'And he that in Virginia shall copper coin receive'

Explicating an Undocumented Fiscal Scheme in the Early English Settlement at Jamestown through the Archaeological Evidence

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Abstract

Traditionally, coins and exonumia found in archaeological contexts have been examined in a way that fails to utilize their full potential for making substantive contributions to historical questions. Often bearing dates and/or dateable iconography, these numismatic objects are used primarily to provide temporal data for archaeological contexts or sites; and, as material culture related to the economic sphere, the function of these objects is assumed. When archaeological excavations in England's North American colonies uncover European coins and exonumia that are obsolete in their original countries of origin, they are often interpreted as items imported for the Indian trade without consideration of their full social and cultural contexts.

Since 1994, archaeological excavations on the *c.* 1607-24 site of James Fort, the initial English settlement at Jamestown, have uncovered over two hundred Dutch and English tokens and Irish coins that are both unusual for the Virginia context and are no longer current in their original settings. This thesis examines this unusual group of base metal coins and exonumia found in the fort's tightly dated discrete contexts as evidence of an undocumented scheme of token currency in the early English colony.

The research incorporates a biographical approach to the data, weaving together numismatic scholarship, evidence from archaeological contexts, and contemporary historical accounts. The use of token currency in Bermuda and Newfoundland, two early English colonies established subsequent to Jamestown, provides evidence of parallel adaptive measures required to fulfil local needs in New World settlements. In conclusion, familial and commercial links connecting the leaders of the Virginia enterprise, English governmental officials, and the Royal Mint are suggested as agencies for the obsolete coins and tokens at Jamestown. Using numismatic objects as portals to Jamestown's past, this study demonstrates new understandings may be gained from beginning an historical inquiry with contextually relevant material culture.

Dedication

To Mum
Ruth Anning Hardy

and
in memory of

my father
Edwyn Worrell Mountain Hardy, BEM, MBE
and
my great-grandfather
Edmund James Anning
Assistant Office Keeper of the Royal Mint (1919-1923)
Office Keeper of the Royal Mint (1923-1927)

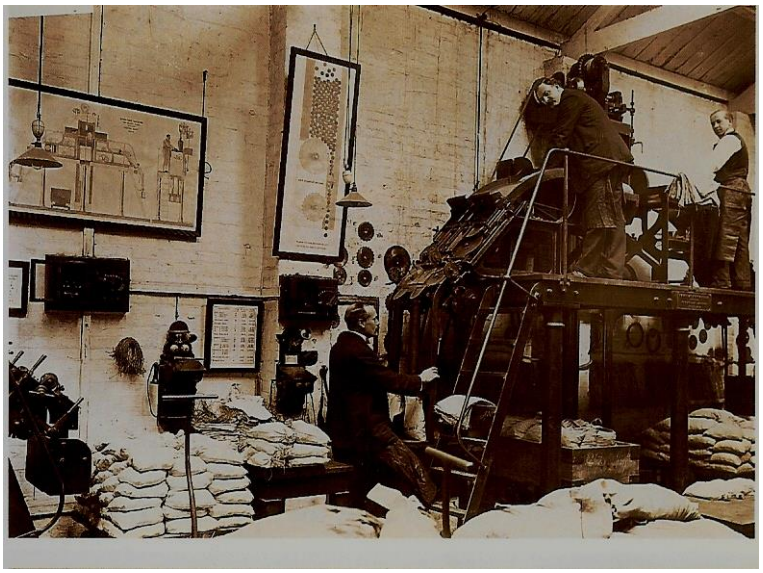

Image courtesy of Ruth Anning Hardy

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As anyone who has embarked on the adventure of writing a thesis when well into their career knows, the final product is derived from a lifetime of conversations with, and insights and support from, friends and associates. While too numerous to name them all, there are a few individuals I wish to personally acknowledge for helping to make this work a reality.

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Table of Contents

List of Figures

Chapter One

Chapter Two

Chapter Three

Chapter Four

Chapter Five

Chapter Six

Chapter Seven

Chapter Eight

List of Tables

Chapter One

Telling History through Numismatica
An Introduction to the Present Study

> One of the fascinating aspects of telling a history through objects is that they go on to have lives and destinies never dreamt of by those who made them.
> (MacGregor 2012, 53)

1.1 Introduction

In 2010, the British Museum in partnership with BBC Radio 4 launched a highly successful website and associated series of radio programs entitled 'A History of the World in 100 Objects'. The guiding concept of the project, which resulted in a major museum exhibition, a best-selling book, and twenty-four million website downloads, was to use objects from the museum's collection as the springboard for recounting a history of mankind from two million years ago to the present day (Vogel 2011). According to museum director Neil MacGregor (2012, xv–xxvi), a biographical methodology that foregrounded artefacts in the investigation rather than merely using them as illustrations of historical themes was employed by the museum in a quest for fresh insights and a 'truer understanding of the world'. Objects as a 'hook' to history was an approach that resonated with the public and garnered the British Museum the coveted Art Fund Prize of £100,000 in 2011. Judge Michael Portillo particularly cited the 'innovative way' people were able to 'engage with objects' as a result of the project (Art Fund Prize 2011).

The British Museum's perspective that 'history told through things gives them back a voice' (MacGregor 2012, xvii) reflects recent methodological developments in the study of material culture that were largely influenced by a workshop on commodities and culture organized in the early 1980s by the University of Pennsylvania's Ethnohistory Program. The intellectual endeavour led

to a provocative series of essays entitled *The Social Life of Things: Commodities in Cultural Perspective* that, as its title suggests, proposed that objects have 'social lives' and accumulate biographies like people as they move through space and time (Appadurai 1986a). The premise of this viewpoint is that as people make, use, modify, purchase, sell, break, and lose objects, they imbue them with meanings and, in turn, the objects themselves have agency and impart meanings to the individuals who interact with them. The meanings of things, as articulated by the volume's editor Arjun Appadurai:

> are inscribed in their forms, their uses, their trajectories. It is only through the analysis of these trajectories that we can interpret the human transactions and calculations that enliven things.
>
> (Appadurai 1986b, 5)

The biographical methodology for the study of material culture, with its perspective that objects have life histories and are more than just stage props in the social process, has gained particular favour in the field of archaeology (Gosden and Marshall 1999; Gilchrist 2000; Gosden 2005; White 2005; Beaudry 2006; White 2009; Gaimster 2010). While artefacts have always been the focus of archaeological research for revealing the dates and functions of contexts, the biography of objects has 'prompted new questions about how people are involved with the things they make and consume' (Hoskins 2006, 82). Within this theoretical framework, archaeologically recovered artefacts are not just 'fragments to be measured, counted and typologised as evidence *about* the past' but are recognized as having agency in the past (Moreland 2011, 28–9). Fuller historical understandings can be derived from explicating how the meanings of artefacts are created through the interactions of objects and people and how those meanings change through time and space. As succinctly stated by Igor Kopytoff (1986, 67), 'biographies of things can make salient what might otherwise remain obscure'.

Almost since historical archaeology's inception as a scholarly pursuit, its practitioners have been challenged by historians to prove that it is not just a 'handmaiden to history' and an 'expensive way of learning what we already know' (Noël Hume 1964; Deetz 1977, 33). Historical interpretation using objects as evidence has been considered secondary to, if not only truly understandable by, the insights provided by the written word. This has resulted in what Moreland (2011) has called a fragmented view of the past that keeps both archaeologists and historians from being totally successful in understanding it.

Part of the disconnect between the two disciplines, particularly between historians and archaeologists who use the documentary record as part of their evidence, may be rooted in the methodological approaches used by each. Historian Cary Carson (1978, 45) noted that scholars in his academic discipline are accustomed to 'gathering the least amount of best information' necessary to solve an historical problem. Archaeologists, on the other hand, feel the need to assemble as much information as possible about the features they are studying and the objects associated with them. Meaning is derived from contextual relationships between objects on a site as well as between those objects and the features in which they were found. This can only be accomplished by having all the data, which include artefact and site-type biographies and the documentary record.

Traditional historical approaches to early colonialism in Virginia seemingly render historians wishing to tap into recent archaeological discoveries impatient with the research efforts required to contextually analyze the vast numbers of artefacts resulting from excavation (Graham et al. 2007, 485 n. 37; Carson et al. 2008). Historical archaeologist Mary Beaudry noted, 'archaeological productions are not and can never be merely transcriptions of what is in the ground; all forms of

archaeological transcription involved negotiation of meaning' (Beaudry 2008, 177). Nevertheless, some historians, frustrated by their inability to use artefacts as a source of ideas in the same way they use documents, criticize material culture specialists working with archaeological collections for rarely communicating their insights in a way that is useful for examining historical problems. This friction is particularly evident in the studies of English colonizing efforts in the Chesapeake region of the United States, as evidenced by a seemingly direct reference to the considerable Jamestown archaeological collection in a recent *Journal of Southern History* article by Virginia-based scholars:

> Artifacts numbering in the millions can be used to tell many different stories or (too often) no story at all, at least not stories that are sufficiently original to make notable contributions to a broader understanding of the past.
>
> (Carson et al. 2008, 34)

The current study seeks to address this perceived dearth of provocative ideas from the archaeologically derived material culture from Jamestown by examining coins and exonumia excavated since 1994 by the Jamestown Rediscovery Project (Figure 1.1). While this material is chronologically focused to the early seventeenth

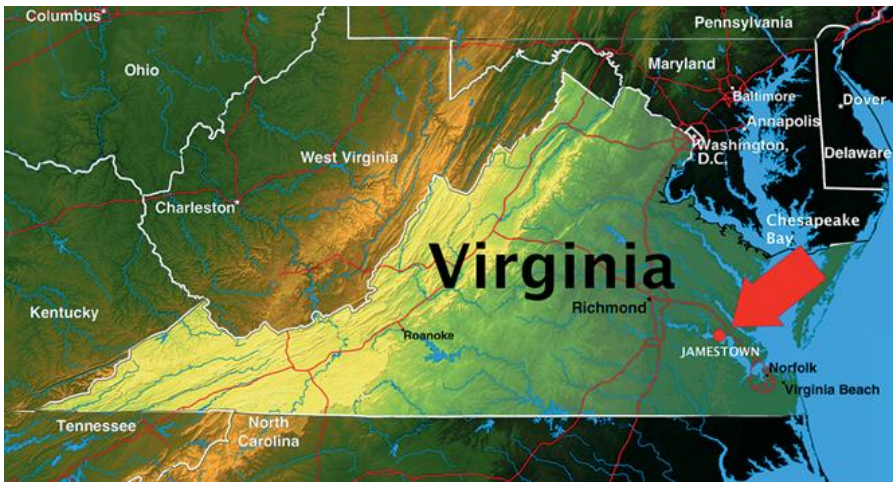

Figure 1.1. *Location of Jamestown, England's first permanent transatlantic colony, in the modern-day Commonwealth of Virginia (Preservation Virginia).*

century and is related contextually to a discrete English contact period site in the New World, the findings are informative in a broader sense for material culture research. The approach to the data is biographical and incorporates multiple lines of evidence from material culture scholarship, contemporaneous archaeological excavations, and historical accounts to place the artefacts under discussion in context. This analysis attempts to 'weave together the various strands of evidence into strong cables of inference' and allow the material culture to take the lead in providing the narrative rather than being relegated to a secondary position that is primarily illustrative of the historiography (Beaudry 2008, 178). By this approach, the artefacts are provided a voice that is just as valid as a written account from the past. Context provides the language that, indeed, reveals objects can 'go on to have lives and destinies never dreamt of by those who made them' (MacGregor 2012, 53).

1.2 Studying Archaeological Coins and Exonumia

In an effort to understand historically undocumented aspects of life in the early Jamestown colony, this biographical study will focus on an unusual group of base metal coins and coin-like objects that has been found in the *c.* 1607-1624 contexts of James Fort, the initial English settlement located in 1994 on APVA[1] property (Figure 1.2). These include one hundred and thirty-eight copper pennies and halfpennies minted in England for use in Ireland**,** sixteen copper tokens issued by the city council of Groningen in the Netherlands, fifty-nine copper tokens associated with the English healing ceremony for the 'King's Evil', and twenty-eight lead Elizabethan tokens of unknown purpose. At first blush there seems little

[1] APVA is an acronym for the Association for the Preservation of Virginia Antiquities, which has now been renamed Preservation Virginia.

***Figure 1.2**. Location of James Fort on the 22 ½ acre-tract of land owned by the APVA on Jamestown Island, Virginia (Preservation Virginia).*

to tie these different artefact groups together besides their late sixteenth and early seventeenth-century period of production. When considered individually, the biographies of these objects reveal seemingly disparate functions and meanings in distinct and unrelated settings. But, when investigated as a group and in light of the colonial Jamestown context in which they were found, these coins and tokens accumulate new meanings that link them together and have the potential to reveal substantive information about Jamestown's early economy. In addition, the association of this material with the early colonial context of James Fort provides new information that may, retrospectively, shed light on the English biographies of the coins and tokens. These artefacts are interesting, not only for being in Virginia and so vastly out of their contextual frameworks, but also for their relative rarity in early seventeenth-century England.

Coins and tokens differ from most of the other objects from archaeological contexts in that they embody 'interplay of image, text, and materiality' (Kemmers

and Myrberg 2011, 89). Political, economic, social, and technological data can be extracted from them; and, unlike most artefacts, monetary objects often include dates or are stylistically dateable to a short period of issue. It is this chronological aspect of coins and their ability to provide excavated features with temporal contexts that has been of interest to archaeologists in the past; but it has also contributed to an underutilization of coinage as an important source of historical data.

The potential of coins and/or coin substitutes to shed light on substantive historical questions is partly diminished by the fact that we are all 'so accustomed to using little round pieces of metal to buy things' (MacGregor 2012, 133). The familiarity of these objects as common items used in economic exchanges presents the danger that interpretations could be based solely on the perceived meanings of the artefacts without consideration of the full social and cultural contexts of the past. This study will examine some of those monetary artefacts that, upon immediate reflection, seem out of place and/or time in the colonial society. Since many of these objects are known to modern researchers and their functions well documented, there is the danger that interpretations could be based solely on the perceived monetary functions of the artefacts without consideration of the social and cultural environments. The opposite is also possible. The active English-Native exchange in the context of Jamestown could be used to explain the presence of unusual artefacts thereby obscuring the meaning and purpose of these items to the people who used and possessed them. Either scenario has the potential of distorting the character of early Jamestown.

An example of such a debatable object that will be discussed in this study is the coin-like brass jetton or casting counter produced in Nuremberg in the sixteenth

and seventeenth centuries as a mathematical aid for a European population still using Roman numerals (Figure 1.3). Jettons are found in large numbers in

Figure 1.3. *A brass Nuremberg jetton of Hans Krauwinckel II (Preservation Virginia).*

Jamestown's early contexts and a few have been recovered from other seventeenth-century Virginia sites as well as from contact period sites in North America. Since these objects are made of a metal prized by the Indians, and some are pierced, they are often identified in the literature as New World trade items (Cotter and Hudson 1957, 91-92; Noël Hume 1972, 171; Kent 2001, 855 & 856; South 2002, 96; Deagan 2002, 258-59).

The a priori consensus of modern researchers regarding the function of jettons in Europe at the time of the Jamestown colony is that they were used

'primarily as devices for advertisement, commemoration or propaganda rather than as calculating aids' (Deagan 2002, 258). This supposition, for which there is scant archaeological or historical evidence, may cloak the true function of these devices in the early colonial economic system. As will be considered in Chapter 2, this interpretation appears to be predicated on the erroneous assumption that by the mid-sixteenth century, European populations were largely numerate with Arabic numbers; thereby no longer needing the ocular system of calculation that had been necessitated by Roman numerals.

The present study offers for the first time a comprehensive examination of the coins and exonumia from the earliest years of the Jamestown colony as revealed by the archaeological excavations of James Fort that commenced in 1994. By examining these artefacts from the closely dated archaeological contexts of Jamestown in relation to their biographies in America and in Europe, this dissertation aims to peel away the assumptions that have become solidly accepted about numismatica. New and undocumented reasons for the presence of these objects in the colony will be posited, illustrating the type of information that can be extracted from material culture by beginning an investigation with objects in context.

As indicated by Haselgrove and Krmnicek (2012, 237), the commonality of coins and the fact that they are perceived as behaving 'according to known rules' has contributed to the common practice of studying coinage apart from the rest of the archaeological assemblage, thereby diminishing its research potential. Influenced by early antiquarian approaches to numismatics, descriptions of archaeological coins usually concentrate on what Myrberg (2009, 157) has described as the primary or production stage of the coin. This looks to the technical

data (i.e. die orientation, materials analysis, iconography, production techniques), and, of most interest to archaeologists, where and when the coin was made. Other stages in the biography of a coin such as its use in society (the secondary stage), its archaeological context (the tertiary stage), and its retrieval and study (the quaternary stage) typically are not integrated to derive the full story that the coin is capable of relating (Myrberg 2009, 157–59; Kemmers and Myrberg 2011, 89–90).

Scholars in recent years have made a plea for the development of a new methodology for researching archaeological numismatics that pulls it out of a concentration on 'classification, stylistic change and dating' and integrates the study of coinage into current archaeological theoretical frameworks (Kemmers and Myrberg 2011, 88; Haselgrove 2005; Haselgrove and Krmnicek 2012; Krmnicek 2009; Myrberg 2009). As stated by Haselgrove and Krmnicek (2012, 244), it is important:

> to devise methodologies that will help us to identify in an archaeological setting whether and which objects had monetary uses of any kind and, by extension, to treat the functions of past coinages as a subject for investigation rather than assumption to be characterized through cross-cultural analysis of the types of contexts in which coins were lost or deposited and their archaeological associations.

A biographical approach that considers coins acquire life histories as they change contexts and as people use them to negotiate their daily lives is particularly promising for widening the contributions coins and exonumia can make to understanding the past. These monetary objects acquire meanings that are as much a part of the 'cultural matrix' surrounding them as of their economic functions (Parry and Bloch 1989, 21).

Kemmers and Myrberg (2011, 94–103) have identified four themes of coin agency that may be useful in studying the biographies of coins and tokens. The first of these is "feeling" and references emotional responses users have to the physical

characteristics of coins including such aspects as iconography, weight, size, and colour. If these monetary objects are to function in society as they were intended, then they must evoke a feeling of trust in their inherent or assigned values and in the authorities guaranteeing them. The iconography of some of the English and Dutch sixteenth-century tokens in the present study, for example, incorporates the double-headed eagle. This symbol, that was once associated with ancient Persia and the Byzantine Empire, was adopted in the post-medieval period by dominant ruling bodies such as the Holy Roman Empire and the Russian Imperial Court (Mollier 1996). As such, the emblem was recognized as representing strength and power and its presence on tokens was meant to assure the public using them that they could trust the issuing authorities. As will be considered, these tokens acquired different biographies in Virginia, but their selection for these new roles was probably guided by the fact that they satisfied the emotional ideologies of familiarity and security used to constitute authority (Tarlow 2000, 719).

The second theme of coin agency identified by Kemmers and Myrberg (2011, 96-99), 'belonging', also involves the study of emotions in archaeology in that coin iconography is considered a means by which group identity is shaped. The "Hogge money" developed for Bermuda in 1616, which will be discussed in Chapter 6, is a prime example of this theme. The brass coin was illustrated on one side with a hog 'in memory', according to Captain John Smith, 'of the abundance of hogges' the English found on the island when they first shipwrecked there in 1609 (Smith 1986d, 362). The other side contains the image of a ship under sail that again is referencing the 1609 providential arrival of the *Sea Venture* bringing the first English colonists to Bermuda (Jordan 2003, 2477). The debased coinage was specially made to circulate within the Bermuda community and its iconography was

particularly selected to appeal to the colonists' sense of identity. Hogge money reflects the observation made by Kemmers and Myrberg (2011, 99) that 'in archaeological research, coins might be one of the most tangible objects available to study negotiations with identity'.

'Acting' is the third action of coins and recognizes that these objects can make socio-political statements and can influence societal change (Kemmers and Myrberg 2011, 99). As Deng (2011, 4) noted, 'the use of an English coin for a personal transaction could in effect amount to a declaration of loyalty to the English state'. The opposite is also true. Reluctance by a populace to use officially issued coinage sends a clear message of distrust, such as the copper farthings of James I that will be discussed below more fully.

While not a coin, a Nuremberg jetton found in a c. 1617–1625 context of James Fort is an example of a coin-like object that was used to make a statement subversive to the social order (Figure 1.4). The mathematical aid depicts biblical motifs with the Crucifixion on the obverse and the Temptation on the reverse. The jetton had been secondarily pierced so as not to obscure the imagery and threaded with a silver link, thereby allowing the disk to be suspended and providing its wearer with a crucifix in the colonial society where such objects of the Catholic faith were forbidden.

Figure 1.4. *Found in Structure 176 of James Fort, this jetton (3582-JR) has been modified for use as a religious pendant (Preservation Virginia).*

Coins with images of monarchs were powerful tools for communicating political authority as Europeans established spheres of hegemony in the New World. Sir Francis Drake, for example, nailed a silver sixpence bearing the bust of Elizabeth to a post he had erected on the California coast as a marker of England's presence (Kelsey 1990, 460). Similarly, survivors of the 1609 *Sea Venture* shipwreck in Bermuda nailed 'the picture of His Majesty in a piece of silver of twelvepence' to a cross made of wood from the wreck as they left the island for Virginia in 1610 (Strachey 1973, 57). For the English, the coin's iconography graphically established their country's claim to the island in the same way that the ship's timber established it symbolically.

During Sir Walter Raleigh's 1595 search for gold in Venezuela, he distributed amongst the indigenous people many English gold pound coins 'with her Majesty's picture to weare, with promise that they would become her servants thenceforth' (Raleigh 1901, 121). Even earlier, Columbus claimed to have presented a native ruler of the Caribbean island of Tortuga (modern day Haiti) with a gold coin bearing the portraits of Queen Isabella and King Ferdinand. His intention, as he stated to his sponsors, was to visually communicate how the Spanish rulers 'commanded and ruled over all the best part of the world, and that there were no other princes as great' (Greenblatt 1992, 13).

Another example of the use of coinage to promote political authority took place in mid-seventeenth-century Maryland under Cecil Calvert, the Lord Baltimore. The iconography Calvert chose for the coinage emission to circulate in his proprietary colony directly referenced contemporary Cromwellian coinage, both in homage to the new Protectorate and to reinforce Calvert's stature and the rightful control he exercised over his territory in North America.

In 1632, Charles I granted Calvert, an acknowledged Catholic, the rights for a privately-owned settlement in the Chesapeake Bay area. Named Maryland in honour of the kings' wife, Queen Henrietta Maria, Calvert's colony was located north of Jamestown on a small tributary of the Potomac River. During the English Civil Wars, Maryland was viewed as a royalist stronghold and was attacked by forces led by Protestants supported by Parliament. For the next several years, the Calvert family engaged in military battles to regain the rights to their proprietorship, which were finally restored by Cromwell in 1657 (Miller 2003, 229-238). It is following this victory that Cecil Calvert contracted with moneyers at the Tower mint to produce silver and copper coinage for his settlement at his own expense.[2] Coinage was scarce in the Maryland tobacco economy that relied on credit and delayed payments dependent on harvesting, shipment and sale of the commodity. The shillings, sixpences, groats, and pennies supplied through Calvert's scheme would facilitate commerce but as Hodder observed, 'the coins were as much a proclamation of his palatine rights as necessary for the colony's internal trade' (Hodder 1993, 1361).

This 'acting' agency of Lord Baltimore's emission whereby the coins were intended to reinforce Calvert's authority over the various socio-political factions in Maryland can be seen in the imagery that he chose for his emission (Figure 1.5). In imitating Cromwell's iconography, with his draped bust on the obverse —although without the presumption of honour signified by the laurel wreath crown — and his coat of arms on the reverse, Calvert's coins are 'dramatically expressing his authority in a way that contemporaries could accept and understand (Jordan 2004, 2684). Even the obverse Latin legends are similar with Calvert's coin stating

[2] For an extensive discussion of Lord Baltimore's coinage scheme, see Jordan (2004).

'Cecilius, Lord of Maryland, etc.' and Cromwell's coin reading 'Olivar, by the

Figure 1.5. *Top, obverse and reverse of Lord Baltimore silver shilling(Clipart Courtesy FCIT). Bottom, obverse and reverse of Cromwell silver shilling (CromwellCoins.com).*

Grace of God, of the Republic of England, Scotland and Ireland etc. Protector' (Jordan 2004, 2683). In sum, Calvert's 'coinage displays and reinforces in images, texts and by metallic composition the fact that [he] was the Lord and ruler of Maryland' (Jordan 2004, 2684).

Some coins clearly reflect more than one activity, as exemplified by the 'belonging' and 'acting' aspects of a gold *aureus* in the British Museum collection (Figure 1.6). Bearing references to the murder of Julius Caesar, the coin was minted in Greece *c.* 43-42 B.C. by Marcus Junius Brutus, one of the assassins. A powerful political statement ('acting') in its own right, the coin was also pierced

Figure 1.6*. Gold coin commemorating the assassination of Julius Caesar (British Museum, London; Oxford University Press; Image courtesy of M. Winckless Collection).*

soon after it was produced for wearing as a pendant. As observed by Bate and Thornton (2012, 133; 135), 'wearing this coin would have been a powerful symbol of support for the conspirators and their cause'. It thereby provides a clear sign of 'belonging' to the group of sympathizers for the killing.

Finally, the ritual role played by coins is defined by Kemmers and Myrberg (2011, 101) as 'creating' because of the 'generative and transformative aspects of coins and coin production'. For centuries, coins and exonumia have been considered imparted with magical or protective qualities as they were interred with the dead, carried as talismans, or buried in the foundations of buildings (Maguire 1997; Davidson 2004; Gilchrist 2008). This apotropaic function of coinage is suggested by an English sixpence found in a plough zone layer of the fort. The silver coin (89-JR) had been cut into a rectangular shape around its 1602 date and pierced for wearing as a pendant (Figure 1.7). In addition, the modification has created a Greek cross, with arms of equal length, out of the long cross fourchée dividing the coin. The careful incorporation of the cross and the date suggests that the year was of significance to the pendant's wearer for whom the coin held extra- monetary powers capable of providing a superstitious attribute like protection or connection to distant loved ones.

Figure 1.7. *Silver sixpence (89-JR) modified to wear as a pendant (Preservation Virginia)*

Another prime example of coins with creating agency is the gold angel presented by English monarchs during the

healing ceremony for the malady known as the King's Evil. The coins were believed to embody the curative power of the sovereign and, for the healing process to work, individuals were instructed to always wear the coins around their necks lest the power of the ritual be broken. Through this ritual, the gold angel 'became a potent device for promoting personal devotion to monarchs and a more general ideology of mystical kingship' (Deng 2011, 136). No angel coins have been found at Jamestown, although the brass ticket tokens used to gain admittance to the healing ceremony are considered to have been discovered in early fort contexts and are part of this study.

1.3 The Thesis and its Organization

This thesis will examine an assemblage of over 200 Irish coins and Dutch and English tokens that are unusual for the context of early seventeenth-century Virginia. Undocumented in the archival record, these artefacts will be studied for insights to their planned use in Jamestown's formative years. Using numismatica as portals to Jamestown's past, this study aims to demonstrate the new understandings that may be gained from beginning an historical inquiry with contextually relevant material culture. It will show that objects can lead to important historical questions and, sometimes, they can also lead to answers or compelling alternative narratives for future research. Conversely, when artefacts are primarily consigned to illustrate the pages of historical texts without deciphering the meanings they carry, the objects can be misrepresented and marginalized, leaving unnecessary gaps in our understanding of the past.

The present inquiry will attempt to reconstruct the plan for settlement in the early English settlement and will focus on an economic scheme that may have been

intended to address initial shortcomings of that plan. A hint of that scheme is contained in several lines of verse composed by Robert Rich, an English gentleman who both invested in the Virginia Company and travelled to Virginia. Intended as a promotional tract, the 1610 poem mentions use in the colony of copper coinage that can be exchanged for English sterling upon an individual's return to England. I had always found this reference, which will be discussed in the next chapter, to be quite a conundrum as there was no copper coinage minted in England at the time of Jamestown's settlement. In fact, there had been no copper coins of the realm since the Northumbrian stycas of the ninth century (Lyon 1955). Furthermore, there was no historical documentation of a token-currency compensation scheme for Virginia Company workers in the colony.

No historian of Virginia's colonial past appears to have taken serious note of Rich's claim embedded in the rhyming narrative.[3] Was it intended as no more than marketing hyperbole for the cash-strapped Virginia Company? After all, the scarcity of coinage in colonial Virginia has been well documented in the historical literature and this situation has been seemingly corroborated by archaeological excavations in the Commonwealth through much of the twentieth century (Bruce 1935; Jordan 2009).

But a different pattern is emerging from the soils of the *c.* 1607-1624 James Fort where, since 1994, archaeological excavations have recovered large numbers of coins and tokens. Even so, these artefacts mostly comprise numismatica that are not in current circulation in England such as copper pennies and halfpennies from a 1601-1602 unsuccessful English emission for Ireland. Could these possibly be the copper coins mentioned in Rich's poem? Could the other obsolete numismatica

[3] Jordan (2009, 194-195) mentions Rich's allusion to 'copper coin' and considers he may be referencing jettons, but does not develop any ideas about a token coinage scheme in the colony (see discussion in Chapter 2).

found in James Fort—consisting of brass, copper, and lead tokens— have also been part of the plan for compensating labourers? These are the questions that prompted my quest into the possibility of an undocumented Virginia Company plan for a colonial token coinage.

The scheme for token currency would illustrate an adaptive dynamic of the financial system by the Virginia Company that has not been previously articulated in Jamestown's historiography. The 'silence' created by the absence of such 'facts or interpretations' has contributed to a narrative supporting the overarching socio-historical view that the Jamestown settlement was mismanaged and a dismal failure thereby diminishing its role as the first significant event in the development of the modern United States of America (Trouillot 1995). Instead, the presence of these objects reflects the experimental efforts considered by the directors of the Virginia Company as they tried to make their colony profitable in the face of unforeseen difficulties.

The early Jamestown economy has been historically characterized as based on barter, a method of exchange in which the social regulation required to determine value, goods, and circumstance has traditionally been viewed negatively (Appadurai 1986b, 11). Bruce disparagingly described barter in his *Economic History of Virginia in the Seventeenth Century* as 'especially characteristic of peoples still lingering in the barbarous or semi-barbarous state' (Bruce 1935, II: 495). Such facile representations of the nascent colony, largely derived from the few known contemporary source materials, have contributed to a negative historiography for Jamestown's early years (Campbell 1860, 92; Elson 1904; Morgan 1975; Morgan 1971). Historical portrayals of the Virginia settlers as 'idle, shiftless men' whose colonizing attempts resulted in a 'fiasco' and whose days were

spent at war with the Indians have been set against a tableau of the industrious God-fearing Pilgrims successfully settling in Plymouth thirteen years later. The New Englanders' purported contrastive respect and peaceful relations with neighbouring Indian groups resonated with Northerners in the American post-Civil War era and became strongly associated with President Abraham Lincoln's 1863 proclamation that the third Thursday November be set aside as a nationally-observed day of Thanksgiving (Elson 1904, 62; Morgan 1975, 84; Marshall et al. 2011, 9–12) (Figure 1.8). Subsequently, each November school children construct their buckled

Figure 1.8. *Early 20th-century depiction of America's creation myth.(J.L.G. Ferris, 'The First Thanksgiving, 1621', Library of Congress)*

Pilgrim hats and Indian headdresses to commemorate the events thought to epitomize the Plymouth settlement as America's birthplace. Jamestown's earlier and more enduring role is lost.

Griffin (2009, 33) argued that this powerful creation myth has been perpetuated because it appeals to issues that interest us in the modern age more that it deals with the reality of Plymouth or 'questions that animated development in Jamestown'. The Pilgrim story may resonate with us today but, as Galenson (1996,

151) has pointed out, the impact of these individuals 'on the colonial economy and society was negligible'. Context is the key and archaeological evidence presents an opportunity to ground Jamestown as 'a place-in-time with its own contextual integrity, not as a precursor to later places-in-time, much less a mirror to contemporary American culture' (Griffin 2009, 33). This thesis strives to use the evidence provided from recent excavations of James Fort to reveal undocumented attempts by the Virginia Company to appeal to the emotional needs of its colonists. To this end, the artefact assemblage relating to economy will be compared with other English colonizing and exploratory efforts in the New World. The biographies of a seemingly diverse collection of Irish coins, Dutch tokens, and English tokens will be examined for both their original intended purposes and their new roles once transported to America.

While English copper coins minted for Ireland have been the subject of much numismatic research (Challis 1978; Challis 1971; Comber 2007; Symonds 1917), there is little understanding of the overseas use of these early coins. When the Dutch, Elizabethan and 'King's Touch' tokens occasionally appear in England, they are usually random finds in farmers' fields, foreshore recoveries from the River Thames, or curios for sale on the antiques market. As a result, these objects are represented by sketchy biographies that are far from explicit. What could possibly be the purpose of bringing these artefacts to Jamestown?

Knowing the colony's dependence on copper as a trade item for food with the Virginia Indians, it would be an easy and logical assumption to ascribe the copper coins and tokens to that use (Noel Hume 1972, 171; Potter 1989; Straube and Luccketti 1996, 46-49; Kelso 2006, 178-179; Noël Hume 2008, 267). Or perhaps, as suggested by historian David Quinn, the numismatic objects from

Ireland and the Netherlands were carried in the purses of colonists who had been part of the military campaigns in those two countries (David Quinn, pers.comm. 1998). Veterans of the war in the Netherlands served as presidents of the Virginia Company's governing council in Virginia for the first three years of the colony and can be counted among most of the early governors (Kelso 1996, 9-10). The first president, Edward Maria Wingfield, was active in both Irish and Dutch campaigns as was the first governor, Thomas West, Third Lord De La Warr (Brown 1890, 1055 and 1048).

Mouer et al. (1992, 158) consider the Irish halfpenny found on a c. 1620–1635 Virginia site to be part of the 'Ulster-Virginia plantation kit', transported by individuals who settled plantations in both places in the early seventeenth century. American numismatist Philip Mossman (1999, 1899) has unequivocally stated that the Irish 'coppers' found at Jamestown were 'evidently brought there by emigrating Irish colonists'. But how many Irish men and women were in the colony between 1607 and 1624 and could this account for the large number of Irish coins in the fort contexts? Even so, what would be the purpose of bringing outmoded debased coinage to a place with no open market?

While forty-two members of the Virginia Company have been identified as also linked to business interests in Ireland, only two individuals thought to be Irish nationals are recorded as being present in the first years of the Jamestown settlement (Jones 1942, 463–65). Irishman Francis Maguel arrived as a sailor with the first group in 1607 and remained in the colony for about a year during which time he was an informant for Spain (Maguel 1890, 393–99). Dionis Oconor, a tradesman with a decidedly Gaelic name, was part of the Second Supply of October 1608 but the historical record is mute on both his ethnicity and on his purpose for

being in the colony (Smith 1986d, 191; McGinn 1993, 21). Through the Virginia Company period only two other colonists are specifically identified as Irish, but this does not necessarily mean that Irish émigrés were not present as most individuals in the colony, particularly servants, were unrecorded.[4]

Any of these aforementioned individuals could be responsible for the random appearance of Irish coinage and/or Dutch tokens at Jamestown but, as this thesis will show, the presence in early fort contexts of the coins and exonumia forming the subject of this study is far from accidental. When compared with the English and foreign regal coin emissions found in the same early archaeological features, it can be seen that the Irish coins and the English and Dutch tokens are far more numerous and hold in common the fact that none of them were in current use when brought to Jamestown. This dissertation will argue that these objects were part of a purposeful supply sent to the colony through the agency of the Virginia Company to serve as a controlled medium of exchange within the settlement. Obsolete for their original intended purposes, these coins and tokens would be only valid for monetary exchange within the colonial community. They would be worthless to individuals beyond Jamestown, thereby providing no incentive for outside illegal trading and ensuring fiscal control by the colony's leadership.

Coins and tokens are familiar to present-day researchers as common items used in economic exchanges, but this does not mean that their uses four hundred years ago are inherently understood (Heslip 2007; Haselgrove and Krmnicek 2012). Without a complete numismatic, cultural, and economic analysis to give agency to these objects, they remain silent props to the colonial experience, out of place and time for their original intended uses and providing little more than dates for the

[4] 'James and John, Irishmen' are included on the list of the individuals dying in Virginia between April 1622 and February 1623 (Hotten 1983, 194). The omission of last names suggests that they were indentured servants rather than heads of households.

archaeological context. The following investigation of the base metal coins and tokens will follow a cultural biographical approach, which acknowledges that objects accumulate life histories from the people who use them and by the contexts in which they are used (Kopytoff 1986). As articulated by Heslip (2007, 420), 'context and sequence are essential tools of analysis and to gain any insight into coin use and recovery one has to look at a series of events, not just isolated periods'.

Chapter 2 of this thesis will provide the historical contexts for the proposed study of coins and exonumia. First, there will be a discussion of the motives of the Virginia Company and the guidelines for settlement provided to its colonists. The colony's subsequent failure to meet expectations of profitable returns or discoveries in the first two years led the Company's leaders to modify their plans and seek a new charter from King James on 23 May 1609. It is under this second charter that Sir Thomas Gates arrived at Jamestown as the appointed leader with revised plans of government, which this thesis proposes, included a system of compensation using token currency.

This chapter will scrutinize the social and economic organization of the fledgling colony as revealed through primary sources, such as the Virginia Company records compiled by Kingsbury (1906–35), to consider how a token coinage may have been used or intended to be used. As previously mentioned, the incomplete documentation provided by the surviving accounts of the initial years of settlement has resulted in very little scholarship about Jamestown's economic system during the Virginia Company period. Researchers either skip over this time period altogether (Nettels 1934; Lasser et al. 1997) or generally describe it as being

based on barter with agricultural products exchanged for manufactured goods (Bruce 1935, II: 495).

The initial exchange in the nascent colony involved trade between the English and the Native peoples. Inexpensive European goods were swapped most commonly for corn and other foodstuffs provided by the Indians. All economic transactions were strictly regulated by the joint-stock Virginia Company and all assets, including land, were controlled so that profits would flow back to the investors. Keeping the shareholders happy, after all, was crucial to insuring that necessary supplies kept flowing to the colony. Later, as the English became successful with the agricultural production of tobacco, this crop was the basis of all economic transactions and prevailed as such throughout the colonial period. Commercially, tobacco was an 'ideal staple commodity' for English merchants as the costs and source of supply were controlled, the product could be re-exported at a profit, and it enabled a market for English goods and services in Virginia (McCusker and Menard 1991, 118). Since tobacco dominated mercantilist activities in Virginia following John Rolfe's initial shipment to London of his cultivated *Nicotiana tabacum* in 1614, economists have tended to skim lightly over the economic system of the less well-documented initial trade and exploration phase of the colony. The perception by scholars, as articulated by Bruce (1935, II: 495), was that the Jamestown colony had no need for coin, 'which is just as much of a commodity as an agricultural or manufactured article', and that very little money circulated throughout the entire seventeenth century in Virginia.

To establish the strength and integrity of the archaeological contexts underpinning this study, Chapter 3 addresses Jamestown Island's archaeological past and present. In particular, the discussion focuses on the events that conspired

on the acreage of the island owned by the Association for the Preservation of Virginia Antiquities (APVA) to create an 'American Pompeii', thereby preserving the intact substrate contexts at James Fort forming the basis of this research. The historical and archaeological evidence for the fort contexts will then be surveyed to provide a temporal framework for the chronologically focused artefacts to be examined. As will be demonstrated, the James Fort assemblage is a rich resource for its closely dated archaeological contexts from a pivotal and immensely important period of Anglo-American history. Jamestown represents the beginnings of what grew to become the British Empire and, as the first successful transatlantic English colony, paved the way for subsequent migration to the New World, including the aforementioned Pilgrims to the New England area in 1620.

Most importantly, there is an undisputable start date of 13 May 1607, before which there was no non-Native habitation of the site. The substantial associated historical documentation of the early settlement supplements the archaeological findings and provides *terminus post quem* and *terminus ante quem* dates for building and clean-up efforts reflected in the soil. The artefact assemblage is like a Rosetta stone for categories of artefacts not tied down as to function or date and has the potential for making the kind of notable historical contributions for which historians are searching.

Chapter 4 of this investigation will examine the coins other than those minted for use in Ireland that have been found archaeologically in the *c*. 1607–1624 sealed features of James Fort. The discussion will construct the numismatic environment against which the Irish coins and the English and Dutch tokens may be compared, providing for the first time an accurate view of the coinage present in the earliest years of England's Virginia colony. The evidence will support the

traditionally held view that official issue coins were not being used within the colony for daily monetary transactions during this period, and will reflect the wider international market to which some Jamestown-related individuals were connected.

Apart from the Irish base-metal emission forming part of the subject of this study, few coins have been recovered from the sealed fort contexts dating to the Virginia Company period (1607–1624). This supports the established notion that very little officially-issued coinage circulated in the early colony, but does not rule out the possibility of a coin substitute planned for use within the settlement to expedite exchanges of goods for services. Archaeological evidence will be used to reconstruct a Virginia Company scheme for the use of coin that was never consummated because unforeseen events intervened. These include a 1609 shipwreck that delayed the arrival of the governor who was to implement the plan and a concomitant near breakdown of Jamestown's social order during a period of starvation and isolation caused by an Indian siege of the fort over the winter and spring of 1609–1610. Restoration of stability and civility in the colony required implementation of strict martial laws that covered all aspects of life; it was a form of 'absolute government' that ensured time was spent neither 'idely nor ymprofitably' (Rolfe 1971, 4). As a result, the proposed incentive provided by an internal currency was no longer considered relevant to maintaining peace and cohesion amongst the colony's labouring force.

Chapter 5 constitutes the core of the current study. Following a biographical format, the Irish coinage and the English and Dutch tokens from the early features of James Fort will be described in terms of both the Virginia contexts in which they were found and the original contexts for which they were intended. Some traditional ideas about the functions of these outmoded and/or recalled coins and

coin substitutes on both sides of the Atlantic will be challenged by their grouping within Jamestown's earliest contexts. To further substantiate the idea of the Virginia Company's intention to integrate token coinage into the colony's economic structure, the use of token currency in two early English New World colonies established subsequent to Jamestown — Bermuda and Newfoundland — will be examined in chapters six and seven. The plan of settlement in Bermuda, formed only five years after Jamestown and by many of the same individuals, is more fully articulated in the historical record than that of Jamestown. Since Bermuda's plan followed the formula of the earlier Virginia colony and was governed during the years when a token coinage was used in that country by an individual trained by Jamestown's leadership, insights to conditions of settlement in the Virginia settlement are gained by reading backwards from what is known about Bermuda (Craven 1937b, 326).

Newfoundland's use of token currency is, like Jamestown, surmised from archaeological evidence alone. The settlement's tokens, considered to be the first coins 'produced in the British colonies of North America', were made of lead, following the traditional metal of English merchant's tokens since the sixteenth century (Jordan 2006, 3005). Although the tokens appear to have been initially issued *c.* 1640, long after the Virginia Company control of Jamestown had ended, their inclusion in this study is applicable because, like the coins and tokens under discussion, they represent an inexpensive local solution to satisfy the immediate needs of a small community based upon an economy of delayed rewards.

In Chapter 8, familial and commercial links connecting the leaders of the Virginia enterprise, English governmental officials, and the Royal Mint will be discussed with the hypothesis that this web of interrelationships provided the

agency for the use of the obsolete coins and tokens at Jamestown. In particular, the Royal Mint will be suggested as the source of supply for these coin substitutes to provide economic stability in the colony just as it was the supplier of scrap copper for trade and for metallurgical trials searching for profitable commodities in Virginia.

The final chapter will summarize the evidence concerning the Irish coinage and the obsolete English and Dutch tokens found in early James Fort contexts. This investigation seeks to challenge traditionally held beliefs that these metal coins and exonumia were either brought to Jamestown as an assemblage of trade items for the Indians or that they arrived haphazardly in the colony as possessions of individuals. The historical and archaeological evidence will be used to maintain that the Virginia Company was planning to implement a program of token coinage that would circulate only within the Jamestown society. The money, with no intrinsic value, was intended to give confidence to the colonists that they would benefit financially from labours expended on the Company's behalf.

Chapter Two

Providing the Historical Context
An Introduction to the History of the Virginia Company
and its Plan for Settlement at Jamestown

2.1 Introduction

The present chapter will provide an historical overview of the Virginia Company and its early settlement at Jamestown to establish the framework for understanding how and why an internal economic system using token currency may have been planned for the colony. First, a discussion of the incomplete condition of the original Virginia Company records illustrates the possibility for an unrecorded economic plan as hypothesized by this study. This is followed by an examination of the 1606 formation of the Virginia Company by royal charter and the organization's subsequent reform by a new charter in 1609 to address the early failures of its colony. It is during this period of change when the Virginia Company re-evaluated the initial plan for its New World venture that this thesis considers a scheme to use token currency at Jamestown was proposed.

The remaining sections of this chapter will describe the establishment of the colony at Jamestown and the realities faced by the colonists that posed problems for the investors. Finally, an attempt will be made to reconstruct the company's first settlement plan, particularly the disparate conditions under which individuals participated in the colonizing venture. The growing discontent amongst some colonists who realized they would derive no benefit from their efforts in Virginia is conjectured by this study as a motive for the company's consideration of the new economic strategy using token coinage.

2.2 Records of the Virginia Company

Jamestown was a commercial enterprise for financial gain undertaken by a group of investors organized as the Virginia Company (Figure 2.1). Unfortunately,

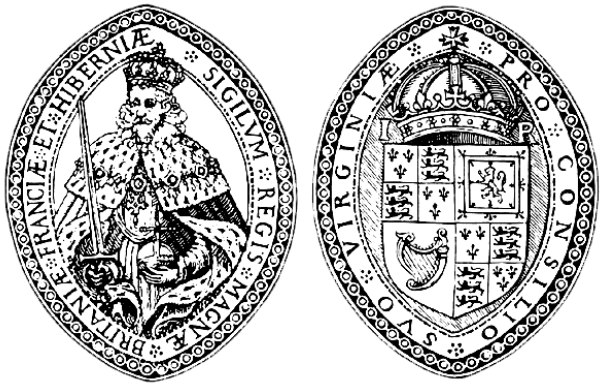

Figure 2.1. *Seal of the Virginia Company (http://commons.wikimedia.org/wiki/ File: VirginiaCompanyofLondonSeal-1606-1624.png).*

most of the company's official documents have been lost. These records, 'kept under the supervision of some of the best businessmen of the time', must have comprised a complete and accurate accounting of the organization's activities and intentions (Brown 1890, x). Although lamentable for historians, the absence of this material from official archives is understandable for a business venture such as the Virginia Company. Operating in a new and experimental sphere of colonization and in a climate of national and international political intrigue, it was in the company's best interests to keep financial and legal records private and inaccessible for public scrutiny.

Shortly before the company's dissolution by the crown in 1624, factional disputes within the organization caused all the records to be confiscated by a commission of the Privy Council for an official inquiry into mismanagement. The fate of the documents after the investigation was completed is not known, but

Kingsbury conjectured that some may have remained in the hands of commissioners interested in the overseas venture, while others were absorbed into the private papers of Virginia Company officers and shareholders (Kingsbury 1906–35, I: 107–15).

Of particular relevance to an understanding of a possible economic scheme planned or implemented in the colony is the loss of the first two court books kept under Sir Thomas Smythe's administration as treasurer of the Virginia Company between January 1606 and July 1619. Containing the minutes of the business meetings, the court books would encompass 'the discussions and decisions with regard to the plantation, the granting of land, and all financial policies and plans for developing the enterprise and increasing the income' (Kingsbury 1906-35, I: 23). These missing documents surely articulated the company's intentions and subsequent efforts, both successful and unsuccessful, as it tried to adapt to conditions in Virginia.

A smattering of other primary sources concerning the Virginia Company and its colony have survived and include documents such as reports, sermons, correspondences, and promotional tracts. Several compilations of this material serve as the founts of information for modern historical interpretations. Among these collected works are Alexander Brown's *The Genesis of the United States* (1890) that assembled all the known primary source materials dating prior to 1616, and Susan Myra Kingsbury's *The Records of the Virginia Company of London*, published in four volumes between 1906 and 1935 as a compilation of the Virginia Company's financial and legal documents from 1616-1626. Philip Barbour's three-volume work, *The Complete Works of Captain John Smith* (1986) annotates the extensive writings of John Smith, and his *Jamestown Voyages Under the First*

Charter 1606-1609 (1969) incorporates English and Spanish documents concerning the first two years of the Virginia settlement. More recently, Edward Haile's *Jamestown Narratives* (1998) brings together in one 946-page tome, a number of the letters and accounts authored by individuals associated with Jamestown's first decade.

Copies of the three royal charters issued to the Virginia Company survived the ravages of time in English and continental archives and in them can be seen the initial motives and principles of settlement, as well as some of the adaptations made by the organization to changing circumstances. The first charter granted by King James on 10 April 1606, is characterized by Bemiss (1957a, vi) as being 'replete with certain traditional and feudal principles, reverence for the English common law, and the supreme authority of the King and his agents'. The monarch had control of the colony but the onerous tasks of 'raising funds, furnishing the supplies, and sending out the expeditions' were up to the investors (Kingsbury 1906-35, I: 11). By the second charter of 23 May 1609, governmental authority shifted to the company's shareholders who, in turn, allowed more local control in Jamestown and a system of management that was responsive to the needs and rights of the colonists. As noted above and discussed below more fully, it is during the restructuring of the settlement under the terms of the second charter that this thesis hypothesizes a scheme for an internal token currency was proposed to address the lack of incentives for non-shareholders labouring in Virginia for the company. This need was especially pressing once it had become obvious that there would be no quick riches to be culled from Virginia.

2.3 'Make returne of present profit': the Virginia Company

The Virginia Company took shape through the first charter granted by King James, which entitled certain patentees to 'make habitation, plantation and to deduce a Colony of sundry of our people into that part of America commonly called Virginia', an area that encompassed the entire North American coastline above Spanish Florida. The patentees, referred to as 'Knightes, gentlemen, marchanntes, and other adventurers', were divided into two groups (denoted in the charter as the first and second colonies) with the rights to trade and settlement in two distinct areas on the eastern seaboard of North America between the latitudes of 34 degrees and 45 degrees north latitude (Figure 2.2). Stressing that this was an area not 'actually possessed by anie Christian prince or people', the letters patent strove to avoid confrontation with the Spanish with whom England had recently brokered a peace (Bemiss 1957a, 1).

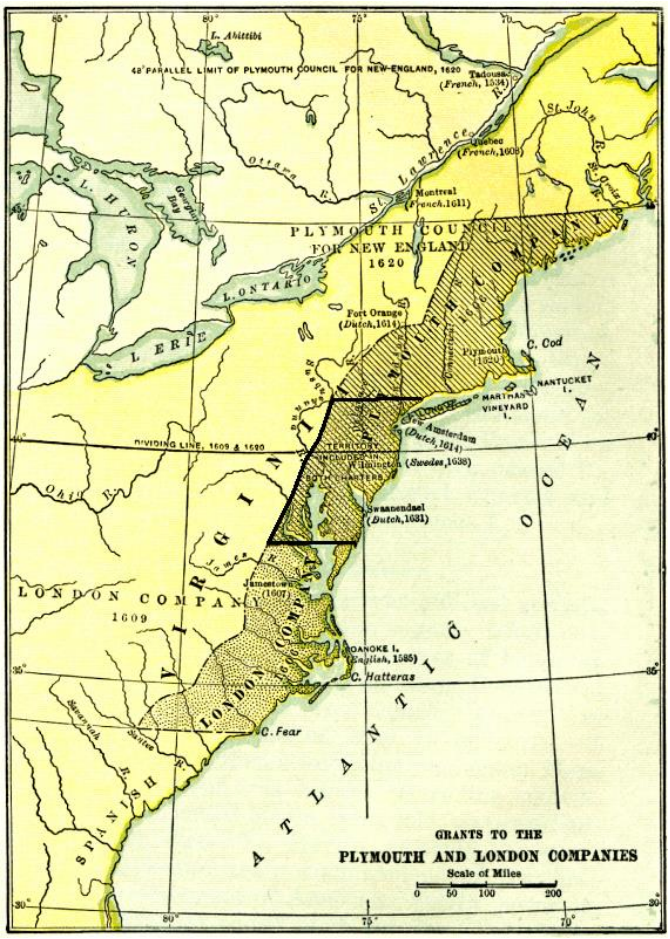

Figure 2.2. *Map illustrating the areas granted for settlement to the two companies in 1606. The territory between 38° and 41° could be settled by either company as long as they remained 100 miles distant from one another* (The Southern States of America *[1909]www.electricscotland.com/history/ america/south/south2.htm)*

The northern territory of "Virginia" was granted to a company of West Country merchants headquartered in Plymouth. This group established a colony headed up by Sir John Popham in present-day Maine that survived for little over a year before being abandoned. The second company of investors, seated in London, concurrently situated their colony on the James River in what is now the Commonwealth of Virginia. This settlement was named Jamestown and persevered to become England's first successful transatlantic colony. Its success where the Plymouth group failed was largely attributable to a milder climate than that faced by the Popham colony and, more importantly, to the London headquarters of its administration. Not only did the London-based Virginia Company have the backing of the city's wealthy merchants, some of whom lent their business acumen to the venture, but it also had access to, and the involvement of, high-ranking governmental individuals who wielded influence for the organization's benefit. The influence of London cannot be understated and, in the estimation of Kupperman (2007, 240), proved to be 'crucial to the investors' willingness to rethink their venture and forge ahead in the face of massive disappointment' in the initial outcomes of the fledgling colony.

With the Plymouth group, or second colony, no longer in the picture, the London organization became known as the Virginia Company. The motives for settlement are articulated in the initial charter and in the company's 'Instructions given by way of Advice' to its colonists (Bemiss 1957a, 1-12; Brown 1890, 79-85). Prominently stated in the document is the intent to propagate the 'Christian religion to suche people as yet live in darkenesse and miserable ignorance of the true knowledge and worshippe of God' (Bemiss 1957a, 2). While this noble-sounding objective proved not to be the major focus of the colony, it was considered to be a

beneficial by-product of English presence in the New World in that it would stem the spread of Catholicism and the sphere of Spain's influence. Religion was also thought to be a civilizing tool whereby converted Indians could be incorporated as a placable workforce for the colony (Craven 1957a, 2; Diamond 1958, 461–2).

Foremost among the investors' objectives was profit from marketable commodities to be found or developed in Virginia and from a newly discovered route through the continent to the riches of the Far East. The latter hope was based partly on information provided to Sir Walter Raleigh's men by North Carolina Indians in the 1580s and partly by experiences of the Muscovy Trading Company with the river systems of Russia, which were thought to be similar to those of North America (Craven 1957, 10–11). As a result, the colonists were instructed to place their settlement on a navigable river that 'bendeth most toward the North-West', which was believed would lead more quickly in the direction of the South Seas (Brown 1890, 80). Also guiding placement of the colony was fear of a Spanish attack on the English settlement. The English only had to observe the fate of the 1565 French settlement of Fort Carolina in present-day South Carolina to see the resolve of the Spanish against intruders to their professed claim to territory in America (Barbour 1969, 50). Contemporary Spanish intelligence revealed that this fear was not unfounded as Spain's ambassadors to London often pushed their king to challenge what they considered to be an ever growing nest of English pirates in Virginia primed to attack Spanish fleets in the Caribbean (Barbour 1969, 254–60; 286; Brown 1890, 443).

The Virginia Company financed its colony through a joint-stock fund that distributed the financial risk of the undertaking amongst investors called Adventurers, who bought shares of stock at twelve pounds and ten shillings apiece.

This method of pooling resources to support expensive ventures, and thereby limiting personal liability, was popular in England at the time; both initial voyages of the East India Company and Shakespeare's Globe playhouse were financed through joint-stock funds (Craven 1957, 16–17; Bowsher 2012 89-96). Initially the Adventurers appear to have been investing in a five-year terminable stock. No extant Virginia Company records specifically articulate the financial particulars, but King James' instructions for the colony dated 20 November 1606 stated that 'for the space of five years' the colonists were to 'trade together all in one stocke' (Craven 1957, 16; Brown 1890, 71). Within this short period of time, the Company expected that the extracted resources of Virginia would prove to be lucrative, thereby supporting the outlay of funds required for shipping people and provisions to the colony.

In the first couple of years, commercial and industrial specialists were sent by the Virginia Company to demonstrate 'that Virginia could provide profitable freightage for the ships of England' (Craven 1957, 12). The search for noble metals was emphasized and several goldsmiths and refiners were dispatched to that end; but other commodities such as glass, iron, naval stores, dyestuffs, furs, medicinal substances, and wood products were also sought (Brown 1890, 384–86; Bruce 1935, II: 440–94; Kelso and Straube 2004). Recent research on the metallurgical equipment and copper ores found during archaeological excavations of James Fort has substantiated the Company's broader interests beyond the much emphasized search for precious metals. Pertinent to the current thesis, Hudgins (2005a) has demonstrated that during the initial period of settlement a major focus was on locating the mineral ores needed by English copper monopolies for the production of brass. Similarly, Captain Peter Wynn's 1608 arrival in the colony may have had

as much to do with his knowledge of mining lead as it was his military experience (Hammer 1998, 82).

The initial results of these endeavours in Virginia were disappointing. There were no valuable resources readily available to offset the company's expenditures, and explorations of the Chesapeake Bay watershed had led to no trans-continental riverine route. Furthermore, the colony had suffered great losses in manpower with large numbers dying from diseases, inadequate provisions, and wars with the Indians. Worst of all were the reports that started reaching the investors' ears telling of the toxic conditions in the settlement created by chronic infighting amongst the men, lack of incentive, and poor leadership.

Fearful that King James would abandon the unprofitable scheme, especially in his 'desire to placate Spain', the Virginia Company Adventurers petitioned the crown for a new charter that would incorporate institutional reforms and, hopefully, save their investments (Kingsbury 1906–35, I: 22).Before the new charter of 1609, the governing body for the colony known as the Virginia Council resided in England. Under the control of the crown, the councillors were 'appointed by the king and sworn to his special service' (Craven 1957, 4). Taking direction from and appointed by the Virginia Council was also a governing council in the colony whose members were to take turns presiding as president for one-year terms. This arrangement of absentee management proved unsatisfactory for the unpredictable conditions in the colony that called for frequent and immediate adaptation and change. As colonist John Rolfe stated, 'the beginning of this *Plantacion* was governed by a *President* & *Councell Aristocratycallie* . . . and in this government happened all the mysery' (Rolfe 1971, 3–4).

The second Virginia charter, granted on 23 May 1609, removed the King's governmental control over affairs of the colony and placed it with the Virginia Company council whose members were chosen by the Adventurers (Kingsbury 1906–35, I: 22). From this point until 1619, when the Virginia Company endeavour had become so good as to offer a prospect of revenue' through the cultivation of tobacco, King James had little interest in the colony (Kingsbury 1906–35, I: 24).

The second charter also established a Planter membership in the Company, which provided shares based on 'labor input as well as capital contributions'

(Walton and Shepherd 1979, 39). Planters, according to the charter, 'goe in their persons' and adventurers 'doe adventure their monyes, goods or chattels' but all are incorporated in 'one bodie or communialitie' (Bemiss 1957a, 42). There would be no dividend for the Planters and Adventurers until 1616 at which time they would receive grants of land in Virginia as well as a share of the profits (Craven 1957, 17).

These reforms appear to address the discontent felt by individuals who were labouring on behalf of the Company in Virginia with no assurances of benefiting from future profits. As a result of the modifications, six hundred English were encouraged to sign on as 'adventurers in person' but a few of these individuals 'were smart enough to discount the propaganda that had persuaded them,' and elected not to participate in future rewards in lieu of receiving wages from the Company (Craven 1957, 19). It is this latter group for whom a token currency would make the most sense. With no ability to draw clothing or victuals from the Company store based on the value of their shares, these individuals had to be content with what they were supplied. Payment for work on company projects using coinage would not only instil confidence in the workers that they were being accurately compensated, but it would also provide a means of reward and incentive by providing the ability to acquire more goods based upon labour expended for the colony.

As previously mentioned, conditions in the colony were to be further improved by establishing an all-powerful governor at Jamestown. Sir Thomas Gates, a seasoned military leader, was chosen as the 'one able and absolute Governor' who would have an advisory council in the colony but who had the authority to institute martial law. He was advised by the Company not to worry

about the 'nicenes and lettre of the law' in cases of rebellion and mutiny (Bemiss 1957a, 58).

Gates was instructed to set up work groups of ten to twenty men to labour on 'severall workes accordinge to their undertakings in the bookes by which they were received' (Bemiss 1957a, 61). An overseer for each group would 'take daily accounte of their laboures'. This was to be reported monthly so that the cape merchant[5] could keep track of the 'goodes or provisions' that were 'advanced or gotten above expence' from the company store. From this accounting, the instructions explain, Gates and the cape merchant 'shall both knowe how your men are imployed, what they get & where it is, as also the measure of your provision and wealth' (Bemiss 1957a 65).

This thesis considers that Gates, intending to provide incentive for the colony's labourers and artificers and to ease the cape merchant's accountancy, brought a token currency that was meant to circulate only in the colony but that would be redeemable for English currency once the individual returned home. The unusual assemblage of coins and exonumia found in early James Fort contexts is postulated to have been part of a plan developed *c.* 1609 to provide immediate rewards for labour in the colony by using token coinage as payment. This scheme would target those individuals who were not investors. There is no documented proof that this plan was ever implemented and, in fact, the archaeological evidence suggests that the 'tools' for the plan were discarded during a spring 1610 cleanup and renovation of the fort to be described in Chapter 3. But to understand why an incentive program may have been considered necessary by the colony's administrators, the rest of this chapter will look at the conditions under which

[5] The cape merchant was in charge of all the merchandise moving in and out of the colony. He also maintained the company store and was to ensure that goods were distributed properly.

different classes of individuals came to Jamestown aboard Virginia Company ships and the corresponding expectations for them held by the Company.

2.4 The Establishment of Jamestown

The perceived Spanish threat to the Virginia Company's settlement, mentioned earlier, led to the company's instruction to its colonists to hide the colony's site one hundred miles from the mouth of a river. At the same time, they were to take care not to disturb the Native settlements. Both directives were difficult for the men to achieve as the James River was navigable for only about sixty miles before it reached the falls near modern Richmond, and Indian habitation was visible on both sides of the river, particularly along the freshwater section above Jamestown Island. The uninhabited 1500-acre island where the English chose to settle, only about thirty-five miles from the river's mouth, is located in the brackish oligohaline zone[6], which may have been one reason it supported no Indian settlement at the time (Figure 2.3). In the spring when the English first arrived the river was flush with freshwater from the winter melt upstream and the colonists would have found the water drinkable. But as the summer progressed, the river water would become noticeably brackish with little exchange between fresh and salt water, perhaps even creating a zone of turbid stagnant water that entrapped pathogens from wastes introduced by the colonists and by the Indian village of Pasbehegh six miles upriver (Earle 1979; Rountree et al. 2007, 138).

[6] The oligohaline zone comprises water with a salt content of 0.5–5.0 parts per thousand.

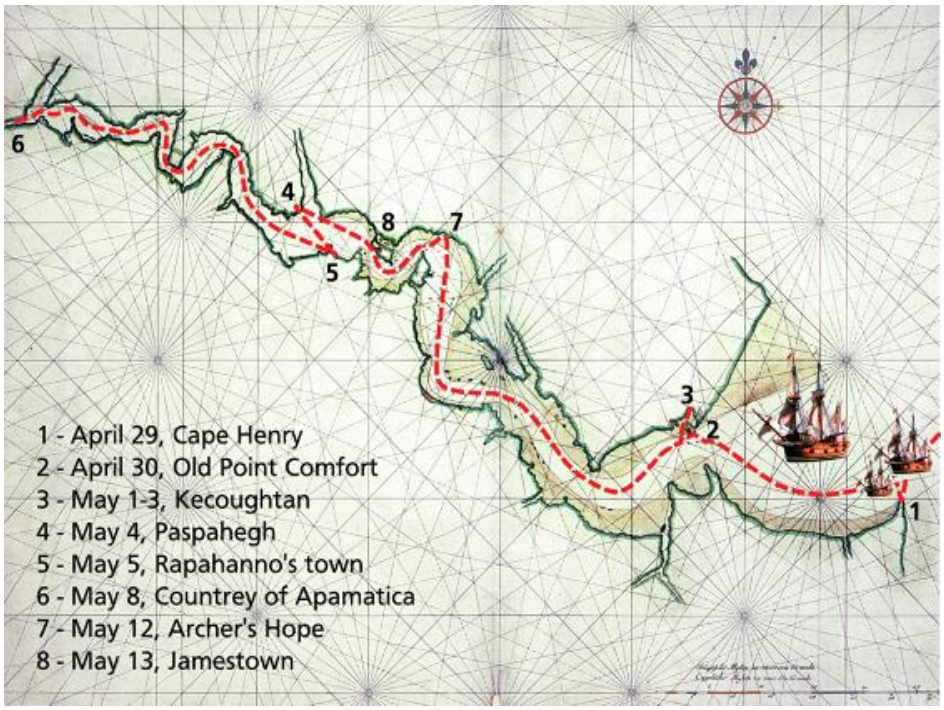

Figure 2.3. *Map of the James River from Johannes Vingboon's Atlas, modified to show the route taken by the English as they sought a suitable site to place their settlement (The National Archives, The Hague, Netherlands; modified by Preservation Virginia).*

Jamestown was established in the midst of the territory known to the Native inhabitants as Tsenacomoco. Encompassing 6,500 miles (16,800 square kilometres) of the Virginia Coastal Plain, Tsenacomoco was home to the Powhatan Indians who were politically organized into a highly stratified chiefdom, ruled over by a paramount chief known to the English as Powhatan. Friendly relationships with the Indians in the area of settlement was integral to the Virginia Company's plan to include them in the colony's system of resource exploitation by making them the primary suppliers of 'corn and all other lasting victuals' (Brown 1890, 83). The colonists were directed to establish a symbiotic relationship with 'the naturals' whereby inexpensive trade goods such as glass beads and pieces of copper would be exchanged for foodstuffs to sustain the settlement (Figure 2.4). On one trading

Figure 2.4. *Over 17,000 pieces of scrap copper for trade and metallurgical trials have been found in the c. 1607-1617 fort contexts (Preservation Virginia).*

expedition, for instance, John Smith was able to trade 25 pounds of copper scrap[7] along with 50 pounds of unspecified iron and glass beads for enough 'bread, corne, flesh, fish and fowle' to feed 40 men for 6 weeks (Smith 1986d, 206).

This bond of friendship was to be formed immediately and, as the colonists' instructions stated, before the Natives 'perceive you mean to plant among them' (Brown 1890, 83). The men 'were not permitted to manure or till any ground' as opening up large areas of land in cultivation from the outset could signal permanency that might alarm and possibly alienate the Indians. Besides, reliance on trade with the Indians for the 'country corn' made sense to the planners, not only

[7] Archaeological excavations have uncovered thousands of copper trimmings representing industrial by-products from the manufacture of domestic metal wares. As to be discussed later, Hudgins (2005a) determined that the copper was mined, and thereby processed, by the English copper monopolies, of which many of the directors and shareholders were also investors in the Virginia Company. Scrap from one English scheme was used to provide sustenance for another.

because it was not known how well the planted English seed would prosper but also because, ideally, it would help frame a friendly rapport with the native inhabitants whose information on the local resources was needed. Most importantly, it freed the colonists to focus on their principal goal, which, as previously mentioned, was to 'make return of present profit' for the London investors (Ancient Planters 1998, 894).

While appearing to be a good plan on paper, the colony's dependency on the native population for sustenance proved to be a perilous policy. Not only because the planners could not foresee how quickly would the relationship with the Natives break down, but also because they were unknowingly planting their colony in the midst of an area that was experiencing a severe drought. Recent scientific testing of ancient stands of bald cypress trees near Jamestown has indicated that the extraordinarily dry conditions started the year before the colonists arrived and continued until 1612 (Stahle et al. 1998). Besides further affecting the quality of the already salty drinking water, the environmental stresses brought by the drought probably led to lower crop yield and unusual migratory patterns of wildlife, compounding the tense relations between the Indians and the English who depended on them for food. No longer having a surplus of foodstuffs to share, the Indians became increasingly less willing to part with life-sustaining victuals for a few handfuls of copper or glass beads. Hostilities escalated over trade for dwindling victuals; with the English taking by force what they could not acquire through negotiation. Chief Powhatan finally cut the tenuous food-lifeline to the colony in 1609 when he realized that he would not be successful in incorporating the recalcitrant English into his stratified chiefdom. James Fort was placed under siege

by Powhatan warriors and the colony plunged into the 'starving time' winter and spring that killed three-fourths of the settlers (Gallivan 2007; Fausz 1990).

The Virginia Company had promised to provide victuals and other goods to maintain its colony but the supply ships were few and far between and, according to the colonists, the shipments were inadequate. In the first year, according to John Smith, the Company-supplied daily rations per man consisted of a pint of wheat and barley pottage that was full of worms from being 'fryed' in the ship's hold during the 4-month initial voyage. Smith further complained that for beverage there was only water, which from the brackish James River was often salty and the shallow aquifer beneath the island filled the colonists' wells with little better (Smith 1986c, 210).[8]

The persistent scarcity of food and lack of alcoholic beverages, the liquid refreshment of choice, meant that the few who managed to have pocket change found some use for it with every arriving ship. While anchored at Jamestown and waiting to be laden with commodities gathered by the colonists, the ships were described to be like floating taverns. John Smith recorded that the sailors aboard would readily pilfer the stores of beer and food intended for their return voyage 'to sell, give or exchange with us for money, Saxefras,[9] furres, or love' (Smith 1986d, 143).

To add insult to injury, the ships' crews took advantage of the desperate settlers by ransacking the company's shipments before arrival and then offering to sell the appropriated goods back to the colonists at exorbitant rates (Smith 1986d;

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[8] A recent hydrological study of Jamestown Island has discovered significantly high salinity levels in the aquifer which supplied the colonists' wells. This seemingly confirms Carville Earle's theory that the quality of the colonists' water supply contributed to the high disease and mortality rates of early Jamestown (Gregory Hancock, pers. comm. 2012; Earle 1979, 96–125).

[9] "Saxefras" is referring to sassafras, a much sought after medicinal plant that was used in Europe to treat syphilis. In 1610, the Virginia Company valued sassafras roots at '£50 and better per ton' (Sainsbury 1860, 11).

Percy 1922, 262). According to colonist William Strachey, the sailors expected advance payments of 'four or five for one' on the colonists' bills of exchange for a 'dust of corn' or 'a pint of beer' even though these victuals had been 'purloined and stol'n perhaps either from some particular supply or from the general store' (Strachey 1973, 72). Described by Strachey as an 'East Indian increase', the rate of four to one was evidently the customary arrangement for the illegal commerce of mariners sailing for the East India Company.

Strachey's reference to 'bills of exchange' indicates that commercial transactions in the colony, whether legal or otherwise, did not depend solely on the money, contraband, or homosexual favours mentioned by Smith, but also used credit. Gentlemen with sources of income in England had special access to goods on account, which enabled them to receive the 'particular' supplies mentioned by Strachey and provided them with an acceptable means of exchange in the mariners' black market. Special supply beyond the shipments provided by the Company appears to have been restricted to a select few of the colony's elite. As a general policy, Sir Thomas Smythe prohibited the colonists from receiving provisions from friends and relatives in England that had been sent 'at their own charge' (Haile 1998, 906). Smythe claimed that the settlers were exaggerating their want and supplementary support was unnecessary, but the policy was probably in place to ensure that as the sole providers of the colony only the shareholders were eligible for future claims to Virginia's riches. This guiding principle was not revised until c. 1616-1617 when a new system using magazine ships of privately-funded supplies was instituted (Bruce 1935, II: 279-80).

George Percy, who sailed to Jamestown on the initial voyage and remained through 1612, was one of the privileged gentlemen counted among the colony's elite (Figure 2.5). As the eighth son of the 8th Earl of Northumberland, Percy was 'the highest-born gentleman of the settlement' at the time of his arrival and served as the governor from September 1609 to May 1610 and then again briefly as deputy governor from March until May 1611 (Shirley 1949). While resident in the colony, Percy received a steady stream of supplies from his brother in London, Henry Percy, the 9th Earl of Northumberland. Amongst the many 'necessaries' sent to George Percy in Virginia were elements of arms and armour (some 'hatched with goulde'), 'diverse sewts' of clothing, gold buttons and lace, a feather bed with 'a Coveringe of tapestrie', twelve pair of shoes and six pair of boots. Foodstuffs were also shipped to fulfil Percy's stated obligation as governor 'to keep a continuall and dayly Table for Gentlemen of fashion' while the other settlers had to make do with the daily allowance out of the Company store of 'a pound of meale a day and a little Oatmeale' per person (Shirley 1949, 235–239). Even 'readie money' was delivered so Percy would not be caught short in case his credit was not honoured by visiting seafarers with commodities to sell, such as the

Figure 2.5.*George Percy (Herbert Luther Smith, Virginia Historical Society, Richmond).*

‘Tobacco and other Commodities’ he purchased from mariner Robert Markam (Shirley 1949, 237).

Percy’s visibly elevated status, illustrated by his access to goods, probably represented the position held to some degree by most of the colony’s gentlemen, especially if they were also shareholders in the Virginia Company. As adventurers they had access to the individuals, such as the ship captains, who made the decisions about what would be accepted to fill the limited storage space available on each voyage to the colony. Captain Christopher Newport, for instance, personally accepted ‘a litell Chest with lock and key’ containing nine pounds worth of clothing and provisions for Percy in Jamestown before departing England in October 1607 as commander of the First Supply (Nicholls 2005, 215–16).

Even so, this privilege of supply did not extend equitably to all of the upper classes. When gentleman Edward Fleetwood, son of the Recorder of London Sir William Fleetwood, departed for Virginia in 1609, he left behind several items that ostensibly would have been of use to him in the undertaking including ‘a bagge of Instruments for Sea’, a fishing rod, edged weaponry, and his books (Withingham 1980, 148). These possessions, along with clothing and several chests were left at a friend’s London home just before the voyage; possibly to be sent on later because Fleetwood had reached his allotted space for goods aboard the ship.

The sea captains were in positions of extraordinary power during the entire Virginia Company period as even Lady Margaret Wyatt, wife of then president Francis Wyatt, was denied passage for several barrels of wheat in 1622 (Kingsbury 1906–35, III: 690). Nevertheless, with special privileges enabling “care packets” from home, the colony’s gentlemen could not only eat better than the rest, they could also embellish their wilderness setting with the material culture of the English

gentry. This stratified society was not foreign to the English colonists who would expect individuals of position and noble lineage to live under better circumstances than the rest. But in Virginia, the differences were magnified by the crowded living conditions within the one acre of land protected by the palisades of James Fort. The harsh realities of life with no visible means to acquire the riches such as the 'pearl and gold' that had been purported to be present, bred discontent amongst the colonists who realized that they had essentially become employees of the Virginia Company (Haile 1998, xx- xxiii). This was especially true for the labourers, specialists, and craftsmen who had been recruited for the venture by the Company on promise of a future reward for their efforts, but who had no guarantees as to the amount of their compensation and, unlike the Company shareholders, had no voice as to how profits would be disbursed.

2.5 The Initial Plans of Settlement

The settlement plan at Jamestown is not explicit for the initial two years, but a 1610 broadside by the Company, together with a promotional tract written in February 1609 entitled *Nova Britannia*, provide, in historian James Ballagh's opinion, 'a perfect outline of the Company's policy at the time' that is probably consistent with the initial terms of 1606 (Ballagh 1895, 12). Further indications of the conditions under which the colonists came to Virginia are included in the Virginia Council instructions to its governors: in May 1609 to Sir Thomas Gates; and again in late 1609 or early 1610 to Gates' replacement, Lord De La Warr (Kingsbury 1933, III: 12–29). In addition, the Virginia Company's 1618 'Great Charter' for Sir George Yeardley's gubernatorial tenure helps to fill in the gaps as it

articulates the rights of individuals in accordance with the circumstances upon which they first arrived in the colony (Craven 1937b, 325–27).

These documents reveal that the basic difference in status depended on whether an individual sailed to Virginia at his own expense or at the expense of the Company. The cost of the voyage was placed at twelve pounds and ten shillings, the same amount as a share of Virginia Company stock. In return for their investment of time and labour in Virginia, the individuals who shipped themselves expected to 'share proportionately in the profits of the joint effort' on the same terms as subscribers who never left England (Craven 1937b, 326). This equitable arrangement is illustrated later by the terms of the property rights of 1618 in which individuals were to receive one hundred acres of land for their personal adventure, the same amount subscribers in England could claim for each of their shares. Ballagh (1895, 13) believed that the original conditions for shares also must have included assurance of a future land grant in addition to a share in the profits as this is consistent with earlier voyages of discovery.

About half of the first group of colonists are identified as gentlemen who most likely paid their own passage. The big question is why these individuals would put themselves in harm's way by personally venturing to Virginia. What was the motivation for them to subsidize their transatlantic voyages when they could reap the same rewards by investing an equal amount of money, but remain in the comforts of their English homes? Lured by the promotional literature extolling Virginia's riches, these individuals must have been encouraged by the prospects of personal profits above and beyond future dividends. By being present when gold, silver and other valuable commodities were unearthed or when the shortcut through the continent to the riches of the Far East was found, these men felt they would be

in position to gain personally from those discoveries. An example of this assumed prerogative is illustrated by Captain Christopher Newport. Even though he was an employee of the Company, Newport felt his status as commander of the first fleet entitled him to ownership of anything of value that he might find while in Virginia (Smith 1986a, 85). Another colonist, shareholder and gentleman Robert Evelin, sailed to Virginia in 1610 in a desperate attempt to recoup losses suffered in an unsuccessful patented scheme to make gunpowder. As he expressed to his stepmother, 'I am going to sea, a long and dangerous vo[yage with] other men, to make me to be [able] to pay my debts, and to restore my decayed estate again' (Scull 1879, 23). As a shareholder and a self-paying colonist, Evelin was compounding the value of his investment that he hoped he could increase by being an active member of the colony.

Another gentleman escaping mounting debts at home was Drew Pickayes, MP for East Grinstead, Sussex. Pickayes arrived at Jamestown in May 1607 in financial ruin. He had been in and out of debtor's prison concerning business dealings with the iron forge he owned and managed on his family estate Brambletye. Faced with mounting financial pressures, he was forced to sell Brambletye in 1601, and in the next year the Privy Council issued orders for his apprehension to prevent him from leaving the country (Thorndale 1995b, 225). In light of these troubles, a chance to recoup some of his losses in Virginia must have appealed to Pickayes who left his wife and children behind in England. Perhaps the Virginia Company intervened with the law on his behalf and even subsidized his transportation costs, for in Pickayes they had 'an expert to scout an iron industry in heavily wooded Virginia' (Thorndale 1995a, 132).

Some of the Jamestown gentlemen were younger sons of prominent families who would not be employed in managing inherited English estates and who joined military campaigns and colonizing expeditions looking for adventure, riches, and the possibility of recognition in courtly circles. Besides joining the clergy or studying the law, a military career or participation in possibly lucrative voyages of exploration were considered worthy of men of status who comprised a large percentage of the early colonists. George Percy, mentioned earlier, is illustrative of one of these adventurers. As the eighth son of the 8th earl of Northumberland, he was 'denied both the income of the nobility and the earning of the rising middle-classes' (Shirley 1949, 228). Dependent on a small annuity from rents on family-held lands, Percy studied law and fought in wars against the Spanish in the Low Countries before signing on for the adventure of the Jamestown colony (Nicholls 1992, 311-12; Brown 1890, 964).

In addition to the gentlemen who paid their way, there were 'extraordinarie' men such as 'Divines, Governors, Ministers of State and Justice, Knights, Gentlemen, Physitions, and such be worth of men for special services' who were to be 'rated by the Councell, according to the value of their persons'. They would be 'honorably supplied with provisions' at company expense 'according to the amount at which their persons and their services were estimated' and would be eligible to share in the profits after a specified period of time (Brown 1890, 272–3; Johnson 1609, 23).[10] Sir Thomas Dale, for instance, was rated by the Virginia Company in 1611 'at the Summe of Seven hundred pounds,' a value transferable to his heirs. Despite seven years absence from commanding a company of English soldiers in the Netherlands, in 1618, he was paid £1,000 salary by the States-General for that

[10] The original charter of 1606 specified five years and this was increased to seven years in the second charter of 1609.

time (Brown 1890, 872). Another individual receiving special compensation through arrangements made by the Company was the Reverend Robert Hunt, who served as Jamestown's first minister. When Hunt sailed to Virginia in 1607, he had not resigned his post as vicar of the parish church of Heathfield in Sussex, and his family continued to be supported by his stipend during his absence. By royal patent dated 21 November 1606, Hunt was granted the right to receive revenue from his post in England while at the same time taking 'one or more benefices, church dignities, or cures in the said parts of Virginia or America' (Smith 1957, 11–12). Captain John Smith recorded that the benefices or support for the minister of Jamestown was the princely sum of '500. pounds a year' (Smith 1986e, 296).[11]

Aside from the self-payers and the 'extraordinary' men subsidized by the Company, there were individuals who had been recruited by the gentlemen to serve them in the new settlement. According to Smith (1986d, 225), the men identified as labourers 'were for most part footmen, and such as they that were Adventurers brought to attend them, or such as they could perswade to goe with them'. The status of these servants in the colony meant that they not only worked for their masters, but that they also laboured on Company projects under the direction of the colony's leadership. Anas Todkill, for instance, described himself as Captain John Martin's manservant responsible for recording his journeys; but Todkill also added that Martin was only 'sometimes my master'. Smith referred to Todkill as a soldier and he is included on many of the early exploratory expeditions in Virginia without Martin (Smith 1986c, 216; 221; 224; 230; 265–66). Some of the colonists' sponsors never came to Virginia but instead sent individuals who could be their eyes and ears in the fledgling colony. William Brewster and Captain George Kendall, for

[11] Barbour conjectured that this generous amount is a misprint for £50 or that it was meant as a valuation in shares of company stock (Barbour 1964, 107).

instance, are thought to have been sent on the first voyage as informants for Lord Salisbury, a major Virginia Company shareholder and secretary of state to James I (Horn 2005, 40). Furthermore, John Ratcliffe, who replaced Edward Maria Wingfield as the colony's president in September 1607, was a close friend of Salisbury's secretary (Woolley 2007, 105; 419 n. 23). There were likely others whose sojourns to Virginia were subsidized to protect the special interests of investors, but these have not been identified in the records.

Finally, there were labourers and specialists who arrived in the colony at the 'Companies charges'. The Great Charter of 1618 reveals that these individuals had the least rights in the colonial society. They were eligible for grants of land like the self-supporting gentlemen, but only after they had fulfilled a service contract for a term of years on Company-owned land. Unlike other landowners, they would also be responsible for payment of a yearly one shilling quit-rent for their property. In the first few years, these proffers were held out as incentives, as 'land for the settlers and profits for the stockholders were affairs of the future' (Diamond 1958, 466).

Initially, all planters were to be maintained at the company's expense for a period of five years after which time it was hoped that Jamestown would be self-sufficient. Although not specified, Bemiss (1957a, 16) conjectures that this may suggest the existence of a 'five-year terminable stock' indicating that the 'Virginia adventure had depended upon joint-stock methods of finance from the beginning'. All the goods sent by the Company and all the commodities produced or collected by the colonists were to be placed in a storehouse, the first building to be erected in the fort as per the Company's directions (Bemiss 1957a, 18–19; Virginia Company 1969,53). Managing the storehouse and in charge of 'all the goods, wares and

commodities' was a cape merchant, who was to be selected yearly by the Virginia president and his council. Under his supervision, there were to be two or more clerks 'to keep a book in which shall be registered and entred all such goods, wares and merchandizes as shall be received'. The clerks were also to keep track of 'all necessaries' supplied to colonists out of the storehouse (Bemiss 1957a, 18–20).

From the very beginning of settlement there was a breakdown in this system through the colony's elite having special access to the stored goods. The first president, Edward Maria Wingfield, admitted that the cape merchant made no note of the merchandise he removed from the storehouse to spend 'in gift or trade with the Indians'. Nor was there any accounting of the trade items Newport took when he left on an exploratory expedition up the James River (Barbour 1969, 221). Smith wrote that Captain John Ratcliff, while president, had 'riotously consumed the store' and he accused Wingfield of feeding himself and his servants out of the Company supplies. Tellingly, Wingfield claimed that while he did take half a pint of peas, he had cooked it with a 'peese of porke of my owne provision' (Smith 1986d, 162; Barbour 1969, 231). As Percy's table of food for the 'Gentlemen of fashion' has already illustrated, the colony's elite ate separately from the rest of the men and, with the ability to draw from the private store of victuals, they could also eat better.[12]

Meagre supplies, inequitable distribution, and the high death rate in the first two years resulted in low morale for the colonists, especially those recruited to labour at the behest of the Virginia Company. The men were poorly provided for in return for their services and it became obvious that there would be no easily acquired riches to share. As Craven noted, any benefits to be derived from working

[12] Wingfield recorded giving the 'keeper of the private stoure' two bottles of salad oil that he had brought from England for his own use (Barbour 1969, 230).

for the company were delayed for a period of years, depending on the individual's status, and remuneration was not keyed to individual efforts (Craven 1937b, 327). There was no incentive to work and few reasons to even stay. Many colonists deserted, considering life in the Indian villages, where they were properly nourished and were availed of female company, to be a better alternative (Galenson 1996, 136; Smith 1986d, 215–17).

This thesis considers that with Sir Thomas Gates' assignment as governor in 1609, the Virginia Company devised a new plan to address this problem just as it reorganized the structure of management in that year. The company recognized it needed positive inducements to attract and maintain the colony's labour force (Galenson 1996, 136). Based upon the military model of imprest funds or advances on soldiers' wages, which would have been familiar to Gates from his recent service in the Netherlands, the scheme would invoke a system of token payment for working on company projects. Labourers would receive immediate and tangible compensation in the way of token coinage, which could be redeemed for extra goods in the storehouse or could be applied as credit to be paid upon the individual's return to England.

A broadside issued by the Virginia Company in February 1609 was written to entice 'all workmen of whatever craft they may be' to voyage to Virginia. Besides houses, food, vegetable gardens and housing 'at the expense of the Company of that Island' they were also promised a 'share of all the products and the profits that may result from their labor, each in proportion' (Virginia Company 1890, 248–49). While coins are not mentioned as a medium of exchange in this document, they are specified in verse by R. Rich, a gentleman who departed London in June 1609 aboard the *Sea Venture* in the company of Sir Thomas Gates.

2.6 'And he that in Virginia shall copper coyne receive': R. Rich's Verse and the Explication of Token Coinage Use in Jamestown

Richard or Robert Rich arrived at Jamestown in May 1610 after being shipwrecked in Bermuda for almost ten months. The *Sea Venture,* flagship of Sir Thomas Gates' fleet, carrying all the newly appointed leaders of the colony, sailed into a hurricane en route to Virginia, which caused it to be cast upon the reefs of Bermuda. All 150 aboard were saved and the castaways were even able to salvage materials from the ship, which they used, supplemented by the island's wood, in the construction of two small ships to take them to Virginia.

Rich was back in England by October 1, 1610 when he published a poem, probably at the behest of the company, about his time in Bermuda and his subsequent arrival at Jamestown. Entitled *Newes from Virginia. The Lost Flocke Triumphant; With the happy Arrival of that famous and worthy knight Sr. Thomas Gates: and the well reputed & valiant Captaine Mr. Christopher Newporte, and others, into England*, the tract is promotional and optimistic despite the author's allusions to 'scandal' and 'false report' about conditions in Virginia (Rich 1890, 420-26). By this time, negative reports by erstwhile colonists who had returned from Virginia had started circulating in England. The complaints concerned 'the Country itselfe, & of the Carriage of the business there' (Virginia Company 1890, 355). Of importance to this discussion is the particular information Rich imparted in his poem about the Virginia Company's method of payment for labour.

Rich described himself in the preface to his rhyming account as a gentleman and a 'soldier, blunt and plaine' although, since he is only identified on the document as 'R. Rich', there is debate about his identity. The *Oxford Dictionary of National Biography* entry for the individual identifies him as Richard Rich, without explanation, while at the same time discounting the claim of historian Philip

Barbour that he was the Richard Rich who was father of Sir Nathaniel Rich and the illegitimate son of Richard, first Baron Rich (Fell-Smith 2004; Barbour 1986, xlvii). Historian Alexander Brown claimed that the tract's author was Robert Rich, a subscriber to the Virginia Company at £12.10s and a brother of Sir Nathaniel Rich. This individual purchased shares in Bermuda from Jamestown colonist Ralph Hamor, was living in Bermuda by 1617, and died there in 1620 (Brown 1890, 980). Considering R. Rich's declaration to the reader at the end of his verse that he is 'for Virginia againe', it seems reasonable to accept that he is the Robert Rich described by Brown.

The portion of Rich's verse that is pertinent to this investigation is as follows:

> To such as to Virginia
> Do purpose to repaire;
> And when that they shall hither come
> Each man shall have his share,
>
> Day wages for the laborer,
> And for his more content,
> A house and garden plot shall have
> Besides 'tis further ment
>
> That every man shall have a part
> And not therof denied
> Of generall profit, as if that he
> Twelve pounds, ten shillings paid;
> And he that in Virginia
> Shall copper coyne receive,
> For hyer, or commodities,
> And will the country leave
>
> Upon delivery of such coyne
> Unto the Governour,
> Shall by exchange, at his returne,
> Be by their Treasurer
> Paid him in London, at first sight
> (Rich 1890, 425-6)

Rich outlines a system whereby individuals would not only share in the profits generated by the colony, but would also be paid wages for work on

Company projects. The pay was not in sterling specie but in "copper coyne" that was to be exchanged for a bill of credit upon leaving Virginia that could be redeemed in London from the treasurer of the Virginia Company. As will be discussed in Chapter 6, Rich is describing a system of token coinage similar to what would be repeated in Jamestown's sister colony Bermuda a few years later. Tokens also circulated in England's Newfoundland colony a few years after that. There is a pattern of token coinage usage in England's early North American colonies to satisfy a population that was accustomed to using tokens for business transactions in their everyday lives. While Bermuda and Newfoundland would produce their own base metal token coinage, there was no such issue especially for Virginia.

Rich's reference to the use of "copper coin" as the means of payment is intriguing as there is no contemporary regal issue of base metal coinage in England. The only copper emissions had been the pennies and halfpennies minted in 1601-1602 for paying Elizabeth's troops in Ireland. As will be explained in Chapter 5, these coins did not circulate in England and they were not well accepted in Ireland.

Jordan (2009, 194-5) speculated that Rich was referring to the use of Nuremberg jettons or casting counters as the token coinage even though materials analysis has shown that the Nuremberg jettons are made of calamine brass and not copper (Mitchiner 1988, 313). Jettons originated in the medieval time period as mathematical aids for working with Roman numerals. Used in conjunction with a gridded counting board or cloth, the jettons permitted calculations to be manually tracked as they were moved over lines and spaces representing decimal units (Figure 2.6). According to Barnard (1916, 78), jettons were sometimes distributed

Figure 2.6. *Accountant, using jettons for calculations at his counting table (Johann Karl von Landshut: Algorithmus linealis. Krakow [1515];Prov: Arthmeum/Research Institute for Discrete Mathematics, Univ. Bonn; Library, Inv.-Nr,:95.7-0973)).*

in the medieval Low Countries as ‘a tally-piece, or ticket, exchangeable for coin, as an acknowledgement of a certain quantity of work performed’. Seemingly lending credence to Jordan’s theory, Barnard stated that this use of jettons was ‘met with at most times and in many places in one form or another’ although he does not provide concrete examples for the post-medieval period (Barnard 1916, 78).

Schofield and Vince (2003, 160) could find no evidence ‘that jettons were ever intended to be used for exchange’ in Britain. Nevertheless, the interpretation of jettons as media of trade persists for these brass objects, which are both coin-like in appearance and ubiquitous in the time period when low denomination coins were in short supply (Jordan 2009, 191; Berry 2002, 22-3). Bowsher (2012, 163) suggested

that the 'goodly number' of Nuremberg jettons found at London playhouses were fulfilling the need for small change in Elizabethan society even though excavations of the Rose and Globe playhouses revealed few jettons in the audience sections, which would be expected if the objects were used by the playgoers as coinage. Rather, the Rose excavations revealed the 'largest concentration of Nuremberg jettons was found in the stage area' suggesting that they could have just as easily been stage props substituting for money if not used by theatre management for accounting purposes (Bowsher and Miller 2009, 134-5). All told, the commonality and accessibility of Nuremburg jettons in England from the mid-sixteenth century to the mid-seventeenth century, which contributed to their occurrence 'in almost every excavation anywhere in the country', argues against their use as currency at Jamestown (Mernick 2005, 3). Any newcomer to the Virginia colony could easily arrive with a pocketful of jettons that would pass as the token currency and thereby beating the system.

As mentioned earlier, over 500 of these coin-like objects produced in Nuremberg, Germany for use in manual accountancy have been recovered from early James Fort contexts (Figure 2.7). This comprises the greatest number of jettons from a single site in Virginia and probably in all of North America.[13] The largest concentration of jettons from the early fort contexts (n=108) was found in Structure 165, 'the Factory' which, as described in Chapter 3, is one of three pre-1610 fort buildings with a cellar and appears to have served as a storehouse for goods and perhaps a trading centre with the Indians.

[13] The second largest number from a Virginia site (n=215) was recovered from Jordan's Journey, located 26 miles upriver from Jamestown. This area was first settled by Samuel Jordan in 1622 and abandoned by 1635. These jettons, which are mostly the products of the Laufer workshop *c.* 1583-1651, reflect a different source of supply from Jamestown, which has jettons produced predominantly from the Krauwinckel workshop *c.*1562-1635.

Figure 2.7. *Jetton of Hans Krauwinckel II, c. 1586-1635, found while water-screening fill from Structure 177, the fort well dating c.1611-1617 (Preservation Virginia).*

It has been stated in the literature and commonly accepted that Nuremberg jettons were part of the trade goods the English brought with them to barter with the Indians in America (Noël Hume 1972, 171; Jordan 2009, 194; Cotter and Hudson 1957, 91-3; Cook 2006, 49; South 2002, 96). This interpretation disregards any need in the New World colonies for the original mathematical purpose of these objects and appears to have initiated with the discovery of three pierced jettons in contexts thought to relate to Sir Walter Raleigh's 1585-87 colonizing attempts on Roanoke Island, North Carolina. In his published report of the 1947-53 Roanoke Island excavations at Fort Raleigh National Historical Site, archaeologist J. C. Harrington (1962, 21) stated that these jettons 'were used as items of trade with the Indians, the holes permitting them to be strung'. Cotter and Hudson (1957, 91-3) repeated this evidence, stating that the European accountancy tools served a

different purpose in the New World as trade items for the Indians who may have worn the holed jettons 'around their necks like pendants, suspended from leather thongs'. In his seminal work first published in 1969, *A Guide to Artifacts of Colonial America,* Noël Hume reiterated that 'jettons or casting counters originally intended as mathematical aids . . . were frequently traded to the Indians, who strung them onto necklaces' (Noël Hume 1972, 171). Thus, the interpretation for holed jettons as trade goods was reified as fact in the literature because it seemed to make sense to the researchers even though there was scant documentation for the practice.

By the sixteenth century, the inexpensive mass-produced Nuremberg stock (standard design) jettons were plentiful in England. Colonizing groups travelling to the New World soon realized that the jettons, like other small inexpensive copper alloy objects, held some value for the Indians and could be traded for food. One 1586 expedition to Roanoke, for instance, recorded that 'for the tagge of a pointe,[14] a bell, a cownter, a pinne or such like, They will geeve you anie thing they have' (Anony. 1991, 307). Sir Richard Hawkins also included 'Counters' in his list of trifles such as combs, bells, pins, and beads that he traded with the natives of South America in 1594 (Hawkins 1933, 98). Small copper alloy objects seem to have been particularly successful bartering commodities but they also comprise essential everyday objects that were required by colonizing groups for their own uses. Tags or aglets covered the ends of laces used to fasten most clothing together, straight pins were used to 'support and fasten the myriad layers of clothes' of the late sixteen and early seventeenth centuries, and jettons were needed as mathematical aids (Bowsher 2012, 180). How does one determine the purpose or purposes for artefacts like these found in Contact period archaeological contexts? At the risk of

[14] A 'tagge of a point' is referring to an aglet from a short lace 'used to tie tailored garments together at the waist, or to tie stockings to the bottom of trunk hose, or on a shoe' (Tiramani 2010, 90).

providing a circular argument, the archaeological contexts themselves may provide the only evidence for reconstructing the biographies of objects over space and time (Haselgrove and Krmniecek 2012). Like the coins and tokens that are the subject of this study, jettons were familiar objects associated with commerce that served different functions through their life histories. Researchers must be careful not to characterize the use of these objects without regard to fully defining their contexts of 'time, place, and intention' (Myrberg 2009, 158).

So, as the previously cited references indicate, the jettons found by Harrington could represent items included in Raleigh's trading packet if they dated as early as Harrington had believed. The recent excavations of James Fort and new scholarship on jettons suggest a less firm association for the Roanoke counters. Although Harrington admitted that none of the Roanoke jettons 'was found in a situation that would date it positively as of the Fort Raleigh period', he felt that because they each bore the name of Hans Schultes, a jetton maker he understood to be in business from 1550-74, they must be proof of the sixteenth-century settlements. Recent analysis of the production techniques and decorative devices of the jettons suggests that none reflects the workshop of Hans Schultes I (*c.* 1553-1584), the only Schultes in production prior to the English colony. Instead, they appear to be from the workshop of Hans II (*c.* 1586-1603) and Hans III (*c.* 1608-1612) of the Schultes family (Mitchiner 1988, 396-412; Straube 2013, 191-93).

If the jettons post-date the Raleigh settlements then they probably relate to mid-seventeenth-century traders who are the first Englishmen documented to visit the area since John White in 1590 (Evans forthcoming). Or they could relate to late seventeenth-century activity in the area by which time jettons were no longer needed for manual accountancy, having been supplanted by the ability of most

individuals to make written calculations using Arabic numerals. Jettons continued to be used through the eighteenth century as gaming counters (Mitchiner 1988, 17, 23). Relegated to this less important role, they were likely used by the English as trade items with the Algonquian Indians who prized coppery metals. This renewed usage in bartering also explains why sixteenth and early seventeenth-century copper-alloy jettons and tokens are recovered in North America from much later colonial and Native archaeological contexts (Bradley and Camp 1994, 213; Stewart 1992, 71; Hunter 2008; Alaric Faulkner, pers. comm. 2002; Kent 2001 855). Researchers have been using the later seventeenth-century North American contexts associated with Indian habitation to interpret the use and purpose of jettons from the beginning of European colonization without taking into consideration the fact that in the early seventeenth century, the widespread use of Roman numerals in accounting required an ocular form of arithmetic. Even as late as 1653, a Jesuit priest in Canada describes porcupine quills used by the Indians as healing amulets to be 'fine and round like the copper counters that we use in Europe for reckoning' (Du Creux 1951, 651). As the century progressed, Europeans became numerate with written calculation using Arabic numbers, rendering redundant the traditional use of the jetton (Barnard 1916, 87-91).

Further to the argument, there is no support that post-production holes in jettons indicate that the objects were intentionally supplied for use in the Indian trade. While only 5% of James Fort's jettons are holed, for instance, numerous sixteenth and seventeenth-century jettons with nail bore holes have been found in England, particularly from the foreshore of the River Thames.[15] This indicates that many defaced examples were in circulation in England during the period of time the

[15] The author also observed that over 25% of the post-medieval jettons housed in the German Museum in Nuremberg were holed.

Virginia Company controlled Jamestown. Mitchiner (1988, 21) and Schofield and Vince (2003, 160) suggested that the holing of jettons may have been an official attempt to keep the coin-like objects from circulating as legal currency.

Alternatively, the holes may have been made to string the counters together in an easily transportable fashion. According to Barnard (1916, 83-4), jettons in the Netherlands were sold in casts of one hundred in metal cylindrical cases, which distils the seemingly extraordinary number of Jamestown jettons down to just six sets. But archaeological evidence in Britain suggests that they were commonly used in much smaller numbers (Schofield and Vince 2003, 160). It is likely that the brass discs were carried in a pouch or perhaps strung around their owner's hat, as seen in the *c.* 1616 painting by Willem Buytewech (Figure 2.8). The illustrated association of the coin-like objects with a playing card is interesting in light of the later documented use of jettons as gaming counters. This usage is not considered to have begun in England until the late seventeenth century 'when the widespread, routine use of counting tokens for accounts seems to have ceased' (Egan 2005, 172).

Figure 2.8. *Detail from Fröhliche Gesellschaft, Willem Buytewech, 1616.(Bredius Museum,The Hague).*

As Keith Thomas (1987) revealed in his article on early numeracy, numerical skills were unevenly distributed in early modern English society with the

result that throughout the seventeenth century counters and counting boards using Roman numerals continued to be used side-by-side with the written methods of computation using Arabic figures. Although the commercial use of Arabic numerals was seen in England by the mid-sixteenth century, the early calculating methodologies for the new arithmetic were unwieldy and not universally taught. Even an accountant of the Earl of Northumberland, brother of Jamestown colonist George Percy, is recorded in 1607 as having to learn 'the art of arithmetic' (Thomas 1987, 120).

For some individuals, especially those still counting on their fingers, there was distrust of the calculations by pen reckoning, which they did not understand and which often contained errors. According to Thomas, it was not until the late seventeenth century that the use of jettons to perform calculations was seen generally as a sign of ignorance. By this time 'Arabic numerals had come to be known as "English figures" and the Roman numbers seemed archaic' (Thomas 1987, 121).

In sum, the jettons from James Fort's earliest contexts are considered to have been brought by the colonists primarily for mathematical calculations and not for trade or for use as an internal currency. The accountancy function of the fort jettons is substantiated by the large concentration of these objects in Structure 165 (n=108), as will be addressed in Chapter 3, that served as a warehouse for goods. Another large group of jettons (n=78) was found in Structure 185, the well located in the centre of the fort that had been built as an addition to Structure 179, a large building believed to be a warehouse built at the same time as Structure 165 to house the colony's supplies (Kelso et al. 2012, 40-41). The activities in both structures would have required casting counters to keep track of victuals and other goods. At

the beginning of the 'starving time' in 1609, for instance, Governor George Percy appointed Captain Daniel Tucker to '*Calculate and Cast upp* our store' so they could ration out the remaining provisions to sustain the colonists for the longest possible time (Percy 1922, 265).

As Rich's rather verbose title indicated, he had returned to England with Sir Thomas Gates and Captain Newport who departed Jamestown in late July 1610, arriving in London in September of that year (Brown 1890, 894). This meant that he had two months at Jamestown during a rather chaotic time in the settlement. When the Bermuda survivors arrived, they found many of the colonists dead, and the distressed settlement suffering the after effects of a winter under siege by the Powhatan and a consequent shortage of food. Within two weeks, Gates, who had assumed leadership, decided that the settlement should be abandoned and ordered that the four pinnaces at the fort be readied to carry the more than 200 colonists to Newfoundland where they might be redistributed onto the English ships fishing there. With space at a premium, only the most necessary supplies could be taken aboard the ships. Colonist George Percy stated that Gates 'caused to be carried aboard all the Armes, and all the best things in the store, which might to the Adventurers make some commodity upon the sale thereof at home' (Purchas 1906, 53). The heavy and bulky pieces of artillery were buried in front of the fort and the rest of the materials, including the coins and tokens comprising the subject of this study, were dumped into any available hole, which included the *c.*1610 fort features described in Chapter 3. The filling of some of these contexts was continued when the fleeing colonists were forced to return to Jamestown just thirty hours after setting sail with the unexpected arrival from England of the new governor, Lord De

La Warr. This initiated the first major clean-up and rebuilding effort in the fort that resulted in many of the initial fort features being sealed beneath later structures.

2.7 Discussion

It is doubtful that Rich's knowledge of Jamestown's economic structure, as expressed in his poem, was gleaned during the unsettled time he was in residence there; but rather from his ten months in Bermuda in the company of Thomas Gates, the intended governor of the colony. It is likely that Gates had brought the Irish coinage and the Dutch and English tokens with him as a scheme to provide instant tangible remuneration to the labourers and craftsmen who customarily 'required much more than subsistence for their work' (Heslip 2007, 425). By 1609, when Gates left England as the colony's new governor, the prospects of finding quick and easy riches in Virginia had faded, as had the willingness of the settlers to work in a system offering some future uncertain compensation. As hypothesized in this study, the Virginia Company attempted to improve morale and incentive to work in the colony by putting into place a new economic strategy using wages as compensation for labour.

This arrangement would be familiar to the English colonists whose 'social expectations will have included the use of coins' (Heslip 2007, 425). Even the soldiers and sailors were accustomed to receiving imprest wages, or advances, on the contracted amount due them at the completion of their terms of service. Like the military model, the compensation each person received in Virginia would be deducted from his total share of the profits once it became eligible for them to claim.

In support of this theory, an examination in Chapter 6 of the short-lived use of token coinage in Jamestown's sister colony, Bermuda, will reveal similar problems of incentives to work as well as cross-fertilization of ideas by individuals who were involved in both colonies. As Kupperman (1979, 25 n.3) cautioned, historical analogies must be approached carefully, since there is no way of knowing for certain that 'the two sets of phenomena being compared do not differ in such important ways as to make the comparison fundamentally wrong'. For this study, the similarities between the early colonizing efforts at Jamestown and Bermuda are considered sufficient to allow historical analogy to explain the presence of numerous obsolete coins and tokens in Jamestown's early contexts.

Chapter Three

Providing the Archaeological Context

Jamestown as an Archaeological Resource and an Introduction to the Archaeological Contexts of James Fort Dating c. 1607-1624

3.1 Introduction to the History of Archaeological Excavations at Jamestown

While Jamestown Island is composed of 1,500 acres of land cooperatively managed by the United States Department of the Interior's National Park Service (NPS) and APVA, it is the 22 ½ acres owned by the latter organization that is the focus of this study. Historically, land management in the two areas has been very different. This is largely attributable to the disparate resources available to a governmental agency (NPS) that can tap into federal support and to a private non-profit organization (APVA) that is largely reliant on grants and donations to fulfil its mission. A flood of federal funding accompanied government-sponsored New Deal work programs on the federally owned land in the 1930s and 1940s and preceded the 350th anniversary of Jamestown's founding in 1957. As a result, the NPS property of New Town—the area into which Jamestown expanded in the 1620s—was the scene of archaeological explorations for over twenty years as areas were cleared for construction projects and 'the physical evidence of habitation' was uncovered for interpretive programming (Cotter 1956, 3). This work identified hundreds of seventeenth-century features, with most dating post 1650, and generated close to one million artefacts. Just two years after the last federal shovel plied the Jamestown soils, NPS archaeologist John L. Cotter published a synthesis of these findings along with the archaeological base map. While a useful body of work for pulling together all of the archaeological discoveries on Jamestown Island between 1934 and 1957, Cotter (1994, x) readily admitted that it was 'a simple descriptive report'. Only some of the artefacts are mentioned in relation to their

contexts, even fewer are illustrated, and there is no attempt to develop theoretical constructs using the material culture.

Prior to the major excavations in the 1990s, most of the archaeology on the island occurred at a time when there had been little archaeological examination of English colonial sites in America. Carson et al. (1981) provided the first explication of American colonial architecture synthesized from archaeological fieldwork in Virginia and Maryland; and the first compilation of the types of artefacts to be found on those colonial sites was produced in 1969 with Ivor Noël Hume's *Guide to Artifacts of Colonial America.* So, even as material remains were found during NPS excavations of Jamestown in the first half of the twentieth century, they were insufficiently understood. This shortcoming was readily admitted by NPS archaeologist Joel Shiner in 1955 when he stated that 'the dating of colonial artefacts has not yet reached the refinement that will permit many objects or features to be dated closer than to the nearest 25 years' (Shiner 1955a, 19).

These early archaeological investigations also took place before the discipline of historical archaeology had developed and, consequently, various survey methods were tried on the island, ranging from thousands of destructive auger tests to swaths of test trenches searching for brick foundations. This "bias for brick," resulted in the identification of only four earthfast or post-constructed buildings amongst over eighty structures that were uncovered, even though subsequent archaeology on the island has found this to be the prevailing architecture of early seventeenth-century Virginia (Kelso 2006; Horning 2006, 9).

In the 1930s and 1940s, excavations were by ten-foot-wide trenches and the artefacts were recorded by 100-foot-square lots. Fortunately, this method proved to

be too time consuming and costly in the 1950s and the archaeologists turned to three-foot-wide trenching on a fifty-foot grid (Cotter and Jelks, 1957, 388). Materials from these excavations were maintained by context, unlike the earlier work, which had sorted and stored excavated objects by type or material with the result that 'no artefact excavated at Jamestown between 1934 and 1936 can be linked with the structure or feature from whence it came' (Horning 2006, 9). J. C. Harrington (1984, 35), Jamestown's archaeologist between 1936 and 1948, retrospectively declared this to be the 'great tragedy of Jamestown'.[16]

While certainly a tragedy for the loss of information these remnants of Jamestown's past once held while sealed in their contexts, it is understandable; for, as Cotter expressed many years later, the archaeology was as much a pioneering effort as the settlement itself (Cotter 1994, ix). Historical archaeology, the study of archival documentation in relation to its associated material remains, was not formalized as a discipline until 1966 when the Society for Post-Medieval Archaeology was established in Britain. One year later the American equivalent organization, the Society for Historical Archaeology, was created and was influenced greatly by the issues raised by archaeologists Harrington and Cotter from their Jamestown experiences. Methodologies and ethics were formulated for the new science that required research plans and standards for the curation and conservation of archaeological finds. Discovery 'as an end in and of itself', which had epitomized the early Jamestown excavations, was no longer considered satisfactory (Horning 2006, 3).

Following the Cotter years, there was no archaeology on the island until 1992 when a five-year project known as the Jamestown Archaeological Assessment

[16] For a concise summary of the history of archaeological research on Jamestown Island, see Horning (2006).

(JAA) was initiated. [17] A collaborative effort by the College of William and Mary and the Colonial Williamsburg Foundation, the goal of JAA was to carry out a multidisciplinary evaluation of Jamestown's cultural resources. Guiding this work was the Systemwide Archaeological Inventory Program (SAIP) of the NPS, which stressed preservation of the resource through identification-level surveys and minimal excavation to achieve research goals. The last outcome the NPS wanted from this assessment was the addition of thousands of artefacts to their already burgeoning, and largely unanalyzed, collection. To answer specific research questions in the field, the assessment team relied on 'surgical cut' excavations that 'chiefly involved only the removal of plough zone and previous archaeological backfill to expose intact deposits' (Horning 2006, 4; Horning and Edwards 2000). The JAA succeeded in clarifying the results of some of the past NPS excavations at Jamestown in light of present-day theoretical constructs. It exposed excavation biases of the earlier work, refined colonial landholdings through extensive documentary research, and provided a more accurate idea of the dates, appearances, and uses of some of the buildings. One of the most important pieces of information generated by the assessment came from an environmental study involving core sampling of ancient Bald Cypress trees. Analysis of tree rings revealed that between the years 1606 and 1612 there was a severe drought in the region (Stahle et al. 1998, 564–567). This important new information on environmental conditions has implications for understanding the historical documents that address the early colonists' health issues, their lack of food, as well as their strained relationships with the Indians. The lengthy drought, according to Stahle et al. (1998), resulted in

[17] An overview of the Jamestown Archaeological Assessment is provided by Horning et al. (2001). For more detailed information there are a series of reports addressing different aspects of the work (Bevan et al. 2000; Blanton et al. 2000; McCartney 2000a; McCartney 2000b; McCartney and Kiddle 2000; Horning and Edwards 2000; Horning and Wehner 2001; Johnson et al. 2001; Carson et al. 2006; Brown and Horning 2006).

raised salinity levels in the tidal James River that served as the colonists' source of drinking water for the first year and a half before they constructed their earliest well. This augments historian Carville Earle's 1979 study that suggested much of the sickness, factious behaviour, and perceived laziness of the colonists may have been a result of salt poisoning from drinking salty James River water (Earle 1979). Another outcome of the drought would be low crop yield resulting in a strained food supply with little or no surplus. As previously mentioned, in the first years the Jamestown settlement was very dependent for survival upon corn provided by the Indians. Without corn, according to John Smith, 'the whole colony [would have] starved' (Smith 1986d, 205). This foodstuff had to be procured from the Indians because the Virginia Company's mandated emphasis on developing merchandisable commodities left the colonists with very little time for agricultural pursuits.

Corn was likewise basic to the Indian diet and has been estimated as providing 75% of the Native population's caloric intake (Brown 1996, 46). At times the colonists' desperate need for corn led to violent encounters with recalcitrant Indian groups who were trying to preserve their meagre supplies of the foodstuff. It may be no coincidence that the initial period of major conflict between the colonists and the Indians, the First Anglo-Powhatan War, spanned the years of the drought, 1609–1614, and was then followed by eight years of peace (Fausz 1990; Strachey 1973, 79). The marriage between colonist John Rolfe and Powhatan's daughter Pocahontas in 1614 is usually credited for this prolonged freedom from strife (Tyler 1900, 108), but the alleviation of environmental stress must certainly now be considered a contributing factor (Rountree and Turner 2002, 145; Horn 2005, 218–23; Noël Hume 1994, 328–29).

In contrast to the extensive archaeological work on the NPS part of Jamestown through the years, the APVA-owned land on the western end of the island remained largely unexcavated after early twentieth-century investigations of the foundations of two early churches and of the Ludwell Statehouse Complex.[18] The excavations of these two areas can be characterised as antiquarian studies that were initiated by APVA efforts, prior to the tercentenary celebrations in 1907, to clean up the area surrounding the brick church tower and to stabilize the eroding shoreline. The women who founded the APVA uncovered two foundations adjacent to the tower: those of a brick church, which they ascribed to 1638, and those of an earlier wooden church that matched the dimensions of one built in 1617 (Galt 1901). These investigators recorded artefacts they found during their excavations, which included some of the graves within and around the church. A few of these materials have survived in the archive with handwritten notes recording their provenances.

The brick foundations of the Ludwell Statehouse Complex on the western edge of the APVA property were uncovered in 1903 during shoreline stabilization efforts by the United States Army Corps of Engineers. Col. Samuel H. Yonge, chief engineer for this project, conducted the excavations and documented his work in *The Site of Old "James Towne" 1607–1698* (Yonge 1952). As with the church excavation, some artefacts associated with this work are stored in the archive with general descriptions as to where they were found. Cotter (1994, 27) noted that 'no specimens were systematically catalogued,' and today many of the artefacts that

[18] In the 1940s and 1950s, NPS archaeologists conducted brief excavations in the area of Fort Pocahontas, the Confederate earthwork, in the search for James Fort and in the area of the Ludwell Statehouse Complex to identify the bounds of a cemetery lying beneath it on the third ridge (Shiner 1957;Shiner 1955a, 28; Shiner 1955b).

seem to match Yonge's descriptions of finds can not be attributed with certainty to their provenances.

Following these early archaeological investigations, the APVA property was maintained as a shrine to the nation's naissance with very little change from the appearance it acquired for the 300th anniversary celebration of 1907. With the tercentennial observation, there had been a frenzy of building projects on the 22 ½ acres that was motivated, in part, by the drive of Southern preservationists to restore to the Commonwealth the dignity that had been so severely shattered during the Civil War half a century before. As one 1907 Jamestown guidebook unabashedly asserted, 'Jamestown [is] the sire of Virginia, and Virginia the mother of this great Republic' (Packer, 1989, 11).

The 1907 building projects, which still dot the APVA landscape, include the reconstructed brick Memorial church by the seventeenth-century church tower, the Yeardley House hospitality centre (now offices for the Jamestown Rediscovery Archaeological Project), the Dale House comfort station (known as the Rest House, then the Relic House, and now a food service facility named the Dale House Cafe) and numerous monuments to historical figures such as Pocahontas and John Smith (Figure 3.1). Also prominent on the APVA landscape is Fort Pocahontas, the earthwork built by Confederate soldiers in 1861 to protect Richmond, the capital of the South, from Union ships sailing up the James River. Even though it never saw military action, Fort Pocahontas was maintained on the property as a symbol for the membership of the APVA of the great losses suffered by the South during the war.

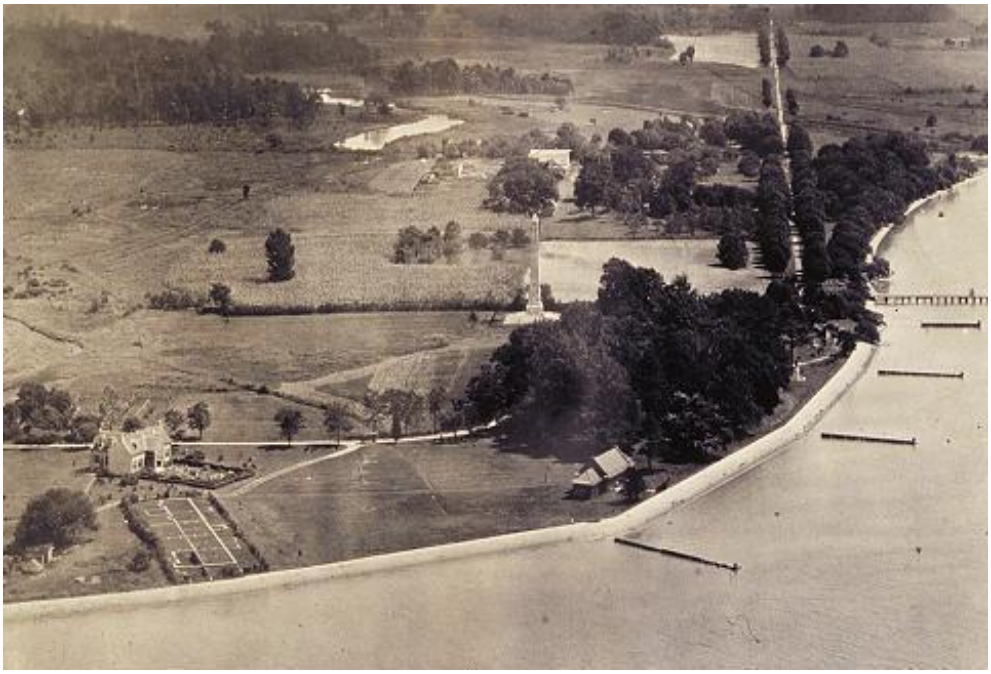

Figure 3.1. *Early 20th-century view from west of Preservation Virginia property on Jamestown Island. Visible at bottom left is the Yeardley House and the foundations of the Ludwell Statehouse Complex. Just below centre is the Dale House.The 1907 Memorial church is in the clump of trees behind the Dale House (Preservation Virginia).*

Archaeologist Audrey Horning (2006) cast a critical eye on the APVA setting, which she viewed as reflecting a nationalistic mindset that persisted in interpreting Jamestown as a shrine to the roots of 'Americanism.' This, Horning claimed, validated a 'cultural mythology' that undermined the ability to critically examine Jamestown in its Atlantic World context. While a legitimate complaint, it is precisely this patriotic fervour for Jamestown through the years that has contributed the most toward preserving the site of James Fort for the archaeological discoveries that began in 1994. With the benefit of advances over the past fifty years in archaeological techniques and in the scholarship of seventeenth-century material culture, the Jamestown Rediscovery Archaeological Project of the APVA is now placing Jamestown in context by helping to balance the traditional historical views.

Jamestown Rediscovery, as will be discussed more fully below, has successfully uncovered the remains of James Fort, established by the English in 1607, and hundreds of thousands of artefacts that relate to the *c.* 1607-24 fort period on the island. Before this important discovery, the physical remains of England's first permanent colony were only represented by the NPS work in New Town, which predominantly uncovered vestiges of the second half of the seventeenth century. Jamestown's earliest period was an archaeological 'black hole', which left its interpretation to the often biased historical documents without a reality check of the physical evidence. As mentioned earlier, modern scholars have been led by this dearth of data to a pervasive characterization of the early colony as a fiasco, largely populated by ill-prepared and lazy individuals (Ver Steeg 1964; Morgan 1975). Most of the colonists were typified as being 'without a trace of foresight or enterprise' (Woodward 1936, 31). This story has been repeated often, prompting historian Thad Tate to comment in 1994 that if anything new is to be learned about early Jamestown 'it will have to come from archaeology' (Kelso and Straube 2004, 33) The recent archaeology of James Fort is fulfilling that prophecy by revealing evidence that provides information not found in the records and that acts as a catalyst to challenge the traditional interpretation of Jamestown's founding years. Recent knowledge includes such aspects as the architectural appearance of the fort; the activities of specialists attempting to turn a profit on Virginia's resources for the Virginia Company of London; the colonists' interaction with the Virginia Indians; and the material culture with which the colonists mediated their daily lives (Kelso and Straube 2004; Hudgins 2005a; Kelso 2006; Straube 2006; Schmidt 2006; Pecoraro and Givens 2006; Deetz 2001a; Straube 2001).

This study will focus upon discrete groupings of artefacts that are surprising in their context of Jamestown and that suggest an historical interpretation that has thus far not been attainable through the written record. The research will touch upon the early colonial economic system, the first plan of settlement, and the tightly woven web of individuals who had access to power in English society and who pulled the strings on the stage that was Jamestown.

3.2 The 'American Pompeii'

Many factors contributed to the preservation of James Fort's features and material culture over 400 years. These include the relocation of the colonial capital from Jamestown to Williamsburg in 1699, the agricultural cultivation of the island in the eighteenth and nineteenth centuries, the presence of an active church into the eighteenth century, the continuous use of the churchyard for burials into the nineteenth century, the construction of a Civil War earthwork over the buried James Fort, and, finally, the APVA acquisition of the acreage encompassing the seventeenth-century fort site in 1893.

In 1905, newspaper editor Charles Marshall Graves enthusiastically proclaimed Jamestown as 'the Pompeii of America' in response to new and unexpected archaeological discoveries on the site of America's birthplace (Graves 1905). The first of what he called 'intelligent excavations' had begun just two years earlier on APVA property around the standing brick church tower and within brick foundations, later determined to be Jamestown's last statehouse, that had been uncovered during shoreline stabilization efforts. Substantive architectural remains and many artefacts were brought to light from these projects, belying the commonly held view that the original settlement had fallen victim to the erosive actions of the

James River (Girardin 1805; Randolph 1837; Lossing 1851–52). After three hundred years, it was becoming apparent that the site long venerated as the "cradle of the republic" still contained evidence of its seventeenth-century roots beneath the soil. Graves (1905, 277) happily predicted that 'the history of the nation's forefathers lies buried on the Island in a grave waiting, under the hand of the student, to give up its dead'.

Over the past century, Jamestown's history has indeed 'given up its dead' under the hands of scores of archaeologists, engineers, architectural historians, antiquarians, and historians. Horning (2006, 1) suggested that Jamestown 'is perhaps the most archaeologically investigated site in North America' with proportionately very little substantive information about the colonial experience as a result. This dearth of critical data, however, is not attributable to the quality of the resource, which recent archaeological excavations have shown contains many sealed and tightly datable seventeenth-century contexts (Kelso 2006; Kelso and Straube 2004; Brown and Horning, 2006). Rather, as previously reviewed, it is a result of when, how, and why archaeological work was done on the island.

Jamestown's path towards becoming an unparalleled archaeological resource began with an act of arson. On 28 October 1698, prisoner Arthur Jarvis set fire to his cell that was apparently located in the row of buildings, currently called the Ludwell Statehouse Complex, on the western edge of the island. As flames quickly spread to the statehouse on the end of the row, colonists lobbed government records from the windows, with the result that all 'records and papers were saved', but little could be done to rescue the building, which 'in a very short time was wholly burnt' (Sainsbury 1905, 513 & 516).

The government, under the leadership of Governor Francis Nicholson, continued meeting for the next few months in private homes on the island, but Jamestown's days as the colonial capital were numbered. At the time of the fire, Jamestown consisted of only thirty houses and, in Nicholson's opinion, was 'reduced to so mean a condition that it cannot give entertainement to the people attending both a Generall Assembly, and a generall Court together' (McIlwaine 1925-1945, I: 409). Likeminded individuals took advantage of the disarray caused by the statehouse fire and mobilized students from the College of William and Mary to propose relocating the capital inland to Middle Plantation (modern-day Williamsburg) where the college was situated. Governor Nicholson and members of the council and House of Burgesses heard five speeches from the students on 1 May 1699, describing how the college would profit both from the growth of support services that would follow the government and from the 'conveniency of good company and conversation' that access to the legislators would provide. In a not-so-veiled denigration of Jamestown Island, the students argued that the seat of government would benefit from the new location, which is 'free from the plague of Moskitoes and the noisome stinks and thick fogs of Fenny, Marsh and Swampy grounds'. Further, the students pointed out that Middle Plantation was centrally located and easily accessible, with two navigable creeks connecting it with the York River on one side and the James River on the other (Anony.1930). This last argument was particularly relevant for, aside from governmental affairs, most of the colony's energy by this time had shifted inland, with many new settlements north of the York River where there were abundant soils for producing high quality tobacco (Horn 1994, 161-199).

Following two weeks of debate, the burgesses agreed to the relocation and on 8 June 1699, Nicholson made the capital's move official (McIlwaine 1918, 265, 273-276). With this decision, Jamestown started its decline from what John Smith had prophesized to be a 'verie fit place for the erecting of a great cittie' (Smith 1986a, 29) but began its journey towards becoming the consummate archaeological resource for the interpretation of English America's first century. The shift of the capital ensured that Jamestown would never develop from its colonial roots to become a large city like New York or Philadelphia. Unlike these present-day American metropolises, much of Jamestown's seventeenth-century past would lie buried and, for the most part, undisturbed by modern intrusion, waiting for the archaeologists' trowels to unlock its secrets.

Even though Jamestown's importance declined with the departure of the capital in 1699, the island was never completely bereft of activity. James City County's court continued to meet there for the next fifteen years and several colonists maintained their Jamestown residences (McCartney 2001, 83–93). But without the cyclical meetings of the legislators and all the support services they required, the town slowly atrophied. In 1724, it was described as consisting 'of nothing but Abundance of Brick Rubbish, and three or four good inhabited Houses' (Jones 1956, 25).

By the mid-eighteenth century, most of the island's acreage had been acquired by two wealthy families who put it under cultivation. This land pattern continued into the twentieth century, which was most fortuitous for the archaeological resource. Ploughing during this time only impacted the first foot or so of soil leaving intact the deeper seventeenth-century features such as wells, ditches, postholes, trash pits and graves (Kelso 2006, 49) (Figure 3.2).

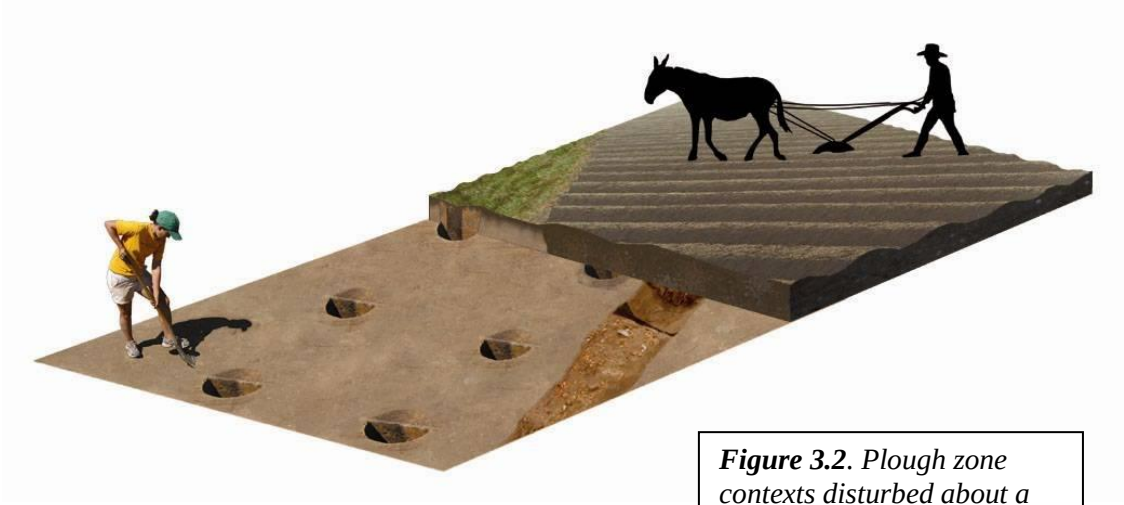

Figure 3.2. *Plough zone contexts disturbed about a foot of soils over James Fort's sealed features (Preservation Virginia).*

The cultivated fields also served to minimize the impact of swarms of visitors on the site, particularly during commemorative events. In 1857, for instance, the 250th anniversary ceremonies were not held at the traditional site of the brick church tower but two miles away on the eastern end of the island because the "owner of Jamestown had devoted the land surrounding the old church to agricultural purposes" (Tyler 1900, 60). This was particularly auspicious for the archaeological remains of James Fort, which lay just to the west of the church, because the event hosted between six and eight thousand people and included the construction of several buildings including a 175 ft long 'refreshment saloon' and a dining hall that could serve 500 people at a time (Couture 1984, 13; McCartney 2000a, 264).

Agriculture was still very much in evidence four years after this event when Confederate soldiers built five earthworks on the island in anticipation of a Union advance on Richmond by way of the James River. Confederate General Robert E. Lee is said to have regretted the destruction of "a promising wheat field" during construction of these fortifications (McCartney 2001, 116).

The main Confederate earthwork, Fort Pocahontas, was situated near the old church tower so as to be strategically placed for line of sight down the James River. As later archaeological investigation would show, this earthwork covered half of James Fort, which had also been situated for military purposes 250 years earlier. During construction of Fort Pocahontas, pieces of seventeenth-century military equipment were reportedly found, hinting of the early fort that once stood on the same ground (Tyler 1900, 80). One of these objects, an iron arm defence or vambrace, found its way to the Virginia Historical Society in Richmond, Virginia, where it is presently housed (Figure 3.3). This element is part of a three-quarter suit of armour which was replaced in England by cuirassier armour in the mid-seventeenth century (Tarrasuk and Blair 1979, 495).

Figure 3.3. *Vambrace found at Jamestown during construction of Confederate earthworks (Virginia Historical Society, Richmond).*

While construction of a Civil War fort over James Fort would seemingly be a destructive act, the six-foot-tall mounds of dirt actually served to preserve a good deal of the resource beneath them. Recent excavations have shown these mounds to be full of seventeenth-century material, revealing that they were created by Confederate soldiers scraping up the soils covering James Fort. Most of this dirt had already been disturbed by eighteenth and nineteenth-century ploughing, leaving many of the deeper features intact. Although this created uneven preservation of the seventeenth-century resource—particularly along the banks of the river, which were reinforced against amphibious landings by Union

troops—the earthworks provided a buffer against later ploughing, resulting in little alteration of the fort-area landscape post Civil War (Kelso and Straube 2004, 41).

The location of the church tower and its associated churches was not only a hint as to where the remains of James Fort may lie, as will be explained later, but it also served to protect the nearby archaeological resource. Even as the town was dying out, attendance at the Jamestown church grew stronger as 'faithful parishioners maintained the church for some fifty years into the eighteenth century' and continued to bury their dead in the surrounding graveyard (Billings 1991, 105). The obvious graveyard served to deter digging in the area through the years, although patriotic visitors had no qualms about removing chunks of deteriorating grave makers or bricks from the church as souvenirs (Stanard 1903, 3).

When the church was finally abandoned by its congregation in 1758, the church and its graveyard were considered public property and reverted to the colony of Virginia, which later became the Commonwealth of Virginia (Billings 1991, 105; Stanard 1903, 4). While the church walls crumbled, the graveyard continued to be used for interments through the eighteenth century, mostly by the families living on the island. In the late eighteenth century, Jamestown resident John Ambler used bricks from the ruinous church to build a wall around some of the gravestones on the church's west end. This enclosure, which still stands, was estimated by church historian Bishop William Meade (1857, 112) to encompass only one third of the original churchyard; but it was intended to protect surviving grave markers from vandalism, some of which related to Ambler family interments. The latest burial in the church graveyard is believed to have occurred on 14 May1807 during celebrations commemorating the landing at Jamestown 200 years earlier. The individual was an unknown young man who was said to have succumbed to the

‘heat and too free use of ice in cider” (True 1983, 9). The 1862 account of fifteen Union soldiers being buried ‘at James Town’ does not specify whether this was in the graveyard or not (McCartney 2000, 272).

As the brick church slowly fell into ruins, only its 36-ft-tall brick tower remained as a landmark of Jamestown’s seventeenth-century past. Traditionally interpreted as being part of a brick church built in 1639, recent analysis of the brickwork by architectural historian Carl Lounsbury suggested that it was constructed in the 1690s as a late addition to an existing church (Lounsbury et al. 2004, 9). Regardless of belonging to the early or late seventeenth century, the tower is the earliest above-ground structure on Jamestown Island and through the years has stood as a monument marking the site of America’s birthplace.

In 1889, a formalized movement to preserve the church tower and surrounding graveyard began with the naissance of the Association for the Preservation of Virginia Antiquities (APVA). Now the oldest historic state-wide preservation organization in the United States, the APVA’s founding mission was ‘to restore and preserve the ancient historic buildings and tombs in the State of Virginia, and acquire by purchase or gift the sites of such buildings and tombs with a view to their perpetuation and preservation’ (Stanard, 1903, 4). Jamestown, and particularly the iconic church tower, was of utmost importance to the newly-formed organization that considered this important national symbol to be threatened by neglect (Figure 3.4). It stood in the midst of a farmer’s field with the nearby James River lapping hungrily at the eroding shoreline. In 1894, one of the APVA’s founders, Mary Jeffery Galt, called it ‘a picture of desolation . . . a wilderness of poor deserted farm land” (Galt 1901). The APVA petitioned the Virginia General Assembly for ownership and in 1892 the Commonwealth conveyed to the

organization all rights to the church property. A year later, the landowners of Jamestown Island, Mr. and Mrs. Edward Barney, gifted the APVA with 22 ½ acres of land surrounding the church, which provided the APVA with right-of-way access to the site (Couture 1984, 24; Stanard, 1903, 4). With the aid of a congressional appropriation for a seawall designed by the United States Army Corps of Engineers, the APVA halted erosion along its property shoreline. Thus, most of James Fort was saved to be discovered by the Jamestown Rediscovery Project beginning in 1994.

Figure 3.4. *Political cartoon of 1935 showing the APVA's successful efforts to save Jamestown as a historical shrine (Richmond Times Dispatch).*

3.3 Giving Voice to the Spade: The Jamestown Rediscovery Archaeological Project

> It has been said that the spade cannot lie, but it owes
> this merit to the fact that it cannot even speak.
> (Grierson 1959, 129, quoted in Moreland 2011, 11)

The spade may be mute but its contents often are not. The first shovelful of dirt dug by the Jamestown Rediscovery Project of the APVA was in April 1994 and, as luck would have it, scooped out the top of a pit (Pit 1) that had been filled with refuse *c.* 1610. James Fort had been found, but it would take another two years of uncovering the remains of the military structure—including bulwarks, curtain walls, gates, and trenches—and studying the accompanying material culture before a public announcement would be made. While the immediate discovery of the long lost fort seemed serendipitous to most, a great deal of scholarship preceded the decisions of where to dig and what to look for in the search for the settlement established in 1607.

3.3.1 Prelude to the Spade

In the late nineteenth century, historian Alexander Brown discovered a depiction of James Fort on a map in the Spanish archives (Brown 1890, 184; Barbour 1969, 238). Historical documents reveal that the roughly drawn map of the Chesapeake Bay region was sent to King Phillip II of Spain on 10 September 1608, by his ambassador to London, Don Pedro de Zúñiga who claims to have received the map from someone who had been in Virginia (Zúñiga 1890, 183). This map is believed by historians to be a copy of one sent by John Smith to explorer Henry Hudson in England by way of Captain Francis Nelson who left Jamestown on 2 June 1608 (Brown 1890, 183-184; Barbour 1969, 236; 238-239; Van Meteren 1969 274). The original map has never been located although it appears to have been in

Hudson's possession when he travelled to the Netherlands in the latter part of 1608 (Brown 1890, 184). Considering the short period of time between when this document must have arrived in London and when it was known to have been sent to Spain, it appears that the Spanish informant managed to acquire and copy the map while it was en route to England.

Situated on the banks of the James River, the fort is depicted on the map as triangular in form with a semi-circular bulwark at each corner (Figure 3.5). This image matches colonist George Percy's description of the fort, which he reported as being 'triangle-wise, having three Bulwarkes at every corner like a half Moone, and foure or five pieces of Artillerie mounted in them' (Brown 1890, 165). Also supplementing the cartographic image of the fort is a description by colonist William Strachey that gives the dimensions of the east and west sides of the fort as 100 yards long and 'the south side next the river' as 140 yards in length 'by reason the advantage of the ground doth require' (Strachey 1973, 79-81). With these verbal and pictorial depictions of James Fort, the Jamestown Rediscovery archaeologists knew what to look for, but where to look remained uncertain.

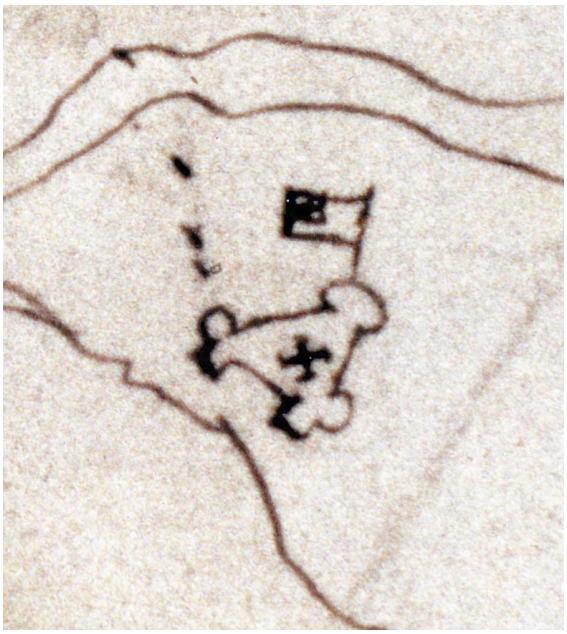

Figure 3.5. *Detail of 1608 map showing the triangular James Fort (Ministerio de Educación y Cultura de España, Archivo General de Simancas, MPD, 19, 163).*

Although most researchers of Jamestown's history believed that James Fort had long ago succumbed to the erosive forces of the James River, most also believed it had been

located in the vicinity of the church and the Confederate earthwork (Yonge 1952; Tyler 1900; Harrington 1985; Noël Hume 1994). Supporting this theory was the idea that church locations are relatively stable, especially once there are burials within a church or in an established churchyard. The present day church tower, representing the only remaining above-ground structure from the seventeenth century, marks the location of churches through 150 years of Jamestown's history. The tower stands by two separate yet parallel foundations found, as mentioned earlier, during antiquarian excavations in the early twentieth century. Cobblestone foundations for a frame structure measuring 20 ft x 50 ft correspond with the dimensions of the church erected by the colonists in 1617 (Ancient Planters 1998, 907). Enveloping these remains are the foundations for a larger brick structure measuring 27 ft x 55 ft. These are most likely the vestiges of the "brick, faire and large" church erected by the mid-seventeenth century that was burned in 1676 during Bacon's Rebellion (Mathews 1836, I: 24-25). Documents indicate that this building was 'either completely rebuilt or repaired in the late 1670s and early 1680s' and continued in use into the mid-eighteenth century (Lounsbury et al. 2004, 7).

Foremost in informing the APVA archaeologists in their search for James Fort was the knowledge gained by several excavations in the 1970s and 1980s in Tidewater Virginia,[19] which had uncovered seventeenth-century settlements that had been fortified with wooden palisades against the Virginia Indians (Neiman 1980; Miller 1986; Noël Hume 1982; Deetz 1993; Hodges 1993; Mouer et al. 1994; Noël Hume and Nöel Hume 2001; Luccketti 2010). Contrary to the commonly held

[19] Tidewater Virginia is used to describe the eastern part of the state that is east of the Fall line, west of the Chesapeake Bay, and located between the James and Potomac rivers. This is the area of the earliest colonial settlement and the waterways in this region are affected by tides. For a summary of some of the key early fortified settlements that informed the search for James Fort, see Luccketti (1999, 21-33) and Luccketti (2010).

perception developed in the 1950s that a defensive wooden palisade was composed of massive tree trunks supported in a deep and wide ditch, these sites revealed soil stains from split timber aligned in narrow, shallow slot trenches. The footprint of James Fort could easily be mistaken for a fence line, as indeed it was in 1949, when a section of the fort's south wall was unknowingly exposed during excavation of a sewer line (Luccketti 1999, 21; Harrington 1949; Hatch 1953). Eleven years earlier in 1938, a narrow utility trench for electrical and telephone service cut through the same area, providing further clues to later researchers that James Fort was nearby (Luccketti et al. 1995, 7). NPS archaeologists monitoring the work for the APVA collected and archived some of the artefacts that turned up in the trench. Key among these are two beaker-shaped crucibles from Hesse, Germany that had been luted together with a clay wrap so that one of the crucibles provided the lid for the other (Figure 3.6). This once-sealed container provided a contaminant-free enclosed environment for a chemical process involving high heat, which, from the molten glass still adhering to the interior, appeared to be glassmaking. Clearly this was evidence of the 'tryal of glasse' produced in 1608 by glassmakers that the Virginia Company had brought from Germany (Straube 2000, 62-66). Glassmaking—save for tests and trials—never takes place in these small containers but rather in large melting pots or siege pots (Hans Georg-Stephan, personal comm. 2008).

***Figure 3.6**. Hessian crucibles fused together to make a closed container for glass trials (Preservation Virginia).*

The utility line trench was located between the standing church tower and the Confederate earthworks in the general area that tradition and scholarly research held to be the location of James Fort. In 1955, just prior to the 350th anniversary of Jamestown's founding, the NPS undertook exploratory excavations in the traditional area to see if 'part of James Fort still stood on dry land' (Shiner 1955a, 1). Known as Project 100, the work was conducted by NPS archaeologist Joel L. Shiner and consisted of a number of random tests in and around the Confederate earthwork. Shiner (1955a, 20) conceded that because of the landscaping on the APVA property:

> a test pit or trench had to be fitted to the existing terrain avoiding trees and monuments. After a short time, it became simply a matter of choosing a likely spot and testing there.

Despite this intuitive approach to archaeological investigation, Shiner's work uncovered several seventeenth-century boundary ditches, a substantial Virginia Indian occupational layer measuring about 110' x 70', and what he described as an armourer's forge from the first quarter of the seventeenth century. This latter feature contained many elements of early arms and armour as well as the raw materials and by-products of smithery. Even with all of this compelling evidence for early habitation, Shiner concluded that 'the search for James Fort was unsuccessful since no trace of it could be found' (Shiner 1955a, 1).

In 1990, archaeologists with the Virginia Company Foundation conducted a re-evaluation of the evidence provided by Project 100 in the hopes that knowledge gained about early fortifications and material culture over the intervening years might enlighten some of the earlier findings. This study concluded that there were features and artefacts from Shiner's excavation that could not be discounted as relating to James Fort (Kelso et al., 1990). Recommendations to the APVA for

further work prior to the 400th anniversary in 2007 were for 'large area excavation' rather than 'small exploratory trenching' as the 'only way to understand the relatively invisible and amorphous nature of the architectural remains of Virginia's Wooden Age' (Kelso et al. 1990, 42). It was this philosophy and this potential promise that engaged the leadership of the APVA and led them to support an archaeological project named Jamestown Rediscovery that would attempt to find any remains of the first settlement that could be interpreted for the quadricentennial celebration of Jamestown's founding in 2007.

3.3.2 The Archaeological Contexts of James Fort

As mentioned earlier, evidence of James Fort came to light during the initial investigation of Jamestown's soils in 1994 by the Jamestown Rediscovery Project. Guided by the historically documented descriptions of the fort, archaeologists slowly uncovered the curtain walls and bulwarks over the next several years until the complete outline of the 1607 triangular fort with a 1608 eastern addition was revealed in 1993. Excavations have shown that about 90% of the fortified settlement has survived with only the western bulwark entirely lost to shoreline erosion along with parts of the south palisade and eastern bulwark (Figure 3.7).

Figure 3.7. *Computer graphic of James Fort, indicating by colored elements the structures that had been located as of 2006. Most of the western bulwark has washed away into the James River (Preservation Virginia).*

Substantial fortifications had not been constructed by the colonists immediately upon their arrival on 13 May 1607. The appointed leader of the colony, President Edward Maria-Wingfield, thought that it was unnecessary to erect more than a light defence consisting of 'the boughs of trees cast together in the forme of a halfe moon' (Smith 1986c, 206). But almost two weeks after pitching their tents, the colonists were attacked by a group of two hundred Indians who managed to wound ten of the colonists and kill two. After this deadly assault, colonist John Smith recounts that 'the President was contented the Fort should be pallisadoed' and within twenty days James Fort, encompassing a triangular one-acre patch of land, was completed (Smith 1986c, 206).

Within the footprint of the fort's palisades, archaeologists found several contexts relating to the first decade of the Virginia Company Period (1607-24) of Jamestown. These include evidence of structures—including some with cellars—pits dug for various reasons, and two wells. A third well (Structure 170) located outside the western palisade walls is brick-lined, unlike the two found in the fort, and is believed to have functioned from *c*.1617 to 1624 (Kelso and Straube 2004, 131-154). Also within the fort is a burial ground dating to the summer of 1607 when the colonists were desperately trying to conceal their dwindling numbers from the Indians.[20]

Frequent renovations within the confines of James Fort's palisades during the Virginia Company years resulted in many sealed archaeological contexts with short definable windows of time providing an unparalleled resource for interpreting life in the early colony. The backfilling of several of these contexts most likely

[20] Part of the Virginia Company instructions given to the first colonists as they were about to leave England stated: 'Above all things Do not advertize the killing of any of your men that the Country people may know it if they Perceive they are but Common men, and that with the Loss of many of theirs they may Deminish any part of Yours, they will make many Adventures upon You' (Virginia Company 1969, 52).

occurred with the arrival of Lord De La Warr in June 1610 or with the subsequent arrivals and rebuilding efforts of Sir Thomas Dale in May 1611 and Sir Thomas Gates three months later. These activities represent the first of two major episodes of reform within the palisade walls initiated by a succession of the colony's leaders in the decade following a fire accidently set by colonists in the First Supply in January 1608. The conflagration burned palisades and buildings as well as 'Armes, bedding, apparel, and much private provision' (Smith 1986d, 157). According to colonist John Smith (1986d, 180-81), reconstruction following the fire resulted in an expansion of the triangular fort into a five-sided plan. This extension has been identified through the archaeological research, which also revealed a new mud and stud structure built into its perimeter. The third major alteration to the fort's structures began in May 1617 with the arrival of Deputy Governor Samuel Argall.

The archaeological evidence that associates features of the early fort with these historical events will be presented in more detail in the context descriptions that complete this chapter. First, an overview of the pivotal arrivals and activities of Lord De La Warr, Sir Thomas Dale, and Sir Thomas Gates will be presented.

Appointed as Virginia's first Lord Governor and Captain General, Sir Thomas West, the third Lord De La Warr, reached the colony in June 1610 to find the undernourished and disheartened colonists abandoning the settlement and sailing for home. The colony had just endured the 'starving time' winter and spring mentioned earlier, and even though the Powhatan had released their siege of the fort, the English had little prospects of acquiring food. This problem had been compounded by the unexpected arrival two weeks earlier by the new governor Sir Thomas Gates with over 100 castaways from the Bermuda shipwreck of the *Sea Venture*. One of the shipwreck survivors, William Strachey, wrote that the newly-

arrived individuals were disheartened to find 'all things so contrary to our expectations, so full of misery and misgovernment' (Strachey 1973, 63). He noted that the palisades had been 'torn down, the ports open, the gates from off the hinges' and houses had been torn apart and burned for firewood. Conditions were dire and, with no prospects of obtaining sustenance from the Indians, Gates ordered the abandonment of the colony. During evacuation proceedings artillery was buried, food was prepared, and unnecessary items were dumped in any open feature. The mass departure was halted by De La Warr's arrival and his timely infusion of new colonists and 'provisions . . . sufficient to serve four hundred men for one whole year' not only re-established the colony, but enabled it to evolve from basic survival mode (Strachey 1973, 85). The energies previously expended on searching for food shifted to rebuilding the ruinous structures of James Fort.

Upon reaching Jamestown, De La Warr ordered labourers in the fort to 'cleanse the town', suggesting that the ruinous structures were razed and all the debris that had accumulated on the ground was shovelled into every available pit, thereby completing the filling of features begun under Gates' orders shortly before (Strachey 1973, 63-63). Rebuilding efforts created a marketplace in the middle of the fort, as well as a storehouse, a *corps de guard,* and a 'pretty chapel' to replace the 'ruined and unfrequented' one (Strachey 1973, 79-80). Dwellings clad with bark like the Indians' houses replaced the old mud and stud buildings (3.8).[21] Strachey observed that this was an improvement over the original structures that were 'parqueted and plastered with bitumen or tough clay' that made the interiors 'like stoves' in the oppressively hot Virginia summers (Strachey 1973, 81-2).

[21] Mud and stud architecture is vernacular to Lincolnshire, England, home of Captain John Smith and William Laxon, a carpenter among the first colonists (APVA Preservation Virginia 2008). Eric Deetz (2001a) recognized its use in some of Jamestown's earliest buildings thereby transforming the formerly held notion that Jamestown's earliest earthfast building were of wattle-and-daub construction.

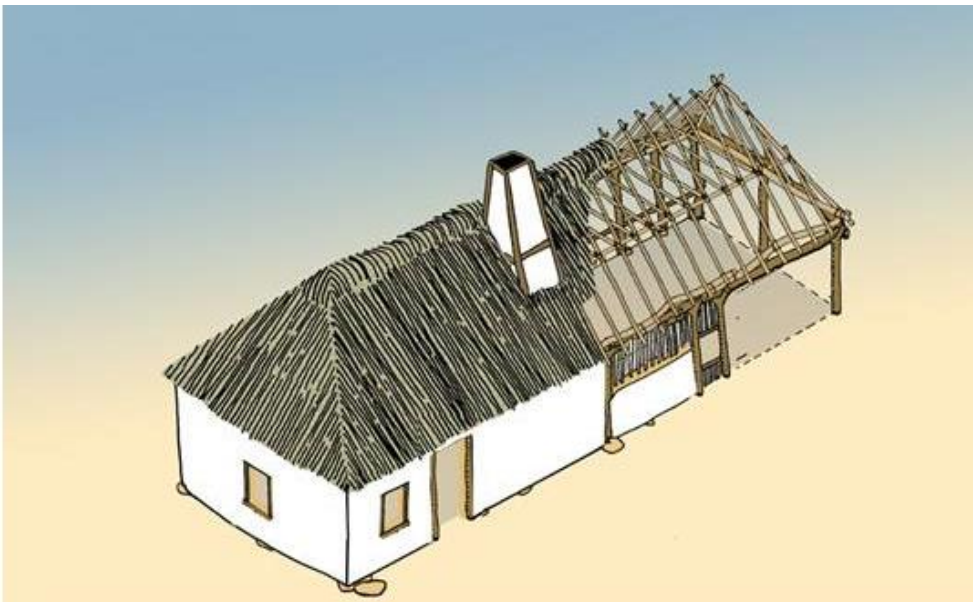

Figure 3.8. *Computer graphic showing construction methods of Structure 160, one of the fort's early mud and stud buildings (Preservation Virginia).*

Unfortunately, from almost the moment he arrived, De La Warr suffered ill health, with bouts of fever, the flux, cramps, gout, and finally scurvy. It was the latter ailment that prompted the governor's personal physician, Dr. Lawrence Bohun, to suggest recuperation in the West Indies. So on 28 March 1611, ten months after he arrived, Lord De La Warr set sail for his health leaving George Percy in command 'to execute Marshall lawe or any other power and Authority as Absolute as himselfe (De La Warr 1890a; De La Warr 1890b; Percy 1922, 275).

On 19 May 1611, Sir Thomas Dale landed at Jamestown as marshal of the colony and, finding that De La Warr had departed, took control of the settlement until the arrival of Lieutenant Governor Thomas Gates three months later. Dale immediately undertook several construction projects, which included repairing the storehouse and 'the falling Church' that had just been built during De La Warr's tenure. He also directed the colonists in building 'a new well for the amending of

the most unholsome water which the old afforded' (Dale 1890, 492). Dale's well is probably Structure 177 that archaeologists found in the northern bulwark area. The well is aligned with the north end of Structure 175, one of two row houses believed to have been constructed beginning with the arrival of Sir Thomas Gates in August 1611 and completed by his departure in March 1614. Structure 177 was a square wood-framed 14' well that was backfilled by 1617, as will be described below.

Unlike Dale, who had moved out of Jamestown and made his primary seat of residence several miles up the James River at Bermuda Hundred, Gates resided at Jamestown. He initiated many improvements to the fortifications on the island including an additional blockhouse and a strengthening of the palisade, especially on the western side. Colonist Ralph Hamor (1615, 22) recorded that 'this town hath been lately newly, and strongly impaled, and a faire platform for Ordnance in the west Bulworke raised'. This renovation must have taken place in the three years between August 1611 when Gates arrived and March 1614 when he departed.

The next major episode of improvements to the fort's infrastructure occurred with the arrival of the settlement's new leader, Captain Samuel Argall, on 16 May 1617. Argall found that the colony's preoccupation with cultivating the newly developed profitable commodity of tobacco had left the fort and its structures in shambles and in great need of repair. Only half a dozen houses were still standing, the storehouse was being used for church services as the church building was 'downe', the palisade walls were in disrepair and 'the Well of fresh water spoiled' (Smith 1986d, 262). Argall's replacement well is considered to be Structure 170, the brick-lined shaft located just outside the west palisade walls that functioned as a water source into the 1620s. It did not contain any of the token coinage comprising the subject of this study so will not be described further except

as an indication that by the time of the well's construction and/or filling, the scheme for token coinage had long been abandoned.

Brief descriptions of the early fort contexts that contained the coins and exonumia comprising the subject of this thesis complete the remainder of this chapter. The pertinent features will be examined in relation to the archaeological plan of James Fort (Figure 3.9) and to the historical documentation used to provide dates and functions for them. Summaries of the noted James Fort contexts are repeated in Appendix I for easy reference.

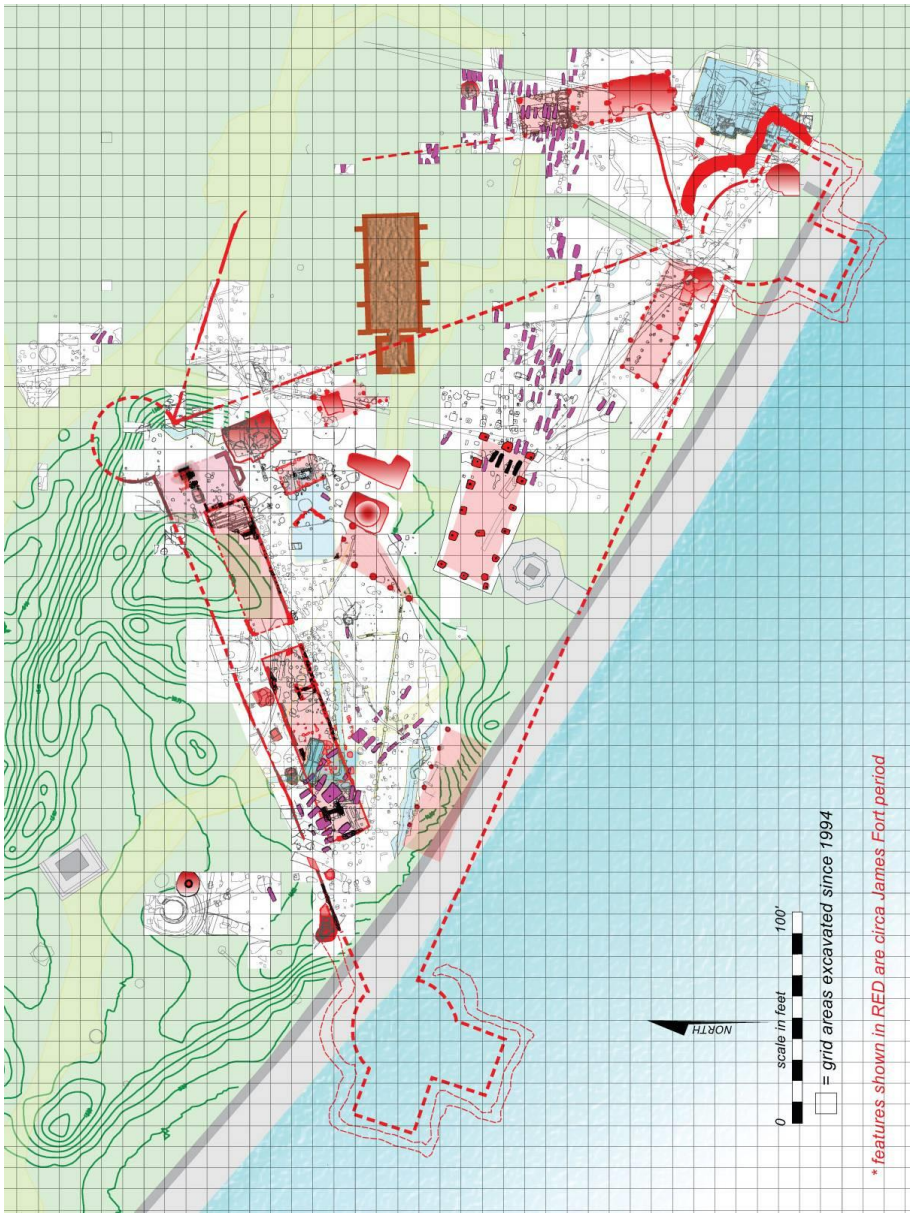

Figure 3.9. *Archaeological plan of James Fort from 1994-2012 (Preservation Virginia)*

3.3.2.1. Structure 165: 'The Factory'

Excavations on the eastern side of the fort disclosed the new enlargement of the triangular fort after the fire of January 1608 mentioned earlier. Smith recounted that the colonists rebuilt the perimeter of the fort into a 'five-square forme' (Smith 1986d, 180-81). Included in this addition was a 70 ft x 17 ft mud and stud building with a cellar (Structure 165) that may have been constructed as the replacement for the storehouse that burned in the conflagration (Figure 3.10). Its location on the

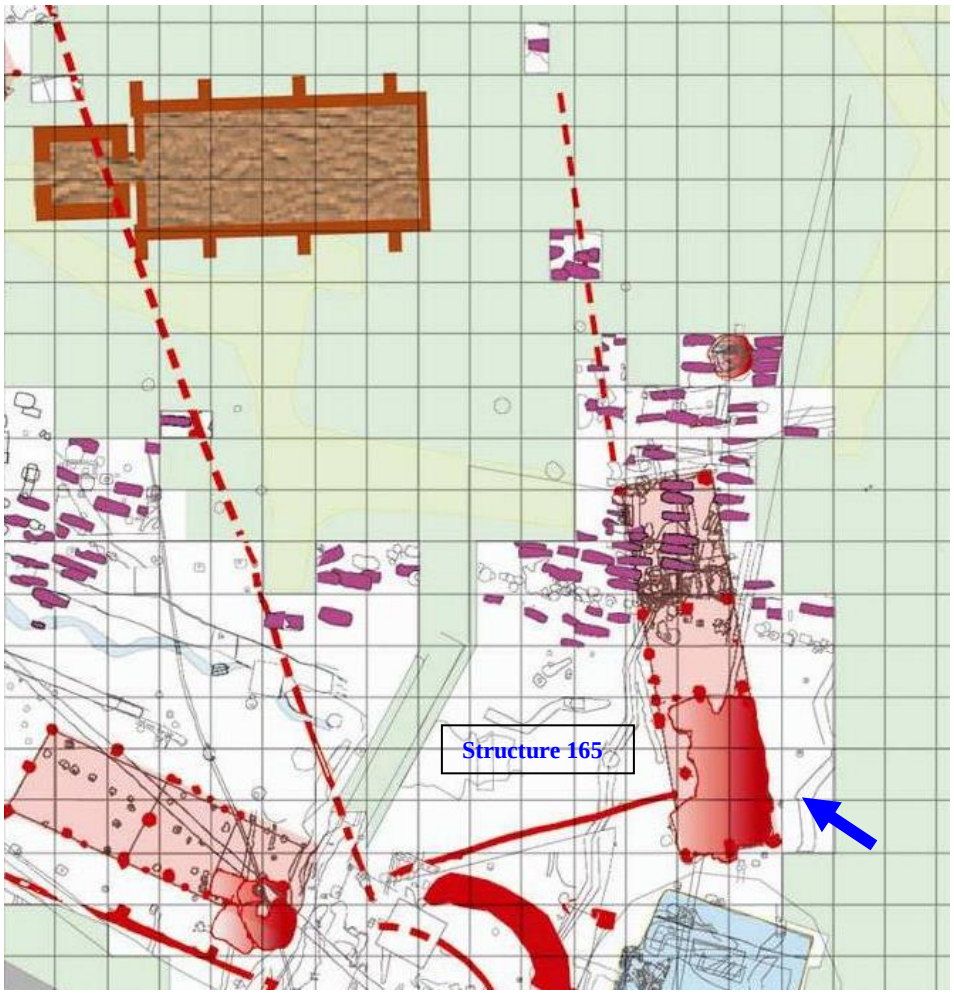

***Figure 3.10**. Structure 165, located outside of the eastern palisade wall and beneath the graveyard associated with the c.1617-1750 churches (Preservation Virginia).*

eastern perimeter of the fort creates an area that could accommodate commerce with the Natives without compromising the security of the fortified area (Deetz

2001b, 17-22). Artefacts associated with trade and commerce were plentiful in this context and included one hundred and sixteen jettons or casting counters used in accountancy, sixteen coins, and one coin weight. Twenty King's Touch tokens, as described in Chapter 5, were also found in Structure 165. This comprises the largest concentration of this token type on the site.

The coinage is represented by thirteen Irish copper pennies and halfpennies dated 1601 and 1602, a 1573 English sixpence, a *c.* 1598-1624 Spanish four maravedis, and a 1577 Livonian schilling. The coin weight was made in Antwerp *c.* 1540-1576 for weighing the English gold angel. To date, no gold coins have been found at Jamestown but twenty-one weights for verifying the value of gold coins have been excavated from James Fort contexts, suggesting that gold coins circulated in the early colonial society.

Also consistent with a storehouse function of Structure 165 are the concentrations of 705 glass beads and 2,711 pieces of scrap copper found in the context. Both of these materials, along with iron tools, were integral to the colonists' trade with the Indians for food (Straube and Luccketti 1996, 15-17; Luccketti and Straube 1998, 17-20).

The colony's leaders strictly regulated items used in the Indian trade and the large quantities of beads and copper in Structure 165 suggest that they were being stockpiled in this secure location. The Virginia Company recognized that the trade of these commodities had to be controlled and instructed the Council in Virginia to only allow those 'appointed by the president and Councel there to buy any Merchandizes or Other things whatsoever' (Virginia Company 1969, 53). The hazards of relaxing controls on trade were made very clear to the colony's leaders in January 1608, when, out of relief and gratitude for the first supplies they had

received from England in six months, they allowed the mariners of the First Supply 'to truck or trade at their pleasures.' The balance of trade that had been so carefully contrived by John Smith and others over the preceding months was quickly destabilized, bringing Smith to complain that the colonists could not buy 'for a pound of Copper, which before was sould us for an ounce' (Smith 1986d, 154).

Besides serving as a centre of commerce and as a secure repository, Structure 165 also appears to have incorporated a workshop for some of the colony's specialists. This is indicated by a room in the north end of the building with a brick hearth and a prepared clay floor (Deetz 2001b, 17-18). The associated artefacts suggest that those specialists may have been the refiners who had been recruited by the Virginia Company to find precious metals in the Virginia soils.[22] A distilling unit used to produce the nitric acid needed to part gold from silver was found in this context, as were 126 fragments of Hessian crucibles, a London-made distilling dish known as a scorifier,[23] and a cupel used to absorb lead oxide in the parting process (Figure 3.11).

Figure 3.11. *London-made distilling flask found in Structure 165 (Preservation Virginia).*

[22] Refiners William Dawson and Abram Ransack came with the First Supply in January 1608. A third refiner, William Callicut arrived in September of the same year and claimed to have 'extracted some small quantitie of silver' from a sample he collected 'at a place about four days' journey' from present-day Richmond (Smith 1986d,184; Hening 1823,135; Straube 2000, 36-37).

[23] Scorifiers are shallow vessels used for initial refining processes that do not require extremely high heat. As a result, they do not need to be made of refractory clays.

3.3.2.2. Pits 8, 9, 10, and 11: Soldiers' Cabins

Among the earliest fort buildings located within the original triangular configuration were several small impermanent shelters, four of which (pits 8, 9, 10 and 11) were built along the western palisade wall (Figure 3.12). Characterized by

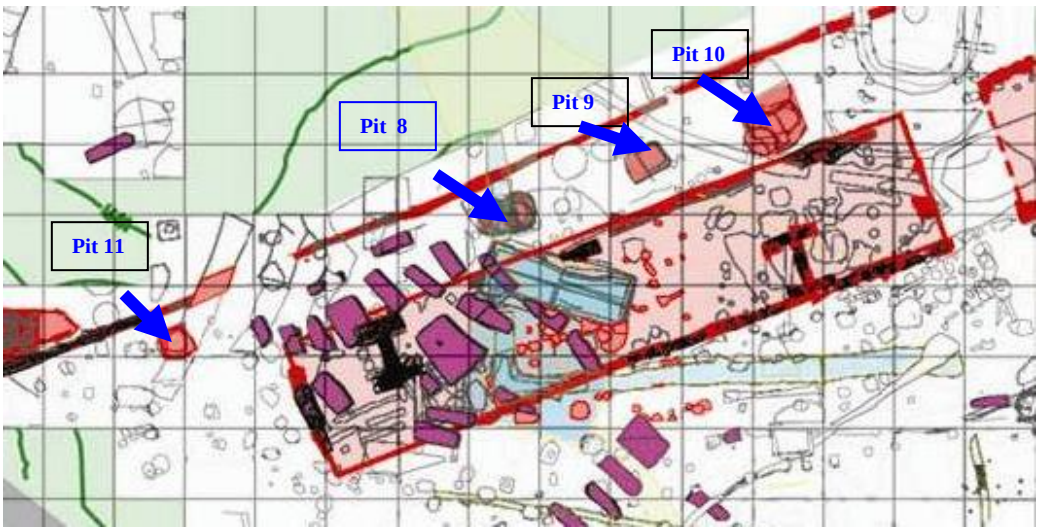

Figure 3.12. *Four impermanent pit shelters located on the interior of the fort between the western palisade and Structure 172, a row house that was constructed c.1611 (Preservation Virginia).*

shallow storage pits with associated small irregular post holes, these soldiers' cabins were rudimentary structures, possibly roofed by canvas pulled out from the nearby palisade. In September 1607, four months after the colonists had first arrived, John Smith grumbled that there were still 'no houses to cover us, our Tents were rotten and our Cabbins[24] worse than nought' (Smith 1986a, 35). The housing was no better for the leaders of the colony as indicated by a reference at the same time to the 'Presidentes Tennt' (Wingfield 1969, 219).

When the First Supply arrived at Jamestown in January 1608, it found the colonists 'utterly destitute of houses, not one as yet built, so that they lodged in cabins and holes within the ground' (Ancient Planters 1998, 894). The lack of

[24] A 'cabin' in the early seventeenth-century is 'a soldier's tent or temporary shelter' (OED Online, June 1989.)

housing was not only a result of the colonists' all-consuming struggle to sustain themselves, but also a consequence of the Virginia Company directive that the men must first build the 'storehouse and those Other rooms of Publick and necessary use before any house be Set up for any private person' (Virginia Company 1969, 53). The storehouse had been built in the first six months of settlement and was burned in the January 1608 fire.

Two coins were found in these contexts: an English halfpenny with a mintmark indicating production *c.* 1607-09, and a silver Swedish öre dated 1576. This is the oldest known Swedish coin found in North America.

3.3.2.3. Pit 1/Structure 160, Pit 5, Pit 13, and Structure 166: 'Mud and Stud Communal Quarters'

The documents record that a 'few poor houses' were built after this date (Ancient Planters 1998, 894) and this is reflected in the two 'cabins' (Pit 1/Structure 160 and Structure 166), and possibly two more (Pit 5 and Pit 13), that were renovated into larger mud and stud buildings like Structure 165 described earlier.

Pit 1, located near the eastern bulwark, appears to have started as a rectangular 5'wide pit house that was subsequently incorporated into the mud and stud building, Structure 160, which may have functioned as a barracks-type building for housing numerous individuals (Kelso 2006, 83-93) (Fig. 3.13). As with all the fort's early features, Pit 1 contained a wide assortment of military equipment including an intact cabasset helmet, numerous tin-glazed apothecary jars, distilling equipment, scores of trade beads and brass jettons, two Irish copper pennies of 1601-1602, an English silver halfgroat of *c.* 1590-92,a King's Touch token, and a lead Elizabethan token. The presence of large sherds of Virginia Indian shell-tempered pottery that mended together into sizeable sections suggests that these

Indian wares were used to prepare food for the early colonists rather than representing re-deposited ground scatter from pre-colonial occupation of the site (Luccketti et al. 1995, 18-21).

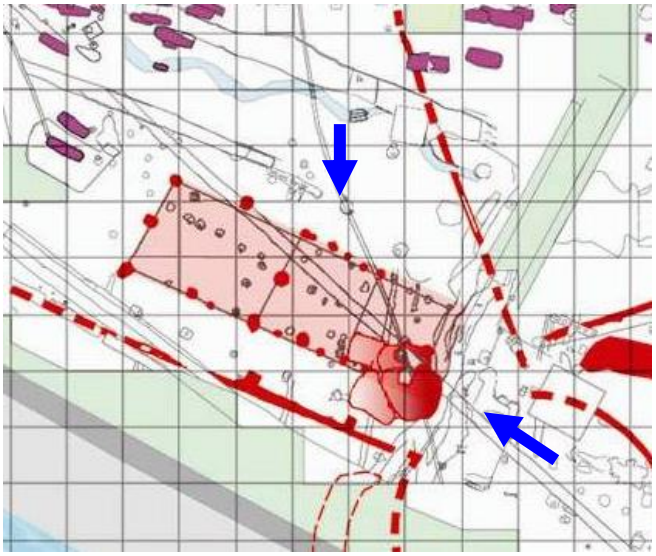

Figure 3.13. *Structure 160 and Pit 1, located in the eastern bulwark area (Preservation Virginia).*

. Also of note in this feature were the Hessian crucible sherds with glass residues and the thousands of fragments of crown window glass. These are evidence of the German glassmakers who arrived in the fall of 1608 to make glass as an export commodity. The crown glass found in Pit 1 was not made at Jamestown; rather it was brought from an English or European glasshouse as cullet, waste glass used as a glassmaking ingredient. This is indicated by the number of crown glass bull's eyes and curving edge pieces with glaziers' groze marks and from chemical analysis of the glass.[25] Before constructing their glass furnace on Glasshouse Point, located one-half mile from James Fort, the glassmakers laboured for two months in the fort area to produce a 'tryal of glasse' to send to the London investors (Straube 2000, 62 – 66).

[25] Crown glass is blown glass that has been spun on the end of a rod into large flat disks. When cutting the round into window quarrels, the glazier usually discards the curved raised edge pieces and the thickened centre where the rod had been attached (the bull's eye). This waste is sold as the commodity cullet. XRF testing has also proven that the glass cullet and the glass residues adhering to the James Fort crucibles from the glassmakers' trials manifest different signatures (Michael Hughes pers. comm., 2000).

Structure 166 (Figure 3.14) is situated in the fort along the east palisade and is defined by a cellar and framing holes very comparable in construction methods to Pit 1/Structure 160 and Structure 165. It also appears to be part of a mud and stud building (Kelso and Straube 2008, 44-48). The cellar's occupation layer contained evidence of a hearth in association with a complete Virginia Indian cooking pot. Nearby lay the carapace of a loggerhead turtle, a type observed by the colonists in Bermuda from the *Sea Venture* shipwreck of 1609. Faunal analysis of this feature has also revealed elements of cahow, a Bermudan petrel (*Pterodroma cahow)* first brought into the colony in May 1610 by the *Sea Venture* survivors (Andrews and Bowen 2008, 76). Before the *Sea Venture*, there had been no contact with Bermuda by any of the Jamestown-bound ships that could account for the presence of Bermudan fauna.

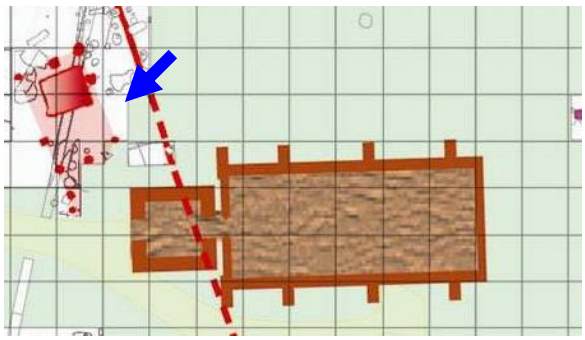

Figure 3.14. *Structure 166 (Preservation Virginia).*

Pit 5, a small 5'6" x 3'8" cellar located just to the north of Structure 165, was similar in size to Pit 1 (Figure 3.15). Unfortunately, its location near the traditional church site resulted in disturbances in the late seventeenth century when the area was used as a graveyard, so it was not possible to determine if this 'cabin' ever evolved into

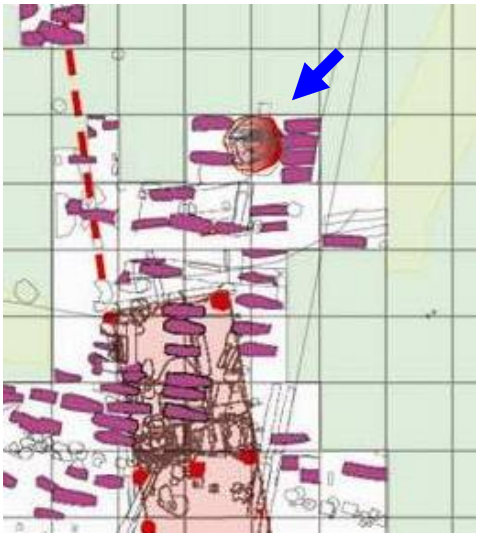

Figure 3.15. *Pit 5, located outside the eastern palisade (dotted line) and north of Structure 165 (Preservation Virginia).*

a mud and stud building (Kelso and Straube 2008, 17-18). Like Pit 1, the context contained numerous military-related artefacts, tin-glazed apothecary jars, and early coinage consisting of an Irish penny dated 1602 and a *c.* 1583-90 Scottish plack of James VI.

Faunal remains also suggest an early fill date for Pit 5 and include bones from the Bermudan cahow as in Structure 166, and the butchered mandible of a horse. While the cahow relates to the arrival of the *Sea Venture* castaways, as mentioned earlier, the butchered horse remains are signal artefacts of the 'starving time' winter and spring of 1609-1610. Horse meat was a taboo food in seventeenth-century English society and was consumed only out of dire necessity (Bowen and Andrews 2000, 20).[26] Within Pit 5 was also found a fragment of a rare grass mat that had been preserved by copper salts from scrap copper deposited in the context. Colonist William Strachey wrote in 1610 of these finely woven Indian mats, which the colonists eagerly acquired through theft or trade to 'dress their chambers and inward rooms, which make their houses so much the more handsome' (Strachey 1973, 81).

As with Pit 5, Pit 13 may have been the cellar to a mud and stud structure but disturbance to the feature during the *c.*1611 construction of Structure 176 has destroyed any identifying postholes (Figure 3.16). Measuring 5'2" x 8"4", the pit contained

Figure 3.16*. Pit 13, located in the north bulwark area and under Structure 176 (Preservation Virginia).*

[26] Horse remains have been found in pits 1, 5, and 8 and in structures 165, 185, and 191.

armour, glass and shell trade beads, Virginia Indian pottery, a brass Dutch token dated 1590, and clay tobacco pipes made by Jamestown colonist Robert Cotton *c.* 1608 (Kelso and Straube 2008, 26-7).

3.3.2.4. Pit 3: 'Powder Magazine'

Another early fort period context, Pit 3, is located in the eastern bulwark (Figure 3.17). Unlike the other pits that have been described, Pit 3 does not appear to have been a soldier's cabin or a cellar to a mud and stud structure. Manifested as a hole, 15' in diameter with 'smooth vertical sides that rounded at the bottom to a flat floor', Pit 3 was possibly a powder magazine below the wooden bulwark platform (Luccketti and Straube 1998, 7-9). Like pits 1 and 5, Pit 3 contained many trade beads and several Nuremberg brass jettons, including one made for the administration of the French king Henry III, *c.*1574-1589. Four Irish pennies dated 1601 and a Dutch token dated 1590 were also found in this context.

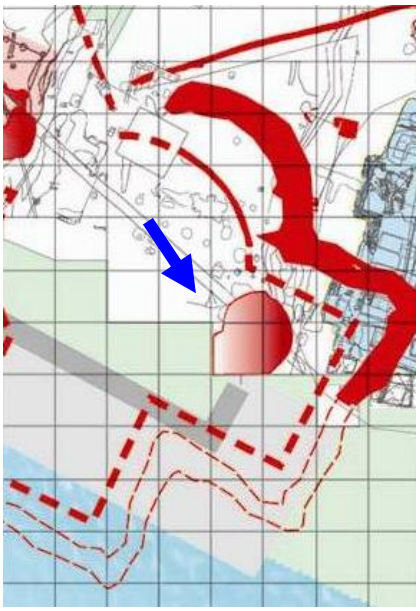

Figure 3.17. *Pit 3, located in eastern bulwark (Preservation Virginia).*

3.3.2.5. Structure 185: 'John Smith's Well'

In the centre of the triangular fort, archaeologists uncovered a cellar with a 14 ft-deep well shaft dug into its floor (Figure 3.18). From its central location and dating evidence sealed within, it appears to be the 'faire Well of fresh water in the Fort' dug under Captain John Smith's direction in late 1608 or early 1609 (Smith

1986d, 325). Smith described the well as containing ‘excellent sweet water, which till then was wanting’, suggesting that this was the first well dug at Jamestown by the colonists (Smith 1986d, 212).

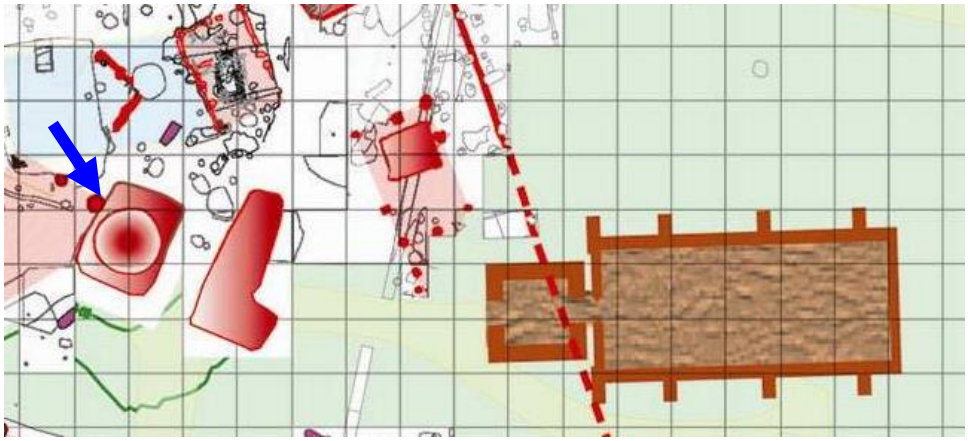

Figure 3.18*. Structure 185, the well constructed under the leadership of Captain John Smith in 1608 and backfilled during the spring 1610 cleanup of the fort (Preservation Virginia).*

The well contained a single wooden cask at the bottom of the earthen shaft and the cellar and well were filled with over one-half million artefacts that appeared to have accumulated rapidly in the context during the initial backfilling phase. Artefact dating indicates that this probably occurred with the spring 1610 events. Evidence of the fauna consumed during the ‘starving time’ winter and spring of 1609-10 was present in the context as well as Bermudan fauna (cahow, seashells, and sea turtles) that were brought by the *Sea Venture* shipwreck survivors in May of 1610.

The first major layer deposited in the cellar/well contained over 60,000 oyster shells and numerous elements of other marine fauna such as Atlantic sturgeon, shark, blue crab, and bottlenose dolphin (Kelso et al. 2012, 39). This deposit of food remains most likely relates to the concerted three-week effort by the colonists as they prepared to permanently abandon Virginia in June 1610. As mentioned earlier, the decision for the colony ‘wth all Spede to Retourne for

England' was made by Governor Thomas Gates who arrived at Jamestown on 23 May1610 after being shipwrecked on Bermuda for nine months (Percy 1922, 269). Finding the colony in dire straits and with only sixteen days of provision remaining, despite the foodstuffs of fish, pig, turtle, and bird that the Bermuda castaways had brought, Gates reluctantly issued evacuation orders (Strachey 1973, 75); Craven and Hughes 1937, 75-76).

The colonists were assigned tasks such as making 'pitche And Tar for Trimminge of our shippes,' baking bread, and preparing food for the planned voyage to Newfoundland where it was hoped they would encounter English ships engaged in fishing 'into which happily they might disperse most of the company'. Once the colony's four pinnaces were readied, Gates 'caused to be carried aboard all the arms and all the best things in the store, which might to the adventurers make some commodity upon the sale thereof at home' (Percy 1922, 269; Strachey 1973, 76). The ordnance was buried before the gate of the fort facing the river and everything else was dumped. The "Smith well" was one of the dumping spots. As revealed by archaeology, the well received not only trash that was littering the fort's landscape such as the faunal remains of the winter's 'starving time' fare and the seafood prepared for the springtime voyage, but also numerous objects considered not valuable enough to take back to England. These include several intact glass and ceramic vessels, a collection of Bermuda seashells brought by the shipwreck surviviors, and piles of trade items. The largest assemblage of the 1601/02 Irish coinage was found in this context (n=60) and this was the only early fort feature to contain examples of all three of the obsolete token types under consideration in this study (n=12). One halved silver English sixpence dated *c.* 1583-85 and two copper Spanish coins were also found in the well.

3.3.2.6. Structure 191: 'The Sturgeon House?'

Aligned with Structure 185 and located ten feet away is Structure 191, a mud and stud building with a 25-foot-long L-shaped cellar (Figure 3.19). The cellar was accessible by earthen steps and contains two ovens built into the cellar's clay walls and supported by brick stacks. One of these ovens is considered to be the 'stove' built by Captain Christopher Newport's men in early 1608 (Wingfield 1969, 227-28).

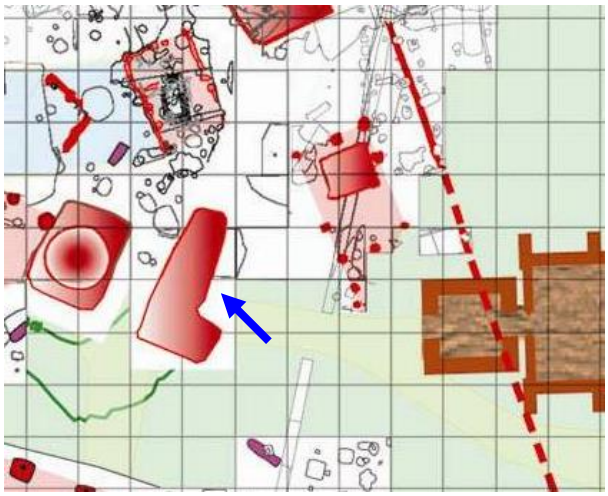

Figure 3.19. *Structure 191 in north central area of the fort (Preservation Virginia).*

This context was not completely excavated at the time this thesis was written so it is not fully understood, but parts of the working floor that have been uncovered reveal layers of sturgeon bones many inches in depth. The early colonists speak of consuming large amounts of sturgeon that yearly swam by the fort between May and October and they also tried unsuccessfully to prepare the fish as an exportable commodity (Smith 1986d 102 & 213; Brown 1890, 386). This may have been the 'sturgeon house' in which the fish was processed prior to the 'starving time'. A curer of sturgeon who arrived in the colony with Lord De La Warr in June 1610 complained that it would be impossible to do a good job in the workspace he had been given, possibly because Structure 191 had already fallen into disrepair. In August 1611, Sir Thomas Dale stated that contrary to the now-deceased curer's protests, he had 'dresseth the same sturgions perfect and well' (Dale 1890, 492).

Archaeological evidence indicates that the mud walls of Structure 191 had fallen into the cellar prior to receiving fill containing 'starving time' faunal evidence, including the butchered remains of a teen-aged European female. The latter comprises the first concrete evidence of the survival cannibalism that was documented as occurring in the colony during the winter and spring of 1609-10 (Horn et al. 2013). Like the debris filling the well shaft of Structure 185, with which it crossmends, the Structure 191 fill over the collapsed mud walls is conjectured to have been deposited sometime after De La Warr's June 1610 arrival.

One *c.* 1570-79 billon Riga schilling was found in Structure 191 as well as eighteen copper Irish coins and one lead Elizabethan token.

3.3.2.7. Structure 186

This mud and stud structure (Figure 3.20) is located in the north central fort just west of, and parallel to Structure 183, the cellar building to be discussed below The structure was located beneath the brick chimney of a building (Structure 180) dating to the fourth quarter of the seventeenth century (Kelso and Straube 2008, 83-4). Structure 186 measures 12 ft by at least 15 ft and possibly extending to 18 ft. Of note is an intact glass distilling dish that was found in one of the post moulds. From its central location, this small building is considered to have functioned as the '*corps de garde*' that colonist

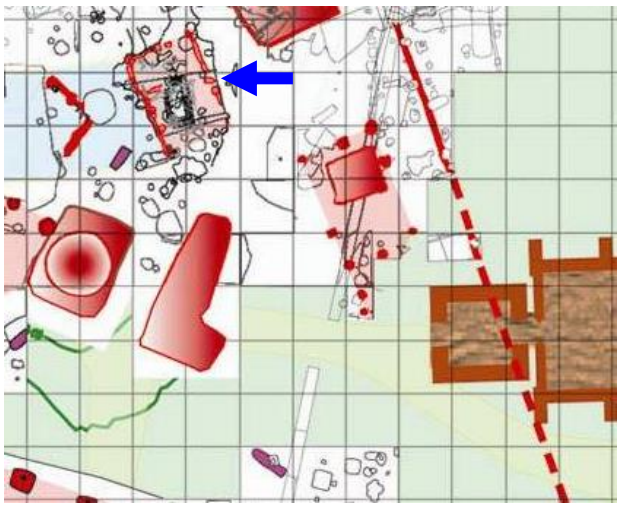

Figure 3.20*. Structure 186 (Preservation Virginia).*

William Strachey describes in 1610 as standing in the middle of the fort with a marketplace and storehouse (Strachey 1973, 79).

Structure 186 yielded one copper Irish halfpenny and one silver English halfgroat, both dated 1602.

3.3.2.8. West Bulwark Ditch

A fourteen-foot section of the ditch surrounding the fort's west bulwark survived latter-day impacts from construction of the 1861 Confederate earthwork and the 1902 erection of a seawall by the Army Corps of Engineers (Figure 3.21). The ditch, which archaeology revealed was created contemporaneously with the western palisade of James Fort, cut through an earlier feature believed to be a saw pit used in the construction of the fort and probably in the production of some of the 'clapboard and wainscot' the first colonists sent back to England (Smith 1986c, 240). The *c.*1611-14 improvements to the west bulwark mentioned earlier sealed materials from James Fort's first years as indicated by the ceramic crossmends between the ditch and most of the fort's earliest contexts (Table 1). As a military feature constructed to make it difficult to scale the bulwark from the outside, the ditch would have been kept clear of the debris that normally collected in any open pit or hole in the fort. Artefacts in the ditch are typical of the

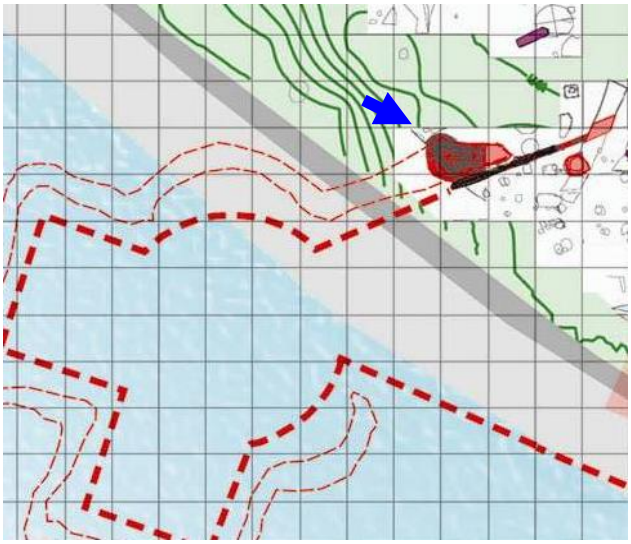

***Figure 3.21**. Surviving section of west bulwark ditch (Preservation Virginia).*

early fort period and include elements of arms and armour, early English tobacco pipes as well as tobacco pipes produced by Robert Cotton *c.* 1608, Native-produced mussel shell beads, and a lead privy cloth seal dated 1600 (Kelso and Straube 2008, 3-8). The numismatica include a *c.* 1605-06 English silver halfgroat, three Irish copper pennies, two Dutch tokens and one English copper token.

3.3.2.9. Structures 172 and 175: 'Councillors' Row'

A 1623 report 'by the Ancient Planters[27] now remaining alive in Virginia' reveals that Gates had 'erected some buildings in and about James Town, which by continual cost in repairing of them do yet for the most part in some sort remain' (Ancient Planters 1998, 901). Two of these buildings are probably Structures 172 and 175, row houses that archaeologists found represented by cobblestone foundations running parallel to, and 12 ft 6 in. from, the west palisade wall (Kelso and Straube 2008, 49-54) (Figure 3.22).

Figure 3.22*. Structures 172 (left) and 175 (right) built along the western palisade wall (Preservation Virginia).*

Some of the cobbles were Bermuda limestone, first brought to Jamestown in May 1610 by the survivors of the shipwreck in Bermuda the previous summer, thereby providing a *terminus post quem* for the date of construction. Bermuda limestone was declared by

[27] The Ancient Planters are the colonists who paid their own way to Virginia and who had lived in the colony at least three years before Dale's departure in May 1616. This special status entitled them to 100 acres of land in Virginia under the Virginia Company's Great Charter of 1618; McCartney 2000a, 50).

the English colonists to be 'the best in the world' for ballasting ships and it was a commodity subsequently requested of the Bermuda colony by the Virginia settlement that had no natural stone (Lefroy 1882, 284-5).[28]

Historical documents suggest that structures 172 and 175 served as the official residences of the colony's governor and his retinue from the time of Gates (*c.* 1611-14) and through the rest of the Virginia Company period. When Governor George Yeardley arrived in the colony in April 1619, for instance, the Virginia Company specified that he was to reside in the structure erected at Company expense during Gates' term:

> We do hereby ordain that the Governors house in James town first built by Sr Thomas Gates Knight at the charges and by the Servants of the Company and since enlarged by others by the very same means be and continue forever as the Governors house any pretended undue Grant made by misinformation and not in a general and quarter Court to the contrary anywise notwithstanding.
>
> (Kingsbury 1906-35, III: 101-102)

An account by the Ancient Planters mentions this structure built by Gates again in 1624, with the additional information that the enlargement of the residence referred to in the previous document was made by Captain Samuel Argall, Deputy Governor from May 1617 to April 1619:

> […] in James City were only those houses that Sir Thomas Gates built in the time of his government, with one wherein the governor always dwelt, an addition being made thereto in the time of Captain Samuel Argoll.
>
> (Ancient Planters 1998, 907)

The westernmost structure (Structure 172) was 92 ft x 20 ft with three double brick hearths, indicating that the long building was divided into six rooms. The eastern building, which was 64 ft long, had only two hearths, suggesting the

[28] In 1622 a ship from Jamestown arrived in Bermuda loaded with sack, aqua vitae, oil, and bricks to trade for 'twenty thousand waight of potatoes', plant materials, fowl, and limestone (Lefroy 1882, 284-5; Smith 1986d, 386).

structure had been divided into four rooms (Kelso and Straube 2008, 49-54). These two long rowhouses appear to fit colonist Ralph Hamor's 1611 description of 'two faire rowes of howses, all of framed Timber' that were built at Jamestown by Gates 'who for the most part had his chiefest residence there' (Hamor 1615, 33). Construction of these rowhouses 12- ½ ft distant from the western palisade *c.*1611 suggests that the soldiers' cabins in that location (pits 8, 9, 10, and 11) had been backfilled by that time to make a passageway along the fort's walls. This seems to be supported by William Strachey's description of the fort. Strachey, who was present in the colony from May 1610 until the fall of 1611, noted that on every side of the fort 'a proportioned distance from the palisades is a settled street of houses that runs along, so as each line of the angle hath his street' (Strachey 1973, 79).

3.3.2.10. Structure 176 and Pit 16

Built onto the eastern end of Structure 175, archaeologists located Structure 176, which is considered to be Argall's *c.*1617-19 'addition' to the governor's house (Figure 3.23). Associated with this structure is a bowl-shaped depression dug into the fill of Structure 183's cellar. Labelled Pit 16, this feature is 6 ft in diameter and only 8 in. deep. From the layers of oyster shell mortar in the pit, it is believed to have been used to mix mortar for the construction of Structure 176. Pit 16 was then filled with early seventeenth-century debris.

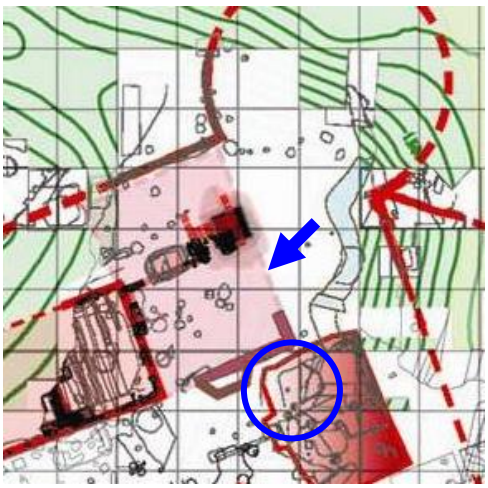

Figure 3.23. *Structure 176 (top) and Pit 16 (encircled) (Preservation Virginia).*

Structure 176 was determined to be a 36 ft long and 24 ft wide building that was divided into two rooms with a central brick double hearth. When uncovered, the hearth was visibly sinking into a depression five feet below the ground level and, judging by the series of brick and stone cobble repairs to the hearth, this was occurring while the hearth was in use (Kelso and Straube 2008, 55-63). Once the hearth was excavated, it became very clear that the problem with the hearth was that it had been constructed over a backfilled well (Structure 177).

One English token was found in Structure 176. An Irish 1601 halfpenny and a copper English farthing dating *c.* 1614-25 were located in Pit 16.

3.3.2.11. Structure 177: 'Dale's Well'

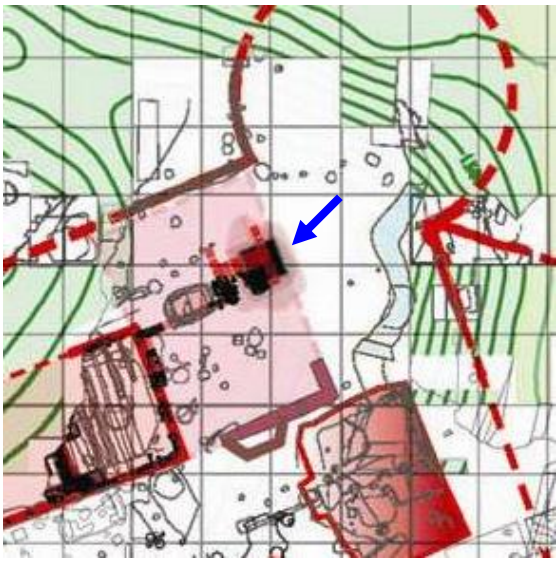

Figure 3.24*. Structure 177, well located near the north bulwark (Preservation Virginia).*

As previously mentioned, this well, which was sealed by Structure 176, *c.* 1617-1619, was filled with thousands of artefacts dating to the late sixteenth and early seventeenth centuries (Figure 3.24). Key among these is a complete Roman lock pistol with a brass barrel and a wooden fishtail stock. The Jamestown pistol is the earliest known example of a Roman lock firearm, a type that has traditionally been considered by researchers to be in production no earlier that the 1630s.

X-rays of the gun's brass barrel revealed that it had been double loaded with two pieces of lead shot when it was dropped down the well. The value of the gun

and the fact that it was loaded suggests that its loss was accidental. Further evidence indicating this scenario is the halberd and boarding pike found in the bottom of the same well (Figure 3.25). Both had blades bent into hooks, presumably for retrieving objects that had unintentionally fallen into the shaft. The halberd blade bears the griffin head heraldic crest of Lord De La Warr thereby providing a *terminus post quem* (TPQ) of June 1610 when De la Warr arrived at Jamestown with a personal bodyguard of 50 halberdiers (Strachey 1973, 80).

Figure 3.25. *Halberd found in Structure 177 (Preservation Virginia).*

Seven copper Irish pennies were found in this context and all but one were dated 1602. Structure 177 also yielded one Dutch and five English tokens.

3.3.2.12. Structure 183: Industrial Centre and Bakehouse

Argall's extension of *c.*1617-19 (Structure 176) also covered a cellar, Structure 183, that may have been constructed as early as 1607 and that reflected prolonged multi-purpose use (Figure 3.26). In its first phase, the cellar was used for metal working as evidenced by the abundance of clinker, hammerscale, and scrap iron. Numerous "mats" of lead shot still imbedded in sprue from being cast in gang moulds and other lead waste suggest that shot was also produced in this location.

The cellar then appears to have been converted into a 20 ft x 14 ft kitchen with clay capping the original ashy work floor and two large round bread ovens dug into the northeast wall (Kelso et al. 2012, 7-26). This conversion of an industrial workshop into a kitchen seems to have occurred during the time that Gates was serving as governor. A letter carried by Dale to Jamestown in 1611 just prior to Gates' arrival, suggests that cooking for the colonists should be centralized because 'ill-prepared food has been harmful to their health, each man having to prepare his own and being kept thereby from needful work.' The letter writer suggests that colonists should 'eat at common tables by companies, after the fashion of the old world, and that there accordingly be common bakers and cooks to provide the food' (Virginia Colonial Records Project: Survey Report No. 06713).

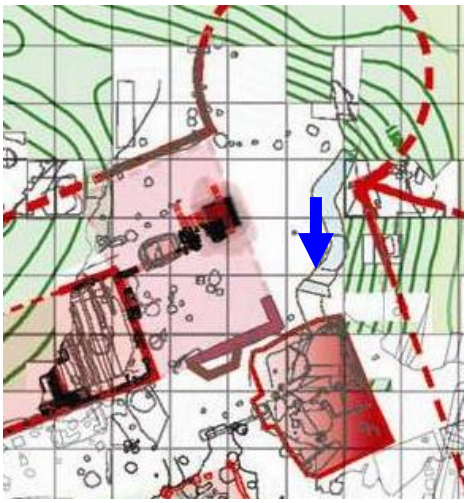

Figure 3.26. *Structure 183, oriented to east palisade wall (Preservation Virginia).*

Uniform fill deposits in Structure 183 indicate that the feature was filled quickly and all at once. This activity was probably in response to the *c.*1617-19 addition to the governor's house that covered part of the structure (Kelso et al. 2012, 7-26). Also cutting into the top of Structure 183 is Pit 6, an irregularly-shaped borrow pit dating *c.* 1610-30 and measuring 28 ft x 16 ft and in depth from 1.5 in to 4 in. While the upper layers of the pit contained materials from the second quarter of the seventeenth century, the bottom layers contained artefacts that were pulled up from the fill of Structure 183. This is supported by the ceramic crossmends between Pit 6 and Structure 165 (*c.* 1610).

Structure 183 yielded two copper English farthings, a silver English penny, a silver English sixpence, and a copper Spanish coin. A single copper Irish penny and three English tokens were also found in this context.

3.4. Summary

The preceding discussion of the history of archaeological investigations at Jamestown was undertaken to reinforce the evidence supporting the close dating of the James Fort features that yielded the coins and tokens comprising the subject of this study. Confidence in the contextual integrity of the site is crucial to accepting the premise of the present thesis concerning the use of a token currency in the colony. Context is key, for it is the recovery in early fort contexts of a large number of obsolete coins and tokens that provided the impetus and foundation for this inquiry into an undocumented monetary scheme in the Virginia colony.

As this chapter indicated, until the initiation of the Jamestown Rediscovery project in 1994, the location of the first English settlement remained unnoticed and largely undisturbed under churchyard graves and Confederate earthworks. The soil layers in the earliest pits and cellars indicate at least three distinct episodes: the occupational layer, the intentional filling with contemporary refuse during documented clean-up efforts, and the levelling topsoil contaminated with later deposits that was probably added in the eighteenth century to ease ploughing of the area (Kelso 2006, 99). The interiors of the fort's early mud and stud buildings usually reveal a layer of the collapsed mud walls beneath the rich strata containing artefacts, thereby revealing the short duration of the earliest structures that contributed to frequent rebuilding and sealed early deposits. The dense pockets of trash in the early pits, cellars, and wells are largely homogenous, resulting from episodes of short duration, and are further linked by ceramic crossmends between

the contexts (Luccketti 1999; Luccketti and Straube 1999, 7; Kelso and Straube 2004, 57-58; Kelso 2006, 99).

Table 1 illustrates that most of the early contexts containing the token coinage under examination are associated either directly or indirectly through ceramic crossmends. The exceptions are pits 13, and 16 and Structure 176, each of which contained only one coin or token. Pit 16 and Structure 176, as mentioned earlier, are related and date to *c.*1617-19 building efforts that took place several years after most of the other early fort contexts had been backfilled. This late date may account for the lack of vessel correlation with the rest of the site for these two features, whereas Pit 13 appears to be a soldier's pit and 'one of James Fort's earliest deposits' (Kelso and Straube 2008, 26). Indicative of its early date is the fact that it contained very few ceramics beyond sherds of Native-produced Roanoke simple-stamped pottery, which also explains the lack of ceramic crossmends (Kelso and Straube 2008, 26-27).

The west bulwark trench is connected with the largest number of contexts through ceramic crossmending. This may be reflective of the *c.* 1611-14 modifications to the bulwark, which is later than most of the other contexts under discussion. These structural changes to the bulwark are concurrent with the clean-up and rebuilding efforts in the fort's interior that followed the 'starving time', when buildings fell to ruin just as the colonial society itself started unravelling. As a result of the high mortality rate, there were a lot of material possessions in the fort with no owners and of little interest to survivors. These objects soon filled every open hole.

This investigation continues with a discussion of the coins in circulation in the *c.* 1607-24 period that were found in the early sealed contexts of James Fort. In

contrast to the conjectured token coinage, little current specie was recovered. In addition, the depositional patterning of the wide variety of low-value coins suggests accidental loss rather than deliberate dumping.

Table 1. Ceramic crossmends between early contexts of James Fort

Context	P11	P5	P3	P1	S165	WBK	P8	P9	P10	S177	S183	S175	S185	S191	S186	S187
Pit 11	X												X			
Pit 5		X			X	X										
Pit 3			X	X	X	X										
Pit 1			X	X	X	X				X						
Str 165		X	X	X	X					X	X					
WBK		X	X	X		X	X	X	X	X			X			
Pit 8						X	X	X	X				X			
Pit 9						X	X	X	X							
Pit 10						X	X	X	X							
Str 177				X	X	X				X	X		X			
Str 183					X					X	X	X	X			
Str 175											X	X				
Str 185	X					X	X			X	X		X	X		
Str 191													X	X		
Str 186															X	X
Str 187															X	X
	1607-1610	1607-1610	1607-1610	1607-1610	1608-1610	1607-1614	1607-1610	1607-1610	1607-1610	1610-1617	1607-1617	1611-1624	1608-1610	1608-1610	1607-1610	1607-1610

Chapter Four

Coins from James Fort's Contexts Dating 1607-1624

4.1 Introduction

The royal charter issued on 10 April 10 1606, granted the Virginia Company the right to mint coinage to facilitate commerce in the Virginia colony. In language used in the charters for subsequent new World colonies, James I agreed that the Company could:

> establishe and cawse to be made a coine, to passe currant there between the people of those severall Colonies for the more ease of traffique and bargaining betweene and amongst them and the natives there, of such mettall and in such manner and forme as the same severall Counsells there shall limit and appointe.
>
> (Bemiss 1957a, 6)

This privilege was never exercised by the Company and was not renewed in the second charter of 1609. As considered in this dissertation, the Virginia Company may not have petitioned for the right to mint coinage in its second charter because it had plans underway that would supply coinage without having to produce it. The Company would use the obsolete coins and tokens discussed in the next chapter. These numismatica would be assigned values within the Colony but would be worthless to any outside trade, giving the Company control over commerce in its colony.

In the early settlement, coinage was not needed for trading with the Indians as victuals and other goods could be purchased with pieces of copper, trade beads, and cheaply-produced iron tools brought specifically for that purpose. Despite intentions to the contrary, conditions in the Colony during the first few years conspired against the need for a special coinage. There was little 'traffique and bargaining' amongst the colonists as they were too busy working on Company projects and struggling to survive the episodes of disease, Indian warfare, and

starvation to engage in any private industry. By 1617, tobacco took hold as the medium of exchange, and while expedient for the purchase of English goods, it was inconvenient for internal commerce. Despite complaints as early as 1619 that there was 'no money at all' in the colony, no special coinage was produced for Virginia until the Virginia halfpenny that was struck in 1773 but not issued until 1775 (Bruce 1935, II: 498; Newman 1956).

Nevertheless, a number of English and European coins have been recovered during the archaeological excavations of James Fort. Some may have been introduced by 'masters of ships' who in the 1630s were imposed a two penny tax at Jamestown for every hogshead of tobacco they exported (Bruce 1935, II: 500). Relatively few of the coins are from the early fort-period sealed contexts, suggesting that coinage was not in general use by the populace but in restricted circulation between the colony's leadership and incoming ships (compare Table 2 with Appendix II). This chapter will discuss the coinage that is contextually anchored to the *c.* 1607-24 period in order to construct the framework for understanding the coins and tokens that comprise the subject matter of this thesis.

4.2 The Coins from James Fort

Apart from the Irish pennies and halfpennies to be investigated later in this thesis, nineteen coins were recovered from sealed fort contexts dating to the Virginia Company period of 1607-24 (Table 2). An additional sixty-two coins minted in this time period were found either in sealed contexts that related to a later date or in early features that had been subsequently disturbed, therefore containing mixed fill (Appendix II). This second set of coins will not be discussed as part of this study, although it is very similar in composition to the small group that can be

closely dated. All the English coins are in denominations of sixpence and below and of the several foreign coins, the majority are Spanish or Spanish colonial.

Table 2. Identifiable coins from sealed fort contexts dating to the Virginia Company period, 1607-24

Context	Coin #	Coin	Material	Date
Pit 1	38-JR	English halfgroat	Silver	1590-92
Pit 5	2797-JR	Scottish plack	Billon	1583-90
Pit 8	3493-JR	English halfpenny	Silver	1607-09
Pit 10	3497-JR	Swedish öre	Silver	1576
Pit 16	4674-JR	English farthing	Copper	1614-25
Structure 165	1199-JR	Spanish 4 maravedis[29]	Copper	1598-1610
Structure 165	2277-JR	Riga schilling	Billon	1577
Structure 165	1123-JR	English sixpence	Silver	1573
Structure 183	4339-JR	English farthing[30]	Copper	1613
Structure 183	4335-JR	English sixpence[31]	Silver	1565
Structure 183	4334-JR	English penny	Silver	1607-09
Structure 183	4336-JR	English farthing[32]	Copper	1613
Structure 183	4338-JR	Spanish 4 maravedis	Copper	1542-56
Structure 185	5549-JR	English sixpence, halved	Silver	1583-85
Structure 185	5734-JR	Spanish dinero	Copper	1598-1621
Structure 185	6108-JR	Spanish 8 maravedis	Copper	1604
Structure 186	5619-JR	English halfgroat	Silver	1602
Structure 191	#100473	Riga schilling	Billon	1570-79
W Bwk Trench	2822-JR	English halfgroat	Silver	1605-06

Since coins can be in circulation many years after they were first issued, it is not known when the early coins found in contexts dating after the Virginia Company period were first used in the colony. For instance, two Elizabethan sixpences found in a fourth quarter seventeenth-century structure (Structure 173) built in the area of James Fort suggest that they were still in circulation at that time. But when these coins were initially used in the colony can not be determined so they, like the coins from mixed contexts, must be excluded from this analysis.

[29] Dated 1591, this coin of Philip II has been counterstamped by Philip III (*c.* 1598-1661). The terminal date range for this coin is based on the archaeological context in James Fort of *c.* 1610.
[30] Harrington Type 1.
[31] This coin is cut down the center but not all the way through as if someone were attempting to create two coins worth threepence but never completed the act.
[32] Harrington Type 2.

Nevertheless, the number of coins from pre-1625 contexts of James Fort is significant as coins are not common finds on North American archaeological sites from this period. With the exclusion of the coins found on shipwrecks and from Jamestown, Kleeberg (2009, 15-33) recorded less than fifty coins from pre-1625 sites in the continental United States.

Eleven of the coins from the fort's sealed contexts are small denomination English issue with the highest values represented by two Elizabethan sixpences. While this may typify the coinage circulating in early Jamestown, it does not necessarily mean that larger denominations were not present. Coins with higher intrinsic values were less likely to become lost and end up in archaeological contexts. Their larger sizes made them easier to keep track of physically and their greater worth would contribute to more careful curation. Furthermore, gold coins, or at least the expectation of them, are suggested by seventeen coin weights dating prior to 1625 that have been found in the fort excavations. Used to verify that gold coins were of correct legally established weights, the coin weights found during Jamestown Rediscovery excavations are for coin denominations from England, France, Spain, and the Spanish Netherlands. Only four of the weights were found in the fort's early sealed contexts. Two of these, one for the English crown and the other for the Spanish 2 escudos, were made in Antwerp by the same maker. This suggests that they may have arrived at Jamestown in the same Dutch coin-weight box.[33]

One of the three sixpences (5549-JR) from the fort's sealed contexts has been cut in half to exchange at threepence and another (4335-JR) has been partially halved. Cutting coins with intrinsic values into fractional pieces was a common

[33] A coin-weight box contained a balance and several weights corresponding to the weights of European gold coins in common circulation. A detailed discussion of the James Fort coin weights is beyond the scope of this study and will be part of a separate analysis.

European practice to facilitate trade and reflects the response to a shortage of low denomination coinage in circulation.[34] In England, cut or clipped coins were to be considered bullion and returned to the Mint, but in reality many continued in circulation. Whereas necessity and convenience must be the primary reasons for the pervasive use of cut coins, Glassman and Redish (1985, 6) suggest that it was also often difficult to distinguish coins that had been purposely reduced from the extremely worn, and thereby underweight, coins that were in legal circulation.

An English sixpence and a halfgroat from plough zone contexts had also been modified; but rather than representing attempts to make change, they reflect differing aspects of Kemmers and Myrberg's 'acting theme' of coin agency (Kemmers and Myrberg 2011, 99). This framework of numismatic study recognizes that, as the subject and object of actions, coins can be used to make statements. The silver sixpence, as mentioned in Chapter 1, was cut into a rectangular pendant and pierced so that the 1602 date on the coin was not affected. The date appears to have been of significance to one of the colonists who may have worn the coin as a talisman or good luck charm. 'The often-observed practice of making pendants out of coins could be understood as the appropriation of the inherent qualities of the very object for the benefit of the individual who wore the pendant' (Kemmers and Myrberg 2011, 100).

The halfgroat, dating to Elizabeth's third coinage *c.* 1583-1603, appears to reflect the diminished value that European currency had in the New World trade for purchasing sustenance. The coin had been rolled into a bead, possibly for trade with the Virginia Indians who are documented as favouring rolled metal beads.

[34] Two other cut silver coins have been found during the fort excavations, both from plough zone. A 1561 halfgroat (1417-JR) and a 1580-81 threepence (4242-JR) have each been halved.

Two English copper farthings found in Structure 183 and one found in Pit 16 represent the attempt by James I to resolve the problem of small change in English society. The need for denominations smaller than a penny for day-to-day transactions had resulted in the private production of base metal tokens trading as farthings and halfpence by shopkeepers, tavern owners, grocers, vintners, and other merchants. While the tokens helped the populace to acquire goods, they were also profitable for the issuers who restricted sales to consumers carrying their tokens and who profited from issued tokens that were not used. It was estimated that in 1611 London there were over 3,000 retailers who produced £5 of lead tokens a piece, ten percent of which were unredeemed (Burn 1855, xxxviii). The crown profited from none of the proceeds acquired by these 'unofficial minters' (Deng 2011, 98).

Coming from a country with a history of copper emissions since the fifteenth century, James I understood the reluctance felt by Elizabeth towards issuing low-value base metal coinage. A debasement could sully his reign. But while king of Scotland, he had issued copper and billon coinage, not so much to benefit the poor despite platitudes to that effect, but to increase royal profits (Holmes 1998, 46-56). To keep the lucrative scheme of English copper farthings out of the Royal Mint and thereby the appearance of self aggrandisement, James granted a royal patent in 1613 for production of the coinage to one of his courtiers, John Harrington, Lord of Exton. It was calculated that 100,000 pounds of patent farthings would cost around £24,000 to produce, resulting in a £65,000 profit of which Harrington would receive £25,000, the rest going into the king's coffers (Berry 1988, 2). The farthings 'were not coin of the realm and could not be forced as legal tender' (Peck 1970, 19), but James made it inconvenient not to accept them by issuing a proclamation banning the use and production of the privately issued

tokens that were the prevalent means of everyday transactions, thereby eliminating the competition (Burn 1855, xl).

The small and underweight copper farthings were easily counterfeited and were not popular among the English populace who viewed the coinage as a means to enrich the king's favourites. Burn observed that the worthlessness of the tokens 'seemed the stimulant for universal contempt; ballad-writer, dramatists, players and poets joined in the general mad-dog cry of everywhere debasement' (Burn 1855, xli). The coins may have been ridiculed in the popular culture of the day but, since they continued to be profitable to the patentee and to the crown, farthing production in various forms continued under a series of monopoly holders until finally stopped by Parliament in 1644 (Fletcher 2003, 44).

Far removed from the hue and cry of England's populace over being forced to use coins not worth their metal, Virginia had a desperate need for a medium of exchange and at least by the 1630s the patent farthings were an attractive option. There was unlikely to be a problem with forgery in the settlement as there was no access to resources such as the die-cutters from the Tower mint who produced private farthings for London businessmen (Fletcher 2003, 44). Furthermore, as Englishmen, the colonists were accustomed to using tokens as an expedient to exchange labour for value. This is especially true of the menial labourers, many of whom were probably hired as casual workers in England for less than one penny per diem in wages, which they expected to pocket at the end of each day.

In 1636, Virginia's new governor Sir John Harvey formally requested 'farthing tokens' from the crown to rectify 'the injury to trade in Virginia, caused by little or no money in the colony'. The governor was particularly concerned that he had no way to pay labourers until the harvest of the tobacco crop, the primary

means of exchange at this date (Sainsbury 1860, 238-9). Harvey's petition may be the reason for the twenty-eight patent farthings that have been recovered from fort area contexts dating to the second quarter of the seventeenth century or from stratigraphically mixed contexts (Appendix II). Issues from each of the patentees are represented by these coins: twenty-four are the 1613 Harrington farthings, two were issued by the Duke of Lennox from 1614-1625, one is a farthing of the Duchess of Richmond (1626-34), and seven were produced under Lord Maltravers. The latter consist of a single Maltravers Round dating 1634-36 and six Rose farthings produced 1636-44.

Until the excavation of James Fort, only a handful of English patent farthings had been recovered from Virginia sites dating to the early seventeenth century, leading to the impression that few circulated in the colony and that Harvey's 1636 appeal for token coinage probably went unheeded.[35] This notion is supported by the Virginia House of Burgesses' response in 1639 to a license granted to Lord Maltravers in that year for supplying the colony with farthings 'in exchange for such commodities as were readily salable [sic] in the English markets' (Bruce 1935, II: 500). The legislators decried the plan, stating that 'the mechanics would be unwilling to receive such money in remuneration for their labor, hired servants for their wages, and merchants for their debts' (Bruce 1935, II: 501). Perhaps the Burgesses, who stated that they would rather have a yearly allocation from the crown of five thousand pounds sterling, were speaking from personal

[35] Discounting the James Fort evidence and aside from two caches containing a total of 180 English patent farthings that were found in Yorktown, Virginia and believed to have been deposited post 1665, only nine farthings from the first half of the seventeenth century have been found in Virginia. One rose farthing was located during National Park Service excavations of Jamestown in the 1950s. Three farthings were recovered from the Chesapean site (c. 1645-55) in Virginia Beach, one of which was a counterfeit Lennox round of James I while the others were farthings of Charles I. Other finds include: one Charles I rose farthing from the River Creek site (c. 1650-80) in York County; a James I farthing and a Charles I rose farthing from Williamsburg excavations; and two Harrington farthings from the Martin's Hundred site (c. 1620-22) in James City County (Cotter 1994, 191; Jordan 2009, 202; Kleeberg 2009, 40, 42, &125; Noël Hume and Noël Hume 2001, 370-71).

experience with the patent farthings that had been sent three years earlier at Harvey's request. If this is so, the large number of recovered pre-1636 farthings at Jamestown suggests that rather than sending the colony only newly minted coinage, the crown had also dumped previously issued coins that had been recalled by the Mint to be melted down upon the emission of Maltravers' new Rose farthing (Jordan 2009, 201, n.24). Some of the farthings still bear the tin coating they were given to appear like silver, indicating that they may represent stores of uncirculated stock as the tinning had a tendency to wear off quickly with use (Peck 1970, 26).

Deliberate official dumping of obsolete English coinage in Virginia was first suggested by Noël Hume upon finding two Harrington farthings during excavations at Martin's Hundred, a c. 1619-45 settlement near Jamestown. The coins were located in contexts that dated over five years later than their official withdrawal from circulation in England. At the time Noël Hume lamented that he 'could find no documentation and no numismatic historian willing to support his thesis'; but now, with the evidence from James Fort, this seems the most reasonable explanation (Noël Hume 1982, 317).

The obsolete coins comprising the topic of this thesis are also theorized to have been part of Mint stores that somehow avoided the melt and were subsequently released to Virginia Company officials for their use. William Harrison noted in his 1587 *Description of England* that the London Mint was the repository for confiscated unofficial coinage. 'All coinage is brought into one place, that is to say, the Tower of London, where it is continually holden and perused, but not without great gain to such as deal withal' (Harrison 1994, 300). Jamestown's receipt of some of the Mint's stockpiled coins and tokens is a possibility that will be considered with the Irish coinage and other exonumia of James Fort.

The remaining seven coins from early sealed contexts as shown in Table 2 are of foreign issue and include a billon Scottish plack, a silver Livonian schilling, a silver Swedish öre, and three copper Spanish coins (a dinero, two 4 maravedis pieces, and one 8 maravedis).The small number of foreign coins, their rarity in English contexts in the New World, and the diversity of their origins all suggest that they arrived at Jamestown randomly rather than as a purposeful assemblage. Scattered in the fort's early features, they were probably in the possession of individuals such as fort officials and gentlemen who had the opportunity to engage in personal monetary transactions with visiting mariners and merchants. As Haselgrove and Krmnicek (2012, 242-43) observed, coins 'found in contexts atypical of their cultural setting may well not be indicative of general circulation patterns'.

The use of foreign coins in seventeenth-century England was controlled by the crown with the result that very little appears to have circulated within the country. The exception may be the limited use of foreign specie in port towns where trading links brought in the small change of other countries (Schofield and Vince 2003, 158; Egan 2001, 88). As long as the person to whom the coins were offered would accept them at commonly accepted monetary values, it mattered little to the populace whether the coins were English or foreign (Henry 1879, 3).

Writing in the late sixteenth century, historian William Harrison stated that continental gold coins had been officially accepted since the reign of Henry VIII, as long as 'they hold weight', but silver coins held no official valuation and were exchanged as bullion to be 'converted into coin' by the mint (Harrison 1994, 299). Of even less value were foreign copper and billon coins that would attract little official attention. These denominations slipped into general circulation through

trading links and military campaigns in the late sixteenth and early seventeenth centuries and were used just as the ubiquitous base metal merchants' tokens. C. E. Challis (1978, 215) observed that the small copper Dutch coin known as the doit was in common enough usage in England for Shakespeare to incorporate reference to it in his 1611 play *The Tempest*.[36]

Besides the two English farthings just discussed, the only other base metal coinage in the early James Fort contexts consists of four Spanish coins: a dinero, two four maravedis, and a single eight maravedis. These coppers were probably acquired by the English in change during small retail transactions in Spanish America; but it is not known what sort of value, if any, may have been ascribed to them at Jamestown. The copper coins would not be familiar to the average Englishman, so, unless they were assigned a token value in the colony, they would only be useful to individuals participating in transactions in the Spanish-controlled areas of the Caribbean.

The copper four maravedis from Structure 183 (4338-JR) is extraordinary in that it was minted in the Spanish-controlled Caribbean island of Santo Domingo, which is known today as the Dominican Republic (Figure 4.1). The obverse contains a crowned gothic "Y" flanked by the assayer mark "F" and the denomination "IIII" with the legend CAROLUS ET IOANNA. The reverse depicts the crowned columns

Figure 4.1. *Spanish four maravedis coin of Johanna and Carlos I (4338-JR) minted in Santo Domingo c. 1542-56. (Preservation Virginia).*

[36] One doit (or duit) dated 1626 was recovered from Structure 145, a mixed context of James Fort.

of Hercules flanked by the mint mark "S" and "P" for Santo Domingo del Puerto, with the legend REGIS ISPANIARUM ET. Dating *c.* 1542-56, the coin represents the earliest New World coin found in North America and is one of two found during James Fort excavations.[37] According to archaeologist Kathleen Deagan, these coins are 'extremely abundant at many sixteenth-century Caribbean sites, including Concepción de la Vega, Puerto Real, and Santo Domingo' (Deagan 2002, 238).

It is reasonable to suppose that the Spanish and Spanish Colonial coinage from James Fort's early contexts may have been acquired by the English during trading relations or through privateering ventures in the West Indies. By the end of the sixteenth century, it is estimated that ten English ships per year were involved in contraband trade with the Spanish Caribbean settlements, particularly for tobacco, sugar, and ginger. These commercial relations continued through the seventeenth century despite periodic attempts by Spanish officials to restrict access (Norton and Studnicki-Gizbert 2007, 265).

For English ships travelling to Jamestown, the Caribbean was part of the original route of sail with the north-westerly trade winds creating a 'conveyor belt' directly to the area (Lenman 2009, 57). The islands provided a convenient rest stop on the seven to ten-week voyage to Virginia where the ships could refresh passengers and take on supplies. One Jamestown colonist writing in 1608 specifically mentioned calling in at Santo Domingo after the five week transatlantic voyage for the purpose of 'trafficking with the Savages' (Perkins 1890, 174).

Santo Domingo was particularly known for tobacco, which since the mid-sixteenth century had been cultivated in small gardens by African and Afro-

[37] The other Santo Domingo coin (4465-JR) is from a mixed layer of the same context (Structure 183 Mix).

Caribbean slaves for personal consumption and for sale to locals in small urban markets. Operating outside of the control of Spanish authorities, the informal commerce extended to dockside exchanges with crews of visiting ships who 'regularly engaged in petty trading as a way of supplementing their dismal wages' (Norton and Studnicki-Gizbert 2007, 256-58). Mariners usually carried coinage with them from the imprest or pre-voyage advance on their wages. Sailor Robert Markam may have used his imprest money in the Caribbean to acquire the 'Tobacco and other commodities' he sold to Jamestown colonist George Percy in 1610 (Shirley 1949, 237).[38] Percy was an 'enthusiastic smoker' since at least 1603, and it is interesting that he would be purchasing the weed when it could be found in the Native-cultivated fields all around him (Nicholls 2005, 216 & n. 15). It is also likely that Markam's tobacco was *Nicotiana tabacum*, the variety much preferred to the *N. rustica* available from the Indians in Virginia, and that it was purchased in Santo Domingo. This consumption pattern may explain the appearance of coins from that Caribbean island at Jamestown.

Supporting Jamestown's indirect trade with Santo Domingo are two Spanish lustreware *escudillas* (double-handled bowls) found in Structure 185, Jamestown's *c.* 1608-10 well. This ware is not found in North American contexts, and the largest New World assemblage has been recovered archaeologically from mid-sixteenth-century sites in the Domincan Republic on the Island of Hispaniola of which Santo Domingo was the largest Spanish colony (Deagan 1987, 54). One of the

[38] Robert Markam (Markham), sailor, and George Percy appear to have known each other since May 1607 when they both embarked on a month-long exploration of the James River with Captain Christopher Newport (Barbour 1969, I: 81). Unlike Percy, who lived in the colony until 1612, Markham appears to have been a mariner involved in sailing ships back and forth to England. He may be the 'fugitive called Robert Marcum' about whom John Smith says in 1621 had lived five years amongst the Maryland Indians (Smith 1986d, 289).

Jamestown *escudillas* reflects decorative elements (the central bird and the surrounding *flores partides*) typical of Muel in Aragon, Spain (Figure 4.2).

The Muel attribution has been confirmed by neutron activation analysis (NAA) of the vessel conducted by the Smithsonian Institution's Museum Conservation Institute (J. Speakman, pers. comm., 2010). This indicates a pre-1610 date for production of the bowl as in that year the potters, who were *moriscos* or individuals of Arab North African descent, were expelled from Muel. They were replaced for a short time by potters from Catalonia who brought their own decorative styles (Gutiérrez 1995; 2000, 67-70). Analysis of the second *escudilla* by the Smithsonian indicated that it was produced in Barcelona, Catalonia and therefore reflective of the turbulence surrounding the Spanish potters in the early seventeenth century (Figure 4.3). Both vessels were probably acquired in the Spanish American colonies by Jamestown-bound Englishmen.

Figure 4.2. *Lustreware escudilla made in Muel, Spain (Photograph by author).*

England's 1604 treaty with Spain opened up trade between the two countries in Europe but not in the Americas. While some prizes continued to be taken in the Caribbean by privateers sailing under any letters

Figure 4.3. *Lustreware escudilla made in Barcelona, Spain (Photograph by author).*

of marque they could obtain and were justified by the 'political religious differences between Spain and the other European powers', others turned to illicit commerce and trade (Barbour 1911, 534-6; Killock and Meddens 2005, 18). The very same merchant adventurers once involved in war-time privateering were sponsors of peace-time commercial expeditions. Influential in mercantile and colonizing ventures such as the East India and Virginia companies, these entrepreneurs backed individuals like Captain Christopher Newport on dozens of trading voyages to the West Indies (Andrews 1954, 34). Newport's reputation as 'a Mariner well practised for the Westerne parts of America' built over thirteen years of Caribbean expeditions for London merchants resulted in his assignment as commander of the initial Virginia Company fleet to Virginia and four subsequent voyages to Jamestown (Andrews 1954).[39]

Newport and seafarers of his ilk who were associated with the Virginia Company and involved in the Spanish American trade are most likely responsible for the appearance of the Spanish coins at Jamestown. This thesis is supported by evidence found during archaeological excavations at two London area sites associated with individuals with maritime connections to the New World in the late sixteenth and early seventeenth centuries. (Tyler 2001; Killock and Meddens 2005). The sites were located in Limehouse and Ratcliff, two geographically defined neighbouring hamlets on the north bank of the River Thames. Together these villages comprised a centre of maritime trades at the time of Jamestown's founding. Ships were built, equipped, and victualed there; early voyages of discovery departed from the docks; and the streets contained the residences of many of the mariners involved in the voyages of privateering, piracy, and trade as well as

[39] Newport's exotic gifts for King James, such as the 'two young Crocodiles and a wild Bore from Hispaniola' must have further helped his standing in courtly circles (Andrews 1954, 40).

provisioning England's first successful New World colony. The close-knit community, which at one time included the aforementioned Christopher Newport,[40] had access to international goods not available to the general English populace. This is most graphically depicted in the atypical pottery assemblages recovered archaeologically from the two sites, which included large numbers of Portuguese, Spanish, and Italian wares (Figure 4.4).

Figure 4.4. *(Left) unusual North Italian ring-handled bowl with splash slip found in James Fort (Preservation Virginia) like one (right) found during excavations in Limehouse, England (Pre-Construct Archaeology Ltd., London).*

Also recovered were exotic imported wares from Iznik, China, Persia, and the Caribbean (Jarrett 2005; Stephenson 2001).Unparalleled on English seventeenth-century sites, the scope and composition of wares is most similar to Spanish sites in the Caribbean and to early James Fort contexts (Killock and Meddens 2005, 21).

Further indicating links to the Caribbean was the discovery at the Limehouse site of seeds from a New World plant (marrow/pumpkin), two pieces of coral and a group of thirteen Spanish Colonial coins dating from the late fifteenth to mid-sixteenth century (Tyler 2001, 64-6; 90; Egan 2001, 87-8). The coins are unique among numismatic finds in the United Kingdom and 'are not known to have

[40] In 1597, Newport was described as 'of Limehouse, mariner' (Andrews 1954, 29).

circulated in England' (Egan 2001, 88).[41] Ten of the coins are four maravedis minted in Santo Domingo like the Jamestown coin from Structure 183 mentioned previously. Another Santo Domingo four maravedis coin was found at the neighbouring Ratcliff site and one was recovered during archaeological excavations of the Rose playhouse in Southwark (Egan and Keys 2005, 69; Bowsher and Miller 2009, 214-15).

The Spanish coins found on the London sites inhabited by individuals known to be doing business in Spanish America represent the 'international links of the area and the possible internal exchange within the closed community of seafarers, pirates and privateers' (Killock and Meddens 2005, 12). With the regular seafaring traffic and trade between the Limehouse/Ratcliff areas of England, the Caribbean, and Jamestown it is not surprising to find these same Spanish coppers in the Virginia colony.

The non-Spanish foreign coinage from the early James Fort assemblages is also unusual and represents global trade. The Swedish öre (3497-JR) found in the *c.* 1610 context of Pit 10, for instance, is dated 1576 and constitutes the oldest Swedish coin found in America (Inger Hammarberg, pers. comm., 2005) (Figure 4.5). The obverse bears the legend IOHANNES.3 D G. SVECIE REX around the full figure of a king in armour with sword in his right hand. The figure is flanked by the numbers "7" and "6" indicating the date of 1576. The reverse bears the legend MON NOVA STOK HOL (New Money Stockholm). The central design consists of a crowned shield bearing three small crowns around the Wasa family coat of arms

[41] Three of the maravedis were counterstamped with a key, which was used in Santo Domingo post 1564 to indicate devaluation from four to two maravedis (Barker 1972, 102). Egan records that 'a couple of similarly marked coins were discovered near the Custom House in London (Egan 2001, 88).

consisting of a shield containing a cross. Flanking the central motif is "I OR" indicating the denomination.

At 26 mm in diameter the coin is about the size of an Elizabethan sixpence, but at 1.7 g (26.23 gr) it is much lighter than the 2.46 – 3 g (38 – 47 gr) of the English coin.[42] The correct weight of the öre from the Swedish Coinage Act of 1574 is 2.83 g, making it the equivalent of the English sixpence and that is how it may have been exchanged, although that is not known for sure (Tingström 1969, 85). The current low weight of the öre, which was produced with only one or two percent silver, is probably a result of wear during years of use and of deterioration from being buried in the ground (Tingström 1969, 13).

Figure 4.5. *Bent silver Swedish öre (3497-JR) found in Pit 10 and dated 1586 (Preservation Virginia).*

Another exotic coin type in this assemblage is the billon schilling minted in 1577 by the city of Riga (Figure 4.6). The coin bears the obverse legend [CIV)]TATIS RI[GENSIS] around the Riga coat of arms consisting of a stone portal with two flagged towers and the head of a lion in the portcullis. The reverse design consists of the two crossed keys from the city's coat of arms and the legend MONE.NO.AR[GE]NTE. The numbers "7" and "7" for the year "1577" are flanking the central legend.

[42] The coin is intact, but has been bent down in the upper right quarter of the obverse side.

Figure 4.6. *Billon schilling (2277-JR) from the Free City of Riga, dated 1577 (Preservation Virginia).*

In present day Latvia, Riga was once part of the Livonian Confederation that incorporated the countries of Lithuania and Estonia. With the dissolution of the confederation in 1561, Riga gained the status of a Free City of the Holy Roman Empire, which it held until taken over by Poland in 1581.[43] Located on the River Daugava within miles of where it empties into the Gulf of Riga— an inlet on the east side of the Baltic Sea—Riga joined the Hanseatic League as a major mercantile centre in the late thirteenth century. The city's location provided an important link between the merchants of Europe and Russia, which helps explain why two of its coins ended up in the early James Fort contexts of structures 165 and 191. In the early seventeenth century, England was dependent on goods from the Baltic and coinage from the area could have easily changed hands through the seaborne community of mariners who at times were manning ships to Virginia. The types of goods England acquired from the Baltic countries are described by Captain John Smith as he argued for developing the same products more economically in Virginia. He stated that 'Muscovia and Polonia doe yearely receave many thousands, for pitch, tarre, sope

[43] Free cities were independent self-ruling polities, owing allegiance solely to the emperor of the Holy Roman Empire (Wood 1920, 260).

ashes, Rosen, Flax, Cordage, Sturgeon, masts, yards, wainscot, Firres, glasse, and such like, also Swethland [Sweden] for iron and copper' (Smith 1986b,159).

While a Free City, Riga's monetary system followed that of the Livonian Confederation and denominations consisted of schillings, ferdings, marks, ½ marks and thalers. The schilling was worth 3 pfennigs. The fort schillings weigh 0.6 grams and are 18 mm in diameter, about the size of an Elizabethan threehalfpence, which is how it may have been exchanged although that is not known for certain.

As mentioned earlier, King James issued base metal coinage in Scotland from the beginning of his reign in 1567, and the billon eightpenny groat found in a *c.*1610 soldier's pit (Pit 5) is one of them (Figure 4.7). A crowned shield bearing a rampant lion comprises the obverse design with the legend IACOB.6 D.G. REG. The reverse has a crowned thistle with the legend EDINB[URGH] OPPIDVM. Also known as a plack, the coin was minted between 1583 and 1590 following acts of the Scottish parliament that had recalled previously issued silver and alloyed coins to the mint's melting pot. This re-coining effort was an attempt to reclaim profits to the Crown that were being diverted by rampant counterfeiting and by the melting

Figure 4.7. *Billon Scottish plack of James VI (Preservation Virginia).*

down of the devalued coinage to extract the silver content. In 1591, just one year after the last issue of the plack, the government again attempted to increase royal profits by ordering the demonetization of all old billon coins. The coins were replaced by a new issue in 1593 of billon four pence pieces, the last Scottish coins to be struck in that metal (Holmes 1998, 47-52).

The Jamestown plack somehow escaped the melting pot and, like the other foreign coins, is unique amongst American numismatic finds. As the earliest Scottish coin recorded in the New World, the plack may have arrived in Virginia in the purse of an Englishman although Scottish specie had very limited circulation in England. In 1603, the Scottish monetary system was established as 12:1 against the English system; worth eight pence Scottish, the plack would be valued in England at two-thirds of a penny (Burn 1855, xxxvii). There was no corresponding English issue for the coin so very few members of the general public would know how to value it.

4.3 Summary

This discussion of the officially-issued English and foreign coins found in James Fort's c. 1607-24 contexts, has argued that these objects are probably the result of random losses from commerce with arriving ships rather than representative of a circulating medium within the colony. The nineteen coins were found in eleven contexts with the largest number (n=6) located in Structure 183, a feature described in Chapter 3, Section 3. 2.12 as dating *c.* 1607-17. This context was filled later than the other coin-bearing contexts, as previously mentioned. It also contained two of the three farthings that represent the latest dated coins from the sealed *c.* 1607-24 contexts. The third farthing was from Pit 16, which was dug

into the fill of Structure 183 as a mortar mixing pit for Argall's *c.* 1617-19 house (see Chapter 3, Section 3.2.10).

The foreign coins in the early sealed contexts, particularly the copper Spanish denominations, almost certainly arrived at Jamestown in the purses of the seafarers participating in international maritime trade. The English coins may have been brought by some of the gentlemen, but few colonists probably carried ready money with them across the Atlantic. Many of the labourers and craftsmen had none to bring, and individuals of means may not have considered that there would be anything to purchase in the isolated Virginia settlement. After all, they had been led to believe that their needs would be met by Virginia Company provisions, from trade with the Indians, and by their own industry through hunting and fishing the abundant wildlife. As was discussed in Chapter 2, the reality faced by the transplanted Englishmen was far different.

Chapter Five

The Token Coinage Used at Jamestown

5.1 Introduction

This part of the study will examine the collection of Anglo-Irish coins and English and Dutch tokens that have been recovered from Jamestown's earliest contexts. The large numbers of these objects located so far removed from the time periods and places for which they had been originally intended are significant. Through investigation of the pre-Jamestown biographies of the coins and tokens it will be established that these numismatically associated artefacts were no longer being used for their initial purposes when they were brought across the Atlantic. Following the life histories of these objects to their final deposition in colonial Virginia, this examination will posit a common reason and agency for the appearance of these disparate objects at Jamestown.

5.2.1 Irish coins: the Anglo-Irish context

'All the receipts are so short of the issue, as my hairs stands (sic) vpright to thinke of it' (Maclean 1864, 147). So wrote Queen Elizabeth's secretary of state, Sir Robert Cecil, in 1602 to his friend Sir George Carew, President of Munster, in regards to a disappointing program of debased coinage for Ireland that had been instituted by the Crown in the previous year. Reluctant though Elizabeth I had been to issue billon and copper coinage to finance her government in Ireland, the queen had been convinced by Cecil and by her lord-treasurer, Thomas Sackville, that this course of action would provide a twofold benefit. Most attractive about the scheme was that the cost projections had indicated it would be a lucrative venture for the Crown. An investment of £84,526 in production costs was estimated to yield £307,281 in billon and copper coin, thereby providing £222,755 in profits (Challis

1971, 118). In addition, by creating a new coinage with little intrinsic value while at the same time demonetizing all other moneys in circulation, the plan hoped to keep English sterling out of the hands of the Earl of Tyrone's army that was fighting English rule in Ireland.

Elizabeth faced mounting costs to support her army in the Nine Years' War that had begun in 1593 with the rebellion under Tyrone. Sir George Carey, treasurer of Ireland, noted in 1600 that 'these Irish wars do exhaust the treasure of England that the state of England doth even groan under the burden thereof [and] we expend faster here than you can gather it in England' (Challis 1978, 268). The cost of financing the English government in Ireland increased from ₤25,000-£30,000 per year during the 'quiet times' between 1586 and 1595 to over ₤200,000 in 1601 (Challis 1971, 99).

Worst of all, some of the 'great summes of money' sent to sustain the English army had found its way into the hands of the rebels who used it to support their cause. As Elizabeth stated in her 1601 proclamation instituting the debased coinage, Tyrone's forces were able to purchase from the continent 'such warlike provisions as they need, as with pouder lead, match, armes, and weapons of all sorts, and with wines, cloth and other necessaries' (Nelson 1905, 59). It was therefore considered that by decrying all moneys circulating in Ireland, 'whether Irish, English, or foreign', and replacing it with a token coinage only current in Ireland and representing a face value much higher than intrinsic worth, the rebels would be denied access to the supplies they were obtaining from foreign countries by the use of silver coins (Symonds 1917, 122).

While serving to hamstring the rebels, it was also considered that the billon shillings, sixpences, and threepences and the copper pennies and halfpennies would

be an economical way to support Elizabeth's fighting forces in Ireland. The money would only circulate in Ireland and would be the only officially sanctioned currency for that country. Individuals entering or leaving Ireland could exchange their money at one of seven official exchanges: London, Bristol and Chester in England and Dublin, Cork, Galway and Carrickfergus in Ireland. By the Crown's 1601 proclamation, the Irish exchanges would issue bills for the tendered money that could be redeemed at the English exchanges at the rate of 19 shillings in English coins for every 20 shillings of new Irish coins. The same exchange rate would apply to travellers to Ireland who were no longer permitted to carry English sterling out of the country (Symonds 1917, 122). In June 1602, in a move to improve the Crown's profit margin, the rate of exchange was increased to 22 shillings Irish for 20 shillings of decried sterling coins with the additional caveat that one-fifth of the money presented in Ireland for receipt of sterling in England had to be silver or gold. 'Those in the pay of the Queen' were exempted from this last stipulation up to the 'extent of their pay or entertainment'. But by the following month, with the English treasury still haemorrhaging funds, the exchange of 'mere copper moneys' was disallowed thereby 'demonetizing these coins outside the realm of Ireland' (Symonds 1917, 123-124).

Although sounding good on paper, the debased coinage scheme for Ireland proved unsuccessful. It never gained acceptance by the public and it failed to constrain Tyrone's forces. The rebels perceived the program as signalling that Elizabeth's 'coffers are empty' and were reinvigorated in their cause (Brewer and Bullen, 1870, 59). In any case, as Pawlisch (1985, 147) has indicated, Tyrone's illicit supply of arms was largely funded using Spanish coin so the debasement of English coin in Ireland had little impact. The biggest hardship was placed on the

soldiers and government officials in the pay of the English government in Ireland who suffered from inflationary rates imposed by merchants who quickly learned to exploit the system. The Irish population held on to the old coinage and kept it in circulation, resulting in 'trafficking in coin, the arbitrary raising of prices, and the abuse of the exchanges' (Challis 1971, 117). In an attempt to stop the widespread manipulation of the system and to gain better control, Elizabeth's last proclamation concerning the coinage in January 1603 restricted merchants and traders to exchanges in Dublin and London. Individuals in the pay of the English government could still use the exchange at Cork and 'travellers and soldiers leaving Ireland might present their bills of exchange at Bristol and Chester to the extent of four pounds' (Symonds 1917, 124).

Aside from the widespread abuses, when the costs of producing the coin, running the exchanges, and transporting the coinage between the two countries were totalled, the program proved fiscally unsound for the Crown.[44] The government would benefit the most from the base-metal monies in circulation that were not swapped for sterling; but the merchants ensured that there was active exchange and that they were the ones to benefit. From the final accounting, the three London exchanges had disbursed £231,046 15s. 5 ¼ d., of which the majority (£123,885. 16s. 4 ¾ d.) was paid to 'merchants, tradesmen, and shipowners', £77,813 12*s.* 7 ½ *d.* went to 'captains and others in the queen's pay', and £29,347 6*s.* 5*d.* to 'gentlemen and others not so engaged' (Challis 1971, 118-9). Only £37,352 in sterling had been collected by the Irish exchanges so the bulk of the funds supporting the scheme had to be supplied out of the queen's coffers.

[44] Carey was paid £2,000 a year to manage the exchanges (Challis 1971, 116, n.1).

James I enacted new monetary policies for Ireland in 1603 to gradually rid the monarchy of this unpopular and unprofitable scheme. By proclamation dated 11 October 1603, the billon coinage was reduced in value by one-third but the 'moneys of mere copper, as pence and half-pence' were to pass at full value, primarily for the 'more necessary use of the poorer sort'. Merchants were required to accept the copper coinage as long as no more than 'foure pence at a tyme' were proffered (Simon 1810, 110). By 1607, with the war over and the end of Mint production of the Irish issue, the Irish economy was again dependent on English currency. A proclamation on May 19th officially established the necessity 'to revive the use of English money in Ireland' and there was monetary union between the two countries (Ruding 1840, 364-365).

No further official mention is made of the Elizabethan pennies and halfpennies although Heslip (forthcoming, 7) believed that they may have continued to circulate in Ireland to a limited extent. They were eventually replaced by the English patent copper farthings discussed earlier in this study that were issued to pass current in England, Ireland, and Wales. Archaeological evidence suggests that this substitution did not occur with the first issue of patent farthings in 1613 since these coins are not found in Ireland, unlike the types produced after 1622. This *terminus ante quem* (TAQ) for the circulation of the Elizabethan copper pennies and halfpennies appears to be substantiated by a proclamation dated 28 September 1622, establishing the patent farthings in Ireland with an exchange in Dublin and simultaneously prohibiting 'the use of all other tokens, or things in the nature of tokens' (Heslip forthcoming, 7; Ruding 1840, 378).

Nevertheless, there do not appear to have been many of the copper Elizabethan coins in Irish circulation as only one archaeological site, Carrickfergus,

has yielded close to the number of pieces of the debased coinage as have been found at Jamestown (Kenny 1985, 65; John Stafford-Langan, pers. comm. 1997; Heslip forthcoming). As noted earlier, Carrickfergus was one of the designated monetary exchanges for individuals travelling in or out of Ireland. Although this role was removed by proclamation in January 1603, the town located eleven miles from Belfast, Northern Ireland, 'remained a centre of royal power and administration' (Heslip forthcoming, 7). In Heslip's opinion, Carrickfergus as an urban hub of the English government in Ireland may have promoted the circulation of the copper coinage much more than in other parts of the country, contributing to the discovery of eighty-five of the English copper pennies and halfpennies produced 1601-02 for Ireland. Before the findings at Jamestown, this comprised 'the largest group of surviving provenanced examples' of these coins, although the dating for them is not as close as that provided by the features of James Fort (Heslip forthcoming, 5). The largest concentration (n=51) was located during excavations in 1991 and 1992 in Carrickfergus contexts identified as "fill of post-medieval town ditch, early seventeenth century' (Heslip forthcoming, 10). The ditch, which started to be backfilled after the construction of the town wall in 1596, appears to have been the dump site for the base metal coins no longer in circulation (Ó Baoill 2012). Like Jamestown, the Carrickfergus coins are not the result of random losses.

If the Anglo-Irish copper coinage was not officially withdrawn from circulation in Ireland until 1622, the pennies and halfpennies found at Jamestown are not the result of this action. As will be discussed below, the contextual dating for the Jamestown coins is more than a decade earlier, suggesting that the coins were supplied to the Virginia colony from the Tower mint where they had been stockpiled for bulk export to Ireland. This thesis proposes that as the debased

coinage scheme fell apart, the Mint was left with an undistributed supply that was barrelled up for its metal content. Some of the coinage was probably melted down for copper tickets to royal rituals, as will be hypothesized later in this chapter, and some was shipped off to Virginia when the need for a token coinage in the colony was put forward by officials of the Virginia Company.

Familial and business connections between Mint officials, administrators of the Virginia Company, promoters of New World colonization, and some of the Jamestown colonists may have had some agency in the appearance of the Irish copper coins in early James Fort features. Captain Edward Hayes is one of these individuals. He was not only enmeshed in England's colonizing ventures in the New World and often rubbing elbows with the organizers and leaders of the Jamestown colony, but he is also credited with contriving the scheme of debased coinage for Ireland (Quinn 2004; Challis 1971, 115; Challis 1978, 19-20 & 268; Symonds 1917, 120-121).

Described by his biographer David Quinn as a 'seaman and promoter of colonization', Edward Hayes was also an inventor, and an archetypical entrepreneurial projector of Tudor-Stuart England (Quinn 2004). Projectors had 'a practical scheme for exploiting material things . . . capable of being realized through industry and ingenuity' (Thirsk 1978, 1-2). Besides having an interest in a more economical production of coinage, Hayes' projects included such diverse topics as the Newfoundland fishery, the London water supply, and the colonization of North America (Quinn 1974, 231-232). The latter activity put Hayes in contact with many of the individuals involved with the Virginia Company's settlement at Jamestown. For several years in the early seventeenth century he was even living at the home of the sister of Sir Thomas Smythe, prominent London merchant and

treasurer of the Virginia Company (Quinn 1974, 232). Furthermore, Richard Hakluyt— geographer, Virginia Company subscriber, and active promoter of English colonization— was considered Edward Hayes' 'friend and mentor' (Quinn 1974, 241). At Hakluyt's urging, Hayes even proposed a scheme in 1606 'by which government and private capital could be combined for the financing of the proposed Virginia colony' (Quinn 2004, 3).

Born *c*. 1550, Edward Hayes was a younger son of a Liverpool merchant of the same name. Hayes' interest in New World ventures is first seen in 1578 with his participation in planning the voyage of Humphrey Gilbert to Newfoundland. Quinn believes that this was made possible for Hayes through introduction to Sir William Cecil, Lord Burghley, while a tutor in the house of Burghley's sister-in-law in the late 1560s and early 1570s (Quinn 1974, 229-30). Being in the 'Burghley camp' rather than with Sir Francis Walsingham's group that was interested in Virginia and North Carolina, Hayes' initial energies for North American settlement were focused on New England and Newfoundland. These areas were considered favourable for English settlement as they were both distant from Spanish settlements and had climates similar to England. Furthermore, Walsingham's interests for a base of operations against Spanish ships guided Sir Walter Raleigh's 1585-87 settlements on Roanoke Island in modern-day North Carolina (Quinn 1974, 235-36).

As captain of the *Golden Hind,* Edward Hayes accompanied Sir Humphrey Gilbert to Newfoundland in 1583 on what proved to be Gilbert's last voyage. Hayes' account of the expedition was published by Richard Hakluyt in his 1589 *Principall Navigations* who later requested Hayes to contribute a treatise to the 1602 account of Captain Bartholomew Gosnold's exploration of New England. Historian Philip Barbour considered that Hayes mentored Gosnold, who was

described by Captain John Smith as the 'first mover' of the Virginia venture. Gosnold arrived at Jamestown in 1607 as one of the governing counsel of the first expedition and died in the colony the same year (Barbour 1964, 99); Smith 1986c, 203). Between 1599 and 1603, Hayes served as 'commissioner for the musters in Leinster,' which on at least one occasion called for him to transport a large amount of money to Ireland (Quinn 1974, 231). This role exposed Hayes to the economic difficulties surrounding the Irish wars while at the same time he was experimenting in Isleworth with his relative Thomas Hayes on the development of new coining machinery. The two interests came together in a proposal to produce economically and efficiently a debased coinage for Ireland.

In addition to devising a new mixture of alloys, Edward and Thomas Hayes claimed to have developed 'ingens' by which they could produce thin copper coins that could not be effectively counterfeited by casting (Symonds 1917, 119). In an undated letter, Thomas Hayes had stated that' the probation of our ingines in this coinage wilbe so throughly manifested yt hereafter it may induce ye whole moneys of England to bee wrought thereby' (Symonds 1917, 120-121). On 17 April 1601, the Hayeses were provided space in the Tower mint to conduct their mechanized experiments, which continued through September (Symonds 1917, 119; Challis 1978, 20).

Despite their experimental work, Edward and Thomas Hayes were not granted a monopoly for the production of the Irish coinage and it is not known precisely how much of an influence they had on the final product. Symonds (1917, 118) described them as unofficial expert advisors. Even if the coins they produced were 'neat and exquisite' as the Hayes had promised, the machinery failed in the more important task of producing consistent coin blanks with minimal waste. As

noted by Challis, coinage aesthetics at the time were less important to the Mint officials than correct coin weight and metal composition, both of which were legally enforced (Challis 1978, 20; Challis 1992, 250).

When Edward and Thomas Hayes started their trial, production of the Irish coinage was already underway using traditional methods in another part of the Mint. By an indenture of February 2, 1601, Elizabeth had agreed with 'Sir Richard Martin and Richard, his son, master-workers at the Tower,' to make five different coins for Ireland (Symonds 1917, 110). Shillings, half-shillings, and quarter-shillings were to be produced from a mixture consisting of three ounces of silver to nine ounces brass. The brass for these new moneys was to be derived from 'unserviceable brass guns' (large artillery pieces) that were called into the Tower mint shortly after the indenture was signed (Symonds 1917, 114). Much of the silver was supplied by £5,200 of 'Spanish moneys taken in ships upon the narrow seas' by the queen's navy (Symonds 1917, 115).

Included in this indenture were also copper pennies and halfpennies with pennies at 192 to the pound and halfpennies at 384 to the pound (Symonds 1917, 110). Recent materials analysis has revealed that these coins were struck from unalloyed arsenical copper, indicating English ores rather than the nickeliferous copper deposits from continental Europe (Hudgins 2005a, 119). The debased coinage scheme for Ireland thereby benefitted England's copper monopolies by providing a market for what had become a problematic surplus of raw copper (Donald 1989, 259).

There is no documentation of payment from the Mint funds to Edward and Thomas Hayes for their efforts, although in September 1603, James I awarded them each an annuity of £100 'for good service done in the wars', which may have been

in recognition of the coinage scheme (Symonds 1917, 121). Even if Edward Hayes cannot be credited with the production of the Irish copper specie that has been found at Jamestown, his association with the scheme for Ireland and his close relationship with the leadership of the Virginia Company suggest that he may have been involved with the plan to recycle to the Colony the government's undistributed stock of copper pence and halfpence in the London mint that had been tendered for exchange into sterling moneys.

5.2.2 Irish coins: the Virginia context

One hundred and thirty-eight copper Irish coins, comprising one hundred and twenty-one pennies and seventeen halfpennies, have been uncovered during the James Fort excavations. This number is extraordinary as this is more than has been recovered during archaeological excavations at Carrickfergus, which, as previously mentioned, served as one of the Irish exchanges for the coins in 1601 and 1602. In addition, only one other Elizabethan Irish copper coin has been archaeologically recovered from an American context and it too probably originated at Jamestown.

In 1990, archaeologists with Virginia Commonwealth University found a 1601 halfpenny at Jordan's Journey, Virginia (44PG302), twenty-six miles 'as the crow flies' up the James River from Jamestown. One of only two coins recovered from the site, the halfpenny was located in the cellar of a *c.* 1620-35 domestic structure thought to be associated with Samuel Jordan, a prominent landowner in the colony (Mouer et al. 1992, 67-69; 157-158). The archaeologists conjectured that the coin was carried to the Virginia colony by one of several settlers who are known to have also established plantations in Ulster, although none of these individuals was historically connected with the site.

Association of the coin with a person who had been in Ireland before arriving in Virginia appeared to be confirmed by what was described as a thick coating of tin on the coin (Mouer et al. 1992, 158). Tinning would indicate that the halfpenny had previously circulated in Ireland where it had been illicitly modified to pass for the more valuable billon threepence, which had much the same design and was struck on the same size flan as the penny (Robert Heslip, pers.comm., 2010; Comber 2007, 6). However, this interpretation lost credence when recent elemental analysis of the coin by the Virginia Department of Historic Resources revealed no sign of tinning (Caitlin O'Grady, pers. comm. 2010).

Like the other Irish coins at Jamestown, the Jordan's Journey halfpenny is considered by this thesis to have emanated from uncirculated Mint stock first brought to the Colony by Sir Thomas Gates. As described earlier, upon his arrival in May 1610, Gates found the settlers in a deplorable state after a six-month siege of James Fort by the Powhatan Indians. He and his leadership team decided that Virginia should be abandoned and all plans were scrapped including, as theorized by this thesis, the scheme for token coinage. The settlers prepared for departure upon the four small vessels in the Colony; and unnecessary low-value objects such as the coins were intentionally dumped. The major renovations to the fort that followed soon thereafter by the re-establishment of the settlement with the arrival of Lord De La Warr resulted in further movement of soil and the filling of trash pits that had been begun by the departing colonists. It is during this effort that began in June 1610 that some of the token coinage could have been separated from the rest. One appears to have found its way into the possession of a colonist such as Samuel Jordan who is believed to have arrived with De La Warr's fleet.

Of the Irish coins found at Jamestown, twenty-seven are from disturbed contexts of the fort without close dating and will not be included in the following analysis (see Appendix III). The remaining one hundred and eleven coins (twelve halfpennies and ninety-nine pennies) are from sealed early contexts, with the latest contextual date of *c*. 1611-17 provided by Structure 177 (Table 3). It is significant to note that none of the coins were found in Structure 170, a late fort-period well that dates *c.* 1617– 24; nor were they found in Midden 1, a context dating to the second quarter of the seventeenth century. The concentration of the Irish coins in sealed contexts that only date to the first decade of the settlement indicates that their use or intended use was restricted to this early period.

Table 3. Irish pennies and halfpennies from sealed contexts of James Fort

CONTEXT	OBJECT	MASTER	COIN	DATE	IM	WT in grams	DIAM in mm	DIE AXIS*
1Q	42	Pit 1	Penny	1602	Martlet	24.7	20.75	2
3BS	101	Pit 1	Penny	1602	Martlet	18.5	17.33	4
69E	724	Pit 3	Penny	1601	Star	29.3	19.70	2
69F	725	Pit 3	Penny	1601	Star	32.4	18.89	12
124F	816	Pit 3	Penny	1601	Star	29.3	20.10	9
124F	686	Pit 3	Penny	1601	Star	18.5	19.46	4
158D	923	STR 165	Penny	1602	Martlet	27.8	19.81	12
158S	615	STR 165	Penny	1601	Star	27.8	19.84	4
158N	617	STR 165	Penny	1601	Trefoil	32.4	20.27	10
158AP	639	STR 165	Penny	1601	Star		19.13	9
158R	1126	STR 165	Halfpenny	1601	Star	12.3	16	3
158V	6982	STR 165	Penny	1602	Martlet	24.7	20	12
158AP	1127	STR 165	Penny	1601	Star	27.8	20.29	5
158S	1263	STR 165	Penny	1602	Martlet	21.6	20.03	5
158AW	1378	STR165	Penny	1601	Star	18.5	18.84	10
158C	1916	STR 165	Penny	1601	Star	20	19.71	7
158F	1933	STR 165	Penny	1601	Trefoil	18.5	19.75	9
158AE	2832	STR 165	Penny	?	?	24.7	21.47	?
785A	2823	STR 165	Penny	1601	Star	18.5	18.87	12
731B	2222	Pit 5	Penny	1602	Martlet	?	17	?
1339B	2830	W BWK	Halfpenny	?	?	9.3	16.9	?
1425B	3057	W BWK	Penny	1601	Star	18.5	20.38	12
1339G	3567	W BWK	Penny	1602	Martlet	24.7	20.81	6
2158Z	3872	STR 177	Penny	1602	Martlet	20	20.12	12
2158Z	3864	STR 177	Penny	1602	Martlet	20	19.12	4

CONTEXT	OBJECT	MASTER	COIN	DATE	IM	WT in grams	DIAM in mm	DIE AXIS*
2158U	3962	STR 177	Penny	1602	Martlet	23.1	21.09	9
2158U	4451	STR 177	Penny	1602	Martlet	20	20.54	6
2158P	4642	STR 177	Penny	1602	Martlet	30.9	20.72	6
2158P	4643	STR 177	Penny	1601	Trefoil	26.2	20.37	12
2158P	6471	STR 177	Penny	1602	Martlet	24.7	19.2	12
2361C	4346	STR 183	Penny	1601	Star	23.1	20.37	3
2718G	6485	STR 185	Penny	1602	Martlet	26.2	19.37	3
2718G	6488	STR 185	Penny	1601	Star	23.3	19.3	12
2718G	6557	STR 185	Penny	1601	Star	23.2	20.5	3
2718J	4867	STR 185	Halfpenny	1601	Star	13.9	16.49	6
2718K	#76784	STR 185	Penny	?	?			
2718H	6476	STR 185	Penny	?	?	32.4	20.5	?
2718N	6487	STR 185	Penny	1601	Star	29.3	19.8	3
2718H	6494	STR 185	Penny	1601	Star	26.2	19	
2718H	4923	STR 185	Penny	1601	Star	23.1	19.99	3
2718H	4924	STR 185	Penny	1602	Martlet	30.9	19.91	1
2718H	4925	STR 185	Penny	1601	Star	26.2	21.33	4
2718H	4926	STR 185	Penny	1601	?	26.2	19.87	?
2718H	5161	STR 185	Penny	1602	Martlet	23.1	20.03	9
2718H	6519	STR 185	Penny	?	?	21.6	18.7	?
2718M	5250	STR 185	Penny	1601	Star	27.8	19.47	5
2718M	6481	STR 185	Penny	1602	Martlet	27.8	20	12
2718N	6495	STR 185	Penny	1602	Martlet	24.7	19.6	10
2718N	6477	STR 185	Penny	1601	Star	20.1	19	9
2718N	6486	STR 185	Penny	1601	Trefoil	24.7	19.8	9
2718N	#75175	STR 185	Penny	?	?	17	18	6
2718N	6688	STR 185	Penny	1601	Star	20.1	19	3
2718N	6497	STR 185	Penny	1602	Martlet	23.1	18.6	6
2718N	6495	STR 185	Penny	1602	Martlet	24.7	19.6	10
2718N	6659	STR 185	Penny	1601	Star	30.9	19	6
2718N	6483	STR 185	Penny	1601	Trefoil	21.6	19	6
2718N	6515	STR 185	Penny	1601	?	15.4	17.5	3
2718N	#75735	STR 185	Halfpenny	?	?	10.8	16	?
2718N	6475	STR 185	Penny	1601	Trefoil	21.6	19.7	6
2718N	6472	STR 185	Penny	1601	Star	18.5	18.5	7
2718N	#76785	STR 185	Penny	?	?	20	19	?
2718N	6556	STR 185	Penny	1602	Martlet	21.6	19.3	2
2718N	#77660	STR 185	Halfpenny	?	?	12.4	16.7	?
2718N	#78196	STR 185	Halfpenny	?	?	12.4	16	?
2718N	6517	STR 185	Penny	1602	Martlet	27.8	19.8	3
2718N	6657	STR 185	Penny	1602	Martlet	12.4	19	3
2718N	#77669	STR 185	Penny	1602	Martlet	24.7	21	?
2718N	6658	STR 185	Penny	1601	Star	23.2	19	12
2718N	#77652	STR 185	Penny	1602	Martlet	29.3	19.8	3
2718N	#77653	STR 185	Penny	?	?	30.9	19	9
2718N	6482	STR 185	Penny	1601	Trefoil	21.6	20	12
2718N	6496	STR 185	Penny	1602	Martlet	29.3	20	12

CONTEXT	OBJECT	MASTER	COIN	DATE	IM	WT in grams	DIAM in mm	DIE AXIS*
2718N	6479	STR 185	Penny	?	?	26.2	19.3	?
2718N	6484	STR 185	Penny	?	?	26.2	20.3	?
2718N	6514	STR 185	Penny	?	?	20.1	17.9	?
2718N	6480	STR 185	Penny	?	?	9.26	19.3	?
2718N	#77677	STR 185	Penny	1602	Martlet	26.2	17.7	6
2718N	6520	STR 185	Penny	1601	Star	9.1	19.4	12
2718N	6555	STR 185	Penny	1601	Star	29.3	17.9	2
2718N	#78199	STR 185	Penny	?	?	13.9	17	6
2718N	#78200	STR 185	Penny	1601	Star	29.3	19	7
2718N	#78201	STR 185	Penny	1602	Martlet	24.7	19	2
2718N	#78202	STR 185	Penny	1601	Star	30.9	19.4	6
2718N	6715	STR 185	Penny	1601	Star	29.3	20	3
2718N	6716	STR 185	Penny	1602	Martlet	30.9	20	11
2718N	#78205	STR 185	Penny	1602	Martlet	23.1	20	12
2718N	#77655	STR 185	Penny	1601	Star	23.1	20.8	6
2718N	#74334	STR 185	Penny	1601	Star	26.2	19	9
2718N	6796	STR 185	Penny	1601	Star	23.2	20	6
2718N	#77657	STR 185	Penny	?	?	?	?	?
2718W	6478	STR 185	Penny	1601	Trefoil	20.1	17.9	12
2848A	6794	STR 186	Halfpenny	1602	Martlet	9.3	16.8	9
3081C	6649	STR 191	Penny	?	?	24.7	20	?
3081C	6660	STR 191	Penny	1602	Martlet	21.6	20	3
3081C	6648	STR 191	Penny	1602	Martlet	30.9	19	?
3081F	6643	STR 191	Penny	1602	Martlet	26.2	20	?
3081F	6644	STR 191	Halfpenny	?	?	9.25	16	?
3081F	6645	STR 191	Penny	?	?	26.2	20	?
3081F	6646	STR 191	Penny	?	?	29.3	20	?
3081F	6647	STR 191	Penny	1602	Martlet	26.2	20	6
3081F	6661	STR-191	Penny	1602	Martlet	26.2	20	6
3081F	6662	STR 191	Penny	?	?	23.2	18	12
3081F	6689	STR 191	Penny	1602	Martlet	18.5	20	9
3081F	6619	STR 191	Penny	1601	Star	24.7	19	?
3081F	6650	STR 191	Penny	1602	Martlet	23.1	20	12
3081F	#98910	STR 191	Halfpenny	?	?	10.8	15.6	?
3081F	#98639	STR 191	HalfPenny	1601	?	6.17	16	?
3081F	#98640	STR 191	Penny	?	?	?	?	?
3081F	#100264	STR 191	Halfpenny	1602	Martlet	10.8	16.6	3
3081N	#101964	STR 191	Penny	?	?	?	?	?
2353D	4844	Pit 16	Halfpenny	1601	Trefoil	12.3	16.96	6

* Die axis records the degree of rotation of the reverse die from the obverse die.

Of the one hundred and eleven coins considered for this study, twenty-five were too corroded from soil conditions to read either date or initial mark. Most of the remaining coins are dated 1601 (n=47), and nine of these bear a trefoil initial

mark while thirty-five are marked with a star. The initial mark can not be distinguished on three coins dated 1601. All thirty-nine of the 1602 coins have martlet initial marks. Although numerous in the Jamestown contexts, comprising 45% of the readable coins, the martlet is the rarest initial mark on the known copper pieces of Elizabeth's third Irish coinage in Britain (Comber 2007, 9). This may indicate that these coins at Jamestown represent a Mint stockpile that began soon after the 1602 issue.

The mark sequence of the coins is established by documentary evidence of the production cycles with the trefoil used from 'the date of the indenture, 2nd February 1601' until the pyx trial of 20 May 1601, after which the star initial mark was employed. The martlet mark was used after the star pieces were pyxed on 24 May 1602 (Symonds 1917 116-7; Comber 2007, 9). Early numismatists have recorded a crescent initial mark for the1602 pennies and additional initial marks of the cipher, and cross on these coins (Nelson 1905, 3; Simon 1810, 38). Neither of these marks have been encountered on any of the Irish coins at Jamestown suggesting that Symonds may have been correct in considering that previous writers had misread worn or poorly struck marks (Symonds 1917, 114).

Both the penny and the halfpenny denominations are struck with the same designs (Figure 5.1). The obverse bears the royal shield, consisting of the arms of France and England quarterly, between the initials E R. Within a beaded border, the legend reads: ELIZABETH D G AN FR ET HIBER RE (Elizabeth by the grace of God, Queen of England, France and Ireland). The reverse consists of the date divided by a crowned harp, with the legend taken from Psalm 54:4: POSVI DEV ADIVTOREM MEV [M] (I have made God my helper). The legend is again within a beaded border.

Figure 5.1. *Reverse (left) and obverse (right) of Irish penny dated 1601 with star initial mark (Preservation Virginia).*

Examination of the coins revealed that there is little standardization in weight, diameter, or die axis (Table 3). The flans are irregular with some appearing almost square and the legends running off the edge. Many of the coins show signs of corrosion from being buried in the ground but they do not show signs of wear from use, which is yet another indication that they may represent an undistributed store of the debased coinage from the Tower mint.

5.2.3 Discussion

The Jamestown assemblage of Elizabethan copper coinage minted in 1601 and 1602 for Ireland is extraordinary in that it represents the largest number of this specie that has been recovered in context. The context is not only over 3,000 miles away from where the coins were originally intended to circulate but also dates several years after the debased coinage was no longer current. Purposeful supply of the monetary objects is suggested by the colonial provenience of Jamestown where,

as noted in Chapter 2, the leadership proposed using 'copper coyne' to reimburse individuals for goods and services. This thesis proposes that the coins were to function as scrip, a substitute for legal currency providing credit against accrued wages and only valid in the colony. Purposeful deposition rather than random and accidental loss of Irish pennies and halfpennies is suggested by their sizeable concentration in just a few features related by ceramic crossmends and dating within the first decade of the colony's existence. This assemblage can be considered a coin hoard, which Haselgrove and Krmnicek (2012, 238) describe as representing a group of coins 'deliberately deposited together, whether or not with the intent of later recovery'.

To summarize Table 3, one hundred and eleven of the coins were retrieved from eleven closed contexts dating to the *c.*1607-24 period. Fifty-five per cent (n=60) were found in Structure 185, the fort well described in Chapter 3 (Section 3.3.2.5), that served as the dumping ground for colonists abandoning Jamestown in June 1610. The next highest concentration, comprising 16% (n=18) of the Irish pennies and halfpennies, was found in Structure 191. This is a feature adjacent to Structure 185 that reflected contemporaneous fill based on 'starving time' faunal remains and ceramic crossmends (see Chapter 3, Section 3.3.2.6). Structure 165, the storehouse described in Chapter 3, Section 3.3.2.1 and located on the eastern perimeter of the fort palisade, contained thirteen of the coins. These objects may be remnants of the original store of the coins when they were first brought into the colony in May 1610 with the intention that the token coinage scheme would be enacted. The remaining contexts contained from one to seven coins each and probably relate to secondary cleanup and rebuilding efforts in the fort that dislodged the coins from these three primary concentrations.

5. 3. 1 Groningen Tokens: the Dutch context

Sixteen brass tokens issued in the late sixteenth century by the northern Dutch city of Groningen have been recovered during excavations of James Fort. While these objects are rare singular finds by metal detectorists in English fields and by mudlarkers along the Thames foreshore, they are most commonly located in archaeological contexts within a limited area of the northern Netherlands and north-western Germany where historically they had authorised usage (Figure 5.2).[45]

The large number of these Dutch tokens found at Jamestown is surprising. Were they carried across the Atlantic in the pockets of English soldiers who had fought in the Netherlands in service to the States-General? Were they acquired by English merchants or government officials who were scouring Europe for surplus metals to be recycled? Could some of these individuals also have Virginia Company connections and thereby be in positions to earmark the materials for the Jamestown colony? Like the Irish coins and the lead and copper tokens addressed in this chapter, this investigation of Groningen tokens will argue that they were purposely acquired by the Virginia Company for use as a token currency in the Jamestown colony.

Figure 5.2. *Map of the Netherlands showing the northern city of Groningen (Pure Adventures).*

[45] Only three Groningen tokens, two from London and one from Surrey, have been reported to the United Kingdom's Portable Antiquity Scheme (http://finds.org.uk/database). One from Suffolk has been recorded on the UK Detector Finds Database 2013, (http://www.ukdfd.co.uk/ukdfddata/showrecords.php? product= 263&cat=all).

The following discussion regarding the primary use of Groningen tokens has been largely gathered from communications with Dutch numismatist Jan C. van der Wis who has undertaken extensive research in the Groningen city archives. His article 'Raadstekens van de stad Groningen' incorporates recent archaeological data and is the latest and most comprehensive scholarship on the early use of tokens in the Dutch city (van der Wis, 2008).

Located in the northern Netherlands with access to the North Sea, the city of Groningen was an important trading centre and part of the Hanseatic League since the fifteenth century. Beginning in the first quarter of the sixteenth century, the city council of Groningen issued token coinage as a perquisite to city officials attending council meetings. Initially, the burgomasters, councillors, guild presidents, ombudsmen, clerks and others could only redeem the tokens for wine or beer in the tavern known as the *wijnhuis* (wine house), conveniently located in the town hall where the meetings took place (Figure 5.3). By the mid-sixteenth century the tokens were more widely accepted by city merchants, particularly tavern keepers, who could redeem the tokens they collected for three Dutch stuivers each from the city treasurer (van der Wis 2008; Jan van der Wis, pers. comm. 2007).

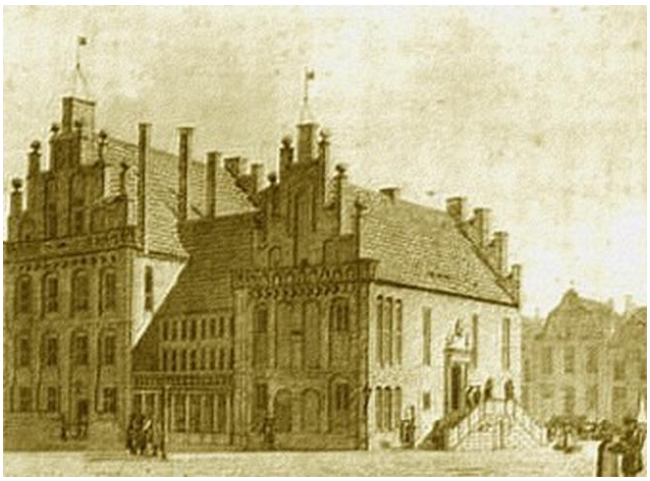

Figure 5.3. *Groningen city hall and tavern, c. 1443-1774 (from copper engraving by Hs. Numan, RHC Groningen Archives, The Netherlands).*

The earliest Groningen tokens are thought to have been made of lead although these have not been identified. Compositional analysis of later extant

tokens indicates that by 1578 they were fabricated in brass imported from Nuremberg. The use of brass rather than copper for token production was rare in the late sixteenth century and is an indication that "Nuremberg brass penetrated the Dutch mints much more effectively than did Central European copper" (Mitchiner 1991, 739).

Production of the tokens, known as *raadsteken*, increased in the last decade of the sixteenth century during the Dutch War of Independence while Spanish-controlled Groningen was under siege by Count William Louis of Nassau and his kinsman Prince Maurice of Orange. Whereas 500 Groningen tokens were issued in 1578, almost 12,000 were produced in 1590 and that figure was more than doubled in the following year (van der Wis 2008, 151). With coinage scarce, the tokens had become a form of emergency money for funding many city services, including the building of defensive works. As a consequence, the *raadsteken* were more widely distributed through the city and became generally accepted by the citizenry as legal tender (Jan van der Vis, pers. comm. 2001).

Groningen was freed from Spanish control and brought into the republic of the United Netherlands in 1594. The last *raadsteken* were issued in the following year, but the tokens continued in circulation as indicated by their official devaluation in 1601 from three stuivers to two-and-two-thirds stuivers, and again in 1604 to two stuivers. By this time counterfeit tokens were circulating and small change was more plentiful, making the tokens an unnecessary problem. On 9 May 1609 the Groningen city council resolved to remove the tokens from circulation. The archival record does not specify whether recalled tokens were consigned to the melting pot at the city mint or whether they were sold as scrap (van der Wis 2008, 154; Jan van der Wis 2001, pers. comm.). If the latter, the May 1609 recall date

accords with the theory to be discussed below that the Virginia Company acquired the tokens prior to the departure of Sir Thomas Gates for Virginia one month later. As postulated, Gates, the newly designated governor of the Jamestown colony, was planning to institute a program of token currency in which the Groningen tokens would play a part.

Most of the archaeologically recovered Groningen tokens have been found within a radius of about 50 kilometres around the city in the provinces of Friesland, Groningen, and Drenthe and in East Frisia, Germany (Jan van der Wis, pers. comm. 2001). As expected, the largest concentration of these objects has been located in the city of Groningen, with forty-three found archaeologically since 1995. Most of these tokens bear dates prior to 1573 and were located in the backfill of old defensive canals, which suggests that they were still in circulation during the 1593 siege of Groningen (van der Wis 2008, 154).

Van der Wis (2008) has identified two types of *raadsteken*, designated A and B, which are distinguished by slight differences in the decorative elements. Both types are struck on one side only and sometimes include four pellets on the reverse side, which are a result of the manufacturing process. Type A tokens, the only type found at Jamestown, bear the imperial double-headed displayed eagle surmounted by the letter "G" for Groningen (Figure 5.4). At the left side of the bird's necks is a six-pointed star and at the right a circle. Beneath the eagle is the city shield of Groningen and a date. Dates of issue for type A tokens are 1578, 1580,

Figure 5.4. *Groningen token from James Fort dated 1590 (Preservation Virginia).*

1581, 1583, 1585, 1590, 1591, and 1593. Type B tokens, which have the addition of aureoles around the eagle, were issued in 1579, 1580, 1581, 1590, 1593, 1594, and 1595.

The selection of this iconography to represent official tokens issued by the city reflects the "feeling" agency of coins identified by Kemmers and Myrberg as mentioned earlier (2011). For centuries the eagle, a powerful and fierce bird of prey, has been adopted by nations, dynasties, and religious and secular organizations to represent the same dominance. The displayed eagle, depicted with outstretched wings and feet, was used by Roman emperors as a 'symbol of power and sovereignty' (Mollier 1996, 2). Even today, it can be seen on the obverse of the Great Seal of the United States of America that was adopted in 1782 (Figure 5.5).

Figure 5.5. *The displayed eagle emblem of the United States of America (http://www.clker.com/clipart-american-eagle.html).*

Early evidence for the emblematic use of the two-headed displayed eagle has been archaeologically unearthed in ancient Mesopotamia on monumental sculpture and official seals (Chariton 2011). This bicephalous form of the bird was subsequently used by the Byzantine Empire to symbolize, according to Mollier (1996), the dual temporal and spiritual sovereignty claimed by the emperor. In the medieval period, the double-headed displayed eagle was selected for the heraldry of

the elected monarch governing the Holy Roman Empire. Representing the 'universal claim to power over Latin Christendom', this heraldic motif came to be associated with the Habsburg dynasty, whose members monopolized the Imperial title in the sixteenth century (Mutschlechner 2013). A powerful and enduring image of strength and authority throughout the medieval and early modern periods, the bicephalous spread eagle was commonly selected for the coats of arms of Europe's ruling houses as well as that of the Hanseatic League, the European commercial monopoly in which Groningen participated as a base of trade.

5.3.2 Groningen tokens: the Jamestown Context

Since 1994, sixteen Type A brass Groningen tokens have been found in the Jamestown Rediscovery excavations. One is dated 1583, three are dated 1591, and the remaining twelve bear the date 1590. Six of the tokens are from disturbed contexts (Appendix IV) but the remaining ten are from tightly sealed fort contexts providing a possible date range for the appearance of these objects in the colony from *c*. 1610 to 1617 (Table 4). Two of the tokens were found in tests into Pit 6, a feature that was discovered in 1996 and described as a borrow pit (Kelso and Straube 2008, 101-102).

Excavations in 2006 discovered that Pit 6 impacted Structure 183, a building described in Chapter 3 with a cellar that had first served in 1607 as a metalworking area and then subsequently as a bakery before being built over in 1617 by Structure 186. Even though the top layers of Pit 6 contain artefacts dating to the second quarter of the seventeenth century, it is considered that the two tokens from tests into the feature had been pulled up from the fill of Structure 183 during the original

digging of the pit[46]. This is supported by fragments of an early seventeenth-century Zhangzhou porcelain bowl found in the same layers as the Groningen tokens and part of a vessel recovered from Structure 183. Also with a *terminus ante quem* of 1617 is the Groningen token from Structure 177, the board-lined square well in the north bulwark area. The remaining seven tokens were found in fort contexts relating to the De La Warr rebuilding efforts in the spring of 1610 that have been previously mentioned.

. Only one other Groningen token has been found in a North American archaeological context, and that was surface-collected during a survey in Gloucester County, Virginia (44GL207). The area of the find is on the York River about fifteen miles "as the crow flies" from Jamestown. This property is not known to have been settled by the English until after 1653 when the land was first patented.[47] It is reasonable to assume that Jamestown was the source of this token that is dated 1590 but the circumstances leading to its transportation to Gloucester County is not known.

Table 4. Groningen tokens from early James Fort contexts

OBJECT	CONTEXT	MASTER	DATE	DIAMETER
506-JR	69E	Pit 3	1590	23 mm
2280-JR	731A	Pit 5	1583	22 mm
2220-JR	703C	Pit 6	1590	23 mm
2606-JR	703B	Pit 6	1590	24 mm
3961-JR	2152B	Pit 13	1591	23 mm
3871-JR	2158Z	STR 177	1590	23 mm
4918-JR	2718H	STR 185	1591	23 mm
4919-JR	2718J	STR 185	1591	24 mm
6561-JR	1425B	W BWK TR	1590	23 mm
#47004	1425D	W BWK TR	1590	23 mm

[46] Even though the report for Pit 6 describes 'many fragments of post-1650 wine bottle glass' from the D layer of the pit, none was cataloged for the feature (Kelso and Straube 2008, 102).
[47] The site survey form 44GL207 is on file with the Division of Historic Resources in Richmond, Virginia.

5.3.3 Discussion

The underlying questions, which thus far have not been answered by the documentary record, are how and why did obsolete Groningen tokens end up in the English colony of Jamestown? A couple of scenarios will be considered but it is the connection between English individuals associated with the wars in the Netherlands and with the early colonizing efforts at Jamestown that seems to provide the strongest avenue to pursue.

One aforementioned possibility concerning the tokens is that they were carried to Virginia as part of the personal possessions of English soldiers who had fought in the Low Countries wars. This parallels the hypothesis concerning the presence of Irish coinage at Jamestown. It considers that the objects were randomly brought by private individuals and were not part of an organized scheme by the Virginia Company.

Certainly the value of copper and copper alloy to the New World natives would have been known to the prospective Jamestown colonists. This had been recorded as early as 1584 by individuals participating in Sir Walter Raleigh's colonizing attempts in present-day North Carolina. In one instance, for example, Raleigh's men mentioned that while they traded a pewter dish for 'twentie skinnes worth twentie Crowns' they were able to receive more than twice that amount for a copper kettle (Barlowe 1584-87, 101). Small brass objects were also valued by the Indians who were reported to 'geeve you anie thinge they have' for 'the tagge of a pointe, a bell, a cownter, a pinne or such like' (Anony. 1991, 307). The obsolete copper alloy tokens, unredeemable in either the Netherlands or England, may have acquired new value for those heading to Virginia who chanced to find them among the change in their pockets after military service (van der Wis 2008, 156).

Groningen tokens could have been acquired, for instance, by English mercenaries participating in the successful sixty-five-day siege of Groningen in 1594. During that campaign, an English regiment of ten companies under the command of Sir Francis Vere fought side-by-side with Dutch army troops led by Prince Maurice, captain-general of the United Provinces (Trim 2008). After the battle, the English troops were assigned to various Dutch garrisons under the pay of the States-General of the United Provinces; and, while a number of the first Jamestown colonists have been identified among the English soldiers serving the Dutch, no direct links have been made between these individuals and military activity in the area of Groningen. Rather, most of the recognized Jamestown soldiers in the Dutch wars have been associated with the southern Netherlands. Thomas Dale, deputy governor and marshal of Virginia from 1611 to 1616, is one of these men. He began his service in the Netherlands as a common soldier around 1588 and by 1605, after military engagements in Ireland, he is listed as captain of one of the nine garrisons of English soldiers in Zeeland, South Holland. The following year, Dale is stationed in Oudewater, also in the south, along with Sir Thomas Gates who would serve as governor of Virginia in 1610 and again from 1611 to 1614 (Royal Manuscripts Commission 1899, 40; Rutman 1960, 289-91). Gates was named as one of the four original adventurers in the first charter of the Virginia Company of London and is theorized as a candidate for the introduction of a token coinage in the Jamestown colony (Bemiss 1957a, 2).

While none of the military activities of Dale or Gates or other Jamestown colonists appear to place them near Groningen in circumstances by which they could acquire *raadsteken*, there are several influential English military officers, government officials, and nobles who are both prominently associated with the

Virginia Company and the Dutch wars and who may have had the authority to gain access to the reserves of recalled brass tokens stored as metal stocks in the Groningen city mint. This thesis considers that, like the Irish copper coinage, the obsolete brass tokens at Jamestown may have been the result of purposeful acquisition by the colony's sponsors rather than random possession and loss by individuals who had been in Groningen.

There is a very strong link between the English officers commanding military campaigns in the Netherlands and the Virginia Company. The Dutch wars comprised the crucible that tried the mettle of candidates the Virginia Company considered capable of leading its colony at Jamestown. The Company actively lobbied the 'Coronells and other chief Commanders of the English' in the Netherlands in an attempt to 'draw them into the society of Action' in Virginia (Royal Manuscripts Commission, 1899, 103). Besides Gates and Dale, the colony's early leadership included several veterans of the conflict such as the first and second presidents, captains Edmund-Maria Wingfield and John Ratcliffe respectively; George Percy, who governed for nine months from 1609 to 1610; Sir Thomas West, the Lord De La Warr, who became first governor and captain-general of Virginia for life in 1610; and George Yeardley who served under Thomas Gates in the Netherlands and governed the Colony between 1616 and 1617 and again from 1618 to 1621 (Wingfield 1993, 76; Brown 1890, 1055; 978; 964; 1048; 1065).

In addition, there were scores of Virginia Company investors who had fought in the Netherlands for the Dutch republic but who never ventured to Virginia in person. One outstanding example is Sir Horace Vere who joined his brother Francis in the 1594 attack on Groningen and continued in military service for the

United Republic off and on for the rest of his life, rising in rank from lieutenant to general of all the English companies in the Dutch republic. In 1609 he was appointed governor of Brill, the English possession in the western Netherlands, and, the same year, was made a Member of His Majesties Council for the Virginia Company in which he was also a subscriber to the sum of £121 (Trim 2009; Brown 1890, 1037). As noted, 1609 is also the year in which the Groningen tokens were recalled and Sir Thomas Gates' fleet left for Virginia.

Younger sons of gentry, such as Horace Vere, as well as "ordinary soldiers" in the Dutch campaigns had the opportunity to garner the attention of England's political and social elite through military prowess and rise quickly through the ranks to leadership positions and, some, to eventual knighthood. Comrades-in-arms Gates and Dale had the support and patronage of powerful government officials such as Robert Cecil, Earl of Salisbury, secretary of state and, from 1608, lord high treasurer. In 1604, while Dale was captain of an English garrison in the Dutch town of Terthold, Cecil wrote on his behalf to the newly appointed English ambassador of the United Provinces, Ralph Winwood (Rutman 1960, 287, 291-2). Cecil contributed substantially to the Virginia Company and is described by historian Alexander Brown as a 'constant and faithful friend of the Virginia enterprise' (Brown 1890, 849). Dale later recounted that 'it pleased the lord treasurer . . . to Imbark me for the plantation in Vergynia and used both his power and [Prince] Henrys for my leave of the lords of the states for 5 years' (Brown 1890, 870). Also writing to Winwood in support of both Gates and Dale was another big investor in the Virginia Company, Sir Henry Wriothesley, Earl of Southampton and patron of Shakespeare (Royal Manuscripts Commission 1899, 55; 56; 97). Wriothesley was

made a member of the governing council for the Virginia Company in 1609 and in 1620 was chosen as its treasurer (Brown 1890, 1062).

Sir Ralph Winwood became an Adventurer himself in 1611. He was solicited by the Council of Virginia, the London-based governing body selected from the investors, in their campaign to raise at least £30,000 for Virginia. Accompanying their request was "a book lately printed and published" about the colonizing efforts at Jamestown. This was most likely "A True Declaration" written by the council and published on 8 November 1610 in an attempt to mitigate the bad press surrounding the colony's first three years. The promotional tract argued that conditions in Virginia could not be as bad as some thought if 'Sir Thomas Gates longeth and hasteneth to go thither again, and the Lord La-ware desireth so earnestly to stay there' (Brown 1890, 428; Council of Virginia 1844, III: 1 & 25).

The council assured Winwood in their letter that the 'factiousness and insufficiency of sundry the Governors and others in Virginia' had been rectified and three important supplies were to be sent under the management of Gates and Dale (Royal Manuscripts Commission 1899, 85). Winwood responded with a contribution of £75 for which he was made a member of the Virginia Council that already included Gates, De La Warr, the Earl of Southampton, and Sir Thomas Smythe. As the chief executive and treasurer of the Virginia Company, Smythe thanked Winwood for his 'love and affection to this worthy Plantation and for [his] ready willingness to contribute to the same' (Royal Manuscripts Commission 1899, 99).

Thomas Smythe was a prominent London merchant with powerful mercantile and societal connections (Figure 5.6). He was governor of the East India Company and had served as master of customs and Sheriff of London. As stated by

historian James Horn (2005, 132), 'the Virginia Company could not have found a more powerful advocate or anyone better suited to harness the support of nobles, merchants, and the church to transform a private colony into a national undertaking'. With controlling interests in both the Virginia and East India companies, Smythe was able to recycle unused supplies from one to the benefit of the other. For example, recorded in the East India Company Court minutes of 30 January 1607 were 'Chests of beads and the remainder of old stores in the Company's warehouse' that were to be either used in an upcoming voyage or were to be sold (Sainsbury 1862, 148.) Several months later, the entry for 4 September 1607 stated:

***Figure 5.6**. Sir Thomas Smythe (Smith), Simon de Passe, 1617 (© National Portrait Gallery, London).*

> sold vnto m*aster* Gou*er*no*ur*, for the virginia voyadge Certaine Beedes, & 5 yardes of Blew Cloth remaininge of the first voyadge very much motheaten for the some of iij^{li} v^{s}[,] viz[.] the Beedes 40^{s} & the Cloth 25^{s}.
>
> (Barbour 1969, 114)

These goods, presumably to be used as trade items in Virginia, had been sitting in a warehouse for four years since the 'first voyadge' of the East India Company was completed in mid-September 1603. Seemingly of little use to the East India Company, the materials were of some value to the under-financed Virginia Company.

Although the surviving Virginia Company records are largely silent regarding sources of supply for early Jamestown, it is not unreasonable to accept that much of the equipage had been gathered on the cheap from obsolete or recycled collections like those of the East India Company. This pattern appears to have endured throughout the Virginia Company's tenure, for John Smith complained that the tents provided for the initial settlement were rotten and in 1623, the year before the Company lost its charter, the colonists claimed they were being 'victualed with mustie bred the reliques of former Vioages' (Smith 1986a, 35; Smith 1986e, 295; Kingsbury 1906-35, IV: 450).

Old textile supply such as that documented from the East India Company above is represented by several Elizabethan lead cloth seals that have been found in the James Fort contexts. The age of the pieces of cloth represented by these seals is unusual as the high capital investment involved in the production and distribution of textiles usually resulted in speedy sales of the finished product (Kelso and Straube 2004, 175-6; Geoff Egan, pers. comm. 1994). Another documented supply to Jamestown of outmoded material occurred in 1622 after a crippling attack by the Indians that left one-quarter of the colonists dead. In response, King James provided weaponry for the colony's defences by clearing his armoury of materiel that had been declared 'unfitt for any moderne service' (Kingsbury 1906-35, III: 551; Sackville 1922, 504). Some of this military equipment has been found during archaeological excavations on Jamestown Island. Furthermore, a survey of the arms and armour recovered from the early contexts of James Fort revealed that outmoded arms were sent to the colony from the outset (Peterson 2000, 1-151; Straube 2006, 33-61).

This discussion has described the pattern of recycled materials provided to the Jamestown colony, of which the Groningen tokens are a part. In an attempt to pursue avenues by which these obsolete Dutch tokens were acquired for the Colony, the connections of individuals involved in the early Virginia settlement with the late sixteenth to early seventeenth-century Dutch wars for independence were investigated. The nexus of England's most powerful businessmen and governmental officials, of which Sir Thomas Smythe is a prime example, appears to be the most fruitful explanation for this undocumented supply. Historian Alexander Brown stressed that Smythe's contributions to the success of the Colony should not be underplayed. 'The enterprise rested largely upon his shoulders through the darkest hours' (Brown 1890, 1013).

As the ambassador to the United Provinces, Sir Ralph Winwood was also in a position to help the Virginia colony beyond his personal financial contributions and administrative participation. According to biographer M. Greengrass (2008), Winwood was 'the driving force in ensuring the integrity of the Dutch republic within a framework of peace that guaranteed the repayment of English debts'. In addition, he had visited Groningen at least twice while in office (Royal Manuscripts Commission 1899-1926, 59; 85).

Instead of being melted down by the Dutch mint, were a number of the tokens acquired for the metal by the English government as part of the acknowledged debt owed by the states general for England's support in the wars against Spain?[48] The Mint acquired metal 'in the form of old coins, foreign coins, plate, etc.' to produce coinage (Glassman and Redish 1985, 2). According to Challis (1992, 323), when James I took the throne, bullion for the Mint was largely

[48] In 1598, it was agreed by the states general of the United Provinces that the debt amounted to £800,000, one-half of which would be refunded in annual payments of £30,000 (Motley 1879-80, IV: 497).

supplied by the Dutch government. Could this mint supply from the Netherlands also have included brass tokens? Woodward (1985, 184-5) documented London imports of shruff, pieces of old brass, from Ireland in the sixteenth century and noted that the recycled metal probably comprised the trade in most English ports as 'old brass and copper was too valuable to be discarded lightly'.

In the early seventeenth century, England was still reliant on continental sources for brass goods or for the raw materials of scrap brass and Swedish copper to make brass. The English monopoly with exclusive rights to produce the metal, the Society of Mineral and Battery Works, had met with little success in making high quality brass. The problem lay with the high lead content in England's calamine stone, the source of the zinc used as an alloy with copper, which contributed to a brittle metal that was not easily malleable (Tylecote 1976, 96; Donald 1961, 18; Hamilton 1967, 37-8).

While no documentation has been located that specifically mentions the acquisition of brass tokens from Groningen by the Tower mint or the subsequent allocation of the objects to the Virginia, the presence of the tokens in James Fort's earliest contexts suggests an affinity of purpose with the Irish coinage just reviewed. Like the Irish pennies and halfpennies, the Groningen tokens represent obsolete copper alloy objects that were once accepted for use in fiscal transactions. At Jamestown they would be accepted by the populace as money, having the appearance of coins or tradesmen's tokens, but they would have no value as currency except in the closed colonial society. Even the unscrupulous mariners mentioned earlier could not benefit from the acquisition of these exonumia.

5.4.1 'King's Touch Tokens': the English context

A third group of copper alloy coin-like objects found in James Fort's early contexts are considered to be part of this economic plan involving payment using token currency. Like the Irish coinage and Dutch tokens, these English tokens associated with a religious healing rite practiced by James I, were likely in store in the Tower mint prior to being released for use by the Virginia Company.

The copper coin-like objects referenced here as 'King's Touch' tokens are stamped on one side with an intertwined rose and thistle under a crown and within a beaded border (Figure 5.7). The iconography of these English tokens appears to

Figure 5.7. *'King's Touch' token (A.H. Baldwin & Sons Ltd, London. www.baldwin.co.uk)*

reference the constitutional union of the crowns of Scotland and England that James I actively promoted throughout his reign but that never became an official reality until a century later with the Act of Union in 1707. Nevertheless, in the face of resistance to full union by legal statute from the English and Scottish parliaments, James boldly advanced his agenda in October 1604 by a proclamation that

established his title as King of Great Britain, 'the blessed Union, or rather Reuniting of these two mightie, famous and ancient kingdoms of England and Scotland, under one Imperiall Crowne' (Bate and Thornton 2012, 214-15).

As part of the campaign to reinforce his position and to unite under one rule the two polities that he viewed 'as two twins bred in one belly', James employed imagery embodying unity, identity, and power. These visual messages of the new king are reflected in the matrices of a new royal coat of arms, a new composite flag incorporating both crosses of St. Andrews and St. George, and in a new coinage (Stewart 2003, 209-213). Bate and Thornton (2012, 215) observed that coins and medals, which would circulate widely amongst the populace, were considered by the new king to be even more effective than portraiture to promote 'his role as unifier and peacemaker'. As a consequence, all the gold and silver denominations of James' second issue coinage in 1604 bear legends referring to the union of the two kingdoms as Britain and the new gold sovereign coin was even named the "unite".

Reflecting the aforementioned iconography of union, the 'King's Touch' token illustrated in Figure 5.7, meshes the symbolism of the past monarch with that of the new under a single crown (Mitchiner 1998, 1652). The rose, used on many denominations of the coinage of Elizabeth I, was first implemented by Henry VII in the fifteenth century as an emblem of the Tudors. The thistle, representing Scotland, was introduced to English coinage with the reign of James I, and crowned roses and thistles appear on several denominations of the subsequent Stuart kings. In the interpretation of this object as part of the ceremony for the King's Evil, the iconography communicates to the token users that the power to heal once held by Elizabeth has been transferred by God's will to James. Only the rightful heir to the

throne could achieve the sovereign remedy and James was advertising and affirming his political legitimacy through the token's iconography.

These tokens are extremely rare finds in England and neither the date nor function has been firmly established for them. When eighteen of the 'King's Touch' tokens were found in a Maryland Indian ossuary in the 1930s, the British Museum's Department of Coins and Medals identified the objects as c. 1630-40 'admission pieces to the ceremony of the King's Touch' (Ferguson and Stewart 1940, 13). This is the reference that first associated the objects with a healing ritual for the King's Evil practiced by British monarchs from the thirteenth to the eighteenth centuries although this interpretation has not been widely accepted.

Numismatist Hyman Montagu recorded one of these tokens in his coin cabinet in 1893 as being 'the size of a modern halfpenny'. He believed the design was similar to a rare copper pattern of Charles I in his collection, and that it was probably produced by the same engraver (Montagu 1893, 27-8). Writing more recently, J. J. North also included the tokens under his discussion of "patterns"—samples of coin designs that are usually not circulated—but he noted that they are 'probably medalets' of James I (North 1991, 150). Dr. B.J. Cook, Curator of Medieval and Early Modern Coinage at the British Museum, considered that the tokens relate to the reign of King James as well but cautioned that the link with the Touch ceremony was without explicit evidence (B.J. Cook, pers. comm. 2008).

Archaeologist Ivor Noël Hume conjectured that the copper pieces were produced from *c.*1603 to 1604 as inexpensive souvenirs to scatter among crowds attending either the accession or coronation ceremonies of James I. According to this theory, surplus tokens that had not been dispensed during the festivities were subsequently brought to Virginia as inexpensive copper objects to trade with the

Indians (Noël Hume 2008, 266). While this interpretation is reasonable considering the importance of copper in the Anglo-Indian trading relationships, there is no contemporary description of James I using copper tokens for royal largess. Rather, small silver medals are recorded as being distributed randomly among spectators at the king's coronation (Jones 1883, 522). James' coronation souvenirs are, according to Hawkins (1885, 191-92), the first of their type to be issued in England. As illustrated in Figure 5.8, the medals depict the bust laureate of James I with the abbreviated obverse legend "James I, Caesar Augustus of Britain, Caesar the heir of the Caesars, presents this medal." As Hawkins noted, James maintained his title as emperor until after his first parliamentary session in April 1604 (Hawkins 1885, 192).

Figure 5.8. *Silver medalet of James I, struck for distribution at his coronation ceremony (P&D Medallions, pdmedallions.co.uk).*

The following discussion considers that the British Museum's 1940 identification of the copper tokens as admission tickets to the Kings' Touch ceremony was correct; but the archaeological contexts in which these objects were found in James Fort indicate that they relate to the reign of James I rather than to his son. Further, it will be considered that the large number of the tokens found at Jamestown is a result of an unrecorded supply from the Tower mint to satisfy the colony's need for token coinage. This follows the pattern of the previously

presented coins and exonumia that had been deemed obsolete for their original purposes but that were resurrected to meet the needs of the Virginia Company's colony. As has been explored in relation to the Irish coinage and the Groningen tokens and will be further argued in Chapter 8, financial and familial links between English government officials and the Virginia Company, and, in particular, between the Tower mint and Jamestown through Sir Richard Martin and his son Captain John Martin, resulted in governmental copper supplies to the Colony. Obsolete numismatica were part of these supplies.

In presenting this argument, the royal ritual known as touching for the King's Evil will be examined, especially as practiced by Elizabeth I, James I, and Charles I, for hints as to the possible function of the 'King's Touch' tokens. Then the American contexts of these tokens will be presented. Like the Irish copper coinage and the Groningen tokens, the 'King's Touch' tokens are interpreted as part of an initial purposeful supply for the colony's economic system. After the scheme using token money failed to take hold in 1610, most of the objects were discarded in early James Fort contexts. As evidenced by the 'King's Touch' tokens found in non-Jamestown contexts dating to the second quarter of the seventeenth century, a few of the coin-like objects escaped the trash pits of James Fort only to be put to yet a third use as items to trade with the Indians.

5.4.2 The King's Evil

> Adored *Cesar*! And my Faith is such,
> I shall be healed, if that my King but touch.
> The evil is not yours: my sorrow sings,
> Mine is the evil, but the cure, the Kings.
> (Herrick 1887, 49)

Robert Herrick's 1648 poem, 'To the King, to cure the Evil', describes the mystical rite of healing whereby a disease known as the King's Evil could be cured by the monarch's touch. The King's Evil, or *morbus regius*, is referencing scrofula or struma, a 'tubercular infection of the lymph nodes, swollen or diseased glands of the neck', which usually first manifests itself in early childhood (Barlow 1980, 3; Spaulding and Welch, 171). While rarely fatal, it can lead to oozing sores and disfigurement suggested by the Latin origin of the word 'scrofula' meaning pig. With the swelling of the cervical glands, the constriction between the head and shoulders disappears and the patient, like a pig, appears to have no neck (Thompson 1893, 336). This description of a pig-like appearance with the disease was made as early as the mid-fifth century by Cassius Felix who noted further that the scrofulous 'hard round bodies' also multiplied like swine (Barlow 1980, 8).

As described in depth by Crawfurd (1911) and Bloch (1989), the disease became associated with the French and English monarchies in the Middle Ages when a cure was thought possible through the king (or queen) touching afflicted areas of the sufferer's body (Figure 5.9). Restoration to health for the supplicant was achievable because the monarch was believed to be imbued with the power of healing

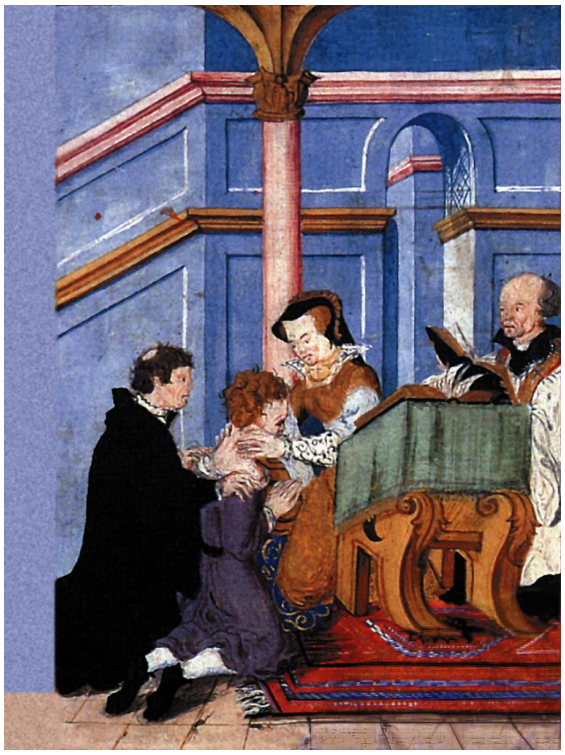

***Figure 5.9**. Illustration from the Mary Tudor Prayer Book depicting Queen Mary touching an afflicted person to cure the King's Evil (Westminster Cathedral, London).*

by divine gift. Perpetuating this idea were tales of miraculous cures that, unbeknownst to the believers, were possible because a scrofula sufferer can experience intermittent remission from the disease, which may eventually disappear on its own (Spaulding and Welch 1994, 175).

The origins for the ritual are unclear and while many of the early English kings "touched" supplicants for illness and distributed alms to support the poor, there has been debate about when the ceremony specifically targeted scrofula and included a coin as a healing piece or memento from the king (Crawfurd 1911; Bloch 1973; Farquhar 1916). The gold angel coin that became a vital component of the Royal Touch was introduced as a coin of the realm by order of Edward IV in 1465. Although not documented as such, its association with a healing ritual from this early date is suggested by the obverse design depicting St. Michael slaying the dragon of evil or pestilence as recounted in the Book of Revelation. Further, the value of the angel (6s. 8d.) was the same as the customary fee for a physician at the time (Farquhar 1916, 73).

Subsequent monarchs Edward V and Richard III continued issuing angels as their only gold coins, presumably because they were required for the healing ceremony that was practiced regularly as a royal prerogative. But it is not until the reign of Henry VII (1485-1509) that documentation provides firm evidence for the use of the angel coin in the King's Touch ritual. The service of the Tudor king, also followed by subsequent monarchs, consisted of prayers and the reading of scripture while Henry placed his hands on the sores of the kneeling subject. The king completed the ritual by crossing 'the Sore of the Sick Person with an Angel of Gold Noble, and the Sick Person to have the same Angel hang'd about his Neck and wear it until he be full whole' (Anon. 1686. 12-13).

Apart from a pause during the reign of William III, the English monarchy touched for the King's Evil continually until the Hanoverian kings put a stop to the ritual. William considered the practice to be wrought by superstition and is only recorded as touching on one occasion and blessing the supplicant with the wry remark, 'God give you better health and more sense' (Farquhar 1918, 118). Anne resumed the ceremony during her reign 'as proof to the people that she was the rightful monarch' but there were dwindling claims for the effectiveness of her touch as scepticism increased about the healing powers of the rite (Spaulding and Welch 1994, 178-9).

Henry Stubbe, writing in 1666, claimed that Queen Elizabeth stopped the Touch ceremony for a while, but 'soon quitted that Fitt of Puritanisme, when the Papists defamed her, as if God had withdrawn from her the Gift of Healing, because she had withdrawn herself from the Roman Church' (Werrett 2000, 387). Elizabeth understood the political value of the ritual especially after the papal bull of excommunication in 1570. As Levin (1989, 204) observed, 'the monarch's function was not only political-religious but had also a special almost magical quality of the sacred in the minds of many people'. Elizabeth's continued ability to heal the King's Evil reinforced for her people the God-given power inherent in the monarchy. She followed the service established by Henry VII and, like her sister Mary did before her, she invoked Catholic ritual by making the sign of the cross over each person (Woolf 1990, 8).

Elizabeth's efficacy in curing the Evil was reinforced by her chaplain William Tooker and her surgeon William Clowes who both wrote books about Elizabeth's healing touch (Levin 2008, 199; Pettigrew 1844, 170-175). The ceremony was so popular during her reign that there was need for a system of

control to both eliminate fraud and to keep the Court from being overrun by diseased persons, especially during times of plague outbreaks. According to Tooker, individuals petitioning to be touched for the Evil were first subjected to 'strict inquiry and examination' for signs of the disease by the royal surgeons who would give 'a ticket' to those who passed (Pettigrew 1844, 170). A list of those qualifying was then presented to the queen who announced the date for the ceremony, 'usually a Friday, Sunday, or feast day'. St. Stephen's Chapel in Westminster was the normal venue, but Elizabeth also Touched while on her progresses through the country (Levin 2008, 199).

No description of either the form or the material of the admission ticket used by Elizabeth has been located, but the next section of this chapter will consider that they were made of lead and that they comprise a documented series of related tokens that have not been associated thus far with the Touching ceremony. It is conjectured that the series reflects the changes in decorative devices that were necessary over time to prevent counterfeited tickets from allowing unwarranted access to the queen.

The first observance of the King's Touch ceremony by James I was 8 October 1603. This was just over six months after the death of Elizabeth on 24 March 1603 but it is recognized as one of the first official ceremonies observed by the Stuart monarchy (Fusch 2008). Still in Scotland when he was proclaimed king, James progressed slowly through England receiving accolades from his newly-acquired populace and deliberately delaying his arrival in London until after Elizabeth's funeral. He finally arrived in the city on May 7th, but a severe plague outbreak delayed his coronation until the 25th of July (Figure 5.10). Even then, extraordinary measures were taken, in the words of one eyewitness, 'to prevent the

presence at the ceremony of any of the dwellers in London, where people are dying by the thousand every week' (Brown 1900, 74). The coronation at Westminster Abbey was attended by 'those attached to the Court' who had been issued 'tickets of admission', whereas the general population was kept away by 'a strong body of guards placed by the gates of London'. The royal party arrived via the Thames but, under penalty of death, this avenue was also closed to the masses (Brown 1900, 74-5). Fear of large open assemblies that could spread the plague meant that the actual public observance of the coronation was postponed until March 1604 (Stewart 167-172).

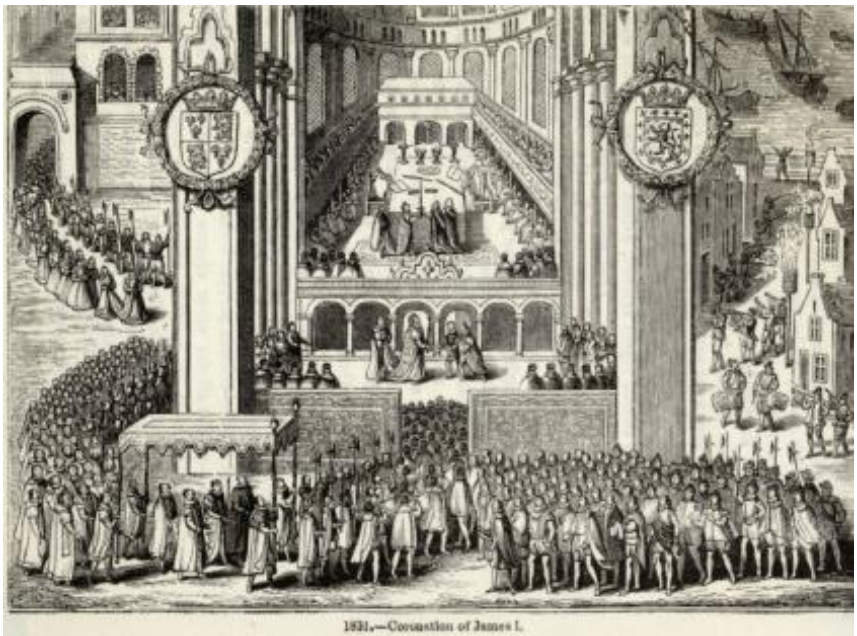

Figure 5.10*. The 25 July 1603 coronation of James I .Unknown artist, 1831. From Charles Knight (ed) 1860. Old England: A Pictorial Museum, vol. 2. London: James Sangster & Company.*

James I, a Calvinist, has been portrayed by some researchers as being reluctant to touch for the Evil, a ritual that had not been followed by Scottish kings (Woolf 1990, 8). This belief is based largely on an official dispatch in 1603 by Giovani Carlo Scaramelli, the Venetian Secretary, when discussing the king's

conflict concerning the anointing ritual that was to be part of his upcoming coronation. James objected to what he considered papist rituals but he also realized that since 'anointing is a function appointed by God to mark the pre-eminence of Kings it cannot well be omitted'. With the same practicality, James decided that he would have the full ceremony for the King's Evil even though he believed that 'neither he nor any other King can have power to heal scofula, for the age of miracles is past and God alone can work them' (Brown 1900, 44). Averse as he may have been to conducting the ritual, James realized the importance of maintaining the royal prerogative by divine right of touching for the King's Evil. Practically speaking, he also may have realized 'that to abandon what had become the Royal Health Service would be a most unpopular act' (Woolf 1990, 8). The king is recorded as conducting the ceremony with prayers and touch of the afflicted that included placing an angel coin on a ribbon about their necks; but he refrained from continuing what he considered to be papist elements of Elizabeth's ritual, such as making the sign of the cross.

From his expenditure on gold angels, an average of £435 per year, it appears that James I touched often for the King's Evil during his reign (Figure 5.11). In

Figure 5.11. *Gold angel coin of James I pierced for use in the King's Evil ceremony. (The Portable Antiquities Scheme/The Trustees of the British Museum).*

1611 and 1624 he sent warrants to the Treasurer and Under Treasurer of the Exchequer expressing his need for 'some great quantity' of angel gold for 'healing and curing of a certain disease called the King's Evil' (Farquhar 1916, 107-108). Except during major plague outbreaks, he not only conducted the ritual while he was in residence at court, but also during his progresses through the country (Nichols 1828, 263-64 & 273). Previous monarchs had only performed the ceremony during specific times of the year, aiming to avoid contact with the afflicted during the summer months when the risk of contagion was highest. That James had been observing the ritual year round to meet the demand is indicated in his proclamation of 1616 re-establishing the edict of previous monarchs that forbade healing at court between the feasts of Easter and Michaelmas[49] (Farquhar 1916, 110-111). This was the only proclamation to restrict people wishing the royal cure that James issued during his reign whereas Charles issued at least twenty edicts to the same between 1625 and 1639. As Richards (1986, 88) indicated, prior to 1640 Charles was much more exclusive than his father in exercising his therapeutic powers. Thereafter, threats to the monarchy made him more responsive to his expected kingly functions and he became 'a much more assiduous "stroker" for the king's evil' (Richards 1986, 93).

No reference to tickets for James's touching ceremony has been found, but it is likely that he continued the same system of certification as recorded for Elizabeth before him, and Charles I who followed him, in order to manage the large numbers of ill persons seeking his assistance. In an attempt to cut down on fraud, Charles is also documented as requesting affidavits from each supplicant's 'parson, vicar or minister and churchwarden' certifying that this was the first time the

[49] September 29th

individual had attended the touching ceremony. This proclamation was repeated by subsequent monarchs and was invoked to forestall potential failures of the 'royal miracle' to heal yet a second time. There was also the concern that some individuals attended the ceremony solely for the gold angels, which they were selling instead of adhering to the proscribed ritual of wearing the coin indefinitely to prevent relapse (Pettigrew 1844, 175; Farquhar 1916, 112). From James I's reign there was an attempt to restrict the commodity potential of the gold coin by stating that the coin given by the king was not just alms to be spent but was part of the cure that would be ineffective if the recipients parted with it. By the reign of Charles II, the gold angel coin had ceased to be minted and was replaced in the King's Touch ceremony by a gold touchpiece bearing the same iconography as the angel (Figure 5.12). The specially-produced touchpiece was thereby removed from the commercial sphere, which reinforced public perception of it as a protective amulet containing the healing powers of the king (Deng 2011, 141).

Figure 5.12*. Gold touchpiece of Charles II produced specially for the Touch ceremony* (*York Coins Inc., www.yorkcoins.com).*

From the reign of Charles I, we have the most detailed information about how the crowds seeking admission to the Touch ceremony were handled to prevent

deception and how the event was kept to a reasonable size. These procedures were probably also followed by the monarchy of Elizabeth and James before him and are therefore pertinent to this discussion.

Individuals seeking the King's Touch from Charles I presented certificates from their village authorities as described above to the royal surgeon who would then give those who qualified an admission ticket of 'bras Copper and such other mettall". The tickets were collected at the door of the ceremony and returned to the warden of the Mint as a check against the number of gold angels that had been provided (Farquhar 1916, 124). The metal tickets could be reused for subsequent ceremonies until counterfeited tickets started surfacing and it became necessary to change the design. Withdrawn tickets would be stored up in the Mint until consigned to the melting pot to produce a new manifestation of the tickets or, as theorized here, until they were acquired by the Virginia Company to ease a labour problem at Jamestown.

The British Museum's King's Touch attribution for the Maryland tokens mentioned earlier was based on a 1635 reference concerning payment to the Tower mint of two pence apiece for 5,500 tokens 'used about the healing of the disease called the King's Evil' (Symonds 1910, 395; Craig 1953, 131). Moreover, warrants issued between 1635 and 1639 called for the production of 8,887 of these 'Tokens for the Evell', which led some researchers to consider that Charles I used base-metal rather than gold healing pieces (Farquhar 1916, 122-3). Helen Farquhar clarified the issue when she located a second reference from 1635 that described the two pence token as an admission ticket for the King's Touch ceremony. The reference was in a draft of a letter from the King to Sir William Parkhurst, warden of the Mint, requesting base metal tokens to replace counterfeits that were

providing unqualified supplicants access to the event and to the gold angels that were part of it (Farquhar 1916, 120-124). Bruce (1865, 1) provided a summarized version of this important document, dated 1 April 1635:

> By proclamation it is signified, that people troubled with the King's evil shall not resort to Court to be healed but only twice in the year, viz., at Michaelmas and Easter, by reason whereof the number has always been so great that the Sergeant Surgeon, whose office it is to view and prepare them for the royal touch, has been accustomed to take their names, and to give every one a token, thereby to know those that are approved and allowed for every healing day. A great abuse has been committed by people who, to gain the gold, have counterfeited the Sergeant Surgeon's tokens, which were cast in a mould made by a Freemason, whereby his Majesty has not only been deceived of so many angels, but the number has been many times increased to be more than was appointed for the day, and many that were appointed wanted their angels, and the royal presence was disturbed by their outcry. Sir William is to give order to Edward Greene, chief graver of the Mint, to make from time to time such number of tokens of brass, copper, and such other metal as the said Sergeant shall give direction for, every one to be in breadth the compass of an angel, and that the said tokens be returned to the Warden of the Mint, whereby he may know what number of angels have been expended in this service; also that he allow the engraver twopence for every such piece delivered to the Sergeant Surgeon.

While no description was made of the tickets except that they be the size of an angel coin, or 29 mm (1.1 inches) in diameter, Farquhar (1916, 120-127) believed that copper medalets in the numismatic record that had been identified by researchers as base metal touchpieces were, instead, tickets to gain entry to the Touch ceremony (Figure 5.13). The medalets incorporate the intertwined rose and thistle under a crown, just as the 'King's Touch' tokens discussed above, but they differ from those recovered from Jamestown in that they were struck on both sides of the flan. The obverse bears the inscription HE TOUCHED THEM with the central motif of a hand reaching from heaven to touch one of four male heads in

profile. The reverse continues the inscription with AND THEY WERE HEALED around a central design of the crowned rose and thistle.

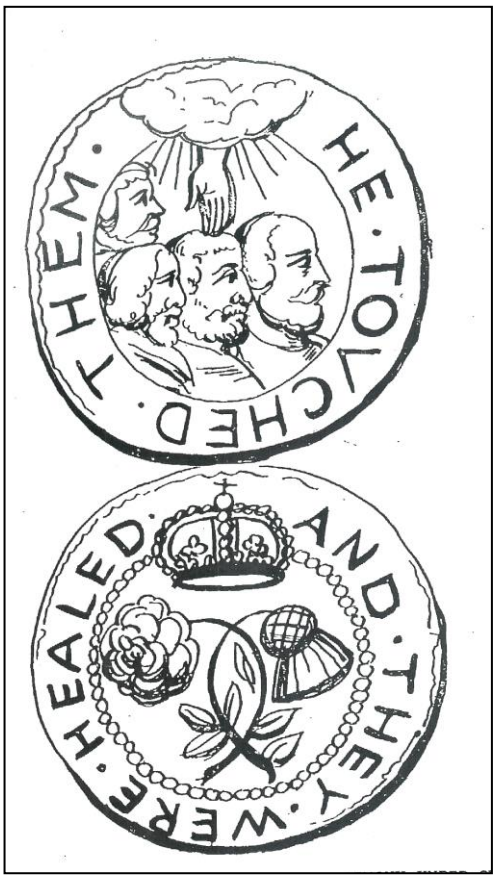

Figure 5.13*. Copper admission ticket to the King's Touch ceremony of either James I or Charles I (from Farquhar 1916, facing page 120).*

The possible "admission tickets" identified by Farquhar only measure 19 mm in diameter (the size of the half angel) and not the 28 mm of the angel as specified in the 1635 order, but Farquhar explained this discrepancy by suggesting they may represent an earlier issue of tickets that had been compromised through counterfeiting (Farquhar 1916, 125). As will be considered below, these tokens may be one of a series of undocumented tickets used in the system of control surrounding the Touch ceremony of King James. The iconography of the crowned and intertwined rose and thistle is recognized, as noted, to have been used by James to promote his union of Scotland and England (Woolf 1990, 9).

Important for the current discussion is the fact that the metal tickets collected at the door of the Touching ceremony were to be returned to the Warden of the Mint 'whereby he may know what number of angels have been expended in this service' (Bruce 1865, 1). The tokens were then sent back to the Tower mint for accountancy purposes where they resided until needed for subsequent observations of the rite. But once the integrity of the tickets had been lessened by forgery, which seemingly occurred often in the unscrupulous quest for gold angels, the tokens

represented obsolete and surplus objects. They were no longer useful for their original purpose but, as theorized in this study, could nicely serve as token currency for the fledgling English colony 3,000 miles across the Atlantic.

5.4.3 'King's Touch' Tokens: the Jamestown/New World Context

Fifty-nine King's Touch tokens have been recovered from the James Fort excavations in two general sizes, with diameters of 28 - 30 mm (n=16) and 18 – 20 mm (n=43). Interestingly, these measurements correspond to the sizes of the gold angel and half-angel coins. Thirty-two of the tokens were from sealed contexts dating to the first decade of the settlement, thereby chronologically associating the objects with James I rather than his son as originally believed by the British Museum (Table 5).

Table 5. English 'King's Touch' tokens from sealed James Fort contexts

CONTEXT	OBJECT	MASTER	DIAMETER	DATE
124F	899-JR	Pit 3	20 mm	c. 1607-10
158AP	684-JR	STR 165	20 mm	c. 1608-10
158AR	641-JR	STR 165	20 mm	c. 1608-10
158AR	1110-JR	STR 165	19 mm	c. 1608-10
158D	911-JR	STR 165	20 mm	c. 1608-10
158D	683-JR	STR 165	19 mm	c. 1608-10
158G	#8073	STR 165	19 mm	c. 1608-10
158G	1906-JR	STR 165	29 mm	c. 1608-10
158N	616-JR	STR 165	19 mm	c. 1608-10
158N	1106-JR	STR 165	29 mm	c. 1608-10
158P	1124-JR	STR 165	18 mm	c. 1608-10
158P	1125-JR	STR 165	29 mm	c. 1608-10
158P	1203-JR	STR 165	19 mm	c. 1608-10
158P	1914-JR	STR 165	28 mm	c. 1608-10
158R	1264-JR	STR 165	18 mm	c. 1608-10
158S	1200-JR	STR 165	29 mm	c. 1608-10
158S	1201-JR	STR 165	28 mm	c. 1608-10
244A	1912-JR	STR 165	18 mm	c. 1608-10
571B	#39675	STR 165	18 mm	c. 1608-10
571C	#39203	STR 165	19 mm	c. 1608-10
785C	#36205	STR 165	19 mm	c. 1608-10
1283A	3627-JR	W BWK TR	20 mm	c. 1607-14

CONTEXT	OBJECT	MASTER	DIAMETER	DATE
2158H	4636-JR	STR 177	20 mm	c. 1611-17
2158P	4640-JR	STR 177	29 mm	c. 1611-17
2158P	4641-JR	STR 177	29 mm	c. 1611-17
2158P	4645-JR	STR 177	20 mm	c. 1611-17
2158P	4646-JR	STR 177	20 mm	c. 1611-17
2160V	#54192	STR 176	20 mm	c. 1617-25
2361A	4450-JR	STR 183	29 mm	c. 1607-17
2361A	4698-JR	STR 183	19 mm	c. 1607-17
2361S	4263-JR	STR 183	27 mm	c. 1607-17
2718N	6558-JR	STR 185	20 mm	c. 1608-10

None of the tokens were found in the fort's sealed contexts that date after *c*. 1617, such as Structure 170, the *c*. 1617-24 brick-lined well found outside the western palisade wall (Kelso and Straube 2004, 131-154). The remaining twenty-seven tokens were recovered from compromised contexts that had been mixed from later activity on the site and will not be included in this discussion (Appendix V).

Most of the King's Touch tokens from Jamestown's sealed contexts were found in Structure 165 (n=20), the mud and stud building incorporated in the 1608 extension of the fort. As described in Chapter 3, this structure contained numerous artefacts relating to commercial transactions and is believed to have served as one of the company storehouses and as a mercantile centre from 1608-1610. None of the tokens were holed for suspension, as might be expected if they were items to be traded with the Indians.

Twenty-two King's Touch tokens are known from three other Virginia sites and one Maryland site. As will be shown, these contexts date to the second quarter of the seventeenth century when the tokens were no longer needed for transactions in the colonial economy but were still useful as copper trade items. The tokens from these sites have yet a third meaning from the original purpose for which they were manufactured.

During archaeological excavations in 1976, a token of the large size (29 mm diameter) was found on property adjacent to Jamestown Island that had been designated as the Governor's Land in 1618 (Figure 5.14). This 3,000-acre property was initially developed by Virginia Company servants who were bound as tenant farmers for seven years and obligated to contribute half of the proceeds from the land they worked to support the colony's governor. As inducements to settle, the Company provided tenants with housing, a year's supply of food, clothing, weapons, and tools. With the 1624 revocation of the Virginia Company charter by King James, the system was revised to allow tenants to lease parcels of land for twenty-one years. While they still provided the governor with income from generated revenues, the percentage each tenant owed was decreased and was usually specified as a barrel of corn per twenty-four acres cultivated (Outlaw 1990, 3-9).

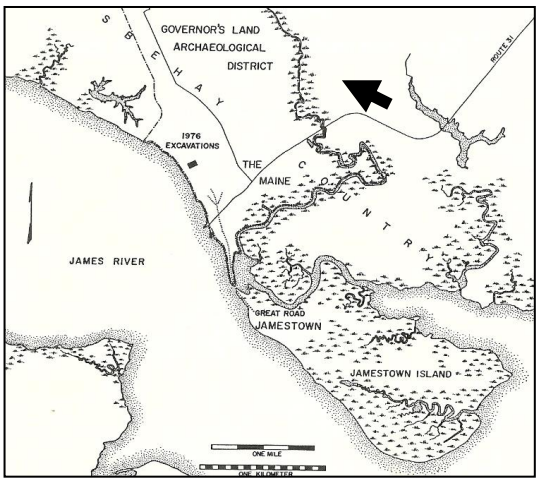

Figure 5.14. *Map showing the excavation area on the Governor's Land, north of Jamestown (from Outlaw 1990, frontispiece*)

The Governor's Land token was recovered from a refuse pit associated with an earthfast[50] domestic structure in the English community named Pasbehay after the local Powhatan Indian group. The pit also included a c. 1623-1625 Scottish twopence and several lead-glazed earthenware vessels believed to have been produced in the Jamestown area by potter Thomas Ward during the second quarter

[50] Earthfast refers to a timber-framed structure supported by vertical posts seated in the ground.

of the seventeenth century (Outlaw 1990, 76-7; 189-92; Straube 1995, 7-40; McCartney 1995, 139-50). It is not known for certain who inhabited the 21' x 17' building associated with the token's pit as none of the forty-three individuals in the eighteen distinct households at Pasbehay were of the status to be recorded in any detail (Outlaw 1990, 7; Meyer and Dorman 1987, 26). A 'King's Touch' token of the small variety (19 mm) was located during archaeological excavations at Flowerdew Hundred, a plantation located thirty-five miles upriver from Jamestown in present day Prince George County (Figure 5.15).

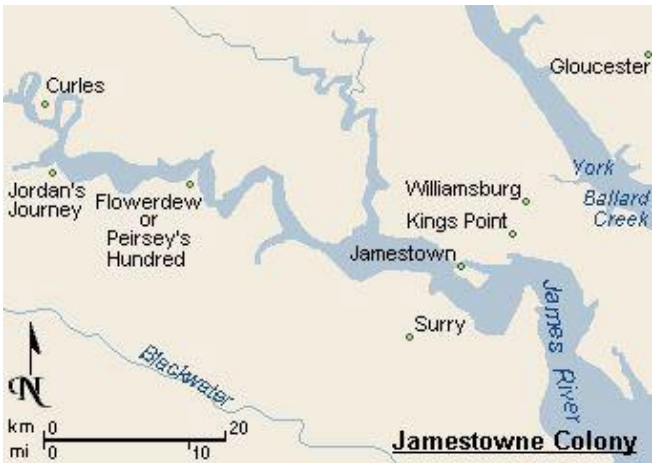

Figure 5.15. *Map of the James River showing the relationship between the*

This property was first patented in 1618 by Governor George Yeardley who had arrived at Jamestown with Sir Thomas Gates in 1610. Yeardley sold his Flowerdew tract in 1624 to Abraham Peirsey, who maintained it until his death four years later. From 1616-24, Peirsey served as the Virginia Company's cape merchant, the official agent accountable for the company's supplies and responsible for seeing that these provisions were distributed equitably amongst the colonists (Meyer and Dorman 1987, 726; McCartney 2007, 548-49).

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The Flowerdew token was found in a plough zone context over the remains of a seventeenth-century bake oven believed to be associated with Peirsey's occupation of the site (Figure 5.16). The mixed context of the token also contained a lead cloth seal dated 1637 so the agency by which the token arrived in

Figure 5.16. *King's Touch token from Flowerdew Hundred (Flowerdew Hundred Collection, University of Virginia Library*).

Prince George County is not known (Deetz 1993, 43-56). However, the property's association with prominent figures in the colonial society, one a governor and the other the cape merchant, suggests that it was possessed by someone with access to the Company stores. Brought to Jamestown originally by Sir Thomas Gates to serve

as internal currency, the King's Touch tokens at Flowerdew and Governor's Land in contexts dating over a decade later suggest that that the objects still held value in Virginia. Tossed aside for their original fiscal function, the few tokens that survived being dumped into *c.* 1610 trash deposits during the temporary fort abandonment and subsequent rebuilding effort may have been used over a decade later as objects to trade with the Indians.

Supporting this later repurposing of the tokens are two that were located in a Native burial associated with a site (44GL32) some archaeologists believe to be Werowocomoco, the seat of Powhatan (also known as Wahunsonacock), paramount chief of the Powhatan polity of Tsenacomoco (Gallivan et al. 2006) (Figure 5.17).

Figure 5.17. *Detail of Captain John Smith's map of Virginia published in 1612, with the locations of Jamestown and Werowocomoco encircled (Library of Virginia).*

The first Englishman documented to have visited Werowocomoco and meet the leader of approximately 15,000 Natives was Captain John Smith. This event

occurred in December 1607 while Smith was exploring upriver from Jamestown. He was captured by an Indian hunting party and detained for four weeks during which time Smith claimed to have been rescued from Powhatan's death sentence by the chief's daughter, Pocahontas (Smith 1986a, 43-59; 1986d, 212-13; 146-51). Powhatan is recorded as moving his chief residence from Werowocomoco in 1609 to get farther away from the English settlement of Jamestown which was only twelve miles distant (Smith 1986a, 61). The Werowocomoco tokens were part of a burial and artefact cache found by a relic hunter in 1997 (Turner et al. 2005, 7-10). The poorly-preserved human remains were of a child from two to four years of age and believed to be of Native American ancestry from the presence of a shovel-shaped incisor and from the presence of grave goods. Other objects associated with the burial include a copper skillet, a latten seal-top spoon, an iron lathing hammer, twelve copper beads, and close to 4,000 glass beads (Gallivan et al. 2006, 39).

Each of the 28 mm diameter tokens was pierced twice in the centre, like a modern-day button, presumably to allow them to be strung as a necklace. The holes are precisely in the same location on each token, as can be seen by placing one over the other. In addition, the holes were made from the reverse side with a gimlet or awl-like object that created metal burrs on the obverse and decorated side that would not be worn against the skin.

While the context of the tokens has been presumed to be an early Contact period feature and would seem to suggest, as stated by Gallivan et al. (2006, 40), that the coin-like objects were 'brought to Virginia for trade with Native communities', this is far from certain. For one thing, the burial and its associated cache of artefacts can not be closely dated and, as a single interment, the relationship of the context to the Native cultural landscape is yet unknown.

Gallivan et al. (2006, 43) admitted that 'it is not clear whether the burial dates to the years before or after 1609 when Wahunsenacawh ended his residency at the village'. If the context is after 1609, then the question is how long after? The associated artefact assemblage suggests that it could be almost fifty years later. Some of the bead varieties, for instance, are not common in the early James Fort contexts and relate more closely to sites dating from the early to mid-seventeenth century in the Northeast that are supplied by the Dutch (Gallivan et al. 2006, 40-43). Further supporting a post-1609 date for the burial context is the copper skillet, which is paralleled by one from a c. 1620-22 context at Martin's Hundred, a site located downriver from Jamestown; and the spoon, which bears a maker's mark that is also on a spoon found in a ca. 1620-35 context in Prince George County, Virginia (Straube 2004). Finally, the analysis of forty-one copper and copper alloy artefacts from Werowocomoco suggested that materials collected from the site can not be associated with confidence to a pre-1609 date. While some of the objects appeared to be unalloyed copper derived from English ores and possibly related to trade between Powhatan and the English, a majority were shown to be composed of strong and weak brasses not found in early Jamestown contexts and correlating more closely with trade in the later years of the seventeenth century (Hudgins 2005b).

A Maryland ossuary containing King's Touch tokens was excavated in the early 1930s from a site along Piscataway Creek, a tributary of the Potomac River near present-day Washington, D.C. The site (18PR40) is believed to be associated with Piscataway Fort, the principal village of the Piscataway Indians since at least 1634. In that year, English colonists led by Leonard Calvert visited the village to negotiate with the paramount chief for land on which to settle. With the chief's

permission to inhabit anywhere in his territory, the English exchanged trade goods for an area that had been an Indian village on the banks of the St. Mary's River. This English settlement became St. Mary's City, beginning as a propriety colony of the lords Baltimore and enduring as Maryland's capital until 1695. The Piscataway, on the other hand, abandoned the site of Piscataway Fort in 1680 when they were pushed out of the area through inter-Indian warfare with the Susquehanna and the Iroquois (Ferguson and Stewart 1940, 4 – 5; Hurry 2001; White 1633).

Two hundred and fifty individuals were represented by the skulls and other bones found in the shallow burial pit of 18PR40. The ossuary burial of reinterred remains included an array of European trade goods normally associated with status Native burials including glass and copper beads, copper bells, and copper pendants that were strung into necklaces. Potter described this pattern of interment as becoming common in Indian settlements of the Chesapeake Bay region after c. 1630 when the control wielded by the werowances or Native elite was diluted by increased Anglo-Native contact brought about by the fur trade and growing English settlements. Before this time, the 'authority of the elite was still implicit in the relative restricted flow of European trade material and prestige goods to society at large' (Potter 1993, 210-20).

The burial pattern date accorded well with the post 1630s occupation of the site and this was seemingly substantiated by eighteen small-variety King's Touch tokens that comprised one of the necklaces in the ossuary. Described in the 1940 report as 'jetons or medalettes', each token had been strung through two holes in a similar fashion as the Werowocomoco tokens except that the holes were located near the flan edges. The excavation report credited the British Museum's Department of Coins and Medals with identifying the objects as 'admission pieces

to the ceremony of the King's Touch' and, more specifically, to use by Charles I between 1630 and 1640 (Ferguson and Stewart 1940, 13). But as shown by the contexts of James Fort, these tokens were in use prior to 1610 and probably relate to the touching ceremony of King James.

5.4.4 Discussion

This examination of the healing ceremony known as the King's Touch has shown a documented use of admission tickets to the ritual since at least the time of Elizabeth I. Utilized to prevent access to the monarch by unqualified individuals and as a tally against the number of gold angels released from the Mint, these unspecified "tickets" have not been positively identified in the numismatic record, especially for the ceremonies of Elizabeth and James. A 1635 description of the tickets used by Charles I led one researcher to associate them with several metal tokens that referenced healing in both legend and iconography (Farqhuar 1916).

Some of these 'tickets' for the King's Touch are hypothesized to be the copper coin-like discs, referred to as 'King's Touch' tokens, which have been found on seventeenth-century Virginia and Maryland sites. The early sealed James Fort contexts provide the firmest dating evidence for these tokens and indicate that they relate to the Touching ceremony of James rather than to the ritual of his son. This dating is further suggested by the iconography of the intertwined rose and thistle under a single crown, which appears to reference James' efforts, especially in the early years of his reign, to reinforce his rightful title as king of the unified kingdoms of England and Scotland. Since only the legitimate heir to the throne could heal by the Divine Right of Kingship, the incorporation of the Tudor rose on the ticket to the Touching ritual assured the public that the power once held by Elizabeth had

been transferred to James. As presented in Chapter 1, this is an example of the 'feeling' agency of coins and tokens whereby familiar symbols are used to reinforce continuity of authority and trust in the new order.

These fort tokens, in two sizes, are considered to be just two types in a series of 'King's Touch' tickets as frequent modifications—whether in size, material, or decorative elements—were necessary for the various Touching sessions to outmanoeuvre counterfeiters seeking unjustified access to the gold coin. The same 1635 document mentioned above established that tickets to the rituals were returned to the 'Warden of the Mint' where, conceivably, they were in store for the production of the next ticket manifestation or for the Mint's metal stock. This recycling into new tickets or perhaps even into the later copper coinage of William I explains the relative scarcity of these objects in English contexts. This was an explanation suggested by Farquhar (1918, 116-17) regarding the apparent absence in the material record of any admission tickets associated with James II.

It is from the Mint store that this thesis theorizes the Jamestown colony was supplied. The last section of this chapter investigates the possibility that lead Elizabethan tokens were also supplied from the Mint where they had been collected as tickets for Queen Elizabeth I's Touching ceremony.

5.5.1 Elizabethan Tokens: the English Context

Twenty-eight lead tokens bearing iconography relating to the reign of Elizabeth I have been found in the James Fort contexts. Unlike the copper alloy tokens and coins discussed in previous sections, these objects are not of a material that was documented as being attractive to the Virginia Indians and there is little to support their usage as trade items. However, like the Irish coinage, the Groningen

tokens, and the 'King's Touch' tokens examined previously, the Elizabethan tokens comprise coin-like objects that, when sent to Jamestown, were obsolete for the original purpose for which they had been crafted. This thesis argues that these lead discs composed part of the assemblage of coins and exonumia provided by the Virginia Company to serve as token currency in the early colony. Further, these Elizabethan tokens are proposed to have been supplied from stores in the Tower mint where, like the 'King's Touch' tokens examined in section 4 of this chapter, these lead discs were collected as old and invalid tickets to the healing rituals of Queen Elizabeth.

The tokens under discussion are part of a series of lead, tin, or pewter tokens associated by decorative elements with Elizabeth I that has been documented since the mid-nineteenth century but which is still not completely understood (Mitchiner 1998, 1632–57; Smith 1854, 159–61; Hawkins 1885, 121–4). Clouding the biographies of these objects has been a dearth of associated historical documentation concomitant with limited contextual integrity. According to Mitchiner (1998, 1631), most of the tokens in this genre were found in London by mudlarkers working the River Thames foreshore. Outside of London, metal detectorists have recorded occasional finds of Elizabethan tokens in East Anglia, Oxfordshire, Wiltshire, and Hampshire (Mitchiner 1998, 1631 & 1652). It is not known how many of these tokens have been found in the United Kingdom, but in Mitchiner's 1998 comprehensive survey of jettons, medalets, and tokens found in the British Isles, there are close to 200 documented examples, of which 86% had been recovered from London contexts (Mitchiner 1998, 1632-57). Since that time, three in this series were found during *c.* 1988-90 excavations of the Rose Playhouse (Bowsher and Miller 209, 215) and a dozen have been recorded in the databases of

the UK Detector Finds and the Portable Antiquities Scheme (www.ukdfd.co.uk; http://finds.org.uk/database/artefacts). The metal-detected unstratified finds were from London, Wiltshire, Essex, Sussex, Kent, and Isle of Wight.

The series of Elizabethan lead or pewter tokens is comprised of three major varieties that Mitchiner considered were 'produced within a fairly short period of time, probably no longer than 1574–1614' (Mitchiner 1998, 1631). All three types bear detailed designs containing coats of arms or other regalia that suggest they were issued by governmental authority for some official use (Powell 2006, 3). However, the purpose for the objects, whether as substitutes for money, as tickets to royal events, as tools for calculations, or as commemorative medalets, is still not known. Neither is it assured that the three issues defined by Mitchiner — the Exchequer, the Lyon, and the Crowned Rose — were produced for the same purpose. Although English lead and pewter tokens have been the subject of much numismatic study, there has been little attempt to contextualize the objects. As William J. Courtenay observed, 'the ability to recognize a particular type has usually taken precedence in the available literature over an examination of the uses and implications of token coinage' (Courtenay 1972, 277).

Lead and pewter tokens were plentiful in Tudor England as the extreme shortage of small change, especially in denominations of less than one penny, led tavern keepers and merchants to produce a substitute currency to facilitate trade (North 1991, 19; Snelling 1766, 2). Similar objects were issued by civil authorities as intermediary alms for the poor who were no longer taken care of by the Church after the Reformation (Berry 1988, 99-100). Since many of the lead tokens issued during Elizabeth's reign appear to reference Mary Stuart, North (1991, 140) considered that these objects may be political medalets demonstrating support for

one queen or the other. Other researchers suggested that the leaden objects could be jettons or casting counters used as ocular aids in mathematical calculations (Mitchiner 1998; Hawkins 1885; Smith 1854). The low output of English brass by the Company of Mineral and Battery Works that held patents for production of the metal is considered a factor for the use of lead rather than brass for the counters (Mitchiner 1998, 1605). While seemingly a valid point, manual accountancy was traditionally conducted throughout Europe using the inexpensive brass counters made in Nuremberg, which abound on late sixteenth and early seventeenth-century English sites. In London contexts, the Nuremberg stock jettons are more common than coins of the realm and for every Elizabethan token found on the Thames foreshore, there are ten German casting counters (Geoff Egan, personal comm. 2008; Mitchiner 1998, 1605). As discussed in Chapter 2, Nuremberg jettons are also plentiful in the early Jamestown contexts where they are considered accoutrements to manual accountancy. With this function in the colony covered by uniform brass objects that the accountant could slide easily over the delineated counting board, it is unlikely that the relatively crude lead discs were sent to Jamestown to serve that purpose.

Although Hawkins also classified the Elizabethan tokens as counters, he posited the idea that ‘they may be merely tickets’ (Hawkins 1885, 121). Base metal tickets to royal ceremonies and to ensure that royal largesse was distributed only to those deemed worthy have been documented in England from as early as the 13th century. These tokens ensured the bearers entrance to a particular event held at a specific time and would be invalid thereafter, whether redeemed or not (Courtenay 1972, 280). Royal charity at the time of Jamestown’s founding was provided in the way of alms, the food dole, the Maundy washing of feet, and, as described above, in

touching for the King's Evil (Levin 1989). This latter function will be investigated in light of the Jamestown context for some of the Elizabethan tokens.

Mitchiner considered the aggregate of lead/pewter tokens under discussion to range in date from *c.* 1574, the earliest recorded year on them, to *c.* 1614. The end date was conjectured to correspond with the 1613 proclamation of James I that protected his new scheme of copper farthings by banning the use of leaden farthing tokens (Mitchiner 1998, 1656). In Mitchiner's view, the Elizabethan tokens were used as money substitutes at this time although they were originally produced as counters.

The Exchequer and Lyon tokens in the series are the most similar in their composition, both being pewter rather than lead, and examples of each have been recorded bearing the date 1574. The only variety in the series found at Jamestown is the lead Crowned Rose issue that first appears *c.* 1590. Alterations to decorative elements seen on some of the documented tokens in this issue, such as the removal of the initials of 'Elizabeth Regina', suggest that the Crowned Rose was produced into the early reign of James I. The continued use of Elizabeth's decorative elements on these tokens during the transitional years of the Stuart government appears to have been deliberate, especially in the interpretation of these objects as tickets to the King's Touch ceremony. Through iconography that the English public associated with their monarch, James employed the acting agency of these exonumia to reinforce his rightful succession to the English throne (Kemmers and Myrberg 2011). As previously mentioned, confidence in King James' ability to heal through the Touching ceremony was crucial to establishing his royal and political legitimacy.

The following analysis of the related series of Exchequer, Lyon, and Crowned Rose tokens will consider that they may have been used as admission tickets to the King's Touch ceremony. Following this argument, the many issues in the series could be indicating the need for governmental officials to thwart potential counterfeiters from gaining unlawful entry to the ritual. Tickets were valid for entry to a specific Touching ritual after which they were considered null and void whether used or not. Most of the redeemed tokens were retained as scrap metal in the Tower mint where they had been collected as a reckoning against the number of gold angels that had been dispensed. Others may have either escaped collection or were dumped by the government, with the result that some of the 'tickets' continued to circulate amongst the populace as token currency. This secondary usage is suggested by one Crowned Rose token documented by Mitchiner that had been countermarked with initials similar to those seen on seventeenth-century leaden tokens (Mitchiner 1998, 1657).

The argument for King's Touch tickets is strongest for the last token type in the series, the Crowned Rose, which has been found at Jamestown. It is the colonial Virginia context that possibly links the tokens with the Tower mint and with a reason for such objects to be in storage there. If the Exchequer and Lyon tokens are indeed related to the Crowned Rose issue, as suggested by Mitchiner (1998, 1632-57), then it is possible they served the same function. Aspects of the Exchequer tokens in particular appear to reference healing and the withdrawal of funds from the royal treasury.

The Exchequer tokens, which have only been recorded from London contexts, bear the legend CAMERAE COMPVTOR REGIOR or 'of the chamber of Royal Account', indicating that these are official issues intended for use by the

queen's treasury (Mitchiner 1998, 1631-32). The central motif is the crowned French shield. On the reverse of some of these tokens is the legend SVBDVCENDIS RATIONIBVS, or 'transactions withdrawn', around a depiction of a male figure holding a spear and a serpent staff over a naked, and possibly pregnant, woman fastened to a tree with a triangular padlock (Roxane Gilmore, pers. comm. 2012) (Figure 5.18). A single snake coils around the staff, which is the iconography of Asclepius, the Greek god of healing and medicine. It is unclear why Mitchiner (1998, 1632) described the figure on the token as Mercury since this god's iconography includes a winged helmet and the caduceus, a rod that incorporates two intertwined serpents. Further research into the mythological

Figure 5.18*. Obverse and reverse of pewter Exchequer token dated 1584 (Knightsbridge Coins/St. James's Auctions).*

iconography may be informative as to the meaning and use of these tokens; but, to be considered is that the imagery depicts the story of Apollo and Coronis, with the serpent staff representing their child Asclepius.[51]

These same designs were used on brass jettons dated 1570-74 that Mitchiner identified as French and that he thought provided the prototype for the English pewter versions (Mitchiner 1991, 1011-12). Smaller versions of the Exchequer

[51] Apollo, the Greek god of healing, killed (or had his sister kill) Coronis, who was pregnant with his child, for being unfaithful. Apollo subsequently saved his unborn son Asclepius as Coronis lay upon the funeral pyre (Roman and Roman 2010, 87).

tokens depict an obverse design of a crowned double-headed displayed eagle, a motif repeated with the later Crowned Rose tokens described anon.

In sum, the Exchequer token appears to be referencing healing and is reflecting the system set up, at least by the reign of Elizabeth I, for verifying that the number of gold angels removed from the Mint for the touching ceremony matched the number of people who were given tickets to receive them. In further reference to this reasoning, it is interesting to make note of an early analogy drawn between Asclepius and the ability of the English monarch to heal through the Royal Touch. In his 1612 verse entitled 'Curing of the Kings Evill', James Maxwell described James I as '*Apollo's* heire, this Ilands *Aeseulape*' (Maxwell 1612).

The Lyon tokens in the series display a rampant lion under a crown and within a garter emblazoned with HONI SOIT Q MAL Y PENCE, the motto of the Order of the Garter. As with the Exchequer tokens, the reverse references France with a crowned shield bearing three fleurs de lis and flanked by two pillars and with the legend PIETAT ET IVSTI, or "Piety and Justice". Hawkins (1885, 121) considered that the French motifs on English tokens were political statements in support of Mary, Queen of Scots but there is little evidence to sustain this association (Geoff Egan, pers. comm. 1995). Mitchiner attributed these designs to French pattern books that often provided the inspiration for jettons produced in England (Mitchiner 1998, 1631). If, as this thesis argues, the tokens were being used as accoutrements in the Touching ceremony, then the designs may be referencing the ancient healing tradition that was the royal prerogative of only the French and English monarchs, as discussed earlier.

Variants of the Lyon tokens are many, some replacing the shield with the Tudor Rose and the legend with GOD SAVE THE QVENE, also used on the later

Crowned Rose tokens. Most with known provenance were found in London, but they have a wider distribution than the Exchequer tokens, having been recorded in East Anglia and 'westwards across to Wiltshire' (Mitchiner 1998, 1637). As indicated earlier, some of these tokens are dated 1574, a time period that coincides with one of Elizabeth's lengthy progresses that included 'Warwick, Gloucestershire, Bristol, Wiltshire, Stafford, Worcester, Canterbury and Norwich' (Cole 2007, 44). These progresses may account for the widespread scattering of the Lyon tokens. During her movement through the countryside, Elizabeth dispensed favours, such as bestowing knighthoods and touching for scrofula. On one of these occasions she is recorded as having knighted five men and 'by her hignes accustomed mercy & charitee, nyne cured of the penyfull and daugnerous diseaz, called the king's evill' (Nichols 1823, 459).

Mitchiner divided the Crowned Rose variety of tokens into two main types: the earlier group from Elizabeth's reign dating *c*. 1590-1603, and the later group relating to the first decade of James's rule. Unlike the pewter Exchequer and Lyon tokens, nearly all the Crowned Rose tokens are made of lead. While most have been found in London, these tokens have a pattern of distribution much like the Lyon tokens, with the next highest number documented from East Anglia but also found 'across Cambridgeshire, Oxfordshire, Hampshire and Wiltshire' (Mitchiner 1998, 1652).[52] Similar to the Lyon tokens, this scatter of tokens may relate to Elizabeth's Progresses during the waning years of her reign. Between 1591 and 1602, for

[52] Four early Crowned Rose Tokens and one from the reign of James I were recorded in the UK Detector Finds Database (www.ukdfd.co.uk) as of November 2011. One was from Essex, one from East Sussex, two from West Sussex, and one from Kent. Five more from the Southeast and London region and three from Isle of Wight are recorded by the PAS (http://finds.org.uk/database/artefacts). Of the fifty-five documented by Mitchiner, thirty-eight were found in London (Mitchiner 1998, 1652-57).

instance, she had Progresses into Surrey, Sussex, Hampshire, Oxford, Berkshire, Berkshire, Middlesex, and Kent (Nichols 1823, xx-xxiii).

Unlike the ubiquitous lead trade tokens of the time, the Crowned Rose tokens were well made, with the quality of production reflected in the 'intricate details of the images and legends' (Jordan 2009, 197 n. 17). The obverse of all the early tokens of this genre consists of the English form of crown (a central cross flanked by fleur de lis) above the Tudor rose with the initials E R. Some also incorporate the legend GOD SAVE THE QVENE just as on the Lyon tokens. The reverse usually depicts a displayed double-headed eagle, which first appeared on the small variety of the *c.*1574-90 Exchequer tokens (Figure 5.19). A common heraldic symbol used by European nobility, as described earlier, the double-headed

Figure 5.19. *Obverse (left) and reverse (right) of a lead Crowned Rose token with the legend, GOD SAVE THE QVENE (Preservation Virginia).*

eagle on these objects possibly represents Elizabeth's role as both the secular leader and the titular head of the Anglican Church. While this iconography does not directly reference healing as the Exchequer tokens, it could still be reinforcing Elizabeth's right to touch for the evil as the head of the English Church and State.

A rare variety of the Crowned Rose token incorporates the legend REGINA BEATY (Blessed Queen) around the rose on the obverse and has a reverse design of a crowned phoenix rising from flames with the surrounding inscription SO LA PHENIX MVN DYE (Only One Phoenix in the World) (Figure 5.20). A mythical

Figure 5.20*. Phoenix token of Elizabeth I, found in Pit 1 of James Fort (Preservation Virginia).*

Arabian bird, the phoenix was said to live for centuries. Only one phoenix could exist at one time and every few hundred years it would burn itself on a funeral pyre only to rise from the ashes with restored youth. The phoenix was thereby considered to be 'symbolic of Elizabeth: unique, eternally youthful, celibate, yet ever regenerating its dynasty' (Hearn 1996, 80).

Mitchiner ascribed the phoenix Crowned Rose tokens to 1603 and after Elizabeth's death on March 24th of that year, claiming that the inscription REGINA BEATY referred to the beatified queen (Mitchiner 1998, 1652). Death is not inherently implied by the use of the word 'blessed', however, as seen by the phrase BEATI PACIFICI on tokens, medalets, and portraits of King James produced during his reign (Farquhar 1916, 129). Translated as 'blessed are the peace makers',

the legend is a motto ‘adopted by James, in allusion to his peaceful disposition’ (Hawkins 1885, 215). The analogy for the Elizabethan tokens appears to represent the hope that the monarch, whose reign has established England as a world power, will live forever. So, while there is no proof that the tokens were not struck during Elizabeth’s lifetime, the similarities in design with the late Crowned Rose tokens suggest that they were used in the last years of her reign. The reverse iconography is similar to medalets said to have been struck in silver, copper and lead to commemorate the queen’s accession to the throne in 1558 (Hawkins 1885, 90-91) (Figure 5.21).

Figure 5.21*. Token with bust of Elizabeth I on the obverse and the legend ET ANGLIAE GLORIA. The reverse depicts a phoenix under a crown, rising from flames, with the legend SOLA PHOENIX OMNIAE MUNDI (Knightsbridge Coins/St. James’s Auctions).*

There is no firm evidence, however, that these tokens were struck in any material other than base metal or that they were intended as coronation missilia. Furthermore, Elizabeth is not associated with the phoenix in poetry, portraiture, or the material arts until the 1570s, which suggests that the tokens incorporating the phoenix iconography relate to the last twenty years of her reign. Illustrative of this

is Nicholas Hilliard's 1575 'Phoenix Portrait' that portrays Queen Elizabeth wearing a phoenix brooch on her bodice.

The same representation of the queen as on the purported coronation token has been documented on the obverse of an extremely rare piece dated 1601 for which examples exist in copper, gold, and silver (Figure 5.22). Through the years,

Figure 5.22. *Token issued in 1601 that may have served as an entrance ticket to Queen Elizabeth's Touching ceremony for scrofula.* (*Spink and Sons).*

it has been variously identified as a medalet, a casting counter, or a pattern for either a silver groat or a copper halfgroat (Peck 1970, 11; Hawkins 1885, 177; Snelling 1769, 46). The obverse legend, VNUM.A.DEO.DVOBVS.SVSTINEO (With the help of God I sustain one with two) and the reverse legend AFFLICTORVM.CONSERVATRIX (Preserver of the Afflicted) appear to reference the King's Touch Ceremony. Elizabeth was able to heal the afflicted through the touch of her two hands. Elizabeth's chaplain, William Tooker, described this part of the ritual with Elizabeth's 'exquisite hands, whiter than the whitest snow, boldly and without disgust, pressing [the supplicants] sores and ulcers, and handling them to heath' (Crawfurd 1911, 75). Farquhar (1916, 128) illustrated the copper piece as a possible ticket to Elizabeth's Touching ceremony but considered that the legend referred to 'the intended unification of the English

and Irish coinage' rather than to the healing ritual. Hawkins (1885, 177) supposed that the legends referred to the queen's documented efforts in 1601 to right a number of social wrongs including governmental support 'for sick and wounded seamen and soldiers'.

The crowned monogram on the reverse is used again on the proposed, but unissued, copper pennies and halfpennies of 1601, as will be discussed in chapter 8. It appears that once the die had been struck by the Tower engraver, it was used on a plethora of officially issued numismatica from patterns for coinage to entrance tickets to royal events. Sometimes this use continued for many years presenting problems for the researcher reliant on iconography to date undated pieces.

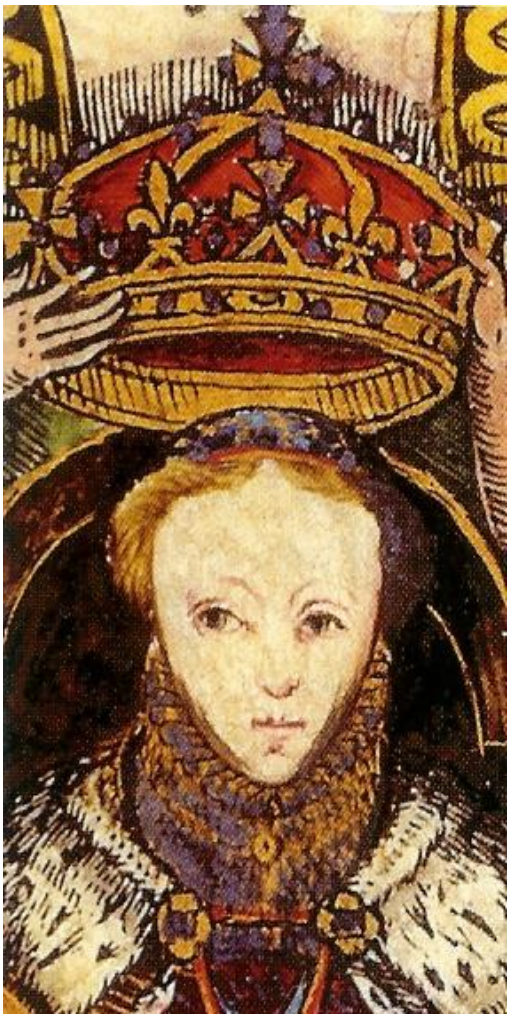

Figure 5.23. *Detail from the title page of the Bishop's Bible (1569) showing the design of Elizabeth's crown (British Library, London).*

The Crowned Rose tokens described above are considered to date to the latter years of Elizabeth's reign and modifications to decorative elements on some of these pieces suggests that they were produced into the early years of James I. The tokens that were probably struck shortly after Elizabeth's death are distinguished by the design of the crown over the Tudor rose (Figure 5.23), which was not used until James took the throne. Instead of consisting of a central cross

that is flanked by fleurs de lis, the new crown features a fleur de lis as the central element that is flanked by crosses (Mitchiner 1998, 1652). In addition, the initials "E R" astride the rose of the Elizabethan tokens have been removed on the issues of the Stuart monarch (Figure 5.24).

Figure 5.24. *Lead Crowned Rose token referencing Queen Elizabeth in the obverse legend REGINA BEATI but with the omission of ER astride the Tudor rose and with a Scottish form of crown (The Portable Antiquities Scheme/The Trustees of the British Museum).*

In following the argument for these objects as admission tickets to the King's Touch ceremony, the symbolic reference to Elizabeth in James' initial ceremonies by use of these tickets may, as described in relation to the 'King's Touch' tokens earlier, be attributed to the fact that the new monarch wanted to assure his public that the ability to cure for the King's Evil had been transferred to him upon Elizabeth's death. As noted in section 4.1, the King's Touch ritual was one of King James' first incumbent ceremonies, practiced just three months after his coronation. While establishing his precedence, it would be beneficial for James to continue using, with minor alterations, some of Elizabeth's emblems. Although James did not adopt the phoenix badge that had been so strongly associated with Elizabeth, the phoenix was used metaphorically in the popular culture to support the

legitimacy of the new Stuart heir. Only one phoenix can exist at a time and now it is he. Shakespeare's 1613 play *The Famous History of the Life of King Henry VIII*, for instance, had contemporary politics very much in mind in the use of phoenix imagery to reference transference of regal authority:

> CRANMER As when
> The bird of wonder dies, the maiden phoenix,
> Her ashes new create another heir
> As great in admiration as herself
> So shall she leave her blessedness to one —
> (5.5.39–43)

By replacing the crown on Elizabeth's lead Crowned Rose token with one of his own, James was subtly signalling that the 'blessedness' of the 'maiden phoenix' had been left to him. This thesis posits that this was the first form of ticket to the 'touching' ritual of King James. Once he became more confident in the charisma of kingship, James modified his tickets by producing them in copper, but the entwined rose and thistle iconography continued to remind his subjects of his rightful succession to the throne with its incumbent powers.

5.5.2 Elizabethan Tokens: the Jamestown Context

Jamestown is the only known New World site where lead Elizabethan tokens have been found. Consisting of the Crowned Rose variety, fourteen tokens were from features disturbed by nineteenth- and twentieth-century activities in the area of James Fort (Appendix VI). The remaining fourteen were retrieved from four tightly sealed contexts dating from the fort's beginning in 1607 and until *c.* 1610 (Table 6).

Table 6. Crowned Rose Lead Tokens

CONTEXT	OBJECT	MASTER	TYPE	DIAM	DATE
1P	22-JR	Pit 1	Phoenix	20 mm	c.1607-10
731B	4502-JR	Pit 5	Eagle	20 mm	c.1607-10

CONTEXT	OBJECT	MASTER	TYPE	DIAM	DATE
731B	4503-JR	Pit 5	Eagle	20 mm	c.1607-10
731B	2266-JR	Pit 5	Eagle	20 mm	c.1607-10
2718G	5159-JR	STR 185	Eagle	20 mm	c.1608-10
2718N	#74686	STR 185	Eagle	20 mm	c.1608-10
2718W	#74750	STR 185	Eagle	20 mm	c.1608-10
2718W	#74058	STR 185	Eagle	20 mm	c.1608-10
2718W	#75179	STR 185	Eagle	20 mm	c.1608-10
2718W	#75639	STR 185	Eagle	20 mm	c.1608-10
2718W	#98369	STR 185	Eagle	20 mm	c.1608-10
2718W	#98370	STR 185	Eagle	20 mm	c.1608-10
2718W	#98371	STR 185	Eagle	20 mm	c.1608-10
3081H	#101965	STR 191	Eagle	20 mm	c.1608-10

One token was too corroded to read, but of the remaining twenty-two, all are of the type considered to be from the last years of Elizabeth's reign in that none bear the Stuart crown and all exhibit the initials "E R". Of the twenty-two measurable tokens, all are 20mm in diameter and reflect design axes of 12.[53] Both of these aspects parallel data from the River Thames finds of these objects (Mitchiner 1998, 1653-1655).

Only one of the Phoenix tokens, as described above, is represented in the assemblage (Figure 5.21). It was found in Pit 1, a trash pit in the eastern bulwark area of the fort that was filled by the clean-up of 1610 (see Chapter 3, Section 3.2.3).This context contained other numismatica including five brass Nuremberg jettons and two Irish pennies of 1601-02. The remaining Crowned Rose tokens are all of the early variety as described above, with the English crown over the Tudor Rose flanked by "E R" and the legend GOD SAVE THE QVENE on the obverse. The reverse bears the displayed double-headed eagle.

Most of the tokens with contextual integrity were found in Structure 185, a well located in the cellar of a structure situated in the fort's centre (see Chapter 3,

[53] Design axis of 12 means that the top of the obverse and reverse design elements are in the 12 o'clock position when the token is spun on its axis.

Section 3.2.5). Archaeological research of the context indicates that it was probably the well that Captain John Smith was referencing early in 1609 when he stated, ‘we digged a faire Well of fresh water in the Fort of excellent, sweet water which till then was wanting’ (Smith 1986d, 212). Excavated 400 years later in 2009, the well/cellar contained half a million artefacts, some of which provided evidence that the feature had been filled in early June 1610.

Pit 5 and Structure 191, the other sealed contexts in which the tokens were found, also contained ‘starving time’ evidence indicating that these features were backfilled during the same 1610 clean-up and rebuilding of the fort as Structure 185.

5.5.3 Discussion

Whether used in England as tickets to the King’s Touch ceremony, as jettons in accountancy, as tokens in commercial exchanges, or as political medalets, the Elizabethan tokens were outmoded for their original purpose by the time they reached Jamestown. The following discussion will review some of the possible reasons for these late sixteenth-century objects at Jamestown.

There would be little need for lead jettons for manual accountancy as the Colony was amply supplied with brass ones from Nuremberg. As mentioned earlier, over 500 of the brass German jettons have been found to date in the excavations of James Fort. In the early years of the settlement, the need for calculations would have been restricted to the cape merchant who was responsible for keeping track of the Company’s supplies. Although not specified in the records, accountancy probably was conducted in the colony’s storehouses, which may have been separated by whether they functioned to supply the settlers or contained the trade

goods that were supplied to the Indians. This duality of function is suggested by the recovery of the largest number of jettons from two sealed *c.* 1610 contexts of James Fort: Structure 165, located in the 1608 enlargement of the fort to the east and believed to be a trading centre; and Structure 185, the well located in the midst of the fort and connected to a structure believed to be a storehouse (Kelso et al. 2012, 29-41).

Perhaps the lead tokens were brought to Virginia as scrap for the metal content. Lead has a low melting point and the tokens could be easily melted down to provide and recast as musket shot. This application has been suggested for several lead cloth seals found in *c.* 1619-22 contexts at Martin's Hundred (Noël Hume and Noël Hume 2001, 420). Cloth seals were part of the European textile industry's system of regulation and control between the fourteenth and nineteenth centuries. Manufacturers and finishers of cloth as well as merchants and tax officials crimped these leaden markers onto textiles as they moved through the various processes from loom to consumer. At the point of sale, a single length of fabric could therefore contain several seals and this, rather than a source of lead, probably accounts for the large number found at Jamestown (Egan 1994).[54]

Figure 5.25. *Lead shot still attached to casting runner (Preservation Virginia).*

Arguing against the Elizabethan tokens serving as sources of lead for the colony are over 10,000 pieces of scrap lead found during Jamestown Rediscovery excavations. Sixty-six percent of the scrap was located in sealed early fort contexts. In addition, close to 14,000 pieces of cast lead shot was recovered, much

[54] Two hundred and twenty-eight cloth seals have been recorded in the Jamestown Rediscovery database as of July 2012.

of which was still attached to the runners of lead created during the casting process (Figure 5.25). There appears to have been no shortage of lead in the colony.

Another consideration for the use of the lead tokens in the colony is trade. Were these objects brought as inexpensive items to use in bartering with the Indians for food? The Native preference for copper, glass beads, and iron tools is well documented in the records but there is no mention of lead objects exchanging hands. However, the colonists also mention trading small inexpensive objects, which they describe as 'trifles' and 'toyes' that could encompass lead tokens (Smith 1986d, 148 & 156). In support of this interpretation are eight small lead figurines recovered during archaeological investigation of a 1596 Dutch encampment in the arctic region of Nova Zembla. These 'toys' in the form of classical mythological figures are believed to be among trade goods carried by an expedition trying to find a north-east passage to China (Braat et al. 1998).

Without historical documentation, the purpose for the Elizabethan tokens in James Fort may never be known. This thesis suggests one possible scenario that has been constructed by considering other numismatica in the fort contexts that are also vastly out of place and time for their original functions. While not of copper alloy like the other coins and exonumia under examination, the tokens may have been assigned a value that would be familiar to the individuals at Jamestown who were accustomed to using leaden farthing tokens to mediate their daily lives in England

5.6. Summary of Token Coinage from Early James Fort Contexts

This chapter has investigated the biographies of four distinct genera of numismatic and paranumismatic objects that are unusual for their contexts in the early seventeenth-century English settlement of Jamestown, Virginia. In

comparison to the archaeological finds of these objects in the English, Irish, or Netherlandish arenas for which they had originally been intended, the numbers found in sealed *c.* 1607-24 features of James Fort are significant. When considered against the number of government-issued coins in current circulation found in the same fort contexts, the quantity is striking (Figure 5.26). Only ten per cent of the numismatica consist of officially recognized coinage in contemporary use.

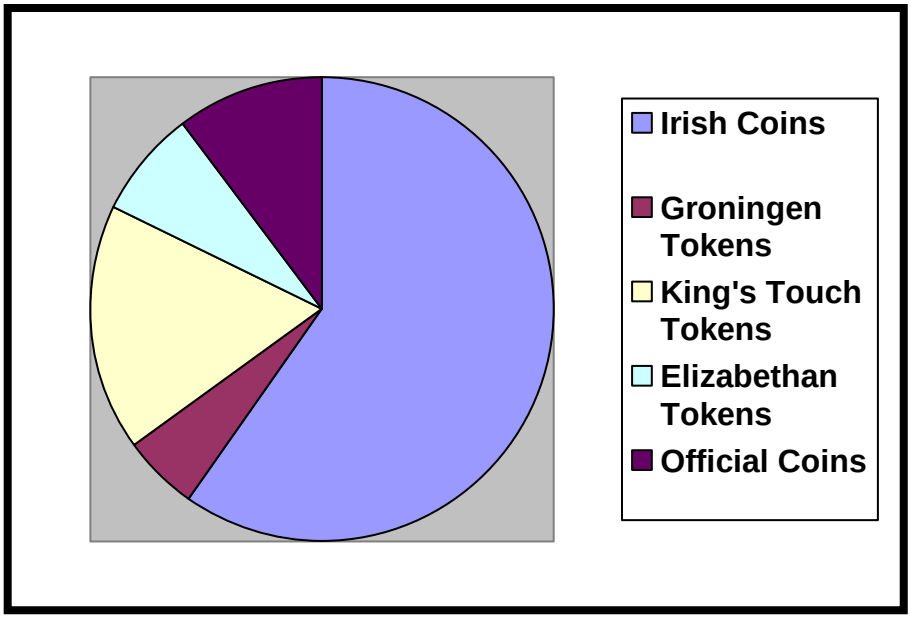

Figure 5.26. *Chart illustrating the relative quantities of token and official coinage found in early fort contexts.*

While numismatists have never before associated the disparate coins and tokens forming the basis of this study, it is the context of Jamestown that creates the nexus. This thesis argues that the presence of these objects in the Virginia Company colony was far from accidental and interprets them as part of a scheme devised by the Company to provide a local token currency to assuage problems it had encountered with motivating its labour force in Virginia.

Of the objects under study, the only true coins in the sense of officially-issued currency are copper pennies and halfpennies minted in England *c.* 1601-02

as part of Elizabeth's third Irish coinage. Also copper and produced in two sizes are uniface tokens that this thesis has interpreted as officially-issued tickets for admission to the King's Touch ceremony of James I. Similarly, small lead tokens with the regal symbolism of Elizabeth I are considered to be tickets to the healing ritual. This idea is based not only on the iconography and quality of production of the tokens, which suggest official issue, but also as an explanation for their abundant presence at Jamestown. Like the King's Touch tokens, the lead tokens are believed to be attributable to supply from the Tower mint where they had been collected in England as a tally against the distribution of gold angel coins.

The seeming outlier from the group of lead and copper English products comprising this study is the brass Dutch token. It is unclear by what means obsolete tokens that had been negotiable for only a limited area around a city in the northern Netherlands may have ended up in the Tower mint to be part of the theorized supply. Possible avenues were suggested in section 3.3 of this chapter, in particular the association of English governmental officials and/or Virginia company shareholders with the wars in the Low Countries. Future historical research may render this connection less obtuse. Nevertheless, other factors of commonality between the Groningen tokens and additional objects in this study strongly suggest that all of these coins and exonumia were sent to Jamestown for the same purpose.

Iconography is one of these connecting factors and may have been a guiding reason, besides availability, for these particular coins and coin-like objects to be selected. If, as theorized, the Virginia Company officials are 'shopping' the Mint for inexpensive 'coinage' for their colony, they may have selected objects with physical qualities that would be recognizable to their intended users. The bicephalous eagle iconography of the Groningen tokens, for example, is also

depicted on the lead Elizabethan tokens. A common symbol of authority in early modern Europe, this imagery may be intended to evoke public confidence that the tokens will be honoured by the issuing body for the value they had been assigned. This is referencing the 'feeling' theme of coin agency identified by Kemmers and Myrberg (2011, 94) and the 'political energies of coinage' examined by Deng (2011). In these cases, that authority is no longer the city of Groningen or the English government but the administrators of the Virginia Company who have adopted these obsolete tokens as monetary objects to use as a local expedient in their Jamestown colony. Similar public reactions would be expected from the Tudor arms and harp on the Irish coins, the entwined rose and thistle on the King's Touch Tokens, and the crowned Tudor Rose and Phoenix on the leaden tokens. These symbols all allude to a beloved queen that 'came to embody a truly national consciousness with such success that she gave her name to an age' (Williams 2000, 76).

Another thread tying these numismatic and paranumismatic objects together is the fact that they were all considered obsolete for their original intended purposes by 1610. The unsuccessful Irish coinage was demonetized 'outside the realm of Ireland' by Elizabeth in 1602 although allowed to circulate in small amounts through a proclamation of James in the following year (Symonds 1917, 124). By 1604, proclamations no longer reference the copper currency (Heslip forthcoming, 6). The Groningen tokens were decried in 1609 and the copper and lead tickets to the King's Touch ceremony would have been voided upon use.

In looking at the sealed early fort contexts yielding these coins and tokens, a

depositional pattern emerges that is consistent with a purposeful dumping of the objects in 1610 (figures 5.27 and 5.28). Of the sixteen finds spots, the majority (n=114) of the 167 tokens cluster around the centre and northern parts of the triangular fort. This is the general locale of Structure 185 that is posited to be the primary disposal feature and encompasses structures 176, 177, 183, 186 and 191 and pits 6, 13, and 16. A similar scatter is seen in the official coins that were presented in Chapter 4 as random losses, but their small numbers (n=19) relative to the number of contexts in which they were found (n=11) speaks more to accidental loss rather than intentional discard. The patterning suggests that the odd coin dropped on the site during the settlement's first three years was swept up with the

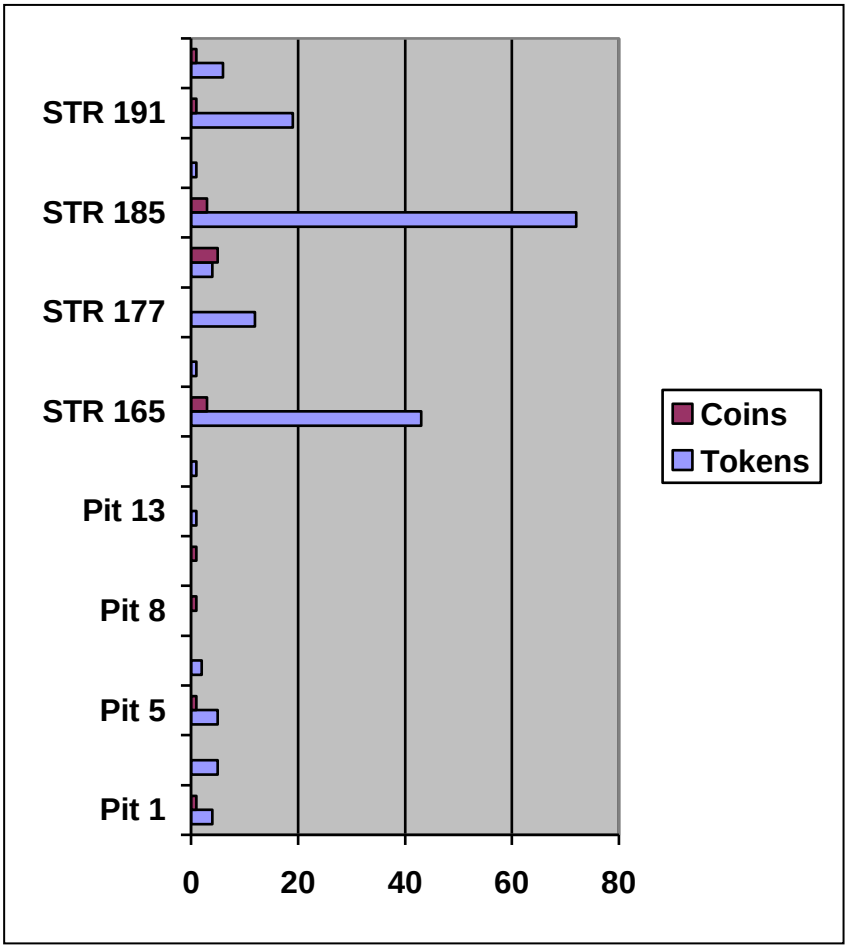

Figure 5.27. *Comparison of the number of coins and token coinage by context.*

rest of the fort's debris in the 1610 abandonment/cleanup efforts.

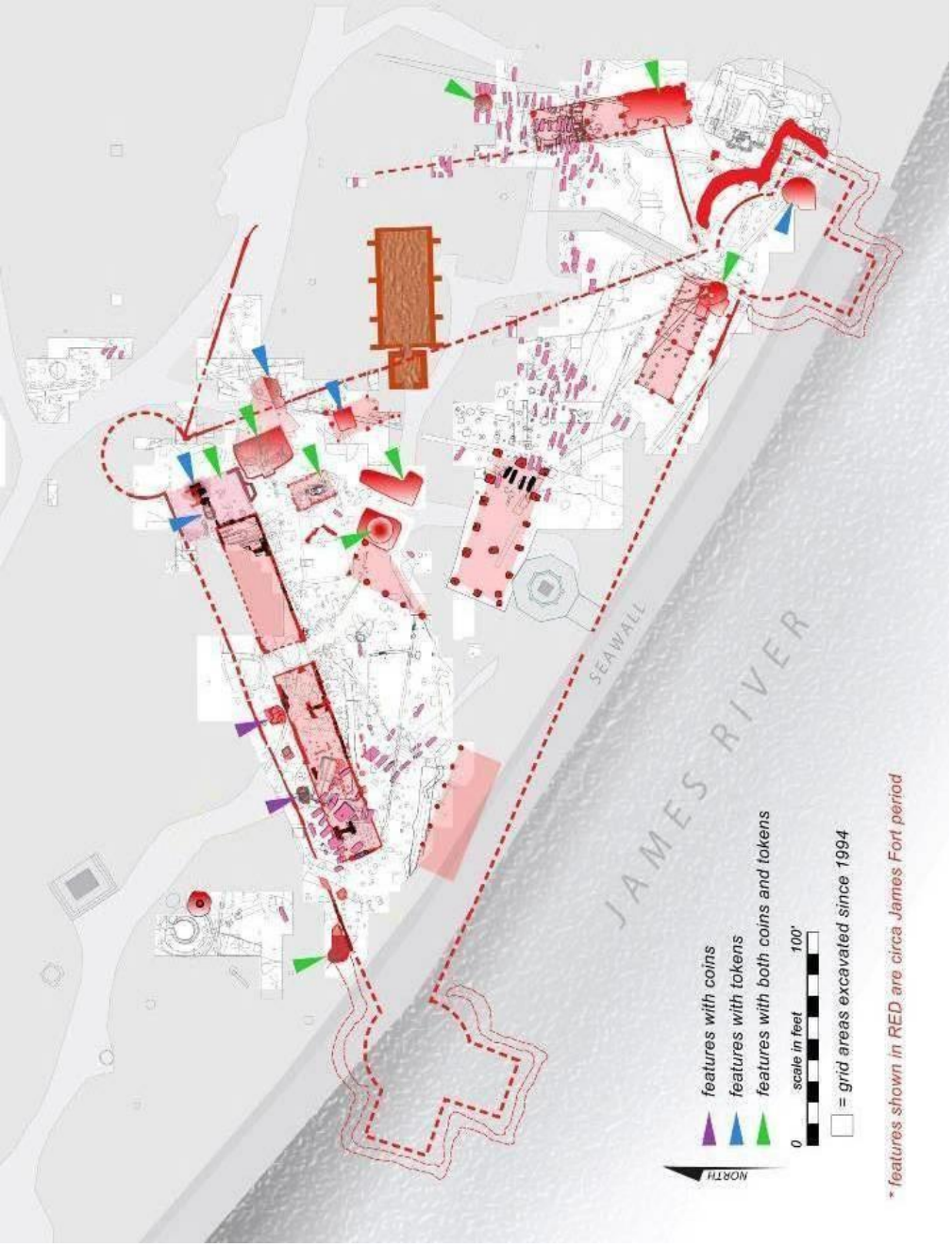

Figure 5.28. *Finds spots of token coinage under study in relation to the coins (Preservation Virginia).*

Upon examination of the numbers of coins and token coinage in each of the contexts (Table 7), Structure 185 emerges as the only feature that contained each of the token types and coins, comprising 40% of the total number. As previously

Table 7. Token coinage and officially-issued coinage from contexts of James Fort dating 1607-1624

Context	Irish Coins	Groningen Tokens	King's Touch Tokens	Elizabethan Tokens	Official Coins	Total per Context
Pit 1	2		1	1	1	**5**
Pit 3	4	1				**5**
Pit 5	1	1		3	1	**6**
Pit 6		2				**2**
Pit 8					1	**1**
Pit 10					1	**1**
Pit 13		1				**1**
Pit 16	1				1	**2**
Str 165	13		20		3	**36**
Str 176			1			**1**
Str 177	7	1	5			**13**
Str 183	1		3		5	**9**
Str 185	60	2	1	9	3	**75**
Str 186	1				1	**2**
Str 191	18			1	1	**20**
W Bwk	3	2	1		1	**7**
Total per Type	**111**	**10**	**32**	**14**	**19**	**186**

established, Structure 185 is a well in the centre of the fort that was constructed in 1608 and, in June 1610, was backfilled with debris from the settlement during the colony's temporary abandonment and subsequent re-establishment. Structure 191, a cellar building adjacent to Structure 185 and crossmending to it, contained 11% of the coins and tokens, which is considered spill-over from the primary context of the well during efforts to rebuild the fort. A third major collection of the numismatica (19%) was found in Structure 165, the storehouse located on the eastern perimeter of the fort. These objects may have been stored in this location upon the initial

arrival of Sir Thomas Gates who was, as propounded earlier, the hypothesized intended implementer of the token coinage scheme. All was then abandoned with the decision to forsake Jamestown.

What numerical values were intended for the token coinage can only be conjectured. As previously submitted, the numismatica were to serve as tallies for labour, circulating locally in the Colony but redeemable under the plan for sterling coin upon return to England. It seems logical that the only coins, the Irish pennies and halfpennies, would be valued as such and that the lead Elizabethan tokens would be considered worth a farthing, just as most of the lead tokens in current circulation in England. While the farthing coin had not been minted in England since the 1520s, and would not be until King James' issue of copper farthings in 1613, it was still considered to be a 'viable sum of money' (Cook 2012, 47).

The two sizes of King's Touch tokens were probably assigned two different values and the Groningen tokens a third, but it is impossible to know these particular facts without some corroborating historical documentation. The Hogge money of Bermuda to be described in the next chapter was produced in at least four denominations and it is not inconceivable that the Jamestown token coinage was to have similar variability.

Chapter Six

The Plan of Settlement and the Use of Tokens in Bermuda

6.1 Introduction

In July 1609, providential winds in the guise of a powerful hurricane roared into a fleet of seven English ships crossing the Atlantic bound for Jamestown. With 'winds and seas . . . as mad as fury and rage could make them', the storm separated the *Sea Venture* flagship from the rest of the convoy, sending it on a terrifying journey to the 'Ile of Devils, that all men did shun as Hell and perdition' (Strachey 1973, 7; Smith 1986d, 345). After three days and four nights of pitching around on the stormy seas, the 'shaken, torne, and leake' vessel was blown onto the coral reefs of 'devilish' Bermuda, thereby setting in motion the English claim and subsequent colonization of the islands (Smith 1986d, 347).

Among the 150 castaways were Sir Thomas Gates, Jamestown's newly designated governor and Sir George Somers, Admiral of the fleet, after whom Bermuda would be soon renamed the Somers Islands.[55] Under the direction of these two men, the colonists set to work building two boats from the island cedar, the 80-ton *Deliverance* and the smaller *Patience.* Nine months later, on 10 May 1610, the colonists set sail for their original destination of Jamestown, 600 miles distant, leaving two mutineers who chose to 'end their daies' in Bermuda rather than 'stand to their trials' at Jamestown for their misdeeds (Smith 1986d, 350). Although fugitives from justice, these two men (Edward Waters and Christopher Carter) would come to represent an unbroken English presence on the islands that, in the eyes of many of the Virginia Company adventurers, God had reserved 'ever since

[55] Historically, the colony is variously referred to as the Sommer Islands, Somers Isles, and Summer Islands but the derivation is stated in 1612 to be a play on words, 'in respect of the continuall temperat ayre', as well as in tribute to Sir George Somers 'that died there' (Lefroy 1877, 57).

the beginning of the world for the English Nation, and in not discovering them to any, to inhabit but to the English' (Craven and Hughes 1937, 74).

Favourable reports depicting Bermuda as 'so opulent fertile and pleasant that all men were willing to go thither', reached London quickly from erstwhile castaways such as Silvester Jourdain, William Strachey, and Sir Thomas Gates (Jourdain 1973, 105-116; Strachey 1973, 3-101; Council of Virginia 1844, III: 1, 1-27). It was just the kind of news the Virginia Company adventurers needed. Interest in the Jamestown colony had been waning for some time; it was becoming more and more difficult to attract investors when, after four years, there was no track record of profitable returns. As Wesley Frank Craven (1937a, 189-90) observed, 'the wreck of the *Sea Adventure* [sic] now proved a windfall for those leaders to whom the continuance of the American venture was a matter of prime necessity'. Bermuda was viewed by the Virginia Company as the stimulus needed for renewed interest in colonizing efforts and as a potential handmaiden to supply its older colony at Jamestown with the foodstuffs that otherwise made it dependent on the Indians. In a 25 June 25 1611 court meeting of the Virginia Company, it was 'Concluded to send A Collony thither' (Quinn 1966, 144). Almost one year later on 27 April 1612, fifty settlers departed England for the Somers Islands with their first governor, Richard Moore.

The Bermuda colony initially operated as a subsidiary joint-stock effort of the Virginia Company; but it was soon apparent that the new settlement needed a primary and dedicated focus to reach its full potential. In November 1612, the rights to the Somers Islands were purchased for £2,000 from the parent company by 118 of its members. Subsequently, the Bermuda colony was administered separately but continued to operate under the legal privileges provided by the Virginia Company's

third charter. Issued in March 1612, the primary purpose of the charter was to expand the Virginia Company's claim to include the territory of the Bermudas (Craven 1937a, 188-9). In June 1615, the Somers Islands Company became a corporation distinct from the Virginia Company, both entities holding royal charters. But in reality the distinction was only a matter of semantics, for not only did 'Sir Thomas Smith [Smythe] serve as governor for both companies', the two organizations continued to have membership, interests, and policies in common (Lefroy 1877, 83-100; Craven 1937a, 195). Examination of the documentary evidence for the economic system set up for the Somers Islands colony therefore may be elucidating for the undocumented arrangement at Jamestown. As Craven noted, 'in the first years, the Somers Islands and Jamestown stories are so interwoven as to make impossible the relation of one without full attention to the other' (Craven 1937a, 177).

Permitting a comparison with Jamestown are the numerous primary source materials relating to Bermuda's early history. Most were collected and transcribed by Sir J. H. Lefroy in his two-volume compilation, *Memorials of the Discovery and Settlement of the Bermudas or Somers Islands, 1515-1685*, that was published in 1877. In 1882 Lefroy published *The Historye of the Bermudaes or Summer Islands*, an important historical narrative located in the British Museum's Sloan Collection. Without author or date, this primary document is a valuable resource for information on the colony up to 1622. Some consider the text to be the work of Nathaniel Butler, Bermuda's governor from 1619-1622 (Craven 1937a, 179; Barbour 1986, II: 338, n.1). Lefroy believed it to bear the literary signature of Captain John Smith who, while never in Bermuda, gleaned information about the colony from company records, narratives, and correspondences, which can be seen

in Book V of his important work *The General History of Virginia, New England, and the Summer Isles* published in 1624 (Lefroy 1882, i-xi; Smith 1986d, 33-478). Much of the writings in the latter were taken from the *Historye* and from a 1622 account, 'Insulularum de la Bermuda detectio' by Richard Norwood, who was first in Bermuda from 1613-1617 (Norwood 1918, 2-32). Norwood had gained a reputation in England as a deep sea diver and was originally sent to Bermuda to dive for pearls. When that resource failed to materialize, he was hired as a surveyor of the island for the Somers Islands Company (Bendall 2004).

Most useful for this discussion of the economic system of the Somers Islands, and for the information it may provide about the use of token coinage at Jamestown, is the historical scholarship of Wesley Frank Craven. His insightful "Introduction to the History of Bermuda" written in four instalments for *The William and Mary Quarterly* used the primary sources just mentioned to examine 'the adventurers' approach to the technical problems of colonization' (Craven 1937a, 176-215; Craven 1937b, 317-362; Craven 1937c, 437-465; Craven 1938, 13-63; quote in Craven 1937a, 179). Craven's thoughtful analyses of the documents established the interconnectedness of the Virginia and Somers Islands companies and recognized the possibility of reconstructing missing details of the Virginia plan of settlement by 'reading backwards' from the formula applied in Bermuda.

6.2 The Economic System of Bermuda

As with Jamestown, the investors in Bermuda expected that after the initial supply of provisions the colonists should be able to sustain themselves. To reiterate the plan previously discussed in Chapter 2, the Jamestown group was to incorporate the Virginia Indians as the primary providers of 'corn and all other lasting victuals'

in exchange for inexpensive trade items such as glass beads and pieces of copper provided by the company (Virginia Company 1969, 51). This arrangement was crucial for survival as the colonists were initially forbidden by the Virginia Company to 'manure or till any ground', as this would be a diversion from activities that 'would make return of present profit' (Ancient Planters 1998, 894). As the Virginia Company was to discover at Jamestown, reliance on the Natives for sustenance at the expense of becoming self-sufficient was a big mistake. Once the trading network began to break down through intercultural hostilities and a market flooded with English goods that made the Native maize too expensive, the Jamestown colony was at the mercy of infrequent and unreliable supplies of food from England. For their part, the Virginia Company investors were reluctant to keep pouring money into provisions when merchandisable goods to offset the expense had not yet been developed. This situation reached a crescendo in the early colony with the 1609-1610 'starving time' winter and spring when, with James Fort under siege by the Powhatan, three out of four colonists died from starvation and disease (Fausz 1990, 17-27 55; Percy 1922, 259-82).

Bermuda had no native population that could be drawn upon as the providers of victuals so the Somers Islands Company, aiming to be free from 'the Care and Charge of Continuall supplies' from England, encouraged its colonists to engage in agriculture from the outset. This emphasis is reflected in the 'fourscore and one sorts of seeds' that the first colonizing group planted upon arrival, the sprouts appearing in the fields before their ship returned to England ten days later (Lefroy 1877, 69). Farming was not restricted to company-owned land as it had been in early Jamestown. Each colonist was to be granted 'one Roode of grounde for his garden and backside, and for every married Couple two Roodes of grounde'

to enable them to become somewhat self-sufficient (Lefroy 1877, 59). Those individuals who laboured in the company's fields producing commodities of commercial value, such as tobacco or sugar cane were permitted to keep half of their produce; the rest turned over to the Company (Craven 1937b, 328).

In the same way as Virginia, the governor had jurisdiction over the labour pool represented by the colonists and the established work schedule was similar in the two colonies. For Jamestown, the Virginia Company stated in 1610 that 'the settled times of working (to effect all themselves, or the Adventurers neede desire) [requires] no more pains than from sixe of clocke in the morning until ten, and from two of the clocke in the afternoone till foure' (Council of Virginia 1844, 20). Even under the martial law enforced by Dale, the colonists were expected to work five to eight hours during the long summer days and only three to six hours during the winter (Strachey 1836, 45). Similarly in Bermuda, by the 'breake of day' the colonists, who were all living on St. George's Island, were to 'repayre to the towne's warfe at the sound of the drumme, and from thence to be disposed to their places of employment'. They toiled until 9 a.m. and then had six hours of personal time when they could work their gardens or go fishing before reporting back to work for the Company at 3 p.m. The work day would end at 'sunnes sett' (Lefroy 1882, 76).

Moore initially assigned the colonists to company projects: fortifying the settlement, building boats for transportation between the islands, erecting the structures for housing and storage of company goods, and developing the roadways. Others were to engage in revenue-producing activities such as searching for

ambergris,[56] diving for pearls, hunting for whales, and cultivating silk and tobacco. These commodities were 'reserved as royalties' for the adventurers; the profits to be made were expected to more than offset the expenses of maintaining the colony (Lefroy 1877, 60). Since the colony needed victuals beyond the initial provisions that had been supplied with them from England, some individuals were employed in stocking the common food bank through agricultural activities, hunting, and fishing.

All goods, whether shipments from England or locally-produced, were deposited in the company storehouse in the town of St. George's and allocated to the colonists according to their share and to work credits they amassed by working on company projects. Not all the individuals had sailed to Bermuda at the company's expense. Some had arrived on adventure such as Edwin Kendall, 'a gentleman that had shyp't himselfe for the voyage' (Lefroy 1882, 21). In return for their efforts, these adventurers expected to share in the profits on the same terms as the shareholders in England.[57]

To encourage participation in the non-revenue producing tasks, Moore's 1612 commission specified that individuals employed 'for our business in the saide Plantacon' should be reimbursed at a rate not to exceed 'xxd. for a workman and 12d. for a labourer' with the 'workmen' referring to the skilled workers. To mediate this system of compensation through wages the Company stated 'by the next supplie there shall be a Coyne sent unto you, wth all convenient opportunitie, togeather with the rates and value thereof'. This 'coyne' was not sent during

[56] An eighty-pound mass of ambergris, a waxy substance formed in the gastrointestinal tract of sperm whales and used in perfumery, was found in Bermuda in 1611 by three men left on the islands to maintain England's claim. Described as the 'goodlyest and greatest peece of Amer-Grece that the world is knowen ever yet to have had in one lump', it was said to be worth the extraordinary amount of £1200, giving investors hope that more was to be found (Lefroy 1882, 18; Jarvis, 2010, 18).
[57] Kendall was implicated in a plot to smuggle ambergris out of the islands and was sent back to London aboard the ship that had brought him ten days earlier (See note 2 above; Lefroy 1882, 20-3).

Moore's administration but 'true records' were kept of compensation for day labour and of all the 'pruisions delivered them out of the Store' at rates set by the governor (Lefroy 1877, 59).

John Collaber was appointed 'clarke of the stores' whose duty was 'to keepe accompts and reckoninge of all such pticulers both prvisions and marchandize as shall be brought in for the use of the Planters and vndertakers, both out of England, or collected in the contrye' (Lefroy 1877, 61). The particular system employed to keep track of each tab is not known. Collaber probably used jettons or casting counters in his reckoning of accounts but without coinage that could be exchanged the only records of transaction would be on paper. For the workers who were accustomed to receiving specie for their labours this may have been difficult to accept, especially since their wage credits were only good at the company store and at an exchange rate set by the governor. The prices of goods in the company storehouse in 1620 were described as 'cutt throat', a condition that Louis E. Jordan speculated probably equally applied to the earlier period in the colony. 'Most likely prices were set so that the colonists would need to expend all of their outstanding credits . . . to purchase whatever items had been supplied to the store' (Jordan 2003, 2470).

By royal charter of 1615, James I granted 'the Governour and Company of the City of London for the Plantacon of the Somer Islands' the privilege of issuing coinage just as he had with the 1606 charter for the Virginia Company. The letters patent stated:

> And wee doe further for us our heires and successors give and grant to the said Governor and Company and theire successors that they shall and lawfully may establish and cause to be made a Coyne to pass currant in the said Somer Islands betweene the Inhitantes there for the more ease of comerce and bargaining betweene them of such mettall and in such manner and forme

> as the said Governor and Company in any of the said generall Courts shall limitt and appoint.
>
> (Lefroy 1877, 98)

This time the 'coyne', known as Hogge money, arrived in Bermuda in 1616 along with a revised economic policy to be implemented by Daniel Tucker, the first governor of the newly chartered company.

During Moore's term of office, supplies from England were not keyed to the profits derived from marketable goods sent from Bermuda. Instead, the shareholders only provided what they considered to be the bare minimum of supplies needed to sustain their colony. The new plan introduced with Tucker's term made supplies to the colony relational to profits or lack thereof (Jordan 2003, 2473). Colonists and adventurers were to share equally in the proceeds derived from Bermudan commodities such as tobacco, silk, sugar cane, timber, whale oil, and pearls. The colonists' share was used to procure clothing, food, drink and other supplies not available in the islands. These materials were deposited upon arrival from England in the company store where they could be 'purchased' by the colonists based upon their earned work credits. As Craven stated, it was a system akin to the 'no booty, no pay' policy used to compensate the captain and crew of ships involved in piracy (Craven 1937b, 334-5). All were encouraged to participate on terms of adventure except the governor, 'the Preacher', and a few others that the company decided should receive 'pencons' or a fixed income. The number supported this way was not specified but appears to have been very small because even the clerk of the stores, the surgeon, and the six council members were described as adventurers (Lefroy 1877, 113; Craven 1937b, 335).

The Somers Islands Company recognized that the whole populace may not be willing to gamble on a promise of future profits for their livelihoods so an

alternative of working for wages was offered. The instructions from the company to Governor Tucker stated:

> But yf any refuse and wil not accept this contentment out of the pffts in that case we have appointed a base coyne wch we send rated wth our puisions, whereby you may give to such men there weekly wages when they worke, and as you shall find them to deserue, with wch coyne yt shalbe lawfull and free for them to buy any puisions out of the Store or any ffishe corne tooles or any other thinge in the Islands where they can gett the same. And to that end you shall pclaime the said coyne to be currant to passe freelye from man to man only throughout the Islands and not otherwise.
>
> (Lefroy 1877, 113)

The Company tried to make profit-sharing the more attractive alternative by stating that half of the income that would be gained by 'contentinge soe many wth base coyne', and thereby reducing their share, would be divided among those willing 'to take theire salrye out of the pffits' (Lefroy 1877, 114). While the control over the company goods was as before, the emission of small change allowed individuals the freedom to purchase goods from each other thereby encouraging the settlers to be productive during their downtime from company projects. Using the colony's legal currency, surplus goods generated in Bermuda could be sold from 'man to man' providing the more enterprising individuals the ability to live better than their neighbours (Craven 1937b, 336). Since most of the coins would be collected at the company store, they could be re-circulated to workers at the next pay period with little need to produce more (Jordan 2003, 2476-7).

6.3 The Hogge Money

Writing in 1624, John Smith related that under the government of Captain Daniel Tucker the Bermuda colonists had besides 'meat, drinke and cloathes' a 'certaine kinde of brasse money with a hogge on one side, in memory of the

abundance of hogges was found at their first landing' (Smith 1986d, 362). The 1609-1610 castaways of the *Sea Venture* found thousands of wild boar on the islands, which they hunted to great success with their 'ship dog', sometimes capturing 30-40 'boars, sows, and pigs in a week' (Strachey 1973, 32). Dubbed 'hogge-mony' by the Bermudans, the reverse of the base metal coin bears the image of a ship under sail, which is believed to depict the *Sea Venture*, also in reference to the 'first landing' (Jordan 2003, 2477; Lefroy 1882, 76) (Figure 6.1).

Figure 6.1. *Obverse and reverse of Bermuda Hogge shilling (Dix Noonan Webb, www.dnw.co.uk).*

Hogge money has been found through the years in Bermuda, but the archaeological discovery in the 1990s of nineteen of the coins at the King's Castle fort site provided the most closely dated context for the currency.[58] Located on Castle Island at the entrance of what was originally called Southampton Harbour at the northeast end of Bermuda, the fort was begun by Moore in 1612 and continued by governors Daniel Tucker and Nathaniel Butler (Figure 6.2). Excavations of the fort by the Bermuda Maritime Museum and the College of William and Mary retrieved the Hogge coinage in two English denominations from a defensive ditch

[58] According to Jordan (2003, 2477), only about 100 Hogge coins have been documented.

that was dug prior to 1622 and filled by *c.*1650 (Harris 2006, 68; Sportack 2006, 87). Found scattered randomly in the context were three shillings and sixteen sixpences, comprising a sum of eleven shillings. While this amount represented almost half a month's salary for a soldier, by the time these coins were discarded in the fort ditch they had probably lost their value in the colony (Sportack 2006, 88).

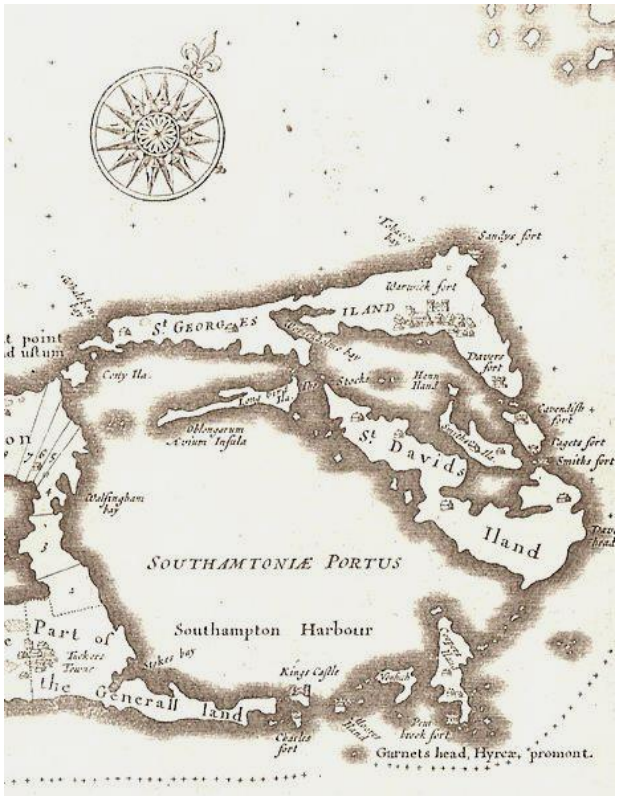

Figure 6.2. *Detail of 1676 John Speed Map of Bermuda showing Castle Island as "Kings Castle" at bottom center (http: //commons. wikimedia.org/wiki/File:Somers_Isles_Map_-_John_Speed_1676.jpg).*

Despite John Smith's description of brass coins, analysis of the metal by the Bermuda Maritime Museum has shown the Hogge money to be copper, some of which was tinned to appear as silver (Sportack 2006, 91-3). Four denominations have been identified among the extant examples of the coins — two pence, three pence, sixpence, and shilling. A number of dies have been recorded for the coins, signifying either different suppliers or, more likely, several issues of the money as the need for it exceeded company expectations. From the irregular thicknesses of the extant coins, it is evident that the denominations were not relational to weight as on English legal tender making them more similar to the merchants' trade tokens in circulation in England at the time.

By the spring of 1617 Richard Norwood had completed his survey of the islands and the subsequent pattern of colonization started a process of change that made the token currency unnecessary. The survey divided the land into eight sections, called tribes, which were further subdivided into fifty shares of twenty-five acres belonging to the adventurers for proprietary planting (Norwood 1918, 12; Craven 1937b, 339). The colonists who were assigned as tenant farmers for each share wasted no time in getting established on their lands, as evidenced by the harvest of the first substantial crop of tobacco in the fall of 1617. From then on, tobacco became the medium of exchange and there was no need for a token coinage. When the *Diana* arrived 'in the townes-harbour' on 15 January 1618, with supplies from the adventurers, they were not off-loaded into the company storehouse as was customary, instead they were sold directly to the colonists for tobacco. According to the history of the Bermudas written in the early seventeenth century, it was 'the first magazin to be sold for tobacco that euer thes ilands sawe' (Lefroy 1882, 110). Governor Tucker, apparently not wanting a good thing to go to waste, was said to have helped himself to 'many perticuler necesaryes out of the store which belonged to the publick' while the *Diana* was in port (Lefroy 1882, 114).

Tucker held the office of governor through November 1618 and returned to England early the next year (Jordan, 2003, 2475 n. 45). It is not known how long Hogge money circulated in Bermuda, but all indications suggest that it ended with Tucker's departure. Whereas court records during Tucker's term had described transactions in monetary terms of pounds, shillings, and pence, by July 1619, the standard denomination was pounds of tobacco (Sportack 2006, 89). By 1621, tobacco was described by the colony's governor as the 'only currant mony' and the

company store was reconfigured into a warehouse for the temporary storage of English goods until the colonists who had purchased them with tobacco could secure transportation to their homes (Jordan 2003, 2486; Lefroy 1882, 230-1).

Now, not only were the colonists dispersed from the Town of St. George where they were once dependent on company projects for employment and on supplies from the company store, but they could also deal directly with the company using tobacco as the medium of exchange. For the adventurers, tobacco was a much more lucrative medium to use in economic transactions with the colonists. As Jordan (2003, 2487) stated, 'Hogge coinage was a short term experiment to an economic problem'. It provided a tangible way to reimburse workers for labouring on company projects. Especially for individuals who may have been illiterate and thereby totally dependent on the honest bookkeeping of the clerk in the company store, the specie was more attractive than a system of credit. But in the end, it proved advantageous for the company to deal with its colonists in terms of tobacco rather than with a token coinage that the company had to spend resources on producing and that was only valid in Bermuda.

6.4 Governor Daniel Tucker

Before leaving this discussion of the economic system in the early Somers Islands colony, it is important to look more closely at the man associated with the use of the base-metal coinage and his connections to Jamestown. For, while the economic system of the early Virginia colony remains unrecorded, a hint of its structure may be seen through the monetary scheme arriving with Tucker who, in his previous position as cape merchant at Jamestown, was responsible for provisioning the colonists from the company store. This individual was deeply

steeped in the workings of the Jamestown society and, by his actions, emulated the system he viewed as effective.

Daniel Tucker is first mentioned in the Virginia Company records as the 'Cape Merchant' on Henry Challons' unsuccessful voyage to reconnoitre the northern latitudes of Virginia. Sponsored by Sir John Popham (of the Virginia Company adventurers granted the rights to the northern latitudes of America), the ship left Plymouth England in August 1606 with twenty-nine Englishmen and two 'savages' that George Waymouth had picked up in Maine the year before. The expedition was aborted near Puerto Rico when the English ship was attacked and plundered by a ship belonging to French merchants (Stoneman 1890, 127-139; English State Paper Office 1890, 757-8).

Tucker first arrived in Jamestown with the Second Supply in 1608 as a 28-year-old Virginia Company investor.[59] He was well-connected in England with the merchant community through his brother, who was the chief customs collector at Gravesend in Kent and 'a close friend' of Sir Thomas Smythe. As previously mentioned, Smythe was not only a leading London merchant and one-time sheriff of the city, but also treasurer of the Virginia Company, governor of both the East India Company and Muscovy companies, and a member of the Levant Company (Craven 1937a, 208-9). Tucker's connections served him well for under De La Warr's government in 1610, he was named as 'provost marshal, truck-master, and vice-admiral, and master of the store' (McCartney 2007, 702). Tucker's duties as both 'truck-master' and 'master of the store' indicate that he was in charge of making favourable exchanges with the Indians for food as well as the equitable provisioning of the colonists from the company store.

[59] He is documented in 1623 as 43 years old and living in Kent, England (McCartney 2007, 702-3).

In 1612, the Virginia governor Thomas Gates received a request from the Virginia Company to send back to England by the next ship 'Daniell Tucker who hath ben a personall adventurer ever since the first plantation' (May 1890, 538). This petition appears to have been part of a campaign waged by Tucker's brother and fellow merchants who were shareholders in the Somers Island Company to appoint Daniel as governor of the Somers Islands:

> Mr. Tucker, the prime searcher of Grauesend, by meanes of certaine of the custome farmers, who wer of the Company, made sute for the acceptance of Mr. Daniell Tucker, his brother, who was lately come ouer to him from Virginia, wher he had bin for diuers yeares Cape-merchant.
>
> (Lefroy 1882, 69)

Tucker arrived at this new post in Bermuda in May 1616 where he found the 'Inhabitants both abhorring all exacted labour, as also in a manner disdaining and grudging much to be commanded by him' (Smith 1986d, 362). As his preparation for leadership was provided by example at Jamestown, Tucker chose to approach his office with 'stricktness and rigour which he had discerned to produce some such effect in that other colonye' (Lefroy 1882, 75). He patterned his government after the 'Virginian rule',

> and in particular imitatinge divers orders digested by Sir Thomas Dale, while he was marshall there, a coppy whereof he had brought with him and often consulted with, he began from them to looke into his English instructions given him by the Company.
>
> (Lefroy 1882, 77)

The orders used by Dale were the *Lawes Divine, Morall and Martiall* codified by William Strachey based on the martial law established by Sir Thomas Gates in May and June of 1610 and expanded by Dale in 1611. The laws covered both military duties and behavioural conduct, and the punishments for infractions were harsh. Death sentences were to be meted out for lying, sedition, blasphemy,

and seemingly minor crimes such as plucking a 'roote, herbe or flower' from a garden not one's own (Strachey 1836, 17).

Tucker wasted no time in following the blueprint for governing he had been provided and within a month of arriving in Bermuda on 16 May 1616, he sentenced a man to be hanged for questioning the 'authoritie of the lawfull Governor wth minutnous [sic] and Rebellious noise' during church service (Lefroy 1877, 123). This heavy-handed approach had worked under Gates and Dale to save the Jamestown colony from imploding and it was to characterize Tucker's term of office in Bermuda. The former cape merchant, who had lived in Virginia for eight years before taking his post in Bermuda, had learned well. Not only did Tucker arrive with a template for governing but with an economic system using token coinage that he had probably experienced first-hand while resident in Jamestown.

6.5 Discussion

The Virginia Company never minted coins for their Jamestown colony but this does not mean that there was not a plan for token currency like the Hogge money that would circulate for the ease of commerce and bargaining among the Virginia settlers. Despite being an undocumented scheme for the Virginia experience, the fact that policies in Bermuda were patterned after precedents in Virginia and that English labourers were accustomed to receiving coinage for their efforts, lend strong support for a Hogge-money-type strategy for Jamestown.

Whereas the 1615 Somers Islands charter specified that the governor and the company had control over the form and appearance of the coins they would use, the 1606 Virginia charter leaves the 'mettall', 'manner and forme' of its coinage up to the 'severall Counsells there (Bemiss 1957a, 6). This proviso supports the

possibility that, rather than minting a new series of coins as was done for the Somers Islands, the Virginia Company leadership had decided to use stockpiles of obsolete base-metal coins and tokens as a cost-saving move. Coin-like in appearance, these objects were no longer accepted or used in England for their original purposes and had no intrinsic value. They were not even worth counterfeiting. Like the Bermuda Hogge money, the numismatica could not be used to pay taxes or to buy goods from visiting ships, which more or less insured that the coinage and the resources it represented would remain in the small community for which it was intended.

The following chapter investigates a similar scheme for a token coinage developed by David Kirke, the proprietor and governor of Pool Plantation in Newfoundland. Crudely produced of lead and in small quantities, the tokens were intended to circulate amongst a transient population of fishermen. This undocumented economic scheme for an English New World colony provides yet another case study that aids in interpreting early Jamestown.

Chapter Seven

The Use of Tokens in Newfoundland

7.1 Introduction

Archaeological excavations between 2004 and 2006 on the Avalon Peninsula in Newfoundland revealed evidence suggesting that a lead token coinage was in circulation there in the second quarter of the seventeenth century. Undocumented in the surviving historical record, the tokens are believed to have been manufactured by resident proprietor Sir David Kirke between 1638 and 1651, both to control commerce and to supplement his settlement's inadequate supply of small change. As will be hypothesized, this evidence for the use of leaden tokens in Newfoundland to fulfil a local need lends credence to the theory that the lead Elizabethan tokens found in early James Fort contexts were intended to be used in a similar way in Virginia.

7.2 Early English Settlement in Newfoundland

The rights to settle the Avalon Peninsula were first granted by James I to the Newfoundland Company on 2 May 1610. With the grant, James included the company's right to produce coinage using the same language he had employed (and would employ in the future) with other English organizations investing in New World colonies.[60] The Company was empowered 'to make a coin to pass current in said Territories of Newfoundland' of a metal and form to be decided by the governing council of the company resident in London (Sainsbury1893, 37-38). Like the Virginia Company, the Newfoundland Company did not exercise its right to mint coins and it is not known if it relied on a token currency as a money substitute.

[60] Cf. Virginia Company; Somers Island Company.

This may be discovered by future archaeological excavations on the site of the first settlement[61].

Like the Virginia Company established four years earlier, the joint-stock Newfoundland Company largely comprised merchants, many of whom were also involved in the other English overseas colonizing and trading ventures.[62] A consortium of individuals bound by kinship, friendship, and business relationships, the company included forty-eight Bristol and London merchants who ventured twenty-five pounds a piece 'to secure and make safe the trade of fishing' on the east coast of Newfoundland (Pope 2004, 50; Cell 1965). Their intent was to monopolize and make profitable the disorganized, but thriving, fishing trade that had been exploited for years by the French, Portuguese, Spanish, and English. To that end, the company sponsored a small colony that settled in August 1610 at Cupids Cove on the Avalon Peninsula, 'the most convenient and familiar section of the whole island' (Cell 1965, 613, 621).

Gillian Cell (1965, 622) noted that the instructions provided to its colony by the Newfoundland Company suggest that the leadership had 'benefited from the experiences of the Virginia Company', but in the end, this knowledge did not save the colony from collapsing. Resistance by West Country fisherman to an authority controlling their traditional fishing grounds, piracy, harsh winters, and the sole dependence on fishery contributed to an unsustainable venture that could not simultaneously support a colony and provide profits for the investors. In a move to

[61] Since 1995, archaeological excavations have been conducted at Cupids in Conception Bay, the site of the 1610 settlement. A small number of coins have been recovered from the occupation layers but with no indication of a token currency using either obsolete coin-like objects or a money substitute produced for the colony (Gilbert 2003).

[62] One of the most enthusiastic supporters of an English settlement in Newfoundland was Edward Hayes who had been part of Sir Humphrey Gilbert's 1583 voyage that visited St. John's during explorations of the coast of Maine. As will be discussed later, Hayes was also behind the scheme to mint copper pennies and halfpennies for Ireland during Elizabeth's reign.

raise capital, the Newfoundland Company in 1616 began selling off its patented property to private associations for development as proprietary colonies.[63] Several settlements ensued, including the small Colony of Avalon established in 1621 by Sir George Calvert. Secretary of State to James I, Calvert chose Ferryland to seat his colony, an area well known to migratory fishermen for its sheltered inner harbour (Gaulton and Tuck 2003, 189) (Figure 7.1).

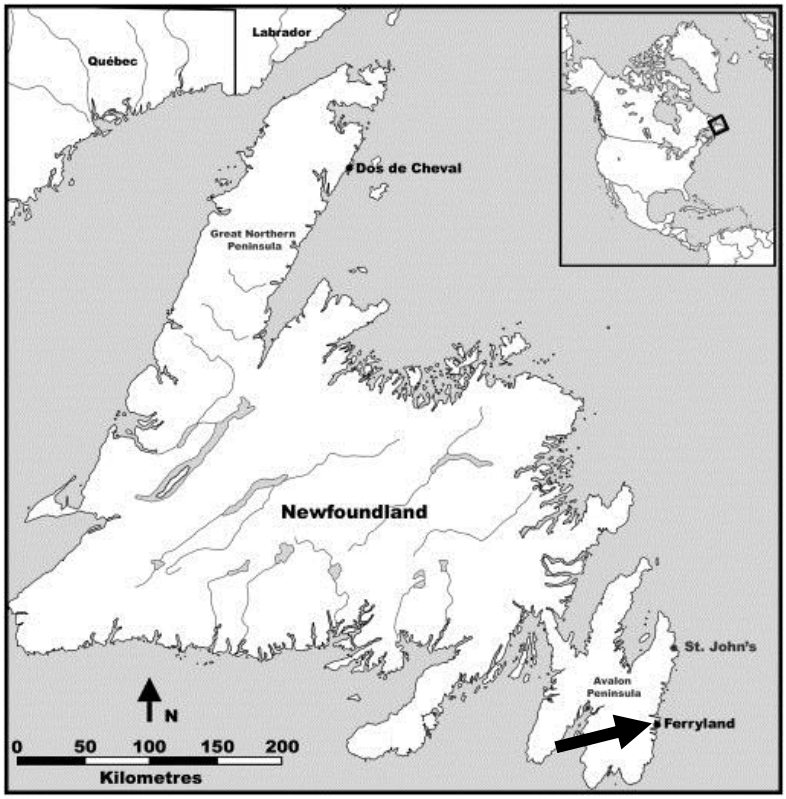

Figure 7.1. *Ferryland on Newfoundland's Avalon Peninsula. (http://en.wikipedia.org/wiki/File:Newfoundland_map.png).*

Investing heavily in his patent, Calvert built substantial structures and even moved to Avalon with his family in 1628. Their residency only lasted a year. Discouraged by a frigid winter, sickness, and French piracy, the Calverts returned to England, leaving a representative to care for the property and maintain their

[63] This is a scheme also employed by the Virginia Company with their "Great Charter" of 1618 (Bemiss 1957a, 95-108).

claim (Gaulton and Tuck 2003, 191; 206-7). Less than a decade later, with a new king on the English throne supporting different policies and having new favourites to please, the Calvert family proprietary rights to Avalon were legally usurped by the commercial monopoly of Newfoundland and granted to the Company of Adventurers to Newfoundland (Pope 1998).

Managing the Company of Adventurers' business was the London wine merchant Kirke, Barkeley and Company that was involved in the Canadian fur trade. David Kirke was a partner in the firm and a principal figure in the Newfoundland scheme. He recognized that a profit was to be made from the triangular trade between England, Spain, and Newfoundland involving salted cod for Spanish wine and convinced high-ranking policy-makers, the Marquis Hamilton and the earls of Pembroke and Holland, to be part of his petition to Charles I for the rights to control commerce in Newfoundland. The grant from the king provided the Company of Adventurers for Newfoundland with a mercantile monopoly that included the right to levy five percent taxes on foreign vessels plying Newfoundland's waters as well as the authority to collect rent from fishermen and to sell tavern licenses. The king's patent allowed the syndicate to incorporate merchants and, not surprisingly, the firm of Kirke, Barkeley and Company assumed management of the business concerns from the outset. These merchant managers, who involved themselves personally in the development of the colonial enterprise, also appear to have reaped the greatest profits from it (Pope 1998, 64-7; Pope 1996).

As the face of the new venture and to ensure the development of a profitable 'circumatlantic trading network', David Kirke settled in Newfoundland in 1638 (Pope 2004, 136). Accompanied by his wife and family and about 100 settlers,

Kirke took over the fishing station of Ferryland in the province of Avalon that had been developed by Sir George Calvert starting in 1621. Calvert, who had not been resident since 1627 and whose family would receive a new charter in 1633 for land in Maryland that would become St. Mary's City, still laid claim to Avalon when Kirke arrived. For the next forty years, litigation over rightful ownership of the property ensued between the Kirkes and the Calverts (Gaulton and Tuck 2003, 191; Pope 1998).

Renaming the colony Pool Plantation, the Kirkes moved into the large mansion house constructed by Calvert and ran a tavern there 'which did draw and keep ship masters, fishermen and others from their fishing employments' (Pope 1993, 104 quoted in Gaulton and Tuck 2003, 215). Not only did Kirke maintain his own tippling house, he also used his monopoly to benefit the family wine business by controlling both the sale of tavern licenses and the supply of wholesale alcohol needed to stock the establishments (Pope 2004, 140 and 375). Kirke extended his domination to the fishing industry by managing the largest fishing fleet in the area and by acquiring and charging rents to others for the use of some, if not all, of the 300 fishing rooms, which served as the bases of operations (Pope 2004, 139-141).

Pope (2004, 246) described the Newfoundland fishery as being like a 'somewhat inefficient and leaky pump, which year after year drove a seasonal flow of five or six thousand migrant workers back and forth across the Atlantic'. This large influx of individuals to the Avalon Peninsula was profitable for Kirke who, as previously stated, controlled the fish processing stations as well as access to amenities such as tobacco and alcohol provided by the taverns. As Kirke knew well, the fishermen and other crewmembers involved in the industry 'came not on wages, but for their shares of the voyage' that would be paid out once the catch was sold

(Pope 2004, 161). Individuals signing on for the ventures would be fed, clothed, and housed in Newfoundland at the expense of the merchants sponsoring the voyages; but to partake of the comforts that taverns could provide they either would have to use pocket change, which was in short supply, or take out advances against their shares. The advances would not be in ready money, but as a book-keeping credit that Kirke realized he could also absorb by issuing his own tokens that would be redeemable for consumable goods or services in his taverns. Lead, self-issued tokens allowed Kirke to siphon off the fishermen's pay through liens on their shares of the season's catch. The ease of credit resulted in many fishermen spending most of their shares before they returned home, much to the detriment of their dependents. Attempting to correct this practice, Charles I placed restrictions on Newfoundland taverns in 1634, but these were ignored by Kirke (Jordan 2006, 3018).

As a merchant, Kirke was not only involved in the international trade involving Spanish wine, but also in inter-colonial commerce that put him in contact with merchants and planters in Virginia. Newfoundland cod had been provided sporadically by the Virginia Company to its Jamestown colony through the first years to relieve bouts of starvation. Once Virginia colonists had developed tobacco into a merchandisable crop, it was regularly traded to Newfoundland for supplies of salted fish, which preserved well and were an excellent source of protein (Pearson 1943, 5-6).[64]

Tobacco, on the other hand was an important component of the Newfoundland economy that was catering to seasonal fishermen and their needs for comfort and entertainment. Smoking and drinking were popular leisure time

[64] The 1624/25 Muster of the Inhabitants of Virginia recorded 58,000 pounds of cured fish stored in fifteen settlements in the colony (Pearson 1943, 6).

activities in the Newfoundland society, as there was little else on which to spend disposable income, even if it was on credit (Pope 2004, 350). Hogsheads of tobacco were imported from Virginia and archaeological discoveries at Ferryland have indicated that Kirke was probably involved in this trade just as he was with alcohol (Pope 2004, 150; 350; 379-81). Representative of this activity by Kirke are nine personalized tobacco pipe bowls made in Virginia that were found in a structure believed to have served as Kirke's Ferryland dwelling (Gaulton and Tuck 2003, 215) (Figure 7.2).

Figure 7.2. *Virginia tobacco pipe bowl with the ligatured initals "DK" for David Kirke (Barry Gaulton, Colony of Avalon Foundation)..*

Kirke was an acknowledged royalist with many enemies, and circumstances began to unravel for him with the death of Charles I. The Commonwealth government, taking heed of the complaints against Kirke by West Country merchants for his manipulation of the Newfoundland fishery, called for an official inquiry. In 1651, David Kirke was in London to defend his colony's management when he was sued by the Calvert family over ownership of the Newfoundland

settlement. The outcome for Kirke was not only forfeiture of his 'lands and colonial possessions to the Commonwealth' but he was also consigned to prison where he died in 1654 (Gaulton and Tuck 2003, 209).

7.3 The 'DK' Tokens

Unlike the grant to the Newfoundland Company in 1610, there was no proviso in Kirke's grant for the production of coinage. This may be one reason that he chose a lead emission, which, unlike silver or gold, would not legally qualify as coinage (Jordan 2006, 3045, n. 110). Five lead tokens found archaeologically in Ferryland and one located in the United Kingdom[65] are believed to have been issued by David Kirke during his 1638-1651 tenure in Newfoundland (Barry Gaulton, pers. comm., 2011). Undocumented in the limited historical record, the tokens represent the first coinage made in England's North American colonies and were presumably produced to meet the need for small change in the Ferryland community.[66]

As with the marking on Kirke's personalized tobacco pipes from Virginia, all the tokens are unifacially stamped with the ligatured intials "DK" within a beaded border (Figure 7.3). The tokens have been found in three different sizes, which may correspond to the three relative values of farthing, halfpenny, and threepence, but they were all struck by the same die,

Figure 7.3. *Lead token of David Kirke (Barry Gaulton, Colony of Avalon Foundation).*

[65] A DK token was found several years ago in the South Lakeland District of Cumbria, U.K.
[66] As described above, the Hogge money for Bermuda that was produced twenty years earlier had been minted in England and Jamestown was using token-like objects that had been recycled from different uses.

probably a metal punch such as those used by leatherworkers (Berry 2006, 4). The token flans are roughly shaped and of uneven thickness, reflecting that not much care was observed in their production. Two are between 17 mm and 19 mm in diameter and two are much smaller at between 13 mm and 14 mm. One token measures between 35 mm and 37 mm and has been stamped three times with the "DK" mark, suggesting that it may represent a value of threepence (Figure 7.4).

***Figure 7.4**. Size comparison between the lead "DK" threepence and a modern Canadian coin worth two dollars (Barry Gaulton, Colony of Avalon Foundation).*

Aside from a conscientious effort to bypass the need for official sanctions to produce coinage, the choice of lead for Kirke's token is easy to understand. The metal has a low melting point and is easy to work. In addition, lead was plentiful in Newfoundland as it was used to ballast the ships loaded with fish. "Pigges of lead" and even "birding shot" allowed the ships to carry a greater cargo of fish that was relatively light to the space it filled. If the bulkier, but lighter, ballast stones were used, the storage capacity would have to be reduced (Pope 1996, 11-12).

Lead was also inexpensive in comparison to other metals. Jordan (2006, 3048-9) has estimated that a pound of lead at this time would cost about two pence.

At this rate, he projected that a pound of lead could result in 15.125d in farthing tokens or 30.25d in halfpenny tokens. As Jordan explained, ‘even when estimating a fairly substantial charge of 1d per pound for production costs, this yields a profit of at least 12d or 600% return on investment for unredeemed tokens’ (Jordan 2006, 3049).

7.4 Discussion

In sum, the scheme of private issue lead tokens was not only profitable for Kirke, it also eased financial transactions that benefited the sale of alcohol and tobacco that were under his control. It worked to Kirke’s advantage because the settlement was isolated with little alternatives, other than the establishments he managed, for opportunities to spend money. It is not surprising that no mention of Kirke’s tavern tokens appears in the records. It was just one more way that Kirke ‘manipulated the operations of the Newfoundland syndicate to benefit its merchant managers rather than the original patentees’ or the king, neither of whom appears to have received their entitled shares of the profits (Pope 1998, 66).

As a proprietary settlement, David Kirke’s Pool Plantation was not structured like the Virginia Company’s Jamestown colony, nor was it contemporaneous with the hypothesized plan for the latter’s use of token currency. This discussion of the David Kirke tokens is pertinent to the current study, however, as it demonstrates the use of tokens to appeal to the immediate desires of a community of individuals who were working under an agreement of delayed rewards. As the leaden tokens would not be acceptable currency outside of Ferryland, it was a system that could be controlled by the issuing authority. At the same time, it provided individuals with a semblance of choice on how to spend their

earnings that resulted in profits for the authority. All of these points are paralleled by the Jamestown experience. Most important, the Newfoundland token scheme is only known through archaeological evidence, just as the proposed plan for Jamestown that is the subject of this thesis.

The next chapter explores one possible avenue by which the odd collection of tokens and coins may have been transported from Mint stores to Jamestown. In particular, this discussion will focus on the familial and financial connections between the Master of the Mint, Sir Richard Martin; his son, colonist John Martin; and the Virginia Company.

Chapter Eight

***It's All in the Family**:*
Exploration of the human connections that provided the agency by which obsolete coinage and exonumia were brought to Jamestown

8.1 Introduction

Historians have noted through the years how interconnected the individuals involved in organizing and settling the Jamestown colony were to one another (Barbour 1964; Wingfield 1993; Brown 1890). The first colonists were not just a random collection of individuals who signed up for the mission. They were sons, brothers, nephews, in-laws, cousins, and neighbours who were working in consort with business associates in an attempt to generate profit for all concerned. Barbour (1964, 105) has ventured that cousins Captain Bartholomew Gosnold and Edward Maria Wingfield were responsible for recruiting forty percent of the first Jamestown settlers whose names are known. Both of these English gentlemen ventured to Virginia but with unhappy outcomes. Gosnold died of an illness at Jamestown in August 1607 and Wingfield became the settlement's first president, only to be deposed of office within five months (Smith 1986a, 20; Brown 1890, 1055). Sir Thomas Smythe, Gosnold's cousin by marriage and treasurer of the Virginia Company, is considered to be responsible for enlisting fifteen percent of the colonists. The impetus for the remaining settlers is either presently unknown or is believed to have developed from London-area connections or specific ties with the East India Company, of which more than one hundred members were also investors in the Virginia Company (Cheyney 1907,514; Barbour 1964, 105). In sum, the Jamestown colonists constituted a nexus bound by a web of kinship, friendship, and business dealings and any of these connections could be responsible for objects found in James Fort.

To support the argument of this thesis that Jamestown had been supplied from Mint stores of base metals, which included obsolete coins and exonumia, this chapter will investigate the familial, social, and business relationships that may have contributed to this supply. The discussion will begin with an examination of Captain John Martin's role in the colony's initial metallurgical experiments. These included not only the well-publicized quest for gold but also the search for more utilitarian metals and minerals that, if found in Virginia, could release England from its dependence on European sources. In light of this discussion, the archaeological evidence pertinent to copper-based metallurgy will be considered. Of specific importance is a slip of copper containing the impressions of two cancelled Elizabethan coins that indicate the Mint as a source of scrap copper supplied to assess Virginia's ores. By extension, the Mint is also the likely source of material for the Virginia Company's 1609 token coinage scheme described in this study.

8.2 The '*refining* Captain Martin'

Captain Christopher Newport's arrival in Plymouth, England on July 29, 1607, generated much excitement among Virginia Company shareholders who were eager to hear news of their fledgling colony in Jamestown. This would be the first information they had received from the colonists since the departure of the initial three ships from London seven months earlier. Newport wrote immediately to Lord Salisbury, principal secretary to King James, apologizing for not being able to sail into London to see him in person until he had more favourable weather for, being in poor health, he had no 'man to put in truste with the shippe'. Nevertheless, he had 'glad tidings' that he could not wait to share; namely, that Virginia was 'verie Riche in gold and Copper'. As evidence of this claim Newport had brought an assay of the

gold that had been conducted in Jamestown by Captain John Martin, one of the colony's seven councillors (Newport 1890, 105-6).

Woolley (2007, 89) posited that Newport's delay in Plymouth had been calculated to provide time for his ship's crew to sell off the shipment of sassafras they had 'gathered upp' in Virginia with the ' losse and spoile of manie of [the colonists'] tooles'(Barbour 1969, 79). Quayside sales of sassafras by Newport and his sailors before arriving in London meant that there was no official accounting of the valued commodity used as a medical treatment for syphilis, thereby depriving the Virginia Company of much-needed revenue. This is yet another example of the control the mariners had over the contents of the shipments to and from the colony as described in Chapter 2.

After two weeks in Plymouth, Newport sailed upon favourable winds into London and was met by Sir Walter Cope, close friend of Lord Salisbury and one of the seven members of the London Council for Virginia. Accompanying Cope was 'one beale,[67] an excellent tryer of myneralls' who upon inspection of the touted assay pronounced that the trial in Virginia had been 'ignorantly made'. The sample had not been properly tested in Beale's opinion because an accurate trial of the ore would 'have turned black & the gold rann together in the bottome'. But, with more untested Virginia earth 'in the pott', Cope was optimistic that further assays would prove Virginia was rich with gold. This was, he opined in a letter to Salisbury, just

[67] Hudgins (2005a, 241-242; 2005c, 57) incorrectly identified this individual as a Jamestown colonist. Beale is most likely the London goldsmith William Beale who in 1625 was awarded a patent for making a compound 'extracted out of certain minerals' to apply to ships, thereby keeping them from burning in sea fights and deterring the 'sea worm or barnacle' (Holland 1890, 247). Beale (1579-1625) is recorded as living in the London parish of St. Vedast in 1590 and later in the parish of All Hallows in Cheapside, also home to Sir Richard Martin. He is probably the son of Robert Beale (d.1601), one time deputy governor of the Society of Mines Royal as well as a shareholder in the Society of Mineral and Battery works (Rigg 1993, 5-6; White 1999, 79).

a barrel full of the earth but ther semes a kingdome full of the ore' (Barbour 1969, 110).

The following day, after four trials of the mineral 'by the best experienced abowte the cytye', all of Cope's optimism vaporized just like the gold. Cope angrily accused John Martin of duplicity, stating that he had 'cosyned the pore Captaine [Newport], The Kinge & state & . . .hys owne father' (Barbour 1969, 111). Martin's father was Sir Richard Martin who was discussed earlier in relation to his role in the new coinage for Ireland issued late in Elizabeth's reign (Figure 8. 1). As Master of the Royal Mint, a practicing goldsmith, twice Lord Mayor of London and a founding member and major shareholder of the Society of Mineral and Battery Works, Martin was a notable City figure. His business connections placed Martin in position to help promote his son's ventures in Jamestown (Challis 2008). Cope suggested that John's deception was a tactic to convince his father to provide him with 'somm Supplyes, which otherwise he dowted never to procure' (Barbour 1969, 111). The content of these 'Supplyes' are of particular interest to this thesis and will be considered below.

Figure 8.1. *Medal of Sir Richard Martin produced by Stephen of Holland (Royal Mint, London).*

Scrambling to salvage the investors' faith in the colonizing venture, Newport claimed that he mistakenly brought the wrong ore and that he would immediately return to Virginia to collect the gold sample 'which he confidentlie

believed he had broughte before' (Barbour 1969, 112). The Virginia Company, in its eagerness to suppose the best and not daring to risk losing a profitable opportunity, resupplied Newport's ship and sent it back to Jamestown accompanied by a pinnace captained by Francis Nelson that could sail quickly back to England with the gold ore. Among the 120 colonists on this voyage were two refiners and two goldsmiths, presumably to assist Captain Martin in his trials on the Virginia ores (Smith 1986d, 162).

After sailing together for nearly two months the ship and pinnace became separated in a fog. Newport found his way to Jamestown, arriving on January 2, 1608; but Nelson elected to spend the winter in the West Indies. He finally reached the colony on April 20, just ten days after Newport had departed for England with his ship freighted, in John Smith's words, 'with so much guilded durt' (Smith 1986d, 158). During the four months that he was in the Colony, Newport had assigned his men and mariners to build a church, a storehouse and a stove (Wingfield 1969, 227-28). All three of these contemporary features have been identified archaeologically in the fort. The 'stove" is located in Structure 191, the L-shaped cellar described in Chapter 3, section 3.2.6, and may have been built specifically for the renewed metallurgical trials if not for the preparation of sturgeon for export. The function of this building may become clearer once it has been completely excavated.

When Nelson returned to England in June with a shipload of cedar, Martin was aboard, hoping to bask in the glory of the results of his latest trial sent back earlier with Newport and to defend his opinion that there was gold to be found 'beyond Tidewater Virginia in the region above the Falls of the James River' (Southall 1946, 30). Anas Todkill, who accompanied Martin to Jamestown as his

scribe, remarked that his master 'being always very sickly, and unserviceable, and desirous to injoy the credit of his supposed Art of finding the golden Mine, was most willingly admitted to return to England' (Smith 1986d, 160). Martin was back in Jamestown in August 1609 with the Second Supply as captain of the *Falcon* and, despite several subsequent trips to England, made Virginia his home until his death around 1632 (Archer 1890, 329). His family and business connections with individuals in control of the Virginia Company and with government officials is reflected in his receipt of an unprecedented patent of land in 1617 that 'gave rise to much controversy and bitterness in both the Company in London and the Colony in Virginia' (Southall 1946, 41). Along with a large grant on the James River above Jamestown, the terms of the patent provided Martin with fishing and mining privileges, the rights to commercial activities, sole governance over settlers on his property, and immunity to the laws of the colony (Southall 1946, 41). By 1621, the leadership of the Virginia Company had changed; Smythe was no longer treasurer and in a position to protect Martin's patent, which was voided as an illegal document in February 1622 (Bemiss 1957b, 221).

Captain John Martin was Sir Richard Martin's third son (Bemiss 1957b, 209). While his older brothers Richard and Nathaniel became goldsmiths and followed their father into the Mint, John chose the path of many younger sons of prominent families and engaged in voyages of exploration and martial affairs. He circumnavigated the globe with Sir Francis Drake from 1577 to 1580 and first sailed to the New World in 1585, also with Drake, as captain of the *Benjamin* (Bemiss 1957b, 210; Brown 1890, 943). This latter expedition plundered settlements in Spanish America before rescuing Sir Walter Raleigh's colonists on Roanoke Island (Brown 1890, 15-16). In 1602, Martin was part of Captain

Bartholomew Gosnold's discovery of present-day New England (Brown 1898, 33). Ironically, Gosnold died at Jamestown on August 22, 1607, just four days after the death of Captain Martin's son, 'John Martine Gentleman' (Percy 1890, 167).

Despite possessing no apparent formal training in assaying, Martin's lineage and his connections to London society, including his marriage to the daughter of the prominent London goldsmith Robert Brandon, conspired to place him in charge of the metallurgical trials in the Virginia Company's new colony. Not only was Martin's highly-placed father in a position to help him through friendships with individuals such as Sir Thomas Smythe, but he often relied on his brother-in-law, Sir Julius Caesar, for assistance. Caesar controlled the treasury as Chancellor and Under Treasurer of the Exchequer and was advisor to the king as a member of the Privy Council (Bemiss 1957b, 211; Southall 1946, 55-56).

Captain John Smith, who was kept from witnessing the trials and 'golden consultations' of the '*refining* Captain Martin', was sceptical of the '*dirty* skill' that diverted so much of the Colony's resources away from the business needed to sustain the settlement (Smith 1986c, 219). As it turned out, Smith was right. No gold was found in the Virginia soils despite Martin's insistence and the frantic search for precious metals had abated by 1610 with the shift towards a military model for the colony and a greater emphasis on agricultural pursuits.

While much was made in Smith's writings about Martin's unsuccessful search for gold, Carter Hudgins used the metalworking evidence found archaeologically in James Fort to argue that the 'refining captain' was also involved in other metallurgical pursuits that were in the interests of Virginia Company investors (Hudgins 2005c 58-59). More specifically, Martin may have been testing Virginia's ores at the behest of the two complementary English copper monopolies,

the Society of Mines Royal and the Society of Mineral and Battery Works, Hudgins (2005a, 312-314) identified thirty-one Virginia Company shareholders who are also known to have been shareholders and/or administrators of one or both of the copper monopolies. Martin's own family was very involved in the metallurgical societies who planned to profit from mining copper, producing brass, and manufacturing finished copper and brass wares. Sir Richard Martin was an investor in the Society of Mines Royal and a founding member of the Society of Mineral and Battery Works of which he and his sons, Richard and Nathaniel, held one third of all the company shares (Challis 2008).

While the copper monopolies had been successful in mining copper, they were less successful in finding calamine stone of the right purity from which they could extract zinc, a fundamental ingredient in the production of brass (Hudgins 2005a). The major markets for copper in the late sixteenth and early seventeenth centuries were 'bulk sales to the Government for coinage or rearmament; or export to the Continent; or conversion to domestic utensils for the home market' (Donald 1989, 259). None of these outlets were very active, resulting in a glut of copper for the Society of Mines Royal. As chemical analysis of two Irish half pennies revealed, the short-lived schemes for English base metal coinage at the beginning of the seventeenth century probably used copper provided from English sources (Hudgins 2005a, 119). But there was no major demand from the Mint for the metal until the end of the seventeenth century when a copper coin of the realm was produced. Ordinance could not be relied upon as a steady customer for copper since old brass guns were often melted down and recast and because much of the nation's ordinance was made up of captured foreign arms. There was no revenue to be gained by the export of copper as this was restricted to prevent the metal from being

acquired by Spain for armaments. Finally, the durability of copper cookware coupled with the ease of patching damaged vessels created a flat market for those goods. Although a stronger metal, brass was cheaper and, besides guns and pots and pans, it could be manufactured into consumables such as straight pins and wire that would ensure a steady market (Hammersley 1973, 21-2). So, to create an outlet for their metal, the copper monopolies had to locate zinc, the ingredient in calamine stone that would provide the alloy to produce brass, and this search extended to England's new colony of Virginia (Hudgins 2005a).

Sir Richard Martin had been provided the lease for English brass production in 1587 and was likely still keenly interested in supporting his son's metallurgical trials in Virginia aimed at finding good quality calamine stone (Hudgins 2005a, 240). To that end he may have sent 'Supplyes', as Cope suspected, in the way of metallurgical equipment and/or scrap copper from Mint stores for the Virginia Company's use.

The material record from James Fort's pre-1610 contexts consists of numerous vessels used in chemical processes including high-quality Hessian crucibles, scorifiers, cupels, alembics, and distilling flasks. Many of these objects exhibit residues from use and elemental and chemical analyses of the material have indicated the colonists' trial of glass, their search for noble metals, and their tests of Virginia ores with unalloyed English copper (Martinón-Torres and Rehren 2005; Hudgins 2005a, 245-265). In order to asses whether Virginia's calamine could aid the home industry, it was essential to use copper from the Society of Mines Royal's sources and, indeed, this is what Hudgins (2005a) discovered. Elemental testing of the copper found in the James Fort excavations demonstrated it to be the arsenical and non-nickeliferous copper from English mines. Further examination of the

physical attributes of Jamestown's copper led Hudgins to conjecture that it consisted of industrial waste from the manufacture of domestic wares as well as of square and circular sheet copper ingots. The latter was marketed to various industries as raw material like the central European copper that is documented in 1602 as being sold in 'round or square plates' (Hudgins 2005a, 196-214; Donald 1989, 228).

Also to be considered is that some of the scrap copper at Jamestown could have emanated from the Mint as waste from the 1601-02 production of copper coins for Ireland and the 1601 experimentation with a copper coin for England. The recovery from James Fort's *c.*1608-10 well (Structure 185) of a cancelled mint trial plate for two Elizabethan coins that were never issued provides strong evidence for this idea. By extension this artefact also supports the thesis argued above, that familial and financial connections between London's projectors, such as Master of the Mint Sir Richard Martin, and the Virginia Company provided the avenue by which decried token coinage arrived at Jamestown.

8.3 The Trial Plate

Bearing the obverse and reverse impressions of two coins, the thin copper rectangular plate has been cut so only half of the imprint of each coin survives (Figure 8.2). This was apparently carried out by the moneyers to void the coins when the trial plate was scrapped and consigned to the government stores of shruff. Through the connections previously discussed between Sir Richard Martin and his son John at Jamestown, as well as between the mint master and Virginia Company officials, these stockpiles of scrap copper represented an inexpensive or perhaps even free source of the metal for the Virginia colony to use for metallurgical trials

and/or for trade with the Natives.

Figure 8.2. *Obverses (left) and reverses (right) of coins stamped on trial plate (Preservation Virginia).*

The trial plate indicates that the coins were hand-struck onto thin metal sheets and then cut out, possibly using a punch. Henry (1879, 6) recorded the existence of 'mint trial pieces' consisting of two or more farthings of James I 'on a slip of copper' and similar uncut pairs or strips containing coins have been documented for the farthings of Charles I (Nelson 1905, 9 and Pl. 1; Peck 1970, 55-56 and 61-63) (Figure 8.3).

Figure 8.3. *Obverse and reverse of uncut strip containing seven farthings of Charles I (Knightsbridge Coins/St. James Auctions)*

In the early twentieth century, four pairs of uncut farthings from the reign of Charles I were found in a dry well of Scarborough Castle in North Yorkshire. Also

in the context dating to the 1640s were numerous scissel—scrap metal left after the coins had been cut out—and brokage—fragments of faulty or incomplete farthings—indicating that the coins were being produced on site (Peck 1970, 56; Sheppard 1907, 75). It has not been determined whether this is evidence of a counterfeiting operation or the work of besieged Royalist troops; bu,t unlike the mint trial plate found at Jamestown, these and other documented strips of Charles I farthings were coins intended for circulation. Also unlike the Jamestown plate coins, which were individually hammer struck, the Charles I coin strips indicate production by the roller-die method. The farthings of James I were probably also produced by this mechanized method, as indicated by the 1613 proclamation that the coins 'should be made exactly and artificially of copper, by engines and instruments' (Peck 1970, 19).

Whereas the farthings on the uncut strips mentioned above were either legal tender or counterfeits of circulating coins, the Jamestown trial plate coins are considered by numismatists as patterns, experimental examples of suggested coin designs that were not meant to circulate and that were never officially issued. Nevertheless, a small number of these unofficial pieces from Elizabeth's reign appear to have slipped into the hands of the general public as a few rare examples have been documented in museum and private collections (North 1991, 140; Peck 1970, 10-15; Colin Cooke Coins 2012a; Colin Cooke Coins 2012b). Only four of the pattern halfpennies, as on the unfinished Jamestown trial plate, are said to be 'available to private commerce' (Colin Cook Coins 2012b).

These coins have been enigmatic to researchers, representing 'tangible mementoes of a scheme which did not in fact emerge from the clouds as far as England was concerned' (Symonds 1916, 95). Some patterns appear to have been

struck in a metal different from the intended coin,[68] they often bear no identifying inscriptions, and their weights may not correspond strictly to established denominations (Snelling 1769, 42-43). A.E. Weightman of the British Museum's Department of Coins and Medals remarked of the patterns in the 1920s that 'there is not one single piece that is quite normal; not one piece about which all is known' (Peck 1970, 10). The Jamestown trial plate, therefore, is exceedingly important numismatically for what it reveals about date and denomination of these objects. Of equal significance for this thesis, as presented in the concluding remarks of this chapter, is the artefact's context in a sealed *c.* 1610 context of James Fort in Virginia.

Both of the coins on the Jamestown trial plate have beaded borders and they were each struck with a die axis of 6. The first coin, which is 13 mm in diameter, is Peck's Type 4 (Peck 1970, 14-15). On the obverse is the crowned royal monogram consisting of the ligatured letters "ELIZABETH R" without a legend. On complete examples of this coin, there is an additional small cross at each side of the crown and a 6-petalled flower between two pellets below and to the side of the monogram. The reverse bears a portcullis with chains and with two large pellets to the sides. Above the portcullis is the date [16]01 over a saltire cross and two pellets. Four pellets are below the portcullis.

The obverse of the second coin (14 mm in diameter) also bears the crowned royal monogram, but with the legend [THE PL]EDGE·OF. On the reverse is a crowned double rose with the legend [·A·HALFE] PENNY. This is Peck's Type 2 pattern for copper coinage, which he provisionally dated to 1576 (Peck 1970, 13).

[68] Montagu (1893, 23) claimed that, as a rule, the intended metal of undocumented patterns occurring in two metals is usually the lower metal.

The denomination of the portcullis pattern and the date of the double rose pattern have been debated through the years by numismatists, but now both can be established with certainty by the trial plate. Although recorded by some researchers as a farthing coin (Montagu 1893, 2-3; North 1991, 40), the portcullis is likely to be a halfpenny just as its companion coin of similar size and weight (Snelling 1769, 46; Peck 1970, 11). The trial plate appears to present a side-by-side rendering of two possible designs under official consideration.

Further, by its association on the plate with the dated portcullis pattern, the double rose pattern also dates to 1601 even though, as mentioned earlier, Peck dated the pattern bearing the double rose to 1576. There are no extant patterns bearing the 1576 date; but in that year, the warden of the mint Richard Martin is documented as assessing a proposed scheme to mint 'halfpenny and farthing "pledges" in copper' weighing 24 and 12 grains respectively (Peck 1970, 9; Challis 1978, 206). The double rose pattern was considered by numismatists to have been produced as part of this proposal, which was ultimately not adopted. While Martin was not averse to the use of debased coinage, and considered it to be a better alternative than the privately-issued tokens in widespread use at the time, he was opposed to the plan for pledge coins on practical grounds. In order to produce the copper coins with intrinsic values that matched face values, and thereby lessen the attraction of counterfeiting, the half penny would have to weigh twenty times more than proposed (Challis 1978, 206-7).

An undated draft of a proclamation by Queen Elizabeth, stating the intent to issue copper token coinage in 24 and 12 grain weights, has been ascribed by some researchers to the same 1576 scheme (Snelling 1766, 2; Peck 1970, 9). The document describes an issue of 'pledges of pure copper' in halfpenny and farthing

denominations while at the same time forbidding the use of privately issued lead or tin tokens. Silver pence were also to be coined (Crawford 1967, 106). No one had to accept the pledge coinage in payments above twenty shillings, and for sums below twenty shillings only one groat was to be paid in them. An exchange was to be established in London to substitute, as necessary, two-thirds of any tendered amount with the silver pennies of the issue and the remaining one third with the copper pledge coins (Snelling 1766, 2).

The Queen's proclamation was never published, existing today only in manuscript form and some numismatists considered that it could very well correspond with the 1601 issue of patterns instead of the 1576 date mentioned above (Crawford 1967, 106; Leake 1793, 256; Christmas 1864, 60). Upon viewing a silver pattern in 1601, Richard Martin reportedly remarked that it was 'the best that he hath seen of that kind' (Challis 1978, 207). The silver halfpenny depicted in Figure 8.4, which has the same designs as the Jamestown copper portcullis pattern, may be the type of issue to which Martin was referring. Until discovery of the

Figure 8.4. *Obverse (left) and reverse (right) of a rare halfpenny pattern in silver (Alderly Collection, www..colincooke.com).*

Jamestown trial plate, this pattern was known only in silver (North 1991, 40).

The Jamestown trial plate is numismatically important as tangible proof of the poorly documented attempt to introduce an English copper currency at the end of Elizabeth's reign. Based upon the 1601 dates on some of the associated patterns, the scheme appears to have been considered concurrently with the program of debased coinage for Ireland. This led Symonds (1917, 114) to conjecture, probably incorrectly in light of the previously discussed undated proclamation for English debased coinage, that the patterns were proposed designs for the Irish coins. The time period also coincides with the trade coinage issued for the East India Company of which Sir Thomas Smythe was an influential founder and first governor. This issue is pertinent to the present discussion because it involves Smythe and other members of the trading company who would soon be prominent players in the Virginia Company. It was also the third monetary scheme proposed and the second enacted for special coinages under indenture to Mint master-workers Sir Richard Martin and his son Richard. By Elizabeth's warrant of January 11, 1601 to Thomas Knyvet, warden of the Mint, and the Martins, 'masters and workers of our Moneys within our Tower of London', new coins were to be minted for the use of the first voyage of the East India Company in an attempt to replace the prevalent use of Spanish silver coins in Asia (Birdwood 1893, 13-14). Known as portcullis money from the iconography on one side just as on the previously described patterns, the coins were minted from foreign silver and bullion in four denominations called testerns that were struck in weights equivalent to the Spanish silver eight, four, two, and one reales (Mitchell and Reeds 1995, 176) (Figure 8.5). Despite Elizabeth's wish to be 'respected by the Asiatics' and 'known as great a

Prince as the King of Spain', the coinage was not accepted in the Indies. Merchants found they could not 'make trade for their merchandise' because the populace was

Figure 8.5*. Obverse and reverse of a silver four testerns, also known as 'portcullis money' (www.hammeredcoin.co.uk).*

not familiar with the 'image or superscription strange' (Ruding 1819, 81; Challis 1978, 146). By the second voyage of the East India Company in 1604, only foreign silver coins were exported for trading purposes and by 1608 the issue was 'stifled without hope of revival' (Challis 1978, 146). Public opinion of the testern was summed up by a character in the 1605 London play *Eastward Ho* as he exhorts another individual to 'be like a gentleman . . . Wipe thy bum with testones' (Shepherd 1874, 452). Like the Elizabethan coinage for Ireland, this special coinage scheme was also a failure.

8.4 Summary

The discovery in a *c.* 1608-10 James Fort well of a copper sheet bearing the partial impressions of two English coins is of utmost significance for what it reveals about avenues of supply to the Virginia colony. Hudgins' study of the scrap copper

found in fort-period contexts explicated the deliberate supply of copper industrial waste from the English copper monopolies for the colony's metallurgical trials (Hudgins 2006a). Now, one of the colony's copper sources can be identified as the Tower mint where the master-worker was Sir Richard Martin, shareholder in the Virginia Company as well as in the societies of Mines Royal and of Mineral and Battery Works, and father to Jamestown colonist Captain John Martin. At the time of Jamestown's founding, Sir Richard embodied 'the last in the line of working goldsmiths who had dominated Mint management since the early sixteenth century' (Challis 1992, 267). He became warden of the Mint in 1572 and quickly expanded his authority by taking over the duties of many of the positions that had been abolished. 'The comptroller was "the warden's creature", the Queen's assayer his minion, and the rest of the Mint officers "his household servants" ' (Craig 1953, 124). From 1582 to 1599, Martin held both the office of warden and master-worker, which meant that he was officially permitted to oversee his own work with no outside accountability (Challis 2008).

In 1599, Martin lost some of his autonomy in the Mint when, deeply in debt, he was forced to sell his letters of indenture as warden to Sir Thomas Knyvet. For the first time Martin, who shared the position of master-worker with his son Richard, had someone overseeing his work. Immediately there were problems with Knyvet accusing Martin of 'not accounting fully for all the metal which passed through his hands' thereby cheating the Crown of £987 14s 8 ½ d (Challis 1992, 259). The case was heard in Exchequer court and the judgment went against Martin who had to pay up, but was able to maintain his Mint office. Pertinent to this discussion is Martin's claim during the hearing that rather than owing money to the Crown, he was due '£1,370 15s 9d in additional expenses for garbelling copper and

so on' (Challis 1992, 260). In other words, Martin's job as master-worker included sorting through copper for the best pieces.

As mentioned above, the Jamestown copper sheet is a voided trial plate for two halfpenny coins produced in 1601 as patterns for a proposed debased coinage scheme that never received official sanction from Elizabeth I. Discarded by the moneyers during the production process, the sheet was probably consigned to Mint stores of copper scrap for eventual reuse either as the main ingredient for debased coinage or as an alloy for silver coinage emissions.[69] Somehow this object avoided the melting pot and joined other pieces of scrap copper and obsolete base-metal coins and tokens in the Mint metal supplies. Master-workers Sir Richard Martin and Richard Martin would have had access to this material, either through garbelling the copper or through exercising one of the 'customary privileges of Mint officials', which was taking 'the sweeps of the melting house' for personal use (Craig 1992, 261). Together, these high ranking individuals exercised a lot of autonomy, which enabled them to help John Martin in Virginia, both financially and with 'somm Supplyes' for metallurgical trials, as mentioned earlier.[70]

[69] The English sterling standard was defined in the late sixteenth century as 11 oz 2 dwt of pure silver and 18 dwt of clean copper (Challis 1992, 262-64).

[70] The younger Richard Martin's support for his brother is indicated in his 1616 will: 'I give to my brother John Martyn all the money which I have formerly lent and payed for him excepting twenty five pounds lent him in money since his last coming into England' (White 1999, 791).

Chapter Nine

Portals to the Past
Conclusions and Significance of Results

Jamestown was an experiment. There was much trial and error in the first few years of the tiny settlement clinging tenaciously to the banks of the James River, as the Virginia Company endeavoured to help its colony adapt to conditions in the New World. Previous English attempts by Sir Walter Raleigh in present-day North Carolina were disappointing, leaving no template to follow for a successful long-term colony. Many of the adaptive responses made by the Company to settlement conditions at Jamestown are documented in the historical record, and have been used by historians in a traditionally negative interpretation of the early settlement to emphasize the series of failures that occurred. Failure, however, is part of the experimental process and the knowledge gained from unsuccessful strategies informed new ways forward. Despite numerous setbacks, Jamestown ultimately endured the 'messy and incomplete' process of building an English society abroad by finding ways to motivate its settlers toward a common goal, thereby becoming the model for all subsequent successful colonies (Kupperman 2007, 327).

The archaeological features of James Fort have captured many of the consequences of this experimental dynamic in a number of sealed contexts that can be closely dated to the *c.*1607-24 Virginia Company period. One characterization of present-day Jamestown described it as a 'graveyard, not only for those unfortunates who died but also for tools and ideas that did not work' (Graham et al. 2007, 518). It is one of the Virginia Company's unsuccessful ideas or schemes, extracted from the soils of Jamestown yet undocumented in the historical narrative that formed the basis of this thesis.

In sixteen discrete but related James Fort contexts that can be closely dated to the years in which the Virginia Company had control over the colony, archaeologists recovered 167 debased metal coins and tokens that shared a common attribute—they all represented obsolete numismatica at the time of their deposition. An additional seventy-four monetary objects of the same types were located in fort contexts that had been disturbed by later activities on the site and therefore could not be tightly dated. Nevertheless, examination of this substantial corpus of outmoded coins and tokens, representing numismatic and paranumismatic objects that are far removed from their original countries of origin and use, opened new portals to understanding Jamestown's formative years. By employing a biographical approach that integrated numismatic scholarship with the archaeological and historical evidence, the present study hypothesized that these objects were provided as a purposeful supply from a common source. Rather than representing random losses by individuals in the settlement, the numismatic objects were interpreted as a token currency provided by the Virginia Company and intended for quotidian exchange within the nascent colony.

Chapter 1 of this investigation introduced new approaches advocated for understanding and interpreting archaeological numismatica that reach beyond the prosaic application of providing dates for features. Political, economic, and technological dimensions of coins were shown to be definable from the iconography, historical text, and material features that they embody (Haselgrove and Krmnicek 2012; Kemmers and Myrberg 2011). Applicable to this thesis is Kemmers and Myrberg's statement that coins have the potential:

> to write a contrastive rather than a complementary history, enabling the search for the previously unknown through active use of the dissonances between historical and archaeological data.
>
> (Kemmers and Myrberg 2011, 93)

Exemplary of such a contrastive history, the documentary records are silent on the possibility of token usage in early Jamestown save for a single reference in 1610 to payments of 'copper coyne' for labour or commodities in the colony. As there was no copper coinage current in England, this thesis theorized that the reference was to the Irish copper pennies and halfpennies that were recovered in large numbers from early fort contexts. This would not be the only time that semi-demonetized Irish copper coins were transported for use in the American colonies. In the mid-eighteenth century, for instance, William Wood's unpopular Hibernia pennies and farthings produced from 1722 to 1724 'were exported to the coin-starved American colonies where they found a renewed value' (Danforth 2001, 2227). For seventeenth-century Jamestown, the renewed value of Irish coinage was similar to the use of scrip in the isolated American mining and lumbering towns of the twentieth century. It was a 'worker perquisite' used to 'attract labor into a somewhat unattractive environment' (Timberlake 1987, 442).

Chapter 2 attempted to reconstruct the initial plan of settlement for the early colony from the sketchy surviving documents to establish the emotional climate in Jamestown that may have prompted the plan for token coinage. The year 1609 was shown to have been a 'tipping point' for the settlement when widespread dissension in the colony prompted the creation of a new charter that would institute a different management style with more local control in the settlement. Pertinent to this thesis, the revisions also sought to address the lack of incentives for non-shareholders who were labouring in Virginia for the Company. The token currency is conjectured to have been part of these reforms that were to be instituted by the newly appointed governor, Sir Thomas Gates.

The archaeological and numismatic contexts for this study were established in chapters 3 and 4. James Fort was shown to be unprecedented in the density of material culture created by the confines of the one-acre area encompassed by palisades and precipitated by the high mortality rate in the early colony that resulted in scores of artefacts floating about detached from ownership. Rebuilding efforts, documented in the historical record, created several sealed features datable to 1610 and it is within these features of the fort that most of the token coinage was recovered. This is the contextual evidence that provides the hypothesis that the numismatic plan was scuttled with Governor Gates' decision that the colony should be abandoned. As hypothesized earlier, the Irish coinage and the tokens were dumped in open contexts, especially the colony's first well (Structure 185), along with other materials deemed not valuable enough to take back to England, and were not retrieved upon the colony's restoration. It is conjectured that implementation of martial law by Lord De La Warr took precedence over previously organized plans and the token coinage scheme was abandoned.

The other brass, copper, and lead tokens comprising this study are also considered to be part of this monetary scheme, primarily from their large numbers in contextual association with the Irish coinage; but also because an argument could be made for the Royal Mint as a common source of supply. This line of reasoning was developed for each of the numismatic types in Chapter 5 through tracing the life histories of the objects. Still not clear is the path of the Groningen token from the Netherlands and it is hoped that future archival research may provide support for its supply to Mint stores through the agency of government officials.

Alternatively, the biographies of two of the varieties of English tokens, one copper and the other lead, provided the framework for suggesting that they had both

served as tickets to a royal ritual known as the King's Touch. This function for the copper tokens had been proposed by the British Museum in the 1930s, although without supporting evidence, and in recent years this attribution had been questioned. Similarly, past researchers have speculated that the lead Elizabethan tokens comprising part of this study once served as tickets, but the association with the Touching ceremony had never been considered. This thesis argued that these ticket tokens, like the Irish coinage, were collected by the Tower mint during the exchange stage of their biographies.

Evidence of token usage from Bermuda and Newfoundland, two early English colonies established after Jamestown, was presented in chapters 6 and 7, providing parallel adaptive measures to fulfil local needs in New World settlements. Bermuda's Hogge money of 1616 was shown to be the most similar to the subjects of this thesis. The Bermuda coinage was of no value outside of the colony, thereby assuring the Somers Islands Company control of the economy. Supporting the correspondence of this monetary scheme with Jamestown is the fact that the emission was instituted by a governor who had lived and worked under the tutelage of Sir Thomas Gates, the individual posited as bringing the token currency scheme to Virginia.

The lead Newfoundland tokens were shown to be of interest for three reasons even though they date to a later period of time in the seventeenth century. They are of the same material as the Elizabethan token hypothesized to be part of the Jamestown scheme; they were issued in response to similar emotional needs in the seventeenth-century colonial society; and, most importantly, they represent an internal token currency in Newfoundland that is only known through archaeological evidence.

Additional support for sourcing of the numismatica from the Mint was offered in Chapter 8 with a discussion of the familial and business relationships connecting Mint officials, the Virginia Company leadership, and individuals at Jamestown. These threads were strengthened further by the discovery of a voided moneyer's trial plate in a *c.* 1608-10 well of James Fort. This rare object, depicting patterns for two coins of a proposed debased 1601 coinage, most likely reached the colony from the Mint's store of metal stock. Supplies from the Mint were hypothesized to have included not only scrap copper for trade with the Natives and for metallurgical trials, as had been suggested by Hudgins' research on the functions of Jamestown's copper (2005a), but also the coins and tokens forming the subject of this thesis. The Virginia Company was thereby able to acquire numismatic objects for use in its colony without having to incur the expense of a coinage emission.

Beyond attempting to explain numismatic outliers in early Jamestown contexts, this study was undertaken to demonstrate that there is value in approaching historical questions from a biographical study of material culture. When the artefact is given centre stage in an archaeological context, myriad avenues of inquiry can be revealed that may not have been evident from traditional approaches. Unfortunately it can be a laborious process, requiring the investigation of many lines of evidence that could prove unsavoury to most researchers. Yet, it is hoped that this enquiry of a possible monetary scheme, based on the biographies of excavated material culture, may be inspirational to researchers for the types of information that can be derived by 'scratching' beneath the obvious.

In this case, the very idea that the Virginia Company intended to address the turbulent emotional atmosphere of its colonial populace by offering immediate

monetary rewards indicates a dynamic process that is not acknowledged in the traditional historiography of Jamestown's early years. According to this interpretation, the Company was attempting to institute a change that would encourage a labour force to migrate to Virginia and, at the same time, motivate and incentivize disaffected members of its colony to be productive on Company projects. As explained by Sigmund Diamond, these two goals that plagued the Company throughout its existence were found to be mutually exclusive in the attempt to maintain a traditional English societal structure. The military discipline required to hold the early colonial society together 'couldn't survive the granting of concessions offered to recruit a labor force' (Diamond 1967, 566). Further, Diamond argues, the opportunity for social mobility that is so characteristic of the modern concept of the American dream began with the breakdown of the traditional societal order through the colonial schemes undertaken to ensure a voluntary labour force (Diamond 1967). Though never enacted, the token money plan hypothesized by this thesis is one of these proposed schemes.

While rarely approached through archaeology, the study of emotion in historical settings should be regarded, according to Tarlow, 'with other aspects of social and cultural meaning and experience' (Tarlow 2000, 713). Using historical references, Kupperman's provocative study 'Apathy and Death at Jamestown' maintained that Jamestown's emotional climate was a result of the conjunction of psychological and physical factors (Kupperman 1979). Analogous to the experiences of prisoners in twentieth-century war camps, Kupperman argued that the isolation and despair suffered by the Jamestown colonists coupled with the lethargy brought on by malnutrition led to a fatal withdrawal from life, which contributed to the colony's high mortality rate. In this scenario, 'the needs of the

group provided daily challenges and solving them may have made the marginal difference between withdrawal and involvement' (Kupperman 1979, 39). The token coinage scheme is interpreted as being one of the proposed solutions, but whether it would have effected any change in the colonial society will never be known.

In summary, this thesis used archaeological evidence to make an argument that the Virginia Company had plans to enact a token monetary scheme in the formative years of the Jamestown settlement. Not only is this hypothesized scheme undocumented in the existing archival record, it also appears to have been unrealized. Traces of the plan's existence have been construed primarily through the study of material culture in context. Without further support from the historical record, this reading of the archaeological evidence can only be regarded as a suggestion, reflective of Haselgrove and Krmnicek's contention that archaeology can 'contribute a solid foundation for discussion by presenting data drawn from the material record and by providing an interpretation' (Haselgrove and Krmnicek 2012, 238). As demonstrated by this thesis, a biographical study of seemingly inconsequential objects buried in context can indeed provide tantalizing portals to the past.

APPENDIX I: Early Sealed James Fort Contexts Referenced in this Study[71]

Pit 1

Description: A 20’ x 16’ pit that was 5’4” deep, which may have started as a soldier’s cabin and subsequently used as a borrow pit.
Date: *c.* 1607-1610

Pit 3

Description: A circular pit in the eastern bulwark measuring 15’ in diameter and 6’ deep, which may have functioned as a powder magazine under a wooden platform.
Date: c. 1607-1610

Pit 5

Description: Cellar to the north of Structure 165 and measuring 5’6” x 3’8”. It is believed to have been associated with an early mud and stud domestic structure.
Date: *c.* 1610

Pit 6

Description: Irregularly-shaped pit measuring 28’ x 16’ and ranging from 1.5’ to 4’ in depth. Located along the east palisade wall, it may have served as a borrow pit. It cuts into the top of Structure 183 and the bottom layers are pulling up materials from this *c.* 1607-17 structure as indicated by ceramic crossmends with it and with Structure 165 (*c.* 1610). The upper layers contained materials from the 2nd quarter of the seventeenth century.
Date: *c.* 1610-30

Pit 8

Description: Shallow pit to soldier’s cabin, measuring 8’ x 3’, and located 3’ from west palisade wall.
Date: *c.* 1607-10

Pit 9

Description: Shallow pit to soldier’s cabin, measuring 5’8” x 4’6”, and located 4’ from west palisade wall.
Date: *c.* 1607-10

Pit 10

Description: Shallow pit to soldier’s cabin, measuring 6’10” x 4’1”, and located 4’6” from west palisade wall.
Date: *c.* 1607-10

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[71] In-depth descriptions of these features can be found in: Luccketti et al. 1995, Straube and Luccketti 1996 (for Pit 1); Luccketti and Straube 1998 (for Pit 3), Luccketti and Straube 1999, Kelso and Straube 2008 (for Structure 165 and Pit 6); Kelso and Straube 2008 (for pits 5, 8, 9 10, 11, and 13; Structures 166, 179, 172, 175, and 177; and the West Bulwark Trench); Kelso and Straube 2008, Kelso et al. 2012 (for Structure 176); and Kelso et al. 2012 (for Structures 176, 183, and 185).

Pit 11

Description: Shallow pit to soldier's cabin, measuring 4'7" x 4'4", and located 2'3" from west palisade wall.
Date: *c.* 1607-10

Pit 13

Description: Flat-bottomed, 4'deep pit of unknown purpose in north bulwark area of fort. The feature was disturbed by construction of Structure 175 in 1611. Measuring 7'2" x 5', Pit 13 may have been associated with a mud and stud structure.
Date: *c.* 1607-11

Pit 16

Description: A 6 ft diameter pit that is only 8 in deep and dug into the fill of Structure 183. It is believed to have served as a mortar mixing pit for the *c.* 1617-19 construction of Structure 176.
Date: *c.* 1617-19

Str 165

Description: A 72' x 18' mud and stud building with a cellar, built outside of the eastern palisade walls of the fort. It is believed to have been built as a storehouse following a fire in 1608 that resulted in an enlargement to the east of the fortified area.
Date: *c.* 1608-10

Str 166

Description: Mud and stud structure, 17' x 36', located on the exterior of the fort, 10' from the east palisade. The south end of the structure extends under the foundations of the standing brick church tower and has not been defined. The north end of the structure contained an 8' x 9' cellar, which may have pre-dated the structure as a soldier's pit house or cabin.
Date: *c.* 1607-10

Str 170

Description: Brick-lined well (#27), located outside of the western palisade wall of James Fort. The well measured 14' deep and 3'6" in diameter.
Date: *c.* 1617-1624

Str 172

Description: Cobble foundation building inside the west wall of James Fort. Dimensions are 92' X 20'. The structure was divided into six rooms as indicated by three "H"-shaped chimney bases. It is believed to be one of the 'two fair rows of houses' mentioned in 1611 in which the governor and his retinue resided.
Date: *c.* 1611-1620

Str 175

Description: Cobble foundation building inside west wall of James Fort and northeast of Structure 172. Dimensions are 64' X 20' although there are disturbances from 1861 Civil War fort construction. Most of the north wall

and the centre of the structure were compromised. Floor joists in northeast room, with nails from floorboards. There is one definite H- shaped hearth on the south wall, about 16' from east wall of the building. Like Structure 172, this building is considered to be one of the 1611'"two fair rows of houses'.
Date: *c.* 1611-1620.

Str 176

Description: Brick and cobble addition on the east end of Structure 175, inside the north bulwark area of James Fort. The structure was divided into two rooms, separated by an "H"-shaped chimney base. Measurements are 24' by approximately 36'. The brick hearth was found to have sunk into a backfilled well. There is an unusual three-sided "bay window projection on the south side of the structure facing into the fort. The north wall (close to west palisade) and much of east wall have been ploughed away. This structure is believed to be the addition to the traditional governor's residence made by Captain Samuel Argall in 1617 upon assuming the governorship.
Date: *c.* 1617-1625.

Str 177

Description: Square wood-lined well near north bulwark lying beneath Structure 176 brick hearth. Oriented with the west palisade, the well was aligned with the northern wall of Structure 175, suggesting that the two features were contemporary. The box frame measured 5' x 5' and the shaft was 11'6"deep.
Date: *c.* 1611-1617

Str 183

Description: Structure with cellar measuring 16' x 20' located 10' from eastern palisade close to north bulwark. The "Grubenhaus" type structure first appears to be an industrial centre with evidence of smithing and casting lead shot. Then the structure was modified to use as a kitchen by indicated by two large circular ovens dug into the east side of the north side.
Date: *c.* 1607-1617

Str 185

Description: A 14' deep well near centre of fort that is considered to be the first well dug by the colonists in the fort.
Date: *c.* 1608-1610

Str 186

Description: A mud and stud building in the centre of the fort and oriented with the fort walls. The structure measures 12' by at least 15' and possibly extending to 18'. The location of the structure in the fort's centre has suggested it may have functioned as a workshop, munitions house or the corps de garde.
Date: *c.* 1607-1610

Str 187

Description: A fort-period building, probably with cobble foundations, located north of the possible storehouse (Structure 179) and considered to be an addition to it. The foundations were disturbed by Structure 180, a mid-seventeenth-century building but the dimensions were approximately 10' wide and 20' long.
Date: *c.* 1607-1610

Str 191

Description: L-shaped cellar, 25'long, parallel to Structure 185, which is 10' feet to the east. Earthen steps provide access to the cellar; two 'bread ovens' incorporating brick stacks are built into the side walls. Excavation of this feature has not been completed at the time of this writing.
Date: *c.* 1608-1610

West Bulwark Trench

Description: Fourteen-foot section of ditch surrounding the fort's west bulwark. First constructed in 1607 and improved in 1614.
Date: *c.* 1607-14

Appendix II: Identifiable coins dating to the Virginia Company period (1607-1624) found in mixed contexts

Context	Coin #	Coin	Metal	Date	Comments
B Buried	2837-JR	English farthing	Copper	1613	Harrington Type 2
B Buried	2838-JR	English farthing	Copper	1613	Harrington, Type 2
Churchyard	2094-JR	English halfpenny	Silver	1605-06	
Churchyard	2223-JR	Spanish maravedi	Copper	1605	
Ditch 1	41-JR	English sixpence	Silver	1560	
Ditch 27		English threepence	Silver	1561-82	
Ditch 28		English farthing	Copper		
Ditch 3	39-JR	English sixpence	Silver	1602	
Ditch 3	40-JR	English threehalfpence	Silver	1579	
Midden 1	1426-JR	English sixpence	Silver	1561-82	Halved
Pit 6	4337-JR	English farthing	Copper	1613	Harrington Type 1
Plowzone	144-JR	Dutch double stuiver	Silver	1615	Zeeland
Plowzone	1305-JR	Spanish half real	Silver	1580	
Plowzone	2989-JR	Spanish 4 maravedis	Billon	1578	Santo Domingo mint
Plowzone	89-JR	English sixpence	Silver	1602	Cut into a pendant
Plowzone	2442-JR	English threepence	Silver	1580-81	Halved
Plowzone	4215-JR	English halfgroat	Silver	1583-1603	
Plowzone	728-JR	English halfgroat	Silver	1583-1603	Rolled into bead
Plowzone	1417-JR	English halfgroat	Silver	1561	Halved
Plowzone	1416-JR	English penny	Silver	1604	
Plowzone	1990-JR	English halfpenny	Silver	1607-09	
Plowzone	3561-JR	English halfpenny	Silver	1613-15	
Plowzone	95-JR	English farthing	Copper	1613	
Plowzone	2836-JR	English farthing	Copper	1613-14	Harrington, Type 2
Plowzone	2443-JR	English farthing	Copper	1613-14	Harrington Type 1
Plowzone	3571-JR	English farthing	Copper	1613-14	Harrington Type 1b
Plowzone	3915-JR	English farthing	Copper	1613-14	Harrington Type 1b
Plowzone	3894-JR	English farthing	Copper	1613-14	Harrington Type 1b
Plowzone	3062-JR	English farthing	Copper	1613-14	Harrington Type 1b
Plowzone	3570-JR	English farthing	Copper	1613-14	
Plowzone	JR2399C	English farthing	Copper	1613-14	
Plowzone	4664-JR	English farthing	Copper	1613-14	Harrington Type I
Plowzone	4673-JR	English farthing	Copper	1614-15	Lennox round
Structure 145	3918-JR	Italian sesino	Copper	1595-1605	
Structure 145	3624-JR	English sixpence	Silver	1593	bent
Structure 145	JR1940D	English sixpence	Silver	1561-82	
Structure 145	JR1375B	English threepence	Silver	1565	
Structure 145	2812-JR	English threepence	Silver	1561-82	
Structure 145	3849-JR	English halfgroat	Silver	1604-05	
Structure 145	3562-JR	English penny	Silver	1591-94	pierced
Structure 145	3563-JR	English penny	Silver	1619-25	
Structure 145	4676-JR	English penny	Silver	1558-1603	
Structure 145	4213-JR	English penny	Silver	1603-04	
Structure 145	4214-JR	English penny	Silver	1606-07	pierced
Structure 145	2950-JR	English halfpenny	Silver	1605-06	
Structure 145	2679-JR	English farthing	Copper	1613-14	
Structure 145	2835-JR	English farthing	Copper	1613-14	Harrington Type I
Structure 145	2815-JR	English farthing	Copper	1613-14	Harrington Type 1
Structure 145	2814-JR	English farthing	Copper	1613-14	Harrington Type 1a

Context	**Coin #**	**Coin**	**Metal**	**Date**	**Comments**
Structure 145	1454-JR	English farthing	Copper	1613-14	Harrington Type 1
Structure 145	2833-JR	English farthing	Copper	1613-14	Harrington Type 1b
Structure 145	2834-JR	English farthing	Copper	1613-14	Harrington Type 1a
Structure 145	4466-JR	English farthing	Copper	1614-25	Lennox round
Structure 145	4495-JR	English farthing	Copper	1613-14	Harrington Type 2, pierced?
Structure 145	4494-JR	English farthing	Copper	1613-14	Harrington Type 2
Structure 171	JR1654B	English sixpence	Silver	1582	
Structure 171	4521-JR	English threepence	Silver	?	
Structure 171	3904-JR	English farthing	Copper	1613-14	Harrington Type 1
Structure 171	JR3136B	Spanish half real	Silver	1621-65	
Structure 173	2900-JR	English sixpence	Silver	1591	Clipped?
Structure 173	3061-JR	English sixpence	Silver	1561-1603	Cut
Str 183 Mix	4465-JR	Spanish 4 maravedis	Copper	1516-1556	

Appendix III: Irish pennies and halfpennies from mixed contexts of James Fort

Context	Object	Master	Coin	Date	MM	WT	DIAM	AXIS
239B	1934-JR	B Buried	Penny	1601	Star	18.2	18.28mm	8
3219C	99261	Modern	Penny	?	?	24.69	19 mm	?
3335A	102534	Modern	Penny	1602	Martlet	30.86	18 mm	9
158L	655-JR	OverStr165	Penny	1602	Martlet	24.69	19 mm	6
69D	11290	Pit 3 Over	Penny	1602	Martlet	?	?	?
2D	92-JR	Plowzone	Penny	1602	Martlet	24.69	19.3 mm	8
81A	726-JR	Plowzone	Halfpenny	1601	Star	12.35	15 mm	12
130A	2845-JR	Plowzone	Penny	1602	Martlet	12.35	17.67mm	8
183A	2831-JR	Plowzone	Penny	?	?	20.06	17.78mm	?
1432D	4497-JR	Plowzone	Penny	1601	Star	20.06	20.97mm	9
2298C	3882-JR	Plowzone	Penny	1601	Star	24.69	19.76mm	12
2248C	82062	Plowzone	Halfpenny	?	?	Inc.	14 mm	?
3422D	108366	Plowzone	Penny	1601	Star	16.97	19 mm	8
3239B	101827	Post CW	Penny	1601	?	29.32	19 mm	?
3439B	108550	Post CW	Penny	1601	Trefoil	24.69	18mm	?
1374B	2810	STR 145	Halfpenny	1601	Star	10.8	16 mm	10
1273C	2811-JR	STR 145	Penny	1601	Star	24.69	18.24mm	3
1382B	2844-JR	STR145	Penny	1602	Martlet	26.24	18 mm	8
1400B	3569-JR	STR 145	Halfpenny	1601	Star	9.26	15.7 mm	5
2000B	4705-JR	STR 145	Penny	1601	Trefoil	23.15	19.6 mm	6
2633B	77726	STR 145	Penny	1602	Martlet	16.97	17 mm	9
1580A	82099	STR 145	Penny	1601	Star	24.69	19 mm	2
2624B	83400	STR 145	Penny	1601	Star	27.77	19.8 mm	4
1422C	3568-JR	STR 145	Penny	1601	Star	24.69	20 mm	6
1400B	53530	STR 145	Penny	1602	Martlet	27.78	19.79	12
2069B	100212	STR 145	Penny	?	?	29.32	18.6 mm	6
1712A	86095	STR171	Halfpenny	1601	Trefoil	6.17	15.5 mm	6

Appendix IV: Groningen tokens from mixed contexts of James Fort

CONTEXT	OBJECT	MASTER	DATE	DIAMETER
586A	3621-JR	CH Burial	1590	23 mm
1646C	#90955	Plowzone	1590	24 mm
2368C	4452-JR	Plowzone	1590	23 mm
3520A	#108543	Post CW	590	23 mm
697C	2281-JR	STR 145	1590	23 mm
1898D	#52946	STR 145	1590	23 mm

Appendix V. English 'King's Touch' tokens from mixed contexts of James Fort

CONTEXT	OBJECT	MASTER	DIAMETER
9F	20-JR	Ditch 1	26 mm
2B	21-JR	Topsoil	30 mm
100A	#12977	Plowzone	28 mm
116A	1209-JR	Plowzone	19 mm
174A	603-JR	Plowzone	28 mm
183A	1379-JR	Plowzone	18 mm
201A	1907-JR	Plowzone	19 mm
201B	1925-JR	B Buried	19 mm
254A	2615-JR	SC Misc.	18 mm
349A	2073-JR	Plowzone	20 mm
449A	#19518	Plowzone	18 mm
487B	3626-JR	B Buried	19 mm
487B	3628-JR	B Buried	29 mm
488B	4738-JR	B Buried	19 mm
488B	2071-JR	B Buried	29 mm
488B	2072-JR	B Buried	19 mm
488B	#33594	B Buried	20 mm
533A	2608-JR	Plowzone	19 mm
602A	#22120	CH Burial	16 mm
1376B	#46927	Plowzone	19 mm
1416C	#46480	Plowzone	20 mm
1581A	#51444	STR 145	20 mm
1646B	#56465	STR 145	19 mm
2319C	4065-JR	Plowzone	20 mm
2378C	4499-JR	Plowzone	19 mm
2599B	#82552	STR 145	20 mm
2949A	#80726	U Trench 6	19 mm

Appendix VI. Crowned Rose Lead Tokens from mixed contexts of James Fort

CONTEXT	OBJECT	MASTER	TYPE	DIAM	DATE
710B	2662-JR	B Buried	?	20 mm	Mixed
3422D	#108533	Churchyard	Eagle	20 mm	Mixed
14B	78-JR	Plowzone	Eagle	Inc.	Mixed
161A	667-JR	Plowzone	Eagle	20 mm	Mixed
1395C	4524-JR	Plowzone	Eagle	Inc.	Mixed
3242C	#198364	Plowzone	Eagle	20 mm	Mixed
3242C	#108365	Plowzone	Eagle	20 mm	Mixed
3422C	#108461	Plowzone	Eagle	20 mm	Mixed
3424C	#108611	Post CW	Eagle	20 mm	Mixed
3422C	#108512	Post CW	Eagle	20 mm	Mixed
3422C	#108513	Post CW	Eagle	20 mm	Mixed
3422C	#108514	Post CW	Eagle	20 mm	Mixed
1892A	#57302	Roadbed	Eagle	20 mm	Mixed
1892D	4504-JR	STR 145	Eagle	20 mm	Mixed

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