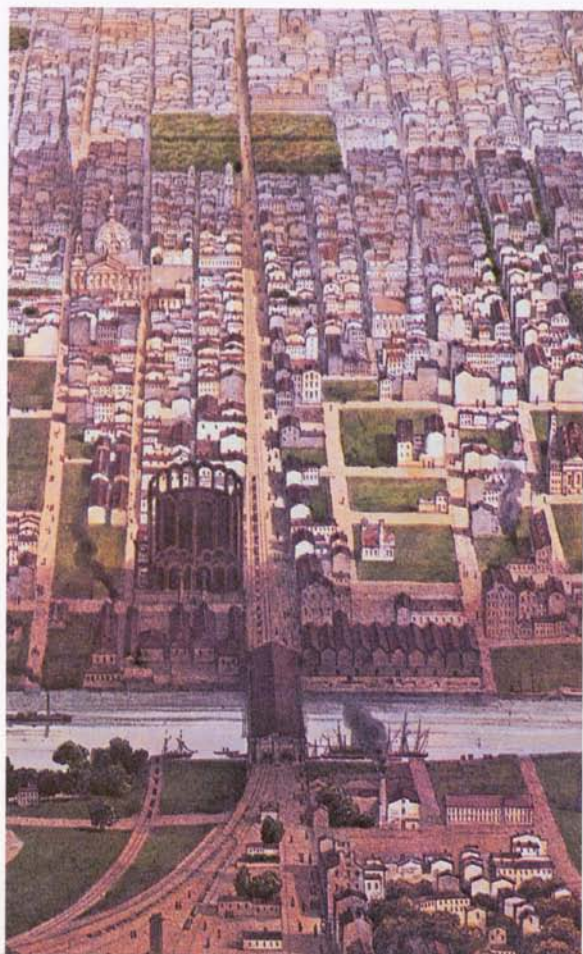


BURIED BENEATH PHILADELPHIA



The Archaeology of
North 7th and Arch Streets

Front Cover:

PHILADELPHIA, PENNSYLVANIA in 1855.

*Reproduced in 1970 by HISTORIC URBAN PLANS, Ithaca,
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Federal Bureau of Prisons
320 First Street, N.W.
Washington, D.C. 20534***

INTRODUCTION

Take a stroll down any city street in America and your experience will be similar. As you walk along the sidewalk, you pass stores, offices, some homes, street vendors, and perhaps a parking lot. Cars, trucks, buses, and bicycles travel down the city streets. People can be seen walking to their destinations, waiting for a bus, or engaging in conversation. Occasionally, you may notice a building that has undergone renovation. You stop and take a look at the front of the building. If you look up, you can see some of the original detail of the building, and perhaps get some idea of how old it is. Was it a home, or a business? Suddenly you get a sense of what the street must have looked like years ago. But who were the people walking down the street then, just as you are now? Why were they walking along this street? Did they live here? Shop here? Work here? Then you realize, what if you could go back and travel through time to get a glimpse of what this building, this street, this area of your city looked like at some point in the past? You look down, and wonder if it could be possible to see through the city street to see what was there before the modern city you know.

THE ARCHAEOLOGY OF NORTH 7TH AND ARCH STREETS



Aerial View of Archaeological Excavations.

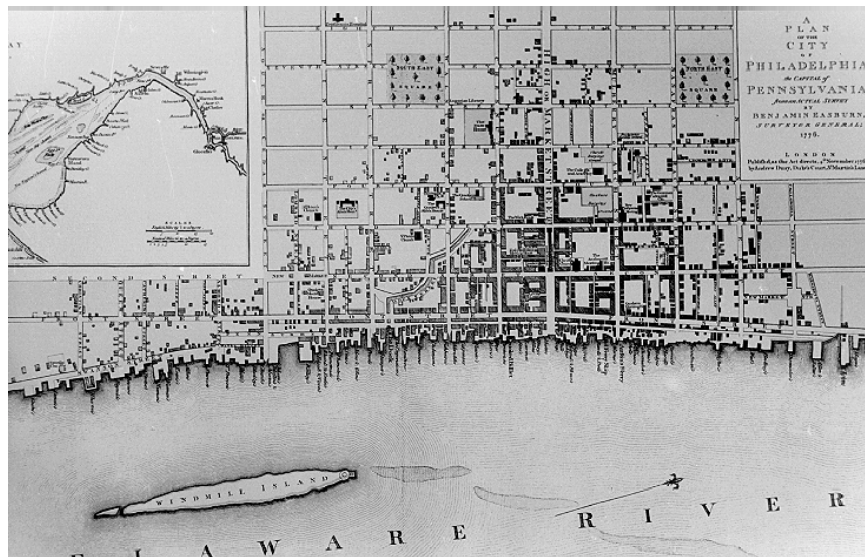
In advance of planned construction of a Metropolitan Detention Center at North 7th and Arch streets in Philadelphia, a large urban archaeology project was conducted in 1995-96 by the U.S. Department of Justice, Federal Bureau of Prisons. Any proposed construction project that has federal funding is required by law (the

National Environmental Policy Act and the National Historic Preservation Act) to determine whether the proposed project will affect any historic or prehistoric cultural resources.

The archaeological excavations focused on uncovering foundations and associated items of historic interest within a series of early lots that fronted both streets. The North 7th and Arch streets project area is designated *Site 36PH91* by the Bureau for Historic Preservation, Pennsylvania Historical and Museum Commission. The designation *36PH91* represents this site as the 91st site (*91*) recorded in Philadelphia County (*PH*) in the Commonwealth of Pennsylvania (*36*).

A HISTORY OF THE SITE

The archaeological project at North 7th and Arch streets began with historical background research. This is standard practice with large urban archaeology projects, because it provides important information to identify where significant archaeological finds are likely to be preserved. To assist in interpreting what is found at an archaeological site, archaeologists rely on chronological frameworks to organize their data. When dealing with a historic archaeological site, historical research provides that framework.



Plan of Philadelphia in 1776.

Source: Easburn 1776

Based on historic documentary investigation, it is known that this block of Philadelphia was granted to John Brooks in 1690. Brooks built the first house on the site around 1700. This house and the rest of the block were subsequently sold to Isaac Zane in 1776. Zane, an early Philadelphia developer, subdivided the area into 11 lots. A number of other houses were then built by local artisans, and a pottery was established on the property.

In the early 1800s, a final subdivision of the site created a total of 21 lots. Most of the earlier structures were demolished, and a new series of 3½-story town houses were erected along Arch Street. These structures served as residences up until just after the Civil War, when they were rebuilt as places of business, often being turned into small factories, which provided various services or produced goods ranging from cigars to clothing to artificial flowers. These buildings all survived into the early 1900s. Lit Brothers department store then began purchasing portions of the block for expansion. By shortly after World War II, all the early structures had been demolished.



*Photograph of 712 Arch Street
courtesy of the Historical Society of
Pennsylvania, Photographic
Collection.*



*Photograph of 708 Arch Street
courtesy of the Historical Society of
Pennsylvania, Photographic
Collection.*

HISTORY OF SITE 36PH91

EARLY HISTORY

1682-1766

In 1682, the site was surveyed by Thomas Holme, and was granted nine years later to John Brooks. Brooks built a home at the corner of Arch and North 7th streets. In 1730, the Brooks grant was sold to William Bryant.

FIRST DEVELOPMENT

1766-1804

Isaac Zane purchased the site in 1766. Anticipating urban growth, Zane put in a new street—Filbert Street—and subdivided the property into 11 lots of different sizes. These lots were sold to some members of the artisan class. By 1796, a pottery owned by Daniel Topham, a coach house, and a stable that functioned as an early nail factory or a domestic residence were present.

EARLY NINETEENTH-CENTURY IMPROVEMENTS

1804-1865

By the early nineteenth century, all previous structures built on the site had been razed. The site had been resurveyed into 21 long and narrow lots, except for the pottery owned now by Andrew Miller. During this time, Philadelphia was experiencing a boom in construction. Large, fireproof, brick domestic structures were being built by wealthy Quakers.

COMMERCIAL DEVELOPMENT

1865-1925

After the Civil War, Philadelphia became a center for manufacturing and heavy industry. Between 1865 and 1875, the domestic structures on the site were remodeled for commercial use, taking them from 3½ to 4 or more stories in height. Shops and manufacturing concerns occupied these structures, with tenants and shopkeepers living on the upper floors and rear appendages of these modified structures.

LIT BROTHERS ACQUISITION

1925-1984

Anticipating expansion in the 1920s, Lit Brothers department store began acquiring property and owned all the lots in the site by 1942. The structures on the site were all razed around 1950, and the area was converted to a parking lot. On the southwest portion of the site, Lit Brothers built subterranean cellars in the location of the former Topham/Miller pottery. In 1961, a single-story masonry building (Lit Brothers Auto Center) was constructed at the corner of North 7th and Filbert streets.

PRESENT DAY

1984-PRESENT

Minor changes occurred to the site after 1984. The Lit Brothers Auto Center was refurbished as a dance club, and two smaller buildings along Arch Street were associated with the commercial parking lot and passport photos. The remainder of the site continued to serve as a parking lot.

DIGGING BENEATH NORTH 7TH AND ARCH STREETS

Urban archaeology often requires the use of jack hammers, backhoes, and other mechanized equipment to open pavements and remove unwanted fill. Such heavy machinery is used in combination with the more familiar form of archaeological excavation, using shovels and trowels, which systematically removes soils and exposes features. Using these techniques, the archaeological team removed fill from the site that sometimes reached depths of 8 to 10 feet, totaling thousands of cubic yards. This particular project was a large undertaking that examined approximately one-third of the total site area. The unexplored area consisted of existing buildings, and a basement storage structure.

The archaeological excavations focused on a sample of the original lots located along both Arch and North 7th streets. Most of the uncovered foundations, with the exception of the remains of one eighteenth-century structure, date to the early 1800s. The foundations of these early structures were revealed, along with later post-Civil War modifications. Circular brick features located within the walls of these former structures include wells, privies or necessities (outhouses), and cisterns (used to collect and hold rain water).



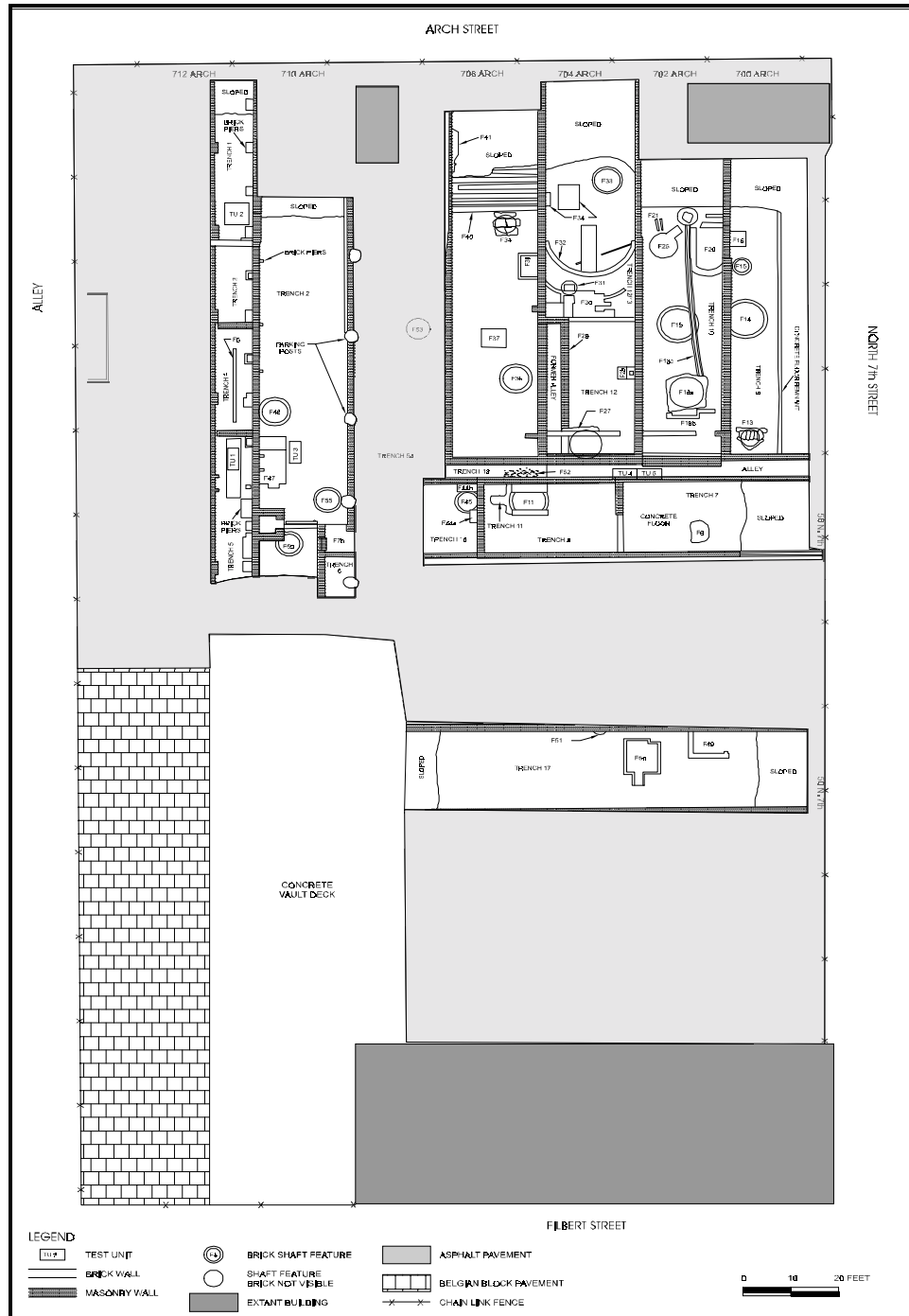
Beginning Excavation of a Deep Well.



Excavation in Progress.



Completion of Well Excavation.



Site Plan, September 1995.

These features, once very necessary parts of homes, are essentially brick shafts often extending about 25 feet into the ground. After abandonment, they often served as trash receptacles for discarded household items and food waste, thereby offering archaeologists windows into the lives of past site occupants.

The last phase of excavation concentrated on recovering artifact deposits from several of the brick shafts that were associated with the early houses. Excavations also focused on recovering artifact deposits from a layer of soil that survived from the 1760s-1780s period of the site's occupation.

The archaeological excavation at Site 36PH91 resulted in the following: documentation of the foundations of six early nineteenth-century domestic structures on Arch Street; documentation of the foundations of two smaller structures on North 7th Street; documentation of 25 deep shaft features (wells, privies, and cisterns), and full excavation of five shaft features; documentation of 43 additional non-shaft features; excavation of the buried layer of soil; and recovery of a large number of artifacts.

WHAT HAVE WE LEARNED?

The foundations revealed beneath the parking lot were not subjected to detailed study, beyond mapping, photo documentation, and descriptive recording. All have been heavily modified during the years of the site's development, and all the foundations are probably duplicated in many structures presently standing in Philadelphia.

The brick shaft features that were revealed during the second phase of investigation held the promise of providing significant information on early residential life, consumer behavior, the use of space, and craft, commercial, and industrial activity in Philadelphia. These features are important to archaeologists, both in the objects they contain and in the details of their construction. They hold keys to



Feature Excavation and Mapping.

the everyday lives of early Philadelphians, as the city expanded out from its colonial confines nearer the Delaware River in the early nineteenth century.

The information obtained during the archaeological excavation and the subsequent laboratory analysis demonstrated that four areas of the site offered the opportunity to study certain aspects of Philadelphia's historical development. The archaeologists referred to these four areas as *depositional units*, which are considered to reflect the principal historical occupations and events that shaped the archaeological record. Archaeologists use the term *archaeological record* to refer to the physical remains, such as artifacts, that are the result of human activities. By studying, recovering, analyzing, and interpreting the archaeological record, archaeologists attempt to reconstruct the past.



Recovered Artifacts in a Screen Used to Wash Away Soil.

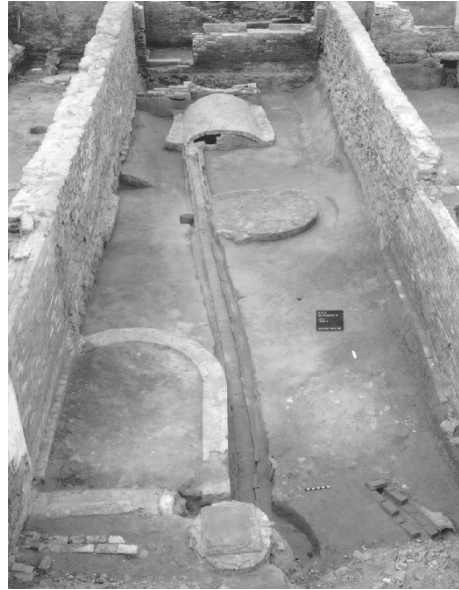
Four key areas of the site were identified: an eighteenth-century refuse deposit that extended over much of the northwestern portion of the site; an early nineteenth-century privy deposit (Feature 15) located at the rear of 700 Arch Street; the site's largest domestic deposit, which was found in another early nineteenth-century privy deposit (Feature 19) located at the rear of 702 Arch Street; and a refuse pit or barrel privy (Feature 56) identified in the rear area of 54 North 7th Street.

DOMESTIC LIFE IN NINETEENTH-CENTURY PHILADELPHIA: THE CLAYTON HOUSEHOLD

Feature 19 is a privy located toward the rear of 702 Arch Street. Although it was probably used in the eighteenth century, its exact date of construction has not been determined. A necessary house built between 1810 and 1818 was probably associated with Feature 19. The archaeologists believed that the filling of Feature 19 happened before this time, or within this time. The types of artifacts recovered

from Feature 19 point to an association with an upper-middle-class family, which is consistent with known households on the Arch Street side of this block. One such household was the Clayton family.

Charles Clayton was a coachmaker, who in 1804 had purchased the property that became 700 and 702 Arch Street. Charles Clayton and his wife, Eleanor, lived on the corner lot and supported a household of 12. In 1810, the improvements on the Clayton property included a dwelling and a coach shop. Between 1810 and 1818, Clayton replaced what may have been the original Brooks/Bryant house on the lot with two contiguous three-story brick buildings fronting on Arch Street. A "necessary house and well" were located toward the rear of 702 Arch Street. Clayton sold the property in 1818. Based on the location of the necessary house drain, and the dates of the artifacts in the privy, it is likely that the contents of Feature 19 were used and discarded by the Clayton household.



Feature 19 (Center) and Necessary House (Background).

The artifacts found in the privy deposit are mostly domestic in nature. Evidence of the children who lived at 700 or 702 Arch Street is indicated by the presence of marbles—one made out of marble and two made out of limestone—and slate pencils.

Feature 19 was very different in construction style and somewhat different in the artifacts recovered when compared to Feature 15, a privy located near the rear of 700 Arch Street. Feature 15 had a narrow opening (3.4 feet), but a relatively deep shaft (19.6 feet). Depending on the date of its construction, the depth may have been in violation of the City of Philadelphia's post-1790 efforts to restrict privy depths in response to yellow fever epidemics. After a series of deadly yellow fever epidemics starting in the summer of 1793, efforts were also made in the name of public health to regulate privy construction and require periodic maintenance. It is estimated that approximately 5,000 people died during the first epidemic, about 10 percent of the population of Philadelphia.

It is possible that Feature 15 is in fact a reused well shaft, possibly associated with the earlier structure once standing at the corner of Arch and North 7th streets (the Brooks House). Feature 19, with its larger opening and shorter shaft, fits the model of a post-epidemic privy. Shaft length was reduced to avoid penetrating the local water table, and the shaft diameter was probably enlarged to increase holding capacity.

TOYS AND CHILDREN: THE EVIDENCE FROM FEATURE 19

The play of girls was encouraged to follow that of their future domestic roles. A hand-painted pearlware toy teapot, fragments of a matching cup, and the lid to another toy teapot were found in Feature 19. This feature also contained a set of miniature ceramic cooking vessels: a toy preserve jar, two toy pitchers, a milk pan, and a jug.



Early Nineteenth-Century Printed Children's Mugs from Features 15 and 19.

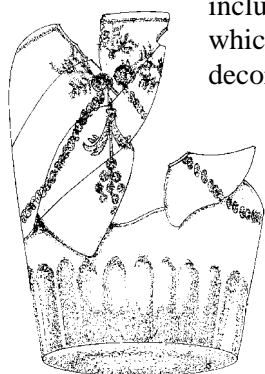
Two children's mugs were recovered from Feature 19. There was a surge in children's items in the ceramic industry in the early nineteenth century. These gifts were intended for the children of the affluent and respectable middle class. The irony is that the ceramic plates and mugs intended for children were often decorated by poor working-class children in England. Fragments of two

children's mugs were found in Feature 19. One had a vignette of two girls with a doll in a garden and the caption "A present for a Good Girl." The other was a blue transfer-printed child's mug with the caption "A Gift for Elizabeth." These mugs probably belonged to the Claytons' daughters. The available 1810 census records do not have the children's names listed for the Clayton family at 700 Arch St., the family responsible for the filling of Feature 19, and it cannot be determined whether a child named Elizabeth was a member of the Clayton household. The mug with an American eagle and the motto "A Present for My Dear Boy," from Feature 15, encouraged patriotism in children.

GLASS FROM THE CLAYTON HOUSEHOLD

The early nineteenth-century residents of North 7th and Arch streets had the opportunity to purchase a variety of glass bottles and table items for use in their homes. The Feature 19 assemblage contains an estimated 77 glass vessels, all of

which are typical of wares commonly found in middle- to upper-class household refuse deposits dating to this period. The majority of the forms are types which were imported from abroad throughout the late eighteenth and early nineteenth centuries, although they were important items in the output of American glass houses during this period as well, fashioned, for the most part, after the forms and styles of the English and Continental vessels.



Most numerous in the collection are tumblers and stemwares, including fine molded, cut and engraved, and enameled pieces which appear to have been important items of everyday table decor. Some of these vessels appear to have been parts of matching sets, suggesting an elaborate set of drinking practices. It is interesting to note that serving pieces—bowls, sugar bowls, compotes, pitchers, salts, and decanters—are conspicuously absent from the Feature 19 table glass assemblage. It may be that these forms, perhaps not utilized on an everyday basis, were not broken and discarded as often as the drinking vessels, or that ceramic counterparts to these glass vessel forms may have been preferred by the Clayton family.

The Clayton family may have reused their bottles or taken advantage of an atmosphere conducive to bottle resale in nineteenth-century Philadelphia. Either practice would have severely decreased the types and numbers of bottles finding their way into the privy. Of those that were discarded and identified, multi-function vials—used to store and dispense such products as medicines, spices, essences, and powdered colors for paint and ink—are the most numerous. The only beverage bottles discarded by the Clayton household are those presumably used for wines and spirits. These appear, for the most part, in cylindrical forms used for both storage and decanting. The single, square-sectioned case bottle in the assemblage probably contained either gin, rum, or brandy, and may have been originally housed in a liquor cabinet or used in a traveling case. The flasks in the assemblage were probably used by one or more of the male members of the Clayton household for liquor consumption. Pharmaceuticals in the collection are limited to one patent/proprietary medicine—*True Daffys Elixir*. A single toilet bottle, possibly for use on a dressing table, likely contained cologne, sweet water, or smelling salts. The single glass table lamp, designed to burn whale or sperm oil, represents the pre-kerosene era of lighting in America that ended in the middle of the nineteenth century when kerosene lamps became the norm. Probably accidentally broken and then discarded, this lamp was probably only one of several utilized by the Clayton household.

DOMESTIC LIFE ON NORTH 7TH STREET

Feature 56, possibly a barrel privy, was identified in the rear area of the 54 North 7th Street lot during preparation for the final phase of archaeological excavation. The portion of Feature 56 of primary interest to the archaeologists was a deposit containing a lot of bone and seeds, together with large numbers of broken but essentially intact ceramic vessels, primarily pearlwares, dating from 1795-1825.



Feature 56 Packed with Discarded Ceramic Teawares.

The artifacts associated with Feature 56 were discarded within a short period of time, and at least part was a deposit of complete or nearly whole vessels. As always when a deposit such as this is encountered, the question arises as to the cause or causes for such a mass deposition. The usual

reasons given are discard of vessels during drastic house cleaning, elimination of surplus or outmoded wares when families remove from one residence to another, change in family composition (especially following marriage or death), or elimination of vessels contaminated by sickness. 54 North 7th Street was occupied by the Katz (also known as Kitts) family before 1790, when Elizabeth Kitts died. Her husband, Michael, died in 1806, and the property was inherited by their two children. It is not known if either or both of the children lived there, but in 1812, they sold the property to Conrad Bartling, who resided on the lot until 1833. The Feature 56 deposit could be attributed to the household of Michael Katz, the possible household of his children, the Bartling household, or some unknown household that occupied the lot between 1806 and 1812.

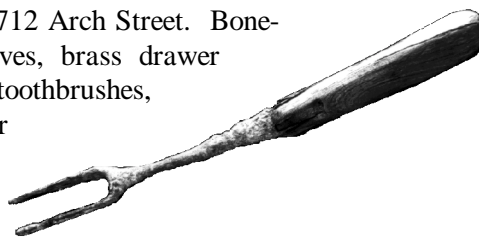
Artifacts associated with clothing were found in the excavations at 712 Arch Street. Over 20 fragments of buckles, mostly from shoes, may have been discarded by one of the wealthier occupants when shoe buckles fell out of favor at the end of the eighteenth century.



Eighteenth-Century Copper and Brass Shoe Buckles. Clockwise from Top Left: Circle and Rope Motif; Floral and Knot Motif; Geometric Motif; Undecorated; Copper with Glass Inlays; Complete Undecorated; and Scroll Motif.

Ladies' personal effects were evidenced by jewelry beads, brass thimbles, bone fan parts, and jewelry parts. Clay wig curlers, used by both men and women, were also found. One wig curler was notable for its (maker's) mark, "WA," which is a stamp of unknown origin. It is not known if these letters denote size, style, or manufacturer, yet wig curlers with this mark have been found at various archaeological sites in the United States and England.

The remnants of everyday life are visible in the abundance of household items recovered from 712 Arch Street. Bone- and wood- handled kitchen knives, brass drawer pulls, brass straight pins, bone toothbrushes, bone combs, and a pewter teaspoon are all representative of a daily routine. All of the combs recovered were of typical eighteenth-century design with double-sided rows of narrowly spaced, fine teeth. This

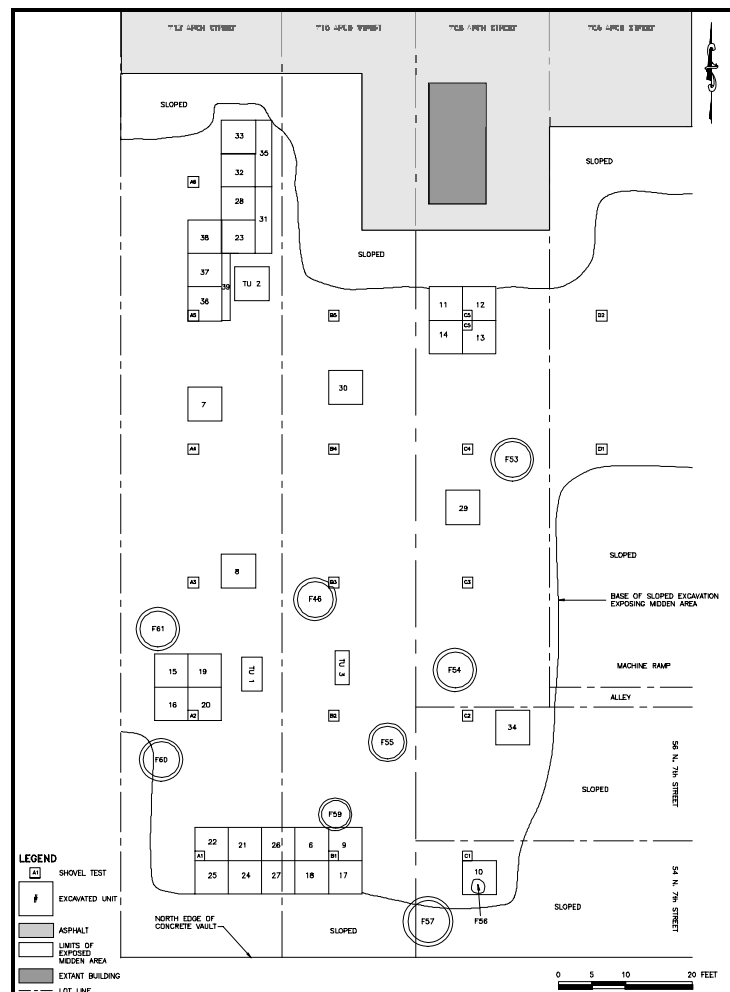


Two-tined Iron Fork with Wood Handle.

style was used for a person's hair, rather than to groom a wig or beard, and was referred to as a head, close tooth or, most appropriately, lice comb.

CRAFTS AND INDUSTRY IN EIGHTEENTH- AND NINETEENTH-CENTURY PHILADELPHIA

The eighteenth century was a time when the workplace and the home were often the same. The nineteenth century saw the North 7th and Arch streets neighborhood change from residential to industrial. By 1887, the shops along Arch Street included an engraver and a photographer (700 Arch), an artificial flower factory (706 Arch), a shoe factory (706 Arch), a tailor shop (708 Arch), a cigar factory



Partial Site Plan, February 1996.

(710 Arch), a photographer's studio (712 Arch), and a printing shop (714 Arch). The buildings along North 7th and Filbert streets included a millinery and trimmings factory (707-09 Filbert), a restaurant (40 North 7th), a wigmaking and barber shop (44 North 7th), a gold leaf factory, a hat factory, a blank book factory (46-48 North 7th), and a bonnet factory (54 North 7th).

Evidence associated with commerce, crafts, and industry was found throughout the North 7th and Arch street site. In some sections of the site, such as the rear portions of 712 and 710 Arch Street, particular industries were reflected in the archaeological record. In addition, the collection of artifacts recovered from the excavations provide insight into everyday items of eighteenth- and nineteenth-century Philadelphia.

A number of artifacts associated with craft industries—such as brewing and metallurgy—were also found at the North 7th and Arch street site. Since none of these craft industries are mentioned in the historic documentation for this area of Philadelphia, archaeology provides the only detail on this aspect of history.

Brewing-related artifacts were recovered from 712 Arch Street. There is no historical mention of a brewery on the block, but a brewery was situated nearby on 6th Street. However, it was not uncommon for individuals to produce their own beer. Evidence discovered that related to the process of brewing included roasting tiles, wooden tubs, and barley. Barley is the most common grain used in beer making, and was the only grain found at the site.

A complete range of metallurgy-related materials were found in the eighteenth-century refuse deposit at 712 and 710 Arch Street. Every step of the manufacturing process was represented: graphite crucibles to process the raw material; unfinished pieces; substandard finished pieces that were rejected; trimmed material scraps; refinery by-products; and completed specimens, either unused or awaiting reuse.



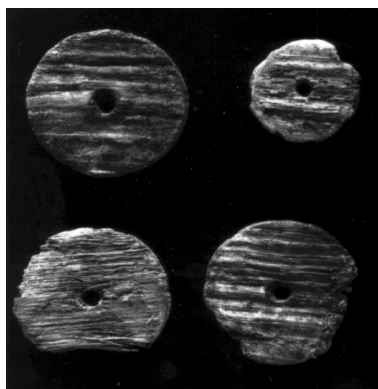
Brass and Copper Scraps.

The artifacts indicate the activities of several different craftsmen. Metallurgy is well represented by the volume of material and goods. The large amount of shoe

parts, leather straps, belts, and scraps is also evidence of a shoemaker or leatherworker on the premises. The deposits of tree bark and cattle horns found are related to the tanning of leather. In addition to metalworking and leatherworking, a third trade may also have been active in the area. The presence of wood shavings, wood by-products, furniture springs, a drawer pull, possible trunk hardware, a wood chisel, a large nail deposit, and upholstery or handwrought tacks suggests that furnituremaking and cabinetmaking were occurring concurrently with the aforementioned trades.

The large amount of leather remnants, primarily in the form of shoe parts, indicates the presence of a leatherworker or cordwainer in the neighborhood. While the leather artifacts were not exclusively shoes or shoe-related, their preponderance would seem to imply that shoemaking or repairing was a specialty.

Leatherworking was represented by nearly 700 leather fragments, manufacturing scraps, and shoe parts. Over 400 pieces were recovered from 710 Arch Street, with an additional 118 pieces found at 712 Arch Street. Aside from the indeterminate scraps, various sections of shoes and belt or strap fragments were also recovered, indicating the presence of a tanner or cordwainer in the area. There is strong evidence that the craftsmen who operated on the site practiced associated trades. Some of the material found at 710 Arch Street is an example of this phenomenon: four leather buttons, one hollow-type gilt button, 18 brass straight pins, seven pieces of metal by-product, 23 shoe parts, and three pieces of leather by-product. During the eighteenth and early nineteenth centuries, it was not uncommon for a specialist in one field to branch out into other areas to supplement his income.



Wooden Button Discs. The Single Center Hole Held a Metal Pin Shank and a Metal Face or "Crown" was Crimped onto the Beveled Outer Edge.

The abundance of bone buttons and various metal buttons signifies the operation of other crafts and industries in the neighborhood as well. Over 150 buttons were recovered from the site, and almost one-third of them were from the rear sections of 712 and 710 Arch Street. The large concentration of buttons in this area is consistent with the supposition that a metalsmith worked or resided in this area, as many of the specimens were unfinished wooden and bone blanks not yet fastened to metal faces. There were 25 wooden or bone disks and six finished tombac buttons. Tombac was an alloy that combined brass with white copper and arsenic, creating an easily polished, sturdy finish resembling silver. In

addition to a specific material content, tombac also denotes a manufacturing style—a wire shank with a raised extension for reinforcement, and a lathe-smoothed disk. Tombac as both a material and a manufacturing technique had a rather short lifespan, first appearing in the middle of the eighteenth century and disappearing by the close of the century.

OTHER ARTIFACTS FROM NORTH 7TH AND ARCH STREETS

The Importance of Nails

Nearly 4,000 architectural fasteners, mostly nails, were recovered from within the site. The large number of nails at the site is neither surprising nor overly significant. The largest concentration of nails or fasteners—one-fourth of the collection—came from the front of 712 Arch Street. Most of the nails can be associated with numerous episodes of building construction, renovation, or demolition that undoubtedly occurred throughout the late eighteenth and early nineteenth centuries.

Lead Seals

Four lead bale seals were recovered from the site. Such lead seals were used to identify the contents of closed packages and indicate that taxes were paid on the items to which they were attached. Each seal recovered was marked with various initials or motifs. One was stamped "HAAP," with the obverse stamped "XXXX," the meaning of which is, at present, indecipherable. A second seal was a four-part seal, with one side embossed with a fleur-de-lis motif backed by the profile of Charles II, flanked by the letters, "OF ENG," to the left and "LAND" to the right, with the remaining two sides blank. This particular seal is dated to the reign of Charles II of England (1660-1685). Four-part seals were almost exclusively used to denote the payment of English excise taxes. Originally used to collect duties on textiles (mainly wool), bale seals were soon used on most goods shipped to and from England in the years prior to the American Revolution, as trade became more regulated and heavily taxed. When attached, the seal would be folded over and compressed with a pair of pincers capable of imprinting a

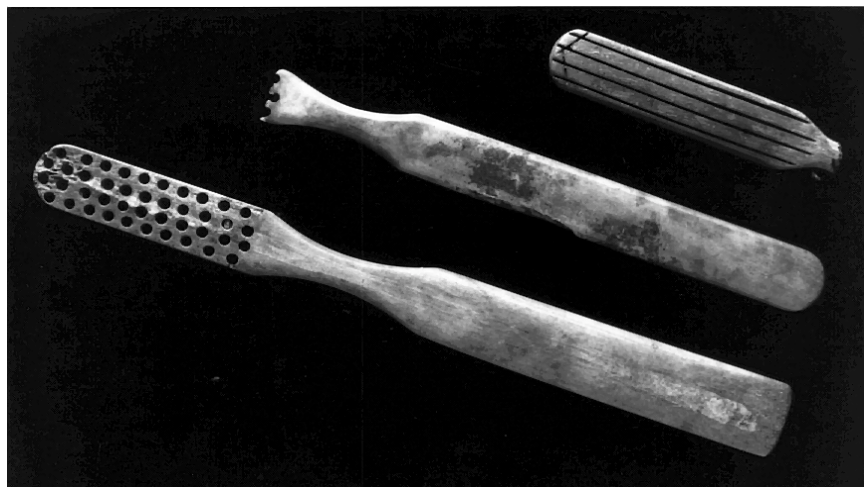


Four-part Lead Bale Seal with Fleur-de-lis Motif on One Side and Profile of Charles II (Ruled 1660-1685) on Reverse with Embossed "OF ENGLAND." This Seal Was Probably Destined for Melting Down.

new or additional mark. Two-part seals, however, were used by merchants to protect against theft or to identify the contents, destination, or maker of goods in transport.

The Many Uses of Bone

In addition to the abundance of bone buttons, numerous other bone items were recovered from the site. Bone as a material was used in a wide range of products, because of its versatility and sometimes its aesthetic capabilities. Due to its durability and adaptability, bone was fashioned into a variety of everyday objects.



Bone Toothbrushes with Drilled Holes for Bristles.

A total of 32 bone combs or comb fragments were recovered from the site, and most were of typical eighteenth-century design, with double-sided rows of narrowly spaced, fine teeth. Nine bone toothbrushes or toothbrush fragments were found, four of which came from Feature 15. All were highly polished, with some noticeably smaller in size, indicating a child's toothbrush. Bone was also a popular material in the manufacturing of ladies' fans. Easily shaped into thin, but sturdy, pieces, bone constituted the delicate rib sections of hand-held fans. All 11 fan fragments found within the site were rib fragments, one with a small metal pin still attached.

Utilitarian objects such as bone-handled kitchen utensils were represented by nine specimens. Most were smoothly polished with no additional adornment, and several had a curled *pistol grip* shape, a popular design in the early eighteenth century. One handle fragment had a partial diamond motif formed by drilled holes, probably to accommodate a diamond-shaped inlay. A possible bone parasol handle

was also recovered, and had a threaded hole drilled in the upper end, possibly to anchor a metal cap, and an iron pin set crossway through the opposing end for the stem of the parasol. A carved ivy motif encircled the entire piece.

Wig Curlers

Two wig curlers were recovered from 712 Arch Street. Both were made from white ball clay and appear to be dumbbell-shaped pieces that were broken roughly in half. One piece had the mark "WA" stamped on one end, and was one-half inch in diameter at its widest point; the other had no recognizable marks, and was slightly smaller in diameter at its widest point. The smaller of the two was pure white. The larger piece was darkened, possibly as a result of heat treatment or the residue of wet newsprint. As part of the curling process, the curler and hair were wrapped in damp paper, sometimes newspaper, which inevitably would transfer the wet ink to the soft clay surface. Wig curlers are found in abundance on archaeological sites dated 1700-1780.



Wig Curlers.

Coins: More Than Money

While there were only a few coins found at the site, three are of particular interest. The significance of the British copper William III half-penny, dated 1699, lies not in its monetary value but in the intended use by its owner. Found in a context associated with a practicing metallurgist, it is possible that this particular coin was to be melted down and reshaped. Another William III half-penny was also found, but the date was worn off. However, this particular type of coin was produced between 1694-1702. A rare Spanish silver "cob" was found which shows clipping. Clipping was the practice of removing tiny fragments from a coin, either by filing or cutting into the cross section of the disk. This was done by the assayer, who would weigh newly struck coins and trim off any excess silver, or by unscrupulous individuals, who would collect the filings from coins in circulation and melt down the accumulated bullion. The Spanish cob was minted from the late sixteenth century into the early nineteenth century, undergoing many changes in appearance and manufacturing technique. Due to the careless nature of the early hand-struck process, many coins were irregular-shaped disks without dates and/or other identifying marks. This specimen can be dated to before 1732, the year the screw-press method was introduced that resulted in the production of near-perfect coins.



Coins from 712 and 710 Arch Street. Left and Center: William III Copper Half Pennies, 1694-1702. Right: Silver Spanish "Cob," Minted Before 1732.

Stained Glass

The back cellar area of 56 North 7th Street contained a large deposit of blue, red, green, amber, brown, and purple stained glass, some obviously in the process of being cut into shaped pieces and some with melted edges. The large quantity and unfinished nature of these pieces suggest the deposit is probably related to manufacturing, rather than being architectural remnants or discards from on-location cutting.

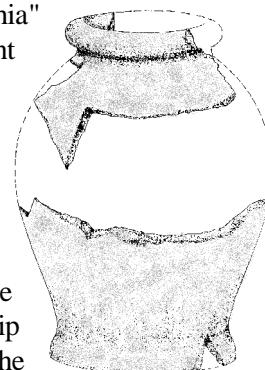
Stained, or colored, glass was used as early as the fifth century, and pictorial panels were used as early as the tenth century. The art of stained glass was rediscovered in America in the second quarter of the nineteenth century, and by the 1830s, secular uses for stained glass began to be explored. Stained glass became popular in the nineteenth century as decorative windows in homes and commercial buildings. By the end of the nineteenth century, the craft had become standardized and commercialized, and stained glass windows could be ordered through the mail from the Sears catalogue. With this commercialization, the popularity of stained glass waned as its quality and uniqueness declined. Philadelphia, in particular, was known for its stained glass windows; you can still see the remnants of this in surviving nineteenth-century buildings, and in antique shops along Chestnut Street that sell salvaged stained glass windows.

CERAMICS FROM NORTH 7TH AND ARCH STREETS

Redwares

In the eighteenth and nineteenth centuries, Philadelphia was famous for its red earthenware pottery. Merchants in the coastal cities of the colonies and the early

Republic proudly advertised that they had "real Philadelphia" pottery for sale. Dishes, bowls, pans, and mugs were sent as far afield as New Orleans and South Carolina. Philadelphia vessel forms and styles of decoration were the standard against which the work of other areas was judged.



Philadelphia earthenwares were typically utilitarian in function but could be quite decorative in style. The makers embellished their pots with light-colored slip (liquid clay) that contrasted well with their red bodies. The slips were applied in two main ways—trailed from a slip cup (a small container with from one to eight openings through which slip flowed), or poured or dipped onto most of the surface of a vessel. With these two simple

techniques, the potters achieved a great variety of appearances. The trailed pots could have single lines of different colored slips, or the slip could be applied in wide bands that look like zebra stripes. Sometimes slip was trailed in intricate floral patterns that resemble modern Pennsylvania Dutch designs. The covering slips could be swirled in petal patterns, or could be cut through to reveal the contrasting red body beneath. Green coloring, from copper, was often used to enhance the designs.



Slipware Dish Decorated with Trailed Slip Lines.

The potters made jars and pots for storing things like butter, apple butter, and other kinds of food; pans and dishes for cooking and serving pies, stews, and porridges; mugs and jugs for drinking and storing beer and other liquids; and bowls. The small bowls made from about 1740 to 1820 are the most distinctive of all the Philadelphia redwares. They are delicately made and are modeled after Chinese tea bowls. Their decorations are usually swirled and petaled slips with different kinds of coloring in the glaze to produce interesting surfaces. The first ones were probably used by people who could not afford expensive imported English and Chinese

teacups. The later ones might have continued to be popular because they were a local tradition; people used them because they were pretty and familiar.

Philadelphia red earthenwares were eventually replaced by the products of industrial potteries in Ohio and New Jersey, but while they were made they were famous throughout the new United States.

Sugar Molds

The sugar trade was an important part of Philadelphia's economy. Europeans at home and in their American colonies had begun to use sugar in larger quantities in the seventeenth century, and the demand for the sweet stuff grew by leaps and

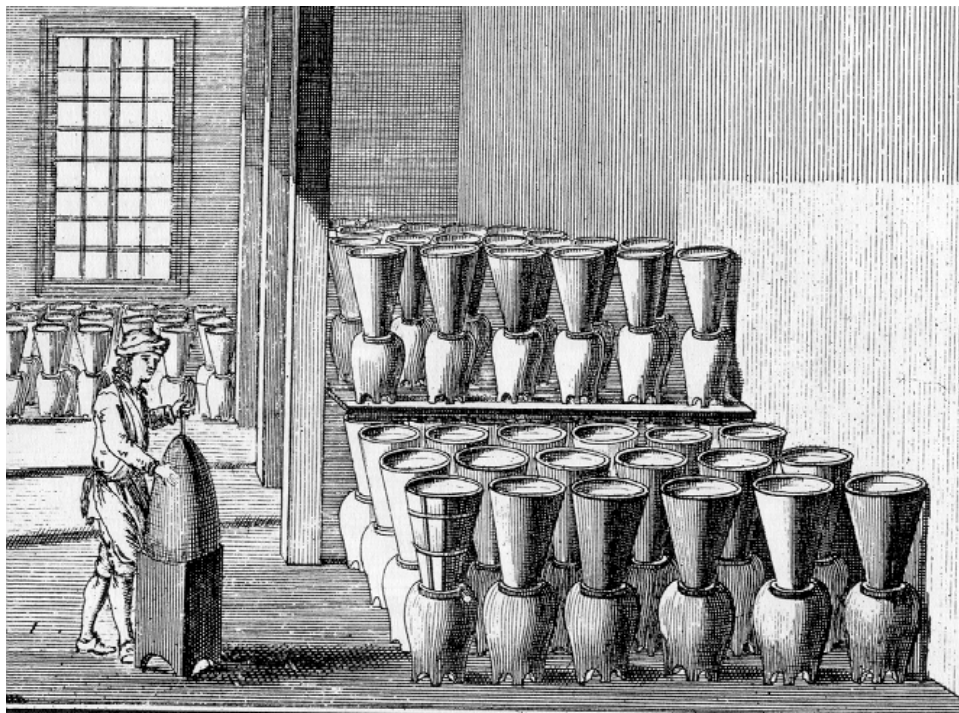


Illustration of Stacked Sugar Molds and Jars from Diderot's Pictorial Encyclopedia of Trades and Industry.

Source: Gillispie 1987

bounds during the next 200 years. Sugar cane was grown in the West Indies, and ships from there brought raw sugar and molasses to Philadelphia in return for flour, preserved meat, and wood products. The raw sugar was processed in Philadelphia

into fine white sugar for the table, giving a handsome profit to the merchants who supervised its refining.

Refining of sugar in the eighteenth century used simple tools: cauldrons for boiling the cane syrup, and molds and jars for crystallizing the sugar. After boiling, the sugar was packed into conical earthenware molds with holes in their tips. The molds were fitted into jars so that the molasses could drain off the hardening sugar. Jars and molds could break during use. Since they were bulky refuse, they made ideal fill for low-lying, swampy areas that needed to be filled in before building. At the North 7th and Arch streets site, over 3,000 sherds of sugar molds and a smaller number of pieces of jars were found. The molds are unglazed earthenware with well-smoothed interiors that would help the sugar to slide free. Some of them are quite large—over 1 ½ feet in diameter and about 3 feet tall. The sugar loaves that came out of the molds were cone-shaped and would be cut with special pinchers.

BURIED BENEATH NORTH 7TH AND ARCH STREETS

The archaeologists have prepared a detailed technical report on the excavation at North 7th and Arch streets, which presents their findings. This report, and the artifacts recovered from the excavations, are held by the Pennsylvania Historical and Museum Commission in Harrisburg.

Through the archaeological excavations conducted at Site 36PH91, and with the subsequent analysis and interpretation of the artifacts recovered, the archaeological information from Site 36PH91 has been preserved. Urban archaeology can be a slow and tedious process, and much of what is important consists of the small items that reflect our collective past. Such objects do, however, provide an important record of everyday life in Colonial, Federal, and Victorian Philadelphia.

LEARN MORE ABOUT ARCHAEOLOGY AND THE HISTORY OF PHILADELPHIA

Cotter, John L., Daniel G. Roberts, and Michael Parrington
1992 *The Buried Past: An Archaeological History of Philadelphia.*
University of Pennsylvania Press, Philadelphia.

Deetz, James
1977 *In Small Things Forgotten.* Anchor Books, New York.

Tatum, George B.
1961 *Penn's Great Town: 250 Years of Philadelphia Architecture
Illustrated in Prints and Drawings.* University of Pennsylvania
Press, Philadelphia.

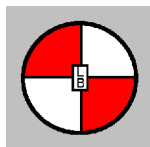
Weigley, Russell, F., Nicholas B. Wainwright, and Edwin Wolf 2nd,
editors
1982 *Philadelphia: A 300-Year History.* W.W. Norton & Company,
New York and London.

REFERENCES CITED

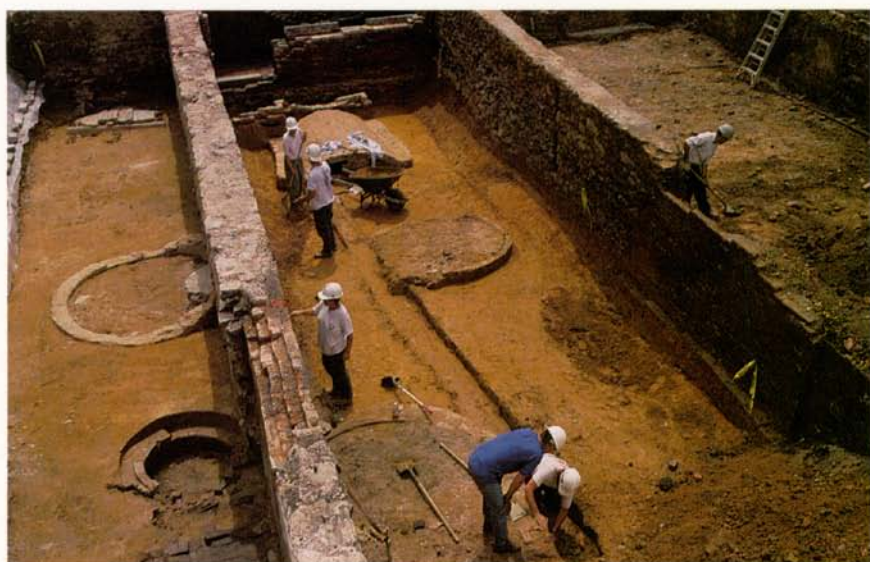
Easburn, Benjamin
1776 *A Plan of the City of Philadelphia, the Capital of Pennsylvania,
from an actual survey.* Andrew Dury, London.

Gillispie, Charles C.
1987 *A Diderot Pictorial Encyclopedia of Trades and Industry,
Volume I.* Dover Publications, Inc., New York.





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