A Structural and Functional Analysis of Eighteenth Century Buttons

Stephen Hinks

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A STRUCTURAL AND FUNCTIONAL ANALYSIS
OF EIGHTEENTH CENTURY BUTTONS

A Thesis
Presented To
The Faculty of the Department of Anthropology
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree of
Master of Arts

by
Stephen Hinks
1988
APPROVAL SHEET

This thesis is submitted in partial fulfillment of the requirements for the degree of

Master of Arts

Stephen Hinks

Approved, April 1988

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Several individuals helped me with specific aspects of my research. Linda Baumgarten, of the Colonial Williamsburg Foundation, provided information about buttons on extant clothing, and allowed me to photograph and study buttons from the Department of Collections. Linda Phillips and Tom Terry, of the Williamsburg Community Hospital Radiology Laboratory, x-rayed these buttons, with excellent results. Rachel Marks helped me translated much of the French text for the button plates in Diderot's Encyclopédie. Elizabeth Hughes patiently answered a series of questions about buttons. Finally, my wife Debora lovingly encouraged me through the many months of research and writing.

Any mistakes are, of course, my own.
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ABSTRACT

Eighteenth century buttons are commonly recovered from historic sites. These buttons have the potential to provide significant information about sites and their former inhabitants. However, much of the necessary data has not been synthesized into a usable form. This thesis brings the necessary information together to enable archaeologists to more fully study buttons.

Eighteenth century buttons are examined through both the historical and archaeological records. Merchants' records provide structural and functional descriptions of buttons, as well as button values. Other documents give information about button manufacturing techniques. Based on this information, the probable functions, date ranges, and relative economic values of archaeological buttons are determined, and a typological system provided.

Buttons from the Calvert House site in Annapolis, Maryland, are discussed in detail. These provide an example of how the information presented can be utilized to gain a broader understanding of a site.
INTRODUCTION

Buttons are one of those artifact categories common to most historical archaeological sites. However, unlike such artifacts as ceramics and glass, rather little research has been done with buttons excavated from archaeological sites. As a result, site reports tend to do little more than describe the buttons excavated and at times propose dates for these buttons based on provenience, and occasionally style and decoration. In this research, I will also consider the functions of different buttons, the manufacturing techniques for buttons of the eighteenth century, and provide probable dates of manufacture for specific types of buttons.

My work builds on two prominent archaeological articles on buttons: Stanley Olsen's 1963 article "Dating Early Plain Buttons by their Form", and Stanley South's 1964 article "Analysis of Buttons from Brunswick Town and Fort Fisher." The emphasis in these articles is on basic structural characteristics of eighteenth and early nineteenth century buttons, and they provide approximate dates of production for the various construction techniques. Both are important works that are frequently used by archaeologists for constructing typologies and dating buttons (c.f. Noel Hume 1970, Otto 1975). Other works on buttons with a similar emphasis are Campbell 1965, Olsen and Campbell 1962, and Noel Hume 1962.
John S. Otto moved beyond merely describing and dating buttons to ascribe some social significance to button assemblages. He compared the quantities and percentages of different functional button types from a slave cabin site, an overseer's house site, and from the planter's home site, all part of the first half nineteenth century Cannon's Point Plantation complex. Otto concluded that there was a somewhat higher percentage of pants and underwear buttons at the slave and overseer sites than at the planter's home site, while the planter's site had a higher percentage of coat buttons. Otto recognized that a major limitation in his analysis was the fact that the slaves probably often reused buttons from garments discarded by the planter (Otto 1975: 249-259; 1985). There was some archaeological evidence to support this possibility. If true, it would significantly skew Otto's results, but would not alter the fact that more coat buttons were found near the planter's home. Most other archaeological reports do little more than describe and attempt to date the buttons. Examples of these type reports are Stone 1974: 45-76, Grimm 1965, and Heldman and Grange 1981.

This study is an attempt to enable historical archaeologists to more thoroughly and accurately examine eighteenth century buttons from archaeological sites. In the first section documentary sources, especially merchants' records and store inventories, will be examined. Using these records, I will analyze how merchants classified their buttons during the second half of the eighteenth century. This system includes descriptive modifiers relating buttons to apparel. Hence button
types can be dovetailed with descriptions of eighteenth century clothing upon which buttons were worn. As a result, basic descriptive button types can be related to specific types of clothing.

In the second section buttons recovered from archaeological sites will be studied in light of the information from the documentary record. The basic functions of various eighteenth century buttons will be ascertained. The buttons studied in my research are from both archaeological collections as well as archaeological reports. Most of the buttons actually examined (i.e. the hands-on study) were from the Calvert House excavation in Annapolis, Maryland. These will be used illustratively in the text, and more fully described in the Appendix. The buttons discussed in a few archaeological site reports were also used, especially those from Fort Michilimackinac, Michigan, and Fort Ligonier, Pennsylvania (see Stone 1974 and Grimm 1970). While not actually handled, these assemblages provided useful additional information for analysis. Some of the button drawings used by Stone are included to illustrate various construction techniques.

In the third section, I will examine the basic construction techniques of the more common types of buttons recovered from archaeological sites, and the approximate dates the various techniques were introduced. Through this examination, I demonstrate how an archaeologist should be able to determine manufacturing techniques, and normally assign approximate termini post quem for the buttons. Following this section will be a brief examination of the six plates on button manufacture
from Diderot's *Encyclopédie*. A typological system based on structural characteristics of buttons will be presented in the conclusion, along with a synopsis of dating and functional information. Finally, an appendix will be included containing a short site history of the Calvert House, a comparison of the Calvert House buttons to those recorded in the merchants' records, and a descriptive listing of the buttons. This listing will have drawings, descriptions, and estimated dates for them. Each of the buttons from this site has been assigned an individual button number. For example, button BC-1 refers to the first button in the Calvert House collection, as illustrated in the Appendix.
CHAPTER 1

EIGHTEENTH CENTURY MEN'S CLOTHING

To understand eighteenth century buttons, it is useful to know how they were used, and to examine the types of clothing upon which buttons were normally worn. This examination of clothing types provides a framework around which the probable functions of specific buttons can be determined. In this chapter eighteenth century clothing upon which buttons were worn will be described, along with a brief description of the types of buttons generally worn on specific articles of clothing.

There are a few potential problems that must be considered. Because a given type of button was normally used on specific types of clothing, there is no guarantee that specific buttons were always used on such types. In other words, it is conceivable that waistcoat buttons were occasionally used on shirts, for decoration on ladies dresses, or as substitutes for missing game pieces. This study will discuss how buttons were normally used, though not necessarily how specific buttons were used.

During the eighteenth century buttons in England and colonial America were predominantly worn by men. While buttons were occasionally worn on women's clothing, the author was able to find very few examples of women's clothing upon which they did occur (cf. CWF-Coll; Cunnington and Cunnington 1972: 5.
Most women's clothing was fastened with laces or hook-and-eyes. There were no references in the examined eighteenth century merchant's records to any buttons being sold specifically for a piece of women's clothing, while all references to button function indicated that the buttons were meant for an article of men's clothing. Since extensive button use for women's clothing cannot be deduced from the examined records, women's clothing will not be considered in the duration of this study.

Several pieces of men's clothing were normally fastened with buttons. These will be briefly outlined here and then described more fully. Breeches were closed with buttons, and buttons were often used with or in lieu of buckles at the knees. Shirts occasionally used buttons, including one or two that were normally used to fasten the collar. Suits, consisting of the coat and waistcoat or vest, and sometimes breeches, were commonly worn during this period, with the coat and waistcoat being fastened with a number of buttons. The frock was similar to a coat, with similar buttons, but was of a more comfortable design, and had a turned-down collar. A great coat was worn to protect men from the weather. During informal situations men often wore banyans, which were long, loose gowns usually fastened with buttons. The final major article of men's clothing with buttons was the jacket, which looked much like a sleeved waistcoat. Worrell noted that men often did not wear undergarments at this time, and that shirt tails were long enough to suffice (Worrell 1975: 93). Several of these clothing types were illustrated in Diderot's Encyclopédie of the 1760's
on a plate "Tailor of Clothes" (Plate 1); these will be noted as the appropriate article of clothing is described.

The usual eighteenth century suit consisted of a coat (Plate 1, Figure 1), a waistcoat (Plate 1, Figures 2 and 11), which was also known as a vest or weskit, and breeches. The waistcoat was worn under the coat, and often matched the coat. Often the somewhat bulky coat was replaced by the trimmer, more comfortable frock (Plate 1, Figures 8 and 12). Cunnington and Cunnington describe the buttons worn on these various garments. Medium to large buttons were normally worn on the coat and frock. Common types worn on coats included basket buttons, covered with an interlacing pattern in thread or a metal imitation, death's head buttons, covered buttons, and buttons covered with wire twist, silk twist, or gold or silver twist. Frock buttons included a greater percentage of metal buttons, including plated, gilt, and steel buttons. Waistcoat buttons were smaller, of similar types, and sometimes matched the buttons on the coat or frock (Cunnington and Cunnington 1972: 189, 197-200, 209-210). A great coat was worn over the suit to protect one from the elements, and used similar large buttons.

Buttons were also extensively worn on breeches (Plate 1, Figures 3 and 4). Specimens in the Department of Collections, Colonial Williamsburg Foundation, indicate that breeches normally were fastened with about seven small buttons, often had a number of buttons worn at the knees, and at times had buttons on the back of the breeches. Two or three large buttons were used to secure the fly (CWF-Coll). This is confirmed by Cunnington and Cunnington (1972: 212-213), and pictures
Plate 1. Tailor of Clothes, Clothing Forms.
throughout London Museum 1973, Copeland 1977, McClellan 1904, and Worrell 1975. These buttons were similar to coat and waistcoat buttons, and may have been used interchangeably. Trousers with buttons at the waist were occasionally worn. No buttons in the examined merchants' records were specifically termed breeches or trouser buttons.

During informal situations the suit coat was at times replaced with a banyan. According to Linda Baumgarten, a banyan was a long, loose gown that was especially useful in the hot climate of the South (Baumgarten 1986: 49). Figure 5 of Diderot's plate "Tailor of Clothes" (Plate 1) is a banyan, and portrays a long row of fairly small buttons used to close the front.

The jacket (similar to Plate 1, Figure 11) was a vest-like article of clothing with sleeves. It had at least one and sometimes two rows of buttons down the front, as well as buttons on the pockets and the sleeves. It was worn over the shirt and sometimes the waistcoat. According to Cunnington and Cunnington, between 1750 and 1800 the jacket was at times worn by all types of seafaring men, apprentices and labourers, and occasionally soldiers. They state, however, that the jacket was not in general use (Cunnington and Cunnington 1972: 265). However, the frequent references to jacket buttons in the merchants' records may indicate that the jacket was in more common use than Cunnington and Cunnington suggest.

Books on costume do not devote much space to discussing eighteenth century men's shirts (cf. McClellan 1904; Earle 1903; Fennelly 1966; Cunnington and Cunnington 1972). There are some
indications that most shirts were "pull-over" shirts, with only one or two buttons used to fasten the collar (London Museum 1973: 93; CWF-Coll). Each of the four eighteenth century shirts in the Department of Collections, Colonial Williamsburg Foundation, has only one button, which was used to fasten the shirt collar.

In summary, during the eighteenth century buttons were primarily worn on a variety of men's clothing. Through understanding the types of clothing upon which buttons were commonly worn, it will be easier to understand the buttons themselves, several types of which were commonly described in the eighteenth century by their function. In the following section eighteenth century buttons will be examined in the context of the documentary record to gain a more complete understanding of the buttons and the clothing upon which they were worn.
CHAPTER 2
BUTTONS IN THE DOCUMENTARY RECORD

There are three basic, interrelated goals for this chapter. First, through an examination of merchants' records between 1750 and 1800 the terms used by the merchants to describe buttons will be determined. Second, core terms and marking terms will be isolated and examined. Finally, an attempt will be make to explain how these various button types were actually used on clothing during the second half of the eighteenth century.

The primary sources used throughout this chapter were merchants' records, primarily from Virginia, for the 1750 to 1800 period. The most complete source used were the William Allason papers, the originals of which are located at the Virginia State Library. William Allason operated a retail general store at Falmouth, Virginia between 1761 and 1776. He kept detailed business records, most of which have survived. His invoice and inventory books proved the most useful, and include five books, these having the following dates: 1761-1764, 1764-1766, 1767-1769, 1769-1774, and 1770-1796. These are used throughout the chapter, and will be identified by date. For example, a citation from the first book will be cited as (Allason 1761-1764). References to Allason's day books or ledgers will be given more complete citations.

There were several other merchant's records used. A.
Gordon was a merchant in New Castle and Hanover County. His journal for Ledger A, 1750-1751, contains invoices and inventories through 1757, and is owned by the University of North Carolina Library. A January 1, 1756 store inventory is located in this volume, and was used in my analysis. Edward Dixon's Invoice Book 1767-1774 contains several yearly store inventories, and was used extensively. John Glassford and Company owned a number of stores, including one in Dumfries, Virginia, which is located near Alexandria. The September 21, 1772 Dumfries store inventory is located in Dumfries Ledger 0. Both the Edward Dixon Papers and the John Glassford and Company Papers are owned by the Library of Congress. Finally, the 1785-1796 Invoice Book of Henry Bedinger, a merchant in Berkeley County, Virginia, provided some input from the late eighteenth century. This volume is located at Swem Library, the College of William and Mary in Virginia.

During December 1984 the author visited the Department of Collections of the Colonial Williamsburg Foundation, and examined the clothing and clothing accessories in the acquisition files. These files have photographs and descriptions of all of the acquired early American objects in the collections. Information from this visit used throughout this chapter will be cited as (CWF-Coll).

All monetary references in this study are based on the British pound, the monetary system used throughout colonial America. One pound is equal to twenty shillings; one shilling equals twelve pence. For example, 2/3/10 is equal to two pounds, three shillings, ten pence, while 5/- is five shillings.
A few theoretical concerns must be addressed. This paper is largely based on merchant's descriptions of eighteenth century buttons, especially those made between 1750 and 1800. It must be emphasized that this is not directly a folk taxonomy, which refers to the normative descriptive terminology employed within a community to adequately describe the objects and events important to that community (Yentsch 1977: 11-13). Rather, these records, especially the inventories, are more detailed than would be expected in the everyday language of a community. This is because the merchants often found it useful to distinguish between numerous button types, and therefore, through necessity, wrote fairly detailed descriptions of the buttons.

One basic assumption that I have made is that specific buttons were generally worn on specific types of clothing. This is generally true at present, and is normally based on size and construction material. A coat button is almost never placed on a shirt, and a shirt button, in turn, will not be worn on pants. There is documentary evidence in the merchants' records that this assumption is valid, including the fact that buttons were often described by functional names, such as jacket buttons and shirt buttons.

Throughout the eighteenth century and into the nineteenth century most merchants kept extensive records of all business transactions, a process normally requiring several books. In the day book, or waste book, the merchant recorded his daily sales as they occurred. These entries were later transferred to the ledger, in which each customer's account was kept. In these
ledgers each customer's credit and debit transactions were recorded, the end result of which was that each customer's financial status with the merchant was always at that merchant's fingertips. Other books often kept by merchants included cash books, in which cash transactions were recorded, a tobacco book, recording tobacco purchased and exported by the merchant, and the invoice and inventory book (Carson 1965: 91-106).

For this study the invoice and inventory books, and especially the inventories of William Allason, proved to be the most useful of the available merchants' records for a number of reasons. First, the inventories recorded normally contained a far more complete record of the buttons represented in a particular store than did the other records kept. On one document the entire inventory of the store was recorded, including quantities present and their values. Secondly, the inventories have proved to be far more descriptive than the day books and ledgers. In the inventories the merchant considered it useful to distinguish specific button types, while defining each button type purchased by an individual was not important. For example, between November 13, 1764 and November 15, 1764, William Allason recorded in his day book that he had sold the following buttons: 1 dozen "small twist buttons", 1/2 dozen "small twist buttons", 1/2 dozen "small mettle (sic) buttons", 3 "Big Twist buttons", "1/2 doz. big mettle (sic) buttons 1 doz. Small", 2 dozen "Big Twist buttons" and 4 "Small Twist buttons", and 2 dozen "buttons" (Allason: Day Book May 16, 1763 - September 20, 1765). These same type descriptions are normal throughout Allason's ledgers (cf. Allason: Ledger 1765-1767).
The inventories are far more descriptive, and therefore more useful for ascertaining the merchants' button taxonomies than are the day books and ledgers. For example, Allason's October 1, 1766 inventory included such descriptions as fine horn buttons with caps, both big and small, brass inlaid metal buttons, and flat white metal buttons (Allason: 1764-1766).

There are a few pitfalls associated with the merchants' store inventories, some of which are common to all eighteenth century records. First, not all of the available inventories are complete or in good condition. For example, the October 1, 1761 inventory is tattered and highly stained; some of the words are illegible. In addition, the 1762 inventory is incomplete; the entire section on buttons is missing (Allason: 1761-1764). Second, the inventories were taken once a year, normally in the fall. This was normally when the store stock was low, and the resultant inventory represented those things that did not sell during that fiscal year. It is quite conceivable that by that time of year those items in high demand would have been entirely sold, with the remaining stock representing a higher-than-normal percentage of "dead stock". A third problem with the inventories is that some types of goods, such as buttons, were sometimes lumped into one category. Based on the store inventories abstracted, buttons normally accounted for only two to four percent of the total inventory for each year. Some years the merchant apparently did not consider the arduous task of counting and describing all of the buttons in stock worth his time, and therefore estimated their value. The result are references to "Buttons and Twist Value . . . . . 15/-/-" in
Edward Dixon's May 1, 1774 inventory (Dixon 1767-1774 Invoice Book) and Allason's October 1, 1763 inventory in which he estimated all of his metal buttons to have a value of 30 pounds (Allason: 1761-1764). A final problem is that rather few eighteenth century invoice and inventory books have survived and are available for scholarly research. The ravages of time have taken their toll on these records. Further, some of those that have survived have not been considered as important for research as the ledgers and letter books, and have therefore not been microfilmed and distributed to other institutions.

William Allason established a retail general store in Falmouth, Virginia, just north of Fredericksburg, in 1761. He maintained the business until sometime in 1776, near the beginning of the War for American Independence. His records are unusually complete, and include his detailed store inventories for the years 1761 to 1775, as well as 1790. The buttons listed are very often associated with specific button stock numbers which remain consistent for each button type from year to year. These were the only inventories for which button stock numbers were widely used. It is probable that these button numbers denote little more than a method employed by Allason to arrange his button stock. For example, on January 7, 1769, William Allason purchased stock from a Thomas Blain of Dumfries, Virginia. On the invoice, line numbers 32, 33, 34, and 35 were four groups of flat metal buttons. Allason's October 1, 1769 store inventory listed these same buttons, in depleted quantities, as stock numbers 32, 33, 34, and 35 (Allason: 1767-1769; also see John Glassford and Company' Dumfries Ledger
G, folio 173). All the same, these stock numbers are useful for tracing stock from year to year, and the store records provide year to year consistancy useful for this study. In addition to Allason's papers, other merchants' records were used, as already noted, to buttress Allason's records, and provide necessary diversity.

It was recognized that in his inventories Allason was not trying to present an exhaustive description of each button, but rather to describe the buttons adequately enough so that he, who was already familiar with the buttons, would know which buttons he was noting in any given reference. Normally a stock number or a word or two was sufficient. Further, it cannot be expected that his descriptions of buttons would remain unchanged from year to year. While marking terms did change, and were more descriptive in some years than others, the stock numbers, when given, remained consistant. In addition, there was almost no fluctuation in button prices from year to year, a fact that proved quite helpful for identifying specific button types.

Through an examination of the marking terms, stock numbers, and prices within each group, it was possible to distinguish specific types, and, through a combination of the marking terms, synthesize that group of terms that best describe a specific type. For example, Table 1 lists a series of buttons from various Allason inventories. Only two out of the six button descriptions employ identical marking terms. However, there is enough similarity between them to suggest that they all refer to the same button type. All of the buttons are priced at 3/9 a gross. Five have the same stock number, while five specifically
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<td>&quot;jackett&quot;</td>
<td>green glass</td>
<td>34</td>
<td>1 gross</td>
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<td>1 gross</td>
<td>3/9</td>
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<td>10/1/66</td>
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<td>glass</td>
<td>in cups, green</td>
<td>34</td>
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</table>

Table 1. Comparison of Button Descriptions, William Allason Inventories, 1761-1768.
identify the buttons as being made of green glass. Four call these "jackett (sic)" buttons. Two note that the glass buttons are in cups. The evidence suggests that these are all the same type of button, that being green glass jacket buttons in pewter cups, #34, which cost 3/9 per gross. Similar analysis was done for those buttons classified under each core group, the results being a fuller description for many of the button types. Some of these fuller descriptions will be used during the discussion of individual button categories.

In the Allason inventories there are seven basic core button terms around which the buttons were described. These are jacket, shirt, sleeve, metal, pearl, horn, and hair and twist. These core terms were modified with a total of eight different kinds of modifiers, as is illustrated on Table 2. From this table it becomes apparent that modifiers dealing with stock number, composition/construction, function, color, and size were by far the most important in describing the buttons. When comparing the invoices and inventories abstracted from the other sources, as will be done throughout the rest of this paper, two things become apparent. First, the other sources add two additional core terms: "coat", and "breast" or "vest". In addition, the other sources rarely use stock numbers to denote specific button types, and either do not distinguish between broadly similar types, or do such solely through the description. It is through these other sources that we occasionally get such more detailed stylistic descriptions as "death head buttons", "Nipple Coat" metal buttons, and "Japaned" buttons. In the following pages the core button terms will be
### Core Terms

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Jacket</th>
<th>Shirt</th>
<th>Metal</th>
<th>Pearl</th>
<th>Horn</th>
<th>Hair and Twist</th>
<th>Sleeve</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Composition/Construction</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
<td>*</td>
</tr>
<tr>
<td>Function</td>
<td>C</td>
<td>C</td>
<td>*</td>
<td>*</td>
<td>-</td>
<td>*</td>
<td>C</td>
</tr>
<tr>
<td>Color</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Size</td>
<td>*</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Quality</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>Shape</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Key**

+ = Modifier present  
* = Modifier present in only a few instances  
C = Modifier present only in core term  
- = Modifier not present in sample

---

Table 2. Modifiers for Button Core Terms, William Allason Inventories, 1761-1775.
discussed, largely in relation to the previously discussed clothing types.

There were approximately 80 references to jacket buttons in the Allason inventories, second only to the broad category of metal buttons, for which there were about 175 references. While some of these jacket buttons may have been dead stock, Allason did maintain a rather substantial stock of them. Most of the modifiers used with jacket buttons dealt with composition/construction and color, with composition/construction being dominant. The most common types of jacket buttons were those made of glass, often in pewter cups. In several cases Allason did not consider it necessary to distinguish between those with and those without pewter cups, the prices of which were similar. The prices for glass jacket buttons varied from 1/9 to 8/- per gross. They were available in blue, black, green, white, and florid yellow, with the green, white, and blue available in pewter cups.

There were several other types of jacket buttons recorded in Allason's inventories, including pearl, horn, silver, silvered, and thread. The pearl jacket buttons included "plain pearl" and "pearl with stone" varieties. There was one type of black horn buttons mentioned, as well as two types of "silver, with stones" jacket buttons. "Silvered" jacket buttons, probably silver or tin plated brass buttons, did not appear in the inventories until 1773, and remained in them for the final two years. Thread jacket buttons, both "round" and "wire", first appeared in the 1766 inventory, and between 1771 and 1775 these thread buttons, with the silvered buttons, were the only
jacket buttons listed in the inventories.

Nearly all of the glass buttons listed in the Allason inventories were either directly or indirectly, through comparison with other years' inventories, termed jacket buttons. There are three possible exceptions. One is a glass button group distinguished solely by color, being black glass. The other two groups are identified as vest buttons. Since vests/waistcoats and jackets were so similar in form, this may indicate that jacket buttons were occasionally used on waistcoats, though these two lots of glass vest buttons may be either misidentified jacket buttons or a form distinct from jacket buttons, and primarily used on vests/waistcoats.

Other than composition/construction and color distinctions, as well as the functional core term jacket, there were very few other marking terms for jacket buttons. A very few did have size markers, including a small/bigger comparison between two different types. There was no big/small distinction within any specific type of jacket button. It is likely that each jacket button type was represented by only one size of button.

The sole other source abstracted in which jacket buttons were mentioned is the September 21, 1772 store inventory in the Dumfries Ledger 0. In this inventory glass jacket buttons are mentioned, as well as possibly carved jacket buttons and ivory jacket buttons. Several times "coat & jacket" buttons are listed (John Glassford and Company 1771-1772: Dumfries Ledger 0). In the latter reference the jacket term may have been synonymous with vest/waistcoat.

There are few marking terms associated with the shirt
buttons listed in Allason's store inventories. The first three references to shirt buttons, all on the October 1, 1761 inventory, are unmarked except for one stock number. All of the remaining references to shirt buttons, beginning in the October 1, 1766 inventory, describe the buttons as "thread" shirt buttons. In 1771 these were further defined as "wire" thread shirt buttons and "round" thread shirt buttons. Shirt buttons were very inexpensive, ranging from 1/9 to 2/- per gross, with all those described as thread costing 2/- a gross. Allason's small, stable stock indicates that shirt buttons may not have been fast sellers.

Each of the four other sources consulted mentioned shirt buttons. Neither Gordon, in his January 1, 1756 inventory, nor Bedinger, in his May 15, 1786 inventory use any marking terms with these references. However, Edward Dixon, in his 1769 through 1772 inventories, mentions both "moulded shirt buttons" and "wire shirt buttons" (Dixon 1767-1774 Invoice Book). Likewise, the September 21, 1772 inventory in Dumfries Ledger 0 mentions "wire Shirt Buttons" (John Glassford and Company 1771-1772: Dumfries Ledger 0). These wire shirt buttons in both the Dumfries and Dixon inventories were probably very similar to the wire thread shirt buttons mentioned in Allason's 1771 inventory. It is probable that these shirt buttons were various thread buttons, such as the Cartwheels, Singletons, and Dorset Knobs, made around the Dorset area of Britain.

Sleeve buttons commonly appear in each of the sources consulted. Having no other functional terms associated with them, the identification of sleeve buttons was initially
difficult. Ivor Noel Hume has, however, identified sleeve buttons of the eighteenth century as what we commonly call cuff links. Their form is very similar to two buttons connected to each other by their shanks with an oval loop (Noel Hume 1961: 380-383; 1970: 89). The sleeve buttons were worn on shirt sleeves/cuffs. There is evidence from the merchants inventories to buttress his contention. Sleeve buttons were the only type of button in any of the sources that were at times listed in pairs, and presumably sold as such. In his 1765, 1769, 1770, and 1790 inventories, Allason listed a total of 32 pairs of sleeve buttons, in addition to all the other quantities listed. In addition, Bedinger's 1786 inventory includes 35 pairs of sleeve buttons.

Sleeve buttons were a very distinct type in Allason's inventories, and apparently needed little other identification. Only twelve of the 62 sleeve button entries included any marking terms. Three of these are in the damaged and highly stained 1761 inventory; two of the terms are indecipherable. Three groups are marked "London", indicating that they were either manufactured in or purchased from London. Three deal with quality, these being "fine", "fine in Card", and "Common". The fine quality sleeve buttons cost -/3 a pair, the equivalent of 18/- per gross, several times more than the common ones, which were valued at 4/- per gross. The four remaining marked sleeve button groups are modified with composition/construction terms. One is describes as "Pinchbeck". The Oxford English Dictionary states that pinchbeck, which was developed in the eighteenth century, is an alloy of copper and zinc that was often used in
jewelry to imitate gold. The pair listed was valued at the moderately expensive price of 2 pence per pair, the equivalent of 12 shillings per gross. The three remaining marked groups are described as "silver Scotch Peeble", "silver Bristole Stone", and "Bristole Stone". According to the Oxford English Dictionary, a Scotch pebble, or peeble, is an agate or other gem found as a pebble in streams, especially those in Scotland. Cunnington, Cunnington, and Beard state that Bristol stone is a rock crystal found near Bristol that was used as imitation diamonds in jewelry (Cunnington, Cunnington, and Beard 1972: 26). These are all valuable buttons, ranging in price up to three shillings per pair, the equivalent of 10/16/- a gross, the most expensive buttons listed in the entire Allason inventories. They doubtless would have been worn as a visible testimony to one's wealth.

Each of the other groups of invoices and inventories consulted included sleeve buttons. In Gordon's 1756 inventory he listed two lots of "bath sleave (sic) Butts" and two lots of "Sleave (sic) buttons". On an April 30, 1771 invoice and his 1771, 1772, and 1773 inventories Edward Dixon listed having "Sleave (sic) Buttons" in stock. Bedinger's 1786 inventory included both large and small "Silver Sleave (sic) Butts". The 1772 inventory in Dumfries Ledger 0 listed seven groups of sleeve buttons. The two marking terms are "black" and "peeble". The "peeble" sleeve buttons cost 3/- a pair, the same very expensive price of Allason's "silver Scotch Peeble" sleeve buttons. It is quite likely that these represent the same type of sleeve buttons in two different store inventories.
Those buttons called "mettle (sic) buttons" by Allason throughout his inventories pose another problem. While these approximately 175 button groups form nearly half of the entire sample, only one, marked "1 single great Coat" metal button, has any function modifier. This was in Allason's October 1, 1761 store inventory. As can be seen on Table 1, in addition to stock numbers, composition/construction, color, size, and sometimes shape modifiers were used to distinguish these buttons from each other. This large amount of modification may indicate that the core term "metal" is a rather unspecialized, almost generic term. The various modifiers are fortunately quite helpful in ascertaining both the form and function of these buttons.

The composition/construction and color modifiers indicate that these metal buttons were normally copper or brass, at times either gold or silver plated, or pewter. These marking terms include "white", "yellow", "gilt", "yellow gilt", "dble (sic) gilt", "silvered", "pewter", and a large number under the blanket term "gilt and silvered". Several are modified with the term "flat", an obvious indication of their shape. There is one marked tin, which may indicate either surface tinning or a high grade pewter.

There are a few button types that were normally listed directly before or after the "mettle (sic) buttons", but were not considered a part of that category. There were "gold" or "gold twist", "silver", and "brass inlaid with steel" buttons. While related, these relatively expensive buttons were probably kept distinct from the "mettle (sic) buttons" because they were
not copper, brass, or pewter. The following discussion of function and size applies to these buttons as well as those grouped as metal buttons.

The majority of the metal buttons were marked as having both "big" and "small" varieties. The merchant purchased these buttons by the double gross, which included one gross of large metal buttons and one gross of small buttons with the same design. The customer could therefore purchase matching sets of big and small metal buttons. When purchased, the big buttons cost twice as much as the small buttons. For example, in Allason's October 1, 1766 store inventory he noted having one gross of small metal buttons #58. The price per double gross (both big and small varieties) was listed as 15 shillings. As the small buttons cost half as much as the large ones, the gross of small buttons had a value of five shillings, and the big buttons would have cost ten shillings for a gross. The big buttons were used on great coats, coats, and frocks, and a few on breeches, while the small buttons were used on waistcoats/vests, breeches, and probably banyans and some jackets.

A functionally related class of buttons in the Allason inventories are the hair and twist buttons. These were made from animal hair, especially mohair, and twists of thread, silk, wire, and, as has been seen above, gold and silver twist. Large quantities of these buttons were kept in stock. For example, the 1766 inventory included 77 full and opened bags of twist buttons, including mohair. Once again, these buttons came in both big and small sizes. There are three functions associated
with some of the hair and twist buttons, these being jacket buttons, shirt buttons, and one reference in the 1769 inventory to hair buttons "for Great Coatts (sic)". As was noted above, twist buttons, including mohair, were used on coats, frocks, and waistcoats. It is therefore highly probable that many or most of the twist buttons for which no function is stated were used on coats and frocks, with small ones being used on waistcoats and possibly breeches. There are no stock numbers associated with these buttons. Other marking terms associated with these buttons are of the composition/construction and color types, and include the following: "silk twist white Sm.", "silk", "Baskett (sic)", "moyhair (sic)", "scarf", "scarlet", "moyhair (sic) scarlet", and "made blue".

The other merchant's records consulted described the metal and twist buttons differently. Each classified some buttons as "coat" buttons and "breast" or "vest" buttons for the coat and waistcoat of the suit. These core terms include "vest wt metal", "Coat Mohair butts", "Wire Vest Buttons", "silver vest buttons", "Gold vest buttons", "Basket Breast", and "Nipple Coat". There are times that the metal and twist buttons were described independent of function, such as "Flatt mettle (sic) Buttons", flat "Lacquered" buttons, "Gilt" buttons, "Enamelled Buttons", "Nankeen Buttons", and "Japaned". These, too, were used on coats and waistcoats.

Several lots of pearl buttons were mentioned in the Allason inventories. The modifiers attached to the pearl buttons were "big" and "small", as well as one reference to "with stones". Some of the previously mentioned jacket buttons were described
as being pearl; some of these unspecified pearl buttons may be jacket buttons. Those few with a big/small distinction were probably coat and waistcoat buttons. There were no pearl buttons listed in the other inventories examined.

The final category of buttons listed in Allason's inventories were the horn buttons. Half of the 22 groups mentioned were termed "black horn", while the remaining half were "fine horn with caps" or a variant thereof. One jacket button group was made of black horn; it is possible that some of these black horn buttons were jacket buttons. Most of the horn types have a big/small distinction, possibly indicating their use on coats and waistcoats. The only reference to horn buttons in the other sources consulted was on a May 9, 1787 invoice from James Calbraith & Co. of Philadelphia to Henry Bedinger. In it Bedinger noted receiving "polished Horn Breast" buttons and the less expensive "Common Horn Breast" buttons (Bedinger 1785-1796 Invoice Book). This indicates that at least some horn buttons were being used on waistcoats.

In summary, an examination of the Allason papers and other merchants' records provides a good understanding of button usage during the second half of the eighteenth century. Women's clothing was rarely fastened or adorned with buttons. Seven major articles of men's clothing used buttons, including shirts, jackets, coats, frocks, waistcoats, banyans, and breeches. Shirt buttons were normally inexpensive thread/twist buttons. Jacket buttons were probably manufactured in only one size range, and included nearly all of the mentioned glass buttons, many of the pearl buttons, some horn buttons, and a number of
thread/twist buttons. Coat and waistcoat buttons were predominantly made of metal or thread/twist. These buttons came in two sizes, with the larger size used on coats, frocks, and great coats, and the smaller used on waistcoats and banyans. Breeches used both coat and waistcoat buttons. Sleeve buttons were what we normally call cuff links, and were worn on shirt cuffs. Pearl and horn buttons may have been worn on the jacket or the coat and waistcoat. Using this information as a context, let us now consider buttons from the archaeological record, relating them to the spectrum of buttons used and sold in the Chesapeake.
CHAPTER 3
BUTTONS IN THE ARCHAEOLOGICAL RECORD

Artifact taxonomies are widely used in archaeology. These taxonomies enable assemblages to be arranged in an orderly manner so that the artifacts from one can be usefully studied and compared with elements of others. To date, three major typological systems for buttons have been developed by Olsen (1963), South (1964), and Stone (1974: 45-76). All of these are based on critical variations in construction materials, manufacturing techniques, and designs present in the buttons. Each change in construction technique results in a different type or variant. These typological systems are primarily useful for comparative purposes and dating; they do not suggest the functions for which the buttons were used.

The purpose of this chapter is to present a framework for a functional analysis of mid-to-late eighteenth century buttons from archaeological sites. This will be accomplished through two major steps. First, the effects of deposition and deterioration upon eighteenth century buttons will be examined, and the results thereof upon archaeological assemblages suggested. Secondly, through examining the structural characteristics of the buttons, the probable functions of the buttons will be determined.
BUTTON DEPOSITION AND PRESERVATION

Only a small percentage of the buttons worn at a site were normally lost or discarded there. There are several probable reasons for this pattern. Most buttons, except for those in burials and possibly in refuse pits, were normally lost as opposed to discarded, and those lost were probably sought more diligently than would be done in our twentieth century disposable society. Buttons, especially those which were fancy or valuable, were doubtless removed from old garments. In addition, the more valuable buttons were primarily on expensive suits which were worn on special occasions; these buttons would rarely be lost. Even when broken, metal buttons were readily recycled, since the metal was a valuable commodity. As a result, those buttons recovered from most archaeological sites provide a small glimpse of the entire button population actually worn at the site, and those buttons are skewed toward the less valuable buttons worn on everyday clothing.

The buttons recovered from the Calvert House illustrate this. Out of the approximately 70 eighteenth century metal buttons recovered from this site, none of the decorated buttons, and very few of the undecorated buttons, were identical. While only the plain bone or wood button molds for the cloth and thread covered buttons survived, these button molds were of numerous sizes, indicating the buttons were from many different articles of clothing. In other words, based on the assumption that buttons on clothing normally matched, at the Calvert House no more than one, and rarely two, buttons were recovered from any given garment. Since ten to twenty or more buttons were
often on individual garments, the buttons archaeologically recovered represent a very small percentage of the buttons worn at the site.

Differing rates of deterioration further skew the types of buttons archaeologically recoverable. While most metal and glass buttons will survive in the ground for several hundred years, wood, bone, and especially cloth and thread deteriorate rapidly. A far greater percentage of metal and glass buttons will normally survive archaeologically than will organic buttons.

Another factor to consider when examining a button assemblage from an archaeological site is the basic function of the structures and activities that occurred at the site. For example, an assemblage from an industrial site will differ from that of a domestic site, which would in turn differ from a military site's button assemblage. For this study the button assemblages from four eighteenth century sites were compared. All four of these sites were extensively excavated, so the numbers and types of buttons recovered did not result from a bias created by the partial excavation or sampling of any site within the data base. Two of these, Fort Michilimackinac and Fort Ligonier, were military sites. Fort Michilimackinac was built by the French in c. 1715 and occupied by French troops for 45 years. In 1761 it was turned over to the British, who continued to utilize it until 1781. During the French period the fort was normally occupied by only 25 to 35 soldiers, along with their families, as well as some craftsmen and missionaries. However it was expanded during the British occupation, with from
35 to 100 soldiers regularly stationed at the fort (Stone 1974: 8-10). Fort Ligonier was built by the British in 1758 during the French and Indian War, and abandoned by them in 1766, following the conclusion of the war. While normally garrisoned by considerably fewer men, up to several hundred occasionally occupied the fort (Grimm 1970: 10-11). The buttons in these collections were examined in the publications *Fort Michilimackinac 1715-1781* by Lyle Stone (1974), and *Archaeological Investigation of Fort Ligonier* by Jacob Grimm (1970).

The Calvert House and Reynolds Tavern sites, both in Annapolis, were predominantly domestic sites. The Calvert House site was occupied from c. 1685 to the present. The major deposits excavated date between c. 1760-1785, during the eighteenth century Calvert occupation of the site. The Calvert family was part of the political and social elite in Annapolis, and included two of Maryland's early governors. Their household normally included 10 to no more than 20 individuals. The Reynolds tavern site was occupied from c. 1740 to the present with the major archaeological deposits eighteenth century. The Reynolds were an upwardly mobile family heavily involved in a variety of entrepreneurial activities. The Reynolds site was also regularly occupied by 10 to 20 individuals, and because of the tavern and a shop, it was regularly visited by a large number of townspeople. The data concerning the buttons from these two sites was obtained through studying the actual button collections. As shown in Table 3, several button characteristics are compared. A few facts are evident from the
<table>
<thead>
<tr>
<th></th>
<th>Fort Michilimackinac (1715-1781)</th>
<th>Fort Ligonier (1758-1766)</th>
<th>Calvert House Annapolis</th>
<th>Reynolds Tavern Annapolis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number</td>
<td>1333</td>
<td>483</td>
<td>&lt;120&gt;</td>
<td>&lt;59&gt;</td>
</tr>
<tr>
<td>Coat vs. Waistcoat-size buttons</td>
<td>Predominantly</td>
<td>Predominantly</td>
<td>29.6%</td>
<td>23.2%</td>
</tr>
<tr>
<td>Plain vs. Decorated</td>
<td>60.2%</td>
<td>Most were</td>
<td>70.0%</td>
<td>91.9%</td>
</tr>
<tr>
<td>Military Designation</td>
<td>33.2%</td>
<td>Undecorated</td>
<td>22.9%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Metal vs. Bone and Wood Molds</td>
<td>87.5%</td>
<td>Only 13 bone and wood molds were recovered</td>
<td>68.5%</td>
<td>71.2%</td>
</tr>
<tr>
<td>Utilitarian Bone and Wood Buttons</td>
<td>0</td>
<td>3</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>Utilitarian Shell Buttons</td>
<td>9</td>
<td>0</td>
<td>33</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 3. Comparison of Buttons from Military and Domestic Sites.
data in the table.

First, far more buttons were excavated from the military sites than from the two domestic sites. This is especially apparent for Fort Ligonier, where the 483 excavated buttons were lost or discarded within a nine year period. There is no evidence that soldiers lost or discarded buttons substantially faster than did civilians. The greater number of buttons present at at least some military sites was doubtless a result of the greater number of people who lived at or visited these sites. While a domestic site, other than a large plantation, was likely to house only one or two families and possibly a few servants, military sites were occupied by many more people, primarily men. Keeping in mind the fact that most of the buttons would have been part of men's clothing, at any given time there would likely be far more buttons worn at a military site than a domestic site. It is only to be expected that far more buttons would be lost or discarded at military sites than domestic sites.

There were considerably more waistcoat buttons recovered from all four sites than coat buttons. This is for two, and possibly three reasons. An eighteenth century suit generally included more waistcoat buttons than coat buttons, making it likely more would be lost. In addition, a lost coat button would be easier to find because it was larger. Finally, since coat buttons cost twice as much as waistcoat buttons, they may have been more diligently sought if lost. Their rate of re-use may also have been higher, with fewer discards.

Most of the metal buttons excavated from all these sites
were plain. This is likely an indication that plain buttons were worn on the everyday suits of most men. The Calvert House buttons included the largest percentage of decorated buttons, which would be expected at the home of the wealthy governor. Most of the plain buttons from Fort Michilimackinac and Fort Ligonier were probably issued on military uniforms. A third of the buttons from Fort Michilimackinac had military designations; these buttons were issued no earlier than 1767 (Olsen 1963: 552). None of these were found at Fort Ligonier, which was abandoned in 1766 (Grimm 1970: 62).

Over two-thirds of the suit buttons located from these sites were metal as opposed to bone or wood molds for cloth covered buttons. It is unclear, however, as to whether this was because fewer cloth-covered buttons were worn, fewer were lost or discarded, or, which is as likely, an equal or larger percentage were originally in the archaeological record, but a large percentage of these has since deteriorated. A considerably smaller percentage of bone or wood molds were located at the military sites, reflecting the fact that military buttons were normally metal.

Very few bone, wood, and shell utilitarian buttons were located at the two forts, while quite a few were located at the domestic sites. At the very least this indicates that few of these utilitarian buttons were being used at military fortifications prior to the 1780s. It is unclear, however, whether those from the Calvert House and Reynolds Tavern were predominantly eighteenth century examples, reflecting wide usage of these buttons at eighteenth century domestic sites, or
nineteenth century buttons reflecting a change in clothing styles between the two centuries. The latter possibility is more likely from the Calvert House, where the primary button assemblage was from a crawlspace that included many intrusive nineteenth century buttons.

In summary, the button assemblages at eighteenth century domestic and military sites appear to reflect different behavioral patterns. At Fort Michilimackinac and Fort Ligonier there were many men present in standard military uniforms; these men lost numerous military buttons which were metal, and plain or with a standard military designation. At the Calvert House and Reynolds Tavern there were significantly fewer men living on-site. Further, these men wore a wider variety of clothing than military personnel. There were comparatively fewer buttons located at these domestic sites, and a greater diversity of basic button types. While further comparative research needs to be done to better clarify the button assemblage patterns present at these and other types of archaeological sites, the information presented here is provocative.

FUNCTIONS OF EIGHTEENTH CENTURY ARCHAEOLOGICAL BUTTONS

As discussed earlier, buttons were commonly used on several pieces of men's clothing during the eighteenth century. These include the suit which consisted of a coat, a waistcoat, and possibly breeches. Large buttons, normally made of metal or thread, were used on the coat, while smaller buttons, often otherwise matching, were worn on the waistcoat. Breeches used a number of small, waistcoat-size buttons to hold the outer flap; similar buttons were often worn with or in place of knee buckles
at the knees. Two or three large coat-sized buttons were used to close the fly. The frock was at times worn instead of a coat, and was of a more comfortable design, with a turned-down collar. Buttons worn on frocks were similar to those on coats. The great coat, again with similar, though normally metal buttons, was worn to protect men from the elements. The jacket looked much like a sleeved waistcoat, though it often used different types of buttons. Pull-over shirts were normally worn by men, upon which one or more small buttons were used to fasten the collar and possibly close the front of the shirt. The banyan was a long, loose gown, often with many buttons, that was worn during informal occasions. Sleeve buttons, or cuff links, were commonly worn on shirt cuffs. As previously mentioned, women's clothing rarely employed the use of buttons.

During the second half of the eighteenth century metal buttons were regularly marketed in two sizes. The large metal buttons were normally used on coats, frocks, greatcoats, as well as the few on the breeches. The small metal buttons were worn on waistcoats, breeches, and possibly on jackets. With this information, it is relatively easy, in most cases, to distinguish which metal buttons in an archaeological assemblage were worn on which article of clothing. Most waistcoat-size buttons ranged from about 14mm to 19.5mm, while coat-size buttons were normally significantly larger, usually from about 18.5mm to 35mm, or larger. It is recognized that because of changing styles, average button sizes did change over time, with the metal buttons gradually getting larger until around 1777, after which the sizes decreased (Cunnington and Cunnington 1972:
189, 197). Therefore, waistcoat buttons from the 1770s may occasionally have been as large as some coat buttons from the 1730s. All the same, size, rather than construction technique, is the most important factor in determining the function of a button. While the construction indicates quantitative and, at times, age differences, the size indicates qualitative differences between the metal buttons. For example, based on their size, BC-11 and BC-12 in the Calvert House collections are examples of coat buttons, while BC-15 to BC-18 are waistcoat buttons (see Appendix). While their construction techniques are similar, their functions are distinct.

Buttons constructed of twists of silver or gold woven around an internal supporting frame served the same function as metal buttons. Figure 1 illustrates a pair of silver twist coat buttons, possibly similar to the big silver twist buttons mentioned several times in William Allason's inventories. The silver twist has been secured over the frame with thread, which in turn served as a flexible eye to secure the button to the coat. X-rays of these two buttons from the Colonial Williamsburg Department of Collections reveals that they were built around large metal, probably brass, rings. While it is probable that the silver twists have normally deteriorated over time, the internal rings, possibly secured around bone or wood, are archaeologically recoverable. These are probably very similar to, and readily confused with, brass curtain rings.

Another group of buttons common throughout the second half of the eighteenth century was the thread/twist/cloth buttons. They were manufactured and sold in both big and small sizes, and
Silver Twist Coat Button Face

Silver Twist Coat Button Back

X-ray of Silver Twist Coat Buttons

Figure 1. Silver Twist Coat Buttons, with X-ray.
were used much the same way as the metal buttons. The primary exception, according to Cunnington and Cunnington, was that these buttons were not often worn on great coats because they could not endure regular exposure to the elements (Cunnington and Cunnington 1972: 225). They came in a variety of types, colors, and designs. Examples in Allason's October 1, 1761 inventory include "scarf", "made blue", "scarlett(sic)", "moyhair", and "moyhair scarlett" (Allason: 1761 - 1764). Unfortunately, these cloth and twist thread buttons rapidly decompose in the ground. All that remain are some of the bone or possibly wood blanks around which the buttons were formed. In most cases it is impossible to determine the type of covering that would have been over a bone or wood blank. Some were wrapped with thin wire twists; this wire twist may occasionally survive in the ground. The sizes of the one-holed blanks do, as with the metal buttons, indicate the functions of the original buttons.

Figure 2 is an original card of eighteenth century thread/twist coat buttons, now located in the Department of Collections of the Colonial Williamsburg Foundation. This card was x-rayed in the Radiology Lab of the Williamsburg Community Hospital in April 1985. The resultant image clearly shows that the internal supports for these buttons are one-holed round wood discs, around which the thread was sewn. The yearly growth marks on the wood are clearly visible. It can safely be assumed that bone discs, such as BC-87 to BC-93 from the Calvert House assemblage served the same basic function, as did a similar wood disc, BC-120. The smaller discs in the assemblage (BC-94 to
Figure 2. Thread Covered Coat Buttons, with X-ray.
were similarly constructed bone waistcoat button molds. Because of differing rates of decomposition, the vast majority of button molds recovered archaeologically are made of bone, while almost all wood molds have totally deteriorated. For example, of the 34 button molds recovered at the Calvert House, only one, or three percent, was made of wood.

Another class of buttons common in the documentary record is jacket buttons. The most common types were glass buttons, pearl buttons, glass buttons in pewter cups, and some thread buttons. Calvert House button BC-82 is a green glass button in a pewter cup, and is likely a jacket button. Its size is very similar to that of waistcoat buttons. It is quite possible that waistcoat buttons were used on jackets. This contention is buttressed by the fact that William Allason's jacket buttons sold very slowly, and Edward Dixon, a merchant in Port Royal, did not keep jacket buttons in stock (cf. Allason's Invoice and Inventory Books; Dixon's 1767-1774 Invoice Book). It is unclear whether or not the thread jacket buttons mentioned by Allason had bone blanks around which the thread was wrapped. The thread jacket buttons were listed with the thread shirt buttons, which are discussed below, and some may not have had wood or bone cores, and therefore would not have survived in the ground.

The shirt buttons described in the examined documents included "thread", "wire", and "moulded" shirt buttons. Shirt illustrations, as well as the fact that these buttons were very inexpensive compared to most of the buttons listed in the inventories, indicate these buttons were small. Linda Baumgarten, of the Colonial Williamsburg Foundation, suggested
that Dorset Knobs, as seen in Figure 3, may have been a type of shirt button (CWF-Coll). The x-ray of these Dorset Knobs indicates that they were built around small (about 7mm diameter), one-holed bone or wood discs. Bone discs from these type buttons may survive archaeologically. A similar variety, also in Figure 3, are the High Tops. While not x-rayed, they also were built around small molds. Sally Luscomb has suggested the molds for this type button were discs of ram's horn (Luscomb 1967: 57), but this has not been verified.

Two other types of buttons located in the Department of Collections of the Colonial Williamsburg Foundation include "Singletons" and "Bird's Eye" buttons, as seen in Figures 4 and 5. Once again, size and construction would indicate that these buttons were probably shirt buttons. The x-ray of the large Singletons shows a metal, probably brass, ring used to support the button. The point at which the ends of the wire ring were soldered together is clearly visible. The smaller Singletons, while not x-rayed, were built around similar, smaller rings. The only part of these buttons normally archaeologically recoverable are the rings around which the buttons were built. The Cartwheel was a similarly constructed style; BC-121 is an excavated example from the Calvert House. The x-ray of the Bird's Eye buttons in Figure 5 indicates that the internal structure for these buttons was a tightly wrapped ring of thread. There is no internal bone or wood disc. As would be expected, except in rare circumstances, Bird's Eye buttons are not archaeologically recoverable.

Sleeve buttons, or cuff links, look similar to two buttons
Figure 3. Dorset Knobs, with X-ray, and High Tops.
Figure 4. Large and Small Singletons, with X-ray.
Figure 5. Bird's Eye Buttons, with X-ray
joined together with a normally brass loop. They were used to secure the cuffs on shirts (Cunnington, Cunnington, and Beard 1972: 58). The only sleeve buttons in the examined records that include a shape designation are three pairs of gold sleeve buttons; one pair is round, while the other two are octagonal (Dixon Ledger 1765-1767: May 23, 1766 invoice; Allason 1764-1766: Invoice from Edward Dixon, between February 7 and August 4, 1766). Even a cursory examination of archaeologically excavated sleeve buttons makes it clear that sleeve buttons were made in a multitude of different shapes and designs. When excavated with the connecting loop identification is easy. Non-round shapes of waistcoat size buttons are normally indicative of sleeve buttons. The documentary record suggests that sleeve buttons were not made of thread/twist. Many are highly decorated and of unusual and expensive construction, construction that is not seen on regular buttons. The most valuable buttons mentioned in Allason's inventories were some of his sleeve buttons. Many include large cut glass settings. Unfortunately, there are some sleeve buttons that, apart from the the connecting loop, are very similar to waistcoat and jacket buttons (cf. Stone 1974: 68-76). It may be that some sleeve buttons were sold that purposely matched waistcoat or jacket buttons. BC-82 has tenatively been identified as a jacket button, but it is possibly a sleeve button; Stone (1974: 68-69, 71) identified a similar button (his Figure 35: v), also without a connecting loop, as possibly being a cuff link. While the vast majority of sleeve buttons are readily identifiable, there are some that cannot be identified with certainty.
As has been seen, button functions for later eighteenth century buttons can usually be determined based upon size, shape, and construction. This information is useful for the archaeologist who is seeking to learn more about the type clothes worn at given archaeological sites. The following discussion of construction techniques will help the archaeologist place excavated buttons within a temporal framework.
CHAPTER 4

THE MANUFACTURE OF EIGHTEENTH CENTURY BUTTONS

When examining an archaeological collection of buttons it is essential to have a basic understanding of manufacturing techniques as well as approximate dates for the different types of buttons. In this chapter basic construction techniques for eighteenth century buttons will be examined, and approximate dates given for these various techniques. This information will make it easier for archaeologists to more accurately assign termini post quem for buttons from archaeological deposits.

PEWTER BUTTONS

Pewter is an alloy of tin and copper, antimony, or lead, that was widely used in the eighteenth and nineteenth centuries for plates, cups, spoons, buttons, and many other objects. The quality of the pewter varied widely, with the high quality pewters containing about 90% tin, with the remaining 10% being copper or antimony. Very little lead was present in the best pewters. When the quantity of lead increased, the quality of the pewter decreased. Albert and Kent noted that the pewter normally used in buttons was initially about 60% tin and 40% lead and antimony. Later, the alloy was changed to about 83% tin and 17% lead and antimony (Albert and Kent 1949: 6). While the change was gradual, the early eighteenth century pewters were generally quite soft and of rather poor quality, while most
of the pewters used later in the century were of the higher quality, harder, and more durable alloy.

Because pewter had a rather low melting point and was comparatively easy to cast, it was widely used in the eighteenth century for the small scale casting of buttons. Hughes and Lester state that in the eighteenth century pewter objects manufactured in Britain and transported to the colonies were not taxed, while there was a substantial tax on block tin imported into the colonies. The result was to encourage the importation of finished pewter objects and discourage the development of a colonial pewter industry. When the imported pewter objects had been used beyond repair they were normally melted and recast into spoons or buttons by someone fortunate enough to own the proper molds. The numerous families who did not own the appropriate molds could often employ the services of a traveling tinker, who would readily recast their used pewter for them (Hughes and Lester 1981: 204). As a result, it is normally difficult or even impossible to determine whether or not one-piece cast pewter buttons were made locally or cast in Britain. Furthermore, locally made pewter buttons were doubtless produced in the colonies long after similar types had nearly ceased to be manufactured in Britain.

There are several forms of cast eighteenth century pewter buttons. In early forms, in use during the seventeenth century, the solid one-piece cast pewter buttons were cast in molds in which the face and shank were formed simultaneously. The shank was directly attached to the button back, and a hole was hand-drilled through this shank to form the eye. This style was
improved in the mid-eighteenth century by modifying the molds so that an eyed shank on a small "stem" was cast with the button (Hughes and Lester 1981: 204). Stanley Olsen has suggested that this revised form was in use from the mid-eighteenth century into the first decades of the nineteenth century (Olsen 1963: 552, 553). While an improvement over the earlier type of pewter button, this type was also weak; its shank often broke. For example, nearly 75% of the Calvert House pewter buttons with pewter shanks had broken or missing shanks.

Recognizing the need for a stronger shank, British button manufacturers began casting brass wire shanks into a boss on the backs of pewter buttons. According to Olsen, this improvement was developed prior to 1760 and used until about the last decade of the century (Olsen 1963: 552, 553). There were two variations of this form. The first form, which probably originated slightly earlier, is represented in the Calvert House collection by button BC-22. This variant has a seam mark on the back formed by the button mold. The second variant, which is represented by BC-27 and others, has a spun back. Olsen explained how this was accomplished. The cast pewter button was placed in a chuck, a clamp-like device on a lathe, and spun. A tool was used to cut the back of the button to form a smooth finish and the desired thickness. This process produced a burred edge around the shank and numerous shallow concentric tool marks on the back (Olsen 1963: 552, 553). These buttons were common at both the Fort Ligonier and the Fort Michilimackinac excavations, suggesting some possible military
use, and that these buttons were manufactured by the 1750s.

At some point during the second half of the eighteenth century some craftsmen began to produce cast pewter buttons with iron wire shanks. It is unclear when these buttons were introduced. Olsen suggested they were used by the British military from about 1760 until 1790 (Olsen 1963: 552, 553). On the other hand, Hughes and Lester stated that while the British may have used iron shanks during the Revolutionary War, the iron wire shank was introduced in the United States by the Grilley brothers of Waterbury, Connecticut around 1800 (Hughes and Lester 1981: 204).

The buttons excavated at Fort Michilimackinac from contexts dating to the 1760s included numerous cast pewter and brass buttons having brass as well as iron shanks. Of the 303 cast pewter buttons with iron shanks, 98% were British military buttons. There were only five pewter buttons with brass shanks; none included a military designation. It may be relevant that of the 53 cast brass buttons from Fort Michilimackinac with wire shanks, 91% of these shanks were brass and only 9% were iron. None included a military designation, and Stone suggested civilian use for these buttons (Stone 1974: 48-53).

A possible interpretation of this data is that while the British military was using cast pewter buttons with iron shanks as early as the 1760s, most cast pewter and brass civilian buttons of the same period were constructed with brass wire shanks. Stone's contention is supported by the fact that 83% of the cast pewter and brass buttons with separate shanks examined from the Calvert House collection had brass wire shanks; only
three had iron shanks. One (BC-24) is military, and it has a brass shank. Further comparative work needs to be done to confirm or refute this contention.

Another form of casting that was often used for both pewter and brass buttons involved the face and button back being cast separately. The edges were ground flat and the face and back brazed or soldered together to complete the button. Numerous buttons of this basic construction technique were located in the Fort Michilimackinac excavations. In most cases the back was cast around a brass, or rarely, an iron wire shank, securing the shank to the button back. In several cases the shank was soldered to the back of the button, and in a few cases the backs were cast with a wedge-shaped protrusion, into which a hole was later drilled. Based on the archaeological evidence, Lyle Stone suggested the ones with a shank soldered to the button back were probably used between 1740 and 1760. On the other hand, those samples in which the shank was cast into the button back tended to date between 1760 and 1780 (Stone 1974: 50-54). While the suggested dates for these specific Fort Michilimackinac buttons may be accurate, Noel Hume writes that this basic construction technique was commonly used throughout the seventeenth century. According to him, during the late sixteenth and early seventeenth century, buttons were generally small and round, cast in two pieces, and the typically brass or white metal halves brazed together. The normally brass wire shanks of these buttons were cast into the backs, and flanked by two holes which allowed heated gasses to
escape while the halves were joined together. This construction technique continued into the eighteenth century, with the buttons becoming larger and ovoid in section (Noel Hume 1970: 88). While the technique was used for both pewter and brass buttons, the majority of those excavated at Fort Michilimackinac were made of the more durable brass. The Fort Ligonier excavations produced all three of the shank variations, with the two-piece brass buttons having a copper wire shank soldered to the button back being the most common (Grimm 1970: 64). All three varieties were therefore in use between 1758 and 1766, when the fort was garrisoned. Only three brazed buttons (BC-47 to BC-49), these incomplete, were recovered from the Calvert House excavations.

A final technique used to cast pewter buttons, which was also used for brass buttons, is often called hollow cast. The face and back were cast as one piece around a separate, often iron, shank. Two holes were present in the back to allow the internal gasses to escape during the casting process. Noel Hume states that these buttons were most common during the first half of the eighteenth century (Noel Hume 1970: 89). Numerous buttons of this type were located at Fort Michilimackinac. All of them are pewter with iron shanks, for which Stone estimated a date of 1760 to 1780 and attributed their use to the British military (Stone 1974: 50, 53). In addition, these pewter buttons with iron shanks were the most common type of button excavated at Fort Ligonier, indicating they were in common use by the British military between 1758 and 1766 (Grimm 1970:...
Based on this evidence, these buttons were probably common in the early eighteenth century, but continued to be used, including by the British military, during the third quarter of that century.

**BRASS BUTTONS**

Copper and brass were extensively used during the eighteenth century for buttons. In most cases, the construction techniques utilized for one of these metals were equally suited for the other. However, brass was more commonly used for buttons than was copper. Therefore, for the sake of simplicity, I will confine my discussion to brass. Where a manufacturing technique applies solely to one or the other, it will be clearly stated as such.

Toward the end of the seventeenth century and throughout the eighteenth century brass buttons went through five major developmental phases. These phases were the battery method, the use of roller mills, casting, plating, and stamping. Each of the last four techniques underwent technological advancements in metalworking that originated with the production of other objects, but was rapidly incorporated into the button manufacturing trade. Each of these innovations will be examined along with its impact on buttons.

Prior to the eighteenth century brass was a rather expensive commodity in Great Britain, with most of it imported from the mainland of Europe. According to Henry Hamilton, this changed in the first quarter of the eighteenth century as brass founderies were established at Cheadle and Bristol. The result
was that brass became increasingly less expensive and the brass industry, especially around Birmingham, became firmly established (Hamilton: 1967: 138-139). While brass was used prior to this time in the manufacturing of buttons, after the establishment of these founderies its use became widespread. Hamilton further noted that by 1720 the English brass and copper industries had developed to the point that they supplied most of the domestic and colonial brass and copper needs (Hamilton 1967: 290-291).

During the seventeenth century a primary method used for working brass was the battery method of production. Numerous hammers of various weights were used, in conjunction with heat, to flatten brass ingots. These hammers varied from up to 500 pound water-driven hammers for flattening the ingots to hand-held hammers for finishing work. Once flat sheets of brass were produced, buttons, or other objects, could be formed from these sheets. Toward the end of the seventeenth century roller mills were introduced, by which ingots of brass were machine-rolled into sheets. This far more efficient method produced sheets of brass faster and cheaper than the more labor intensive battery method. Despite this, the battery method of flattening brass continued to be used, albeit decreasingly, to the end of the eighteenth century (Hamilton 1967: 261-262, 343-344). In effect, both methods of production were used throughout the eighteenth century, making it virtually impossible to date flat buttons based on the method of flattening employed. In addition, the only observable difference between the buttons produced by these two methods is
that those battered may exhibit slight variations in thickness and surface regularity.

One of the more common types of late eighteenth century buttons is that type made from flat brass discs with an eye soldered to the back. Numerous discs of the desired size were stamped out of sheets of brass. Shanks were attached to the backs of these discs, along with a drop of solder, and the buttons placed in an oven to make the solder flow, securing the shanks to the button backs. Afterwords designs could be engraved or, during the final decade of the century, stamped onto the face and possibly backs of the buttons. These were then normally gilded or tinned. At times Sheffield plate was applied to sheets of copper before the discs were stamped; the resultant buttons would have a silvered face.

Such buttons were common toward the end of the eighteenth century. Hughes and Lester suggested they were used between 1770 and 1800 (Hughes and Lester 1981: 178), while Olsen indicated their use was from about 1785 to 1800 (Olsen 1963: 552, 553, Figure 1G). None of these buttons were found in the deposits at Fort Michilimackinac dating between 1715 and 1781 (cf. Stone 1974: 45-76), indicating they were not common on the Michigan frontier prior to 1781. Olsen, and Hughes and Lester explain a significant distinction between eighteenth century and nineteenth century flat brass buttons. In the eighteenth century the brass or copper wire shanks were "alpha" shanks, not having the bent-over ends present on the "omega" shanks used from the very early nineteenth
century (Olsen 1963: 552, 553; Hughes and Lester 1981: 221). In summary, those flat buttons having the "alpha" shanks were used from the 1770s until around 1800, while those with "omega" shanks were used after about 1800.

The development of the cast brass button industry closely paralleled that of the pewter industry, with a few exceptions. Toward the beginning of the eighteenth century, brass and copper were rather expensive commodities. Although less durable, pewter was also less expensive and easier to cast. As a result, a substantial portion of the cast buttons from the early eighteenth century were made of pewter. However, as the brass and copper industry developed and casting techniques improved, increasing numbers of buttons were made from cast brass. By mid-century large numbers of durable cast brass buttons were being produced using several of the same casting techniques employed for pewter buttons. These techniques were also used for pewter buttons, which have been discussed; they will be mentioned briefly at this point.

As with the pewter buttons, one-piece brass buttons were often cast with a brass, and occasionally iron, wire shank. While most of the cast brass buttons from the Calvert House in Annapolis had spun backs, South noted that among the buttons examined from Brunswick Town there were several cast brass buttons present with back mold seams. These he classified as Type 8 buttons (South 1964: 117). These variants are contemporaneous with each other and with the similar cast pewter buttons.

The second common type of cast brass button is that type in
which the face and back are cast separately and the halves brazed or soldered together. While some were cast in pewter, the majority of the buttons made this way were brass. The brass and the pewter forms are contemporaneous, and tend to date from the seventeenth century until around 1780. South suggested these brass buttons were worn by both British and French troops prior to 1768, at which point regimental numbers began to be placed on the military buttons (South 1964: 115).

The third method used to cast brass buttons was the hollowcast method, which was also occasionally used with pewter buttons. These buttons were normally were cast around an eyed brass wire shank, although occasionally crossed brass wires were used. They were most commonly used during the first half of the eighteenth century, but continued to be used, decreasingly, until the Revolutionary War.

Around 1760 a form of brass called tombac was developed and was soon used for cast tombac buttons. Hughes and Lester explain that tombac contained a substantially higher ratio of zinc to copper than does common brass, and as a result had a much more silvery look. However, the high zinc content makes tombac rather brittle, suitable for casting but not for stamping. As a result, decoration on tombac buttons was normally engraved as opposed to stamped. These buttons were normally plated, probably with tin. They were cast similarly to other one-piece brass buttons, and were used between 1760 and about 1800 (Hughes and Lester 1981: 203). Not unexpectedly, given the dates of deposition, one tombac button (BC-46) was recovered in the Calvert House excavation.
The eighteenth century saw substantial advancements in the development of plating metals. Prior to the eighteenth century two primary methods were used to plate metals. One was to dip the object to be plated into molten gold, silver, or tin. The other was to pound thin sheets of gold or gold leaf onto the object, especially objects of silver. Both were time-consuming processes that produced a relatively thick and potentially expensive surface layer. Hamilton records that Thomas Bolsover of Sheffield made the first major eighteenth century development around 1742. He devised a way whereby silver could be plated over copper, the result becoming known as Sheffield plate (Hamilton 1967: 269). The distinguishing characteristics of Sheffield plate are that generally only one side of an object was plated, and the silver plating was on copper since it could not be effectively applied to brass. In the manufacture of buttons, one side of a sheet of copper was plated, and then the discs for buttons were cut from this sheet. As a result, copper buttons with Sheffield plate have silver on the face and copper on the sides and back. Calvert House buttons BC-72, BC-73, and BC-80 are examples of buttons with Sheffield plate.

In 1768 John Bootie received a patent for the tinning of copper and brass objects (Hamilton 1967: 348). This was apparently an easier, less expensive method for tinning copper and brass than the earlier dipping of the objects into molten tin. The use of tinning on buttons became increasingly widespread since it was an effective and inexpensive substitution for silver. The primary difference between the earlier tin-dipped buttons and the later tinned buttons is that
the earlier process produced a thicker layer of tin. The later tinning could be done over engraved or stamped buttons with less obscuring of the decoration. Tinned buttons are readily distinguishable from those with Sheffield plate since tinned buttons are plated on all sides as opposed to just the face; tinning can also be done on brass, whereas Sheffield plate can only be applied to copper. Unfortunately for archaeologists, the tinning often does not survive on excavated buttons. BC-24, BC-26, BC-41, and BC-71 are tinned brass and pewter buttons from the Calvert House; it is unclear whether these buttons were tin-dipped, or tinned by the method patented by Bootie.

For the majority of the eighteenth century, designs on buttons were either cast or hand-cut by an engraver. All of this changed with the introduction of machine stamping. Hamilton recorded that in 1769 John Pickering of London introduced a method for stamping designs onto brass coffin hardware. One year later this new technology was being used for manufacturing buttons. Stamping buttons by machine had significant advantages over earlier methods of producing brass buttons: it was faster, cheaper, and produced both the form and design at the same time (Hamilton 1967: 267-268). Thin discs of brass or possibly silver were stamped to form domed shells, often intricately decorated, that were then crimped over bone, wood, and occasionally metal button backs with a depressed rim to receive the stamped face.

For most of the eighteenth century thin domed brass, silver, and rarely pewter faces were applied over bone or wood button backs. The button faces were normally hand-stamped into
the desired shapes, although occasionally the faces were cast. These faces were filled with a clay or resinous filler to provide added strength, and then crimped over the button backs. This was a rather labor intensive process, and was only limitedly used. The introduction of the stamping machine, however, made these buttons much easier and less expensive to manufacture, and their use became far more widespread.

Between 1750s and the first decade of the nineteenth century the backs of stamped sheet brass buttons went through several distinct stages, as described by Albert and Kent. Initially the bone or wood button backs on these stamped brass buttons had four holes, and occasionally a fifth central hole (a result of production that had no other functional purpose). Catgut was sewn through these four holes to form the shank, and was knotted on the inside of the button. The interior of the button was filled with a type of cement, normally of a resinous or asphaltum base, before the brass face was applied. This cement secured the catgut and strengthened the thin button shell. When the catgut broke it could not be replaced, in effect making the button useless. In the second stage of the development of these button backs, the catgut was replaced with thin brass wire, secured in the same way as the catgut. In addition, the bone or wood back was occasionally replaced with a similarly shaped thin brass or iron back. Once again, when the wire broke the button was rendered unusable. In the third stage of development, the four holes in the bone, wood, and occasionally brass or iron button backs were replaced with one
central hole. A wire shank was attached to the button through this hole with the ends of the shank bent against the button back interior. Undoubtedly, this improved shank extended the usable life of these buttons. By the late 1770s each of these shank varieties was in use, with the eyed shanks becoming more widespread. In the final development, occurring in the early nineteenth century, these button backs were replaced by more durable stamped metal button backs (Albert and Kent 1949: 30).

An early example of stamped buttons is found in a patent issued to the Birmingham jeweller John Smith in 1770. According to Prosser, this patent explained a process whereby gold and silver buttons, probably cuff links which were to have stone settings, were stamped into the necessary shape, and tines used to secure the stones were cut. This appears to be the first case in which such buttons were made by being stamped out of flat discs (Prosser 1970: 55).

A later patent, also mentioned by Prosser, discussed a slightly later method for stamping sheet iron buttons. James Alston received a patent in 1785 that explained a process for making sheet iron buttons that involved stamping red-hot blanks in an engraved or plain die. Once the excess was removed in an edging lathe, shanks were soldered, screwed, or rivoted onto the stamped button. In addition to giving directions for tinning, silvering, or gilting these buttons, this patent also explains how these buttons could be inlaid with other metals by means of a blow with a stamp. A further provision in this lengthy patent was a method for covering iron button faces with a sheet of brass, which was then folded underneath with the appropriate

Hughes and Lester record that toward the end of the eighteenth century the stamping of backmarks upon buttons began. These buttons often have a split anvil mark on the back, which was formed by a two-part die, each half of which circumvented the shank. This mark is not always present, as some dies used were one-piece, having a central hole into which the button shank fit while the back was stamped (Hughes and Lester 1981: 216). These backmarks included manufacturers' names, quality assurances such as "DOUBLE GILT", and decorations such as eagles and stars. Calvert House buttons BC-78 through BC-81 are examples.

In summary, throughout the eighteenth century metal buttons passed through several developmental changes. These changes were the direct result of technological developments in casting techniques, plating, stamping, and metal flattening through the use of the roller mill. As a result, numerous variations of metal buttons were produced, some of which can be fairly accurately dated. While metal buttons are the most common type recovered from most eighteenth century archaeological sites, several other types of buttons were commonly used; these well be discussed next.

BONE AND WOOD BUTTONS

Bone and wood were commonly used throughout the eighteenth century for the manufacture of buttons. Bone buttons were generally made from cattle bones, the best of which were the large shin bones. These bones were cleaned and boiled to soften them. They were then sawed open, flattened, and the spongy
interior removed by scrapping. When dry, these flat sheets of pressed bone were normally cut into buttons with a lathe, although a carpenter's brace and bit were at times used. Then, depending upon the function of the button being manufactured, holes were drilled in the button for sewing it onto clothes, a shank attached, or fabric sewn around it (Hughes and Lester 1981: 8). Waste bone from which these buttons have been cut is occasionally recovered at archaeological sites, including a few samples from the Calvert House. Wood buttons were made in much the same way as bone buttons. The wood was prepared into rather thin flat sheets, from which the wood buttons were cut either on a lathe or with a carpenter's brace and bit. They were used in the same way as bone buttons.

Most bone and wood buttons in the eighteenth century served one of three basic functions. The first, which has already been discussed, was as button backs to stamped metal buttons. The second was to be the central supporting disc for cloth covered buttons, which will be discussed later with other cloth buttons. The third function was as a plain, utilitarian button. As seen in the Calvert House bone buttons (BC-124 to BC-147), these inexpensive buttons came in two basic sizes, approximately 10.5mm to 14mm and 16mm to 18mm, which could be used on shirts, breeches, and possibly on lower quality waistcoats. Dating these simple buttons by themselves, without reference to the context, is difficult, since there were few changes in construction techniques throughout most of the eighteenth century and well into the nineteenth century. The dating that can be done is based primarily upon the pattern of the button
holes. Throughout most of the eighteenth century, bone buttons generally had three or five holes, with one being a center hole formed during production. The other two or four holes were hand-drilled, and therefore often not evenly spaced. As Prosser noted, this began to change toward the end of the eighteenth century when Ralph Heaton invented a machine in the 1790s that simultaneously drilled four holes in wood or bone buttons (Prosser 1970: 58). These holes were evenly spaced and were apparently drilled at the time the button was being lathed, eliminating the need for a central hole formed during production. As with each new innovation in the button trade, Heaton's machine did not immediately permeate the button industry; the earlier three and five holed buttons continued to be made, decreasingly, well into the nineteenth century.

The archaeological record indicates that utilitarian bone and wood buttons were not widely used during most of the eighteenth century. None of these buttons were found in the Fort Michilimackinac excavations (Stone 1974) or the 1726 to 1776 context of the Brunswick Town ruins excavated by Stanley South (1964). In the Fort Ligonier excavations three of these buttons were found, less than one percent of the entire button assemblage. The fact that more were found at the Calvert House site is at least partially a reflection of the excellent preservational conditions in the crawlspace deposits. In addition, many may be nineteenth century.

SHELL BUTTONS

Shell buttons, often called pearl buttons, were made from the shells of various freshwater and marine molluscs. Hughes
and Lester noted that in the eighteenth century white shells were normally used, although toward the end of the century some smaller shell buttons were being made from gray and brown shell. The non-white shell buttons were considered inferior to the pure white buttons (Hughes and Lester 1981: 235). Once again, a primary key for dating shell buttons revolves around the construction of the shank. Hughes and Lester suggested that drilled brass shanks were introduced on shell buttons around 1770, and continued on these buttons for the duration of the century and possibly into the early nineteenth century. Another form of eighteenth century shell button shank was a type of pin-shank, in which the shank included a metal collet on the back and possibly a jewel or paste setting on the center of the face. This setting effectively hid the shank. A nineteenth century variant of the pin shank, used primarily before 1840, had a piece of wire with a head, similar to a pin, extend through a small central hole in the button and twist into a shank on the back. This produced a form of decoration on the face, and secured the shank to the button (Hughes and Lester 1981: 233).

In 1787 Joseph Rabone of Birmingham secured a patent for a swaged-in-turret shank. While initially designed for use on bone and ivory buttons, this normally brass shank was soon used on shell buttons. Prosser described the shank type as follows. A somewhat wedge-shaped, undercut recess was cut into the back of the button. The end of the shank stalk was made concave. This concave end was inserted into the recess in the button, and the shank given a sharp tap.
The pressure flattened and therefore enlarged the shank within the recess, effectively and permanently securing the shank to the button (Prosser 1970: 57). This type of shank has been used to some extent ever since, making dating difficult; its presence does provide a good terminus post quem.

The most common type of shell button found by archaeologists is that of the simple, normally four-holed, lathe-turned utilitarian button. These are very similar to the utilitarian bone and wood buttons discussed earlier, and served the same basic functions. Most of these date to the nineteenth and even twentieth century. However, since there has been little stylistic change in these buttons, their dating is very difficult if not normally impossible. While the documentary evidence is inconclusive, the archaeological evidence would suggest that these utilitarian shell buttons were predominantly used in the nineteenth century. For example, Stanley South indicated that only a few shell buttons, type 22 in his typology, were found at Brunswick Town, and these came from an 1800 to 1830 context. On the other hand, the 1837 to 1865 Fort Fisher ruins contained a substantial number of shell buttons (South 1964: 121-122, table). A total of nine utilitarian shell buttons were located at Fort Michilimackinac, suggesting that while they were used prior to 1782, they were certainly not common (Stone 1974: 59,60). This is supported by the fact that none were recovered from the Fort Ligonier excavations (Grimm 1970: 62-75). While shell is usually more stable in the ground than bone or wood, some may have deteriorated, skewing the button assemblages.
HORN BUTTONS

In the second half of the eighteenth century horn buttons were made by skilled hornsmiths as a byproduct of their horn comb, spoon, handle, and beaker industry. Hughes and Lester explained what the process involved. The primary materials used for horn buttons were the horns and hooves of cattle, which are made of keratin, the same protein found in hair, nails, and feathers. The tips of horns were removed, and the horns and hooves were soaked in water, with periodic boiling, for about two weeks to soften them. They were then cut open, the spongy interior removed with scrapping, and the horn flattened between sheets of iron, with clamps. Once flattened, buttons were cut out of the horn sheets. These were molded, with heat and pressure, into beautiful, often highly detailed buttons (Hughes and Lester 1981: 8,9). These horn buttons are rarely found by archaeologists, and when found can rarely be dated with precision. None were located in any of the collections examined.

CLOTH BUTTONS

A large portion of the buttons used in the eighteenth century were made of thread or embroidered cloth. Hughes and Lester recount a brief history of their development in eighteenth century Britain. From 1688 to 1727 the manufacture of cloth buttons was prohibited in Britain to protect the developing metal industry. Although they did somewhat constrict the cloth button industry, the laws were widely ignored. Around 1690 Abraham Case developed a button called a hightop (Figure 3) made of "close stitched thread on a cone of linen twisted over a
ram's horn base". Other variants of thread buttons were later developed by the Case family, including those built around small brass rings (Figure 4). The manufacture of these buttons developed into an extensive home industry involving large numbers of women, children and the elderly in the Dorset area of Britain throughout the eighteenth and first half of the nineteenth century (Hughes and Lester 1981:70). Little remains of these buttons for the archaeologist other than an occasional brass ring, and possibly ram's horn molds for the early "hightops", of which BC-122 from the Calvert House may be an example.

Many, if not most, of the buttons still present on eighteenth century clothing are embroidered or woven cloth buttons. While this may be because metal buttons were considered more valuable, and were therefore removed from old clothing, it certainly means that the use of cloth-covered buttons was widespread. These buttons were built or woven around discs of bone or wood, which were basically flat and had one central hole, which was a byproduct of production (Calver and Bolton 1950: 44, 53; South 1974: 195). These are not to be confused with the concave bone or wood button backs which have a rabbeted edge; the button backs originally had stamped brass faces which were crimped around the rabbeted edge. They were backs to metal buttons while the bone and wood molds were internal to the cloth buttons, providing a frame around which the buttons were sewn.

Cloth covered buttons were completed with colorful embroidery and various designs, one of the most common designs
of which was the basket weave, a design often copied on metal buttons. As with the other cloth buttons, these were normally made by poorly paid women and children. Made of cloth, the organic portion quickly disintegrated once discarded, with the result that the archaeologist is rarely left with anything except the bone, or rarely wood, button molds. Since the value was based on the quality of weaving or embroidery, it is impossible for the archaeologist to know whether a given button mold was originally associated with an expensive or an inexpensive garment. These buttons were used throughout the eighteenth century, especially after 1727, peaking in popularity in mid century, and waning from popularity at the end of the century.

DIDEROT PLATES

Having examined the manufacturing techniques for eighteenth century buttons, it would be useful to summarize the contemporary documents that describe these techniques. The best available source is the Encyclopedie, edited by Denis Diderot in the mid-eighteenth century. This monumental French work illustrated and described many scientific and technological realities, as well as the production of numerous eighteenth century objects. In the second volume there are six plates that deal with button manufacture. Unfortunately, the eighteenth century French text throughout most of the Encyclopedie, including the button plates, is obscure, with many of the technological terms very difficult to translate; very little of the text has been translated into English. Therefore, the plates have been reproduced, but the original text has not.
These plates will be briefly discussed, although the function of some of the tools and illustrated activities is unclear at this time.

The first plate (Plate 2) illustrates the production of wood molds from which buttons were later made. In this plate Figures 1 and 2 are two men cutting a rather thin section from a block of wood. Figures 3 and 4 are cutting the wood molds with a bit turned by a bow. The final figures are using a high speed hand turned drillwheel, a more complex and efficient method to cut the wood molds. The rest of this plate, as well as the second plate (Plate 3), illustrate much of the equipment used for cutting these wood molds.

The third plate (Plate 4) illustrates the construction of stamped sheet metal buttons with bone or wood backs. An examination of the men and equipment in this plate illustrates the process for the construction of these buttons. The man in Figure 1 is punching discs of metal, probably brass, out of a sheet using the equipment in Figure 4. He then hand stamps these discs into plain or designed domes with the punch and dies in Figures 5 and 6. Figure 2 places these stamped faces in a shallow pan with sand, and fills the domes with a glue, probably resinous, filler. The pan is placed over a small heater, and a normally bone or wood button back, with a catgut shank, pressed onto the filler. Once the filler has cooled, partially securing the button backs, the button face edges are bent over the button backs, unifying them into single units. Finally, the completed buttons are polished by Figure 3, using the lathe and other equipment shown in Figures 12 through 16.
Plate 3. Maker of Button Molds, Diderot Button Plate 2.
Plate 4. Maker of Metal Buttons, Diderot Button Plate 3.
Stamped brass buttons with bone or wood backs were handmade in the mid-eighteenth century, as illustrated in this plate. This was a rather labor-intensive process. While forming beautiful buttons, the buttons would have been relatively expensive, and comparatively few made. The invention of the stamping machine in 1769 made the process much easier and faster, and by 1770 large numbers of these stamped buttons were being produced. Unfortunately, it is difficult and often impossible to differentiate between these earlier hand-stamped and the later machine-stamped buttons. There are two clues to help distinguish the earlier from the later buttons. An analogy can be drawn between these buttons and the production of coinage. Before the introduction of the stamping machine coins were normally hand stamped. The resultant coins were normally slightly irregular. However, coins struck in a stamping machine are very regular, produced with exacting machine precision. Likewise, hand stamped sheet brass buttons are apt to be slightly irregular, unlike those produced with the post-1769 stamping machines. Another clue to the age of stamped buttons is the fact that there were relatively few of these buttons being produced before 1770. If the artifacts from a given archaeological context all seem to pre-date 1770, and few of these stamped buttons are present, it is likely the buttons pre-date 1770, and are therefore hand stamped. Also, those from a context which is known to predate 1770 can comfortably be considered hand stamped. For example, a number of these buttons were located at Fort Ligoneir, Pennsylvania, which was occupied from 1758 until 1766 (Grimm 1970: 59, 61, 67, 68; Types 13 and
these buttons were doubtless hand stamped.

The last three of Diderot's button plates (Plates 5, 6, 7) illustrate the production of cloth, hair, and metal thread covered buttons. In the fourth plate (Plate 5) Figure 1 is covering cloth buttons with silk and decorations, while Figure 2 is steaming the newly covered buttons to shrink and thereby tighten them. Figure 3 in this plate is braiding something, possibly a bodice, which is not directly related to the buttons. The fourth figure is placing the "wick", probably a thread shank, on the button backs. The various equipment used in these processes is shown at the bottom.

The fifth plate (Plate 6) illustrates different types of machinery used to ply several threads together to form cords. It is likely the threads were often of different materials or metals, so the resulting cords would be more decorative. These cords would then be sewn over the cloth buttons or used for other decorative purposes.

The final plate (Plate 7) illustrates the covered buttons themselves. Figure A is a button mold, while the remaining fifteen buttons are completed. A number of these buttons were made of silk (Figures 1-4), but the majority of those illustrated by Diderot were covered with thin tapes of gold (Figures B-E, 5-10). The tiny gold tapes often looked like Figures 11-16 (greatly enlarged) and were woven around the button molds. For example, one illustrated button (Figure 9) was woven from the tape shown in Figure 16. Other buttons used a combination of these, and doubtless many other types of gold, and probably silver, tape. Unfortunately for archaeologists,
Plate 5. Maker of Embroidered Buttons, Diderot Button Plate 4.
Plate 6. Maker of Embroidered Buttons, Diderot Button Plate 5.
the completed cloth and thread buttons rarely survive in the ground; only the bone discs are normally recovered.

In summary, the button plates in Diderot's Encyclopédie provide a valuable synopsis of metal and cloth button production, other than cast buttons, during the mid-eighteenth century. These plates enable one to visualize the complexity of eighteenth century button production in this modern age of mass production and automation.
CHAPTER 5
CONCLUSIONS

Discussion in the preceding chapters focused on the functions and manufacturing techniques of eighteenth century buttons. In chapter one I showed that in the eighteenth century buttons were primarily associated with articles of men's clothing, upon which they were profusely used. These garments primarily included great coats, coats, frocks, waistcoats, breeches and trousers, jackets, shirts, and banyans. A variety of different types of buttons were used on various garments, and they can normally be distinguished from each other.

Merchants' records were examined in the second chapter to determine how they described their buttons and the relationship of these descriptions to the types of clothing upon which they were worn. These records provided adequate descriptions of buttons and their functions, verifying that specific button types were normally associated with specific types of clothing. This information provided the framework through which buttons from the archaeological record could be attributed to types of clothing.

The third chapter examined buttons recovered from archaeological sites, and sought to determine the types of clothing with which they were associated. Published button assemblages were examined from Fort Michilimackinac and Fort
Ligonier (Stone 1974 and Grimm 1970), as well as the button assemblages from the Calvert House and Reynolds Tavern excavations in Annapolis. Problems of differential deposition and preservation were examined, and it was concluded that the buttons present in the documentary record would vary considerably from those present in the archaeological record. This was because of differing discard and loss rates for the different button types, and the normally rapid deterioration of most organic buttons. All the same, the functions of most buttons recovered from the archaeological record can be determined. This is primarily based on the size of the buttons as well as the construction techniques used for their manufacture.

Finally, the basic manufacturing techniques used for eighteenth century buttons were determined. The primary modes of button construction for each major type of material utilized were discussed, and probable dates for these techniques, derived from the archaeological and documentary records, were presented. This was followed by a brief discussion of the button plates from Diderot's Encyclopédie, the primary source illustrating button production.

All of this data can best be summarized and put into a compact, usable whole by placing the various button types into a typological system. This will enable one to determine the probable function, date range for manufacture, and construction technique for recovered eighteenth century buttons, and to compare these buttons with those from other sites. That typology is presented on Table 4. The purpose of this typology
Table 4. Typology of Eighteenth Century Buttons.

Type 1  One piece cast buttons. The face and shank are cast as one unit, and the eye hole completed after casting. These buttons normally have a seam mold on the back passing through the shank.

1A1 Cast pewter, with the eye directly attached to the button back.

1A2 Cast pewter, with the eye separated from the back by a short stem.

1B1 Cast brass, with the eye a hand-drilled wedge-shaped protrusion on the button back.

Type 2  Two piece cast buttons, with an eyed wire shank cast into the single element button face.

2A1 Cast pewter, with a mold seam across the button back.

2A2 Cast pewter, with the button back spun to remove casting irregularities.

2B1 Cast brass, with a mold seam across the button back.

2B2 Cast brass, with the button back spun to remove casting irregularities.

2B3 Cast brass, normally with a convex face and concave back. There is no mold seam, and the casting irregularities have not been removed. The back has an "orange peel" appearance.

2C1 Cast tombac, with the button back spun to remove casting irregularities. These buttons often have hand-engraved decoration.
Type 3  The face and back are cast separately, and then brazed together. These buttons often have two holes in the back which allowed heated gasses to escape when the halves were joined together.

3A1 Pewter face and back, with the eye cast as part of the button back.

3A2 Pewter face and back, with an eyed wire shank cast into the button back.

3B1 Brass face and back, with the eye cast as part of the button back and the hole hand-drilled

3B2 Brass face and back, with an eyed wire shank cast into the button back.

3B3 Brass face and back, with a wire eye soldered or brazed to the button back.

3C1 Brass face, pewter back, with an eyed wire shank cast into the button back.

Type 4  Hollow cast button, with two holes in the button back from which heated gasses could escape during manufacture. The face and back are a single component with a hollow center, the separate wire shank is cast into the button back.

4A1 Pewter, cast around an eyed wire shank.

4B1 Brass, cast around an eyed wire shank.

4B2 Brass, cast around two crossed wires, normally brass, which form the shank.

Type 5  Metal face, crimped over a bone, wood, or thin sheet metal back. The button back has a recessed edge to receive the crimped edge of the face.

5A1 Cast brass face, crimped over a bone or wood button back. The back has four or five holes for a catgut shank. This variety often may be indistinguishable from those with stamped faces, except when the button back is missing.
5B1 Stamped sheet brass face, crimped over a bone or wood button back. The back has four or five holes for a catgut shank.

5B2 Stamped sheet brass face, crimped over a bone or wood button back. The back has four or five holes with a crossed wire shank.

5B3 Stamped sheet brass face, crimped over a bone or wood button back. The back has a single central hole with an eyed wire shank.

5B4 Stamped sheet brass face, crimped over a thin sheet metal back. The back has four holes with a crossed wire shank.

Type 6 Brass disc, stamped from a brass sheet, with a soldered eyed wire "alpha" shank.

6A1 Flat brass disc, with no stamped backmark.

6A2 Convex brass disc, with no stamped backmark.

6B1 Flat brass disc, with a complex stamped backmark. These buttons often have a "split anvil" mark across the back.

6B2 Convex brass disc, with a complex stamped backmark. These buttons often have a "split anvil" mark across the back.

Type 7 Cast metal button back crimped over a setting, normally paste or enameled brass. These are normally sleeve buttons, although a few may be jacket buttons. Many are oval.

7A1 Pewter button back cast with a shank.

7A2 Brass button back cast with a wedge-shaped, hand-drilled shank.

Type 8 Stamped metal button back crimped over a paste setting. These are normally sleeve buttons.

8A1 Stamped brass back with tines to secure the paste setting, with a wire eye soldered to the button back.
Type 9  Button ring or mold for thread covered button. These provide the central supporting structure around which the cloth or thread buttons were sewn. These buttons are rarely found with the thread or cloth covering intact.

9A1  Bone button mold with a central hole, a byproduct of production.

9A2  Wood button mold with a central hole, a byproduct of production.

9B1  Brass ring, with the ends soldered together, around which thread was sewn. This thread was occasionally metal.

9C1  Small turned horn ring, bead-like, around which thread was sewn to form a conical button.

Type 10  Button with a swaged-in-turret shank. These buttons are normally shell, although wood and bone examples may exist.

10A1  Shell button.

Type 11  Utilitarian bone, wood, and shell buttons. These simple lathe-turned buttons were used on a variety of inexpensive clothing.

11A1  Bone button, with four or five holes.

11A2  Bone button, with two holes, and an occasional third central hole, a byproduct of production.

11A3  Bone button, with three off-centered holes. This is an unusual variation.

11B1  Wood button, with four or five holes.

11B2  Wood button, with two holes, and an occasional third central hole, a byproduct of production.

11C1  Shell button, with four holes.

11C2  Shell button, with two holes.
is to provide a simple classification system for excavated buttons. It is a general system that disregards particularistic decorations, and concentrates on basic construction techniques. Each type represents a basic manufacturing technique, which is further divided into more specific varieties. While it does not categorize every possible variety of eighteenth century button, it does classify the vast majority, and provides a framework to which remaining varieties can be added.

Probable button functions can be added to the typological designations. These functions, which are discussed in Chapter 3, include coat, waistcoat, jacket, shirt, and sleeve buttons, as well as large and small utilitarian buttons. Most of the metal buttons as well as the bone or wood molds for cloth covered buttons were coat and waistcoat buttons. Coat buttons were used on great coats, coats, frocks, and some of them on breeches and trousers. Waistcoat buttons were used on waistcoats, breeches and trousers, and probably on banyans and some jackets. The difference between them is that coat buttons are larger than waistcoat buttons. The size range for each of these types is shown on Table 5.

Jacket buttons are difficult to distinguish from other types. In Allason's records, glass and glass buttons in pewter cups were often jacket buttons, as well as some probably small thread covered buttons. In addition, since jackets were basically sleeved waistcoats, waistcoat buttons were doubtless also used on them.

Shirt buttons were normally small thread covered buttons, which are rarely recovered archaeologically except as small
Button Function Designations

c = Coat button
w = Waistcoat button
j = Jacket button
sh = Shirt button
sl = Sleeve button
lg = Large utilitarian button
sm = Small utilitarian button

Button Function Size Ranges

Table 5. Button Function Designations and Size Ranges.
brass button rings. During the late eighteenth century it is probable that small utilitarian buttons were also used on shirts.

Sleeve buttons were almost always metal, fancy, and waistcoat size. When complete, they include two buttons connected with a small metal loop. These buttons are typically octagonal or oval, and often have glass or paste settings. While many are elaborately decorated, without the connecting loop some cannot be distinguished from waistcoat buttons.

Utilitarian buttons served a variety of functions on late eighteenth and nineteenth century clothing, including use on shirts, breeches and trousers, as well as other typically inexpensive clothing. These buttons are turned bone or wood, and occasionally shell, and have between two and five holes. They were manufactured in two size ranges, as shown on Table 4, a practice that continued through the nineteenth century.

Table 5 provides a list of designations to denote the probable functions of the buttons. These designations are added to the end of the typological description for the Calvert House buttons analyzed in the appendix to indicate the functions discussed above. For example, button Type 1A1 c is a coat button constructed according to the description for Type 1A1.

The probable date range for the manufacture of the various button types is presented on Table 6. Once a button has been placed into the typological system, use of the table will provide an approximate date range for its manufacture. For many of the types the given dates are necessarily broad since firm beginning or ending dates cannot be determined for many of the
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Sheffield Plate (1742) ..................................................
Tombac (1760) ..............................................................
Military Designations (1767) ............................................
Machine-Stamped Buttons (1770) ...........................................
Sweged-in-Turret Shank (1787) ............................................
Complex Stamped Backmarks (c. 1795) ...................................
"Omega" Type Wire Shanks (c. 1800) ....................................
Pressed Glass/Porcelain Buttons (1840) .................................

Table 6. Date Ranges for Eighteenth Century Buttons.
manufacturing techniques. At the bottom of the table are a number of key *termini post quem* dates for construction techniques, most of which are applicable to several types of buttons. Since many of the construction techniques were used generation to generation, the style of decoration on specific buttons is often more useful for dating the buttons. Further analysis of large button assemblages from tightly dated sites could better define these dates.

The relative economic values of the buttons in their eighteenth century context can only be superficially addressed. The merchants records, while supplying considerable information about the variety of buttons available, did not provide adequate data to compare specific types. For example, with but few exceptions, the pewter buttons were not differentiated from the copper alloy buttons. In addition, no emphasis was placed on construction techniques, and little on decoration. Therefore, while a general economic comparison of broad button categories is possible, the available documentary record does not allow for a detailed economic analysis.

The values of most of the buttons in Allason's 1764-1772 inventories are compared on Table 7. The values listed are for a gross of buttons. This table excludes two categories of buttons. The silver buttons as well as those made from gold and silver twists were excluded because of the minimal number listed, their considerable value, and their extreme scarcity at archaeological sites. In addition, the shell buttons were not included because very few were listed in Allason's inventories, they were given conflicting functional descriptions, and the
Note: Horizontal Line Denotes Average Price

Table 7. Economic Comparison of Buttons, William Allason Inventories, 1764-1772.
price variation between these few buttons was disproportionate to the number of buttons in the inventories. The table compares the values of the vast majority of Allason's buttons, and provides some useful economic information.

Metal, cloth covered, and horn coat and waistcoat buttons were included in Allason's inventories. In this discussion of these buttons, values for only the coat buttons will be given. In each case the coat buttons cost twice as much as matching waistcoat buttons. Therefore, the value relationship between the different categories of waistcoat buttons is virtually identical as for the coat buttons. By examining the price ranges and averages of these buttons, a few conclusions can be proposed. While the horn coat buttons ranged from 2/6 to 12/-, with the cloth coat buttons from only 1/10 to 5/-, the horn coat buttons averaged only 3/8 compared to the 4/8 average for the cloth buttons. The metal coat buttons, including both copper alloy and pewter, had a much wider range of value, from 1/11 to 18/8, with the average gross 7/1. This was half again as much as the average cloth coat buttons, and nearly twice the average horn coat buttons. The difference in values both within and between these groups is doubtless based on the cost of material and workmanship, as well as the amount and quality of decoration on the buttons. For example, within the metal button category, the copper alloy buttons were generally more expensive than the pewter buttons, since pewter was both a less valuable metal and easier to work than copper alloys. In addition, gilded buttons were normally more expensive than comparable tinned or silvered buttons. Unlike the metal buttons, the exterior cloth and
thread decorations on cloth buttons is usually missing, leaving only the plain internal bone or rarely wood discs.

Three more functional categories remain in Allason's inventories. The thread shirt and jacket buttons cost 2/- per gross; with the exception of the small horn buttons, these were the cheapest buttons, on the average, sold by Allason. Most of the glass and glass in pewter cups jacket buttons were much more expensive than the thread jacket buttons. While some were as inexpensive as 2/- a gross, others were four times more expensive, and the average was 4/7, well over twice the cost of the thread ones. Finally, with the exception of those made of silver, the sleeve buttons were fairly inexpensive, from 2/- to 6/4, averaging only 3/5 a gross. Since sleeve buttons are normally nicely decorated metal, and their construction required the additional labor of constructing and attaching a connecting ring, it is possible that Allason's inventory was somewhat skewed toward simple sleeve buttons with minimal decoration. As with the coat and waistcoat buttons, the value of all these buttons is based on the cost of manufacture as well as the quality and quantity of decoration.

There are several limitations with archaeological button assemblages. First, buttons were primarily worn on men's clothing; eighteenth century buttons provide little information about women or their clothing. Second, only a skewed cross section of buttons worn at a site were deposited into the archaeological record. Buttons were normally lost as opposed to discarded, and those lost were usually from everyday clothing instead of fancy, expensive clothes. Third, organic buttons
often do not survive in the archaeological record. Finally, several button construction techniques were used from generation to generation, making it difficult to date many buttons except through their archaeological context.

In summary, despite their limitations, buttons can provide valuable additional information about an archaeological site. An examination of the construction techniques enables the buttons to be dated as well as compared from site to site. Button sizes and their forms reflect their functions. The material from which they were made and their decoration suggest the relative values of the buttons, a factor which may be useful in studying the expenditure patterns of a site. Further study of archaeological button assemblages should increasingly refine this information and contribute to its usefulness for historical archaeologists.
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APPENDIX

CALVERT HOUSE BUTTONS

In the preceeding chapters structural and functional characteristics of eighteenth century buttons have been examined, and the information applied to some buttons in the archaeological record. In this appendix the buttons excavated from the Calvert House site in Annapolis, Maryland, will be discussed. A brief historical overview of the site will enable the buttons to be placed in their historical context. The buttons from a few tightly dated proveniences will be compared to the average button assemblage listed in the 1764-1772 Allason inventories. This comparison will provide some tangible evidence about how the archaeological record differs from the documentary record. Finally, the individual buttons in the assembage will be described, illustrated, and placed into the typological system developed in the conclusion.

CALVERT HOUSE SITE HISTORY

The Calvert House site is located on State Circle in the historic district of Annapolis, Maryland. It was first occupied in the late 1680s or early 1690s before Governor Nicholson replanned the town, incorporating State Circle into the design. While little is known about the site during these early years, in the late 1690s the lot was purchased by a William Taylard. In 1718 the lot, which included a dwelling house, was sold by
his widow to Philamon Hemsley. Hemsley and his wife, who was a cousin of Governor John Seymour, were wealthy enough to build a brick home on the lot in 1718/1719. Following Hemley's death, the lot, with its brick house, was purchased by Governor Charles Calvert in 1727, beginning the Calvert family's occupation of the site. Through the rest of the century the home was occupied by various members of the Calvert family, including (c. 1727-1732) Edward Henry Calvert, the younger son of Lord Baltimore, and probably Governor Benedict Leonard Calvert (Yentsch 1988: 18-19).

Between the 1720s and the 1780s the Calverts made numerous changes to the home and lot. The house was situated on a hilltop, with the terrain gently sloping downward away from the Circle. This hillside was terraced and landscaped, forming an ornamental garden and yard befitting the wealthy governor and his family. In addition, the Calverts built an orangery, with a hypocaust to heat it during the winter, immediately southeast of the house. This orangery, along with the terraced ornamental gardens, was a visual reminder for all to see of the wealth and social status of the Calvert family (Yentsch 1988: 20-22).

In the years prior to the Revolutionary War the Calverts began changing their home and property. As early as the late 1760s the orangery was razed. However, the war stymied their efforts, as the Calverts spent most of the war away from Annapolis. During part of this time the home and property was used as a barracks for Continental Army officers. Several military buttons from this occupation were recovered. After the war, younger members of the Calvert family re-occupied their
Annapolis home and continued the changes started earlier. As construction continued, the base of the hypocaust and its surrounding yard was filled with soil from the footing trenches for the new additions. By c. 1786, the orangery remains and yard were sealed beneath the floorboards of a brick addition to the home. The kitchen well was filled, and the brick kitchen courtyard covered with a thick layer of refuse. The yard was leveled, and the landscaped terraces removed. The orientation of the house was changed 90 degrees, and the house made symmetrical to its new front (Yentsch 1988: 25-26; personal communication). This new layout existed, with little substantial modification, into the twentieth century.

The late eighteenth century changes at the Calvert House produced three large, contemporaneous archaeological deposits. The approximate fill dates for each of these deposits was based on historical documentation in conjunction with the stylistic motifs on the ceramics, the dates of production for the military buttons and coins, and the presence of small quantities of pearlware. The first large deposit was found in the 27 foot deep kitchen well shaft, Feature 121. The second deposit (Feature 112) lay over the brick courtyard, was 1.5-3.5 feet thick, and capped with a half to one foot thick layer of brick rubble. The well was located in the courtyard; both were initially filled simultaneously by c. 1786.

The filling beneath the addition crawlspace was somewhat more prolonged, occurring between c. 1765 and 1784, with some of the fill coming from the same source as the well and courtyard fill. It consists of three interrelated deposits. Feature 5 is
the rubble fill within the hypocaust foundation, and was probably completed by c. 1780. Surrounding the hypocaust base was Feature 5B, a rubble deposit contemporaneous with Feature 5, and formed partially from earth dug for footing trenches. The yard surface was then leveled. The top three inches of the fill layer was arbitrarily designated Feature 5A; it contains some material dating to c. 1786 when the addition was altered. All three strata were covered with a brick addition in the late 1760s, and the area converted into a crawlspace. While no more soil was added to these deposits, over the next 150 or more years hundreds of small artifacts, including many buttons, continued accumulating in Feature 5A, falling through the floorboards onto the powdery surface (Yentsch n.d.: 6; 1988: personal communication). In the following section the buttons from these major deposits, with the exception of the mixed Feature 5A, will be compared to each other and the buttons from the Allason inventories.

BUTTONS FROM THE CALVERT HOUSE AND ALLASON INVENTORIES

One of the values of historical archaeology is the ability to compare the documentary record to the archaeological record. Where the two agree, both are reinforced. When they differ, the differences themselves allow more to be learned about both sources. In this section the buttons recovered from four Calvert House deposits will be compared with the button assemblage described in Allason's inventories.

The Calvert House deposits examined were located in three diverse microenvironmental settings. Those recovered from the lower well (Feature 121) were constantly wet from the time of
deposition until excavation. The Feature 112 buttons from the fill overlying the brick courtyard were in a typical outdoor environment, passing through numerous wet-dry cycles. Features 5 and 5B were both under a brick addition to the house, and were therefore kept dry. These deposits were formed within a short period of time during house construction. In addition, the refuse source for most of Features 112 and 121, and at least some of Features 5 and 5B, was the same. The probable source was the Calvert household. It would be expected, therefore, that the basic button assemblages, when originally deposited, would be similar, and major differences that are currently present could largely be attributed to the different microenvironmental settings.

The buttons analyzed do not constitute a scientifically reliable statistical sample. Only 13 were from the well, 18 each from Features 5 and 112, and 22, plus four intrusives, from Feature 5B. However, these buttons do provide a strong indication of the types of buttons originally present, and the effects of the environment on them.

The buttons from each of these features were placed in the same descriptive categories used by Allason. The utilitarian buttons (bone, wood, shell), were not initially included, since they were not listed in the Allason inventories. The percentage of the button types for each feature and a combination of the four features was compared to the average percentages from the 1764-1772 Allason inventories (Table 8). From this comparison a number of tentative conclusions can be reached.

Allason listed a far greater percentage of cloth buttons in
Table 8. Comparison of Calvert House Buttons, less utilitarian, to William Allason Inventories.

<table>
<thead>
<tr>
<th>Key</th>
<th>M = Metal Buttons</th>
<th>C = Cloth Covered Buttons</th>
<th>Sh = Thread Covered Shirt Buttons</th>
<th>S1 = Sleeve Buttons</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Feature 5</th>
<th>Feature 5B</th>
<th>Feature 112</th>
<th>Feature 121</th>
<th>Features Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>[Graph]</td>
<td>[Graph]</td>
<td>[Graph]</td>
<td>[Graph]</td>
<td>[Graph]</td>
</tr>
<tr>
<td>C</td>
<td>[Graph]</td>
<td>[Graph]</td>
<td>[Graph]</td>
<td>[Graph]</td>
<td>[Graph]</td>
</tr>
<tr>
<td>Sh</td>
<td>[Graph]</td>
<td>[Graph]</td>
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</tr>
<tr>
<td>S1</td>
<td>[Graph]</td>
<td>[Graph]</td>
<td>[Graph]</td>
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<td>[Graph]</td>
</tr>
</tbody>
</table>

Allason Inventories 1764 – 1772
n = 1467 gross

Feature 5
n = 15

Feature 5B
n = 14

Feature 112
n = 17

Feature 121
n = 12

Features Combined
n = 58
his inventories than were recovered from these features. While over half of Allason's buttons were cloth covered, only 22 percent of those from the examined Calvert House deposits were bone discs for cloth covered buttons. Even more importantly, none was recovered from Feature 112, the refuse deposit in the alternating wet-dry environment (i.e. 'open' context characteristic of most archaeological deposits). Since the refuse in Features 112 and 121 was largely from the same source, as evidenced by ceramic crossmends between the two, it is likely that Feature 112 originally included cloth covered buttons, possibly in similar quantities to Feature 121. That these buttons are missing is a result of the wet-dry microenvironmental system that promotes the deterioration of organics, including bone.

Between 25% and 43% of the buttons recovered from the dry Features 5 and 5B, as well as the wet Feature 121, were discs for cloth covered buttons. Since wet and dry microenvironments promote bone and wood preservation, these figures may be a more accurate indication of the percentages of cloth covered buttons lost or discarded at the Calvert House. Note that in the yard rubble, Feature 5B, the recovery rate was similar to the percentages shown for Allason's inventories.

The considerable difference between the percentage described by Allason and the overall percentage recovered from the Calvert House is at least partially a reflection of differing rates of deterioration between pewter and brass on the one hand, and bone and wood on the other. Additional factors may include the Revolutionary War military use of the house,
since buttons used by the military were almost always metal, and the site was known to have served as a barracks for officers in 1784/1785. Several buttons with military designations were recovered from the deposits, and others of the undecorated metal buttons may have been worn by soldiers. Finally, metal buttons, which were generally more expensive than cloth covered buttons, may have been more common at the site, which was occupied by a wealthy, elite family, than in the general population, or their loss/discard rate may have been higher than that of cloth covered buttons.

A much higher percentage of metal coat and waistcoat buttons were recovered from the Calvert House deposits than were recorded by Allason. This is especially true for Feature 112, where approximately 90% were metal coat or waistcoat buttons. This is true for a number of reasons described in the previous paragraph, with the most important the excellent preservation of metal compared to bone and wood.

Although they were used in the 1760s and 1770s, Allason did not list any bone, wood, or shell utilitarian buttons in his inventories. However, as shown on Table 9, over 18% of the total Calvert House buttons studied were these simple, inexpensive buttons. Their absence in the documentary record may indicate Allason did not stock these utilitarian buttons, or they were routinely sold out prior to when the inventories were regularly compiled. Some may have been homemade. While while known to have been used during the late eighteenth century, they are not a significant element in many archaeological button assemblages. Because of problems with preservation, as well as
Table 9. Comparison of Calvert House Buttons, including utilitarian, to William Allason Inventories.
differential loss and discard rates, the extent of their use remains unclear.

The percentage of shirt and sleeve buttons recovered from the archaeological record was similar to that in Allason's inventories, with no more than half a percentage between them. While not unexpected for the sleeve buttons, which were made of metal and glass, the percentage of recovered thread shirt buttons was uncommonly high compared to many archaeological sites. Many of these buttons were made totally of thread and cotton, which in most cases has deteriorated. Those with internal support normally have tiny horn and possibly bone molds, both of which are prone to deterioration, or small brass rings, which may mineralize. While sleeve buttons would be expected at large eighteenth century sites, thread shirt and jacket buttons often have not survived.

Some of the buttons described in Allason's inventories were not recovered at the Calvert House. These include silver buttons, those covered with gold or silver twists, brass buttons inlaid with steel, horn, and shell buttons used on coats, waistcoats, and possibly jackets. Combined, these buttons accounted for only about 3.5% of Allason's buttons. The small, rather stable quantity stocked by Allason may indicate they were not widely used. In addition, the horn, shell, and possibly the gold and silver twist buttons were prone to deterioration. Finally, some of these buttons, such as the silver ones, were rather expensive, and considerable care may have been taken to prevent their loss.
DESCRIPTIONS OF THE CALVERT HOUSE BUTTONS

In this section all of the buttons recovered at the Calvert House will be briefly described below. The eighteenth century buttons have been placed in the typological system developed in the conclusion. In addition, each has been given a functional designation, which is included next to the button type. Probable manufacturing dates as well as context dates are presented for most, and the faces of most have been drawn. The post-eighteenth century buttons have been described in broad categories only, with no more than one button drawn to illustrate each of these categories.
Buttons from the Calvert House excavations, Annapolis.

Type 1  One piece cast buttons. The face and shank are cast as one unit, and the eye hole completed after casting. These buttons normally have a seam mold on the back passing through the shank.

1A1  Cast pewter, with the eye directly attached to the button back.

1A2  Cast pewter, with the eye separated from the back by a short stem.

1B1  Cast brass, with the eye a hand-drilled wedge-shaped protrusion on the button back.

Type 1A w

BC-1  AP28-985  F.113
Cast pewter waistcoat button, with shank missing. This button is in poor condition, with no visible decoration or mold seam mark.
Form Date:  pre-1810  Context Date:  19th c.

BC-2  AP28-671  F.36
Remains of a cast pewter button, probably a waistcoat button. The shank is missing, and there is no evidence of decoration or a mold seam mark. The original shape and size of this button are unknown.
Form Date:  pre-1810  Context Date:  c. 1730

Type 1A1 c

BC-3  AP28-482  F.5
Cast pewter coat button with the remains of a pewter shank. The face has an eight-armed floral motif, while the back has a mold seam mark.
Form Date:  pre-1810  Context Date:  c. 1765-1780

BC-4  AP28-240  F.5B
Cast pewter coat button with the remains of a pewter shank. The face decoration is indistinct, and the back has a mold seam mark.
Form Date:  pre-1810  Context Date:  c. 1772-1784
Cast pewter coat button with the remains of a pewter shank. The face depicts a shield bearing the arms of the Virginia colony, with a crown on top. This shield and crown motif is virtually identical to that on the obverse of the 1773 Virginia halfpenny. The back has a mold seam mark. This button may have been used by colonial Virginian troops during the early 1770s. Much of the detail is indistinct.

Form Date: pre-1810  Context Date: c. 1784

Cast pewter waistcoat button with its pewter shank missing, and no evidence of a mold seam mark. The face depicts an intertwined "USA" surrounded by a reeded border, part of which is missing. This button is a general service Continental Army waistcoat button, and was used during the Revolutionary War. Several similar variants of this button form are labeled GI 2 by Albert (1976: 9-10).

Form Date: pre-1810  Context Date: c. 1772-1784

Cast pewter waistcoat button with its attached pewter shank, and the remains of a mold seam mark. The face depicts an intertwined "USA" with an "N" on top and a "C" below. The original reeded border is indistinct. This button is a general service Continental Army button associated with North Carolina troops. A similar coat button was labeled by Albert (1976: 9-10) as GI 2 NC.

Form Date: pre-1810  Context Date: c. 1765-1780

Cast pewter waistcoat button with its pewter shank missing and no mold seam mark visible. The face decoration is indistinct. This button is likely a waistcoat button, but its small size may indicate it is actually a sleeve button.

Form Date: pre-1810  Context Date: c. 1784
Type 1A1 s1

BC-9        AP28-1650 F.186
Octagonal cast high-quality pewter sleeve button with a hand-drilled shank. The flat face is covered with a complex geometric motif, while the slightly recessed back is plain. It is missing the connecting link and the matched button.
Form Date: pre-1810  Context Date: c. 1784

Type 1A2 c

BC-10        AP28-1650 F.186
Cast pewter coat button, with the probable eyed pewter shank missing. The face has the designation "4/1 C/M". This button is a Revolutionary War button for the 4th Maryland Regiment, and probably dates to c. 1780. It is unclear what the "I C" or "J C" denotes. This button was not recorded by Albert (1976).
Form Date: c. 1767-1783  Context Date: c. 1784

BC-11        AP28-1121 F.121
Cast pewter coat button, with eyed pewter shank and mold seam mark. The face is undecorated, and is incomplete.
Form Date: c. 1730-1810  Context Date: c. 1784

BC-12        AP28-604
Cast pewter coat button, with the eyed pewter shank missing, and no mold seam visible. This button is in poor condition, and any face decoration is indistinguishable.
Form Date: c. 1730-1810

Type 1A2 w

BC-13        AP28-564 F.19
Cast pewter waistcoat button fragment, with an eyed pewter shank and mold seam mark. The fragmentary face is decorated with a central raised dot and a circular edge ridge. While this button is probably a waistcoat button, it could be a very small coat button.
Form Date: c. 1730-1810  Context Date: c. 1760-1770

BC-14        AP28-1750 F.5A
Cast pewter waistcoat button, with the eyed pewter shank missing, and the back mold seam visible. The incomplete face has two concentric incised circles.
Form Date: c. 1730-1810  Context Date: post-1780
BC-15  AP28-343  F.5
Cast pewter waistcoat button, with an eyed shank and a back mold seam mark. The face has the designation "MM/3". It is a Revolutionary War button used by the 3rd Company of the Maryland Matrosses. This button is labeled MD 3D by Albert (1976: 157).
Form Date: c. 1767-1783  Context Date: c. 1765-1780

BC-16  AP28-249  F.5
Cast pewter waistcoat button, with the eyed pewter shank missing, and the back mold seam visible. The incomplete face is undecorated.
Form Date: c. 1730-1810  Context Date: c. 1765-1780

BC-17  AP28-249  F.5
Cast pewter waistcoat button with the eyed pewter shank missing, and the back mold seam visible. The incomplete face is undecorated. This button was from the same provenience as BC-15, and is virtually identical.
Form Date: c. 1730-1810  Context Date: c. 1765-1780

BC-18  AP28-564  F.19
Cast pewter waistcoat button, with an eyed shank and a back seam mark. This complete button does not have any face decoration.
Form Date: c. 1730-1810  Context Date: c. 1760-1770

Type 1A2 w or s1

BC-19  AP28-1540A  F.121
Cast high-quality pewter button, with the eyed pewter shank missing, and the back seam mark visible. The face of this button is decorated with a floral motif surrounded by concentric circles. While probably a waistcoat button, the elaborate decoration on this well-made button indicates it could be a sleeve button.
Form Date: c. 1730-1810  Context Date: c. 1784

Type 1B1 w

BC-20  AP28-657  F.42
Cast brass waistcoat button with an incomplete hand-drilled shank. The cracked convex face was cast with a basketweave design, while the concave back does not have a seam mark.
Form Date: pre-1810  Context Date: pre-1780
Type 2  Two piece cast buttons, with an eyed wire shank cast into the single element button face.

2A1  Cast pewter, with a mold seam across the button back.

2A2  Cast pewter, with the button back spun to remove casting irregularities.

2B1  Cast brass, with a mold seam across the button back.

2B2  Cast brass, with the button back spun to remove casting irregularities.

2B3  Cast brass, normally with a convex face and concave back. There is no mold seam, and the casting irregularities have not been removed. The back has an "orange peal" appearance.

2C1  Cast tombac, with the button back spun to remove casting irregularities. These buttons often have hand-engraved decoration.

Type 2A1 c

BC-22  AP28-N.P.  F.5A
Pewter coat button cast around a brass wire shank, with a seam mark across the back. The face was cast with the designation "Y/W*R/I" surrounded by a border of raised dots. This is a Revolutionary War period military button. The designation has not been identified.
Form Date: c. 1767-1783  Context Date: post-1780

Type 2A2 w

BC-23  AP28-944  F.113
Pewter waistcoat button cast around a brass wire shank. The back of this plain button has been spun, and the button appears to have been tinned. It is made of a high-quality pewter.
Form Date: pre-1820  Context Date: 19th c.
BC-24  AP28-1231 Op.3
Pewter waistcoat button cast around a brass wire shank. The back of this plain button has been spun, and the button appears to have been tinned. It is made of a high-quality pewter.
Form Date: pre-1820  Context Date: 19th c.

BC-25  AP28-812 Op.3
Pewter waistcoat button cast around a brass wire shank. The back of this plain button has been spun.
Form Date: pre-1820  Context Date: 19th c.

BC-26  AP28-997 F.112
Pewter waistcoat button cast around a brass wire shank. The slightly concave back of this plain button has been spun, while the slightly convex face is undecorated. The button is tinned.
Form Date: pre-1820  Context Date: c. 1784

BC-27  AP28-830 Op.3
Pewter waistcoat button cast around a brass wire shank. The slightly concave back of this plain button has been spun, while the slightly convex face is undecorated.
Form Date: pre-1820  Context Date: 19th c.

BC-28  AP28-951 F.112
Pewter waistcoat button cast around a brass wire shank. The flat face is undecorated, and the back is spun.
Form Date: pre-1820  Context Date: c. 1784

BC-29  AP28-1105 F.112
Pewter waistcoat button originally cast around a wire shank, which is missing. The flat face is undecorated, and the back is spun. This button has a rather high copper content.
Form Date: pre-1820  Context Date: c. 1784

Type 2B2 c

BC-30  AP28-1174 F.121
Brass coat button cast around a brass wire shank. The flat face of this button is undecorated, while the back has been spun.
Form Date: pre-1830  Context Date: c. 1784
BC-31 AP28-473 F.5
Brass coat button cast around a brass wire shank. The flat face of this button is undecorated, while the back has been spun.
Form Date: pre-1830  Context Date: c. 1765-1780

BC-32 AP28-N.P. F.5A
Brass coat button cast around a wire shank, which is missing. The flat face of this button is undecorated, while the back has been spun.
Form Date: pre-1830  Context Date: post-1780

BC-33 AP28-928
Brass coat button cast around a brass wire shank. The slightly convex face is undecorated, while the slightly concave back has been spun.
Form Date: pre-1830

Type 2B2 w

BC-34 AP28-A F.5
Brass waistcoat button cast around a brass wire shank. The slightly convex face is undecorated, while the slightly concave back has been spun.
Form Date: pre-1830  Context Date: post-1780

BC-35 AP28-N.P. F.5B
Brass waistcoat button cast around a brass wire shank. The flat face is undecorated, while the back has been spun.
Form Date: pre-1830  Context Date: c. 1772-1784

BC-36 AP28-931 F.112
Brass waistcoat button cast around a brass wire shank. The slightly convex face is undecorated, while the concave back has been spun.
Form Date: pre-1830  Context Date: c. 1784

BC-37 AP28-937 F.112
Brass waistcoat button cast around a wire shank, which is now missing. The flat face is undecorated, while the back has been spun.
Form Date: pre-1830  Context Date: c. 1784

BC-38 AP28-932 F.112
Brass waistcoat button cast around a brass wire shank. The slightly convex face is undecorated, while the concave back has been spun.
Form Date: pre-1830  Context Date: c. 1784
BC-39  AP28-974  F.112
Brass waistcoat button cast around a wire shank, which is now missing. The flat face is undecorated, while the back has been spun.
Form Date: pre-1830  Context Date: c. 1784

BC-40  AP28-1212  F.112
Brass waistcoat button cast around a wire shank, which is now missing. The undecorated flat face is incomplete, and the back has been spun.
Form Date: pre-1830  Context Date: c. 1784

BC-41  AP28-343  F.5
Brass waistcoat button cast around an iron wire shank. The flat face is undecorated, while the back has been spun. This button is tinned.
Form Date: pre-1830  Context Date: c. 1765-1780

BC-42  AP28-970  F.112
Brass waistcoat button cast around an iron wire shank. The flat face is undecorated, while the back has been spun.
Form Date: pre-1830  Context Date: c. 1784

BC-43  AP28-14  F.5A
Brass waistcoat button cast around an iron wire shank, which is incomplete. The flat face is undecorated, while the back has been spun.
Form Date: pre-1830  Context Date: post-1780

BC-44  AP28-786  Op.3
Brass waistcoat button probably cast around a wire shank, which is missing. The convex face is undecorated, while the flat back has probably been spun.
Form Date: pre-1830  Context Date: 19th c.

Type 2B3 c

BC-45  AP28-951  F.112
Brass coat button cast around a wire shank, which is missing, and was probably made of iron. The convex face is decorated with two incised concentric circles, while the concave back retains the orange peel-like casting irregularities.
Form Date: c. 1720-1780  Context Date: c. 1784
Type 2C1 w

BC-46    AP28-1183
Tombac waistcoat button cast around a brass wire shank. The flat face is decorated with an engraved engine-turned floral motif, while the back has been spun.
Form Date: c. 1760-1800

Type 3  The face and back are cast separately, and then brazed together. These buttons often have two holes in the back which allowed heated gasses to escape when the halves were joined together.

3A1  Pewter face and back, with the eye cast as part of the button back.

3A2  Pewter face and back, with an eyed wire shank cast into the button back.

3B1  Brass face and back, with the eye cast as part of the button back and the hole hand-drilled

3B2  Brass face and back, with an eyed wire shank cast into the button back.

3B3  Brass face and back, with a wire eye soldered or brazed to the button back.

3C1  Brass face, pewter back, with an eyed wire shank cast into the button back.

Type 3A2 w or 3C1 w

BC-47    AP28-783 Op.3
Pewter waistcoat button back cast around a brass wire shank. The brass or pewter face, which was originally soldered to this button back, is missing. The back may have been spun.
Form Date: pre-1800  Context Date: 19th c.

BC-48    AP28-1012
Pewter waistcoat button back cast around a brass wire shank. The brass or pewter face, which was originally soldered to this button back, is missing. The back is incomplete and has been spun.
Form Date: pre-1800
Type 3B w or 3C w

BC-49 AP28-782 Op.3
Cast brass waistcoat button face which originally brazed or soldered to a brass or pewter button back. This convex face has a cast geometric design.
Form Date: pre-1800 Context Date: 19th c.

Type 5 Metal face, crimped over a bone, wood, or thin sheet metal back. The button back has a recessed edge to receive the crimped edge of the face.

5A1 Cast brass face, crimped over a bone or wood button back. The back has four or five holes for a catgut shank. This variety often may be indistinguishable from those with stamped faces, except when the button back is missing.

5B1 Stamped sheet brass face, crimped over a bone or wood button back. The back has four or five holes for a catgut shank.

5B2 Stamped sheet brass face, crimped over a bone or wood button back. The back has four or five holes with a crossed wire shank.

5B3 Stamped sheet brass face, crimped over a bone or wood button back. The back has a single central hole with an eyed wire shank.

5B4 Stamped sheet brass face, crimped over a thin sheet metal back. The back has four holes with a crossed wire shank.

Type 5B c

BC-50 AP28-969 F.110
Stamped sheet brass coat button face. The original bone, wood, or thin sheet metal face of this button is missing. The face is stamped with a floral and geometric motif, and is gilded. It is folded in half.
Form Date: c. 1750-1810 Context Date: c. 1784

BC-51 AP28-943 F.112
Stamped sheet brass coat button face. Only a small portion of the original wood button back remains. The incomplete face is stamped with a floral motif, and is gilded.
Form Date: c. 1750-1810 Context Date: c. 1784
BC-52  AP28-956  F.112
Stamped sheet brass coat button face. The original bone, wood, or thin sheet metal face of this button is missing. The incomplete face is stamped with a floral motif.
Form Date: c. 1750-1810  Context Date: c. 1784

Type 5B w

BC-53  AP28-1661  F.198
Stamped sheet brass waistcoat button face. The original bone, wood, or thin sheet metal face of this button is missing. The cracked face is stamped with a crossed geometric motif.
Form Date: c. 1750-1810  Context Date: c. 1785

BC-54  AP28-1118  F.112
Stamped sheet brass waistcoat button face. Only a small piece of the original bone button back remains. The incomplete face is undecorated.
Form Date: c. 1750-1810  Context Date: c. 1784

BC-55  AP28-N.P.  F.5A
Stamped sheet brass waistcoat button face. The original bone, wood, or thin sheet metal face of this button is missing. The flat face is stamped with geometric motif, and is gilded.
Form Date: c. 1750-1810  Context Date: post-1780

Type 5B1 c

BC-56  AP28-840  Op.3
Stamped sheet brass coat button with a four-holed bone back. The flat face of this button is plain, and traces of the original gilding remain. Catgut was originally sewn through the holes in the button back to form the shank.
Form Date: c. 1750-1810  Context Date: 19th c.

BC-57  AP28-838.1  Op.3
Four-holed bone button back originally covered by a stamped sheet metal face, which is missing. Only half of the button back remains.
Form Date: c. 1750-1810  Context Date: 19th c.
Type 5B1 w

BC-58 AP28-1564 F.121
Stamped sheet brass waistcoat button with a four-holed bone back. The flat face of this button is plain, and traces of the original gilding remain. Catgut was originally sewn through the holes in the button back to form the shank.
Form Date: c. 1750-1810  Context Date: c. 1784

BC-59 AP28-564 F.19
Stamped sheet brass waistcoat button with a four-holed bone back. The slightly domed face of this button is stamped with small flowers and converging lines. Traces of the original gilding remain.
Form Date: c. 1750-1810  Context Date: c. 1760-1770

BC-60 15 AP 28 F.5A
Stamped sheet brass waistcoat button with a four-holed bone back. The nearly flat face is undecorated.
Form Date: c. 1750-1810  Context Date: post-1780

BC-61 AP28-1067 F.121
Stamped sheet brass waistcoat button with a five-holed bone back. The incomplete flat face is decorated with a linear geometric design surrounded by a border of tiny leaves. Traces of the original gilding remain.
Form Date: c. 1750-1810  Context Date: c. 1784

BC-62 AP28-531 F.5B
Stamped sheet brass waistcoat button with a four-holed bone back. The incomplete flat face is stamped with an anchor and rope or chain, and traces of gilding remain. While a military, doubtless naval, button, its original association is unclear. This exact form is not illustrated by Albert, although similar buttons were worn by both the British and American navies during and soon after the Revolutionary War.
Form Date: c. 1770-1810  Context Date: c. 1772-1784

Type 5B3 c

BC-63 AP28-1118 F.112
Bone coat button back with mineralized fragments of its stamped sheet brass face. The incomplete button back has a central hole into which a wire shank was originally secured. The face appears to have featured an interlocking braid design.
Form Date: c. 1760-1810  Context Date: c. 1784
BC-64 AP28-974 F.112
Stamped sheet brass coat button with a one-holed bone back. Only half of this button survives, and its face features a floral motif and traces of gilding. The wire shank that originally extended through the bone back is missing.
Form Date: c. 1760-1810 Context Date: c. 1784

Type 6  Brass disc, stamped from a brass sheet, with a soldered eyed wire "alpha" shank.

6A1 Flat brass disc, with no stamped backmark.

6A2 Convex brass disc, with no stamped backmark.

6B1 Flat brass disc, with a complex stamped backmark. These buttons often have a "split anvil" mark across the back.

6B2 Convex brass disc, with a complex stamped backmark. These buttons often have a "split anvil" mark across the back.

Type 6A1 c

BC-65 AP28-N.P. F.5A
Flat brass disc coat button, with a brass wire "alpha" shank soldered to the back. The button face is undecorated.
Form Date: c. 1770-1810 Context Date: post-1780

BC-66 AP28 F.121
Flat brass disc coat button, with the wire "alpha" shank is missing. The button face is undecorated.
Form Date: c. 1770-1810 Context Date: c. 1784

BC-67 AP28-N.P. F.5A
Flat brass disc coat button, with a brass wire "alpha" shank soldered to the back. The button face is undecorated.
Form Date: c. 1770-1810 Context Date: post-1780

Type 6A1 w

BC-68 AP28-827 Op.3
Flat brass disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The button face is undecorated.
Form Date: c. 1770-1810 Context Date: 19th c.
BC-69 AP28-836 Op.3
Flat brass disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The button face is undecorated.
Form Date: c. 1770-1810 Context Date: 19th c.

BC-70 AP28-N.P. F.5A
Flat brass disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The button face is undecorated.
Form Date: c. 1770-1810 Context Date: post-1780

BC-71 AP28-779 Op.3
Flat brass disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The button is undecorated, except that it was probably tinned.
Form Date: c. 1770-1810 Context Date: 19th c.

BC-72 AP28-777 Op.3
Flat copper disc waistcoat button, with a brass wire "alpha" shank soldered to the back. While no design is present, the face of this button is covered with Sheffield plate.
Form Date: c. 1770-1810 Context Date: 19th c.

BC-73 WMCC-72 F.5?
Flat brass disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The face is undecorated, while the back is hand-stamped "GILT". The gilding has not survived.
Form Date: c. 1770-1810 Context Date: c. 1772-1784?

Type 6A2 w

BC-74 AP28-918
Convex copper disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The face of this button is covered with Sheffield plate.
Form Date: c. 1770-1810

BC-75 AP28-N.P. F.5A
Convex brass disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The face of this button is undecorated.
Form Date: c. 1770-1810 Context Date: post-1780
Convex brass disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The face of this button is undecorated.
Form Date: c. 1770-1810  Context Date: c. 1772-1784

Convex brass disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The face of this button is enamelled white.
Form Date: c. 1770-1810  Context Date: c. 1772-1784

Type 6B1 w

Flat brass disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The face is undecorated, while the back is stamped with an eagle and stars over "BEST".
Form Date: c. 1790-1810

Flat brass disc waistcoat button, with a brass wire "alpha" shank soldered to the back. The face is plain, while the back is stamped with "PLATED" over stars. Traces of gilding remain.
Form Date: c. 1790-1810  Context Date: c. 1785-1790

Flat copper disc waistcoat button, with the wire "alpha" shank missing. The face is plain and is covered with Sheffield plate. The back is stamped "PLATED" with a geometric design.
Form Date: c. 1790-1810  Context Date: post-1780

Type 6B2 w

Convex brass disc waistcoat button, with a brass wire "alpha" shank. The face is undecorated, and the back is stamped "GILT" with a geometric design. Traces of gilding remain.
Form Date: c. 1790-1810
Type 7  Cast metal button back crimped over a setting, normally paste or enameled brass. These are normally sleeve buttons, although a few may be jacket buttons. Many are oval.

7A1  Pewter button back cast with a shank.

7A2  Brass button back cast with a wedge-shaped, hand-drilled shank.

Type 7A1 j or sl

BC-82 AP28-616 F.5B
Cast pewter jacket button with a green glass setting. The pewter back was cast in one piece, and the glass face was secured to the back. William Allason described some of his buttons as green glass jacket buttons in pewter cups, a description that aptly fits this button. However, it could have been used as a sleeve button, with the connecting ring and matching button lost.
Form Date: c. 1720-1800 Context Date: c. 1772-1784

Type 7A1 sl

BC-83 AP28-1062 F.121
Cast pewter sleeve button with a faceted clear glass setting. The shank on this hexagonal button is missing, as is the connecting ring and the matched button.
Form Date: c. 1720-1800 Context Date: c. 1784

Type 7A2 sl

BC-84 AP28-1103
Cast brass sleeve button crimped over a clear glass setting. The brass is decorated with sepals which surround the flower motif cut into the underside of the setting. The glass is faceted around the exterior edge. The shank of this button was cast with the rest of the button back. The brass wire connecting ring is present, the the matched button is missing.
Form Date: c. 1720-1800

BC-85 AP28-620 F.28
Cast brass sleeve button crimped over a domed face consisting of a green enamel applied to sheet brass. The button is fragmentary, including about six pieces, and with the shank missing.
Form Date: c. 1720-1800 Context Date: c. 1765
Type 8  Stamped metal button back crimped over a paste setting. These are normally sleeve buttons.

8A1  Stamped brass back with tines to secure the paste setting, with a wire eye soldered to the button back.

Type 8A1 s1

BC-86 AP28-970 F.112
Stamped sheet brass sleeve button back. The bent back has an "alpha" shank soldered to it, and a series of tines used to secure a glass setting, which is missing. A piece of the connecting ring remains, although the matching button is missing. This may have been manufactured by a method similar to that patented by Birmingham jeweller John Smith in 1770.
Form Date: c. 1770-1810 Context Date: c. 1784

Type 9  Button ring or mold for thread covered button. These provide the central supporting structure around which the cloth or thread buttons were sewn. These buttons are rarely found with the thread or cloth covering intact.

9A1  Bone button mold with a central hole, a byproduct of production.

9A2  Wood button mold with a central hole, a byproduct of production.

9B1  Brass ring, with the ends soldered together, around which thread was sewn. This thread was occasionally metal.

9C1  Small turned horn ring, bead-like, around which thread was sewn to form a conical button.

Type 9A1 c

BC-87 AP28-503 F.5B 17.5mm
BC-88 AP28-255 F.5A 19.5mm
BC-89 AP28-339 F.5B 19mm
BC-90 AP28-652 F.5A 19mm
BC-91 AP28-1089 F.121 20mm
BC-92 AP28-1121 F.121 21mm
BC-93 AP28-1438 18.5mm

Bone coat button molds, with central holes, byproducts of production. The cloth or thread coverings for these buttons are missing. Except for diameter, which is given
for each, all of these coat button molds look alike, as shown in the drawing to the right. Two of these button molds (BC-88, BC-92) are incomplete.
Form Date: 18th c.   Context Dates: F.5A = post-1780
                      F.5B = c. 1772-1784
                      F.121 = c. 1784

Type 9A1 w

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<td>BC-119</td>
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</table>

Bone waistcoat button molds, with central holes, byproducts of production. The thread or cloth coverings for all of these buttons are missing. Except for diameter, which is given, all of these buttons look alike, similar to that drawn to the right. Two of these waistcoat button molds are incomplete (BC-116, BC-117). Those molds around 9mm in diameter may also have been used on shirts.
Form Date: 18th c.   Context Dates: F.5 = c. 1765-1780
                      F.5A = post-1780
                      F.5B = c. 1772-1784
                      F.42 = c. 1730-1770
                      F.110 = c. 1784
                      F.121 = c. 1784
                      Op.3 = 19th c.
Type 9A2 c
BC-120        AP28-612 F.5
Wood waistcoat button mold, with a central hole, a byproduct of production. The thread or cloth covering is missing. Unlike the recovered bone molds, this coat button mold has a somewhat convex top. It has a diameter of 23 mm, the largest of the button molds recovered from the Calvert House excavations.
Form Date: 18th c. Context Date: c. 1765-1780

Type 9B1 sh
BC-121        AP28-240 F.5B
Thread shirt button built around a brass wire ring, which is bent. This button is known as a "cartwheel", and was probably manufactured in the Dorset area of Great Britain. Most archaeological examples of this and similar types of thread buttons are represented solely by the surviving brass wire ring, since the thread normally rapidly deteriorates.
Form Date: c. 1750-1840 Context Date: c. 1772-1784

Type 9C1 sh?
BC-122        AP28-N.P. F.5
Turned horn with a central hole that may have been the central mold for a shirt button. Luscomb (1967: 57) suggests that shirt buttons known as "high tops" were built around discs made of ram's horn. X-rays of "high tops" verifies they were built around circular discs; if these molds are made of horn, than BC-122 is likely an example of such a button mold.
Form Date: c. 18th c. Context Date: c. 1765-1780

Type 10 Button with a swaged-in-turret shank.
These buttons are normally shell, although wood and bone examples may exist.

10A1 Shell button.

Type 10A1 sm
BC-123        AP28-652 F.5B
Small utilitarian shell button constructed with a swaged-in-turret shank. The polished white face is flat, while the back is convex with an undercut hole for the missing shank. The swaged-in-turret shank was patented around 1787, and has been used ever since. This button is probably a nineteenth century example.
Form Date: post-1787 Context Date: c. 1772-1784
Type 11 Utilitarian bone, wood, and shell buttons.
These simple lathe-turned buttons were used on a variety of inexpensive clothing.

11A1 Bone button, with four or five holes.

11A2 Bone button, with two holes, and an occasional third central hole, a byproduct of production.

11A3 Bone button, with three off-centered holes. This is an unusual variation.

11B1 Wood button, with four or five holes.

11B2 Wood button, with two holes, and an occasional third central hole, a byproduct of production.

11C1 Shell button, with four holes.

11C2 Shell button, with two holes.

Type 11A1 lg

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<th>Catalog</th>
<th>Form</th>
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Large four or five-holed utilitarian bone buttons with a recessed center, which prevented the thread from wearing at this point. BC-124 through BC-129 have central holes, which were byproducts of production, surrounded by four hand-drilled holes. BC-130 through BC-134 have only four holes. While not definite, it is possible that some of these latter buttons were formed on a machine invented by Ralph Heaton in the 1790s that turned the buttons and drilled the four holes at the same time. Buttons BC-127 and BC-128 are incomplete, while BC-131 consists of mendable halves from two proveniences. The diameters of each of these buttons is provided. The drawn examples to the right are typical of those with both four and five holes.

Form Date: p. 1740
Context Dates: F.5 = c. 1765-1780
F.5A = post-1780
F.5B = c. 1772-1784
Op.3 = 19th c.
Type 11A1 sm

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Small four or five-holed utilitarian bone buttons with a recessed center that prevented the threads from wearing at this point. BC-135 through BC-143 have central holes, which are byproducts of production, extending part or all the way through the buttons. These, along with the remaining three buttons, have four holes surrounding the center which were used to sew the buttons to the garments. BC-146 may have been formed on a machine invented in the 1790s that simultaneously turned the button and drilled the four holes. One button (BC-142) is incomplete. The diameter of each of these buttons is provided. The drawings to the right show the basic shapes of these buttons.

Form Date: post-1740  Context Dates: F.5 = c. 1765-1780
                   F.5A = post-1780
                   F.5B = c. 1772-1784
                   F.28 = c. 1765
                   Op.3 = 19th c.

Type 11A3 lg

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</tbody>
</table>

Large three-holed utilitarian bone button, with a recessed center. The three hand-drilled holes form a triangle around the center of the button. This button, which has a diameter of 18.5mm, is an unusual variety.

Form Date: 18th c.  Context Date: c. 1784

Type 11C1 lg

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Date</th>
<th>Type</th>
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<tbody>
<tr>
<td>BC-148 - BC-153</td>
<td>various proveniences</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Large four-holed utilitarian shell buttons, with a recessed center. While these lathed-turned buttons could have been made during the eighteenth century, this style of button was far more common during the nineteenth century. Only nine utilitarian shell buttons were found during the 1959-1966 Fort Michilimackinac excavations, and none were recovered from Fort Ligonier. This indicates that while they were used, prior to at least 1780 these buttons were not very common. The drawing to the right shows the basic form of these buttons.

Form Date: post-1760
Type 11C1 w

BC-154 - BC-178 various proveniences
Small four-holed utilitarian shell buttons, with a recessed center. While this type was occasionally made in the eighteenth century, most examples are from the nineteenth century. The drawing to the right illustrates the basic form for these buttons. For more information about them, see the description for Type 11C1 b.
Form Date: post-1760

Type 11C2 lg

BC-179 AP28-215 17mm
Large two-holed utilitarian shell button, with a slightly raised central area within which is a slit for the two thread holes. The button is made of grey shell, which was unpopular in the eighteenth century, and is probably nineteenth century.
Form Date: 19th c.

Type 11C2 sm

BC-180 AP28-968 F.112 9.5mm
Small two-holed utilitarian shell button, with a central slit for the two thread holes. Since construction techniques did not change from the eighteenth century well into the nineteenth century, this button cannot be accurately dated.
Form Date: post-1760 Context Date: c. 1784

Nineteenth and twentieth century buttons from the Calvert House.

The following buttons were excavated during the Calvert House excavations, and date to the nineteenth and twentieth century. While beyond the scope of this study, these buttons are listed and briefly described, and representative ones drawn. No further analysis of these buttons has been done.

BC-181 AP28-55 F.5A
BC-182 AP28-14 F.5A
BC-183 AP28-581 F.5A
BC-184 AP28-914 F.5B
These buttons are stamped iron shells crimped over four-holed bone or wood button backs. The faces are concave, and have four holes extending through the button backs. These utilitarian sheet iron buttons probably date to the early nineteenth century, although a late eighteenth century date is possible.
BC-185
Cast brass button cast with a thick wire protruding from the back, which was subsequently bent into a shank. The domed face has an eight-armed motif formed with a series of punctations.

BC-186 - BC-197
Glass buttons with brass shanks, which were pressed into the molten glass to secure them. Most of these buttons are various forms of swirlbacks, and were primarily used between circa 1840-1870 (Hughes and Lester 1981: 109). BC-189 has a pin shank, and is also nineteenth century. Many of these, while still plastic, were pressed into molds to produce geometric or floral decorations. The drawing to the right is an example of one of the swirlbacks.

BC-198
AP28-633
BC-199
AP28-14 F.5A
BC-200
AP28-41
Stamped brass buttons with flexible cloth shanks. BC-198 is large (17.5mm), while the other two are small (7mm). Buttons with this type of flexible shank were developed in the 1820s.

BC-201
AP28-48
BC-202
AP28-N.P. F.5A
Stamped iron buttons, originally with flexible cloth shanks. Each is fairly large, about 16.5mm, and has a large hole in the back through which the shank protruded. The iron shells were also originally covered with cloth. This button type was developed in the 1820s.

BC-203
AP28-497
BC-204
AP28-251
BC-205
AP28-472
Stamped iron buttons with a soft metal (brass?) plug extending through the face to help secure the front and back sections of the button together. These buttons were originally covered with cloth, and given flexible cloth shanks. This type button was probably developed by Burrell in 1835 (Prosser 1970: 67).

BC-206 - BC-221
Large utilitarian porcelain buttons. These buttons were stamped out of a fine clay and fired, a process that was first developed in 1840 by Prosser (Prosser 1970: 64; Hughes and Lester 1981: 31). They were often decorated with simple geometric motifs in the clay or, more commonly, with various transfer prints. The button backs have an "orange peel" surface appearance, which was formed when the buttons were fired. These buttons continued to be made, virtually unchanged in form, well into the twentieth century. The large buttons normally have a diameter of about 16mm.
BC-222 - BC-298 various proveniences
Small utilitarian porcelain buttons. These buttons normally have a diameter of about 11mm; otherwise they are identical to those described above.

BC-299 - BC-302 various proveniences
Stamped brass and iron buttons with stamped backs and wire shanks. These buttons are of a "Sanders" type construction, which was developed in the 1820s.

BC-303 AP28-351 F.5A
Small sheet brass button with three drilled holes. This nineteenth century decorative or small utilitarian button (8mm diameter) is stamped with an eight-pointed floral motif.

BC-304 - BC-306 various proveniences
Sheet brass buttons, stamped with a recessed center, and drilled with four holes. These buttons were used in the mid-nineteenth century.

BC-307 - BC-311 various proveniences
Hard rubber buttons. Two of these were cast with brass shanks, two have four holes each, and one has a self-shank. Hard rubber was first used for buttons in 1849 (Hughes and Lester 1981: 48-49).

BC-312 AP28-26 F.5A
Two piece stamped brass button with a stamped sheet brass shank. It is embossed with a shield, with "PEYNIER" above and "GRENOBLE" below. It is probably early twentieth century.

BC-313 AP28-772 Op.3
Cast plastic button. This is a late nineteenth or twentieth century button.
VITA

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