several along the sides. There were far fewer top nails than bottom nails, also to be expected, as the lid added some support but mainly just had to be nailed shut.

The presence of horizontally oriented nails at the top of a coffin along its sides would indicate that the lid was inset and was nailed from the sides, although vertically oriented nails would indicate that the lid was nailed from the top and therefore overlapped the

edges of the side boards, headboards, and footboards. The latter pattern reflects typical coffin construction as described above.

Coffins with inset lids are documented,⁹ but no evidence of any beading or cleats that could have supported inset lids was found for coffins at the New York African Burial Ground. Therefore, burials where records showed horizontal and top nails were reexamined carefully. In some cases, close examination of in situ photographs led to the conclusion that all

⁸ A study of a sample of seven coffins for which nails were recorded in situ at a small late-eighteenth- to early-nineteenth-century rural family cemetery in Delaware also indicated clearly that the majority of nails were used at the head and foot (LeeDecker 2001:6).

⁹ Inset lids are recorded for expensive, lead-lined, triple-shell coffins. Describing the inner coffin of typical surviving triple-shell coffins in vault and intramural graves in England, Litten (1991:101) has noted that the lids were recessed, supported by a length of beading that was glued and tacked around the upper inner sides. At the College Landing site in Williamsburg, it was concluded from nail placement that the coffin lids were "attached with nails placed horizontally into the six sides," but no discussion is offered regarding the specific construction method or whether the lids would have been inset (Hudgins 1977:64). The burials, all thought to be of African Americans, were dated from 1790 to 1820 based on the machine-cut nail shanks.

Table 36. Burials with Identified Coffin Wood

Burial No.	Age Category	Low Age	High Age	Sex	Temporal Group	Coffin Shape	Catalog No.	Sample Location	Wood
6	adult	25	30	male?	Late	hexagonal	00219-CWA	lid/side	eastern white pine
11	adult	30	40	male?	Late- Middle	hexagonal	00267-CWA-CWD	bottom	cedar
12	adult	35	45	female	Late	rectangular?	00253-CWA	lid	cedar
15	subadult	11	18	undetermined	Late	unidentifiable	00286-CWA	unspecified	red pine
17	subadult	4	6	undetermined	Middle	hexagonal	00357-CWA	lid	yew
18	adult	35	45	female?	Early	tapered	00310-CWA	lid	red cedar
22	subadult	2.5	4.5	undetermined	Middle	unidentifiable	00344-CWA	bottom	pine
							00344-CWB	unspecified	pine
23	adult	25	35	male	Early	tapered	00383-CWA and CWB	unspecified	white spruce
							00383-CWC	unspecified	red (eastern) spruce
25	adult	20	24	female	Middle	unidentifiable	00353-CWA	unspecified	pine
27	subadult	1.4	2.8	undetermined	Middle	hexagonal	00378-CWA	unspecified	pine
29	adult	35	45	male?	Early	tapered	00381-CWA1	side	white spruce
							00381-CWA2	unspecified	white spruce
34	adult			undetermined	Early	rectangular?	00427-CWA	bottom?	fir
35	subadult	8	10	undetermined	Middle	hexagonal	00458-CWA	unspecified	red pine
36	adult			female	Late	unidentifiable	00459-CWA	unspecified	cedar
37	adult	45	55	male	Late	hexagonal	00460-CWA	lid/side	cedar
38	adult	12	18	female	Early	tapered	00461-CWA	unspecified	spruce
40	adult	50	60	female	Late	hexagonal	00489-CWA	unspecified	eastern white pine
41	adult			undetermined	Middle	unidentifiable	00525-CWA	lid	sugar pine
							00525-CWB	lid	pine
							00525-CWC	bottom	pine
46	adult			female?	Middle	unidentifiable	00605-CWA	unspecified	fir
47	adult	35	45	male	Middle	hexagonal?	00619-CWA	unspecified	spruce
49	adult	40	50	female	Middle	hexagonal	00641-CWA	unspecified	cedar
50	subadult			undetermined	Middle	hexagonal	00649-CWA	interior	spruce
							00649-CWB	lid, bottom	pine
							00649-CWC	unspecified	pine

Table 36. Burials with Identified Coffin Wood (continued)

Burial No.	Age Category	Low Age	High Age	Sex	Temporal Group	Coffin Shape	Catalog No.	Sample Location	Wood
54	adult			undetermined	Late- Middle	unidentifiable	00726-CWA	unspecified	cedar
57	subadult	0.88	2.16	undetermined	Middle	hexagonal	00796-CWA	unspecified	cedar
58	subadult	3.5	4.5	undetermined	Late	rectangular	00797-CWA1	bottom	red pine
63	adult	35	45	male	Late	hexagonal	00805-CWA	bottom	cedar
							00805-CWB	side	pine
64	subadult	0.38	0.88	undetermined	Late- Middle	hexagonal	00803-CWA	unspecified	pine
67	adult	40	50	male	Late- Middle	unidentifiable	00810-CWA	unspecified	eastern white pine
							00810-CWB	unspecified	fir
68	adult	21	25	male	Early	tapered	00807-CWA	unspecified	cedar
69	adult	30	60	male	Middle	hexagonal?	00808-CWA	unspecified	spruce
70	adult	35	45	male	Middle	hexagonal	00812-CWA	unspecified	cedar
71	adult	25	35	female	Late	hexagonal	00813-CWA	unspecified	cedar
77	subadult	0.67	1.3	undetermined	Middle	hexagonal	00820-CWA	unspecified	pine
82	adult	18	25	female	Middle	unidentifiable	00825-CWA	unspecified	red pine
83	infant			undetermined	Early?	rectangular	00826-CWA	unspecified	white spruce
85	subadult	0.25	0.75	undetermined	Middle	hexagonal	00831-CWA	unspecified	cedar
89	adult	50	60	female	Late- Middle	hexagonal	00830-CWA	unspecified	spruce
91	subadult	0.67	1.3	undetermined	Late- Middle	hexagonal	00834-CWA	unspecified	eastern red cedar
94	subadult			undetermined	Middle	hexagonal	00837-CWA	unspecified	cedar
96	adult	16	18	male	Middle	hexagonal	00839-CWA2	unspecified	eastern white pine
97	adult	40	50	male	Late	hexagonal	00840-CWA	unspecified	larch
101	adult	26	35	male	Late- Middle	hexagonal	00843-CWA1	unspecified	larch
107	adult	35	40	female	Late- Middle	hexagonal	00850-CWA	unspecified	fir
108	subadult	0.25	0.75	undetermined	Late- Middle	hexagonal	00851-CWA	unspecified	pine
109	subadult	0.67	1.33	undetermined	Late- Middle	hexagonal	00852-CWA	unspecified	pine
122	adult	18	20	female	Middle	hexagonal	00867-CWA	unspecified	eastern white pine
126	subadult	3.5	5.5	undetermined	Middle	hexagonal	00871-CWA	lid	spruce

Table 36. Burials with Identified Coffin Wood (continued)

Burial No.	Age Category	Low Age	High Age	Sex	Temporal Group	Coffin Shape	Catalog No.	Sample Location	Wood
128	infant	0	0.17	undetermined	Middle	hexagonal	00873-CWA	unspecified	cedar
130	subadult	1	2	undetermined	Middle	hexagonal	00875-CWA	unspecified	eastern red cedar
							00875-CWB	unspecified	cedar
137	adult	25	35	undetermined	Late	unidentifiable	00882-CWA	unspecified	pine
147	adult	55	65	male	Late	hexagonal	00892-CWA	all	white cedar
153	adult			female?	Late	hexagonal	00898-CWA	unspecified	cedar
159	adult	25	35	female	Middle	hexagonal	00905-CWA1	unspecified	cedar
							00905-CWA2	unspecified	red pine
171	adult	44	60	male	Late	hexagonal	00931-CWA	lid	pine
							00931-CWB	side	spruce
174	adult	17	18	male	Late	hexagonal	00940-CWA	unspecified	cedar
177	adult	30	60	undetermined	Early	tapered	00946-CWA	lid	eastern white pine
182	subadult	7.5	12.5	undetermined	Early	tapered	00970-CWA	unspecified	cedar
183	subadult	0.63	1.13	undetermined	Late	hexagonal	00971-CWA	unspecified	cedar
							00971-CWB	side	spruce
							00971-CWC	side	cedar
186	infant	0	0.17	undetermined	Late	hexagonal	00987-CWA	lid	spruce peg
189	adult			undetermined	Middle	unidentifiable	01015-CWA	unspecified	cedar
194	adult	30	40	male	Late	hexagonal	01109-CWA	unspecified	cedar
							01109-CWD	post	cedar
195	adult	30	40	female	Late	hexagonal	01151-CWA	unspecified	red cedar
196	adult	20	24	undetermined	Late	hexagonal	01150-CWA and CWE	side	cedar
							01150-CWB	lid	pine
							01150-CWC	lid	eastern white pine
							01150-CWG	bottom	pine
200	adult			male	Early	four-sided	01165-CWA	unspecified	cedar
202	adult	12	18	female?	Early	tapered	01171-CWA	unspecified	white spruce
206	subadult			undetermined	Middle	rectangular	01180-CWA	unspecified	red pine
208	subadult	0.5	1	undetermined	Late	unidentifiable	01182-CWA	bottom	cedar
212	subadult	4.5	5.5	undetermined	Middle	hexagonal?	01189-CWA	unspecified	yew
213	adult	45	55	female	Middle	hexagonal	01190-CWA	unspecified	red cedar

Table 36. Burials with Identified Coffin Wood (continued)

Burial No.	Age Category	Low Age	High Age	Sex	Temporal Group	Coffin Shape	Catalog No.	Sample Location	Wood
214	adult	45	55	male	Late	hexagonal	01191-CWA	unspecified	balsam fir
221	adult	30	60	male	Early	tapered	01206-CWA	unspecified	pine
228	adult			male?	Late	hexagonal	01214-CWA	bottom	cedar
236	subadult	4	5	undetermined	Late	hexagonal	01222-CWA	bottom	loblolly (soft pine)
							01222-CWB and CWC	side	pine
237	undetermined			undetermined	Early	four-sided?	01223-CWA	lid	red pine
242	adult	40	50	female	Late	hexagonal	01229-CWA	unspecified	spruce
244	subadult	5	9	undetermined	Late	unidentifiable	01231-CWA	unspecified	cedar
246	subadult	0.5	2.9	undetermined	Middle	four-sided	01234-CWA	bottom	cedar
247	adult	35	49.9	male?	Early?	unidentifiable	01236-CWA	lid	cedar
							01236-CWB	bottom	eastern white pine
							01236-CWE, CWG, CWI, CWJ	lid	pine
259	adult	17	19	female?	Late	hexagonal	01249-CWA	unspecified	cedar
							01249-CWB	unspecified	pine
263	subadult			undetermined	Early	tapered	01257-CWA	unspecified	cedar
265	subadult	0.5	1	undetermined	Middle	hexagonal?	01261-CWA	unspecified	cedar
268	infant	0	0.5	undetermined	Middle	hexagonal?	01264-CWA	unspecified	pine
270	adult			male	Middle	unidentifiable	01266-CWA	lid	cedar
272	subadult	0.25	0.75	undetermined	Early	four-sided	01268-CWA	unspecified	cedar
277	subadult			undetermined	Middle	unidentifiable	01274-CWA	lid	eastern white pine
							01274-CWB	bottom	cedar
283	subadult	0.33	0.67	undetermined	Middle	hexagonal	01302-CWA	bottom/lid	red pine
290	adult	45	55	male	Late- Middle	hexagonal	01324-CWA	unspecified	black walnut
306	adult	28	44	male	Middle	hexagonal	01474-CWA	unspecified	spruce
310	adult	44	52	female	Middle	hexagonal	01486-CWA	bottom	red pine?
313	adult	45	55	male	Late	hexagonal	01516-CWA	bottom	eastern white pine
315	adult	30	40	female	Middle	hexagonal?	01519-CWA	lid	cedar
							01519-CWB and CWC	bottom	cedar

Table 36. Burials with Identified Coffin Wood (continued)

Burial No.	Age Category	Low Age	High Age	Sex	Temporal Group	Coffin Shape	Catalog No.	Sample Location	Wood
316	adult	18	20	female	Late- Middle	hexagonal	01521-CWA	lid	cedar
328	adult	40	50	female	Middle	hexagonal	01589-CWA	unspecified	red cedar
							01589-CWB	lid	red cedar
							01589-CWC	side	cedar
333	adult	45	55	male	Late- Middle	rectangular	01613-CWA	bottom	loblolly pine
340	adult	39.3	64.4	female	Early	tapered	01651-CWA and CWB	side	eastern white pine
							01651-CWC and CWE	bottom	red cedar
							01651-CWD	lid	eastern white pine
342	adult	25	35	female?	Late	hexagonal	01660-CWA	unspecified	pine
354	adult	35	45	male	Late	hexagonal	01742-CWA	unspecified	eastern white pine
							01742-CWB	side	white spruce
							01742-CWC	lid	fir
							01742-CWD	unspecified	fir
							01742-CWE	unspecified	Scots pine
363	subadult	1	2	undetermined	Late	hexagonal	01825-CWA	bottom	cedar
384	adult	25	45	female	Middle	hexagonal	01955-CWB	bottom	red pine
							01955-CWC	side	red pine
388	adult	29	57	female	Early	tapered	02008-CWA	lid	red pine
							02008-CWB	lid	pine
392	adult	42.5	52.5	male	Late- Middle	rectangular	02039-CWA	unspecified	cedar
							02039-CWB	side	pine
402	adult			undetermined	Early	tapered	02066-CWA	lid/side?	spruce
							02066-CWB	lid	cedar
415	adult	35	55	male	Middle	hexagonal	02097-CWA	bottom	cedar
419	adult	48	62	male	Middle	hexagonal	02104-CWA	side	spruce

Table 37. Number of Coffins Made of Each Wood Type, by Temporal Group

Wood Category	Early	Middle	Late- Middle	Late
Cedar	6	15	4	13
Pine	4	14	3	7
Spruce	5	5	1	2
Cedar/pine	2	2	1	3
Cedar/spruce	1	_	_	1
Pine/spruce	_	1	_	1
Pine (loblolly)	_	_	1	1
Fir	1	1	1	1
Fir/pine	_	_	1	
Fir/pine/spruce	_	_		1
Larch	_	_	1	1
Yew	_	2	_	
Walnut	_	_	1	_
Total	19	40	14	31

Table 38. Number of Coffins Made of Each Wood Type, by Age Category

Wood Category	Adult	Subadult	Infant	Undetermined
Cedar	24	13	1	
Pine	15	11	1	1
Spruce	10	2	1	
Cedar/pine	7	1		
Cedar/spruce	1	1	_	_
Pine/spruce	2	1	_	_
Pine (loblolly)	1	1	_	_
Fir	4	_		
Fir/pine	1			
Fir/pine/spruce	1	_	_	_
Larch	2	_	_	_
Yew	_	2	_	_
Walnut	1	_	_	_
Total	68	32	3	1

of the top nails were in fact vertical. In other cases, the horizontal nails in question did not appear at all in the photographs. Top nails were sometimes removed during excavation and therefore were not present at the time the final burial photographs were taken and drawings rendered. The illustrators had to rely on the excavators' recollections of nail locations. We conclude that the depictions of lid nails on the in situ drawings are less reliable than those of bottom nails. The depicted orientations of nails that had been removed probably were not always accurate. It also is possible that some nails were never drawn at all, although the number of nails depicted in some drawings was greater than the number of nails counted in the laboratory (using nail heads to arrive at minimum numbers—Appendix J, Part 3 of this volume, lists all burials with minimum nail counts from the laboratory inventory).

Screws

We know that the use of screws in coffins added to the cost (by about a shilling at mid-century), so an attempt was made to examine the distribution of these hardware items. Unfortunately, the severe corrosion of all coffin hardware made the identification of screws difficult, especially in the field during excavation—there were only three burials in which screws were recorded on the field drawings (Figure 121). In the laboratory, some screws were identified through visual inspection after minimal mechanical cleaning, but numerous items that could not be clearly identified as either nails or screws were set aside for X-rays and were lost when the laboratory was destroyed. Screws were recovered and identified from 31 coffins, and there were possible screws from 1 other. Their distribution is presented in Table 41. Coffins of young children and men and women of all ages are represented. Almost all of the coffins where screws were used were hexagonal, doubtless because extra strength was needed at the joints because of the bent sideboards. The only Early Group coffins with screws were from Burials 72 and 83, but this shared grave had been disturbed by a foundation, and the screws, which lacked specific provenience, might have been intrusive, or the burials might be incorrectly assigned to the Early Group. The lack of screws in early burials is probably attributable to the lack of hexagonal coffins. As noted, tapered coffins of the Early Group generally had more nails at the joints, and a change in joinery accompanying the change in style is suggested.

Wood Category	Tapered	Four Sided	Rectangular	Hexagonal	Unidentifiable ^a
Cedar	4	3	_	22	9
Pine	3	_	2	15	8
Spruce	4	_	1	6	2
Cedar/pine	1		1	4	2
Cedar/spruce	1		_	1	_
Pine/spruce	_	_	_	2	_
Pine (loblolly)	_	_	1	1	_
Fir	_	_	_	2	2
Fir/pine	_	_	_	_	1
Fir/pine/spruce	_		_	1	_
Larch	_		_	2	_
Yew	_	_	_	1	1
Walnut	_	_	_	1	_
Total	13	3	5	58	25

Table 39. Number of Coffins Made of Each Wood Type, by Shape

^a Questionable cases for each shape (e.g., tapered?) are counted as "unidentifiable" in this tabulation.

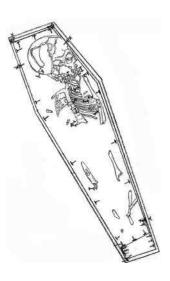


Figure 121. Example of a coffin with screws recorded in situ. The drawing is of Burial 321, which held the remains of a child 1–2 years old. One screw attached the right side to the footboard and two others attached the left side board to the bottom. Scale is 1 inch = 1 foot; north is to the right (drawing by W. Williams).

In most cases, only a single screw was identified, and numerous nails were also present in every case. Although we are likely to have missed screws because of poor preservation and the loss of information from items that were never X-rayed, New York African Burial Ground coffins were clearly built mainly with nails. Screws were apparently usually employed on an as-needed basis during coffin construction rather than being used, per order, instead of nails. The few screws that were recorded in situ were at the corner joints (Burials 225 and 321) or at the top and oriented vertically to attach the lid (Burials 286 and 321).

The joints may have occasionally required screws for strength—for instance, if warped boards were used. Another possible use for screws would have been to secure the lid temporarily, perhaps if the coffin was to be stored or were to be transported to the house of the deceased, where it could then be removed to place the body inside.

It is worth noting that the coffin in Burial 101, which had a decorated lid and would have been relatively expensive, had at least four screws (although

Table 40. Coffin Nail Locations

					Loca	tion			
Burial No.	Nail Heads (MNI)	Total	Top Horizontal	Top Vertical	Bottom Horizontal	Bottom Vertical	Corner Joint Head	Corner Joint Foot	Comments
23	31	63	_	13	21	9	12	8	Drawing 1026 used
40	16	29	_	1	15	_	7	6	Drawing 1039 used
44	16	20	_	9	11	_	_	_	Drawing 1042 used
45	2	11	_	_	8	3	_	_	
48	13	22	_	_	16	_	2	4	
49	17	17	_	4	12	_	_	1	
50	18	18	_	4	4	_	4	6	
53	3	16	_	2	10	1	_	3	
55	21	22	_	12	10	_	_	_	
56	21	19	2	8	5	2	1	1	two top horizontal nails questionable
57	17	26	3	_	15	1	6	1	
59	11	13	_	4	3	_	4	2	Drawing 1047 and photo used
64		17	2	_	11		2	2	
68	35	49	_	9	21	6	8	5	
71	43	44	2	_	24	1	9	8	Drawings 280 and 1049 used
73	14	14	_	2	10	_	2	_	
77	9	20	_	4	11	_	1	4	counted two bottom nails at foot as corner nails
78	17	25	_	4	7	_	7	7	photo used
85	12	14	4	_	6		3	1	
86	9	8	_	_	2		3	3	one nail on cranium, one nail by right foot
90	9	16	_	5	9	_		2	photo used
94	20	28	2	3	9	_	7	7	top horizontal nails not visible in photo
100	10	13	_	4	3		1	5	
101	32	27	2	6	9	_	4	6	top horizontal nails not visible in photo
106	6	15	2	_	10	_	2	1	one nail on coffin floor
107	5	28	_	12	10	_	2	4	
115	34	22	_	5	10	_	5	2	
121	16	14	_	2	8	_	2	2	
122	28	31	_	4	14	_	5	8	used cross section drawing

Table 40. Coffin Nail Locations (*continued***)**

	Nail			Location					
Burial No.	Heads (MNI)	Total	Top Horizontal	Top Vertical	Bottom Horizontal	Bottom Vertical	Corner Joint Head	Corner Joint Foot	Comments
123	30	13	_	1	9	—	2	1	one nail outside coffin wall?
127	7	11	_	2	2	_	3	4	
128	4	16	_	1	10	_	2	3	
130	7	20	1	2	8	1	5	4	top horizontal nail not visible in photo
133	13	12	_	1	8		2	1	
134	13	24		3	9	_	6	6	
135	8	21	2	3	10	_	3	3	top horizontal nails not visible in photo
138	4	24	_	6	8		8	2	photo used
145	26	33	_	8	14		6	5	Drawing 1055 used
146		18		4	10		3	1	
147	20	20	_	3	15	_	_	2	one nail on coffin floor
148	19	27	5	2	7		5	8	top horizontal nails not visible in slide; one nail by left radius, one nail by distal left femur
149	17	19	5		8	_	3	3	
151	16	27	_	1	16	_	6	4	Drawings 348 and 1056 used
159	19	17	_	_	15	_	2		
216	13	15	2	_	13	_	_	_	
217	27	14	_	_	11	1	_	2	two nails near cranium on coffin floor
218	3	12	2	3	3	_	2	2	
221	6	20		5	2	8	2	3	one vertical nail in middle of coffin lid, one nail by right shoulder on coffin floor
225	15	16	1	2	3	1	5	4	horizontal top nail visible in photo; includes two cor- ner-joint (head) screws
226	1								
230	36	30	4	6	17	1	1	1	top horizontal nails not visible in photo
235	4	35		11	9	8	5	2	
236	23	20	2	_	14	_	1	3	one nail near cranium on coffin floor

Table 40. Coffin Nail Locations (*continued***)**

	Nail				Loca	tion			
Burial No.	Heads (MNI)	Total	Top Horizontal	Top Vertical	Bottom Horizontal	Bottom Vertical	Corner Joint Head	Corner Joint Foot	Comments
238	24	25	_	8	8	_	4	5	
239	27	12	3	_	6	_	3	_	Drawing 514 used
241	21	23		3	18		2		
242	14	22		4	10	5	1	2	
245	38	20		6	9		4	1	four scattered nails on cof- fin lid in drawing
254	9	19		1	10		4	4	
266	6	40	_	10	16	_	5	9	
268	11	16	_	5	2	2	2	5	
282	17	16	_	2	_	6	5	3	
294	16	18	_	2	9	2	3	2	
295	39	27		5	19		1	2	
299	59	39		7	20	3	3	6	
306	20	23	_	5	12	1	3	2	
310	6	32	2	3	18	1	5	3	top horizontal nails and vertical bottom nail not visible in slide; one nail near left foot
311	2								
312	3	17	_	3	2	2	3	7	
314	35	26		3	13		7	3	
315	27	16		4	9	1	1	1	plus one nail near left elbow on coffin floor
324	1	15	6	_	8	_	1	_	plus one nail near right ribs on coffin floor
332	3	29	_	9	12	_	5	3	nails were missing from laboratory inventory
334	15	17	_	_	11	_	1	5	Drawing 712 used
335	9	38	5	7	17		4	5	top horizontal nails not visible in photo
336	12	9	4	1	1		_	3	
340	37	47	11	13	6	5	5	7	top horizontal nails not visible in photo
342	22	43	5	4	24	3	5	2	
346	28	27	1	_	14	5	5	2	
347	17	18		1	10		5	2	
353	6	55	_	15	26	_	7	7	photo used

Table 40. Coffin Nail Locations (*continued***)**

	Nail				Loca	tion			
Burial No.	Heads (MNI)	Total	Top Horizontal	Top Vertical	Bottom Horizontal	Bottom Vertical	Corner Joint Head	Corner Joint Foot	Comments
354	15	37	_	7	16	_	7	7	
361	14	14	_	1	2	10	1	_	
366	29	37		11	12	2	6	6	
376	63	28	_	10	9	2	_	7	
379	23	31	_	7	12	1	6	5	photo used
380	29	44	4	9	24	1	3	3	top horizontal nails not visible in slide
381		8	_	1	4	_	2	1	
387	11	8	_	1	3	_	3	1	
388	17	30	5	11	6	_	6	2	top horizontal nails not visible in photo; two nails on coffin floor near feet
389	9								
390		7	1	4	_	_	1	1	top horizontal nail not vis- ible in photo; one nail out- side coffin, two on coffin floor
392	29	21	2	4	7	_	4	4	top horizontal nails not visible in slide; four nails scattered on coffin floor; seven vertical nails on lid cross boards
397	39	41	_	10	20	_	7	4	four nails scattered on cof- fin lid
399	24	27	2	4	12	1	4	4	Drawing 874 used; top horizontal nails oriented outward (displaced?)
415	19	31	_	11	12		4	4	Drawing 891 used
419	14	20		8	9	_	2	1	Drawing 904 used

Key: MNI = minimum number of individuals.

Table 41. Burials with Coffin Screws

Burial No.	Low Age	High Age	Sex ^a	Temporal Group ^a	Coffin ^a	Number of Screws ^b
17	4	6	undetermined	Middle	hexagonal	1
22	2.5	4.5	undetermined	Middle	unidentifiable	1
40	50	60	female	Late	hexagonal	1
72	1	2	undetermined	Early?	rectangle	2 plus 4 shanks
77	0.67	1.3	undetermined	Middle	hexagonal	1
83			undetermined	Early?	rectangle	1
86	6	8	undetermined	Late	hexagonal	1
89	50	60	female	Late-Middle	hexagonal	3
95	7	12	undetermined	Late	hexagonal	1
97	40	50	male	Late	hexagonal	1
100			undetermined	Middle	hexagonal	3
101	26	35	male	Late-Middle	hexagonal, decorated	4
122	18	20	female	Middle	hexagonal	1
135	30	40	male	Late	hexagonal	1
154	25	29	female	Middle	hexagonal	1
159°	25	35	female	Middle	hexagonal, painted	2
173	0.25	0.75	undetermined	Late	rectangle	2
186	0	0.17	undetermined	Late	hexagonal	1
187	1.5	4	undetermined	Late	hexagonal	1
225	0.5	1.25	undetermined	Late	four-sided	2
241	55	65	female	Late	hexagonal	1
268	0	0.5	undetermined	Middle	hexagonal?	1
284	21	28	male	Middle	unidentifiable	1
285	20	30	female	Middle	hexagonal	1
286	4.4	8.5	undetermined	Middle	hexagonal?	2
300			undetermined	Middle	hexagonal?	1
315	30	40	female	Middle	hexagonal?	1
321	1	2	undetermined	Middle	hexagonal	1
341			male	Middle	hexagonal	1
346	50	70	female	Late	hexagonal	1
353	24	34	male	Middle	hexagonal	1
427	16	20	male?	Middle	hexagonal	1

^a A question mark indicates a probable assignment.

b Counts are minimums: fragments were counted if a head was present, or if a shank with point was present with no potentially corresponding head. Thirteen whole screws were recovered.

^c Burial 159 had two possible screws (no X-ray was taken prior to the items' destruction on September 11, 2001).

their precise locations on the coffin are unknown), which may have further increased the cost, and that Burial 159 held a coffin that was painted and also had possible screws. Thus, the fancier the coffin, the greater the likelihood the builder would use screws, perhaps reflecting a keener sense of overall quality of workmanship.

Coffin Decoration

Coffin furniture refers to handles, corner and edge "lace," breastplates, upholstery, and other decorative metalwork as opposed to hardware (nails and screws) used in constructing the box. Five coffins with decorative metalwork were found at the New York African Burial Ground. Two of these were problematic owing to recordation problems or disturbance. One hexagonal coffin, in Burial 252 (from the late period and located north of the fence line), may have had a small breastplate on the lid; this item was recorded in the field but never accessioned in the laboratory. A small iron disk was recorded along with the possible breastplate and was inventoried in the laboratory but not salvaged after the collapse of the World Trade Center. One possible tack and several nails were also recorded roughly aligned lengthwise down the center of the coffin lid; it is possible these attached the breastplate to the wood. The grave contained the remains of a very young child between 1 and 2 years old. In Burial 222, assigned to the Late-Middle Group and holding an adult (probably a man) of undetermined age, excavators noted small iron tacks that they thought represented a lid decoration on the hexagonal coffin. The tacks were observed in place on the pelvis and right arm of the individual during excavation, but vandals disturbed the human remains, apparently scattering the tacks, and only four were recovered. They were identified as of cast iron, manufactured using a technique first patented in England in 1769 (see Lenik 1977).

Only three coffins with clearly decorated lids were recorded in detail, in Burials 101, 176, and 332. All three were in men's graves assigned to the Late-Middle Group and are discussed in Chapter 8. Iron tacks formed the decorations, and as in Burial 222, the tacks appeared to be cast metal. In one case (Burial 176) the coffin also had handles. Each coffin is described more fully below.

Tacks were also recovered in association with Burials 138, 197, and 256 but do not seem to have represented decorations. A handle back plate was recovered from Burial 90, though it is considered unlikely the

coffin in this grave had handles (only one was found, and the edge of the burial had been disturbed, raising the possibility that the item was intrusive).

It is interesting that the New York African Burial Ground coffin lid decorations were composed of iron tacks, rather than the brass tacks favored by Euroamericans. In addition to the fact that iron is less expensive than brass, it may have been preferred for cultural reasons. Tinning would have "whitened" the tacks and made them reflective, so the possible significance of color or other visual quality should be considered (see Thompson 1983; Thompson and Cornet 1981).

Burial 101: The Heart or Sankofa Symbol

Burial 101 (see Chapter 8) was of a man in his early thirties whose dental modifications and dental lead levels suggested possible African nativity but whose strontium isotope levels pointed to possible birth in America (Goodman et al. 2009 [Chapter 6 of *Skeletal Biology of the New York African Burial Ground*]; see Handler [1994] on modified teeth). The coffin lid decoration or symbol measured approximately 45 cm wide and 48 cm long and was positioned over the midsection of the body (Figure 122).

The heart-shaped outline consisted of 51 domed, square-shanked iron tacks, with heads measuring 10 mm in diameter. The inner decorative elements were composed of smaller tacks, with heads approximately 6 mm in diameter (Figure 123). The tacks were described as "tinned or silvered, iron-headed tacks" when first exposed. All of the tacks appeared to be of one-part construction and were of cast manufacture.

As illustrated in Chapter 8, the interior portion of the decoration may have originally formed initials and an age or year. If so, the initials are indecipherable, but the year "1769" is a plausible reading for a date (keeping in mind that the lid had split longitudinally, possibly bifurcating a "6"). Alternatively, the interior design may have formed part of a non-alphanumeric device.

Coffins with heart motifs on the lids are not uncommon in colonial period and nineteenth-century contexts. These motifs typically included initials or a name and an age and/or year formed in tacks on the interior. As noted, Joshua Delaplaine made one such coffin for Samuel Hallet of New York in 1756. Samuel Hallet's estate paid over £2 for his heart-decorated coffin, but because it was made of an expensive wood (liquidambar), we do not know how much the Burial 101 coffin, which was made of larch, may have cost. Nor can we know who ordered the man's coffin, his family

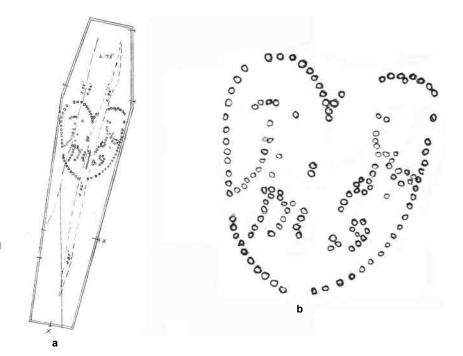


Figure 122. Coffin lid in Burial 101: (*a*) in situ drawing (scale is 1 inch = 2 feet); the lid had split longitudinally as shown; (*b*) detail of the motif formed from tacks on the lid (drawings by M. Schur). See Chapter 8 for in situ photograph.

and friends or the head of the deceased's household; whether an African craftsman built it; or whether the deceased's mourners decorated it themselves. The heart shape may have had meanings for the mourners that diverged from or expanded on those that Europeans would have attributed to it. The heart has been interpreted as representing the soul, for example, in West Central Africa (Denbow 1999), and the shape of a heart with interior scrolls has been identified as an Adinkra symbol—"Sankofa"—associated with Twi-speaking Akan people of Ghana and the Ivory Coast, as noted in Chapter 8.

Burial 176: Handled Coffin with Tack-Edged Lid

Burial 176 held possibly the most expensive coffin of those excavated at the New York African Burial Ground. It was fitted with six iron handles (the only definitively handled coffin at the site) and, in addition, had iron tacks around the perimeter of the lid. The handles, of the inverted bale type with "ears" on each end of the back plates, were probably a matched set, though they were not all well enough preserved to confirm this. One that was X-rayed was decorated with facing < cutouts between the posts (Figures 124–127). The handles were placed two on each side, one each at the head and foot.

We considered the possibility that the coffin was cloth covered, a common embellishment by the eighteenth century. However, no textile fragments adhered to the perimeter tacks, and it is likely they were simply decorative.

The reverse-bale-type coffin handles were of hand-wrought iron. Conservators noted that the back plates had strike marks from having been hand forged along the outer edges (visible in the X-ray) and score marks at the cutouts. The handles connected to the back plates with posts, and the plates were screwed into the coffin boards. A similar handle, with the "ears" and facing cutout design, was recovered from a disturbed burial context at the St. Anne's Churchyard in Annapolis (Jones 2001:8).

Burial 332: "HW"

Unique at the New York African Burial Ground, Burial 332 held a coffin with a lid decorated in iron nails forming initials and a number (Figure 128). The grave was of a man whose presumed initials were "HW" and who probably died at age "38" (see Chapter 8). The coffin was hexagonal in shape. Its lid had split lengthwise, leaving a gap down the center and disturbing the lettering. The only artifacts in the coffin were a pin beneath the man's skull and a curved pin or copper ring fragment in the chest area. Burial 289, of a young child, overlay the southwest part of Burial 332. The grave-shaft outline indicates the latter was a separate interment, although it may have been deliberately placed above Burial 332.

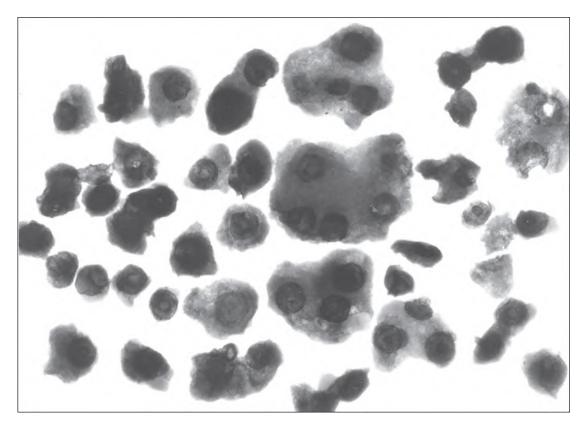


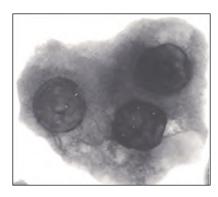
Figure 123. X-ray of small tacks from the Burial 101 coffin lid decoration. Detail shows three tacks that had rusted together. The circles at the centers of the tack heads are where the tack shanks had broken off. Diameter is 6 mm. Exposure 30 sec./70K (courtesy of the W. Montague Cobb Anthropology Laboratory, Howard University).

Coffins with initials and age at death, like those with hearts, were not uncommon during the eighteenth and nineteenth centuries, and Delaplaine's records tell us that one for a child was made in New York in 1756 for 14 shillings.

The display of the deceased's identity on the lid suggests that the funeral ritual may have involved showing the coffin, either at the home, during the procession to the cemetery, or at the graveside.

Possible Painted Coffins

Coffins in Burials 159, 183, 213, and 313 were thought by excavators to have possible paint residue. ¹⁰ Burial 159 was of a woman between 25 and



35 years old, assigned to the Middle Group. Her coffin was hexagonal in shape. The western portion of the lid was well preserved but had split down the middle lengthwise. When exposed, it appeared to have red paint adhering to the wood, which was photographed and sampled. Laboratory analysis (see section entitled "The Coffin Wood and Hardware Assemblage: Condition, Treatment, and Chain Of Custody") suggested that the Burial 159 coffin may in fact have been painted, based on the presence of copper at the surface of the wood. It was not possible to determine the color of the original surface treatment. Documentary sources from both New York and

¹⁰ The conservation report (LaRoche 2002:44) stated that Burial 63 was also thought by excavators to have possible paint, but there is no mention of this in the field notes.

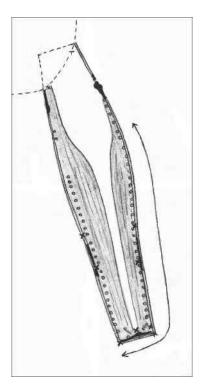
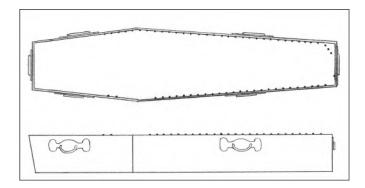


Figure 124. Coffin lid in Burial 176, drawn during excavation (drawing by B. Ludwig).

Figure 125. Reconstruction of coffin in Burial 176, top and side view, based on field observation (reconstruction by B. Ludwig).



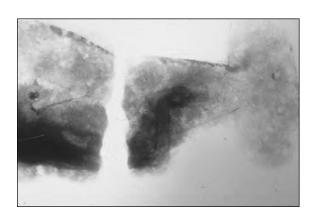


Figure 126. X-ray of coffin handle from Burial 176. The "ear" of the back plate with two screw holes is visible at right, and the bale handle can be seen to the left of this. One of the cutouts is visible on the piece at the left (courtesy of John Milner Associates).

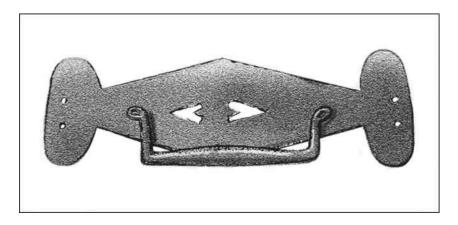


Figure 127. Composite drawing of coffin handle based on the X-rays taken of the handles from Burials 176 and 90. Length is 7.4 inches (drawing by C. LaRoche and R. Schultz).

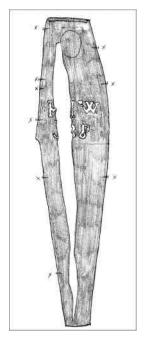


Figure 128. Burial 332 coffin lid, drawn as found during the excavation. The oval indicates where the skull was visible through the remnants of the coffin wood. See Chapter 8 for a photograph (drawing by M. Schur).

Charleston suggest that the color typically used for coffins was black (see discussion in section entitled "Coffin Production and Provision").

The other coffins with possible paint also had observable reddish coloration adhering to wood. None was analyzed for pigment.¹¹ Burial 183, north of the fence line and assigned to the Late Group, held a child approximately a year old in a hexagonal coffin, who had been buried with the head to the east rather than the west. Samples of wood were taken, and the south side board was identified as cedar, the north as spruce. The coffin lid was recorded as having flecks of possible paint over the entire surface and a concentration of orange/red color on the north side. A wood sample was taken from the hexagonal coffin in Burial 213, the grave of a woman 45–55 years old and was identified as red cedar. Excavators noted that a wood sample with possible red paint was also taken, but no such sample was inventoried or analyzed by laboratory staff. Burial 313 held a man of 45–55, buried in a hexagonal coffin. His grave was north of the fence line and is assigned to the Late Group.

A sample of the coffin lid included what excavators thought was a possible paint stain collected from the pelvic/femoral area; this sample was not identified or analyzed for pigment. A sample of wood was also taken from the coffin bottom and was identified as eastern white pine.

The decorated coffins represent an added funeral expense. If any of the adorned coffins were provided by slaveholders, they might be interpreted as instances of paternalism: valued household members (including free or enslaved servants and laborers) could be afforded special treatment in death, above and beyond the customary practice. But they might also speak to the ability of kin to pressure slaveholders into extra outlay. If, on the other hand, special coffins or accoutrements were donated or paid for by friends and kin of the deceased, they may reflect the special esteem in which the deceased was held or the status or aspirations of the mourners. In the case of Burial 101, the symbolic content of the decoration may have been primary, whereas for Burial 332, the identity of the deceased was emphasized in the decoration. The Burial 176 coffin's decorated handles suggest fashion and expenditure and perhaps also special attention to the act of carrying the deceased to the grave. Their cutout decorations may simply have been a commonly available style for handles or may have been somehow symbolic.

The Coffin Wood and Hardware Assemblage: Condition, Treatment, Chain of Custody

Wood

Coffin wood samples as well as samples of wood thought to be from grave markers were frozen upon recovery to preserve them for analysis. In addition, there were many bags of soil from the scraping of coffin stains, labeled as coffin wood, which often contained only slivers of wood or no wood (all wood samples are listed in Appendix E.1, Part 3 of this volume). Wood samples of all kinds were assigned consecutive catalog number suffixes ("CWA," "CWB," etc.; see Chapter 1). Often, the bags indicated which part of the coffin (lid, bottom, or sides) the sample came from, but many samples were not so labeled. Unless two bags were labeled identically, it was assumed that some

¹¹ According to the project conservators (LaRoche 2002:44), the possible paint from Burial 183 was not brought to their attention for analysis, and it is assumed this was the case for Burials 213 and 313 as well. Howard University laboratory staff likewise did not note any wood samples that had been labeled as possibly painted or that appeared to be painted. The sample identified as red cedar from Burial 213 was labeled as "Bag 1 of 2," but no second sample was ever located. The lid sample from Burial 313 was stored in the freezer and was not recovered after the collapse of the World Trade Center.

distinction in provenience was represented by separate bags even when such a label was absent; therefore, separate bags from a burial were always retained. Analysis involved thawing of samples, preparation, and examination under a polarized-light microscope. The conservation report describes sample preparation as follows:

The largest and most robust pieces within each thawing episode were sampled first. For these samples, conventional sampling strategies were employed, including boiling the wood to facilitate taking samples or taking the required cuts directly from viable wood (Hoadley 1990). This was the method most frequently employed. The more fragile samples and some minute samples were infused with Primol WS-24 to facilitate sample taking and identification.

Due to the large number of samples collected, microscopic slides were not retained but photomicrographs of samples with clear distinguishing features were digitized for documentation using a digital imaging system [LaRoche 2002:43].

A total of 203 frozen wood samples from 133 burials was analyzed by John Milner Associates (JMA) conservators using comparative techniques. Often, the identifying morphological features were no longer extant or were degraded, and the wood could be identified only to the family or genus level rather than to species. Odor and the presence of residue were useful in some identifications (further description of the identification process will be found in LaRoche [2002:42]). All of the identified wood samples are listed in Table 36.

No additional samples were analyzed by Howard University Archaeology Team staff. All wood samples stored in the freezer at the World Trade Center lab were lost on September 11, 2001. Most of the wood samples stored in boxes on the laboratory shelving (many of which consisted of scrapings from wood-stained soils) were salvaged; however, these samples were not considered likely to yield definitive identifications.

As noted (see section entitled "Coffin Production and Provision" in this chapter), coffins in Burials 63 and 159 were identified as possibly having remnants of paint on the wood. Wood samples from these burials were examined microscopically, but no evidence of organic binders was identified, and the samples were subsequently subjected to X-ray fluorescence to attempt to detect pigment. Procedures and results

of the X-ray fluorescence analysis are provided in the conservation report (LaRoche 2002:44–48). The analysis was performed at the U.S. Customs Laboratory using a Jordan Valley Applied Research energy dispersive X-ray fluorescence spectrometer, Model EX 300. Wood samples with iron and copper staining from other burials, as well as control samples with no evidence of metallic staining, were used for comparative analysis. In addition, soil samples were tested in order to determine the extent to which wood-surface discoloration might be a result of elements in the soil. Results indicated that the wood from the coffin in Burial 159 probably had some kind of surface alteration, based on the levels of copper present (higher than in soil samples but lower than residue from copper artifacts). It should be noted, however, that a copperalloy straight pin was recovered adhering to the wood where the pigment appeared to be best preserved. It seems possible the copper levels present in the wood sample may be distorted because of the proximity of corroded pins.

Iron Hardware and Coffin Furniture

Coffin hardware was not among the material to receive treatment by project conservators. The bags labeled as "coffin nails" were examined by Howard University Archaeology Team laboratory staff in 1999. Every fragment was examined and enumerated as either whole, head fragment, head and shank fragment, shank fragment, or shank with point. This made a minimum nail count possible for every context, which then could be checked against the field drawing of in situ nails where available.

Nails were all of iron and hand wrought. They typically were not measurable (whole nails that could be measured are listed in the inventory). Most nails were broken at the head and along the shaft, either while in situ or during recovery. Very small nails were often listed in the inventory as "tacks," but these are not to be confused with the dome-headed and tinned iron tacks used for lid decorations.

The identification of screws was considered important because screws were more expensive than nails, and their presence may indicate a higher overall cost for the coffin (see discussion of coffin construction). Some screws were identifiable upon visual inspection. In other cases, where corrosion was too far advanced for identification, possible screws were set aside for X-rays. X-rays of unidentifiable items were only taken

for Burials 1–138. The remaining items that had been set aside remained on separate shelving when the laboratory was shut down in early 2000. These items were not salvaged after the World Trade Center collapse on September 11, 2001.

Coffin handles and tacks consisted of corrosion products (rust) forming relatively amorphous masses. They were desalinated in deionized water baths but received no further conservation treatment. Some of the handles and tacks were X-rayed by project conservators working for JMA, and some additional tacks were X-rayed by Howard University staff. Many lumps of rust that were possible tacks, or that appeared to be tacks but could not be quantified, were set aside for X-rays along with the possible screws and were lost in the World Trade Center collapse.

Handles with back plates numbered seven but were broken into pieces in the course of removal from the soil. Although not all of them were well enough preserved for accurate description, based on the surviving pieces and X-rays, it appears likely that all were of the same basic type and shape. Because the bags of nails from Burial 176 were not recovered from the World Trade Center, it is not known whether any screws were recovered.

Disposition

All coffin remains that survived the destruction of the World Trade Center lab were transferred to General Services Administration for reburial. Where there were corresponding human skeletal remains, the coffin wood and hardware were placed in the new coffin along with the remains and any other artifacts. No samples of coffin wood or hardware were retained.

CHAPTER 11

Pins and Shrouding

Jean Howson with the assistance of Shannon Mahoney and Janet L. Woodruff

It is our assumption that for those interred at the New York African Burial Ground, preparation of the body included some form of covering, whether a winding sheet, a shroud, or clothing. Where remnants of such dressing have not survived, we cannot know how the body was treated. However, it seems most likely these cases had cloth that had been wound about the corpse or sewn or tied shut. Owing to preservation conditions, textile and fiber fragments recovered from graves at the New York African Burial Ground were only found in association with metal artifacts (pins, buttons, coins, jewelry, and nails).

Other than coffin remains, the most common artifacts recovered from graves were copper-alloy straight pins. These were always referred to in the field records as "shroud pins." Pins, however, may have been used to fasten clothing (especially for women), or to fasten a strip of cloth used to tie up the chin of the deceased. An attempt has been made to analyze the placement of the pins on the body to better determine whether the presence of a winding cloth, some other type of burial garment, or clothing is indicated. This chapter focuses on pins; other clothing items are discussed in Chapter 12.

A Profile of the Burials with Pins

As noted in Chapter 5, pins were found in almost two-thirds of the burials in which their preservation was feasible. (We arrived at a total sample of 327 burials by including 317 burials with "y" or "y, cranium only" preservation; 2 burials with "y, no cranium" preservation that had pins; and 8 burials with "n" preservation that had pins.) A total of 812 pins was recorded overall, from 213 burials. It is likely

the actual frequency was greater, assuming that pins were originally present in many of the extremely disturbed burials and that some pins had decomposed beyond recognition. In many cases, the pins could not be recovered because of their advanced decomposition, but often, even when no actual fragment remained, telltale green stains indicating that pins had been present were noted and recorded (either prior to removal of the skeleton or during cleaning of the bone).

Tables 42 and 43 provide a basic profile of the burials with pins. We look at age, gender, and pin use over time, then turn to the actual placement of pins on the body.

Sex, Age, and Time

The distribution of pins was skewed along age and gender lines. Children and infants were more likely to have pins than adults, and women more likely than men. It is possible that clothing is represented by some of the pins—they were more likely to be used with women's clothing than men's. This will be discussed further when we turn to pin placement.

The overall frequency of burials having at least one pin changed little from the Middle Group on (Table 44). The lower frequency of Early Group burials with pins is attributable both to the probability that these goods were less abundantly available in the early eighteenth century and to reduced preservation.

¹ Pins were very fragmentary at the time they were inventoried (see section entitled "Recovery, Condition and Treatment, and Chain of Custody"). The number 812 is the number of pins represented based on field and laboratory recording, rather than pin fragments that were recovered and eventually reburied, which numbered 1,232.

Age/Sex	Number of Burials with Pins	Total Sample of Age/Sex Category	Percent of Age/ Gender Category ^a
Adult females	53	74	71.62
Adult males	46	94	48.94
Adult undetermined	10	17	58.82
Total adults	109	185	58.91
Infants up to 6 months	22	28	78.57
Subadults 6 months to 15 years	82	114	71.93
Total subadults	104	142	72.53
Total	213	327	65.14

Table 42. Presence of Pins, by Age Category and Sex

If we look at the distribution of burials with pins by sex and age over time, we also see little appreciable change. Burials of women were consistently much more likely to be associated with at least one pin than those of men.

The numbers of pins in adult burials, rather than their presence or absence, exhibit a different pattern, however (Table 45). In the Early and Middle Groups, more of the pins were found with women's burials, although in the later temporal groups, slightly more of the pins were found with men than with women. The preponderance of men in the Late Group burials accounts for the distribution in that group, but the Late-Middle burials may point to a change over time in burial attire.

Analysis of Pin Placement

Table 43 lists burials with pins in four body areas. This information helps us to understand the function of pins and ultimately sheds light on how the living mourners prepared the body for burial.

Those who prepared the very youngest for burial apparently wrapped them in cloth and then fastened the cloth with numerous pins (Figures 129 and 130). This seems counterintuitive: complete shrouding

would have required little cloth to wrap the smallest children and infants, so why the need for pins at all? We hypothesize that pins had ritual meaning beyond fastening. This meaning may have had to do with protecting the very young or with ensuring adequate means to make a spiritual passage. Without knowing the precise meanings, we can point to the extra care taken by mourners in their ministrations to the body of an infant, pin by pin, and the social and spiritual connection to the deceased embodied in this ritual moment. A purely utilitarian interpretation (as shroud fasteners) in the burials of children is inadequate. By extension, all of the pins used in shrouding may have had ritual meaning as well as having a functional use as fasteners.²

Burials with pins only on the cranium include 31 adults and 13 subadults (excluding 2 burials with pins that had been truncated so that the cranium was the only surviving part of the skeleton, making it impossible to know whether pins had been present elsewhere on the body). Burial drawings show the

^a Totals used to calculate percentages do not include burials for which neither age nor sex determination can be made, burials that were completely redeposited remains, burials where empty coffins were discovered, or burials without pins that were missing the cranium, unless the pins were recovered with the bone. We arrived at a total sample of 327 burials by including 317 burials with "y" or "y, cranium only" preservation; 2 burials with "y, no cranium" preservation that had pins; and 8 burials with "n" preservation that had pins.

² In his early study of African American burials from College Landing, Carter Hudgins (1977:71) similarly noted that "the placement of pins and location of the stains assumed a pattern that indicated cultural significance rather than random occurrence."

Table 43. Burials with Pins and Pin Locations

Burial	Law	High	100		Temporal		Lo	cation		No	Preservation
No.	Low Age	Age	Age Category	Sex ^a	Group ^a	Cranium	Jaw/ Neck	Torso	Extremities	Provenience	Code
1	20.00	25.00	adult	female?	Late	1		_	_	_	у
5	0.50	1.00	subadult	undetermined	Late- Middle	1	6	12	_	_	у
6	25.00	30.00	adult	male?	Late	3	_	3	_	1	У
7	3.00	5.00	subadult	undetermined	Late- Middle	3	_	3	_	_	У
8	0.00	0.50	infant	undetermined	Middle		1	_	_	1	У
12	35.00	45.00	adult	female	Late	1	1	1	_	_	У
14	0.00	0.50	infant	undetermined	Late	4	4	14	4	_	У
16	50.00	60.00	adult	female	Middle	1	_	1	_	_	У
17	4.00	6.00	subadult	undetermined	Middle	2	1	2	1	_	У
19			subadult	undetermined	Middle	2	_	—	_	_	У
20	45.00	50.00	adult	male	Late	_			3	_	n
22	2.50	4.50	subadult	undetermined	Middle	1		3	_	_	у
23	25.00	35.00	adult	male	Early	1		_	_	_	у
24	3.00	6.00	subadult	undetermined	Middle	1	_	5	_	_	у
27	1.40	2.80	subadult	undetermined	Middle	2	4	7	_	_	у
30	7.00	11.00	subadult	undetermined	Middle	_	2	3	_	_	У
31	14.00	16.00	adult	undetermined	Middle	1	_	11	_	_	У
32	50.00	60.00	adult	male	Middle				_	1	у
35	8.00	10.00	subadult	undetermined	Middle	1	_	_	_	_	у
37	45.00	55.00	adult	male	Late	1	_	5	1	_	у
38	12.00	18.00	adult	female	Early	1	_	_	_	_	у
39	5.00	7.00	subadult	undetermined	Middle	2	1	4	3	_	у
40	50.00	60.00	adult	female	Late	1			_	1	у
43	2.50	4.50	subadult	undetermined	Late- Middle	3		_	_	_	у
45	2.50	4.50	subadult	undetermined	Middle	1		_	_	_	у
46			adult	female?	Middle	_	1	_	_	_	у
49	40.00	50.00	adult	female	Middle	4	_	_	_	_	у
53	0.25	0.75	subadult	undetermined	Middle	3	_	1	1	_	у
55	3.00	5.00	subadult	undetermined	Middle	2	_	2	_	_	у
56	30.00	34.00	adult	female	Middle	2	_	3	_	_	у
57	0.88	2.16	subadult	undetermined	Middle	_	1	_	_	_	У

Table 43. Burials with Pins and Pin Locations (continued)

Burial	Low	High	Age		Temporal		Lo	cation		No	Preservation
No.	Age	Age	Category	Sex ^a	Group	Cranium	Jaw/ Neck	Torso	Extremities	Provenience	Code
58	3.50	4.50	subadult	undetermined	Late	2	_	_	_	1	у
59	0.00	0.25	infant	undetermined	Late	1	1	4	_	_	у
60	0.25	0.75	subadult	undetermined	Late- Middle	1	3	1	_	_	у
63	35.00	45.00	adult	male	Late	1	_	_	_	_	у
64	0.38	0.88	subadult	undetermined	Late- Middle	_		1	_	_	у
65	0.00	0.49	infant	undetermined	Late	3	3	_	_	_	у
67	40.00	50.00	adult	male	Late- Middle	_	_	6	_	_	y (no cranium)
71	25.00	35.00	adult	female	Late	_	_	1	_	2	у
72	1.00	2.00	subadult	undetermined	Early?	_	3	2	_	_	у
73	20.00	30.00	adult	female?	Middle	2	1	1	1	_	у
75	0.00	0.00	infant	undetermined	Middle	_	_	4	_	1	у
78	16.00	19.00	adult	undetermined	Early	1	_	_	_	_	у
79	0.25	0.75	subadult	undetermined	Middle	4	_	4	_	_	у
81			adult	female	Middle	_	_	1	_	_	y (no cranium)
82	18.00	25.00	adult	female	Middle	2	_	_	_	_	y (cranium only)
84	17.00	21.00	adult	female	Early	_	3	_	_	_	у
85	0.25	0.75	subadult	undetermined	Middle	_	_	2	_	_	у
86	6.00	8.00	subadult	undetermined	Late	1	_	_	_	1	у
87	4.00	6.00	subadult	undetermined	Middle	3	_	_	_	_	y (cranium only)
89	50.00	60.00	adult	female	Late- Middle	_	_	2	_	_	у
90	35.00	40.00	adult	female	Middle	2	_	1	_	_	у
91	0.67	1.30	subadult	undetermined	Late- Middle	_	3	2	_	_	у
94			subadult	undetermined	Middle	1		3	_	_	у
95	7.00	12.00	subadult	undetermined	Late	1	_	1	_	_	у
97	40.00	50.00	adult	male	Late	5		_			у
99	6.00	10.00	subadult	undetermined	Late	_	1	1	_		у

Table 43. Burials with Pins and Pin Locations (continued)

Burial	Low	High	Age	а	Temporal		Lo	cation		No	Preservation
No.	Age	Age	Category	Sex ^a	Group	Cranium	Jaw/ Neck	Torso	Extremities	Provenience	Code
101	26.00	35.00	adult	male	Late- Middle	3	_	1	_	_	у
102	1.33	2.67	subadult	undetermined	Middle	_	_	_	_	1	у
103			subadult	undetermined	Middle	_	_	1	_	_	у
104	30.00	40.00	adult	female	Middle	_	1	_	1	1	у
107	35.00	40.00	adult	female	Late- Middle	_	_	2	_	_	у
108	0.25	0.75	subadult	undetermined	Late- Middle		1	3	_	_	у
109	0.67	1.33	subadult	undetermined	Late- Middle	1	1	2	_	_	у
111	0.67	1.33	subadult	undetermined	Middle	_	_	1	_	_	у
112	0.25	0.75	subadult	undetermined	Middle	_	_	_	_	4	у
115	25.00	35.00	adult	female	Middle	1	_	_	_	_	у
116	45.00	55.00	adult	male	Middle	2	_	_	_	_	у
119	35.00	45.00	adult	male	Late- Middle	1	1	1	_	_	у
121	2.50	4.50	subadult	undetermined	Early	2	_		_	_	у
122	18.00	20.00	adult	female	Middle	_	2	4	_	_	у
123	0.67	1.33	subadult	undetermined	Late- Middle	3	2	5	_	_	у
126	3.50	5.50	subadult	undetermined	Middle	2	_	1	_	_	у
127	0.67	1.33	subadult	undetermined	Middle	_	3	6	2	1	у
128	0.00	0.17	infant	undetermined	Middle	1	2	2	_	1	у
130	1.00	2.00	subadult	undetermined	Middle	1	_	1	_	_	у
131			subadult	undetermined	Late	1	_	_	_	_	n
133	1.00	2.00	subadult	undetermined	Middle	2	2	1	_	_	у
134	40.00	50.00	adult	female	Late	_	_	—	_	1	у
136			subadult	undetermined	Middle	_	_	1	_	3	у
143	6.00	10.00	subadult	undetermined	Middle	1	_	_	_	_	у
144	0.00	0.17	infant	undetermined	Middle	_	_	—	_	3	у
146	0.00	0.00	infant	undetermined	Late- Middle	3	4	1	_	_	у
147	55.00	65.00	adult	male	Late	_	_	4	_		у
148	12.00	18.00	adult	undetermined	Middle	4	1	1	_	_	у
149	0.50	1.00	subadult	undetermined	Middle	1		1	_	_	у

Table 43. Burials with Pins and Pin Locations (continued)

Dunial	Low	Uiah	A = 0		Temporal		Lo	cation		No	Duosomustion
Burial No.	Low Age	High Age	Age Category	Sex ^a	Group	Cranium	Jaw/ Neck	Torso	Extremities	No Provenience	Preservation Code
151	35.00	45.00	adult	male	Late	_	1	_	_	_	у
153			adult	female?	Late	1	_	4	_	_	у
154	25.00	29.00	adult	female	Middle	3	_	3	2	_	у
159	25.00	35.00	adult	female	Middle	2	1	8	_	_	У
160	3.50	5.50	subadult	undetermined	Middle	_		_	_	1	У
166	0.50	1.00	subadult	undetermined	Late	2	6	5	_	_	У
167	8.50	12.50	subadult	undetermined	Middle	_	_	_	_	1	У
169	5.50	9.50	subadult	undetermined	Middle	3	_	—	_	_	У
171	44.00	60.00	adult	male	Late	_	_	5	_	_	У
173	0.25	0.75	subadult	undetermined	Late	_	1	3	_	_	У
174	17.00	18.00	adult	male	Late	_	_	_	_	1	у
175	24.00	28.00	adult	male	Middle	_	_	_	_	1	n
176	20.00	24.00	adult	male	Late- Middle	_	1		_	_	у
177	30.00	60.00	adult	undetermined	Early	1	_	_	_	1	у
179	25.00	30.00	adult	male	Late	_	_	_	_	1	у
180	11.00	13.00	subadult	undetermined	Late	_	2	2	_	_	У
183	0.63	1.13	subadult	undetermined	Late	1	2	7	5	_	У
186	0.00	0.17	infant	undetermined	Late	4	1	3	_	_	У
187	1.50	4.00	subadult	undetermined	Late	1		—	_	1	У
189			adult	undetermined	Middle	_	_	_	1	_	n
190	0.38	0.88	subadult	undetermined	Late	_	4	4	_	1	у
191	25.00	30.00	adult	male	Late	_	_	_	2	1	У
192	40.00	60.00	adult	female	Late	1	_	2	_	_	У
195	30.00	40.00	adult	female	Late	_	_	_	1	_	У
196	20.00	24.00	adult	undetermined	Late	_	_	1	_	_	У
199	30.00	40.00	adult	female	Late	_	_	_	_	1	у
201	1.50	3.50	subadult	undetermined	Late	_	1	_	_	_	у
203	12.00	18.00	adult	undetermined	Late	_	_	1	_	_	у
205	18.00	20.00	adult	female	Late	1	1	4	_	4	у
210	35.00	45.00	adult	male	Late	_	_	_	_	1	у
213	45.00	55.00	adult	female	Middle	1	1	1	_	_	у
214	45.00	55.00	adult	male	Late	_	_	_	1	_	у
215	0.00	0.16	infant	undetermined	Middle	_	_	_	_	1	у

Table 43. Burials with Pins and Pin Locations (continued)

Burial	Low	High	Age	a	Temporal		Lo	cation		No	Preservation
No.	Age	Age	Category	Sex ^a	Group	Cranium	Jaw/ Neck	Torso	Extremities	Provenience	Code
216	0.00	0.16	infant	undetermined	Late- Middle		_	4	_	1	у
219	4.00	5.00	subadult	undetermined	Late- Middle	1	_	1	_	_	у
221	30.00	60.00	adult	male	Early	2	_	_	_	_	у
225	0.50	1.25	subadult	undetermined	Late	1	1	1	1	_	y
226	0.00	0.17	infant	undetermined	Early	4	1	1	_	_	у
229	6.75	11.25	subadult	undetermined	Late- Middle	_	1	_	_	1	у
230	55.00	65.00	adult	female	Late	_	1	1	_	_	у
235	28.00	42.00	adult	female	Late- Middle	_	_	_	_	1	у
236	4.00	5.00	subadult	undetermined	Late	_	_	_	_	1	y
239	1.50	3.50	subadult	undetermined	Middle	1	1	1	_	_	у
241	55.00	65.00	adult	female	Late	_	_	5	_	_	у
242	40.00	50.00	adult	female	Late	_	_	2	_	_	у
244	5.00	9.00	subadult	undetermined	Late	1	_	2	_	_	у
245	2.50	4.50	subadult	undetermined	Middle	2	1	_	_	1	у
252	1.00	2.00	subadult	undetermined	Late	3	1	1	1	_	у
253	13.00	15.00	subadult	undetermined	Late- Middle	_	_	1	1	_	у
255	0.00	0.17	infant	undetermined	Middle	1	_		_	_	у
257	30.00	40.00	adult	male	Late	4	2	3	_	_	у
259	17.00	19.00	adult	female?	Late	_	_	_	_	1	у
265	0.50	1.00	subadult	undetermined	Middle	1	_	_	_	_	у
266	25.00	35.00	adult	female	Late	_	_	_	1	_	у
268	0.00	0.50	infant	undetermined	Middle	_	1	2	_	_	у
281			adult	male?	Early	2	_	_	_	_	у
283	0.33	0.67	subadult	undetermined	Middle	_		1	_		у
289	5.00	9.00	subadult	undetermined	Late- Middle	1	1	2	_	_	у
290	45.00	55.00	adult	male	Late- Middle	1		_	_	_	у
294	0.50	1.00	subadult	undetermined	Middle	3		3	_	_	у
295	30.00	50.00	adult	female	Middle	3			1		у
299	40.00	50.00	adult	male	Late	2	_	_	_	_	у

Table 43. Burials with Pins and Pin Locations (continued)

Burial	Low	High	Age		Temporal		Lo	cation		No	Preservation
No.	Age	Age	Category	Sex ^a	Group	Cranium	Jaw/ Neck	Torso	Extremities	Provenience	Code
300			infant	undetermined	Middle	1	_	_	_	_	у
303	0.50	1.00	subadult	undetermined	Middle	_	_		_	2	n
305	-0.33	0.33	infant	undetermined	Late	2	_		_	1	у
311	0.25	0.75	subadult	undetermined	Late- Middle	3	2	_	_	_	у
312	0.00	0.30	infant	undetermined	Middle	2	3	7	2	_	у
313	45.00	55.00	adult	male	Late	1	1	1	_	_	у
315	30.00	40.00	adult	female	Middle	1	_	_	_	_	у
316	18.00	20.00	adult	female	Late- Middle	1	—	3	_	_	у
319			adult	female	Late- Middle	2	_	4	_	1	n
320	2.00	4.00	subadult	undetermined	Middle	_	_	1	1	_	у
321	1.00	2.00	subadult	undetermined	Middle	2	2	7	1	_	у
325	25.00	35.00	adult	male	Late	1	_	_	_	_	у
328	40.00	50.00	adult	female	Middle	1	_	3	_	_	у
332	35.00	40.00	adult	male?	Late- Middle	1	_	_	_	_	у
334			subadult	undetermined	Middle	1	_		_	_	у
335	25.00	35.00	adult	female	Middle	3	3	4	_	_	у
336	0.50	1.00	subadult	undetermined	Middle	_	1	1	_	_	у
338	33.00	65.00	adult	female	Late- Middle	1	_	_	_	_	у
340	39.30	64.40	adult	female	Early	8	1	2	_	_	у
341			adult	male	Middle	_	_	1	_	_	у
342	25.00	35.00	adult	female?	Late	1	1	1	_	1	у
343	19.00	23.00	adult	male	Late	_	_	1	_	_	у
346	50.00	70.00	adult	female	Late	3	_	1	1	_	у
348	1.00	2.00	subadult	undetermined	Middle	_	_	2	_	_	у
351	50.00	60.00	adult	male	Middle	1	_	1	_	_	у
352			adult	male	Late- Middle	1	1	_	_	_	у
353	24.00	34.00	adult	male	Middle	5	1	_	_	2	у
356			subadult	undetermined	Middle	5	8	1	1	2	у
360			subadult	undetermined	Middle	_		_	_	1	у

Table 43. Burials with Pins and Pin Locations (continued)

Burial	Low	High	Age	а	Temporal		Lo	cation		No	Preservation
No.	Age	Age	Category	Sex ^a	Group	Cranium	Jaw/ Neck	Torso	Extremities	Provenience	Code
361	33.00	57.00	adult	male	Early	3	_	1	_	_	у
362			adult	undetermined	Late- Middle	4	1		_	_	y (cranium only)
363	1.00	2.00	subadult	undetermined	Late	2	1	4	1	_	у
368	10.50	13.50	subadult	undetermined	Middle	_	_	1	_	1	у
369	40.00	50.00	adult	male	Late	1	_	_	_	_	у
370	2.00	4.00	subadult	undetermined	Middle	2	_	1	_	_	у
373	45.00	60.00	adult	female	Late- Middle	1	_	_	_	_	у
374	0.00	0.25	infant	undetermined	Middle	5	2	_	2	_	у
375	16.00	18.00	adult	female	Middle	_		1	_	_	у
376	45.00	65.00	adult	male	Late- Middle	2	_	6	_	_	У
380	40.00	60.00	adult	male	Middle	_	_	_	2	_	у
382	4.00	5.00	subadult	undetermined	Early?	_	_	_	_	1	у
383	14.00	18.00	adult	female	Middle	1		—	_	_	У
385	40.00	60.00	adult	female	Middle	2	_	1	_	_	У
388	29.00	57.00	adult	female	Early	2	_	_	_	1	У
389			adult	female	Early	2	_	_	_	_	у
393	- 0.17	0.17	infant	undetermined	Middle	2	1	1	1	_	У
395	43.00	53.00	adult	male	Late- Middle	1	_	_	_	_	У
396	6.50	8.50	subadult	undetermined	Middle	1	2	1	1	_	у
397	30.00	40.00	adult	female	Middle	1	_	_	_	_	у
398	25.00	35.00	adult	undetermined	Middle	_	_	_	_	1	n
399	0.00	0.30	infant	undetermined	Middle	5	1	_	1	_	у
400	25.00	35.00	adult	male	Middle	2		_	_	_	у
403	39.00	65.00	adult	male	Middle	1	_	_	_	_	n
405	6.00	10.00	subadult	undetermined	Middle	2		_	_	_	у
406	0.00	0.50	infant	undetermined	Middle	3		6	2	3	у
412	0.00	0.00	infant	undetermined	Middle	_	_	_	_	7	у
413	50.00	70.00	adult	female	Late- Middle	2	_	_	_	_	у
414	39.00	59.00	adult	male	Middle	2	_	_	_	_	у

Table 43. Burials with Pins and Pin Locations (continued)

Burial	Low	High	Age	9	Temporal		Lo	cation		No	Preservation
No.	Age	Age	Category	Sex ^a	Group	Cranium	Jaw/ Neck	Torso	Extremities	Provenience	Code
415	35.00	55.00	adult	male	Middle	2			_	_	у
417	9.50	14.50	subadult	undetermined	Middle		1			_	у
418	30	55	adult	male	Middle			1	_	_	у
419	48.00	62.00	adult	male	Middle	2				_	у
427	16.00	20.00	adult	male?	Middle				1	_	у
428	40.00	70.00	adult	female	Middle	1	_		_	_	у
432			adult	undetermined	Early	1	_		_	_	у

Note: Table 43 includes observations of pin evidence in each location, such as staining on bones, as well as pins recorded in the field and those recovered and inventoried. Fragments found in soil from the same location are normally counted as a single pin. Where records indicate a pin was recovered from a location and staining on bone from that location was subsequently noted, only one pin should be counted.

Table 44. Burials with Pins by Age, Sex, and Temporal Group

		Early		ı	Middle		Lat	te-Midd	lle		Late			Total	
Sex/Age	Number	With Pins	Percent												
Female	8	5	62.50	32	23	71.88	10	8	80.00	24	17	70.83	74	53	71.62
Male	10	4	40.00	26	14	53.85	18	9	50.00	40	19	47.50	94	46	48.94
Adult, undetermined	5	3	60.00	6	4	66.67	2	1	50.00	4	2	50.00	17	10	58.82
Infant	1	1	100.00	18	14	77.78	3	2	66.67	6	5	83.33	28	22	78.57
Subadult	11	3	27.27	66	48	72.73	16	14	87.50	21	17	80.95	114	82	71.93
Total	35	16	42.86	148	103	69.13	49	34	69.38	95	60	63.16	327	213	65.14

Note: Number includes burials with adequate preservation to expect pins in addition to burials with "n" preservation from which pins were nevertheless recovered.

Table 45. Pin Frequencies, by Temporal Period and Sex

Temporal	Total	W	omen		Men
Group	No. of Pins	No. of Pins Percent		No. of Pins	Percent
Early	29	20	68.96	9	31.03
Middle	109	81	74.31	28	25.69
Late-Middle	47	20	42.55	27	57.45
Late	98	41	45.28	57	54.72

^a A question mark indicates a probable assignment.

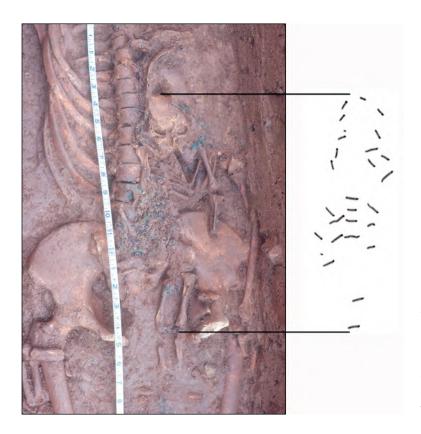


Figure 129. *Left*, in situ photograph of Burial 14. Burial 14 was of an infant no more than 6 months old who shared a grave with a 35–45-year-old woman (Burial 12). The bones of the woman can be seen in the photograph, with the infant's remains superimposed (photograph by Dennis Seckler). *Right*, excavator's drawing of pin locations prior to removal. The pins encircled the infant's skull (at top) and extended down to the knees. Scale is 1 inch = 1 foot.

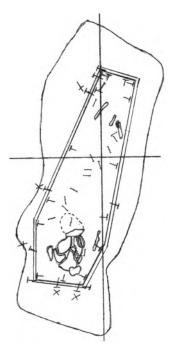


Figure 130. In situ drawing of Burial 183, which held an infant between 8 and 16 months old. This burial was one of just two infants that had the head to the east rather than the west. Pins were found in place along the center of the remains from the skull (at bottom of drawing) down the length of the body. Scale is 1 inch = 1 foot; north is to the right (drawing by M. Schur).

precise locations on the crania in many cases, and the pins were typically on the top of the skull or near the ear. The presence of pins on the cranium has been taken to be diagnostic of shrouding in other archaeological contexts (e.g., Hudgins 1977; Hunt 1994:92). It is possible, however, that pins found only at the head represent a piece of cloth used to secure the chin rather than a complete shroud. In cases where cranial pins are absent, chin cloths simply may have been tied. The securing of the jaw was necessary because it would otherwise fall open when the corpse was laid out supine. Richardson (2000:19) records that in traditional English practice, prior to the onset of rigor, the eyes would be closed, then the mouth, which would be secured either with the band of a shroud cap or with "a bandage passing under the chin and tied at the top of the head." According to Litten (1991:72) the chin tie was removed if a tied cap was put on. The tying of the chin was typical in English practice in the eighteenth century, and chin cloths could be purchased ready-made along with a shroud (Litten 1997:48). Any strip of cloth would have been sufficient, however.

Tying the chin may have been a typical part of the process of laying out the dead among both white and black New Yorkers, but pinning the chin cloth suggests a variant practice. If, on the other hand, cranial pins reflect the special arrangement of the shroud so as to expose the face, it is possible that for these deceased individuals, the face was meant to be in view at some point during the funeral proceedings, perhaps during a wake.

Table 46. Number of Burials with One or More Pins in the Four Body Areas, by Sex

Sex	Cranium	Jaw/Neck	Torso	Extremities
Female	31	10	25	6
Male	25	7	14	5

Note: Only adults for whom gender could be definitely determined are included.

About equal numbers of New York African Burial Ground men (15 men and 2 probable men) and women (11 women and 1 probable woman) had pins only on the cranium, but the distribution by age is skewed toward adults aged 30 or over. Children's chin cloths may typically have been tied rather than pinned. Tying rather than pinning also may have been dictated by religious observance, as in Muslim shrouding. If the cranial pins indicate arrangement of the shroud so as to show the face, such a practice may have been reserved mainly for older individuals.

There were a number of burials with pins that also had possible evidence of clothing. For example, a child (Burial 22) and two women (Burials 213 and 342) had aglets (small copper-alloy "tubes" that cover the ends of laces) as well as pins. In these cases, the aglets may represent clothing (see Chapter 12) or the ties of shrouds. The locations of the aglets on the body were not provenienced in the field because they were indistinguishable from pins. The aglet in Burial 213 was determined to be from the left parietal.

Other burials with evidence for clothing that also had pins include one of a man with a jacket (Burial 6) and three adults with apparent knee breeches (Burials 203, 259, and 415). Thirteen adults with miscellaneous buttons or button fragments that may represent clothing also had at least one pin. There are several possible reasons for the presence of both pins and buttons:

- Individuals were both clothed and wrapped. Four of the people buried with both pins and buttons (Burials 325, 353, 405, and 415) had pins only at the cranium or cranium and jaw. One, the woman in Burial 385, had a pin in the torso area as well as two at the cranium. Only one of these had clear-cut evidence for clothing, Burial 415; perhaps preparation of this man's body included securing the jaw with a chin cloth, which was left in place at burial.
- They wore buttoned undergarments beneath their shrouds. Bone buttons, likely to represent undergar-

- ments were found with Burials 37, 171, 257, 313, 353, and 385.
- They were clothed rather than wrapped, and some of their clothing was pinned.
- Their buttons were not attached to clothing but rather were worn on a string or placed in the hand as a memento or talisman at the time of burial.

Some adults had pins on the head, torso, and extremities. These cases, like those of children with pins along the body, probably indicate winding sheets that may have been pinned along the length of their bodies ³

Although pin distributions by sex on cranium, jaw, and extremities were comparable, more than twice as many women than men had pins on the torso area (Table 46). This is consistent with the hypothesis that in some cases pins represent clothing fasteners rather than shrouds. Pins were used more often than buttons to fasten women's clothing in the eighteenth century (Figure 131; see section entitled "Clothing and Fasteners in Historical Context" in Chapter 12). Of the adults with pins only on the torso, 5 were women, and 5 were men (excluding two burials with torso pins that had been truncated, leaving only the post-cranial skeleton and making it impossible to know whether cranial pins had been present).

Pins and Shrouds in Eighteenth-Century New York

Mass produced in the period of the African Burial Ground cemetery, straight pins would have been available at shops, at the markets, and no doubt from peddlers, and they also could have been obtained by women and girls who did the sewing in European households. Cloth for shrouds or winding sheets may

³ Litten (1991:59) cited this practice for English shrouding in the fifteenth century but did not trace its history.



Figure 131. Detail from "Jersey Nanny" (mezzotint) by John Greenwood, American, 1748. This depiction of a working-class woman shows two items of clothing fastened with pins. The scarf or shawl is pinned at her throat; her short gown, which wraps across her torso, is pinned on the left side of her chest. (Photograph © 2009 Museum of Fine Arts, Boston. John Greenwood, American, 1727–1792, *Jersey Nanny*, 1748, Mezzotint, Sheet: 24.4 x 19.7 cm [9 5/8 x 7 3/4 in.], Museum of Fine Arts, Boston, Gift of Henry Lee Shattuck, 1971.715.)

have been considered, along with the coffin, a sine qua non of proper burial. As we noted in Chapter 2, there is scant evidence, but wrapping the dead in some manner was practiced in at least some of the African cultures to which captives brought to New York belonged. There is no documentary evidence of New York's household heads providing cloth as there is for coffins, though such a custom may have developed. Alternatively, like pins, cloth would have been available to blacks through several other means, such as purchase at the many eighteenth-century shops that dealt in cloth, or from peddlers who sold such wares; recycling from the deceased's or a relative's household, or through appropriation that would have come under the heading of "theft."

Litten (1991:57–84) has described shrouding in fifteenth- through nineteenth-century England, relying for the most part on information gleaned from sculptures, drawings, and paintings; Richardson (2000:20–21) draws on folklore and illustrated funeral invitations to provide a picture of traditional practices. The winding sheet was commonly used for burials in post-medieval England, and the custom would have come to New York with European colonists. In English (and more widely European) practice, a winding sheet consisted of a rectangular length of cloth that

enclosed the corpse, tying above the head and below the feet. The edges of the sheet, about three times the width of the corpse and 6 inches longer at both head and foot, were fastened either by stitching or pinning, and each end was tied with a strip of cloth. Illustrations from the sixteenth through eighteenth centuries show English corpses wrapped in generous widths of material with gathered ends. In some cases, the illustrations show that the fabric was pushed back to reveal the deceased's face; otherwise, the winding sheet completely concealed the corpse. In Europe and among European colonials, specific garments called "shrouds," as opposed to winding sheets, came into fashion in the eighteenth century. These somewhat resembled an open-backed nightshirt with a tie at the feet. The shroud had a drawstring tie at the neck, rather than above the head, and sleeves with drawstrings or tapes at the wrists. A fabric cap complemented the dress. Men and women seem to have been dressed for the grave in similar, if not identical, fashion.

Blanche White, who advertised as an undertaker in New York in 1768, sold "shrouds and sheets" (Gottesman 1938:142), suggesting that these were two different items, the former probably a garment rather than a winding sheet. There was probably no difference between the sheets used for bedding and those

used for winding sheets, at least among the poor. Household mistresses may have offered old bedsheets for use as shrouds by enslaved and free servants, whereas they might have used heirloom linens or newly purchased sheets or garment shrouds for their own family members.

In the North American colonies, there was no regulation of the type of cloth used for shrouding; linen and wool would have been most common.4 Lengths of cloth, like wood for a coffin, would have represented no small expense for bereaved family and friends, and it was probably impossible to provide the flowing or repeatedly wrapped shrouds that are depicted on the well-to-do in early European sculptures and prints. A proper Muslim shroud, too, requires yards of cloth because more than one wrap is used and each wrap should be large enough to cover the entire body. The ideal is three wraps for a man and five wraps for a woman, but one wrap can suffice because the provision of a shroud should not be unduly burdensome.⁵ The outlay for a proper shroud would have been prohibitive for African Muslims living under slavery in colonial New York. They would have met their collective obligation to wrap the dead by adapting their practices to the economic constraints they faced.

Surviving records from funeral suppliers do not detail the colors of cloth used for shrouds or winding sheets, but in most cases, illustrations appear to show white or pale fabrics dressing the dead (see Litten 1991:57–84). Antebellum accounts from the American South suggest that enslaved plantation laborers usually used white cloth to wrap their dead (Roediger 1981:169). Muslim shrouds are always supposed to be white. The colors of shrouds used in the seventeenth and eighteenth centuries in the areas of Africa where New York's captives came from were not recorded.

The Pin Assemblage and Associated Cloth

Pins recovered from graves at the New York African Burial Ground were very uniform. Almost all were fragmentary (if not already broken in situ, they usually broke when handled). Those that were whole or were in pieces that could be measured were just under to just over 1 inch long. Only five whole pins were present at the time of the Howard University inventory of the assemblage. Examples of recovered pins are shown in Figure 132. (A photograph of the replicas of pins that were created for the New York African Burial Ground by artisans at Colonial Williamsburg is provided in Chapter 1; see Figure 9.)

Cloth was typically recovered along with larger metal artifacts such as buttons or coins, but was also recovered with pins from a few of the burials. The identified textiles are of linen and cotton. Burials with textile remnants associated with pins or aglets (rather than buttons or cuff links) are listed in Table 47 (see Chapter 12 for textiles associated with buttons). Also included in this table are burials that yielded textile fragments that were associated with metal items that would have aided preservation (e.g., coins) but no buttons or cuff links. The fragments listed in Table 47 may represent shrouds, but some might also be from clothing. One man, in Burial 415, had clothing represented by numerous buttons but is included because we know he also had cloth pinned on the cranium (Figure 133). Examples of textiles from possible shrouds are shown in Figures 134 and 135.

Recovery, Condition and Treatment, Chain of Custody

During excavation, pin recovery was not always possible because of the state of decomposition of these fragile items. When recovered in the field, the pins or pin fragments were placed in small plastic containers or bags and brought to the project laboratory. In the laboratory, conservators noted that pins were mineralized and highly fragmented, often consisting only of corrosion product. The pins were desalinated and batch-treated with a corrosion inhibitor, vacuum-impregnated with the acryloid B-72, and stored in polyethylene boxes. The exact location of each pin within a burial (e.g., cranium, vertebrae, etc.) was either not recorded on the field containers, or this

⁴ In the late seventeenth century, the English Parliament passed *The Act for Burying in Woollen*, which prohibited the use of linen or other fabrics as burial garments (in order to protect the woolen industry). Well-to-do families sometimes flouted this law and considered the fines imposed as one of the costs of a funeral (Litten 1991:74). The act remained in effect until the early nineteenth century in England.

⁵ During the course of the African Burial Ground project, Fatimah Jackson, Kofi Agorsah, Muhammad Hatim, and Sylviane Diouf provided information about Muslim burial practices. For an overview of prescribed Muslim practices, see University of Southern California Muslim Student Association (2007).



Figure 132. Copper-alloy pins from Burial 12 (Catalog Nos. 253-B.001 and 253-B.002). The bottom pin is 2.2 cm in length (photograph by Jon Abbott).

Table 47. Textile Fragments Recovered (Not in Association with Buttons)

Burial No.	Catalog No.	Type of Fragment	Comments
18		unidentified possible textile	Found in soil adhering to left parietal during cleaning of remains; not conserved.
22	344-B.004	linen	Plain weave, partially mineralized; single aglet recovered.
46	605-B	unidentified	Found in soil pedestal during cleaning of remains; not conserved.
71	813-B.003	unidentified	Textile associated with pin; not listed in conservation report.
104	847-B.003	unidentified	Not listed in conservation report.
109	852-B.002	linen	
121	866-B	unidentified	Pseudomorph (exact replica of textile formed by corrosion products).
136	881-B.002	linen	
156	901-B	fiber, unidentified	Found in soil pedestal during cleaning of remains; not conserved.
169	926-B.001	cotton	
180	960-B	fiber, unidentified	Found in soil pedestal during cleaning of remains; not conserved.
219	1200-UNC	unidentifiable	Provenience unclear.
225	1211-B.004	unidentified	Not listed in conservation report.
230	1216-B.002	unidentified	Adhering to either side of a copper-alloy coin.
252		unidentified	Impression of cloth noted in field records; not recovered.
363		unidentifiable	Single fiber from cranium.
389	2023-B.002	unidentifiable	
415	2097-В	unidentified	Recovered with pin during cleaning of cranium in laboratory; not conserved.