ABSTRACT

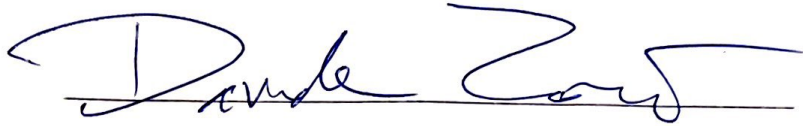Why Were They Buried?: A Comparative Study of Two Viking-Age Coin Hoards in

Their Political Contexts

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Director: Davide M. Zori, Ph.D.

Viking-Age coin-dated hoards have been studied at length in terms of their insights into the historical and economic accounts of Vikings in Britain in the early tenth century. They are especially useful in contextualizing Viking activities since they allow large stores of wealth to be situated within a small range of dates. Due to this precision, hoards allow analysis in terms of political events concurrent with their burial. The goal of this thesis is to provide a comparison of two of the largest Viking-Age coin-dated hoards found in Britain—the Cuerdale hoard and the Vale of York hoard—in order to suggest that the burial of such large hoards was tied to important political events, typically militaristic. I will argue that the best explanation for the deposition of Viking-Age hoards as large as the Cuerdale and Vale of York examples is for the protection of wealth during times of political turmoil.

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WHY WERE THEY BURIED?: A COMPARATIVE STUDY OF TWO VIKING-AGE

COIN HOARDS IN THEIR POLITICAL CONTEXTS

A Thesis Submitted to the Faculty of

Baylor University

In Partial Fulfillment of the Requirements for the

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By

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[1] BMC=British Museum Collection

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taught me many lessons, among them: to read with an always critical eye; to write academically (thank you, Dr. Ballard); to craft thoughtful arguments; and to remember my human limitations and the importance of my faith to it all (thank you, Prof. Moore, for your open-door policy and your advisement in much more than coursework). I am forever grateful for this community, where I found a home, excitement towards learning, and many of my closest friends. Many thanks to Dr. Nogalski for encouraging me to come on board! I am forever indebted to you for sharing your passion for BIC with naïve seventeen-year-old Sarah Catherine, for whom your words and the fervor of Emily Varley were incredibly instrumental as she made life-changing decisions during the spring of 2018!

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DEDICATION

To Grammi and Papa, my constant cheerleaders in all my endeavors and two of my
education's biggest supporters
AMDG

CHAPTER ONE

Introduction

Viking-Age silver hoards shed much light on Viking activities in Britain in the early tenth century. Archaeologically, hoards tell us about the migration patterns of Vikings (Sheehan 1995), the ways in which they maintained a mixed economy (Kershaw 2017), and their emphasis on reciprocal exchange. Coin-dated hoards are especially useful in providing context for Viking migration and ways of life since they allow large stores of wealth to be situated within a small range of dates. Due to this chronological precision, such hoards allow analysis in terms of political events concurrent with their burial. This thesis aims to provide a comparison of two of the largest Viking-Age coin-dated hoards found in Britain—the Cuerdale hoard and the Vale of York hoard—in order to suggest that the burial of such large hoards was tied to important political events, typically militaristic (Graham-Campbell 2013, 5). I argue that it is more important to consider the political context of such large hoards than their economic context, especially when considering the reasons for the deposition of the hoards.

Objectives

This introductory chapter will consider relevant past scholarship on Viking coinage in Britain in order to 1) offer a periodization of the coins themselves, 2) consider how scholars have studied coin hoards, and 3) situate my argument within these previous studies.

Chapter 2 offers an overview of the Cuerdale and Vale of York hoards, respectively. It considers the dates, burial, finding, excavation, and overall content of both hoards. This chapter will also provide historical context for both hoards using primarily *The Anglo-Saxon Chronicles*. *The Anglo-Saxon Chronicles* was the first account of a western nation's history written in its vernacular. It was written by scribes and survived as several manuscripts at churches and monasteries, and its nearly yearly account begins with the fifth century AD and ends in the mid-twelfth century AD (Swanton 2000, xx-xxi). Subsequent chapters will supplement this historical context with artifactual evidence.

Chapter 3 analyzes the coins contained in the Cuerdale and Vale of York hoards, considering them both separately and compared to those of the other hoard. In doing so, the contributions of important rulers and church officials included in Anglo-Saxon and Viking coinage preceding and during the Viking Age will become clear, providing further political contexts for both hoards that will aid in comparison. It will also consider trends in coinage and what they may suggest about the development of the Viking Age economy in Britain prior to the deposition of the hoards.

Chapter 4 presents an overview of the non-numismatic metal contained in both hoards in the context of the dual-nature economy of the Viking Age, specifically in Britain. In the context of the Viking Age, this dual economy or "dual-currency" economy, in the words of Jane Kershaw (2017, 173-174) encapsulates the Vikings' continued use of raw silver in economic exchange, even as they began minting and using coins of their own. This chapter also provides an in-depth analysis of the metal content of both hoards. While this chapter primarily refers to hacksilver, its name refers more

generally to metals because of few artifacts that have not been hacked into pieces for use in the bullion economy. Like Chapters 2 and 3, it considers each hoard individually and then in comparison with the other. I will herein suggest that the primary significances of the hacksilver itself, when considered in context, lie in the insight it provides into who would have buried hoards and why they were buried in their respective locations.

Chapter 5 offers a synthesis of claims made in the preceding chapters in order to further contextualize the Cuerdale and Vale of York hoards in the political record of the Viking Age in Britain. This chapter will conclude that large Viking silver hoards were most likely buried for the protection of wealth during times of political upheaval in Britain, evidenced by political events that occurred around the time of their burial.

I also include catalogs of the artifacts in Appendices 1-4. Appendices 1 and 2 are catalogs of the coins that I adapted from major publications on both hoards in order to facilitate better comparisons for my purposes by increasing readability of the entries and creating a uniform organization system. This reorganization highlights trends in the coins of both hoards and is therefore useful in my analysis of coins. Appendices 3 and 4 are catalogs of the non-numismatic metal of both hoards of my own compilation. I elected to create these catalogs in order to compile all the non-numismatic artifacts under study in numerical order based on their item numbers in the British Museum Collection. Much of the data included comes directly from the British Museum Collection catalog entries, supplemented with my own artifact descriptions where I deemed necessary or helpful for my own artifact analyses. In other places, I merely rearranged some of the wording of British Museum Collection entries in order to create a more parallel structure among the entries. While other catalogs exist, the one I have created is unique in that it references

the whole catalog number of each artifact, is sorted numerically rather than typologically, and has the information relevant to my purposes of comparing the Cuerdale and Vale of York hoards and situating them in their political contexts.

A Brief Review of the Literature

The research of numerous archaeologists and numismatists provides context for the debate over the contextualization of Viking hoards. Gareth Williams (2014), the Curator of Early Medieval Coins and Viking Collections at the British Museum, offers both an invaluable state of research in a study on the coinage of Vikings in Britain from AD 865-954 and a periodization of the coinage in six phases, five of which are important for this thesis and will be referenced in subsequent chapters. For this reason, his research is the most valuable starting point for a review of the literature about Viking coinage. He discusses the beginning of study of Anglo-Scandinavian coinage in Britain with Daniel Haigh in the 1840s, whose conclusions set the groundwork for historical interpretations of Northumbrian coins (Williams 2014, 17-18). He was especially influential in terms of geographical association with York, the ways in which Anglo-Scandinavian coinage was influenced by Christian and Frankish elements, and the necessity of utilizing more than just Anglo-Saxon sources (such as *The Anglo-Saxon Chronicles*) in order to attribute coins chronologically (Williams 2014, 18). Williams (2014, 18-19) notes few studies about Anglo-Scandinavian coins at the end of the nineteenth and beginning of the twentieth centuries. These were not nearly as consequential as other studies beginning in the 1950s. Many of these studies clarify the dating and regional attribution of coins in hoards such as the Cuerdale and offer attributions of some of the coins to various rulers or mints.

Most notable for my purposes is his discussion of the work of Marion Archibald, who established that this hoard was not buried until *c*. 905 based on her analysis of the composition of the artifacts of the Cuerdale hoard. This conclusion is vital to any study of the Cuerdale hoard because it affects the context in which the hoard is situated, leading to potential errors in coin study and attribution of the hoard to concurrent events (Williams 2014, 19). Next, he discusses the shift from consideration of "'dual economies' to 'multiple economies,' including social as well as monetary and or quasi-monetary exchange" (Williams 2014, 20). He closes his discussion of coinage study by alluding to recent increases in the study of iconography of the coinage by himself, Megan Gooch, and Mark Blackburn. He also covers adjustments to the dating and attribution of silver based on newly-discovered hoards, and his own writing on the Cuerdale coins catalogued by James Graham-Campbell (Williams 2014, 20).

Perhaps most significantly, however, he notes that historians and numismatists are beginning to agree "that, even taken as a whole, the historical sources have significant gaps, and that the coins cannot simply be mapped onto an accepted text-based chronology; but also that the coins in many cases fill what would otherwise be gaps, and are themselves amongst the most important surviving contemporary historical sources for the period" (Williams 2014, 17). This combination of written historical sources and coins as historical sources is the lens through which I will approach the discussion in subsequent chapters.

The first two phases of coinage Williams defines in his state of research, 865-*c*.880 and *c*.880-895, predate both hoards I consider here and are important as context for several types of the coins that this thesis considers. During phase 1, Williams notes that

the "transition from pre-Viking to Anglo-Viking coinage in East Anglia," ushers in new coinage systems that are consistent with permanent settlement of this region by Scandinavians by the 870s (Williams 2014, 21 and 23). Phase two features the development of uniquely Anglo-Scandinavian coins, in the context of a mixed bullion economy (Williams 2014, 24). Phase three covers the span of 895-910, during which time the Cuerdale hoard was buried. Williams (2014, 27) deems this the phase with the most extant coins of this Anglo-Scandinavian type, likely due in part to the size of the Cuerdale hoard. The fourth phase from 910-919—the first phase post-Cuerdale—introduces the new series of *Swordless St. Peter* coins and imitations of Anglo-Saxon coins with no listed moneyer (Williams 2014, 31-32). The fifth and final relevant phase, from *c*.919-927, covers the continuation of anonymous imitated coins, along with a return of royal coinage, new St. Peter coins in York, and St. Martin coins in Lincoln (Williams 2014, 32). This phase and the preceding one are especially relevant to the Vale of York hoard due to the timing of its deposition.

Research in the last decade seems to focus on single finds of silver rather than hoards. Continuing the theme of the necessity of the combination of physical and written sources to gain insight into Viking activity in England, David Griffiths (2015, 41) notes:

> Hoards cannot tell us everything we wish to know about patterns of wealth and exchange. Single finds of silver objects and coinage that may have been dropped by mistake during a transaction perhaps convey more readily the actual patterns of use of silver and coins (See also Kershaw 2015).

This claim adds further support to not only the use of both archaeological and historical sources for the study of Viking coin hoards, but also to the idea that large Viking-Age hoards are best understood in their political contexts.

Jane Kershaw has conducted the primary research on single finds of Viking-Age

silver in Britain. In 2015, Kershaw considered hoards through many lenses; however, her

major contributions are to their economic contexts in Britain in comparison to those of

single finds. Her conclusions are important to this study because they help frame the

argument for the importance of political context to the deposition of large hoards by

outlining the limitations of their supplementation of the historical record. In her

consideration of the evidence of single-finds of silver versus silver hoards, Kershaw

(2015, 162) argues that many hoards were buried due to the economic ramifications of

political turmoil in north-west England. She here concludes that hoards suggest an

economic relationship between York and Dublin by way of the Irish Sea instead of local

economic exchange (Kershaw 2015, 162). In this way, her work provides context for the

Cuerdale hoard, which was found in north-west England near the Irish Sea.

Kershaw (2017) also discusses the role of Viking hoards in dual-currency

economies in Britain, and her observations help suggest why a political explanation for

large hoards is most helpful. Her first contribution is that, contrary to previous scholars'

conclusions, Vikings used both raw silver and coins for economic exchange, which she

uses single finds of silver to support (Kershaw 2017, 173-174). She notes that silver

hoards in the Danelaw region under Viking control in Britain have a combination of coins

and non-numismatic metal that indicates that bullion was used in the area until at least the

tenth century AD (Kershaw 2017, 175). Hoards illuminate the intersection between

Scandinavian bullion economies encountering Anglo-Saxon coin-based economies

(Kershaw 2017). She (2017, 175) acknowledges that the silver in hoards is vital to a

complete understanding of Viking economies; however, she cautions against

extrapolating artifacts in a hoard to forms of silver used in everyday exchange. In other words, it is difficult to generalize about economic systems using only hoards as evidence, perhaps due to their interspersal, or even to their possible connections with political events. Individuals (or even groups) may have maintained bullion for purposes other than exchange, such as status, which could account for their burial in hoards. She instead argues for the importance of single finds of hacksilver to explaining economic trends because they allow for more localization (Kershaw 2017, 176-177). Consistent with Kershaw's idea, then, a political lens would be more effective than an economic trend for large hoards, such as Cuerdale and Vale of York.

Another new research direction is the connection between specific silver hoards in Ireland and York during the Viking Age. Brittany Nebiolini (2020) begins the conversation on this subject, considering several hoards in both Dublin and York (the Vale of York among them), as well as the rulers in power over both regions in terms of their effects on the transferal of silver. She argues that Ívarr's politically-stable dynasty in Ireland was integral to the connection between the economies of Dublin and York during the Viking Age, once again tying the context of hoards to political phenomena (Nebiolini 2020, 155). Her claims expand on some of Kershaw's from 2015, and they are important in establishing an economic relationship between the Vale of York hoard and Ireland, the connection to which has already been suggested for the Cuerdale hoard.[2]

Scope of Thesis

While both hoards have been studied at length, this thesis is unique because it is a comparison of two large hoards in terms of their artifacts and situation within the political

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[2] See here Sheehan 1995 and Kershaw 2015.

history of the early 10th century. Having considered the literature, especially in terms of how it contextualizes hoards in the history of England, I will conclude that the best explanation for the burial of Viking-Age hoards of the magnitude of the Cuerdale and Vale of York examples is the protection of wealth during times of political turmoil.

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CHAPTER TWO

An Overview of the Hoards and Their Historical Contexts

Prior to analyzing the artifacts of the Cuerdale and Vale of York hoards and their role in the Viking-Age economy in Britain, it is necessary to situate the hoards in their proper historical and political contexts. This chapter will consider the finding, dates, and overall historical contexts of the Cuerdale and Vale of York hoards. Considering these contexts for the hoards, the position of their artifacts in aiding the historical record is clearer, and the analysis of artifacts in subsequent chapters will lend itself more to this historical consideration.

The Cuerdale Hoard: Discovery and Dating

Figure 1: Part of the Cuerdale Hoard (Graham-Campbell, 2013. Cover Image)

The Cuerdale hoard was discovered in Cuerdale, Preston, Lancashire on May 15, 1840, on the land of William Assheton while Cuerdale Hall was undergoing repairs (Graham-Campbell 2013, 21). Its finding is documented by the contemporary solicitor of Lancaster as:

> On the 15th May last, about 6 o'clock in the evening, one of the several Labourers who were engaged in sloping down and repairing the embankment of the River Ribble, in the Neighbourhood of Cuerdale Hall near Preston, which had become partially undermined by the action of the water, was suddenly surprized by finding some pieces of corroded Metal in the Bank he had been cutting with his spade under the breast of it and, on letting down the upper part of the earth and filling it into a Wheelbarrow, these pieces of Metal were seen, and his spade afterwards struck among a quantity of loose silver coins some of which were thrown into the Barrow along with Soil (quoted in Graham-Campbell 2013, 21).

After its discovery as both loose coins and a large store of wealth in a corroded lead box, it was almost immediately given the designation of Treasure by the authorities of the province (Graham-Campbell 2013, 21). Once found and so designated, it was claimed by the Crown, examined by the British Museum in response to a counterclaim by William Assheton (the owner of the land, who was abroad when the hoard was found), and distributed to nearly two hundred public and private collectors after June 1841. There is some controversy over the means of acquisition of some of the collectors, several of whom likely stole from the original collection of artifacts (Graham-Campbell 2013, 21-29). The dispersal of the hoard to almost two hundred individuals and entities nearly two centuries ago severely hinders comprehensive study of its artifacts (Graham-Campbell 2013, 21, 39). Nonetheless, the British Museum owns and has analyzed all the non-numismatic artifacts and nearly one-third of the coins of this hoard, making the artifacts owned by the British Museum the best possible sample to study. Originally, researchers estimate the hoard contained approximately 7,500 coins. The British Museum now

possesses a total of 1,772 coins (Graham-Campbell 2013, Appendix 4; see Appendix A). The Museum also owns over 700 pieces of metal from the hoard (see Appendix C).[3] [4] Based on dates and names of rulers and mints inscribed on its coins, the Cuerdale hoard dates to between 905 and 910, when the Viking Age in Britain was well underway. This date makes the Cuerdale hoard one of the oldest of the Viking hoards in Britain (Graham-Campbell 2013, 7). It also indicates that Vikings were not only present in Britain by the beginning of the tenth century but also building settlements in some capacity. This is confirmed by mentions of their settlements in *The Anglo-Saxon Chronicles*: "880 [879]. Here the raiding-army went from Cirencester into East Anglia, and settled that land, and divided it up" (Swanton 2000, 77).[5] It is extremely unlikely that a hoard of this magnitude would have been deposited by a small group of raiders who had no intention of staying in Britain; for this reason, the Cuerdale hoard is indicative of a further stage of Viking occupation in Britain.

The Cuerdale hoard is significant to a study of Viking-Age economies in Britain because it is one of the largest Viking coin hoards, and certainly the largest unearthed to date in Britain (Graham-Campbell 2013, 5). Additionally, because it is coin-dated, its dating is precise, especially important for such an early hoard (Graham-Campbell 2013, 7). This date enables the hoard to make greater contributions to the political and economic history of England because it can be situated among events and rulers with

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[3]   Interestingly, the British Museum also lists two bone pins from the Cuerdale hoard, which were presumably donated to the Museum later than the hoard, evidenced by the catalog date and the donor's name (BMC nos. 1954,0202.1 and 1954,0202.2). However, since these are neither coins nor metal, they will not be considered within the scope of this thesis.

[4]   Throughout this thesis, BMC is used to abbreviate "British Museum Collection"

[5] Mentions of "raiding-army" in *The Anglo-Saxon Chronicles* denote raiders of Scandinavian descent.

greater accuracy. The Cuerdale hoard is also significant for the study of Viking

economics in Britain because many artifacts in the hoard still exist in the same collection,

that of the British Museum. Since this hoard has been unearthed for nearly two hundred

years, much earlier than most other hoards in Britain, the British Museum's collection

and preservation of most of the artifacts in the hoard has been invaluable for its continued

contribution to the field of archaeology. It is used as a point of comparison for most of

the other Viking hoards in Britain, as well as others in mainland Europe. Much research

on the artifacts of the hoard has been conducted and fully published, and it is a standard

for subsequent hoards (see Williams 2014).

Finally, the Cuerdale hoard's combination of a vast array of coins and hacksilver

indicates a great deal of contact with other cultures. The individual or group who buried

the hoard had encountered coins from as far east as the Byzantine Empire and possessed

coins from a variety of European rulers on the British Isles and beyond. While it is

unknown whether these were obtained by raiding, trading, or a combination, the likely

mixture of the three indicates cultural contact. So, while it no longer exists in its entirety

due to distribution of some of its artifacts by initial finders, the significance of the

Cuerdale hoard is nearly unparalleled in comparison to other coin hoards from the Viking

Age, and it can provide much insight into the context of the Vikings who established

settlements in northern Britain, as well as to their interactions with other groups in Britain

at the time. Because of its variety of artifacts, early burial, and size, the Cuerdale hoard is

integral both in establishing a standard of comparison for other Viking hoards in Britain,

such as the Vale of York hoard, and in aiding in the understanding of Viking activities in

Britain during the early tenth century.

Figure 2: The Vale of York Hoard (Graham-Campbell 2013, 10)

The Vale of York hoard was found in January of 2007 by metal detectorists in North Yorkshire and designated as treasure on July 18th of the same year (Ager and Williams 2011, 135; Ager 2020, 86). Its contents include one gilded silver Carolingian cup, sixty-seven pieces of hacksilver, one gold arm ring, and 617 coins of mixed styles (Ager and Williams 2011, 136). The hoard was deposited in a Carolingian cup, which contained all the other artifacts and was instrumental in keeping the hoard together. This cup is perhaps one of the reasons the hoard is one of the largest of its kind in Britain found intact. The contents were analyzed using x-radiography prior to excavation, when hundreds of metal artifacts were found packed tightly inside (Ager 2011, 122-124). The area surrounding the cup was excavated by the York Archaeological Trust to ensure that

no artifacts were missed in the initial excavation, but no additional artifacts were found on the surrounding land (Ager 2011, 123-124).

Like the Cuerdale hoard, the date of deposition of the Vale of York hoard can be approximated to within a few years because it is a coin-dated hoard. Aethelstan's 'Building' coins, their imitations, and his *Rex Totius Britanniae*, the combination of which indicate a date of deposition after 928, are most helpful in this dating process (Williams 2011, 150-151).

The Vale of York hoard provides another example of an early Viking-Age hoard in northern Britain. The Vale of York hoard's primary significance in comparison to other hoards lies in its method of burial, which impeccably preserved its contents for over a thousand years until it was fully recovered in 2007. It also, like the Cuerdale hoard, contains coins and other artifacts of diverse origins indicating the existence of cultural contact. The Vale of York hoard, in this way, complements written accounts of Vikings in Britain to offer a more holistic picture of their lifeways in Britain.

Overall Comparison in Terms of Political Contexts

The Cuerdale and Vale of York hoards have several similarities that contribute to their political contextualization. Both are indicative of a mixed bullion and coin economy. Both contain much hacksilver, as it was first utilized by Vikings in transactions, and standardized coins indicative of a centralized, coin-based economy. Further, both can be accurately dated due to a combination of datable coins and to political circumstances surrounding such coins. In both cases, this combination of factors provides a narrow window of time for the deposition of each hoard. Because of this narrow window, contemporary written records are useful in contextualizing hoards.

Historical Context of the Cuerdale Hoard. Gareth Williams (and Archibald 2013, 64) notes that scholars are becoming increasingly wary of attributing hoards based on specific political events (i.e. attempting to force hoards to fit political contexts, which he suggests is a problem with earlier dates suggested for the Cuerdale hoard).[6] However, the very presence of political upheaval around the time of the burial of both the Cuerdale and Vale of York hoards suggests its importance to their deposition, whether one can connect specific battles to specific hoards given available evidence or not. The deposition date of the Cuerdale hoard has been debated since it was found, but the best approximation of c. 905 has come from the work of Marion Archibald, who determined it must have been buried on or after this date (Williams 2014, 19). This makes Graham-Campbell's (2013, 7) suggested date range of c. 905-910 perhaps the best approximation. Since the dating of the Cuerdale hoard has now been attributed based on artifact analysis rather than its affiliation with political events, I will suggest a couple political events here with which its burial may coincide, especially given its location.

One of these political events is the Battle of Tettenhall, which is listed in *The Anglo-Saxon Chronicles* in three manuscripts, one in 909 and the other two in 910, both of which fit the date range of the Cuerdale hoard. Of this battle, the *Chronicles* says: "Here the Mercians and West Saxons fought against the raiding-army near Tettenhall on *6 August* [sic] and had the victory" (Swanton 2000, 95). In a footnote, Swanton (2000, 95) offers a more detailed contemporary account from Æthelweard:

> *After a year the barbarians broke the peace with King Edward, and no less with Æthelred, who then ruled the Northumbrian and Mercian areas* [sic]. *They harried through Mercia and over the Severn into the west country; but, when,*

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[6]   This citation of Williams and Archibald appears as it does because Archibald wrote an aside that is part of the larger chapter authored by Williams. Much of the chapter is written by Williams, with a designated contribution by Archibald.

rejoicing in rich spoil [sic], they were in the process of crossing back over the Severn bridge at Bridgnorth (*Cwatbricge* [sic]) they were attacked by squadrons of both Mercians and West Saxons, which on 5 August gained a great victory of Woden's field (Wednesfield) killing three viking kings, Halfdan (*Healfdene* [sic]), Eowils (*Eywysl* [sic]), and Ivar (*Inwær* [sic]) who with the other jarls and noblemen *hastened to the hall of the infernal one* [sic].

This huge victory of Anglo-Saxon over Viking forces indicates a loss large enough to warrant the burial of wealth in such a large store as the Cuerdale hoard prior to heading off to battle. This wealth is especially indicated by the mention of the wealth of the Norse in this excerpt from *The Anglo-Saxon Chronicles*. Perhaps such a large amount of wealth would have been buried quickly in such a way as the Cuerdale hoard, by a river, as Vikings sailed off to fight the Mercian and West Saxon forces. In addition to causing a loss of land and control, this loss would have also marked a massive loss of morale, indicated by the death of three Viking kings, on a field with a Norse name.[7]

While the Cuerdale hoard's location near a river and time of deposition are concurrent with Vikings traveling to participate in the Battle of Tettenhall, it is also entirely plausible that such a quick deposition near the River Ribble occurred as a group of Vikings went towards or away from a smaller, less noteworthy battle. Given the numerous power struggles and shifts that occurred between kingdoms and factions during the Anglo-Saxon and Viking ages, this possibility is not unlikely and cannot be ruled out.

Historical Context of the Vale of York Hoard. Based on the evidence of the dating of the coins and events recorded in *The Anglo-Saxon Chronicles*, one can reasonably conclude that the Vale of York hoard was tied to the raiding campaigns of Athelstan. According to Gareth Williams (2011, 151), the hoard was deposited after a meeting

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[7]   Woden's field=Odin's field. This place, then, is named after the head of the Norse gods.

among rulers of the kingdoms of Britain to designate terms of peace between their kingdoms at Eamont Bridge in 927.[8] This gathering is documented in *The Anglo-Saxon Chronicles*: "And they [the British kings governed by Athelstan][9] confirmed peace with pledges and with oaths in a place which is named Rivers' Meeting[10] on *12 July* [*sic*]; and they forbade all devil-worship and then parted in concord" (Swanton 2000, 107). However, as Williams (2011, 152) notes, the presence of mixed coins in this hoard in northern York suggests that Athelstan did not have much control over the circulation of coins at the time of the deposit of the hoard. This hoard also has other implications for the stability of the northern kingdoms of Britain during this time, and it calls into question the long-term efficacy of the gathering at Eamont Bridge.

While there are many possible reasons for the deposition of a Viking hoard fully contained in a cup during this time, Barry Ager (2011, 133-134) suggests that the Vale of York hoard was most likely deposited for the safe keeping of a large deposit of wealth because of its remote location and the time of turmoil in Northumbria surrounding its burial. Ager (2011, 133) also notes that this may be why it was never retrieved. Although *The Anglo-Saxon Chronicles* describes a meeting of unity among rulers in Northumbria under Aethelstan, it also describes a great war in Northumbria within ten years of the deposition of the hoard. Of this battle, which occurred in 937, the *Chronicles* accounts that "Never yet in this island was there a greater slaughter of people felled by the sword's

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[8]   While *The Anglo-Saxon Chronicles* says 926, this difference is likely not consequential given the occasional difference in dating among the manuscripts (See E.G. Mardon et al. 1992), especially because the coins provide a date of after 927. This information is more valuable for the context it provides than its precise dating.

[9]   Mentioned as both Athelstan and Aethelstan in sources, and I use both interchangeably

[10]   Eamont Bridge, Westmorland

edges…since Angles and Saxons came here from the east" (Swanton 2000, 109-110).

Perhaps it is because of this battle, the Battle of Brunanburh, or a similar one that the

owner of this hoard both initially buried it and never returned to retrieve it.

Williams (2008, 230) notes that there is little chronicle evidence of what occurred

in the years after the peace agreement was forged at 927 in Eamont Bridge; however, he

suggests that this lack of evidence is because Athelstan maintained his power in

Northumbria, eliminating the necessity to write about power struggles. This claim, he

says, is supported by chronicles that have not been preserved but were cited in twelfth-

century documents. Based on this evidence:

> there was an attempt by the Viking ruler Guthfrith, supported by Earl Thurferth,
> to gain control of the kingdom of Northumbria of which Guthfrith's brother
> Sihtric had previously been king. He failed to gain control of York [from
> Athelstan], and was forced to retreat (Williams 2008, 230).

If this is indeed the case, the Vale of York hoard could have been deposited by one of

these Viking leaders or one of their subjects while battling Athelstan in York. Williams

(2008, 230) continues that this claim cannot be assumed, and the hoard cannot be

attributed to one of these rulers, but the existence of political turmoil following the peace

agreement made in 927 makes it "reasonable to assume that the hoard was deposited for

safety by a Viking of high status during that period" (Williams 2008, 230).

Conclusions

While neither hoard can be definitively linked to any specific political event or

individual, since no Viking hoard was buried with a denoted claimant, the very existence

of political turmoil within a few years of the known dates of both hoards suggests a link

between these two largest stores of Viking wealth unearthed in Britain in terms of the

reasoning for their deposition. While the Cuerdale and Vale of York hoards have broad

similarities in context, they differ significantly in method of deposition, legislation available at the time of discovery, and the events that may have led to their burial. Unlike the Cuerdale hoard, the Vale of York hoard was found after the Treasure Act of 1996 was implemented in Britain. This policy required that a hoard designated as Treasure must be sent to the British Museum for a full report on the nature of its artifacts (Ager 2011, 121). Since there was no such policy when the Cuerdale hoard was excavated during the 19th century, the hoard was divided among multiple individuals and groups over the course of the year following its designation as Treasure (Graham-Campbell 2013, 28-29; Williams and Archibald 2013, 39). This unfortunate reality inevitably complicates the study of the hoard. Gareth Williams (and Archibald 2013, 39) claims that, in addition to being a large enough collection for study, the sample owned by the British Museum is likely representative of the entire hoard based on the documentation of coins from other locations. He nonetheless acknowledges that those who stole from the hoard were, in some cases, assistants of the researchers who knew the comparative value of the coins, such as the single Byzantine coin from the Assheton collection, that escaped documentation and could alter dating of the coins and other factors (Williams and Archibald 2013, 39-40). This reality underscores the importance of protective legislation such as the Treasure Act of 1996. With the presence of such legislation, hoards can be studied with no missing pieces and contribute more wholly to the historical record. For this reason, the Treasure Act of 1996 provides an advantage for the Vale of York hoard over the Cuerdale hoard in terms of its relevance to the historical record.

One of the most considerable differences between these two hoards is the method of burial of the Vale of York hoard. The Vale of York hoard was contained in its entirety in a silver Carolingian cup (see figure 3).

Figure 3: The Carolingian Cup from the Vale of York Hoard (Ager 2020, 87)

This cup is ornately decorated, depicting animals in motion surrounded by vegetation. It is one of several similar Carolingian cups used in church settings that have been found in hoards throughout Europe. Barry Ager (2020, 86-88) posits that the animals depicted on this cup mirror those of the Stuttgart Psalter, particularly surrounding Psalm 148, which discusses nature praising the Lord. This interpretation of the imagery of the cup supports its potential intended use in a church setting. The cup's possible creation for use in a church setting is also supported by gilding on its interior. The presence of purer metal on the inside of the cup suggests that it was used to hold the Eucharist once consecrated, or as a vessel for incense or holy chrism. For use in any other capacity, less care would be taken on the inside of such an ornate cup. Ager (2020, 89) also suggests that the lack of a lid on the cup from the Vale of York and other comparable cups found in hoards may

indicate that the Vikings began to shift the use of such cups from sacred to secular, with lids possibly being repurposed as hacksilver or for other uses of precious metals.

Interestingly, the cup has a style more closely matching that of Eastern vessels, and there are no Western vessels in this style. This indicates cultural contact between the West and the East, which likely happened during the reign of Charlemagne. The mixture of Oriental and Byzantine artistic styles in the metallurgy of this cup are especially intriguing in the context of its possible use in Western church settings. However, the Carolingian cup of the Vale of York hoard is both a practical feature of this hoard as a vessel for keeping all coins together upon burial and a distinguishing feature that sets this hoard apart from many of its contemporaries, especially due to its Eastern influence (Ager 2020, 91-92).

The cup used as a container for the Vale of York hoard kept the hoard together in the ground, while the Treasure Act of 1996 meant that the hoard had been kept together prior to its in-depth study. The Vale of York hoard can therefore be studied in its entirety. This is not the case with the Cuerdale hoard. However, because it was found almost two hundred years ago, the Cuerdale hoard has been studied much more extensively, beginning right after its discovery in the 1840s (Williams 2014, 17-18). Further, and perhaps more relevantly to a comparative study, the Cuerdale hoard has been completely catalogued and published, while the Vale of York hoard is still being studied with publications forthcoming. Nevertheless, the British Museum's documentation of all the artifacts in this hoard as well as introductory catalogs and artifact analyses enable this hoard to be studied in comparison to others.

Overall, both hoards are exemplars of coin hoards from the Viking Age in Britain. Both are rather large in comparison with most others of their types, and both can be precisely dated to the early tenth century because of their dated coins and their historical contexts. These hoards are also earlier examples of hoards than most hoards found to date in Britain during the Viking Age. Because of these early dates and their mixtures of coins and hacksilver, the Cuerdale and Vale of York Viking coin hoards are crucial for the study of Viking-Age economies in transition from a metal-based economy to a national coinage economy. Therefore, the comparison of the contents of these two hoards will supplement the narrative of Viking-Age economies during the transition period from raiding bands of Vikings in Britain to total Viking control of the Danelaw by the end of the tenth century with a chronology of rulers (Holman 2001).

CHAPTER THREE

Political Implications of the Coins of the Cuerdale and Vale of York Hoards

Chapter Introduction

Since coins comprise the vast majority of both the Cuerdale and Vale of York hoards, they are important to consider in any discussion of these hoards, especially when examining their contribution to Viking economies in Britain. This chapter analyzes several trends of the coins of each hoard separately and in comparison with the other in order to suggest the value of their contributions to the historical record of Viking-Age Britain, primarily through the chronology of rulers and indications of Viking minting abilities that they provide.

The British Museum owns and studies all 617 coins of the Vale of York hoard and the 1,772 remaining coins of the Cuerdale hoard. The Vale of York hoard's 617 silver coins were acquired by the British Museum directly following the discovery of the hoard in 2007 (Ager and Williams 2011, 136). The British Museum owns and studies 1,772 coins from the Cuerdale hoard.[11] Most of these were acquired in the mid-nineteenth century shortly after the discovery of the hoard. Researchers believe that, initially, there were approximately 7,500 coins in the Cuerdale hoard; however, due to the dispersal of the coins to many parties and the pocketing of coins by the original handlers of the hoard, it is now impossible to study the corpus of the coins in the hoard. The British Museum now has in its possession the 1,427 coins originally given to the Museum

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[11]   Data drawn from the catalog in the Appendices of Graham-Campbell 2013.

as well as the 345 originally given to William Assheton and later donated to the Museum by his family. The Museum's entire collection forms nearly one third of the hoard's original number of coins, the largest single collection of these coins and no doubt the best documented (Williams and Archibald 2013, 39). For this reason, the coins in the possession of the British Museum will be analyzed as a reasonable sample to compare with the coins of the Vale of York hoard.

Dating in Context of the Coins

According to catalog data from the British Museum, the Cuerdale hoard was deposited around AD 905.[12] The research of Marion Archibald confirmed that the date of deposition had to be this or later (Williams 2014, 19). The Cuerdale hoard was also likely part of a bullion economy, which further highlights the importance of mixed economies to the Scandinavian settlement of Britain, especially given the size of the Cuerdale hoard (Williams and Archibald 2013, 41). It consists of a mixture of Anglo-Saxon and Danelaw coins; however, the largest group of coins are those from the Viking kingdoms of Northumbria and East Anglia (Williams and Archibald 2013, 42).

Congruent with other 10th-century Viking hoards, the Vale of York hoard contains coins of Anglo-Saxon, Anglo-Viking, Islamic, and Carolingian origins. Because of this wide variety of coins from different periods, the date of the hoard can be estimated with unusual precision. Unlike other 10th-century hoards, it does not possess early Danelaw coins like those of the Cuerdale hoard and others. The earliest coin that could possibly be from the Danelaw region in this hoard is an 871 issue from the Anglo-Saxon coinage of Alfred. Since over 100 of the coins in this hoard were coins of Athelstan, the deposition

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[12]   Date from the British Museum Collection.

date of the hoard had to be after his coins had reached Viking Northumbria so that they could be widely circulated and included in the hoard (Ager and Williams 2011, 144). Based on the presence of these Athelstan 'Building' coins, their imitations, and only one *Rex Totius Britanniae* coin, the hoard must date between AD 927 and 929 (Williams 2011, 152). Due to a mixture of hacksilver and coins of national and regal significance, this hoard was part of a mixed bullion economy, which was typical during the Viking Age, especially as Vikings were transitioning between the use of only precious metals in transactions to the use of standardized coinage (Williams 2011, 152).

Similar Features Among the Coins of Both Hoards

In an analysis of the coins of both the Cuerdale and the Vale of York hoards, many comparative and distinctive features arise. Both hoards have many coins from the reign of Edward the Elder (899-924/5), but the Vale of York hoard has significantly more, which is consistent with its later date. Most coins from this hoard come from this time, indicating a deposition date that was after his reign (or at least late in his reign)—consistent with the date proposed by Williams (2011, 152). The British Museum possesses a total of 33 coins of Edward the Elder from the Cuerdale hoard, of Bath, Two-Line, and Portrait composition. These coins are of the earliest of his styles, which perhaps corroborates the estimated deposition date of the hoard in 905 (Williams and Archibald 2013, 42). The Museum has 402 Edward the Elder coins (out of 627 total coins) from the Vale of York hoard. These coins are of Two-Line, Bust, Burh, Rose, and Floral types. The greater proportion of this type of coin in the Vale of York hoard than the Cuerdale hoard suggests that the reign of Edward the Elder had more bearing on the overall date and context of this hoard than it did on the Cuerdale hoard. Further, for two thirds of the

hoard to be comprised of these coins, his coins had to have been circulating more in the area in which this hoard was found than that in which the Cuerdale hoard was found. Both hoards also contain many Viking imitations of Anglo-Saxon coins, which is significant because it indicates that Vikings were integrating their methods of economic exchange with local economies by developing a similar coinage system.

Beyond general trends, the Cuerdale and Vale of York hoards possess many similar issues, even down to the moneyer in several cases. First, the Cuerdale and Vale of York hoards possess many overlapping types of Alfredian coins. These are of London (no moneyer), Two-Line, and Rex Doro types. Consider a London Monogram from the Vale of York hoard, presumably just the reverse with the mint signature (see figure 4).

Figure 4: Silver Penny, London Monogram from the Vale of York Hoard (presumably of Alfred the Great and the reverse, but not delineated) (BMC 2009,4133.79)

While neither hoard has many examples of the London issue in its entirety, the Cuerdale hoard has several Viking imitations of this type that can perhaps shed light on this type of coin. For example, an imitation of a London Monogram coin from the Danelaw region portrays a profile of Alfred with the inscription "ÆLFREDRE," perhaps a variation of the

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Latinized ALFRED REX (Alfred, the King), on the obverse (see figure 5). The reverse of

this coin portrays the unique monogram of the London mint. This type is interesting

because, while it is a clear nod to Alfred's rulership, it names no moneyer. Further,

Alfred valued Roman ties to Christian England at its inception. His three new coins in

Roman style, then, are consistent with this influence of Rome on Christian England.

These three types were the rare Two Emperors, Cross-and-Lozenge, and London

Monogram types (Karkov 2004, 25). It is intriguing that Catherine Karkov (2004, 25)

discusses these Roman-influenced coin types in the context of Alfred's perception of

himself as a ruler, suggesting that Alfred saw himself as both a classical sort of ruler and

as a unifier.

Figure 5: Viking Imitation of Alfredian Silver London Monogram Issue (BMC
1838,0710,290)

Consider also a Two-Line silver halfpenny of Alfred from the magistrate of

Cuthbert minted in Wessex (see figure 6). This coin, not an imitation, features a central

cross in the middle of the obverse surrounded by the inscription "ÆLFRED REX"

(Alfred, the King). The inscription "REX" is perhaps a nod to Roman imperial coins due

to the use of Latin, although it suggests the establishment of ideological power through

the material record regardless. The reverse of the coin displays Cuthberht's split-line signature. This coin is a particularly interesting issue because it does not have the clean lines and symmetry that others do. This may be a feature of the coins of Cuthberht, although it could indicate a rushed job in order to produce coins more quickly.

Figure 6: Alfred Two-Line Silver Halfpenny (BMC 1838,0710.410)

Both hoards contain Edward the Elder coins, especially significant in the case of the Cuerdale hoard since his reign began roughly six years before the hoard was buried. This indicates, then, that the coinage of Edward the Elder was very widely circulated from its onset, which helps explain why 402 out of the Vale of York hoard's 617 coins date to the reign of Edward the Elder (Williams and Ager 2011, 141-143; See Appendix B). One such coin of his Two-Line series from the Cuerdale hoard displays the two-line moneyer inscription of Æthered, whose coins appear in both the Cuerdale and Vale of York hoards (see figure 7; Appendices 1 and 2). This series features the Latinized name of Edward on the obverse (evidence by the inscription of REX following the Anglo-Saxon name) around a central cross inscription. The reverse designates Æthered as the

moneyer, with the inscription split into two lines. This coin was produced from around 900-925, and the style of this example is typical of the series.[13]

Figure 7: Edward the Elder Two-Line Coin, moneyer: Æthered (BMC 1838,0710.432)

Additionally, both overlap in coins of Archbishop Plegmund of Canterbury with no overlapping moneyers. Consider a Two-Line example from the Cuerdale hoard whose issue reflects a more Anglicized inscription than many other coins in these hoards, suggesting perhaps a distinction for the primary Archbishop in England (see figure 8). The obverse displays a central cross inscription with inherent religious significance due to the commissioning of the coin by an archbishop. The inscription in his name surrounding the cross reads "PLEGMVNDARCHIBP" ("Plegmund, Archbishop"), demonstrating the Anglicization of the coin. The reverse bears the moneyer's name in two lines, as with the Edward the Elder type. Based on the cross inscription appearing centrally on the obverse of all three Two-Line series, the cross is likely a feature of the Two-Line coin type.

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[13]   Data from the British Museum Collection.

Figure 8: Silver Penny of Plegmund, Archbishop of Canterbury; minted by Tidwald in Canterbury, Kent (BMC 1838,0710.1106)

The Vale of York hoard features a similar coin bearing the inscription "PLEGMVNDARCHIEP" (Plegmund, Archbishop), which encircles a cross patee (see figure 9). Only the obverse of this coin is displayed; however, it is likely that between the coins of the Cuerdale and Vale of York hoards of this series, at least two came from the same time of production. This connection between the hoards, then, is indispensable. Since Canterbury was the most significant archdiocese in England at the time, it also suggests the growing importance of church connections to Vikings in Britain. It could, however, also be indicative of the Vikings' continued strategic invasion of defenseless church settings for their vast stores of wealth. This invasion is first mentioned in *The Anglo-Saxon Chronicles* with the invasion of the monastery at Lindisfarne in 793 as follows:

> Here terrible portents came about over the land of Northumbria, and miserably frightened the people: these were immense flashes of lightning, and fiery dragons were seen flying in the air. A great famine immediately followed these signs; and a little after that in the same year on *8 January* [sic] the raiding of heathen men miserably devastated God's church in Lindisfarne island by looting and slaughter (Swanton 2000, 55, 57).

Figure 9: Silver Penny of Plegmund, Archbishop of Canterbury; minted in Canterbury, Kent; no moneyer listed (BMC 2009,4133.643)

Finally, both hoards contain Islamic coins. The Vale of York hoard contains several fragments of Islamic coins, which were fragmented to be used in bullion form. This indicates that the Vikings who buried this hoard perhaps acquired these coins before they had context for using coins in wide circulation (Ager and Williams 2011, 143). The Cuerdale hoard has both whole and fragmentary examples of Islamic dirhams. For example, of three dirhams displayed in sequence in *The Cuerdale Hoard and related Viking-Age silver and gold from Britain and Ireland in the British Museum*, two are whole and one is fragmented (see figure 10). Interestingly, only one of these coins is legible enough that it can be identified by ruler, which suggests the other two were used for their value in silver, perhaps prior to Viking use of a coinage economy. Additionally, the fragmented coin shows evidence of being melted, further indicating its value as raw silver (see figure 10, third coin).

Figure 10: Islamic Dirhams from the Cuerdale Hoard (Williams and Archibald 2013, 46; Figure 3.2, 22-24)

Variations in the Coinage of the Cuerdale Hoard

Perhaps the greater significance of these hoards is where they differ in content, as that can shed more light on their contributions to the historical record, especially geographically and chronologically. The Cuerdale hoard contains many more Viking-issued coins than the Vale of York hoard, which is important to the political record because it suggests that rulers established mints in the area inhabited by Cuerdale Vikings sooner than Vale of York ones. While both hoards contain Viking imitations of earlier coins, the Cuerdale hoard also coins Anglo-Viking original mints. Consider first an imitation of a Two-Line coin of Alfred under the name of Orsnaforda (see figure 11). This coin contains a clear inscription of the name of Alfred in the middle of the obverse, with the name of the magistrate divided into two lines: one above and one below Alfred's name. The reverse displays the name of the Viking magistrate, Beornwald, split in two lines in the typical form of this type of coin. Williams (2014, 25-26) says that this type was an imitation of Alfred's rare OHSNAFORDA type, which Vikings changed to

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ORSNAFORDA. Williams says the majority of these, like figure 11, do not display mint signatures, but some were minted in Lincoln and Leicester (Williams 2014, 26). This example, therefore, suggests the presence of original Viking minting in Anglo-Saxon style in Britain during the late 9th and early 10th centuries.

Figure 11: Silver Penny of Alfred under Magistrate Orsnaforda, Viking Imitation (BMC 1838,0710.308)

In addition to this style of imitation, which the Vale of York hoard also possesses, the Cuerdale hoard contains original Viking mints. For example, Aethelstan II commissioned coins in his name while king of East Anglia (see Appendix A). His Two-Line coins contain a cross patee encircled by the inscription "XED EL SAN RE" (rearranged, ED EL SAN REX=Aethelstan Rex=Aethelstan, the King) (see figure 12). The moneyer's name (Guntere) is displayed in a split-line format on the reverse in typical form of this coin type. This type of coin may have been a nod to the coinage of Alfred, who was a contemporary of Aethelstan's. It may also reflect the beginning of Aethelstan's Christianization as reflected through coin due to the Latinized "Rex." The coin even uses his baptismal name, further indicating this influence of Christianity (Williams 2014, 23).

Figure 12: Aethelstan Two-Line Coin; moneyer Guntere (BMC 1838,0710.8)

The Cuerdale hoard also has many more Carolingian coins than the Vale of York hoard, which only contains one coin of this origin. These Carolingian coins of the Cuerdale hoard also present more specific rulers, mint locations, and other archetypal features. This discrepancy between the two hoards is especially surprising considering the Carolingian silver cup that contained the coins of the Vale of York hoard, which would suggest Carolingian influence on those who owned the hoard. It perhaps indicates that the Vikings who buried the Cuerdale hoard had sustained contact with Carolingian peoples long enough to share a coin-based economy with them, and even to create imitations of their coins.[14] Although this is possible, Williams (and Archibald 2013, 49) notes that a more plausible means of transfer of the approximately 1,000 Carolingian coins in the Cuerdale hoard occurred by means of two Viking raids—one among the Western Franks and the other among the Middle Kingdom—which is consistent with the division of the coins into these two groups. Because of this division, raiding was a more likely means of acquiring these coins. The Carolingian artifacts in the Vale of York hoard—only the cup

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[14]   As in the case of derivatives or imitations of Christiana Religio, Louis the Child, Lorraine, and Lambert types.

in which it was buried and a single coin—were likely obtained in a raid rather than economic exchange, especially due to the potential religious significance of the cup, since a vessel for storing the Eucharist would not have been surrendered willingly (Ager 2020, 89-91).

The Cuerdale hoard contains coins minted during the reigns of many more rulers—Carolingian, Anglo-Saxon, Viking, and others alike—than the Vale of York hoard, which comes as no surprise since it is the larger of the hoards by far (see Appendices 1 and 2). Interestingly, of Anglo-Saxon coins, the hoard excludes the earliest type of Alfred's coins, the Lunette. This omission is likely due to the lower silver content of this coin compared to later Alfredian types, which makes sense in a Viking context because Viking economies were originally built upon hacksilver, where direct measurements of silver were critical for economic exchange (Williams and Archibald 2013, 42). Because of this, the earlier Lunette type would not have been of value in bullion exchange. The oldest Anglo-Saxon coin in the hoard was a single Ceolnoth penny (see figure 13). This penny, minted for the Archbishop by Wunhere, displays a portrait of the Archbishop Ceolnoth on the obverse and a Chi Ro on the reverse. It is most likely that this coin was obtained during a raid, as Ceolnoth died the year that Viking raiders went from York to Mercia to East Anglia, upon which "the Danish took the victory, and killed the king and conquered all that land" (Swanton 2000,70). Mention of Ceolnoth's death immediately precedes this quotation, making this the earliest mention of Ceolnoth in conjunction with Vikings. This supports the presumption that the coin was acquired by raid rather than trade. Nonetheless, this coin is indicative of the mixture of pagan and

Christian cultures at this time, which would later influence Viking coins as they became more Christianized.

Figure 13: Ceolnoth Penny from the Cuerdale Hoard (Williams and Archibald 2013, 44; Figure 3.1, 14)

The Cuerdale hoard has many (originally, approximately 1,800) imitations of St. Edmund Memorial coins, while the Vale of York possesses none of these. According to Williams (and Archibald 2013, 43), these imitations were minted by Anglo-Vikings in East Anglia from around 895-910. This type is based on coins of Edmund, who was essentially the last ruler of East Anglia under Anglo-Saxon control. Since his murder by Vikings in 870 was considered a martyrdom, he is venerated as a saint, and his coinage reflects that legacy. Interestingly, the Viking imitations of this type of coin have Frankish moneyers, suggesting that Vikings brought skilled Frankish moneyers in order to start their own coinage system in Britain (Williams and Archibald 2013, 43). The central cross imagery on the obverse of these coins supports the religious significance of the canonization of King Edmund (see figure 14 for examples of original St. Edmund coins, which have been imitated in the way described).

Figure 14: St. Edmund Coins, of the types imitated by the Vikings (Williams and Archibald 2013, 44; Figure 3.1, 19 and 20)

Whether the Vikings recognized this religious significance and minted these coins for that reason is debatable. Perhaps this coin type was a demonstration of power on behalf of the Vikings who had just taken over East Anglia. More plausibly, however, due to the sheer number of these coins in the Cuerdale hoard, the Vikings imitated these St. Edmund coins as they transitioned from a raw silver economy to minting coins of their own design. This is also supported by the Vikings' use of Frankish moneyers in these imitations, as these moneyers would have been able to teach the new East Anglian rulers to mint coins of their own.

Williams (and Archibald 2013, 43) also notes that coins of the northern Danelaw were originally misattributed as Frankish. However, they were minted in York, distributed in this and other hoards throughout the region, and were created for rulers of Scandinavian descent, suggesting that they were from Northumbria while it was under Viking control. Frankish influence to this extent lends further support to the possibility that Viking moneyers were taught by Frankish ones to mint their own coins with

descriptions unique to them, which appear among these coins of the northern Danelaw. Based on Williams' (and Archibald 2013, 43) analysis, these coins display an image of a cross surrounded by an inscription that varies by ruler, primarily Siefred or Cnut. The British Museum contains several examples of both rulers' coins in this series from the Cuerdale hoard. Perhaps most notable are two photographed coins of Siefred bearing inscriptions (see figure 15).

Figure 15: Siefred Coins of the Northern Danelaw, minted in York, from the Cuerdale Hoard (BMC nos. 1838,0710.1237 and 1838,0710.1256, respectively)

One sees on the obverse of the first (leftmost) coin the Latinized inscription "SIEFREDVS REX" (Siefred, the King), with a similar yet abbreviated inscription on the second. Siefred may have had his name Latinized on these coins to portray any number of ideal characteristics about his mode of rulership, but two scenarios are likely. First, he desired to portray himself as a classical ruler possessing power akin to that of Rome, which would make sense in the time of Holy Roman Emperors. Siefred's coinage bears distinct similarities to an issue of Charlemagne's which was produced in Pavia, Italy, likely while he was Emperor of both Franks and Romans (see figure 16).

Figure 16: Charlemagne Coin of 768-814 Production in Pavia, Italy (BMC 1855,0612.492)

Second, Siefred desired to designate, at least publicly, a connection with the Catholic Church. The Christianization hypothesis becomes more likely when the inscription is considered in conjunction with the cross motif on the coins, which appears centrally on the obverse and reverse of both coins here (see figure 15). When one considers the cross and the Latin inscription, it is more plausible that Siefred sought to display himself as an outwardly Christian ruler of the region. His motives for doing so remain up for discussion. These coins were minted between 894 and 898, while a later issue of Siefred coins was minted in 900, suggesting Siefred introduced multiple coin series.[15]

Another unique feature of the Cuerdale hoard is its one Byzantine coin, a hyperperon of Heraclius and Heraclius Constantine (see figure 17). This coin was acquired by the British Museum in the collection given to William Assheton in the initial dispersal of the coins.[16] The presence of this rare issue in the remainder of the coins could indicate that either this coin was rarely encountered by Vikings because the locations of their common routes of trading and raiding were farther west or those who

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[15]   Years from British Museum Collection descriptions.

[16]   Evidenced by its listing in the Assheton Family Collection in Graham-Campbell 2013.

initially claimed some of the coins in the hoard recognized this type as rare and took the rest. The most likely case is a combination of both theories, since the coin was likely rarely encountered by Vikings, but the hoard's lack of more coins of this type does not necessarily indicate that there were many more at another time. Its presence in the hoard is, however, invaluable to the economic historical record because it suggests that Vikings ventured as far east as Anatolia for economic exchange, because they likely would not have traveled as far for the sole purpose of raiding.

Figure 17: Silver Hyperperon of Heraclius and Heraclius Constantine (Williams and Archibald 2013, 44; Figure 3.2.21)

Finally, the Cuerdale hoard contains a single papal coin of Pope Benedict IV (BMC 1838,0710.1223). The significance of this coin is twofold. First, it indicates contact with Rome. Second, it was produced between 900 and 903, indicating that this cultural contact between the group that buried the Cuerdale hoard and Rome had to occur in the five years leading up to its deposition, especially because it was minted in Rome.

Variations in the Coinage of the Vale of York Hoard

While the Cuerdale hoard is comprised of coins of a litany of rulers, the Vale of York hoard is comprised primarily of coins of Alfred, Edward the Elder, and Athelstan.[17] This specific list of rulers enables the Vale of York hoard to pick up a later chronology of coins than the Cuerdale hoard, especially due to its coins from the reign of Athelstan, which began around 924/925. It contains 51 coins minted during the reign of Alfred, who initiated numerous coinage reforms.[18] Mark Blackburn (2003, 199) discusses these reforms, suggesting that Alfred began to restore the purity of metals used in coins and add mints within the first ten years of his reign, reflected in the variety of the mint locations of the coins of Alfred from both hoards (see Appendices 1 and 2). While the Vale of York hoard contains significantly less of these coins than the Cuerdale hoard, they are nonetheless important to this hoard because they mark the beginning of its Anglo-Saxon coins chronologically. The Vale of York hoard's 402 coins of Edward the Elder suggest his quick dissemination of his own coinage following the reign of Alfred. Finally, the Vale of York hoard contains over 100 coins of Athelstan. This is hugely significant because it was deposited within three to five years of the start of his reign, suggesting a swift circulation of his coins. The chronology provided by the Vale of York's concentration of the coins of these three rulers, then, suggests that their coinage styles were widely accepted within years of their assumption of power. This hoard contributes this concentration to the less concentrated chronology of the Cuerdale hoard when the two are compared.

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[17]   See Appendix B.

[18]   All numbers based on Ager and Williams' "Preliminary Catalogue…" (2011).

The Vale of York has a single St. Martin Sword and Cross coin, produced in Lincoln (see figure 18). This coin, with its combination of sword and cross imagery combined with the affiliation with a saint, could indicate the presence of religious syncretism in Northumbria by the time the coin was minted (between 921 and 927) according to Ager and Williams (2011). The prominence of the sword imagery on the side with the name could also be a symbol of rulership, of someone attempting to establish an image as a strong military ruler for posterity. Another likely interpretation is that the use of the sword has certain religious imagery, like the rather common Sword St. Peter type; however, Williams (2011, 149) notes that this type of coin differs from the St. Peter coins in reverse design, mint location, and rarity, so the possibility of syncretism is not to be ruled out.

Figure 18: St. Martin Sword/Cross Coin from the Vale of York Hoard (BMC 2009,4133.670)

The sword trope seen in the St. Martin coin continues with the presence of a singular coin under the mint name of rORIVACASTR, also from the Vale of York hoard

(see figure 19). The name, while unusual, points to a mint location of Rochester by best approximation of researchers at the British Museum. This coin differs from the St. Martin coin because, while the sword is still the central image on the issue, the cross appears twice and more distinctly, while it is not a very clear image on the St. Martin issue.

Figure 19: rORIVACASTR Sword/Cross Coin from the Vale of York Hoard (BMC 2009,4133.671)

This could, perhaps, indicate a greater influence of Christianity in Rochester, which would have had more Roman Catholic influence at this time, being closer to Canterbury than Lincoln (see figure 20). Williams' (2011, 149) suggestion that Rochester was a former Roman fortress occupied by Vikings in 893 also lends support to this argument. The rORIVACASTR coin differs more significantly from the St. Martin coin because of the presence of religious syncretism in Rochester. It may also have been included for ideological purposes, as Thor, symbolized by the hammer, was an important figure for Vikings even once they encountered Christianity. This ideological significance becomes more likely when considered in conjunction with the name of the moneyer, Otard. While

his inscription is not pictured in the British Museum Collection, Williams (2011, 149) notes that this is the name of a Germanic moneyer. The presence of Thor's hammer, then, would have perhaps been carried over to Rochester in the style of Otard. Wiliams (2014, 34) also suggests that this coin may have been influenced by the Sword St. Peter type.

Figure 20: Map of Anglo-Saxon Kingdoms ca. 805
(https://www.medievalchronicles.com/medieval-history/medieval-history-periods/anglo-saxons/anglo-saxon-kingdoms/)

Interestingly, the Vale of York hoard has no coins of Aethelstan II, although he was a contemporary of Alfred, whose coins are well-represented in the hoard. Perhaps this can shed light on the political background of the hoard, as it suggests the owner of the Vale of York hoard did not have contact with the kingdom of Aethelstan II. Along this vein, the Cuerdale hoard has more from the earlier rulers, which calls into question

why the Vale of York hoard had mostly coins made within decades of its burial. Perhaps this indicates less trade within the group that owned the Vale of York hoard. It could also indicate that the Vikings who owned this hoard settled Britain later and were less well-traveled than those who owned the Cuerdale hoard.

The Vale of York hoard contains many more Edward the Elder coins, greater than half of its coins, than the Cuerdale hoard. One of these types of Edward the Elder coins contained by the Vale of York hoard that differentiates it from Edward the Elder coins of the Cuerdale hoard is the Rose series (see figure 21). The obverse of this coin features an ornate floral design in the center surrounded by the inscription "EADVVEARDREX" ("Edward Rex"=Edward, the King). The design of this series appears to primarily function as ornamentation, likely of a sort of symbol Edward chose to represent himself, like a crest.

Figure 21: Silver Penny, Edward the Elder Rose Series, from the Vale of York Hoard
(BMC 2009,4133.182)

The Vale of York hoard also contains many Two-Line coins of Edward the Elder (see figure 22). While the reverses are not depicted or moneyers listed, this type of coin undoubtedly does not differ from the numerous other Two-Line series under consideration. The obverse of this sort of coin depicts a cross patee encircled by the same inscription as that of the Rose issue.

Figure 22: Silver Penny, Edward the Elder Two-Line Series (BMC 2009,4133.487)

Additionally, the Vale of York hoard contains coins from the reign of Athelstan, which began after the burial of the Cuerdale hoard (approximately 924/5-939). At this point chronologically, the Vale of York hoard begins to contribute to the numismatic record in the way that the Cuerdale hoard cannot, which adds to its political significance in comparison. It has Athelstan coins of the Two-Line, Bust, Church, and Rex Totius Britanniae ("King of All the Britons") issues. Consider an example of Athelstan's Rex Totius Britanniae coin (see figure 23). The obverse, the only side pictured by the British Museum Collection, has a cross patee in the middle encircled by the inscription

"EĐELSTANREXTOBRIE," or "Athelstan, Rex Totius Britanniae." As the inscription and the mentions of raiding and alliances from *The Anglo-Saxon Chronicles* suggest, Athelstan sought to expand his control to multiple kingdoms, perhaps as part of a unification strategy. He was, however, unsuccessful in unifying all the kingdoms, which is indicated by future raiding (i.e. the Battle of Brunanburh).

Figure 23: Silver Penny, Athelstan Rex Totius Britanniae Series, Minted in either Leicester or Chester (BMC 2009,4133.639)

It is intriguing that, while the Cuerdale hoard contains coins from three of the Archbishops of Canterbury during the ninth century, the Vale of York only has those of Archbishop Plegmund, the near contemporary of the hoard's deposit date. Conversely, the Cuerdale boasts coins of Archbishops Ceolnoth, Aethelred, and Plegmund, successively. Additionally, of the coins of the one Archbishop represented in both, the Vale of York contains significantly fewer (see Appendices 1 and 2). Similar to the Vale of York's lack of coins from Aethelstan II, this could show that the owner of the hoard was less well-traveled when compared to that of the Cuerdale hoard. It also suggests that

the store of wealth of the Vale of York hoard was much newer prior to its deposition than the Cuerdale hoard. This would explain why the Vale of York hoard has coins from less rulers than the Cuerdale hoard.

Conclusions

The coinage of the Cuerdale and Vale of York hoards is first important to study because it offers precise deposition dates for the hoards, c. 905 and 927-929, respectively. The knowledge of these dates makes coin hoards such as these useful to historians as well as archaeologists because they can supplement written sources to give a better understanding of the politics of a region over time. While the Cuerdale hoard contains many more Viking-issued coins than the Vale of York hoard, the Vale of York hoard's significance in essentially continuing the Anglo-Saxon chronology of the Cuerdale hoard cannot be understated, especially since the dates of the hoards are so close together. The Cuerdale hoard also contains coins of more rulers, as well as a greater variety of coins from farther away. This suggests that the Vale of York hoard was both a younger hoard than the Cuerdale hoard at the time of its deposition, that the individual who buried it was perhaps less well-traveled than the owner of the Cuerdale hoard, and that the Vale of York hoard was perhaps a more local collection than the Cuerdale hoard. In each of these ways, then, the coins of the Cuerdale and Vale of York hoards contribute to their respective political contexts.

CHAPTER FOUR

The Non-Numismatic Metal of the Cuerdale and Vale of York Hoards: Contextualizing

Hoards through Silver

In addition to their coins, both the Cuerdale and Vale of York hoards contain

numerous metal artifacts, consistent with their character as Viking hoards (see

Appendices 3 and 4). Both hoards are comprised of whole and fragmented metal artifacts,

which, combined with coins, make them part of the mixed bullion economy of Britain in

the Danelaw during the Viking Age. This chapter will cover commonalities and

anomalies in the non-numismatic metal of the Cuerdale and Vale of York hoards. It will

then establish the contributions of both hoards to the mixed economy of the Viking Age

in Britain. By analyzing the non-numismatic metal of the Cuerdale and Vale of York

hoards, two of the largest Viking hoards in Britain, one gains insight into this mixed

nature of the economy during the Viking Age. In addition, the non-numismatic metal

adds greater context to the coins for the types of individuals who may have owned these

hoards, both of whom were of very high status and had likely obtained silver from

Ireland.[19] Overall, however, the non-numismatic metal of the hoards reveals that they

have vastly different contexts, providing background for the deposition locations of both

hoards and the ownership of the Vale of York hoard.

Hacksilver: Use, Testing, and Significance

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[19]   See Nebiolini 2020 and Williams 2008.

Hacksilver is a blanket term encompassing silver utilized in transactions for its value in raw silver rather than its value as an item. John Sheehan (1995, 22) offers the rather simple explanation of "cut up pieces of ingots and ornaments." Sheehan (1995, 22) elaborates further:

> in a metal-weight economy a silver ornament was viewed ultimately as no more than a piece of bullion and was liable, when necessity required, to be cut up into pieces for payments to be made. Thus a status object, like an armring or a brooch, could be readily transformed to serve mercantile interests.

The hacksilver of both hoards contains many testing nicks, indicative of the value of pure metals to Vikings in their economic exchanges. Consider the example of King Oláf and Queen Sigríth from the *Saga of Oláf Tryggvason* from *Heimskringsla*, to which Ager (2011, 133) alludes in his preliminary discussion of the Vale of York haord. In order to seal the engagement of the two monarchs, "King Oláf sent Queen Sigríth the large gold [arm] ring which he had taken from the temple gate at Hlathir. It was considered a splendid possession" (Sturluson 1977, 200). The queen's smiths, however, inspect the ring, resulting in problems for Oláf: "They said that the ring was counterfeit. Then she had the ring broken in two, and there was seen to be copper inside it. Then the queen was furious and said that Oláf would defraud her in more things than that" (Sturluson 1977, 200). This fraudulent ring began a series of events resulting in the failure of the two to go through with the marriage. This example suggests, then, the importance of pure metals to an economic and ideological system based on honor such as that of the Vikings. Kruse and Graham-Campbell (2013, 78-79) note that nicking was not used in the British Isles prior to the Viking Age, but that most of the silver (both numismatic and non-numismatic) in the Cuerdale hoard was nicked to test for quality. This further underscores the importance of verifying the purity of metals to the Vikings because their system

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spread with them to new areas. Consider, for example, the ingot with the most nicks in the Cuerdale hoard (see figure 24).

Figure 24: Ingot with the most testing nicks from the Cuerdale Hoard (BMC 1841,0711.252)

It was hacked from a Hiberno-Scandinavian arm ring, and it was designed with a circular stamping technique. This fragment has forty-eight total nicks, many of which are clearly visible from the British Museum Collection's image along the edges of the silver, which appear rugged from the nicks (see figure 24).

Features of the Hacksilver of Both Hoards

Both the Cuerdale and Vale of York hoards contain fragments of silver arm rings in the Permian style. The Vale of York hoard contains a clear example of this type of ring, twisted down most of its length in a rope-like fashion (see figure 25.1).

Figure 25.1: Vale of York Permian Arm Ring Fragment (BMC 2009,8023.17)

Ager (2011, 131-132) notes that these arm rings, dating to the ninth and early tenth centuries, are characterized by polyhedral terminals, of which the Cuerdale hoard has a couple of examples (see figures 25.2 and 25.3). Ager (2011, 132) suggests that this type of ring was most likely of North Russian design, created with a standard weight of 100 grams from a uniform number of dirhams. They were then fashioned into arm rings by Vikings through coiling. Rings of this type found in Britain, such as those discussed here, likely made their way to Britain through the Irish Sea. Ager (2011, 132) seems to claim this route because of the Vikings' use of these Permian arm rings for trading. This means of acquiring these arm rings would also support the claim of Sheehan (1995, 22) that the Cuerdale silver came from Vikings who were forced out of Ireland and of Nebiolini (2020) that the Vale of York hoard is part of a network of hoards connecting the silver of Ireland to the silver of York during the Viking Age. It is worth noting, however, that the designs of this type from the Vale of York hoard differ greatly from those of the Cuerdale hoard.

The fragment from the Vale of York is a piece of the length of an arm ring, while those form the Cuerdale hoard display pieces of the knobs of the rings. The first of these from the Cuerdale hoard (figure 25.2) displays a piece of a rod ending in one such knob. The second (figure 25.3) is itself a fragment of a knob. This second example is ornately decorated, with circular designs punched into larger triangular ones. The Cuerdale hoard's Permian arm ring fragments also differ from that of the Vale of York due to their more weathered (or, in the case of figure 25.2, tarnished) appearance. This is likely due to the more secure method of burial of the Vale of York hoard, as the Carolingian cup that contained the hoard would have provided some protection from the elements for the objects.

Figures 25.2 and 25.3: Cuerdale Hoard Examples of Permian Arm Ring Fragments (BMC nos. 1841,0711.523 and 1841,0711.441)

These Permian arm ring examples from both hoards suggest that, while Viking hoards contain silver hacked from similar artifacts, Vikings valued the silver content of the rings more than their appearance. Each of the three examples considered here is ornately decorated, but each displays a different pattern and comprises a different part of the ring. This trend should continue in other metal artifacts shared by both hoards, which will further indicate the value Vikings placed on silver in a mixed economy in Britain during the Viking Age.

The majority of the non-numismatic metal of both hoards is whole or fragmented silver ingots, of varying sizes, shapes, and metal compositions (Ager 2011, 132-133; Kruse and Graham-Campbell 2013, 73). Kruse and Graham-Campbell (2013, 73) offer the following definition of ingot when used for the purposes of analyzing Viking hoards: "gold and silver being stored, for whatever eventual purpose, in a form that had no immediate function as a piece of jewellery (and different from coin)." As this definition suggests, 'ingot' is a broad term for metal artifacts that cannot be clearly defined in other ways and whose function is often practical. The Cuerdale hoard contains 363 ingots (remaining), and the Vale of York has 33 ingots (Kruse and Graham-Campbell 2013, 73; Ager 2011). This significant difference suggests that those who buried the Cuerdale hoard both worked with more silver and engaged in more silver production.

Several features of the ingots of both hoards are worth noting because of both their variety and the ease of transaction they facilitate. Complete ingots comprise the majority of the Cuerdale hoard's non-numismatic silver (Kruse and Graham-Campbell 2013, 75). This method of silver storage suggests that the economy of the Vikings was practical, as ingots could then be hammered and hacked according to the necessary weight for a transaction.[20] The overall plainness of ingots also lends itself to this practicality in economic exchange, as they were seldom ornately crafted like coins, brooches, arm rings, and other forms of silver; rather, they were molded, often using sand as a mold for its cheapness and availability (Kruse and Graham-Campbell 2013, 81). The practicality of this method indicates that the Vikings who were creating ingots were

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[20] Kruse and Graham-Campbell (2013, 78) suggest that ingots may have been hammered for storage or in order to make hacking easier, as this technique would have made pure silver much less difficult to break.

likely not yet established in stationery settlements due to the ease of transport ingots

facilitated. The ingots of both hoards vary in shape and size, likely owing both to the

difference in methods of creation and to the use of ingots in the exchange of hacksilver.

One such shape is an ovoid shape from the Cuerdale hoard (see figure 26). This ingot is

of a circular shape and was hammered flat, perhaps for ease of transport and use. It

appears as a pre-coin mode of monetary exchange because of its size and shape.

Figure 26: Ovoid-shaped ingot from the Cuerdale Hoard (BMC 1841,0711.210)

Another ingot from the Cuerdale hoard takes the form of the hacked end of an oblong

silver ingot (see figure 27). This fragment has a very distinct knife mark from a nick on

the top, along with six others elsewhere. It is rounded on the non-hacked end.

Figure 27: Terminal End Hacked from an Oblong Ingot of the Cuerdale Hoard (BMC 1841,0711.114)

In addition to a terminal being hacked from an ingot and distributed as a terminal, both terminals could be removed and the center of the ingot used in economic exchange, such as an example from the Vale of York hoard (see figure 28). This ingot fragment has several testing nicks on the edges. Additionally, it features imperfections in the otherwise flat, smooth surface, perhaps indicative of the method by which it was molded.

Figure 28: Vale of York Midsection of Flattened Ingot (BMC 2009,8023.29)

Yet another shape from the Vale of York hoard is a long, whole silver ingot with rounded ends and of trapezoidal shape (see figure 29). This ingot features several nicks along its length of 132.70 mm.

Figure 29: Vale of York Large Ingot (BMC 2009,8023.26)

While this ingot is rectangularly shaped, another long ingot (86.10 mm) from this hoard

is rounded, reflecting a difference in casting techniques (see figure 30).

Figure 30: Vale of York Long, Rounded Ingot (BMC 2009,8023.25)

Due to their variety of sizes, shapes, and styles, ingots clearly illustrate the

practicality of the weight-based silver exchanges conducted by the Vikings prior to their

minting of state coins. This variety (illustrated by the examples from both hoards; figures

22-26) suggests the practicality of ingots because they could be fashioned using the

materials available, with little to no requirements other than the presence of the proper

value of silver. The Vikings' creation of ingots created an easy method of transporting silver, which they carried with them also in their voyages outside of continental Europe.

The Cuerdale Metal: Unique Ingots, Flanges, Images from Nature, and Irish Silver

Much of the non-numismatic metal contained in the Cuerdale hoard also takes the form of ingots. Since there is a much larger quantity of ingots in the Cuerdale hoard than in the Vale of York hoard, it is unsurprising that its ingots have more variety as a group. Several types stand out as especially unique. Interestingly, of the ingots in the Cuerdale hoard, five have impressions of textiles (Kruse and Graham-Campbell 2013, 82; see figure 31). The oblong ingot in Figure 31 features a clear textile impression down the length of one of its sides demarcated by the recurring pattern. This impression was made at some stage in the production of the ingot, and it could be a marker of the producer of this type of ingot. It could also indicate, however, that the ingot was molded inside of a piece of fabric. This ingot was also, interestingly, nicked more than most others, as most had less than five nicks, while this displays thirteen (Kruse and Graham-Campbell 2013, 79). Perhaps this high rate of nicking indicates that the pattern from the textile casts doubt on the purity of the silver of this ingot, although it could merely indicate greater use in exchange overtime.

Figure 31: Cuerdale Oblong Silver Ingot with Textile Impression (BMC 1841,0711.38)

Several of the ingots in the Cuerdale hoard are much smaller than those of the Vale of York hoard. For example, one small ingot, classified as a "droplet," is 6 mm in diameter (see figure 32). This size in conjunction with its roundness differentiates it from most other ingots (BMC 1841,0711.84).

Figure 32: Cuerdale Ingot Droplet (BMC 1841,0711.84)

Another small ingot in the Cuerdale hoard is an "ovoid ingot" of 5 mm (length) by 4 mm (width). This ingot is almost too small to describe beyond its oval shape (see figure 33; BMC 1841,0711.86).

Figure 33: Cuerdale Ovoid Ingot (BMC 1841,0711.86)

Interestingly, neither the droplet ingot nor the ovoid ingot is designated as hacksilver, indicating that both were intentionally molded, which calls their purpose into question. Since neither ingot (or others like them) was of a significant weight, both significantly less than a gram, one may ask how practical they would have been for transactional purposes. The British Museum designates droplet ingots from other hoards as "casting waste," but these had no such designation. Perhaps they served a similar purpose to modern cents.

An additional difference in the ingots of the Cuerdale hoard from those in the Vale of York hoard is that they were occasionally decorated. One such decorated ingot features a row of circular punches across the horizontal midline of the ingot (see figure 34; BMC 1841,0711.133). While the purpose of these marks is unclear, it is likely that they symbolized either status or ownership. Perhaps they were a sort of signature, like later mint signatures. Whatever the case, these markings are significant as very atypical among ingots, which are usually only plainly decorated.

Figure 34: Cuerdale Decorated Ingot (BMC 1841,0711.133)

Finally, the ingots of the Cuerdale hoard are unique because they sometimes contain flanges. The entry for one silver oblong ingot offers the following definition of a flange: "the grafment has a large triangular flange at one end, caused by silver overflowing from the casting mould (flashing)" (BMC 1841,0711.144). This ingot, both terminals of which have been hacked, has a large triangular projection from one of its sides, which, as the definition indicates, resulted from a casting imperfection (see figure 35).

Figure 35: Cuerdale Oblong Ingot with Large Triangular Flange (BMC 1841,0711.144)

Another ingot has a large flange at one terminal to both sides, giving it an almost minnow-like appearance (see figure 36). This ingot perhaps reflects a large error of the cast. Such flanges likely occur in the ingots of the Cuerdale hoard and not among those of the Vale of York hoard simply due to its much larger size, which presents more room for both variation and error.

Figure 36: Cuerdale Whole Ingot with Large Flange (BMC 1841,0711.40)

The silver of the Cuerdale hoard also differs from that of the Vale of York hoard due to the presence of animals depicted in its hacksilver. One example is a part of the hoop of a brooch from this hoard which has dragon-like terminals (BMC 1841,0711.433). This artistic style again supports the claim that the owner(s) of the Cuerdale hoard produced more silver than the owner of the Vale of York hoard, since it demonstrates a skill indicative of practice.

Another unique feature of the Cuerdale hoard's silver is the presence of a double neck ring, made from three pairs of twisted rods. This sort of neck ring, and others like it with less rods, were made of many rods twisted together and then looped to form a ring. The composition of this example, however, is rare because of its use of so many rods. It is also rare because it was preserved almost intact, only split once rather than hacked several times, as was the case with other (Kruse and Graham-Campbell 2013, 90).[21]

The Hiberno-Scandinavian arm ring from Cuerdale hoard is an important distinguishing feature of the Cuerdale hoard because, as Jane Kershaw (2015, 153) notes, this type suggests the specific origin of Dublin for its silver (see figure 37; BMC 1841,0711.252). She says that Hiberno-Scandinavian denotes inhabitants of Ireland with Scandinavian descent, and that their broad-band arm rings such as this were likely produced in Dublin (Kershaw 2015, 153). John Sheehan (1995, 20) expands upon this connection of the Cuerdale hoard with Ireland, stressing the significance of Hiberno-Scandinavian silver in one of the largest Viking hoards ever found. He also notes that the presence of Irish silver in this hoard can provide invaluable historical context, tying the presence of this silver "with the period of unrest surrounding the expulsion of the Vikings

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[21] Because it was part of the Assheton Collection, no clear British Museum photograph of this neck ring is available. It is still listed here due to its importance as a rarity.

form Dublin in 902" (Sheehan 1995, 22). It is likely no coincidence, then, that the Cuerdale hoard was found along a river feeding into the Irish Sea (see figure 37; Kershaw 2015, 152). In this way, the presence of Hiberno-Scandinavian silver in this hoard indicates a connection with forced migration of Vikings from Ireland, suggesting the owner of the Cuerdale hoard was among them.
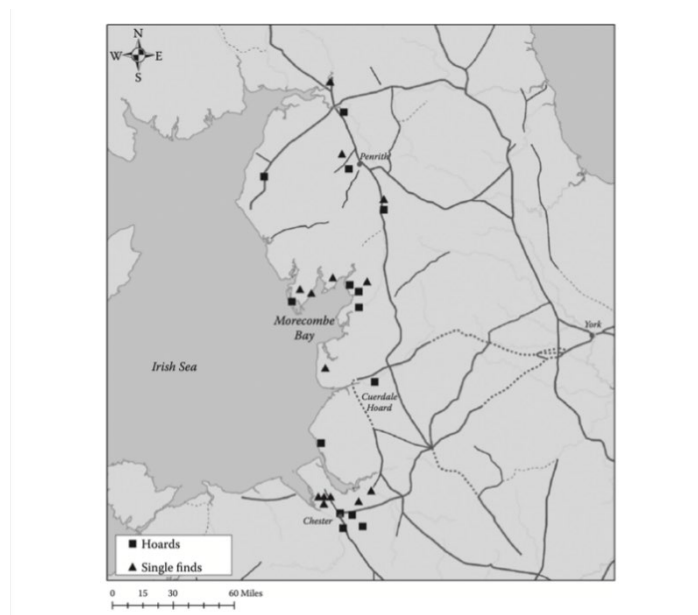
Figure 37: Map of the Deposition Site of the Cuerdale Hoard (Kershaw 2015, 152)

The Vale of York Metal: The Presence of Gold and Uniqueness of Fragmentation

The metal of the Vale of York hoard is unique because it contains a gold artifact. This gold artifact is an important indicator of the status of the owner of the hoard. The Vale of York hoard contains one complete gold arm ring, crafted in a traditional Viking style and like those of other Viking hoards of the tenth and eleventh centuries. This sort of ring was typically worn by men and was the type that Viking kings distributed to members of their retinues (Ager 2011, 127-128). The gold ring of the Vale of York hoard is a flat band with a somewhat complex loop closure. By way of design, it features a

series of X's punched in a row around the outside of the length of the otherwise plain, flattened band (see figure 38).

Figure 38: Vale of York Gold Arm Ring (BMC 2009,8023.2)

This gold ring is perhaps a key indication of the status of the owner of the Vale of York hoard, as it most likely indicates that he was an individual of high status who fought for a king. The Icelandic sagas contain much evidence of gold rings symbolizing power for kings. For example, consider the ring of King Helgi in *The Saga of King Hrolf Kraki*, hailed as "a widely famed treasure" (Anonymous 1999, 16). His brother, King Hroar, agrees to grant King Helgi authority over part of his kingdom in Northumbria due to his great kingship in exchange for this ring, to which his brother agrees (Anonymous 1999, 16). As this example suggests, these rings were owned and bestowed by kings to confer honor to the beholder or to seal exchanges of power and land ownership. This is perhaps also consistent with theories of why the hoard was never retrieved, as a warrior would have secured his wealth prior to leaving for a battle from which he never returned (Ager 2011, 133).

Ager (2011, 128-129) also notes that the Vale of York hoard contains no complete brooches, which indicates that the owner was generous in his distribution of wealth in this form, the brooches were utilized in hacksilver, or perhaps a combination of both. Among the fragments it does contain, however, are several of bossed penannular style. Interestingly, most of the fragments of brooches in the Vale of York hoard are Celtic in origin—five out of seven or eight fragments total. These Celtic brooch fragments suggest that the owner of the Vale of York hoard maintained a trade relationship with the Celtic peoples of northern Britain. The hacking of Celtic brooches with greater frequency than Viking ones perhaps indicates that brooches of outside groups, while valuable for their silver content, were not as valuable to Vikings as an adornment, which raises interesting questions about political distinctions among groups in power in Britain at this time. One of these fragments of Celtic brooches is the single find of a pin and chain. This piece of hacksilver depicts a simple hinged pin connected by a chain to a bead. Researchers surmise it was originally linked to another brooch by another chain at the loop of the bead of the terminal (see figure 39; BMC 2009,8023.9).

Figure 39: Vale of York Brooch Pin and Chain (BMC 2009,8023.9)

Further, the Vale of York hoard contains a silver sheet that was cut from a piece of jewelry (possibly another brooch) and bossed twice (see figure 40). It features several nicks, on the bossed portions, the flat portions, and the edges. This fragment was also roughly hewn from its original source, one of the factors which makes its origin difficult to ascertain.

Figure 40: Vale of York Bossed Penannular Brooch Fragment (BBMC 2009,8023.10)

The hoard also contains a set of pin fragments that researchers believe fit together as one pin (see figure 41). One (the top artifact depicted in figure 41) is a plain pin head with a looped end. The other (the bottom artifact depicted in figure 41) is a plain, flattened piece of silver folded in the shape of tweezers with the etched pattern of Z's on the interior of the fold. Both are thought to be of Celtic influence and part of a bossed penannular brooch.

Figure 41: Vale of York Brooch Pin Fragments (BMC 2009,8023.11 and 2009,8023.12)

Finally, the Vale of York hoard contains a fragment from the end of a ball-type penannular brooch (see figure 42). It has a spherical shape with a protruding portion of hollow rod, which would have connected to the rest of the brooch. This brooch is also Celtic in origin. While the Cuerdale hoard also contains several examples of brooch or silver fragments of Celtic influence, these brooch fragments from the Vale of York hoard reflect not just pieces of the craftsmanship of the brooches (i.e. the bosses, etc.) but also of the pins used to close the brooches. These fragments of pieces of brooches with practical uses suggest that the Vale of York hoard was still situated during a mixed

economy when the Vikings who owned it recognized silver for its value in monetary exchanges rather than just its artistry. For this reason, these fragments are critical.

Figure 42: Vale of York Ball-Type Penannular Brooch Fragment (BMC 2009,8023.6)

Additionally, this hoard contains several silver arm rings, which would have been used in the mixed bullion economy as hacksilver when fragmented and as status symbols when intact (Ager 2011, 130). Consider, for example the whole arm ring in figure 43 that likely would have been worn to show status. This ring is made of two plain, twisted rods, which create a spiral design. While it is whole, it interestingly displays at least one clear nick, which could indicate its use in a transaction. Perhaps, however, the bestowed integrity of the bestower in this way as in the case of Queen Sigríth (Sturluson 1977, 200).

Figure 43: Vale of York Whole Silver Arm Ring (BMC 2009,8023.18)

This hoard also presents some examples of arm rings used as hacksilver that are almost whole. One such nearly whole arm ring is a simple silver rod arm ring that is folded such that the ends overlap (see figure 44). Researchers of the British Museum note that this arm ring was likely knotted, and the knot was removed when the arm ring was repurposed as hacksilver.

Figure 44: Vale of York Nearly Whole Hacksilver Arm Ring (BMC 2009,8023.20)

Conclusions

The Cuerdale hoard presents a more thorough overview of the metal of the Viking Age, used as hacksilver and otherwise, than the Vale of York hoard because of its size.

This by no means indicates, however, that the metal of the Vale of York hoard lacks importance. The presence of the gold ring in the Vale of York hoard is especially significant to its non-numismatic metal, and it could suggest that the owner of this hoard was of higher status than that of the Cuerdale hoard. However, perhaps gold is only missing from the Cuerdale hoard due to the initial dissemination of its artifacts, as researchers (Williams and Archibald 2013, 39-40) have suggested that these individuals were aware of the value of the hoard's artifacts. While the political significance of the Vale of York hoard is more clearly glimpsed through its coins due to its clear chronology from Alfred to Athelstan, the situation of the Cuerdale hoard lies in its location and the origin of its silver. Researchers (Sheehan 1995, Kershaw 2015) suggest this indicates its ties to political turmoil faced by Vikings in Ireland. This turmoil resulted in the relocation of Vikings to an area in northern Britain near a river connecting to the Irish Sea, where they eventually deposited the Cuerdale hoard (see figure 37).

When glimpsed through a political context, the hacksilver overall shows that the individuals or groups who buried these two large Viking coin-dated hoards were likely of high status. This, in conjunction with the locations and contexts of the hoards, suggests that they would have buried large stores of wealth for protection prior to heading into battle in a power struggle, of which there were many in Viking-Age Britain.

CHAPTER FIVE

Conclusion

When considering the context of the burial of Viking hoards, there are several possible reasons for deposition. First, hoards could be assembled and buried with someone as a votive deposit of wealth for their use in the afterlife in "the Age of Sepulchral Mounds" to which Snorri Sturluson alludes in *Heimskringla* (Sturluson 1977, 3-4). Another possibility, especially in Gotland, is that hoards were assembled as bridewealth and presented to the parents of a bride prior to a marriage, who then buried the hoards of wealth under floorboards for safe keeping (Burström 1993). Third, hoards could be buried to protect wealth in times of political upheaval. I argue that this third possibility was the case with both the Cuerdale and Vale of York hoards.

Since the Cuerdale and Vale of York hoards possess much wealth, were not buried in significant locations in terms of Viking-Age settlement of Britain, and are buried at similar times to known political conflicts between Anglo-Saxons and Vikings, it is best to analyze them in terms of their political contexts in order to glimpse their contributions to the Viking Age. The coins in both hoards establish a definitive timeline of rulers, while the non-numismatic metal helps establish the origins of both silver and the owners of the hoards. In this way, the coins and non-numismatic metal of the Cuerdale and Vale of York hoards can supplement the historical record of the Viking Age, and they are both suggestive of the burial of large Viking coin hoards for the purpose of protection of wealth in times of battle.

Based on the objects, the Cuerdale hoard has a geographical association with Ireland (Sheehan 1995; Kershaw 2015). Its burial by the Ribble River suggests it may have been buried as Vikings were in transit between locations, perhaps towards or away from battle. The Cuerdale hoard's burial by a river (see figure 37; Kershaw 2015) perhaps suggests that this hoard was buried rapidly as a warrior, or group of warriors based on the size of the hoard, began the voyage to participate in battle. The suggested timeline of the hoard could align with participation in the Battle of Tettenhall, although it could also indicate participation in a smaller battle. Whatever the case, such a large store of wealth—nearly 7,500 coins and hundreds of pieces of raw silver—would have been buried for protection prior to conflict in hopes of returning to it. It was never retrieved, further supporting deposition on account of political turmoil.

The coinage of the Vale of York hoard denotes a clear connection with the reign of Athelstan based on its timing and the quantity of his coins, suggesting a possible connection to his raiding campaigns. The burial of the Vale of York hoard in the north of England during the reign of Athelstan (924/5-939) suggests a correlation with the raiding campaigns of this king against the Norse and the Scottish. While the hoard seems to be buried too early for participation in the legendary Battle of Brunanburh, this is not entirely implausible, although more evidence in the future is necessary to corroborate this claim. However, this was not the only raiding account of Athelstan against the Vikings. Early sources cited in twelfth-century accounts suggest that Viking leader Guthfrith attempted to reclaim York from Athelstan around the time of the Vale of York hoard's burial (Williams 2008, 230).

Directions for Future Research

In the study of Viking hoards in Britain, future research ought to be directed towards 1) additional hoards as they are found and 2) better analysis of existing hoards as greater methods for the analysis of metal become available. The discovery of more hoards would allow greater contextualization of extant hoards and could enable hoards to tell more of the story of the history of Britain through the chronology displayed on coins, records of artifacts traded, and where Viking settlements were likely located. More hoards would provide a more complete data set and chronology of hoards. This would also enable hoards as a whole set to be placed into better historical context. Another direction for future research is the application of newer research methods to the analysis of the metal of hoards. For instance, a study conducted by Stephen Merkel (2019, 213) discusses the effectiveness of methods which have been used to analyze the chemical content of silver in Scandinavia, and he contends that newer technological developments may be more effective than older methods such as X-ray fluorescence (XRF), which was used to analyze the Vale of York hoard initially. Due to the multiplicity of sources of silver, it is critical to trace it back to the correct source in order to accurately determine Viking trade and settlement patterns, which is perhaps why Merkel (2019, 207) argues: "An integrated approach that takes into account archaeology, numismatics, archaeometallurgy, and mining history is the only way forward in provenancing Viking Age silver." By establishing firm, chemically determined trade patterns future research into newer analytical chemistry methods for analyzing silver may provide further insights into the political contexts of large hoards such as the Cuerdale and Vale of York Viking Age silver hoards. Application of newer methods like those mentioned by Merkel (2019) would greatly aid the study of these two hoards by allowing further precision of dating of

the hoards. This would, therefore, enable more exact analysis of the Cuerdale and Vale of York hoards in the context of the many power exchanges brought about by battle in Viking-Age Britain, battle which conceivably led to the burial of large hoards such as these.

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APPENDICES

APPENDIX A

A Catalogue of the Coins of the Cuerdale Hoard[22]

British Museum Collection
<u>Anglo-Saxon</u>
- Mint Location: Mercia
  - Ceolwulf II (874-9)
    - Cross-and-Lozenge (N. 429)—2
      - Liafwald—2
    - Name-in-Field (N. 429/1)—1
      - Eanred
- Mint Location: East Anglia
  - Ethelred (c. 870)
    - Temple—1
  - Oswald (c. 870)
    - Letter A/Cross Pattée (N. 480)—1
    - Christiana Religio (N. 480/1)—1
- Mint Location: Wessex
  - Alfred (871-901)
    - Cross-and-Lozenge (N. 629)—9
      - Ciolwulf
      - Dunna
      - Eadelm
      - Eadwulf
      - Ethelmod
      - Lulla
      - Torhtmund
      - Uncertain—2
    - London Monogram, no moneyer (N. 644)—7
    - Late Issue, Mint signed (N. 642)—3
      - Exeter
      - Winchester—2
    - Late Issue, Mint signed (N. 643)—1
      - Gloucester
    - Two-Line (N. 635-7, 639)—217
      - Ælfstan
      - Ælfwald
      - Athelulf—3
      - Aethered—4
      - Beagstan—4
      - Beornmer—2
      - Bernred—7
      - Berhtere—2
      - Bernwald
      - Boga
      - Buga—6

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[22] Data taken from Williams 2013, 282-284.

- Byrnhelm—4
- Cudbehrt—21
- Cuthwulf—4
- Cynewulf
- Dealinc—2
- Dealla—2
- Diarwald—4
- Dudig—3
- Dunna—3
- Dunninc—2
- Eadwald—15
- Ealdwulf
- Ecwulf—14
- Elda—3
- Elfwald—2
- Ethered—4
- Ethelstan—2
- Ethelwine—4
- Ethelwulf—4
- Garwine
- Goda—3
- Guthere
- Heawulf
- Hereferth—7
- Heremod
- Heremund
- Herewulf
- Hunberht—2
- Iudelbard
- Ludig—12
- Lulla
- Oswulf—4
- Samsun—2
- Sigewald
- Simun
- Stefanus
- Tilewine—7
- Tirwald—5
- Wiberht
- Wigbald—5
- Wine—3
- Winig/Winiger—2
- Wulfred—17
- Wynberht—9
  - Two-Line, with Rex Doro inscription (N. 638)—22
    - Birnwald—4
    - Diarwald—9
    - Dunninc—2
    - Eadvald
    - Ethelstan—3
    - Herefreth
    - Hunfreth
    - Tirvald

- Two-Line, cut half-pennies (N. 635-9)—5
- Two-Line, round half-penny (N. 640)—1
  - Cuthberht
- o Edward the Elder (899-924)
  - Bath (N. 654)—1
  - Two-Line, early (N. 649)—22
    - Aethered—4
    - Beornwald
    - Byrnelm
    - Wulfeard—3
    - Wulfred—2
    - Buga
    - Cuthberht
    - Dudig—2
    - Eadwald—3
    - Wynberht
    - Aedelstan
    - Aethelwulf
    - Wulfheard
- o Archbishops of Canterbury
  - Ceolnoth (833-870)
    - Group I, Chi-rho reverse (N. 242)—1
  - Plegmund (890-923)
    - First coinage (N. 253)—31

Viking
- Alfred imitations
  - o Two-Line, Rex Doro (N. 475/1)—48
  - o Two-Line, Rex Doro halfpenny (cf N. 640)—4
  - o Two-Line (N. 475/1)—17
  - o Two-Line, halfpenny (cf N. 640)—7
  - o London Monogram, no moneyer (N. 463)—2
  - o London Monogram, moneyer (N. 463)—18
  - o Halfpenny, London Monogram, no moneyer (N. 466)—1
  - o London Monogram, Lincoln (N. 470)—1
  - o London Monogram, 'Roiseng' (N. 467)—1
  - o Oxford, Orsnaforda (N. 472)—34
  - o Oxford (N. 473)—1
  - o Oxford, halfpenny (N. 474)—1
  - o Alfred/St. Edmund Memorial mule (N. 484)—2
  - o Alfred Two-Line/Cnut mule (not in North)—1
- East Anglia
  - o Athelstan II/Guthrum (880-90)
    - Two-Line type (N. 479)—17
      - Aelven
      - Bericbe
      - Berter—2
      - Ciolwulf
      - Ecgwulf
      - Edelgar
      - Elda—4
      - Enondas
      - Guntere—2
      - Iudelberd—2
      - Iudoel

- o St. Edmund Memorial coinage (N. 483)—595
  - Abbonel—20
  - Adalbert—48
  - Adiret—2
  - Adradus—40
  - Albert
  - Alus
  - Ansiger—27
  - Aoedinvivm (?)
  - Arus—10
  - Asten
  - Bado—5
  - Bascic
  - Beringar—4
  - Beslin—3
  - Bosecin—22
  - Chenapa-8
  - Cunrnete—2
  - Daegmund—53
  - Eadred
  - Edwine
  - Edwulf
  - Ersalt—7
  - Eura
  - Eranovndo (?)
  - Fredemund—4
  - Gislefred—4
  - Grim—5
  - Gundbert—2
  - Haiebert—2
  - Hamin—4
  - Huscam—2
  - Iaocd—6
  - Iemsodhr
  - Iohannes—2
  - Isembald (?)
  - Lairoedbu
  - Martin—7
  - Martinus—10
  - Meuther—2
  - Oandert—3
  - Odomer—3
  - Odulbert—11
  - Odulf—2
  - Oid
  - Onnonea—17
  - Oswulf
  - Otbert—5
  - Otibuinio—14
  - Quaran—6
  - Rather/Reart—13
  - Remigius
  - Rhdumr
  - Risleca—11
  - Robert—2
  - Sigemund—27

- - - Stein—4
    - Stephan—2
    - Tedredo—2
    - Tedwine—4
    - Udare—4
    - Usca—3
    - Walter
    - Wandefred—2
    - Wigbald—7
    - Winedulf—6
    - Winiger—27
    - Winier—41
    - Wulfold
    - Uncertain—79
  - St. Edmund Memorial coinage, ERIAICE CIV on reverse (N. 483/3)—2
- Northumbria
  - Halfdene (872-8)
    - Two-Emperors/London Monogram (N. 481)—1
    - Halfpenny, Two-Line type (N. 482)—1
  - Earl Sihtric (c. 895)
    - Gundibert, Shelford (N. 529)—1
  - Cnut (c. 900-902)
    - Ebraice Civitas (Cross Patée), EC1/CRC York (N. 495)—2
    - Ebraice Civitas (Karolus Monogram), EC2/CRG York (N. 498)—20
    - Ebraice Civitas (Cross Pattée), EC1/SRD York (N. 493)—1
    - Ebraice Civitas (Cross Pattée), EC1/CRD York (N. 496)—3
    - Ebraice Civitas halfpenny (Cross Pattée), EC1/CRG York (N. 517)—4
    - Ebraice Civitas halfpenny (Cross Pattée), EC1/CRD York (N. 516)—1
    - Ebraice Civitas halfpenny (Karolus Monogram) EC2/CRG York (N. 518)—2
    - Mirabilia Fecit, MF1/CRG York (N. 511)—3
    - Mirabilia Fecit, MF1/SRG York (N. 510)—1
    - Dns. Ds. Rex, DDR1/CRG York (N. 507)—1
    - Cunnetti, C1/CRCF York (N. 499)—9
    - Cunnetti, C1/CRG York (N. 501)—67
    - Cunnetti halfpenny (Cross Pattée), C1/CRG York (N. 519)—6
    - Cunnetti halfpenny (Karolus Monogram), C2/CRG York (N. 520)—8
    - Cnut/Quentovic—13
  - Siefred (c. 894-8)
    - Siefredus, S1/CRG York (N. 504)—5
    - Ebraice Civitas (Cross Pattée), EC1/SFRE York (N. 494)—2
    - Ebraice Civitas (Cross Pattée), EC1/CSRC York (N. 491)—1
    - Ebraice Civitas (Cross Pattée), EC1/CSRA York (N. 489)—3
    - Ebraice Civitas (Cross Pattée), EC1/CSRB York (N. 490)—3
    - Ebraice Civitas halfpenny (Cross Pattée), EC1/CSRB York (N. 513)—1
    - Siefredus, S1/REXF York (N. 503)—2
  - Sievert (c. 895-902)
    - Ebraice Civitas (Cross Pattée), EC1/SRD York (N. 493)—4
    - Ebraice Civitas (Cross Pattée), EC1/CRG York (N. 497)—1
    - Ebraice Civitas (Cross Pattée), EC1/SRB York (N. 492)—1
    - Mirabilia Fecit, MF1/SRG York (N. 510)—2
    - Mirabilia Fecit halfpenny, MF1/SRG York (N. 522)—1
    - Dns. Ds. Rex, DDR1/SRG York (N. 506)—9
  - Cnut and Siefred (c. 895-902)
    - Mirabilia Fecit, MF1/ECG York (N. 512)—11
    - Dns. Ds. Rex, DDR1/ECG York (N. 508)—2
    - Mirabilia Fecit, MF1/DDORA (N. 509)—12

- ▪ Alvvaldus, A1/DDORA (N. 505)—1

<u>Carolingian</u>
- Charles the Bald (c. 840-77)—50
  - Angers—2
  - Arras
  - Blois—2
  - Bourges
  - Bruges—2
  - Cambrai
  - Chartres
  - Clermont—2
  - Curtisasonien
  - Évreux
  - Laon
  - Le Mans—5
  - Melle—17
  - Nantes
  - Nevers
  - Noyon
  - Orléans—2
  - Paris—2
  - 'Porcocastello'
  - Quentovic
  - Saint Denis
  - Sens
  - Soissons
  - Tours
- Carloman (c.879-84)—1
  - Limoges
- Louis II (c. 877-9)—2
  - Namur
  - Tours
- Odo (c. 887-98)—23
  - Angers—3
  - Blois—2
  - Compiègne
  - Laon
  - Limoges—6
  - Orléans
  - Toulouse
  - Tours—8
- Temp. Charles the Simple (c. 893-929)—5
  - Beauvais
  - 'Boionia' (Boulogne?)
  - Limoges
  - Melle
  - St. Omer
- 'Charles the Emperor'—4
  - Bourges
  - Metz
  - Nevers
  - Toulouse
- Louis the Child (c. 889-911)—9
  - Constance
  - Mainz—2

- o Namur
- o Strasbourg—3
- o Würzburg
- o Unidentified
- Louis the Blind (c. 887-928)—2
  - o Provence—2
- Berengar (898-924)—3
  - o Christiana Religio—3
- Lambert (894-8)—2
  - o Christiana Religio—2
- Christiana Religio derivatives or imitations—4
- Imitation or derivative of Louis the Child, Lorraine type—1
- Imitation or derivative of Lambert—1
- Uncertain fragments—11

Rome
- Pope Benedict IV—1

Danish—3

Islamic
- Dirhams—12

Total=1,427 coins

The Assheton Family Collection (now in the British Museum)
Anglo-Saxon
- Mercia
  - o Ceolwulf (874-9)
    - ▪ Two Emperors (N. 428)—1
      - Ealdwulf
- East Anglia
  - o Æthelred (c. 870)
    - ▪ Temple (N. 488)—2
      - Blundered, uncertain (cut quarter)
- Wessex
  - o Alfred (871-99)
    - ▪ Voided Cross/Quatrefoil (N. 634)—1
      - Luda
    - ▪ Cross-and-Lozenge (N. 629)—3
      - Burtwald
      - Wulfeard
      - Wulfred
    - ▪ London Monogram, no moneyer (N. 644)—8
    - ▪ Halfpenny, as above (N. 645)—1
    - ▪ London Monogram, moneyer (N. 646)—1
      - Tilewine
    - ▪ Oxford (N. 646/1)—1
      - Bernwald
    - ▪ Two-Line (N. 635-7,639)—21
      - Æthelwulf
      - Æthered
      - Bernred—2
      - Buga
      - Burnhelm
      - Cuthbert—2
      - Cuthwulf

- Dealla
- Dudig
- Dunna
- Eadwald
- Eadweard
- Ecwulf
- Ethelwin
- Gilewulf
- Goda
- Hunberht
- Ludig
- Oswulf
  - Two-Line, Rex Doro (N. 639)—5
    - Biarnard
    - Diarwald
    - Elfstan
    - Ethelred
    - Uncertain
- Edward the Elder (899-924)
  - Portrait (N. 651)—4
    - Æthered
    - Cudberht
    - Dudig
    - Wulfred
  - Two-Line (N. 649)—6
    - Æthered—2
    - Buga
    - Dudig
    - Ludbern
    - Wulfard
- Archbishops of Canterbury
  - Æthelred (870-89)
    - Two-Line (N. 252)—1
      - Elfstan
  - Plegmund (890-923)
    - Doro (N. 254)—3
      - Diarmund
      - Eadmund
      - Hunfrith
    - Two-Line, Class 1 (N. 253)—1
      - Hunfrith
    - Variant of above, with pellets rather than crosses on reverse—3
      - Birnad
      - Bruned
      - Elfstan

Viking
- Alfred imitations
  - Orsnaforda (N. 472)—6
  - Halfpenny, as above (N. 474)—1
  - Halfpenny, as above w/ cross on reverse (N. 475)—1
  - London Monogram, 'Roiseng' (N. 467)—1
  - Two-Line—8
    - Diaryt
    - Ludig

- - - Oswulf
    - Woberht
    - Wulfred—2
    - Uncertain—2
- Anglia
  - Athelstan II/Guthrum (880-90)
    - Two-Line (N. 479)—3
      - Berter
      - Blundered—2
  - St. Edmund Memorial (c. 895-910) (N. 483)—46
    - Abbonel
    - Adalbert—5
    - Adradus—4
    - Albert—5
    - Ansiger—3
    - Arus
    - Bonec
    - Chenapa—2
    - Dægmund—5
    - Ersalt—3
    - Hamin—2
    - Martin
    - Reart
    - Sigemund—5
    - Blundered—6
    - Uncertain
    - Variant of above, with ALFRED REX DO reverse—1
- Northumbria
  - Siefred (c. 894-8)
    - Ebraice Civitas (Cross Pattée), EC1/CSRA York (N. 494)—3
    - Siefredus, S1/REXE York (N. 502)—2
    - Dns. Ds. Rex, DDR1/SRG York (N. 506)—3
    - Mirabilia Fecit, MF1/SRG York (N. 510)—1
    - Siefredus, S1/REXF York (N. 503)—3
    - Ebraice Civitas (Cross Pattée), EC1/CSRA York (N. 489)—2
    - Ebraice Civitas (Cross Pattée), EC1/SRD York (N. 493)—3
    - Ebraice Civitas (Cross Pattée), EC1/CSRB York (N. 490)—4
  - Cnut (c. 900-902)
    - Cunnetti halfpenny (Karolus Monogram), C2/CRG York (N. 520)—7
    - Ebraice Civitas (Karolus Monogram), EC2/CRG York (N. 498)—1
    - Ebraice Civitas halfpenny (Karolus Monogram), EC2/CRG York (N. 518)—2
    - Cunnetti, C1/CRG York (N. 501)—50
    - Cunnetti, C1/CRCF York (N. 499)—4
    - Cunnetti, C1/CRD York (N. 500)—2
    - Cunnetti halfpenny (Cross Pattée), C1/CRG York (N. 519)—3
    - Mirabilia Fecit, MF1/DDORA York (N. 509)—7
    - Mirabilia Fect halfpenny, MF1/DDORA York (N. 521)—1
    - Quentovici, Danelaw Imitation? (N. 524)—2
    - Quentovici, Danelaw Imitation? (N. 523)—1
    - Dns. Ds. Rex, DDR1/ECG York (N. 508)—1
    - Alvvadus, A1/DDORA York (N. 505)—1
    - Ebraice Civitas (Cross Pattée), EC1/CRG York (N. 497)—19
    - Mirabilia Fecit, MF1/CRG York (N. 511)—1
    - Ebraice Civitas (Cross Pattée), EC1/CRCF York (N. 495)—15
    - Ebraice Civitas (Cross Pattée), EC1/CRD York (N. 496)—1
    - Ebraice Civitas halfpenny (Cross Pattée), EC1/CRG York (N. 517)—4

- - - Ebraice Civitas halfpenny (Karolus Monogram), EC2/CRG York (N. 518)—1
    - Mirabilia Fecit, MF1/ECG York (N. 512)—11
    - Mirabilia Fecit, MF1/CRG York (N. 511)—8
- Carolingian
  - Louis the Child (c. 899-911)—4
    - Strasbourg
    - Christiana Religio—3
  - Berengar (898-924)—2
    - Christiana Religio—2
  - Carloman (c. 879-84)—1
    - Limoges
  - Temp. Charles the Simple (c. 893-929)—13
    - Bourges
    - Clermont Ferrand
    - Limoges
    - Melle—7
    - Uncertain—3
  - Gratia D-I Rex—13
    - Angers—2
    - Arles
    - Arras
    - Blois—2
    - Bruges
    - Chartes
    - Le Mans—2
    - Melle
    - Tours
    - Uncertain
  - Odo (c. 887-98)—8
    - Angers—2
    - Blois
    - Limoges—3
    - Toulouse
    - Tours
  - Lambert (894-8)—1
    - Christiana Religio
- Islamic
  - Dirhams, mostly fragmentary—13
- Byzantine
  - Heraclius and Heraclius Constantine (615-630)—1
- **TOTAL=345 coins**

A Catalogue of the Coins of the Vale of York Hoard[23]

Anglo-Saxon
- During reign of Alfred (871-99):
  - London monogram (no moneyer)—3
  - Two-Line (47 total)
    - Æthered—10
    - Æthelwulf—7
    - Byrhelm—3
    - Deorwald
    - Dunna
    - Hereferth
    - Heremund
    - Hunberht
    - Wulfred—21
    - Uncertain
  - Rex Doro (1 total)
    - Diarwald—1
- During the reign of Edward the Elder (899-924/5):
  - Two-Line (340 total)
    - Æthelferd—6
    - Æthered—39 (one cut in half)
    - Æthelsige
    - Æthelstan—3
    - Æthelwald—2
    - Æthelwine
    - Æthelwulf—22
    - Badda—6
    - Beahred—5
    - Beahstan—8
    - Beornere—13
    - Beornferth—2
    - Beornwald—7
    - Beornwulf
    - Beorhtred—2
    - Beornard
    - Beornred—4
    - Beorhthelm—2
    - Bonus Homo
    - Brece—3
    - Byrnelm—4
    - Byrnelm (likely)
    - Cenbreht
    - Ceolwulf
    - Ciolhelm—2
    - Clip—3

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[23] Data taken from Williams and Ager 2011, 141-143.

- Cynestan
- Deorwald—16
- Diormod Dryhtwald—4
- Dunning—3
- Eadelm
- Eadgild—2
- Eadmund—5
- Ealdwulf—2
- Ealhstan—5
- Eclaf—3
- Egenulf—2
- Eigmund—2
- Fritheberht—11
- Fulchrad—2
- Gareard—4
- Goderic
- Grimwald—3
- Gundberht—2
- Gunter—4
- Hanno
- Hathebald
- Heardmer—1
- Hrodger
- Hunfreth—2
- Igere
- Iohann—5
- Landac—4
- 'Liedulm'
- Liofhelm—3
- Londbriht—3
- Magnard—2
- Manent
- Megenfrith
- Melland
- Merlain
- Ordulf
- Osbearn
- Ossere—2
- Pastor
- Pitit
- Regenulf—19
- Rihard
- 'Rothnard'
- Samsun—8
- Sigebrand
- Snel—3
- Sprov—3
- Stefman—2
- Thegn
- Thurlac—2
- Tila—8
- Torhthelm—3 (one in half)
- Walter—2
- Warmer
- Weardhelm—3
- Wigere

- Wighard—3
- Wihtmund
- Wihtwulf
- Wilric
- Winegar—2
- Wulfgar
- Wulfheard—7
- Wulfric
- Uncertain/blundered—17 (one in half)
  - Bust (48 total)
    - Andreas
    - Beahstan—3
    - Byrhelm—3
    - Deorwald—3
    - Dudig
    - Ealhstan
    - Eawulf
    - Gareard—2
    - Liofhelm—3
    - Man
    - Manna
    - Wulfred—21
    - Uncertain—6
  - Floral varieties (3 total)
    - Æthelstan
    - Brece
    - Doiga
  - Burh (2 total)
    - Waltere
    - Wulfsige (cut in half)
  - Rose (9 total)
    - Wulfheard—9
- During the reign of Athelstan (924/5-39):
  - Two-Line (67 total)
    - Ælfred
    - Æthelfred
    - Æthered
    - Æthelsige
    - Æthelwulf—2
    - Abba—2
    - Alfeau—2
    - Berhthelm
    - Biornard—2
    - Byrhelm—4
    - Byrnwig
    - Cenbreht
    - 'Cia__elm'
    - 'Cioehecm'
    - Deorwald
    - Dryhtwald—3
    - Eadmund—2
    - Garwulf—3
    - Grimwald
    - Heremod
    - Hungar
    - Igere—2

- - - Iohann—8
      - Man
      - Mana
      - Regenulf
      - Sigebrand—2
      - Sigeland—2
      - Snel—2
      - Thurlac
      - Tiotes
      - Torhthelm—3
      - Wealdhelm—3
      - Wulfheard—4
    - Bust (1 total)
      - Æthered—1
    - Church, with York signature (22 total)
      - Ragnald—22
    - Church, moneyer only (14 total)
      - Adalbert—5
      - Etram—4
      - Frotier—2
      - Turstan
      - Wyltsige—2
    - Rex Totius Britanniae (King of All the Britons) (1 total)
      - Maegred—1
  - Archbishop Plegmund (890-923) (8 total)
    - Æthelfred—2
    - Æthelwulf
    - Bierhtelm—2
    - Wilric—2
    - Uncertain

Anglo-Viking
- Sword St. Peter (c. 921-927)
  - Cross reverse—22
- St. Martin (c. 921-927)—1
- Sihtric I (921-926/7)
  - Hammer reverse—1
    - Are
  - Mallet reverse—1
    - Uncertain
- 'Rorivacastr' sword type—1
  - Otard
- Danelaw imitation, Athelstan Church—1

Carolingian
- Sancta Colonia—1
- GDR—3
  - Corbie
  - Quentovic
  - Uncertain

Islamic (Samanid Dynastry)
- Nasr b. Ahmad I—1
- Ismail b. Ahmad I—3
- Ahmad b. Ismail—4
- Nasr b. Ahamad II—2
- Nasr b. Ahmad (I or II)—1
- Caliph Al Mu'tamid—1

- Uncertain Samanid—3

Total=617 coins

A Catalogue of the Non-Numismatic Metal of the Cuerdale Hoard[24] [25]

1873,1101.1—hacked "silver ingot; rectangular with relief cross one side"

~~1841,0711.1~~—

1841,0711.2—"cast silver 'mark' ingot, trapezoidal in section and plan"

1841,0711.3—"cast silver ingot, trapezoidal in section with pointed terminals and a slight flange running along each side"

1841,0711.4—"cast silver oblong ingot, D-shaped in section with rounded terminals"

1841,0711.5—"cast silver oblong ingot, sub-rectangular in section and with sub-rectangular ends"

1841,0711.6—"cast silver oblong ingot with rounded terminals and trapezoidal in section"

1841,0711.7—"cast silver oblong ingot, trapezoidal in cross-section and with pointed terminals"

1841,0711.8—"cast silver oblong ingot, tapering towards pointed ends"; not nicked (perhaps b/c whole, although still anomalous)

1841,0711.9—"cast silver oblong ingot with rounded terminals, sub-rectangular in section and hammered on both upper and lower surfaces"

1841,0711.10—"cast silver oblong ingot with rounded ends and trapezoidal in section"

1841,0711.11—"cast silver oblong ingot of sub-triangular section, with pointed terminals and a pitted upper surface"; not nicked

1841,0711.12—"cast silver oblong ingot of D-shaped section with rounded terminals"; rugged top side (flawed casting)

1841,0711.13—"cast silver oblong ingot, sub-rectangular in section"; whole, but erroneous casting makes it appear incomplete on one side

1841,0711.14—"cast silver ingot of oval to D-shaped section, with rounded terminals"; not nicked

1841,0711.15—"cast silver oblong ingot, sub-rectangular in section with rounded terminals"; rough top surface from casting process

1841,0711.16—"cast silver oblong ingot, trapezoidal in section, with rounded terminals"

1841,0711.17—"cast silver oblong ingot with rounded ends, D-shaped in section"; more rounded at one end and squared at the other

1841,0711.18—"cast silver oblong ingot of varying cross-section, trapezoidal at one end, D-shaped in centre and flattened ovoid at the other end"

1841,0711.19—"cast silver oblong ingot with rounded ends, sub-rectangular in section"

1841,0711.20—"cast silver oblong ingot, D-shaped in section with rounded terminals"

1841,0711.21—"cast silver oblong ingot, D-shaped in section, with rounded terminals"

1841,0711.22—"cast silver oblong ingot with rounded terminals, sub-triangular section"

1841,0711.23—"cast silver oblong ingot with rounded ends"

1841,0711.24—"cast silver oblong ingot with rounded terminals, sub-triangular in section"

1841,0711.25—"cast silver oblong ingot with rounded terminals, D-shaped in section…pitted towards one end"

1841,0711.26—"cast silver oblong ingot with one pointed and one more rounded end, trapezoidal in section"

1841,0711.27—"cast silver oblong ingot, oval to D-shaped in section with rounded terminals"

1841,0711.28—"cast silver oblong ingot with rounded ends, D-shaped in section"; pitted a few times

1841,0711.29—"cast silver oblong ingot, both ends rounded and D-shaped in section"

1841,0711.30—"cast silver oblong ingot with rounded ends…trapezoidal in cross-section and has a large casting flaw at one end on the upper face"

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[24] Data in this section taken from the British Museum Collection

[25] Bolded numbers reflect those photographed by the British Museum

1841,0711.31—"cast silver oblong ingot with rounded ends, sub-triangular in section"; several pronounced nicks

1841,0711.32—"cast silver oblong ingot, sub-triangular in section with rounded terminals"; one end more pointed and narrowed than the other

1841,0711.33—"cast silver oblong ingot with rounded terminals. In section, it is trapezoidal in the centre and sub-triangular towards the terminals…deep, transverse chisel-cut on one face, towards the terminal"

1841,0711.34—"cast silver oblong ingot with rounded ends, D-shaped in section"; top very rugged from casting

1841,0711.35—"cast silver oblong ingot with rounded ends, sub-rectangular in section"; on one of the faces of the ingot, "ridges in relief create a saltire cross at one end and a V-shaped feature in the centre"

1841,0711.36—"cast silver oblong ingot of D-shaped section, with rounded terminals"

1841,0711.37—"cast silver oblong ingot, oval to D-shaped in section with one rounded and one pointed end"

1841,0711.38—"cast silver oblong ingot, D-shaped in section with rounded ends"; one end significantly narrower than the other; "A clear cloth impression appears on one side"

1841,0711.39—"cast silver oblong ingot with one rounded and one pointed terminal, D- to oval-shaped in section"

1841,0711.40—"cast silver oblong ingot with rounded terminals, and a broad flange (flashing) at one end"

1841,0711.41—"cast silver oblong ingot, sub-rectangular in cross-section with rounded terminals"; smooth surface

1841,0711.42—"cast silver oblong ingot, sub-rectangular in cross-section. One end is rounded and the other more irregular in shape"

1841,0711.43—"cast silver oblong ingot, sub-triangular in cross-section with rounded terminals"

1841,0711.44—"cast silver oblong ingot with rounded ends and D-shaped cross-section…hammered partially on the upper and lower surfaces"

1841,0711.45—"cast silver oblong ingot with rounded ends, D-shaped in cross-section. Both sides are hammered partially. An oval casting flaw is in the centre of one side…cracked [in the middle of one face], probably through faulty casting"

1841,0711.46—"cast silver oblong ingot, sub-rectangular in cross-section. Both ends are rounded, but one is slightly flawed from the surface of the mould from which it was cast"

1841,0711.47—"cast silver oblong ingot with rounded ends, sub-triangular in cross-section. Flaws from the mould and casting…are visible"

1841,0711.48—"cast silver oblong ingot with rounded terminals, D-shaped in cross-section…has been drilled…contains the remnant of the broken drill-bit"

1841,0711.49—"cast silver oblong ingot with rounded terminals…sub-triangular in cross-section"; terminals off-center

1841,0711.50—"cast silver oblong ingot with rounded terminals, sub-triangular in cross-section. On one long side is a casting spur in the form of a pointed projection"

1841,0711.51—"cast silver oblong ingot, sub-triangular in cross-section with hammering on both faces"

1841,0711.52—"cast silver oblong ingot, trapezoidal in cross-section with rounded terminals"

1841,0711.53—"cast silver oblong ingot with rounded ends and flattened cross-section"

1841,0711.54—"cast silver oblong ingot, sub-triangular in cross-section with one rounded and one square-off terminal. Its surfaces are pitted from the casting mould"

1841,0711.55—"cast silver oblong ingot, sub-triangular in cross-section, with rounded ends and a pitted surface [casting process]"

1841,0711.56—"cast silver oblong ingot, D-shaped in section with rounded terminals"; sizable sphere fused to the middle of one side

1841,0711.57—"cast silver oblong ingot with rounded terminals, sub-triangular in section"; pitting resulting from casting process

1841,0711.58—"cast silver oblong ingot with a cross-section varying from sub-triangular to D-shaped. Both terminals are rounded and the surface is pitted from the casting mould"

1841,0711.59—"cast silver oblong ingot with rounded ends, D-shaped in cross-section with surfaces pitted from the casting mould," particularly on one edge

1841,0711.60—"cast silver oblong ingot, D-shaped in cross-section with rounded terminals and surface

pitted from the casting mould"

1841,0711.61—"cast silver oblong ingot with rounded terminals, trapezoidal in cross-section"; line etched down midline

1841,0711.62—"cast silver oblong ingot, D-shaped in cross-section with rounded terminals that are slightly upturned"; protruding imperfection; pretty good visibility of nicking

1841,0711.63—"cast silver oblong ingot with rounded terminals, sub-triangular in cross-section"; more narrowed at one end

1841,0711.64—"cast silver oblong ingot, sub-triangular in cross-section with rounded and upturned terminals"

1841,0711.65—"cast silver oblong ingot with rounded terminals. It is D-shaped in cross-section but with a bulge towards one side of the bottom"; has "impression of coarse cloth"; textile impression

1841,0711.66—"cast silver oblong ingot, D-shaped in cross-section with pointed terminals. One face has a clear impression of fine cloth"; textile impression

1841,0711.67—"cast silver oblong ingot, oval to D-shaped in cross-section, with rounded terminals"

1841,0711.68—"cast silver oblong ingot, oval in cross-section with one rounded terminal and the other with a small broken projection"; looks like an extended balloon

1841,0711.69—"cast silver oblong ingot with one rounded terminal, the other with a large projection…D-shaped in cross-section and its surface is pitted from the casting mould"

1841,0711.70—"cast silver ovoid ingot, D-shaped in cross section"

1841,0711.71—"cast silver ovoid ingot, sub-triangular in cross-section"

1841,0711.72—"cast silver ovoid ingot, D-shaped in cross-section with surfaces pitted from casting mould"

1841,0711.73—"cast silver ovoid ingot, D-shaped in cross-section with its surface pitted from the casting mould"

1841,0711.74—"cast silver ovoid ingot, with an irregular ovoid cross-section and a rough surface from the casting mould"

1841,0711.75—"cast silver ovoid ingot, roughly kidney-shaped with an irregular D-shaped cross-section…rough from the casting mould"; classified as 'ovoid,' but this is a very loose description given the shape

1841,0711.76—"cast silver ovoid ingot, D-shaped in cross-section"; bean-shaped

1841,0711.77—"cast silver ovoid ingot, D-shaped in cross-section with a casting flaw on the upper surface"

1841,0711.78—"cast silver ovoid ingot, D-shaped in cross-section"; somewhat lemon-shaped

1841,0711.79—"cast silver ovoid ingot, D-shaped in cross-section"; very off-center

1841,0711.80—"cast silver circular ingot, D-shaped in cross-section"; appears bead-like due to smaller circular imperfection in the center

1841,0711.81—"cast silver circular ingot, D-shaped in cross-section with a cut across the upper face"

1841,0711.82—"cast silver ovoid ingot, D-shaped in cross-section with a pitted surface from the casting mould"

1841,0711.83—"cast silver ovoid ingot, D-shaped in cross section with a pitted surface from the casting mould"

1841,0711.84—"cast silver ingot droplet, circular with a D-shaped cross-section, surface pitted [in the middle] from the casting mould"

1841,0711.85—"cast silver ovoid ingot, D-shaped in cross-section with an irregular outline and pitted surface from the casting mould"

1841,0711.86—"cast silver ovoid ingot, D-shaped in cross-section with a pitted surface from the casting mould"

1841,0711.87—"cast silver ovoid ingot with rounded terminals, sub-rectangular in cross-section"

1841,0711.88—"cast silver oblong ingot, tapering in profile with a trapezoidal cross-section at the thick terminal and a rectangular section at the thin terminal. Both terminals are rounded, and the thinner one has been hammered on all sides"

1841,0711.89—"cast silver oblong ingot, rectangular in cross-section and hammered on all surfaces"; flattened top surface

1841,0711.90—"cast silver oblong ingot of flattened, rectangular cross-section with sub-rectangular bevelled ends; hammered all over"

1841,0711.91—"cast silver oblong ingot with a tapering octagonal cross-section. One terminal is thick and

rounded, and the other is thin and straight…hammered on all sides"

1841,0711.92—"cast silver oblong ingot, octagonal in cross-section with rounded terminals. All sides have been hammered"; rounder than .91; deep striations on top side from molding process

1841,0711.93—"cast silver oblong ingot, rectangular in cross-section with rounded ends…hammered on all four sides…deep transverse cut across the upper side"; because of deep transverse cut, appears as if it was almost hacked

1841,0711.94—hacked "cast silver oblong ingot"; octagonal cross-section b/c hammering pattern; "tapers towards both terminals, which have been cut off"

1841,0711.95—"cast silver oblong ingot, octagonal in cross-section with rounded terminals…hammered [almost completely smooth] on the upper and lower surfaces"

1841,0711.96—"cast silver oblong ingot, octagonal in cross-section with rounded terminals. Cloth impressions are present on the terminals and all four sides have been hammered flat"

1841,0711.97—"cast silver oblong ingot, sub-rectangular in cross-section with one side thicker than the other. It has rounded terminals and has been hammered on all four sides"; hammered nearly flat on faces

1841,0711.98—"cast silver oblong ingot, rectangular in cross-section with rectangular terminals…hammered on all sides and is bent in two"

1841,0711.99—"cast silver ovoid ingot, flattened ovoid in cross-section and hammered on the upper and lower sides"; imperfections from casting

1841,0711.100—"cast silver ovoid ingot, rectangular in cross-section and hammered on all four sides" such that they appear rounded

1841,0711.101—"cast silver ovoid ingot, flattened ovoid in cross-section and hammered [flat] on the upper and lower sides"

1841,0711.102—"cast silver ovoid ingot, hammered [flat] on the upper and lower sides"

1841,0711.103—hacked "cast silver oblong ingot, D-shaped in cross-section. One end is rounded and the other end is cut off. The surface is pitted from the casting mould"

1841,0711.104—hacked "cast silver oblong ingot of trapezoidal cross-section, with one rounded terminal and the other terminal cut off…tapers in height towards the rounded terminal"

1841,0711.105—hacked "cast silver oblong ingot, sub-triangular in section. One terminal is rounded and the other is cut off…parallel cut across the base"

1841,0711.106—hacked "cast silver ingot terminal, rod-shaped and of varied section, being trapezoidal at the thicker end, and D-shaped at the wider cut end"

1841,0711.107—hacked "cast silver ingot, sub-triangular in section with one rounded terminal and the other terminal cut off. 22 nicks"

1841,0711.108—hacked "cast silver oblong ingot, sub-triangular in section and of irregular form. One terminal has been cut off, the other is rounded"; pitted from casting; bottlenecks before cut end

1841,0711.109—hacked "cast silver oblong ingot, trapezoidal in section, with one rounded terminal and the other terminal cut off"

1841,0711.110—hacked "cast silver oblong ingot terminal, sub-triangular in cross-section with one rounded terminal and the other cut off. A faint cloth impression is present on the upper surface, and there is some pitting"

1841,0711.111—hacked "cast silver oblong ingot terminal, sub-triangular in cross-section with one rounded terminal and the other cut off"; pitted from casting

1841,0711.112—hacked "cast silver oblong ingot terminal, cut off at one end…trapezoidal in cross-section and has a parallel cut across the upper surface"

1841,0711.113—hacked "cast silver oblong ingot, cut off at one end and tapering towards the other, rounded terminal…trapezoidal in cross-section"; diagonal cuts

1841,0711.114—hacked "cast silver oblong ingot terminal, D-shaped in section"; round end; large nick on top

1841,0711.115—hacked "cast silver oblong ingot terminal, cut off at one end and the other rounded…D-shaped in section"; pitted from casting

1841,0711.116—hacked "cast silver oblong ingot terminal with a rounded end and the other end cut off…D-shaped in section"; no marks of testing

1841,0711.117—hacked "cast silver oblong ingot" terminal; D-shaped, pointed terminal, cut at other end; half hammered, "where the section becomes more rectangular in form"

1841,0711.118—hacked "cast silver oblong ingot terminal, cut off at one end and the other rounded. It is

D-shaped in cross-section and has been bent, with a heavy cut within the curve"; V-shaped; more rounded than most other oblong ingots of this hoard

1841,0711.119—hacked "cast silver oblong ingot, one terminal rounded and the other cut off. It is D-shaped in cross-section and has been hammered on its upper surface, where the cross-section becomes trapezoidal"

1841,0711.120—hacked "cast silver oblong ingot" terminal, "sub-triangular in section. It has one rounded terminal, and the other is cut off"; somewhat rough break

1841,0711.121—hacked "cast silver oblong ingot [rounded] terminal, sub-rectangular in section but hammering has given a faceted, octagonal form"; "W" cut near the broken end

1841,0711.122—hacked "cast silver oblong ingot terminal, trapezoidal in section with one surviving rounded terminal, the other terminal cut off"; nearly clean break at cut end

1841,0711.123—hacked "cast silver oblong ingot terminal, hammered on all four sides to form a sub-rectangular section. One rounded terminal survives; the other has been cut off"; some pitting from mold

1841,0711.124—hacked "cast silver oblong ingot terminal, hammered irregularly on all four faces to create an octagonal section. One rounded terminal survives, the other has been cut off"; main surface textured due to varied hammering

1841,0711.125—hacked "cast silver oblong ingot terminal, D-shaped in section with hammering on the upper surface. One rounded terminal survives, the other has been cut off"; slight plateau on top surface

1841,0711.126—hacked "fragment of a silver [oblong] ingot, comprising a terminal with rounded end. The ingot is rounded at the surviving terminal and is hammered one the upper and lower surfaces"; pitting at curved end from molding

1841,0711.127—hacked "cast silver oblong ingot" terminal, "trapezoidal in cross-section, one end rounded and the other hammered and cut"; striations on face from cut end to round end

1841,0711.128—hacked "cast silver oblong ingot, trapezoidal in cross-section with one rounded terminal and the other end cut off"; pitting; uneven cutting on cut side

1841,0711.129—hacked "cast silver oblong ingot, one end cut off and the other end rounded. It is flattened ovoid in cross-section and its surface is pitted from the casting mould"; rough cut edge

1841,0711.130—hacked "cast silver oblong ingot, hammered into an octagonal cross-section. One end has been cut off, and the other is sub-rectangular"; clean cut

1841,0711.131—hacked "cast silver oblong ingot, cut off at one end and the other end rounded, trapezoidal in cross-section. Its surface is pitted from the casting mould"; rugged cut edge

1841,0711.132—hacked "cast silver oblong ingot, cut off at one end. It is trapezoidal in cross-section and tapers to an upward-curving angular terminal. Its upper surface is pitted and the lower surface has a cut across it"; one side has crescent-shaped cut removed

1841,0711.133—hacked "cast silver oblong ingot terminal, one end rounded and the other end cut off. The lower face is decorated with a line of annular punches along the central line, three and part of a fourth surviving"; decorations=circular punches in a line; marked testing nicks on edges

1841,0711.134—hacked "cast silver oblong ingot, flattish ovoid in section with both terminals cut off…tapers towards one end"; at tapering end, a vertical cut mark

1841,0711.135—hacked "cast silver oblong ingot, cut off at both ends. The fragment is D-shaped in section, and has a large pit on the upper surface"

1841,0711.136—hacked "cast silver oblong ingot...both ends cut off. It is D-shaped in cross-section"; half of the top has been flattened, while the other half remains rounded

1841,0711.137—hacked "cast silver oblong ingot with both terminals cut off…sub-triangular in section"; rugged cut edges

1841,0711.138—hacked "cast silver oblong ingot with both terminals cut off…sub-triangular in section"; pitted markings on one side

1841,0711.139—hacked "cast silver oblong ingot, cut off at both ends…sub-rectangular in section"; one cut edge very uneven; large divot on one face, likely from casting

1841,0711.140—hacked "terminal fragment of a cast silver oblong ingot, rectangular in section with a hammered, chamfered terminal and the other terminal cut off…cut across the cut-off end and a deep cut along one side"

1841,0711.141—hacked "cast silver ingot of flattened, rectangular section with both terminals cut off. One terminal is trapezoidal in section and the other is D-shaped. Two cuts have been made [diagonally]

across the centre and one near the edge on the reverse side"

1841,0711.142—hacked "cast silver oblong ingot, hammered [nearly flat] on all sides and cut off at both terminals…sub-rectangular in section"; edges unevenly cut [appear broken instead]

1841,0711.143—hacked "cast silver oblong ingot…with both ends cut off. It is D-shaped in cross-section and has a large pit on the upper face"; one edge clean cut, the other, more jagged

1841,0711.144—hacked "fragment of a cast silver ingot, D-shaped in section and cut off at both ends. The grafment has a large triangular flange at one end, caused by silver overflowing from the casting mould (flashing)"; non-flanged end has cut marks by the edge

1841,0711.145—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in section"; trapezoid-shaped due to diagonal cuts on both sides

1841,0711.146—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in section and curves slightly towards the terminals, which are upturned"

1841,0711.147—hacked "cast silver oblong ingot…with both ends cut off…trapezoidal in cross-section and tapers slightly towards one end…lower surface shows casting flaws"; one rough edge from cutting

1841,0711.148—hacked "cast silver oblong ingot…with both ends cut off…trapezoidal in cross section and has a large pit on the upper face"

1841,0711.149—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section and the upper surface is slightly flattened"

1841,0711.150—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section"; diagonal (yet parallel) ends

1841,0711.151—hacked "cast silver oblong ingot…with both ends cut off…trapezoidal in cross-section and has been hammered on the top"

1841,0711.152—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in section and has a parallel cut across one end"; slight uneven texture from molding

1841,0711.153—hacked "cast silver oblong ingot…with both ends cut off…trapezoidal in cross-section, with a flange along one side caused by overflow from the casting mould"; wavy top side, perhaps due to casting error

1841,0711.154—hacked "thin slice cut from a cast silver oblong ingot of trapezoidal-cross section"; faces trapezoidal in shape due to diagonal cuts

1841,0711.155—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section"; very rugged exterior

1841,0711.156—hacked "cast silver oblong ingot…with both ends cut off…sub-triangular to D-shaped in section"

1841,0711.157—hacked "cast silver oblong ingot…with both ends cut off…sub-triangular in section and 22 nicks are visible"; unusual number of nicks for such a small (14x11mm) fragment

1841,0711.158—hacked "cast silver oblong ingot…with both ends cut off…sub-triangular to D-shaped in cross-section and the upper face is flattened"; tapers *slightly* towards the more rugged end

1841,0711.159—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross section"; rugged top section with deep cut visible

1841,0711.160—hacked "cast silver oblong ingot…with both ends cut off...sub-triangular in cross-section"; very rough edge on one end

1841,0711.161—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section"; uneven cut edge

1841,0711.162—hacked "thin slice cut from a cast silver oblong ingot of sub-triangular cross-section"

1841,0711.163—hacked "cast silver oblong ingot…with both ends cut off…trapezoidal in cross-section"

1841,0711.164—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section with a parallel cut across one end on the upper face"

1841,0711.165—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section"; parallel diagonal cuts on ends

1841,0711.166—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section"; part of top rounded, the rest flattened

1841,0711.167—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section and curves towards upturned ends"

1841,0711.168—hacked "cast silver oblong ingot…with both ends cut off...irregularly polygonal in cross-section and has a projection on one side from the casting mould," perhaps a partial flange (?)

1841,0711.169—hacked "cast silver oblong ingot, with both ends cut off…sub-rectangular in cross-section and distorted at one end…parallel cuts across the lower face"

1841,0711.170—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section…distorted by flattening when cut"; uneven cuts on one side and one edge

1841,0711.171—hacked "cast silver oblong ingot…with both ends cut off…sub-triangular in cross-section"; somewhat flattened on top

1841,0711.172—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section and has three deep and five shallow parallel cuts across the upper face"

1841,0711.173—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section"; narrow (6mm)

1841,0711.174—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section"

1841,0711.175—hacked "silver band arm-ring, tapering and cut-off at both ends. Five parallel incised lines are visible on one side, perhaps decoration"

1841,0711.176—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in section…lower face is flattened"

1841,0711.177—hacked "silver oblong ingot…with both ends cut off…sub-rectangular in cross-section and cross is incised into the centre of one end. The lower face is flattened"

1841,0711.178—hacked "silver oblong ingot…with one end cut off. It is rectangular in cross-section…one end has been hammered, forming a sub-rectangular shape"

1841,0711.179—hacked "silver oblong ingot…with one end cut off. It is rectangular in cross-section, with one end hammered into an irregular sub-rectangular shape. There are cuts on the upper and lower faces"; diamond shaped

1841,0711.180—hacked "cast silver oblong ingot…with both ends cut off…D-shaped in cross-section"; rugged edges

1841,0711.181—hacked "cast silver oblong ingot…irregular in shape having been cut from the end of an ingot"

1841,0711.182—hacked "cast silver oblong ingot…irregular in shape having been cut from the end of an ingot"; slightly curved, so narrower at one end than the other

1841,0711.183—hacked "cast silver oblong ingot…irregular in shape having been cut from the end of an ingot"; rough edge; trapezoid-shaped

1841,0711.184—hacked "cast silver oblong ingot…triangular and wedge-shaped, cut from the end of an ingot"; tapered on one end

1841,0711.185—hacked "silver band arm-ring, rectangular in form and trapezoidal in cross-section. It has been cut off on three sides and shows the remains of stamped ornament"

1841,0711.186—hacked "approximately one quarter of a circular ingot with an irregular circumference…cut on two sides at a right angle to give a quarter shape, and is wedge-shaped in section…surface is rough and hammered"; rough surface, likely from casting

1841,0711.187—"cast silver oblong ingot with one rounded and one irregular end, polygonal in section. One face has been hammered flat but the other only partially"

1841,0711.188—"cast silver ovoid ingot, flattened in cross-section and hammered [flat] on the upper and lower faces"

1841,0711.189—"cast silver ovoid ingot with an irregular shape, hammered flat and with its surface pitted from the casting mould"

1841,0711.190—"cast circular ingot, flattened in section and hammered on the upper and lower surfaces"; not nicked

1841,0711.191—"cast silver circular ingot, flattened ovoid in cross-section and hammered on both upper and lower surfaces"

1841,0711.192—"cast silver ovoid ingot, flattened and hammered on the upper and lower face"; one sharp edge, likely from hammering

1841,0711.193—"cast silver circular ingot, flattened and hammered on the upper and lower faces"; not nicked

1841,0711.194—"cast silver ovoid ingot, flattened and hammered on upper and lower faces"

1841,0711.195—"cast silver circular ingot, flattened and hammered on upper and lower faces with a droplet on one side"; both droplet and imperfections on one face likely due to casting imperfection

1841,0711.196—"cast silver ovoid ingot, flattened and hammered on the upper and lower faces, with droplets spattered on one face" from casting imperfections

1841,0711.197—"cast silver ovoid ingot, flattened and hammered on the upper and lower faces"

1841,0711.198—"cast silver ovoid ingot, flattened and hammered on the upper and lower faces"

1841,0711.199—"cast silver ovoid ingot, hammered flat and with a hammered edge"

1841,0711.200—"cast silver circular ingot, flattened and hammered on upper and lower faces. No nicks are visible"

1841,0711.201—"cast silver circular ingot with an irregular outline, hammered flat and partially hammered along one edge"

1841,0711.202—"cast silver circular ingot, flattened and hammered on upper and lower faces"

1841,0711.203—"cast silver circular ingot, hammered flat with a partially hammered edge"

1841,0711.204—"cast silver circular ingot, hammered flat. No nicks are visible"

~~1841,0711.205~~

1841,0711.206—"cast silver ovoid ingot, flattened and hammered on the upper and lower faces, with an irregular outline. The edges are rough. No nicks are visible"; appears to be a droplet or other casting imperfection on exterior of ingot

1841,0711.207—"cast silver circular ingot, hammered flat and with an irregular outline. No nicks are visible"

1841,0711.208—"cast silver circular ingot with rough edges, hammered flat"; some casting imperfections on one face

1841,0711.209—"cast silver ovoid ingot, hammered flat and around the edges, with an irregular outline. No nicks are visible"

1841,0711.210—"cast silver ovoid ingot, hammered flat"

1841,0711.211—"cast silver ovoid ingot, tear-shaped in form and hammered flat with some dimpling on the surface [from casting]. No nicks are visible."

1841,0711.212—"cast silver circular ingot, hammered on the upper and lower faces"

1841,0711.213—"cast silver ovoid ingot, flattened and hammered on the upper and lower faces"

1841,0711.214—hacked "cast silver oblong ingot, D-shaped in cross-section with one rounded terminal and the other terminal cut off"

1841,0711.215—hacked "cast silver oblong ingot, oval in cross-section with one rounded terminal and the other terminal cut off"; very rough cut edge

1841,0711.216—hacked "cast silver oblong ingot, sub-triangular in cross-section, with one pointed terminal and the other terminal cut off"; uneven cut edge

1841,0711.217—hacked "cast silver oblong ingot, sub-rectangular in cross-section with one rounded terminal and the other terminal cut off. No nicks are visible."; very uneven cut edge

1841,0711.218—hacked "cast silver oblong ingot, D-shaped in cross-section with one rounded terminal and the other terminal cut off"; clean cut edge

1841,0711.219—hacked "cast silver oblong ingot, D-shaped in cross-section with one pointed terminal, the other terminal cut off. No nicks are visible."; irregular shape

1841,0711.220—hacked "cast silver oblong ingot, D-shaped in cross-section with one rounded terminal and the other terminal cut off"

1841,0711.221—hacked "cast silver oblong ingot, D-shaped in cross-section with one rounded terminal and the other terminal cut off"

1841,0711.222—hacked "cast silver oblong ingot, oval in cross-section with one rounded terminal and the other terminal cut off"; one face hammered

1841,0711.223—hacked "cast silver oblong ingot, D-shaped in cross-section with one rounded terminal and the other terminal cut off…deep cut on the upper surface"

1841,0711.224—hacked "cast silver oblong ingot, comprising one rounded terminal which has been cut across"

1841,0711.225—hacked "cast silver ovoid ingot fragment, comprising half of a hammered disc"

1841,0711.226—hacked "cast silver oblong ingot, D-shaped in cross-section with one rounded terminal and the other terminal cut off. It bears a light cut on the surface"; ripples on surface

1841,0711.227—hacked "cast silver oblong ingot, trapezoidal in cross-section. It has been hammered on all four faces and tapers to one rounded terminal, the other terminal cut off"

1841,0711.228—hacked "cast silver oblong ingot, trapezoidal in cross-section. It has been hammered on all four faces and tapers to a rounded terminal, the other terminal cut off"

1841,0711.229—hacked "half of a rounded ingot terminal, cut from an oblong ingot of D-shaped cross-section. It is damaged and cracked in places"

1841,0711.230—hacked "fragment of a silver sheet band annular arm-ring, comprising approximately half of the object and one terminal. The arm-ring is convex in cross-section and tapers towards a plain rod-like terminal, bent at the end to form a loop. The front face of the arm-ring is decorated with stamped ornament in two longitudinal fields separated by incised lines, incorporating triangles containing four pellets, opposed and interlocking triangles. The edges of the arm-ring are cracked and there is a break across the central part"

1841,0711.231—hacked "fragment from the terminal of a silver band penannular arm-ring. The fragment is roughly rectangular and tapers slightly towards the rounded terminal. It is broken across the other end, roughly halfway along the original length. It has been decorated with heavy stamping, divided into two fields by a central line of small, rectangular stamps. Each field is filled with triangular stamps containing three pellets each. 93 complete or incomplete triangular stamps have been observed. No nicks are visible."

1841,0711.232—hacked "Complete silver band penannular arm-ring, in two fragments. The arm-ring has cracked edges and is curved and split. The shape suggests it was deliberately bent into a U-shape and then broken in two. The larger fragment comprises the middle part of the arm-ring, which tapers towards a rectangular terminal which has been created by the end being rolled back ontoitself. The smaller fragment comprises the other terminal, which has been treated in the same way. The arm-ring is decorated with two different stamps, comprising a ring with central pellet and a pair of opposed triangles. In the centre is a saltire cross created by the ring-and-pellet stamp. The edges of the arm-ring are decorated with a double border of the triangle stamp. Three more ring-and-pellet stamps appear at the end of each border. Six nicks are visible on the larger fragment, and none on the smaller fragment."

1841,0711.233—hacked smaller portion of 232

1841,0711.234—hacked "fragment from a silver annular band arm-ring, comprising part of the narrow band in the form of a flattened strip, and part of the rod-like terminal…broken off at both ends. The band is decorated with two rows of interlocking dagger-shaped stamps. No nicks are visible."

1841,0711.235—hacked "Fragment of a silver annular band arm-ring, comprising part of the flattened band and part of the rod-like terminal. It is broken at both ends. The front surface is decorated with three rows of stamping: the central row is a line of opposed triangles, each triangle containing three pellets, and the outer rows are conjoined circlets. The opposed triangles continue onto the rod. Two nicks are visible."

1841,0711.236—hacked "complete silver penannular plain band arm-ring, broad in the centre and tapering towards rounded terminals. The terminals have been hammered inwards, creating a figure-of-eight form. One nick is visible."

1841,0711.237—hacked "silver plain band penannular arm-ring with an expanded centre that tapers towards rounded terminals. Both terminals have been bent and hammered inwards so that the arm-ring is now in a figure-of-eight shape. Two nicks are visible."

1841,0711.238—hacked "complete silver plain band penannular arm-ring, with both ends hammered inwards. It is slightly wider in the middle and tapers to rounded terminals."

1841,0711.239—hacked "complete silver band annular arm-ring, narrow in form with a slightly broader middle section that tapers to rod-like terminals, twisted together to close the loop. The front face is decorated with two rows of annular stamps [circular punches], reducing to one row at the terminals. The arm-ring has been flattened slightly into an oval shape [perhaps the reason for the hacksilver designation]. Six nicks are visible."

1841,0711.240—hacked "fragment of a silver band annular arm-ring, comprising most of the central portion and one terminal. The central portion is expanded and tapers towards the surviving rod-like terminal. The front face is decorated with paired stamped triangles, arranged back-to-back to form vertical rows. Two nicks are visible."; connects to 241; most of the arm-ring

1841,0711.241—hacked "fragment of a silver band annular arm-ring, comprising one terminal. The fragment is flattened and cut off at one end. It is decorated with stamped ornament comprising back-to-back triangles. One nick is visible."; goes with 240, and appears to be terminal and part of closure

1841,0711.242—hacked "silver annular band arm-ring, almost complete, one terminal cut off and the other complete and twisted. The band is plain and narrow, with a slightly expanded centre that tapers towards rod-shaped ends. The arm-ring is bent out of shape and damaged. 12 nicks are visible."

1841,0711.243—hacked "fragment of a silver band penannular(?) arm-ring, cut at at least one end and bent

into a loop. One nick is visible.”; pretty plain band

1841,0711.244—hacked “fragment of a silver band arm-ring, cut off at both ends. The arm-ring has been hammered on the back to make the section convex. It is decorated with stamps that may have been cast, divided into two zones, each with two interlocking rows of dagger-shaped stamps. The two zones are divided by a central ridge. The ridge and borders of the ring are decorated with incised lines. Two nicks are visible.”; very intricately-decorated

1841,0711.245—hacked “fragment of a silver sheet-band arm-ring. The arm-ring has been cut off at both ends. The front surface is decorated with a central row of stamped conjoined triangles, flanked by a row of dumbbell-shaped stamps. Outside of these is a row of lozenge stamps containing pellets. Incised lines and pecking add to the decoration. Two nicks are visible.”; rough hacked edges

1841,0711.246—hacked “fragment of a silver band arm-ring, tapering in shape and cut off at both ends. The arm-ring has a double border of stamped Y-shaped motifs, each with a broad foot containing a pellet. The foot is oriented inwards. 18 nicks are visible.”

1841,0711.247—hacked “fragment of a silver sheet-band arm-ring, cut from the edge. The front surface is decorated with five stamps, comprising a plain oblong stamp along the central line and an outer border of hexagonal stamps. The central field is decorated with two rows of alternating ring-and-dot and hammer-head-like stamps. Seven nicks are visible.”; one even hacked edge, one uneven

1841,0711.248—hacked “fragment of a silver band arm-ring, comprising a tapering band with both ends cut off. The front is decorated with rows of double-ring stamps. Four nicks are visible.”

1841,0711.249—hacked “fragment of a silver band arm-ring, cut off at both ends. One edge is cracked and split. The fragment is decorated with a border made from two rows of quatrefoil stamps each containing four pellets, and a central row of a trefoil oblong stamps containing three pellets. Six nicks are visible.”; one edge straight, the other tapered; small hole at tapered end

1841,0711.250—hacked “fragment of a silver band arm-ring, cut off at both ends. The arm-ring is decorated with a row of vertical rectangular stamps with indented sides and central pellets. Two nicks are visible.”; uneven ends

1841,0711.251—hacked “fragment of a silver band arm-ring, cut off on three sides into a square shape. The upper surface is decorated with fine, small stamps comprising a pelleted lozenge in two interlocking rows, interspersed with a smaller paired lozenge stamp, arranged horizontally. A further lozenge stamp runs along the lower edge, interspersed with vertical paired lozenge stamps. No nicks are visible.”

1841,0711.252—hacked “silver band arm-ring, comprising a tapering band with both terminals cut off. The front is decorated with a stamped design using a bar-shaped stamp with a central oval containing four pellets, flanked by triangles each containing three pellets. The narrower end has been bent backwards and underneath. 48 nicks are visible.”; this is the most nicks of any artifact in the Cuerdale hoard

1841,0711.253—hacked “fragment of a silver band arm-ring, comprising part of one edge. The fragment has been cut off on three sides and one end has been clipped. The front face is decorated with three rows of stamped lozenges, each containing one pellet. The stamps in the outer rows are arranged vertically and the central row horizontally. Two rows of stamped triangles, points facing inwards, decorate the outer edge, the inner row with an incised line beneath it. Several diagonal cuts are present on the reverse face, which have slightly deformed the shape of the fragment. Four nicks are visible.”; one edge narrower than the other, tapers towards the narrow edge

1841,0711.254—hacked “fragment of a silver band arm-ring, cut off on all four sides. The remains of stamped motifs containing pellets survive on the front face. No nicks are visible.”; tapers towards one end; squared edges

1841,0711.255—hacked “fragment…of a [likely] silver annular band arm-ring. The fragment is broken at both ends, tapering to one end and bent up at the other end. One face is decorated with two rows of stamped oppose triangles, each containing one pellet. Eight nicks are visible.”

1841,0711.256—hacked “fragment of a silver band arm-ring, comprising part of one edge that is severed on three sides. Its upper surface is decorated with ring and C-shaped stamps arranged to form a deep serpentine groove. Two nicks are visible.”

1841,0711.257—hacked “fragment of a silver band arm-ring, rectangular in shape and cut off on all four sides. The upper surface is decorated with stamped motifs comprising two lines of interlocking triangles, each triangle containing three pellets, with another larger pelleted triangular stamp in the middle, linked to a pelleted bar punch. No nicks are visible.”; edges nearly straight

1841,0711.258—hacked "fragment of a silver band arm-ring, cut off at both ends. The fragment has a tapering shape, and has been bent and flattened. The surface is cracked. The upper surface is decorated with two rows of sub-triangular stamps along both long edges, forming a border. Two nicks are visible."

1841,0711.259—hacked "fragment of a silver sheet-band arm-ring, comprising part of one tapering edge. The front face is decorated with an elaborate stamped design incorporating opposed triangles, bars, rectangles containing pellets and rings. The fragment is flattened and worn. Six nicks are visible."; wavy surface

1841,0711.260—

1841,0711.261—hacked "fragment of a silver band penannular arm-ring, consisting of one of the terminals. The terminal is rectangular, and the surviving portion of the band tapers slightly towards it. The other end has been cut and broken. The front face is decorated with two border rows of stamped opposed triangles. Three nicks are visible."; jagged non-terminal edge

1841,0711.262—hacked "fragment of a silver narrow band arm-ring tapering towards one end. The other end is cut and damaged. The upper surface is decorated with two rows of stamped ornament, one comprising an angular stamp and the other a blob-like motif on a footed stem. Thirteen nicks are visible."

1841,0711.263—hacked "fragment of a silver band arm-ring, comprising a piece from one edge of a tapering part of the band. The fragment has been cut off at both ends and is decorated on the front face with [C-shaped] stamps, arranged to create serpentine grooves. Three nicks are visible."

1841,0711.264—hacked "fragment of a silver band arm-ring, cut off at both ends. The upper surface is decorated with a row of bar stamps containing six or more pellets, each bar stamp arranged vertically. Nine nicks are visible."; trapezoidal, with narrower upper edge

1841,0711.265—hacked "fragment of a silver band arm-ring, cut off at both ends, one obliquely. The upper surface is decorated with a design of vertically-arranged bar stamps, now quite incomplete. No nicks are visible."

1841,0711.266—hacked "fragment of a silver band arm-ring, comprising one edge. It has been cut off on three sides, the cutting [distorting] it into a trapezoidal cross-section. The upper surface is damaged, but retains the remains of a [circular] design made using an ovoid ring-stamp. Seven nicks are visible."; distorted vertical edges

1841,0711.267—hacked "fragment of a silver band arm-ring, cut off at both ends. The surviving fragment tapers slightly in shape. The upper surface has been beaten, damaging the stamped decoration. All that can now be observed is the remains of a bar stamp, possibly arranged to form a diagonal cross motif. Eight nicks are visible."; irregular shape

1841,0711.268—hacked "fragment of a silver band arm-ring, cut off at both ends. The upper surface is decorated with a row of vertically-arranged zig-zag bar stamps, too incomplete to record fully. One nick is visible."; rugged edges on all sides

1841,0711.269—hacked "fragment of a silver band arm-ring, cut off on three sides. The upper surface has been severely beaten, obscuring the stamped decoration. This appears to have comprised a bar stamped with serrated edges. One nick is visible."

1841,0711.270—hacked "fragment of a silver band arm-ring. The upper surface is decorated with a row of vertically-arranged bar stamps each containing at least three pairs of pellets. Four nicks are visible."; concave upper edge

1841,0711.271—hacked "fragment of a silver band arm-ring, cut off at both ends and on the lower edge. The upper surface is decorated with the remains of a design made using a double-bar stamp with multiple points. Eight nicks are visible."

1841,0711.272—hacked "fragment of a silver band arm-ring, cut off at both ends. The upper surface is decorated with a row of vertically-arranged bar stamps, each one containing multiple points comprising at least three oblong motifs. 13 nicks are visible."; grid-shaped stamping design

1841,0711.273—hacked "fragment of a silver band arm-ring, cut off from the edge of one terminal. The upper surface is decorated with a stamped design comprising a border of vertically-arranged opposed triangles, and on the edge of the terminal, a row of ovoid ring-stamps or sub-triangular stamps containing one pellet. Two nicks are visible."; uneven cut edges

1841,0711.274—hacked "fragment of a silver band arm-ring, cut off at both ends. The upper surface is decorated with a row of vertically-arranged bar stamps containing two pairs of pellets. Four nicks are visible."; four straight edges.

1841,0711.275—hacked "fragment of a silver band arm-ring, broken off at one end and cut off at the other. The upper surface is decorated with stamped ornament comprising two rows of opposed triangles. Seven nicks are visible."; four rugged edges

1841,0711.276—hacked "fragment of a silver band arm-ring, cut off at one end and broken at the other. The upper surface is decorated with two rows of pentagonal stamps with a projection from the apex, indicating that the stamps have originally formed half of a conjoined triangle stamp. Four nicks are visible."

1841,0711.277—hacked "fragment of a silver band arm-ring, cut off at both ends and folded over to form a U-shape. It tapers slightly towards one end. The front face is decorated with stamped ornament in rows and diagonal crosses"

1841,0711.278—hacked "fragment of a silver band arm-ring, cut off at both ends and [slightly] tapering. The upper surface is decorated with a row of vertically-arranged plain bar stamps, 17 mm long. Seven nicks are visible."

1841,0711.279—hacked "fragment of a silver band arm-ring, cut off at both ends. The front surface is decorated with a row of incised thick vertical lines. Four nicks are visible."

1841,0711.280—hacked "fragment of a silver band arm-ring, cut off obliquely at both ends. The upper surface is decorated with a row of plain bar stamps. Three nicks are visible."

1841,0711.281—hacked "fragment of a silver band arm-ring, cut from a tapering thick band. The upper surface is decorated with a row of vertical grooves, perhaps made by a stamp and / or cutting. The terminal is [undecorated], with beaten edges. Four nicks are visible."

1841,0711.282—hacked "fragment of a silver arm-ring, cut off at both ends. The upper surface has two deep vertical incisions at one end, possibly representing grooved decoration or secondary cuts. A scratched cross has also been made to the surface. Five nicks are visible"

1841,0711.283—hacked "fragment of a silver band arm-ring, cut off on two sides from the edge of one terminal. The upper [surface] shows signs of decoration comprising two vertical incisions, which alternatively could be secondary marks. One nick is visible."

1841,0711.284—hacked "fragment of a silver pin-head from a bossed penannular brooch cut off at both ends. It has three incised grooves and evidence of three perforations that originally would have held twisted wires. Three nicks are visible."; type series: Johansen F

1841,0711.285—hacked "fragment of a silver band arm-ring, cut off on three sides. The upper surface is decorated with the remains of a row of vertical bar stamps with serrated edges, forming a zigzag effect. Two nicks are visible."; one straight edge, the other diagonal

1841,0711.286—hacked "fragment of a silver band arm-ring, cut off on three sides. The upper surface is decorated with the remains of a row of vertical bar stamps with serrated edges. Nine nicks are visible."

1841,0711.287—hacked "fragment of a silver band arm-ring, cut off at both ends with a parallel cut at one end. The upper surface is decorated with a vertical row of stamps made using a multi-point bar with seven elements [although probably more than 7 in reality because of the hacking]. 11 nicks are visible."

1841,0711.288—hacked "fragment of a silver band arm-ring, cut off on all four sides into an irregular shape. The upper surface is decorated with a row of vertical, multi-point bar stamps. Five nicks are visible."

1841,0711.289—hacked "fragment of a silver band arm-ring, cut off at both ends. The fragment tapers slightly and has been bent into a loop. The upper surface is decorated with a vertical row of bar stamps with serrated edges. 17 nicks are visible." A few nicks on the edge are very prominent.

1841,0711.290—hacked "fragment of a silver penannular band arm-ring, comprising a broken and flattened terminal tapering towards the rectangular end. It is decorated with a row of stamps made with a bar with a plain centre and serrated edges, giving a toothed effect. Four nicks are visible."; at 44 mm, longer than many fragments of arm-rings; one nick particularly prominent

1841,0711.291—hacked "fragment of a silver band arm-ring, cut off at both ends. The upper surface is decorated with a row of vertical multi-point bar stamps with nine elements. 10 nicks are visible."; one end has a straight cut, the other has intersecting diagonals

1841,0711.292—hacked "fragment of a silver band arm-ring, cut off on three sides. The original outer edge is cracked. The upper face is decorated with stamped ornament, comprising five diagonal parallel impressions alongside a vertical impression, all made with a multi-point bar stamp with eight elements. Two nicks are visible."; one edge has a medieval cut

1841,0711.293—hacked "fragment of a silver band arm-ring, cut off on three sides. The upper surface is decorated with vertical stamps made using a multi-point bar stamp with five elements. There are three oblique parallel cuts on the lower surface. Four nicks are visible."; one straight vertical edge, the other diagonal

1841,0711.294—hacked "fragment of a silver penannular band arm-ring, decorated with a row of vertical stamps made using a multi-point bar stamp with at least five elements. Seven nicks are visible."; one rounded edge, another straight edge

1841,0711.295—hacked "fragment of a silver penannular band arm-ring, with a rounded terminal. The upper surface is decorated with a row of vertical Z-shaped stamps. Two nicks are visible."; one straight edge, one rounded edge

1841,0711.296—hacked "fragment of a silver band arm-ring, cut off at both ends. The upper surface is decorated with a row of vertical bar stamps with serrated edges. Five nicks are visible."; two straight ends

1841,0711.297—hacked "fragment of a silver band arm-ring, cut off on three sides. The upper surface is decorated with a row of zigzag stamping, distorted when the arm-ring was severed. Two nicks are visible."; uneven ends

1841,0711.298—hacked "fragment of a silver band arm-ring, cut off at both ends. The fragment tapers and is decorated with a row of stamps made using a bar stamp with serrated edges and [a] median line. Nine nicks are visible."

1841,0711.299—hacked "fragment of a silver band arm-ring, cut off at both ends. Its upper surface is decorated with a row of stamps made using a zigzag bar stamp. Four nicks are visible."

1841,0711.300—hacked "fragment of a silver band arm-ring, broken at one end and cut off at the other end. The upper surface is decorated with a row of serrated bar stamps. 11 nicks are visible."

1841,0711.301—hacked "fragment of a silver band arm-ring cut off at both ends from the front. There is a transverse cut on the back. The upper surface is decorated with zigzag stamping. One nick is visible."

1841,0711.302—hacked "fragment of a silver band arm-ring, cut off on three sides with a parallel cut across the narrow end. The upper surface is decorated [with] diagonally-arranged impressions from a serrated bar stamp. Six nicks are visible."

1841,0711.303—hacked "fragment of a silver band arm-ring, cut off at both ends to leave oblique terminals. The upper surface is decorated with the remains of a chevron motif, formed using a serrated bar stamp and a billeted bar stamp with a plain centre. Three nicks are visible."; hexagonal

1841,0711.304—hacked "fragment of a silver band arm-ring, cut off at both ends. The fragment tapers and is cracked on the outer edge. The upper surface is decorated with a row of vertical serrated bar stamps. Eight nicks are visible."

1841,0711.305—hacked "fragment of the middle part of a silver band arm-ring. The fragment has been cut off at both ends, one end being straight and the other oblique. One of the outer edges is cracked. The upper surface is decorated with impressions from a double V-shaped stamp, resembling a leaf-like or foliate motif. Nine nicks are visible."

1841,0711.306—hacked "fragment from a silver band annular arm-ring, comprising part of the band and rod terminal. The fragment has been [cut] off at both ends. The upper surface is decorated with [two] ovoid stamps containing a pellet, from which four incised lines extend. Two nicks are visible."; curved at the tapering end, and appears to be part of the terminal

1841,0711.307—hacked "fragment of a silver band arm-ring, tapering and cut off at both ends. The front surface of the fragment is decorated with ring stamps [in diamond- and triangular-shaped patterns]. One nick is visible."

1841,0711.308—hacked "fragment of a silver band arm-ring, cut off at both ends and bent. The front surface of the fragment is decorated with opposed triangle stamps, arranged in three rows but increasing to five at the wider end. Three nicks are visible."

1841,0711.309—hacked "fragment of a silver band arm-ring, comprising a portion of the edge that is cut off on three sides. The front is decorated with a stamped design of opposed triangles and ovoid rings. Three nicks are visible."

1841,0711.310—hacked "fragment of a silver band arm-ring, comprising part of the edge. One side has been cut and the other three are broken. The surface is cut and scratched. The upper surface is decorated with vertical and horizontal rows of ovoid ring stamps. 12 nicks are visible."

1841,0711.311—hacked "fragment of a silver band arm-ring, comprising part of one edge. It has been cut off on three sides. The upper surface is decorated with ring stamps. Five nicks are visible."; uneven edges

1841,0711.312—hacked "two fragments from a silver band arm-ring together forming the middle part of the band and one tapering side. Both pieces have been flattened and cut off at both ends. Fragment 1 (larger) The upper surface is decorated with a diagonal cross with a stamped pellet between each arm, and a vertical row of plain bar stamps. The stamp has a distinctive fault on one side. One nick is visible. Fragment 2 (smaller) The upper surface is decorated with a vertical row of plain bar stamps. No nicks are visible."; pictured together

1841,0711.313—hacked "fragment of a silver band arm-ring, flattened and tapering. Both ends have been cut off. The front surface is decorated with a stamped zig-zag design. Three nicks are visible."

1841,0711.314—hacked "fragment of a silver band arm-ring, tapering and cut off at both ends. The front surface is decorated with rows of transverse stamps from a zig-zag bar stamp. Two nicks are visible."

1841,0711.315—hacked "fragment of a silver band arm-ring, comprising the expanded middle section that has been cut off at one end and broken off at the other. The front surface is decorated with a stamped design using a plain bar stamp with serrated edge. Two nicks are visible."

1841,0711.316—hacked "fragment of a silver band arm-ring, tapering and cut off at both ends. The front surface is decorated with a design using a zig-zag stamp. Four nicks are visible."

1841,0711.317—hacked "fragment of a silver band arm-ring, cut off at both ends. The upper surface is decorated with a row of serrated bar stamps. Two nicks are visible."

1841,0711.318—hacked "fragment of a silver band arm-ring, cut off at both ends and expanding towards the centre. It is decorated with a central saltire over a vertical row of rectangular stamps, further rows of which flank the cross. 20 nicks are visible."

1841,0711.319—hacked "fragment of a silver band arm-ring, comprising the expanded middle section and part of one tapering side. Both ends are cut off and the fragment is bent into a U-shape. The arm-ring fragment is decorated with a central saltire cross and a row of vertical stamps from a lattice stamp containing pellets. 12 nicks are visible."

1841,0711.320—hacked "fragment from the edge of a silver band arm-ring, cut off on three sides. It is decorated on the upper surface with a design using a lattice bar stamp and triangle motifs. Nine nicks are visible."

1841,0711.321—hacked "fragment of a silver band arm-ring, cut off at both ends and hammered flat. The fragment comprises part of the expanded central section, which tapers towards one end. The remains of stamped decoration is [*sic*] visible. Towards the centre are two rows of interlocking pelleted triangles, while the tapering section features vertical lines of lattice stamps. Five nicks are visible."

1841,0711.322—hacked "fragment of a silver band penannular arm-ring, thin and broken at one end. The surviving terminal is rectangular. The arm-ring fragment is decorated with vertical rows of lattice stamps. On the back is a deep cut. No nicks are visible."

1841,0711.323—hacked "fragment of a silver band arm-ring, triangular in form and cut off on two sides. The upper surface is decorated with a row of lattice stamps. There is a deep oblique cut across the lower surface. No nicks are visible."

1841,0711.324—hacked "fragment of a silver band-arm ring, comprising part of the expanded mid-section that has been cut off at both ends. The front is decorated with intersecting V-shaped lines, created with a lattice stamp. No nicks are visible."

1841,0711.325—hacked "fragment of a silver band arm-ring, comprising the expanded middle section with both terminals cut off. The front surface is decorated with a design comprising a central diagonal cross and a row of vertical stamps using a bar stamp with serrated edges. Seven nicks are visible."

1841,0711.326—hacked "fragment of a silver band arm-ring, sub-rectangular in form and tapering. One end has been cut off and the other end is broken off. The arm-ring fragment is decorated with stamps arranged in a V-shape. 18 nicks are visible."

1841,0711.327—hacked "fragment of a silver band arm-ring, comprising the central section of the band. The front surface is decorated with a design comprising a diagonal cross and a vertical row of stamps. Eight nicks are visible."

1841,0711.328—hacked "fragment of a silver band penannular arm-ring, decorated with a diagonal cross made using a plain bar stamp with serrated edges"; appears cut on one end and tapering at the

other

1841,0711.329—hacked "fragment from the edge of a silver band arm-ring, cut form a thick band. It is decorated on the front with a stamped design of zigzags between borders, using a bar stamp with serrated edges. Three nicks are visible."

1841,0711.330—hacked "part of the expanded mid-portion of a silver band arm-ring band severed across its mid-point. It is decorated with the remains of a diagonal cross, incorporating a central vertical line, using an incomplete bar-stamp containing a row of pellets. Twelve nicks are visible (six on each side)."

1841,0711.331—hacked "fragment of the edge of a silver band arm-ring. The fragment is from the middle part of the arm-ring, and has been cut on three sides. The remains of a stamped saltire cross survive along with other stamps comprising interlocking triangles, each containing a single pellet. Two cuts have been made into the front surface [likely as part of the hacking process]. Four nicks are visible."

1841,0711.332—hacked "fragment of a silver band arm-ring, cut off at both ends. It is decorated on the upper surface with a vertical row of stamps made using a bar-stamp consisting of several (at least six) pelleted triangles. Two nicks are visible."; mostly square, except for a corner cut off on a diagonal

1841,0711.333—hacked "terminal fragment of silver band penannular arm-ring. Severed at one end from a narrow band, with a rounded terminal; it is decorated with a row of vertical transverse stamping, using a bar-stamp consisting of a row of conjoined lozenges (on their sides), each containing a pellet."

1841,0711.334—hacked "silver band arm-ring fragment.It is decorated with a row of vertical transverse stamping, using a bar-stamp consisting of a row of conjoined lozenges (on their sides), each containing a pellet."

1841,0711.335—hacked "fragment of a silver band arm-ring, cut off at both ends. The surface is partly flattened and decorated with the remains of a vertical row of stamped decoration, using a bar-stamp consisting of a row of conjoined polygonal elements each containing a pellet. Seven nicks are visible."; 3 techniques→cast, stamped, beaten; one diagonal very jagged edge

1841,0711.336—hacked "fragment of silver band arm-ring, cut off at both ends and decorated with two rows of opposed triangles, made with a pelleted stamp. Nine nicks are visible."

1841,0711.337—hacked "fragment of a silver band arm-ring, cut off at both ends and slightly D-shaped in cross-section. It is decorated with four rows of interlocking triangles made with a pelleted triangle stamp. Two nicks are visible."; one corner cut off on a diagonal of an otherwise square shape

1841,0711.338—hacked "fragment of a silver band arm-ring, tapering and cut off at both ends…decorated with two areas of stamped ornament, a zig-zag at one end and rows of opposed triangles, each containing three pellets, at the other. Eight nicks are visible."

1841,0711.339—hacked "fragment of a silver band penannular arm-ring, comprising one terminal. Severed, with two strokes (one downwards from the edge), from a narrow band which tapers slightly to a sub-rectangular (and thicker) terminal, with stamped decoration consisting of the remains of a diagonal cross, ending with a single vertical impression, using a plain bar stamp, combined with a second stamp, within the angles of the cross, in the form of a pair of opposed triangles, both containing three pellets. Nine nicks are visible."; one edge straight, the other curved

1841,0711.340—hacked "terminal fragment from a silver neck-ring, rectangular in section and cut off at both ends. The fragment tapers towards one end and is decorated with stamped triangles each containing three pellets. One nick is visible."

1841,0711.341—hacked "fragment of the edge of a silver band arm-ring. It is sub-triangular in shape and has been cut off on three sides. The upper surface shows the remains of two longitudinal rows of stamped decoration, using a stamp in the form of a pair of opposed (conjoined) triangles, each containing three pellets. Two nicks are visible."

1841,0711.342—hacked "fragment of a silver sheet band annular arm-ring, comprising a small piece from an outer edge with some stamped ornament visible. An additional fragment of the same arm-ring is registered separately as 1841,0711.230."; jagged top edge

1841,0711.343—hacked "fragment from the edge of a silver band arm-ring, sub-rectangular in form and cut off on three sides. The upper surface has the remains of stamped decoration, consisting of two longitudinal rows of interlocking pelleted triangles, with only a slight trace of the lower row surviving. No nicks are visible."

1841,0711.344—hacked "fragment from the edge of a silver band arm-ring, cut off on three sides. It has been partly flattened and shows the remains of stamped ornament, comprising three longitudinal rows of double lozenge-shaped stamps. Seven nicks are visible."; rectangular-shaped other than one corner cut off at diagonal

1841,0711.345—hacked "fragment from the edge of a silver band arm-ring, cut off on three sides. The remains of two longitudinal rows of stamped decoration are visible, using a plain 'dagger-shaped' stamp, pointing inwards. Two nicks are visible (on the outer edge)."

1841,0711.346—hacked "fragment of a silver band arm-ring, cut off at both ends from a narrow, slightly tapered, band. The remains of two zones of stamped decoration are visible. The narrowest end has a single longitudinal row, doubled at the wider end, using a plain opposed (unlinked) triangle stamp. Four nicks are visible (two opposing pairs on the front and back of both original edges)."

1841,0711.347—hacked "fragment from the edge of a silver band arm-ring. Cut off from behind on three sides, with the remains of three longitudinal rows of stamped decoration, using two plain 'hour-glass' stamps of different sizes, the smaller being used for the central row. Nine nicks are visible."

1841,0711.348—hacked triangle-shaped "fragment from the edge of a silver band arm-ring, triangular in form and cut off on two sides. The upper surface has the remains of a longitudinal row of stamped decoration along its original outer edge, using a plain opposed (conjoined) triangular stamp. Seven nicks are visible."

1841,0711.349—hacked fragment of a silver armlet; punched design with lozenges; tapered at one end

1841,0711.350—hacked "fragment from the edge of a silver band arm-ring, cut off on three sides from the middle section. The upper surface is decorated with the remains of a diagonal cross with an open centre, made with a lattice stamp. 11 nicks are visible."

1841,0711.351—hacked "fragment of a plain silver band annular arm-ring, comprising a broad flat band that tapers to a straight terminal at one end, the other end being cut off. Two nicks are visible."; some rippling on top surface

1841,0711.352—hacked "fragment of the centre of a silver plain band arm-ring, cut off at both ends, one end bent backwards. The band tapers and is flattened. 21 nicks are visible."; some rippling on surface of one side

1841,0711.353—hacked "fragment of a silver plain band arm-ring, comprising a tapering band with one surviving straight terminal, the other terminal cut off. The fragment has been flattened, and 10 nicks are visible."

1841,0711.354—hacked "fragment of a silver plain band annular arm-ring. The fragment is cut at both ends and tapers towards one rod-shaped end, and bent back. 12 nicks are visible."

1841,0711.355—hacked "fragment of a silver annular plain band arm-ring, cut-off at both ends, comprising the middle section and part of one terminal. One end is wider and the other tapers significantly, originally part of a twisted terminal. The fragment is bent into a loop. Two nicks are visible."

1841,0711.356—hacked "fragment of a silver plain annular band arm-ring, narrow and tapering towards the end. Both terminals have been cut off, but the remains of the hammered rod for the twisted terminal survive at one end. The fragment is bent into a loop. No nicks are visible."

1841,0711.357—hacked "fragment of a silver plain band arm-ring, narrow and tapering, cut off at both ends. The fragment has been bent into a U-shape. Five nicks are visible."

1841,0711.358—hacked "fragment of a plain silver penannular arm-ring, cut off [at] one end and the other end rounded and bent under. Four nicks are visible."

1841,0711.359—hacked "silver penannular 'bullion-ring' made from a plain, flat hoop which tapers towards the back, where the two sub-rectangular terminals overlap. Two nicks are visible."

1841,0711.360—hacked "fragment of a silver plain band arm-ring, cut at both ends and bent into a loop. Eight nicks are visible."; ends not overlapping

1841,0711.361—hacked "terminal fragment of a silver plain penannular finger-ring, with a plain band tapering to a straight-ended terminal. It has been cut approximately in half, through the inside of the gap between its terminals. Sixteen nicks are visible."

1841,0711.362—hacked "fragment of a silver plain penannular band arm-ring, cut off at one end and tapering to a rounded terminal. It has been hammered flat. Five nicks are visible."

1841,0711.363—hacked "fragment of a silver plain penannular band arm-ring, cut off at one end and tapering to a rounded terminal. It is bent, perhaps from hammering."

1841,0711.364—hacked "fragment of a silver plain band arm-ring, cut off at both ends and hammered flat. Two nicks are visible."

1841,0711.365—hacked "fragment of a silver plain band arm-ring, cut off at both ends and hammered flat. Six nicks are visible."; pictured with .364, so possibly from the same ring

1841,0711.366—hacked "fragment of a silver 'bullion-ring', cut off at both ends and tapering slightly. 12 nicks are visible."; slightly curved

1841,0711.367—hacked "fragment of a silver plain band arm-ring, cut off at both ends. One end is bent up. Two nicks are visible."

1841,0711.368—hacked "fragment of a silver plain band arm-ring, cut off at both ends and tapering. It has been hammered flat. Six nicks are visible."; one end bent up slightly

1841,0711.369—hacked "fragment of a silver plain band arm-ring, cut off at both ends and tapering. It has been hammered flat. 19 nicks are visible."; both ends jagged

1841,0711.370—hacked "fragment of a silver plain band arm-ring, cut off at one end with one rounded terminal. One nick is visible."

1841,0711.371—hacked "fragment of a silver [plain] band arm-ring, cut off at both ends from a tapering band and hammered flat. Five nicks are visible."

1841,0711.372—hacked "fragment of a silver plain band arm-ring, cut off at both ends. Five nicks are visible."

1841,0711.373—hacked "fragment of a silver plain band arm-ring, slightly bent, cut off at one end and tapering to a straight terminal at the other end. Six nicks are visible."

1841,0711.374—hacked "fragment of a silver plain band arm-ring, cut off at both ends. The wider end has been bent inwards with a parallel cut and light cuts have been made across the outer face. Two nicks are visible."

1841,0711.375—hacked "fragment of a silver twisted rod, cut off at both ends and circular in cross-section. Four nicks are visible."

1841,0711.376—hacked "fragment of a silver plain band arm-ring, cut off at both ends. The fragment tapers slightly and has been bent up at one end. One nick is visible."

1841,0711.377—hacked "fragment of a silver band penannular arm-ring, cut off at one end with a sub-rectangular [terminal] at the other. The edges have been hammered. Six nicks are visible."

1841,0711.378—hacked "fragment of a silver 'bullion-ring', plain, strongly curved and cut off at both ends. Seven nicks are visible."

1841,0711.379—hacked "fragment of a plain silver band arm-ring, cut off at both ends and tapering, with two parallel cuts at one end. The fragment has been flattened. 18 nicks are visible."

1841,0711.380—hacked "fragment of a silver plain band arm-ring, flattened, cut off at both ends and slightly tapering. Eight nicks are visible."

1841,0711.381—hacked "fragment of a plain silver band arm-ring, cut off at both [ends], flattened and tapering with a dented surface. Seven nicks are visible."

1841,0711.382—hacked "fragment of a plain silver band arm-ring, cut off at both ends, tapering and flattened. 10 nicks are visible."; one surface scratched

1841,0711.383—hacked "fragment of a plain silver band arm-ring, cut off at both ends, flattened and tapering with two cuts at the wider end. Six nicks are visible."

1841,0711.384—hacked "fragment of a silver 'bullion-ring', cut off at both ends, slightly tapering and very curved, with some cracking. One nick is visible."

1841,0711.385—hacked "fragment of a plain silver 'bullion-ring', cut off at both ends, very curved, with a parallel cut across the inside of one end. Two nicks are visible."; some distortion (or perhaps remnants of a stamp) in one corner

1841,0711.386—hacked "fragment of a plain silver 'bullion-ring', cut off at both ends and very curved. Eight nicks are visible."; one rough end, vertical cut near other

1841,0711.387—hacked "fragment of a plain silver band arm-ring, cut off at both ends, slightly tapering. The wider end is broken and the narrower end has two parallel cuts on the back. The fragment is curved and the edges are cracked. Six nicks are visible."; very uneven edges

1841,0711.388—hacked "fragment of a silver 'bullion-ring', cut off both ends from a plain thick band. The fragment is curved with a parallel cut across the inside of one end. Three nicks are visible."

1841,0711.389—hacked "fragment of a plain silver 'bullion-ring', cut off at both ends from a plain thick band. The fragment is distorted and curved with a parallel cut on the inside. Six nicks are visible."

1841,0711.390—hacked "fragment of a silver band arm-ring, cut off at both ends and tapering slightly. The fragment is slightly curved and there are cut marks on the [back]. Four nicks are visible."

1841,0711.391—hacked "fragment of silver band arm-ring, cut off at both ends and slightly tapering, with

a cracked edge. The fragment is curved with parallel cuts on the reverse at one end. Six nicks are visible."

1841,0711.392—hacked "fragment of a silver band arm-ring, cut off at both ends, tapering and slightly curved. Six nicks are visible."

1841,0711.393—hacked "fragment of a silver band arm-ring, cut off at both ends and tapering slightly. The fragment is slightly curved and there are two cuts at one end. 10 nicks are visible."

1841,0711.394—hacked "fragment of a silver band arm-ring, cut off at both ends and tapering slightly. Four nicks are visible."

1841,0711.395—hacked "fragment of a silver band arm-ring, cut off at both ends and curved. One nick is visible."; possible slight flange at one end

1841,0711.396—hacked "fragment of a silver band arm-ring, cut off at both ends from a narrow band with parallel cuts on both faces. 26 nicks are visible."; straight edges

1841,0711.397—hacked "fragment of a silver 'bullion-ring', cut off at both ends, plain and very curved. 13 nicks are visible."

1841,0711.398—hacked "fragment of a silver band arm-ring, cut off at both ends and tapering slightly. The narrower end is broken and bent and there is a transverse scratch across one face. Five nicks are visible."

1841,0711.399—hacked "fragment of a silver band arm-ring,severed at both ends (one end to a break) and cracked on the edges. A rectangular cross is incised on one face. Four nicks are visible."

1841,0711.400—hacked "fragment of a silver band arm-ring, cut off at both ends from a wide tapered band and slightly flattened. Six nicks are visible."; one straight cut and the other diagonal

1841,0711.401—hacked "fragment of a silver oblong ingot, ovoid to sub-rectangular in cross-section due to being hammered on both faces. No nicks are visible."

1841,0711.402—hacked "fragment of a silver penannular band arm-ring, cut off at one end from a narrow tapering band. It has a straight terminal with bevelled edges. Three nicks are visible."

1841,0711.403—hacked "fragment of a silver 'bullion-ring', cut off at both ends from a plain thick narrow band and flattened. One nick is visible."

1841,0711.404—hacked "fragment of a silver band arm-ring, cut off at both ends and tapering slightly with cracking on the edges. The fragment is curved. 11 nicks are visible."

1841,0711.405—hacked "fragment of a band arm-ring, cut off at both ends and flattened by hammering. 12 nicks are visible."

1841,0711.406—hacked "fragment of a silver penannular band arm-ring, comprising one terminal. It is cut off at one end and tapers slightly to the rounded terminal, and has been flattened by hammering. One nick is visible."

1841,0711.407—hacked "fragment from the edge of a silver band arm-ring, cut off on three sides. Eight nicks are visible."

1841,0711.408—hacked "fragment of a silver 'bullion-ring', cut off at both ends, plain and slightly curved. 12 nicks are visible."; scratched surfaces

1841,0711.409—hacked "fragment of silver 'bullion-ring', cut off at both ends and across one angle, plain and tapering with parallel cuts on the upper surface. It has been flattened by hammering. Six nicks are visible."; diagonal edges on one end, and straight edge on the other

1841,0711.410—hacked "fragment of a silver 'bullion-ring', cut off at both ends, plain and tapering with parallel cuts at one end. The fragment has been flattened by hammering. Six nicks are visible."

1841,0711.411—hacked "fragment of a silver 'bullion-ring', cut off at both ends and across one angle, plain and tapering. The fragment has been flattened by hammering. One nick is visible."; two diagonal edges

1841,0711.412—hacked "fragment of a silver band arm-ring, cut off at both ends with parallel cuts on the reverse across three angles. The fragment has been flattened by hammering. Six nicks are visible."

1841,0711.413—hacked "fragment of a silver band arm-ring, cut off at both ends and tapering slightly, with three parallel cuts made obliquely across one corner. One nick is visible."

1841,0711.414—hacked "fragment of a silver band arm-ring, cut off at both ends and flattened by hammering. There are three parallel cuts on the front and back. 12 nicks are visible."; cut diagonally at one corner

1841,0711.415—hacked "fragment of a silver band arm-ring, cut off at both ends and flattened by hammering. 10 nicks are visible."; one uneven edge

1841,0711.416—hacked "fragment from the edge of a silver band arm-ring, cut off on three sides and

flattened by hammering. Nine nicks are visible."; curved concavity on one side

1841,0711.417—hacked "fragment of a silver band arm-ring, cut off at both ends and tapering slightly. There is a parallel cut halfway across one end, and the fragment has been flattened by hammering. 11 nicks are visible."; diagonal scratches on surface

1841,0711.418—hacked "fragment from the edge of a silver band arm-ring, cut off on three sides and flattened by hammering. 3 nicks are visible."; rough, uneven edges

1841,0711.419—hacked "fragment from the edge of a silver band arm-ring, cut off on three sides and flattened by hammering. Six nicks are visible."; trapezoid-shaped

1841,0711.420—hacked "fragment from the edge of a silver band arm-ring, cut off on three sides and flattened by hammering. Six nicks are visible."; one slightly-rounded edge; diagonal cut parallel to rounded edge

1841,0711.421—hacked "terminal fragment of a silver penannular band arm-ring, cut off at one end and tapering towards the rectangular terminal. One nick is visible."

1841,0711.422—hacked "fragment from the edge of a silver band arm-ring, cut off on three sides from the middle section of the ring as indicated by a slight curve…parallel cut halfway across on the reverse of the narrower end, and the fragment has been flattened by hammering. One nick is visible."

1841,0711.423—hacked "fragment of a silver band arm-ring, pointed in form, cut off at both ends. One end is broken and the other cut obliquely. One nick is visible."; narrow triangle in shape

1841,0711.424—hacked "fragment of a silver oblong ingot, wedge-shaped, cut off by two oblique strokes. The cross-section is unclear. No nicks are visible."; imperfection on top surface, likely from casting

1841,0711.425—denoted as hacksilver, but appears whole (although hammered); "Annular silver lozenge-rod arm-ring, comprising a tapered rod with overlapping ends that terminate in twists, wrapped around the rod. The rod is square in section and decorated on three faces with a punched design of plain opposed triangles. The arm-ring is now flattened into an oval shape. Four nicks are visible."

1841,0711.426—like 426, denoted as hacksilver, but appears whole (although reshaped); "Annular silver lozenge-rod arm-ring, comprising a plain tapered rod with terminals twisted tightly together. The arm-ring is rectangular in section and has been flattened into a figure-of-eight shape. Three nicks are visible."

1841,0711.427—hacked "fragment of an annular silver lozenge-rod arm-ring, comprising a square-sectioned rod that tapers towards a twisted terminal, the other terminal having been cut off. The fragment has been bent and is very scratched. Seven nicks are visible."; U-shaped

1841,0711.428—hacked "silver armlet with faceted, plain hoop and curved ends, one missing."; 7.10 cm

1841,0711.429—denoted as hacksilver, but appears whole, although modified; "silver annular lozenge-rod arm-ring, comprising a plain tapered rod of rectangular cross-section. Its ends are twisted together tightly and flattened into a figure-of-eight shape. Three nicks are visible."

1841,0711.430—denoted as hacksilver, but appears whole, although modified; "Silver annular arm-ring made from a plain, tapering rod of circular section. The terminals are joined in a spiral knot. The arm-ring is flattened into an ovoid shape. One nick is visible."

1841,0711.431—denoted as hacksilver, but appears whole, although modified; "A silver annular rod arm-ring with an annular band-shaped finger-ring attached to it. The arm-ring consists of a plain tapering rod of circular section with its terminals twisted together. It is flattened into a figure-of-eight shape. The finger-ring consists of a plain tapering band with its terminals twisted together. Three nicks are visible on the arm-ring."; unique as an example of two artifacts intertwined

1841,0711.432—"Silver annular twisted-rod arm-ring, comprising two tapered rods with the ends of one rod linked in a spiral knot, with two twists to either side. The arm-ring has been flattened into an oval shape. Five nicks are visible."

1841,0711.433—hacked "Hoop of a plain silver penannular brooch with zoomorphic terminals and punched decoration. The hoop comprises a circular-sectioned rod with flattened terminals. These have been modelled to resemble animal heads with open jaws, indicated by a line of punches [bordered?] by incised lines. The hoop is much misshapen, having been straightened and with both ends bent inwards. Four nicks are visible."; terminals appear to be the mouths/faces of dragon-like creatures

1841,0711.434—hacked "Plain silver terminal of an unfinished penannular brooch (blank or rough-out), triangular in form and broken at one end through the remaining part of the hoop. The hoop

fragment is rectangular in section and bent back. The object is cracked and has been hammered roughly. Two nicks are visible. The fragment joins with 1841,0711.435."; Celtic in origin

1841,0711.435—hacked "terminal fragment of a plain silver 'rough-out' or blank for a penannular brooch terminal with part of the hoop. The hoop section has been bent back and underneath itself. Two nicks are visible."; Celtic in origin

1841,0711.436—hacked "silver buckle or annular brooch constructed from a penannular arm-ring and the pin from a 'thistle' brooch. The arm-ring is octagonal in cross-section and tapers towards the terminals, which are flat. It is decorated with rows of punched opposed triangles. The pin-head and shaft are cast in one. Part of the pin-head has been filed and stamped to create 'brambled' effect. The top of the pin-head has a central mark with an incised line around the border. The back of the pin-head has been cut off to fit it onto the arm-ring, and then hammered on the front and back to close and fix it in place. The pin shaft is sub-rectangular in cross-section and has been cut off at the end to fit onto the ring. Six nicks are visible (four on the pin and two on the arm-ring)."; Celtic in origin

1841,0711.437—hacked "fragment of a silver pin-head from a 'thistle' pennanular brooch, with a stub of the pin. The pin-head is hollow cast and spherical, with deeply incised, brambled decoration. One nick is visible."; Celtic in origin

1841,0711.438—hacked "cast silver fragment comprising the upper half of one side of a pin-head from a ball-type penannular brooch. The fragment is cut off on three sides, with the remains of a plain collar on one side. The pin-top is plain with a pair of incised lines, creating a simple collar above a plain moulding. Three nicks and one surface cut are visible."; Celtic in origin

1841,0711.439—hacked "fragment from the pin-head of a silver ball-type penannular brooch, comprising the upper half of one side of the pin-head, cut off on two sides. The face of the ball appears to have damaged during the cutting. The fragment probably represents the plain reverse side of a 'thistle' type penannular brooch, its interior hollowed for the brooch-hoop. One nick is visible."; Celtic in origin

1841,0711.440—hacked "silver fragment from the left-hand hoop/terminal junction of a ball-type penannular brooch, cut off on three sides. Only a small part of the hoop survives, circular in cross-section with a single plain collar denoted by a pair of incised lines around the junction. Three nicks are visible."; Celtic in origin

1841,0711.441—hacked "cast silver fragment cut from a faceted rectangular terminal knob of a 'Permian' arm-ring. The upper face is decorated with a row of ring punches within a border of lozenge punches and an incised line. The outer face is decorated with three ring punches arranged in a triangular formation, with an incised border around the edge. Two nicks are visible."; cast and punched techniques; pyramid-shaped

1841,0711.442—hacked "fragment from the edge of a massive cast silver band arm-ring, rectangular, D-shaped in cross-section and cut off on three sides. The ornament has been flattened during cutting, but comprises a deep, transverse C-shaped groove with a punched outer edge, and a similar row of regular punch marks forming a border along the upper outer edge of the ring. Seven nicks are visible."

1841,0711.443—hacked "silver fragment, possibly from a terminal plat of a brooch. It is flat and triangular in form, and has been cut off on on [sic] all sides. The remains of incised decoration are visible on the front, comprising a tapering and curving band with diagonal hatching, and two outer lines forming plain borders. There are two transverse cuts across the back. No nicks are visible."; incised technique

1841,0711.444—hacked "silver fragment, one side with punched zigzag."; perhaps a fragment of an arm-ring because decorated, but not denoted and not enough present to tell for sure

1841,0711.445—hacked "fragment of a silver oblong ingot, wedge-shaped with one rough cast face. No nicks are visible."; one concave end, the other convex

1841,0711.446—hacked "fragment of a silver oblong ingot, sub-rectangular in form with an irregularly-shaped cross-section. The surface shows cracking and some casting flaws. No nicks are visible."

1841,0711.447—hacked "fragment of a silver oblong ingot, sub-rectangular in form and cut off from an ingot of probable D-shaped cross section."; not visibly nicked; very irregular shape

1841,0711.448—hacked "silver fragment, possibly from the terminal plate of a brooch. It is flat and sub-rectangular in form, and has been cut off on three sides leaving one original straight edge."; mostly triangular in shape otherwise; "One side is decorated with an incised pair of curving lines, and the

[other] side is plain. No nicks are visible."

1841,0711.449—hacked "fragment from the left-hand terminal of a silver pseudo-penannular brooch. The fragment is moulded at the terminal junction and the incised remains of an open-jawed animal-head are visible on both sides. Four nicks are visible."; Celtic in origin; incised technique

1841,0711.450—hacked "fragment of a silver bossed penannular brooch"; one of the spherical bosses surrounded by a square; "The fragment comprises a sub-rectangular plate that has been cut off on all four sides. In the centre is a hollow domed boss which is riveted into place. On the edge of the surviving plate can be seen the remains of incised billeted dividing bands and ornament. Three nicks are visible."; Celtic in origin; Johansen A type series; incised technique

1841,0711.451—hacked "silver hemispherical boss from a bossed penannular brooch. The boss is solid, plain and has an integral rivet. There is a deep double cut across the base [unpictured], probably from where it had been cut from the brooch. Two nicks are visible."; Celtic in origin; of Johansen miscellaneous type series

1841,0711.452—hacked "plain silver solid boss from a bossed penannular brooch, sub-conical in form with a flat top and integral rivet. Two nicks are visible."; Celtic in origin; of Johansen miscellaneous type series

1841,0711.453—hacked "plain silver solid boss from a bossed penannular brooch, hemispherical in form with an integral rivet. No nicks are visible."; Celtic in origin; of Johansen miscellaneous type series

1841,0711.454—hacked "fragment of a bossed penannular brooch, comprising part of the right-hand terminal plate. The fragment has the remains of open work animals along the outer and inner edges, which have been cut through. In the centre is a rivet hole and double incised beaded border which once surrounded a boss, now missing. A deep cut crosses the empty space left by the boss. Eight nicks are visible."; Celtic in origin; of Johansen C type series; reflects incised technique

1841,0711.455—hacked "fragment from the terminal of a silver bossed penannular brooch. The fragment is openwork and in the form of an animal shown in profile with a ring-punched eye and incised and punched decoration on its body. The other face is plain. Two nicks are visible."; of Johansen F type series; reflects the use of incised and punched techniques

1841,0711.456—hacked "cast silver strap-end inlaid with niello, decorated in the Trewhiddle Style. Between the rivet holes at the split-end are three incised pendant leaves within a fan-shaped field, the two outer ones turning back on themselves. At the terminal is a pattern based on a formalised animal head seen from above. The eyes are indicated by a pair of dots and the snout by a double curved line. The forehead bears a fan-shaped field containing a formalised pattern similar to that at the split end, while the ears are comma-shaped and cross-hatched centrally - between the ears is a small bifoliate pattern. In the centre of the strap-end is a sub-rectangular field with one convex end and slightly curved long sides, which are bounded by a beaded border. The field is ornamented by engraving and was originally inlaid with niello, of which some survives. It is divided by a cross, the arms of which have triangular terminals; at the junction of the arms is a square billet. In each quarter is a backward-looking animal. The hind-leg combines with the tail, crosses the body to interlace with a semi-circular ribbon behind the animal, and emerges to form a scrolled terminal. The animal has a squared snout, the mouth is open and the lower jaw is slightly shorter than the upper one, the forehead is domed and a small dot indicates an eye. The back is plain. The object is much worn and eight nicks are visible."; of Trewhiddle style; from Late Anglo-Saxon period; uses both silver and niello; reflects cast, inlaid, and incised techniques; of Thomas 2000 (Class A1bii) type series

1841,0711.457—hacked "fragment of decorated silver mount, possibly from a bowl or cup. The fragment comprises an oblong strip with a rivet-hole at one end, the main surviving field incised with a contorting animal in the Trewhiddle Style, within plain lateral borders. The strip is broken along the contours of the animal's head. The back is plain. Three nicks are visible."; of Trewhiddle style; from Late Anglo-Saxon period; reflects incised technique

1841,0711.458—hacked "fragment of a silver brooch pin-head, comprising a flat sub-rectangular plate and part of a shaft, oval in cross-section. There is a rivet-hole in the centre of the plate for a boss, now missing. The fragment is broken across the top and cut through the shaft. 17 nicks are visible."

1841,0711.459—hacked "fragment from the left-hand terminal of a cast silver bossed penannular brooch. The fragment has been cut from a plain hoop of low, D-shaped cross-section at the point where the hoop meets the terminal plate. The terminal plate has been cut off on three sides and is very

scratched and damaged. The upper surface of the fragment is incised with a sub-triangular field containing a diagonal cross with a lighter vertical line. An incised line is also visible parallel to the cut end of the fragment. On the reverse side is a pair of parallel V-shaped grooves, pointing towards the centre of the terminal. Three nicks are visible."; Celtic in origin; of Johansen B type series; reflects an incised technique

1841,0711.460—hacked "fragment from the left-hand terminal junction of a cast silver bossed penannular brooch. The fragment has been cut through a profile animal head at the junction between hoop and terminal. At the other is an ancient break, repaired on the reverse with a plain sheet of silver, now held in place by two flattened rivets. The animal has open jaws with scrolled ends, and the remains of an incised billeted border and traces of other ornament are present. Two nicks are visible."; Celtic in origin

1841,0711.461—hacked "fragment from the inner edge of a cast silver bossed penannular brooch terminal. The fragment is sub-triangular in form and has been cut off on three of its four sides. The upper surface preserves the remains of incised zoomorphic decoration on a diagonally hatched background, comprising an animal with a plain, band-like body with incised contour lines that terminate in a scroll on top of its head. The back of the fragment is plain except for a lightly incised contour line. Three nicks are visible."; Celtic in origin; of Johansen A type series; reflects incised and cast techniques

1841,0711.462—

1841,0711.463—hacked "fragment of a cast silver bossed penannular brooch. The fragment comprises a sub-triangular plate from the junction between hoop and terminal, cut on three of its four sides. The original outer edge is curved around a crudely incised wheel-shaped cross. The reverse is plain. Two nicks are visible."; Celtic in origin; of Johansen miscellaneous type series; reflects incised technique

1841,0711.464—hacked "fragment of a cast silver bossed penannular brooch. The fragment comprises part of a terminal, cut off on four sides leaving only a small part of the original outer edge and part of the junction with the hoop. The remains of ornament [are] visible, consisting of a border row of stamped triangles and an incised, cross-hatched band marking the junction. A further [pair] of concentric lines, creating a narrower plain band, can also be seen. The reverse is plain except for the remains of incised concentric line ornament. One nick is visible."; Celtic in origin; of Johansen miscellaneous type series; reflects stamped, incised, and cast techniques

1841,0711.465—hacked "fragment of a cast silver bossed penannular brooch, comprising part of the hoop and terminal junction. The fragment is triangular in shape, cut off on two sides. The remains of incised decoration on the front consists of the possible scrolled terminal of open jaws and a diagonally hatched field. On the back are a pair [of] incised lines along the original outer edge. No nicks are visible."; Celtic in origin; of Johansen A type series; reflects incised and cast techniques

1841,0711.466—hacked "silver fragment, possibly from the terminal plate of a penannular brooch. The fragment is sub-triangular in shape, cut off on three sides. The one original edge is curved with a row of plain opposed (conjoined) triangle stamps, creating an 'hour glass' effect. Three nicks are visible."; reflects a stamped technique

1841,0711.467—hacked "fragment of a cast silver band arm-ring. The fragment is distorted [and the] ornament on its upper face is flattened as a result of being cut from below at one end, the other end being broken. The decoration comprises deeply incised transverse grooves, framing a central pit at the broken end. No nicks are visible."; reflects cast and incised techniques

1841,0711.468—hacked "silver fragment possibly from the pin-head of a penannular brooch. The fragment has been cut across at both ends and tapers from a flat rectangular section towards what is most likely a pin-shaft, oval in cross-section the front surface is damaged but retains traces of five converging incised lines. Five nicks are visible."; reflects an incised technique

1841,0711.469—hacked "silver fragment, possibly from a filigree pendant. It has been cut and broken on two sides, the edges partly folded and fused on the back with a further cut across the centre. The surviving outer edge has a raised plain border, and the possible suspension loop has a collar of beaded wire. The upper surface is filled with granules, while the remaining complete field (in the upper left) contains a plain cylindrical loop. Two nicks are visible."; reflects filigree and granulation techniques

1841,0711.470—hacked "silver filigree-decorated fragment, possibly from a mount. The fragment comprises a sub-triangular piece of silver sheet with a rounded terminal. One side is straight and

the the other expands towards the cut end. The fragment is largely edged with beaded wire, with a further row of beaded wire forming a circle around a rivet hole in the centre, perhaps for a missing boss. Beside this is a field containing five small granules with beaded collars; a sixth granule, in the centre, is now missing. The reverse of the fragment is plain. One nick is visible."; reflects filigree and granulation techniques

1841,0711.471—hacked "silver filigree-decorated fragment, comprising an irregular piece of thin sheet, cut on all sides. On the upper surface are soldered the remains of a loop of beaded wire and collared granule, now flattened. Traces of gilding are present. The reverse of the fragment is plain. Two nicks are visible."; with silver and gold; reflects filigree, granulation, and gilded techniques

1841,0711.472—hacked "silver filigree-decorated fragment, comprising a piece of thin sheet with one original side. On the front is a soldered C-shaped scroll of flattened beaded wire, enclosing a granule, with a second granule outside beside a plain clasping band. The reverse is plain. Two nicks are visible."; reflects filigree and granulation technique

1841,0711.473—hacked "silver filigree-decorated fragment, from a brooch. It comprises an irregular piece of sheet with one original edge. The upper surface is decorated with a row of three collared granules, each one surrounded by a pair of plain twisted wires which continue across the fragment to divide it vertically. The reverse is plain. Three nicks are visible."; reflects filigree and granulation techniques; very rugged edges

~~1841,0711.474~~

1841,0711.475—hacked "silver filigree-decorated fragment, comprising a sub-triangular piece of thin sheet with one original edge. This edge appears to have been edged with a wire and has a slight curvature. The upper surface is decorated with a spiral of beaded wire enclosing a granule, now flattened and worn. The reverse is pain. One nick is visible."; reflects filigree and granulation techniques

~~1841,0711.476~~

1841,0711.477—hacked "scrap fragment of silver sheet, irregularly shaped and cut off on all four sides. The surface is battered and the edges cracked. Eight nicks are visible."

1841,0711.478—hacked "scrap fragment of silver sheet, in two pieces. The fragment is sub-rectangular with two straight sides meeting at a right-angle and two irregularly cut sides. No nicks are visible."; very battered

1841,0711.479—hacked "fragment of a cast silver plain band arm-ring, cut off at both ends from a thin band. The fragment is curved with some cracking. Four nicks are visible."

1841,0711.480—hacked "fragment of a cast silver plain band arm-ring, cut off at both ends from the middle section of a tapering band. The widest end is bent back. Three nicks are visible."; rounded edge; reflects a cast technique

1841,0711.481—hacked "fragment of a cast silver plain band arm-ring, cut off at both ends from a thin, slightly tapering band. Three nicks are visible."; reflects a cast technique

1841,0711.482—hacked "fragment of a cast silver band arm-ring, cut off at both ends from a thin tapering band, with some cracking. Six nicks are visible."; reflects a cast technique

1841,0711.483—hacked "fragment of a cast silver plain band arm-ring fragment, cut off at both ends from a thin tapering band. There is a parallel cut across one end. The fragment has been hammered flat. Five nicks are visible."; reflects a cast technique

1841,0711.484—hacked "fragment of a silver brooch pin, comprising part of the pinhead. It has been cut across at both ends, with a slight curvature and taper. It has been hammered to create a raised plain border along both sides, which could alternatively suggest that it is unfinished. One nick is visible."; reflects a hammered technique

1841,0711.485—hacked "fragment of a cast silver plain band arm-ring, cut off at both ends from a thin band. A parallel cut has been made across one end on the back. Seven nicks are visible."; reflects a cast technique

1841,0711.486—hacked "fragment of a cast silver plain arm-ring fragment, cut off at both ends from a thin tapering. Thirteen nicks are visible."; reflects a cast technique

1841,0711.487—hacked "fragment of a cast silver plain band arm-ring, comprising one terminal. It has been cut off at one end from a tapering narrow band, and the terminal is rounded. It has been hammered flat. Eight nicks are visible."; reflects cast and hammered techniques

1841,0711.488—hacked "fragment of a cast silver plain arm-ring, comprising one terminal.it has been cut off at one end from a narrow band, and the terminal is rounded. It has been hammered flat.One

nick is visible."; reflects cast and hammered techniques

1841,0711.489—hacked "fragment of a cast silver plain band arm-ring, comprising one terminal. It has been cut off at one end from a narrow, tapering band and the terminal is rounded and irregular. It has been hammered flat. Five nicks are visible."; reflects cast and hammered techniques

1841,0711.490—hacked "fragment of a cast silver plain arm-ring, cut off at both ends from a narrow band and curved in shape. One nick is visible."; reflects cast techniques

1841,0711.491—hacked "fragment of a cast silver plain arm-ring, cut off at both ends from a narrow, tapering band. It has been hammered flat. Seven nicks are visible."; reflects cast and hammered techniques; slightly rippled

1841,0711.492—hacked "fragment of a cast silver plain band arm-ring, cut off at one end. The band tapers towards a straight terminal incised with a transverse line touching a diagonal cross, perhaps sketching out stamped ornament. The arm-ring appears to have been crudely finished. Five nicks are visible."; reflects cast and incised techniques

1841,0711.493—hacked "fragment of a cast silver plain band arm-ring, cut off at both ends from a tapering band. Two nicks are visible."; reflects cast technique

1841,0711.494—hacked "fragment of a cast silver plain band annular arm-ring, cut off at both ends from a narrow, tapering band. The fragment appears to derive from the section of the band near the terminal, but the ring is unfinished. It has been hammered flat and the edges are faceted. Two nicks are visible."; reflects cast and hammered techniques

1841,0711.495—hacked "fragment of a cast silver plain band arm-ring, cut off at both ends from a narrow band and hammered flat. Three nicks are visible."; reflects cast and hammered techniques

1841,0711.496—hacked "fragment of a cast silver plain band arm-ring, cut off at both ends from a tapering, hammered band. Three nicks are visible."; reflects cast and hammered techniques

1841,0711.497—hacked "fragment of a cast silver plain band arm-ring, cut off at both ends from a narrow, hammered band. No nicks are visible."; reflects cast and hammered techniques

1841,0711.498—hacked "fragment of a cast silver plain band arm-ring, hammered and cut off on both sides to form a triangular shape. No nicks are visible."; reflects cast and hammered techniques

1841,0711.499—hacked "fragment of a cast silver plain band arm-ring, hammered thin and broken on three sides. Four nicks are visible."; reflects cast and hammered techniques

1841,0711.500—hacked "fragment from the edge of a cast silver plain band arm-ring, damaged and bent, broken on at least three sides. No nicks are visible."; reflects cast technique

~~1841,0711.501~~

1841,0711.502—hacked "fragment from the edge of a cast silver plain band arm-ring, hammered flat and cut off on three sides. There is a parallel cut at both ends. Four nicks are visible."; reflects cast and hammered techniques

1841,0711.503—hacked "silver sheet scrap, possibly from a band arm-ring, consisting of a sub-rectangular fragment of plain sheet silver, with one side hammered back on itself. Three, or maybe two, edges are either original or very cleanly cut at right-angles to the surface. The fourth edge is irregularly cut. Ten nicks are visible ([including] four along the bent edge)."

1841,0711.504—hacked "silver sheet scrap, consisting of a fragment of plain sheet silver, irregularly severed on all four sides. It is bent back on itself on one side, which has three parallel cuts along the edge. Five nicks are visible (all along the bent edge)."; appears battered

1841,0711.505—hacked "fragment of a cast silver bossed penannular (?) brooch pin-head, cut at both ends and bent into a U-shape. There is a neatly incised narrow groove down the centre, with a broad groove to either side (left roughly finished)."; Celtic in origin; reflects cast and incised techniques

1841,0711.506—hacked "silver cylinder, one end compressed."

1841,0711.507—hacked "silver U-sectioned fragment. Semi-circular fragment of a U-shaped binding-strip, formed from a thin plain sheet. It is intact at one end and broken at the other. Four nicks are visible (on the outer edge)."

1841,0711.508—hacked "fragment of a silver polygonal-rod arm-ring, cut off at both ends. The fragment is decorated with rows of punched triangles, each triangle containing three pellets. Five nicks are visible."; reflects punched technique; error here—image depicted is 506

1841,0711.509—hacked "silver fragment of armring of octagonal section with 6 rows of punched apex-to-apex triangles."; reflects a punched technique

1841,0711.510—hacked "silver rod arm-ring fragment. Severed at both ends from a thick rod (D 0.7 cm), with stamped decoration; opposed triangles, with three pellets in one and one the other. Three

nicks are visible."; reflects a stamped technique

1841,0711.511—hacked "silver rod arm-ring fragment. Severed at both ends from a rod, with stamped decoration; opposed plain triangle and polygonal element. Ten nicks are visible."; reflects a stamped technique

1841,0711.512—hacked "silver fragment of armring of lozenge section, 2 sides punched with rows of apex-to-apex triangles."; reflects a punched technique

1841,0711.513—hacked "silver fragment of armring of lozenge section, 3 edges with punched apex-to-apex triangles, on edge much worn."; reflects a punched technique

1841,0711.514—hacked "silver fragment of armring of lozenge section, sides with punched apex-to-apex triangles."; reflects a punched technique; triangles pelleted

1841,0711.515—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a square-sectioned rod (0.9 x 0.9cm), with a row of alternating stamped ornament along both outer faces. The 'dagger-like' stamp consists of a lozenge containing three pellets on a pair of lobes, which both contain a single pellet. Eleven nicks are visible (on three of its original angles)."; reflects a stamped technique

1841,0711.516—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a square-sectioned rod (0.9 x 0.9cm), with a row of stamped ornament along both its outer faces. The stamps consist of an oval containing a single pellet, alternating with a C-shape. Thirteen nicks are visible (on all four original angles)."; reflects a stamped technique

1841,0711.517—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a square-sectioned rod (0.6 x 0.6cm), with a row of stamped ornament along both its outer faces. The 'mini-bar' stamp consists of a lozenge containing a single pellet, between two V-shapes. Two nicks are visible."; reflects stamped technique

1841,0711.518—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a square-sectioned rod (0.6 x 0.6cm), with a row of ring-stamped ornament along three adjacent faces and the intermediate angles. Slightly curved. Thirteen nicks are visible (on all four original angles)."; reflects stamped technique

1841,0711.519—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a rod of rectangular section (0.5 x 0.45cm), with a row of stamped ornament across its outer angle. The plain 'hour-glass' stamp consists of a pair of opposed triangles. Six nicks are visible."; reflects stamped technique

1841,0711.520—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a rod of rectangular section (0.6 x 0.45cm), with a row of stamped ornament along both its outer faces. The bar-stamp contains a minimum of five pellets. Five nicks are visible."; reflects stamped technique; part of pellet design appears worn off

1841,0711.521—hacked "silver fragment of armring with punched and notched decoration."; reflects a punched technique

1841,0711.522—hacked "silver rod arm-ring fragment. Severed at both ends from a slightly faceted rod, with three rows of stamped decoration across the slight angles, using a plain double-point stamp. There are the obscure remains of further stamped and incised ornament, with two diagonal lines converging towards a transverse line linking two triangles. Three nicks are visible."; reflects incised and stamped techniques; photo misattributed (fragment of a plain twisted rod arm-ring)

1841,0711.523—hacked "fragment of a cast silver 'Permian' arm-ring, consisting of a short length of rod terminating in a rectangular faceted or polygonal knob. The outer surface of the rod is decorated with a row of punches comprising conjoined triangles each containing a single pellet. The polygonal terminal knob is plain. 13 nicks are visible, with three on the knob and ten on the rod."; reflects cast and punched techniques

1841,0711.524—hacked "silver rod fragment from arm-ring. Rod of oval section, with a row of alternating stamped ornament; cut and broken at both ends and bent into a U-shaped loop. The larger of the two stamps consists of a pair of parallel bar-shaped elements, one containing a pair of pellets and the other one; the second is a simple ring-stamp. Three nicks are visible."; reflects stamped technique

1841,0711.525—hacked "silver rod arm-ring fragment. Severed at both ends from a thick plain rod. Ten nicks are visible."

1841,0711.526—hacked "silver rod arm-ring fragment. Severed at both ends from a thick plain rod. Six nicks are visible."

1841,0711.527—hacked "silver armring fragment of octagonal section."

1841,0711.528—hacked "fragment of a silver polygonal-rod arm-ring, cut off at both ends. It has been straightened out with one end bent. Eleven nicks are visible."

1841,0711.529—hacked "fragment of a silver polygonal-rod arm-ring, plain and octagonal in section, cut off at both ends. The fragment is slightly curved and five nicks are visible."

1841,0711.530—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a thick rod of square section, with a row of stamped ornament across its outer angles; curved. The plain 'hour-glass' stamp consists of a pair of conjoined lozenges. Twelve nicks are visible."; reflects a stamped technique

1841,0711.531—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a square-sectioned rod, with a row of stamped ornament along three adjacent faces. Strongly curved. The 'hour-glass' stamp consists of a pair of plain opposed triangles, one with a flawed edge. Nine nicks are visible."; reflects stamped technique

1841,0711.532—hacked "silver polygonal-rod arm-ring fragment. Severed at both ends from a plain rod of octagonal section. Strongly curved. Three nicks are visible."

1841,0711.533—hacked "silver polygonal-rod arm-ring fragment severed at both ends from a plain rod of octagonal section, with a parallel cut at one. Slightly curved. Four nicks are visible."

1841,0711.534—hacked "silver polygonal-rod arm-ring fragment. Severed at both ends from a plain rod of octagonal section. Slightly curved. Nine nicks are visible."

1841,0711.535—hacked "silver oblong ingot fragment. Thin slice cut from an ingot of polygonal section, with six irregular hammered sides and an unworked main face (base). Severed at both ends from the top. One nick is visible."

1841,0711.536—hacked "fragment of a cast silver lozenge-rod arm-ring, rectangular in section and cut off at both ends. The fragment is slightly curved. Six nicks are visible."

1841,0711.537—hacked "silver armring fragment of trapezoidal section, curved, with groove."; reflects an incised technique; several cuts near one terminal

1841,0711.538—hacked "fragment of a silver rod arm-ring, rectangular in section and cut off at both ends. The fragment tapers slightly and is curved. 15 nicks are visible."

1841,0711.539—hacked "curved fragment of a silver rod arm-ring, square in section and cut off at both ends. Four nicks are visible."

1841,0711.540—hacked "silver lozenge-rod arm-ring fragment. Severed at [both] ends from a plain rod of square section. Curved. Fifteen nicks are visible (on all four original angles)."; appears hammered

1841,0711.541—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain, slightly tapered, rod of square section. Slightly curved. Nine nicks are visible (on all four original angles)."

1841,0711.542—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section; straightened. Twenty-six nicks are visible (on all four original angles and a cut end)."

1841,0711.543—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section, with flattened angles. Straightened. Thirteen nicks are visible (on all four original angles)."

1841,0711.544—hacked "silver armring fragment of lozenge section, curved."

1841,0711.545—hacked "fragment of a silver lozenge-rod arm-ring, plain and square in section, and cut off at both terminals. The fragment has been bent into a closed loop and one end is twisted. The surface is pitted. Six nicks are visible."

1841,0711.546—hacked "fragment of a silver lozenge-rod arm-ring, plain and square in section, cut off at both ends. The fragment has been bent into a loop, its ends overlapping. Three nicks are visible."

1841,0711.547—hacked "fragment of a silver lozenge-rod arm-ring, tapering and cut off at both ends. The arm-ring is plain and square in section. It has been straightened and the narrow end is bent back into a loop. Three nicks are visible."

1841,0711.548—hacked "fragment of a silver lozenge-rod arm-ring, comprising a rod of square-section cut off at both ends. The fragment is decorated with punched triangles and has been bent into a loop. Six nicks are visible."; reflects punched technique

1841,0711.549—hacked fragment of a "cast silver lozenge-rod arm-ring, consisting of a plain rod of square section, It has been cut off at both ends and bent into a loop. 16 nicks are visible."; reflects cast technique

1841,0711.550—hacked "fragment of a silver arm-ring made from a rod of lozenge-shaped section…has

been cut at both ends and bent into a loop. 16 nicks are visible."

1841,0711.551—hacked "fragment of a silver lozenge-rod annular arm-ring, cut off at both ends. The rod has been [straightened] with one end bent into a loop. 28 nicks are visible."

1841,0711.552—hacked "silver armring fragment of lozenge section, notched."

1841,0711.553—hacked "silver annular lozenge-rod arm-ring terminal fragment. Severed at one end from a plain rod of square section, which tapers to a straight terminal, with parallel cut across the other. Bent. Seven nicks are visible."; slightly curved

1841,0711.554—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. Strongly curved. Five nicks are visible."

1841,0711.555—hacked "silver armring fragment of lozenge section, curved."

1841,0711.556—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. Slightly curved. Six nicks are visible."

1841,0711.557—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section, with flattened angles. Curved. Four nicks are visible."

1841,0711.558—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section, but with rounded outer face. Curved. Thirteen nicks are visible (on all four original angles)."

1841,0711.559—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. Twisted and bent, with cracking along inner edge. Seventeen nicks are visible (on all four original angles)."

1841,0711.560—hacked "silver armring fragment of lozenge section."; clear nick on top

1841,0711.561—hacked "silver annular lozenge-rod arm-ring terminal fragment. Severed at one end from a plain rod of square section, which tapers to a slightly rounded terminal. Bent. Three nicks are visible."

1841,0711.562—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. Slightly curved."

1841,0711.563—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. Curved. Fourteen nicks are visible (on all four original angles)."

1841,0711.564—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. Slightly curved. Six nicks are visible."

1841,0711.565—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section, but with rounded angles; curved. Twelve nicks are visible (on all four original angles)."

1841,0711.566—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. Straightened. Eleven nicks are visible (on all four original angles)."

1841,0711.567—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. Straightened. Four nicks are visible."

1841,0711.568—hacked "silver fragment of bar of lozenge section."; part of arm ring

1841,0711.569—hacked "silver fragment of bar of lozenge section."; part of arm ring

1841,0711.570—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. Curved. Nine nicks are visible."

1841,0711.571—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. Curved. Six nicks are visible."

1841,0711.572—hacked "silver lozenge-rod arm-ring fragment. Severed at both ends from a plain rod of square section. [Slightly] curved. Three nicks are visible."; two imperfections in silver on the top, likely from casting

1841,0711.573—hacked "silver annular lozenge-rod arm-ring terminal fragment.Severed at one end from a plain rod of square section, which tapers to a straight terminal. Straightened. Twenty nicks are visible (across all four angles)."

1841,0711.574—hacked "silver annular lozenge-rod arm-ring terminal fragment. Severed at one end from a plain rod of square section, which tapers to a straight terminal. Straightened. Twenty nicks are visible (across all four angles)."

1841,0711.575—hacked "silver fragment of bar of trapezoidal section."; part of an arm ring

1841,0711.576—hacked "fragment of a silver arm-ring. The arm-ring is made of a plain, tapering rod of square section, slightly rounded at the inner and outer angles. It has been cut off at both ends and is slightly curved. Two nicks are visible."

1841,0711.577—hacked "fragment of a silver lozenge-rod arm-ring, joining fragment 1841,0711.681. the fragment comprises a square-sectioned tapering rod. Four nicks are visible."

1841,0711.578—hacked "fragment of silver lozenge-rod arm-ring. Severed at one or both ends from a narrow plain rod of rectangular section, but the narrowest end is rounded. Slightly curved."

1841,0711.579—hacked "fragment of silver lozenge-rod arm-ring. Severed at both ends from a narrow plain, slightly tapered, rod of square section. Slightly curved. One nick is visible."

1841,0711.580—hacked "fragment of silver lozenge-rod arm-ring. Severed at both ends from a plain rod of square section. Curved, and twisted at one end. Two pairs of diagonally intersecting lines are scratched on one face. One nick is visible."

1841,0711.581—hacked "fragment of silver lozenge-rod arm-ring. Severed at both ends from a plain rod of square section. Curved, and twisted at one end. Four nicks are visible."

1841,0711.582—hacked "fragment of silver lozenge-rod arm-ring. Severed at both ends form a plain rod of rectangular section. Slightly curved and twisted. Two nicks are visible."; reflects a twisted technique

1841,0711.583—hacked "fragment of a silver striated rod arm-ring, one end cut off and the other end twisted, now bent into a loop. The terminal is plain and circular in section, and the rest has been hammered into a square section."; reflects twisted and hammered techniques

1841,0711.584—hacked "silver rod fragment. Twisted fragment of square-sectioned rod, incompletely striated, severed at both ends and bent into a U-shaped loop, with everted ends of unequal length. Two nicks are visible."; reflects a twisted wire technique

1841,0711.585—hacked "silver rod fragment. Small twisted fragment of square-section rod, severed at both ends. Thirteen nicks are visible."; reflects a twisted technique

1841,0711.586—hacked "silver rod fragment. Small twisted fragment of square-sectioned rod, severed at both ends. Four nicks are visible."; reflects a twisted technique

1841,0711.587—hacked "fragment of a silver twisted rod arm-ring, one end cut off and the other wedge-shaped in section. The fragment is bent into a U-shape and noticeably worn. Three nicks are visible."; reflects a twisted wire technique

1841,0711.588—hacked "silver penannular finger-ring made from a twisted rod of square cross-section. The terminal ends are nearly touching. One nick is visible."; reflects a twisted technique

1841,0711.589—hacked "silver finger-ring hoop fragment. Twisted plain rod of square section, broken at both ends. Approximately six nicks are visible."; reflects a twisted technique

1841,0711.590—hacked "fragment of a striated rod, possibly from an arm-ring, cut off at both ends and bent back on itself twice with a further loop made at one end. The central part of the rod is circular in cross-section and the ends are striated. Two nicks [are] visible."

1841,0711.591—hacked "fragment of a silver striated rod arm-ring, cut off at both ends. One end is plain with an octagonal section, and the other end is striated and bent into a U-shaped loop. Five nicks are visible, and there is a deep cut on the striated end."

1841,0711.592—hacked "silver fragment, probably of a brooch-pin. Fragment of circular section, cut at one end; the other, which is broken, has been hammered flat but is also curved."; reflects twisted and beaten techniques

1841,0711.593—hacked "silver striated rod fragment. Severed at both ends from the same direction, with flattening on the opposite side. Four nicks are visible."; reflects a twisted technique

1841,0711.594—hacked "silver striated rod fragment. Severed at both ends from different directions. Four nicks are visible."; reflects a twisted technique; round imperfection on top

1841,0711.595—hacked "silver striated rod fragment. Severed at both ends from opposite directions, with considerable flattening and some cracking. Four nicks are visible."; reflects a twisted technique

1841,0711.596—hacked "silver striated rod fragment. Severed at both ends from opposite directions. One nick is visible."; reflects a twisted technique; flattened in part

1841,0711.597—hacked "silver striated rod fragment. Severed at both ends, one of which is plain and octagonal in section and the other coarsely striated. Four nicks are visible."; reflects a twisted technique

1841,0711.598—hacked "silver fragment of rod of plano-convex section, twisted."; part of arm ring; reflects a twisted technique

1841,0711.599—hacked "silver striated rod fragment. Severed at both ends from the same direction, with flattening on the opposite side. Seven nicks are visible."

1841,0711.600—hacked "silver rod fragment moulded to give twisted effect."; reflects twisted and cast

techniques

1841,0711.601—hacked "silver striated rod fragment. Severed at one end and broken at the other.Five nicks are visible."; reflects twisted and cast techniques

1841,0711.602—hacked "silver rod fragment moulded to give twisted effect."; reflects twisted and cast techniques

1841,0711.603—hacked "silver rod fragment moulded to give twisted effect."; reflects twisted and cast techniques

1841,0711.604—hacked "silver rod fragment cast to give twisted effect."; reflects twisted and cast techniques

1841,0711.605—hacked "fragment of a silver part-striated rod, one end broken and the other end cut off, now bent into a loop. The rod is striated for approximately a third of its length, the remainder decorated with a row of pelleted hourglass punches. 15 nicks are visible."; reflects a punched technique

~~1841,0711.606~~

1841,0711.607—hacked "silver rod, twisted with one plain end."; reflects a twisted technique

1841,0711.608—hacked "silver rod, twisted with one plain end."; reflects a twisted technique

1841,0711.609—hacked "silver bar, twisted, curved."; reflects a twisted technique

1841,0711.610—hacked "silver wire, twisted, curved."; reflects a twisted technique

1841,0711.611—hacked "silver bar, faceted, one end twisted."; reflects a twisted technique; non-twisted end appears polygonal

1841,0711.612—hacked "silver strip with punched circles."; reflects a punched technique

1841,0711.613—hacked "silver rod, square section, with punched circles."; reflects a punched technique

1841,0711.614—hacked "silver wire, thick, twisted."; reflects a twisted technique; appears to taper in thickness towards one end; bent roughly in half

1841,0711.615—hacked "fragment of a silver twisted-rod arm-ring, consisting of two rods twisted together and cut off at both ends. The fragment is bent into a figure-of-eight shape. A small piece of wire is caught between the rods. No nicks are visible."; reflects a twisted technique

1841,0711.616—hacked "fragment of a silver twisted arm-ring, comprising a pair of rods twisted together and cut off at both ends. The rods are flattened in section. One nick is visible."; reflects a twisted technique; twisted into a ring with a protrusion of the ends of the rods

1841,0711.617—hacked "silver wire, twisted, bent to form [an unclosed] triangular shape."; reflects a twisted technique

1841,0711.618—hacked "fragment of a silver twisted-rod arm-ring, comprising a pair of rods twisted together and cut off at both ends. The fragment is bent into a U-shaped loop. Three nicks are visible."; reflects a twisted technique

1841,0711.619—hacked "silver wire, possibly a fragment from a twisted neck-ring. It comprises two rods twisted together and cut-off at both ends, with a slight curvature. Three nicks are visible."; reflects a twisted technique

1841,0711.620—hacked "fragment of a silver twisted-rod arm-ring, comprising a [pair] of rods twisted together and cut off at both ends. One nick is visible."; reflects a twisted technique

1841,0711.621—hacked "fragment of a silver twisted-rod arm-ring, consisting of two rods twisted together and cut off at both ends. The surface is very pitted. 16 nicks are visible."; reflects a twisted technique

1841,0711.622—hacked "fragment from a twisted neck-ring (?), comprising two silver rods twisted together and cut off at both ends. Seven nicks are visible."; reflects a twisted technique

1841,0711.623—hacked "fragment of a silver twisted-rod arm-ring, consisting of two rods twisted together. It has been cut off at both ends, and a deep cut is visible in the centre inside the curve of the ring. Seven nicks are visible."; reflects a twisted technique

1841,0711.624—hacked "silver wire, twisted."; reflects a twisted technique

1841,0711.625—hacked "fragment of a silver twisted-rod arm-ring, comprising a pair of rods twisted together. One end is broken and the other has been cut off. The fragment is slightly bent in the middle and 16 nicks are visible."; reflects a twisted technique; one end of this fragment appears to be the closure of the arm ring; along the bend in the middle, one of the rods is broken

1841,0711.626—hacked "silver wire, twisted."; reflects a twisted technique

1841,0711.627—hacked "silver wire, looped over and twisted"; reflects a twisted technique

1841,0711.628—hacked "silver wire, twisted and fused together."; reflects a twisted technique

1841,0711.629—hacked "fragment of a silver twisted-rod arm-ring, comprising a pair of rods twisted together and cut off at both ends. Five nicks are visible."; reflects a twisted technique; who fragment is curved

1841,0711.630—hacked "silver wire, looped over and twisted."; reflects a twisted technique

1841,0711.631—hacked "silver wire, twisted."; reflects a twisted technique

1841,0711.632—hacked "silver wire, twisted, looped over at one end."; reflects a twisted technique

1841,0711.633—hacked "fragment of a silver twisted-rod arm-ring terminal. The fragment comprises two pairs of rods twisted together and fused into the plain terminal, terminating in a loop. Eight nicks are visible."; reflects a twisted technique

1841,0711.634—hacked "silver wire twisted into loop."; reflects a twisted technique; bent into a U-shape; tapers at one end

1841,0711.635—hacked "silver rod fragment, hammered with 4 twisted wires at one end."; reflects twisted and beaten techniques

1841,0711.636—hacked "silver rod fragment, one end of twisted wire."; reflects twisted wire technique

1841,0711.637—hacked "silver wire, bent."

1841,0711.638—hacked "fragment of a silver twisted-rod arm-ring, comprising a pair of rods twisted together and cut-off at both ends. One nick is visible."; reflects a twisted technique

1841,0711.639—hacked "fragment of a silver twisted rod, cut off at both ends and bent into a loop with one end bent back. Two nicks are visible."; reflects a coiled wire technique

1841,0711.640—hacked "fragment of a silver twisted rod, cut off at both ends and bent into a loop. One nick is visible."

1841,0711.641—hacked "fragment of a silver twisted rod, cut off at both ends. It has been bent into a loop and its ends are bent back. Three nicks are visible."

1841,0711.642—hacked "fragment of a silver twisted rod, cut off at both ends and bent into an S-shape. 12 nicks are visible."

1841,0711.643—hacked "silver wire, bent."; twisted into a diamond shape

1841,0711.644—hacked "silver wire, looped."; ends overlap

1841,0711.645—hacked "silver wire, bent and curved."

1841,0711.646—hacked "silver wire, bent."

1841,0711.647—hacked "silver wire, bent."

1841,0711.648—hacked "silver wire, bent into bow shape."

1841,0711.649—hacked "silver wire, bent."

1841,0711.650—hacked "silver wire, twisted into knot shape."

1841,0711.651—hacked "silver wire, twisted into knot shape."; appears to be a thick wire

1841,0711.652—hacked "silver strip, bent into knot."

1841,0711.653—hacked "silver rod, twisted."; reflects a twisted technique

1841,0711.654—hacked "silver wire bent into two loops."

1841,0711.655—hacked "silver wire, bent."

1841,0711.656—hacked "silver wire, bent."

1841,0711.657—hacked "silver wire, bent."

1841,0711.658—hacked "silver strip, twisted slightly, [loosely] omega-shaped."; reflects a twisted technique

1841,0711.659—hacked "silver wire, twisted."; reflects a twisted technique; spiral-shaped

1841,0711.660—hacked "silver rod, circular section, bent."

1841,0711.661—hacked "silver wire, bent."

1841,0711.662—hacked "silver wire, coiled [into a spiral shape]."; striated wire; reflects a coiled wire technique

1841,0711.663—hacked "silver wire, thick, twisted."; reflects a twisted technique

1841,0711.664—hacked "silver wire, twisted."; reflects a twisted technique

1841,0711.665—hacked "silver wire, bent."

1841,0711.666—hacked "ten fragments of a silver rod arm-ring (labelled 666.a-i and 666.k) and one piece of silver rod (labelled [666.j]) probably from a twisted wire arm-ring. The rod arm-ring fragments are plain, circular in cross section and have been cut off at both ends. Many nicks are visible across the group. The twisted arm-ring fragment has been cut off at both ends and is circular in cross section. One nick is visible."

1841,0711.667—hacked "thirty-two fragments of silver wire, probably from a twisted wire arm-ring, each

one cut off at both ends from plain rods. Many show evidence of nicks."

1841,0711.668—hacked "thirty-seven fragments of silver wire, probably from a twisted wire arm-ring, each one cut off at both ends from plain rods. Many show evidence of nicks."

1841,0711.669—hacked "thirteen fragments of plain silver rods, probably from a twisted [wire arm-ring]. Each rod has been cut off at both ends. There is some evidence of nicking."

1841,0711.670—hacked "fragment of a silver annular rod arm-ring, tapering and circular in section. In two pieces, one comprising a double-twisted terminal. Five nicks are visible."; at least one of the three ends appears broken rather than cut

1841,0711.671—hacked "silver wire, bent sharply."; some nicking visible on the outer edge of one side

1841,0711.672—hacked "silver wire bent into loop."; several nicks visible

1841,0711.673—hacked "terminal fragment of a silver penannular rod arm-ring, cut off at one end. The fragment is circular in section, plain and tapering. One terminal has been hammered to make a flat end. The rod has been bent into a knot-like loop. Six nicks are visible."; the ends overlap

1841,0711.674—hacked "fragment from the terminal of a silver penannular rod arm-ring, circular in section. The fragment tapers towards one flat terminal, the other terminal is cut off. It has been bent into a closed loop. Six nicks are visible."

1841,0711.675—hacked "fragment of a silver rod arm-ring, comprising a plain tapered rod that has been cut off at one end and clipped at the other. The fragment has been bent into a loop. One nick is visible."

1841,0711.676—hacked "fragment of a silver rod, broken at one end and hammered flat into rectangular section at the other. The rod tapers towards the broken end and the whole rod has been bent into a tight S-shape. 22 nicks are visible."

1841,0711.677—hacked "fragment of a silver rod, bent into a loop. Part of the rod is rectangular in section, where it has been hammered. It has been cut off at both ends and 24 nicks are visible. The fragment may come from a trefoil-headed pin (Graham-Campbell 2011, cat. n. 1:1059)."; reflects a hammered technique

1841,0711.678—hacked "silver wire, square section, bent at one end" into a J-shape

1841,0711.679—hacked "silver wire, thick, twisted."; reflects a twisted technique

1841,0711.680—hacked "silver wire, thick, bent into loop."

1841,0711.681—hacked "fragment of a silver lozenge arm-ring, joining fragment 1841,0711.577. The fragment comprises a square-sectioned tapering rod, bent into a figure- of-eight shape. Eight nicks are visible."; ends overlap

1841,0711.682—hacked "silver wire, bent into loop."; one curved end

1841,0711.683—hacked "silver wire, thick, bent into loop."; one end curved into small circle

1841,0711.684—hacked "silver rod, bent with one end hammered and the other pointed."; reflects a beaten technique; both ends curved

1841,0711.685—hacked "silver wire folded in three."; reflects a folded technique; one circular terminal

1841,0711.686—hacked "fragment of a silver rod arm-ring, cut off at both ends. The rod is plain and sub-circular in section. 12 nicks are visible. The fragment joins with 1841,0711.687, which forms the terminal of the arm-ring."

1841,0711.687—hacked "fragment of a silver annular rod arm-ring terminal, [straightened] and cut off at one end. The rod is circular in section and the surviving [terminal] is straight. One nick is visible. This fragment joins with arm-ring fragment 1841,0711.686."; one end curved

1841,0711.688—hacked "fragment from the upper end of a pin-shaft. [Comprising] a rod of circular section. It is broken off at one end (which is rectangular), and is lightly incised on the front surface with a diagonal step-pattern. Five nicks are visible."

1841,0711.689—hacked "silver rod, circular section, curved."

1841,0711.690—hacked "silver rod, circular section, curved."

1841,0711.691—hacked "silver rod, circular section, curved."

1841,0711.692—hacked "silver rod, circular section, curved."; flattened by the ends

1841,0711.693—hacked "silver band, curved."; flattened by the ends

1841,0711.694—hacked "silver rod, roughly circular section, curved slightly."

1841,0711.695—hacked "silver rod, circular section, stout."; one warped end

1841,0711.696—hacked "silver wire fragments, 37 pieces."

1841,0711.697—hacked "fifteen fragments of hacksilver, deriving from brooches, suspension attachments, arm-rings and possibly a finger-ring, labelled 1841,0711.697.a-o. Two fragments have been cut

from brooch hoops (1841,0711.697.a-b). Both are ovoid in cross-section and many nicks are visible. One fragment is from a rod arm-ring with an oval cross-section (1841,0711.697.c). It has been cut off at both ends, and two nicks are visible. One fragment is from a suspension ring or attachment (1841,0711.697.d), comprising a piece of plain rod cut off at both ends and bent into a U-shape. One nick is visible. Ten fragments are from rod arm-rings (1841,0711.697.e-h and j-o), all plain and cut off at both ends. Numerous nicks are visible across the group. One fragment may come from a rod finger-ring (1841,0711.697.i). The rod is plain, curved and has been cut off at both ends. Four nicks are visible."

1841,0711.698—hacked "eight pieces of plain wire, cut and broken with some evidence of nicking."

1841,0711.699—hacked "terminal fragment of a silver 'bullion-ring', cut off at one end. The fragment is square in section and tapers towards a straight terminal. It is curved and distorted. Seven nicks are visible."

1841,0711.700—hacked "silver strip, coiled" into a circle with overlapping ends; reflects coiled metalwork technique

1841,0711.701—hacked "silver coil of wire of square section."; circular with overlapping ends; reflects coiled wire technique

1841,0711.702—hacked "two coils of silver wire"; reflects coiled wire technique

1841,0711.703—hacked "silver, small piece cut from a sheet."; one diagonal edge

1841,0711.704—hacked "silver fragment, flat, plain, with shaped [rounded] end."; one rounded end and one cut end

1841,0711.705—hacked "silver fragment, band, slightly curved."; narrow fragment that tapers to a point

1841,0711.706—hacked "silver sheet, curved."

1841,0711.707—hacked "fragment of a silver brooch hoop, cut and broken at each terminal and D-shaped in section. On the back are two pairs of contour lines, very lightly incised. Five nicks are visible."; reflects an incised technique

1841,0711.708—hacked "fragment from the hoop of a silver brooch, D-shaped in section and cut off at both ends. One end is bent back onto itself. Two contour lines are incised on the rear surface. Seven nicks are visible."; reflects an incised technique

1841,0711.709—hacked "silver fragment, strip of oval section, curved, decorated with border of double lines."

1841,0711.710—hacked "silver strip, decorated with 2 incised lines."; reflects incised technique

1841,0711.711—hacked "silver fragment, rod of oval section with stamped decoration."; reflects punched technique

1841,0711.712—hacked "silver fragment, band with stamped decoration."; reflects punched technique

1841,0711.713—hacked "silver fragment, band with decoration of geometric S-shapes."; reflects punched technique; uneven edges suggest possible breaks

1841,0711.714—hacked "fragment of a silver polygonal-rod arm-ring, cut off at one end. The fragment is octagonal in cross-section and tapers into a straight, plain terminal. Each of the four sides is decorated with a row of punched opposed triangles, and three ring punches to separate the decoration from the plain terminal. Six nicks are visible."; reflects punched technique

1841,0711.715—hacked "fragment from the terminal of a silver brooch pin, cut off at the upper end. The pin is rectangular in section and tapers towards the tip, which is more lozenge-shaped in section. The tip [is] bent back into a closed loop. Four nicks are visible."; pointed tip extends beyond the loop

1841,0711.716—hacked "fragment of a cast silver band arm-ring, comprising the central portion tapering towards narrower sides, with both ends cut off. The front of the arm-ring fragment is decorated with a complex punched design of opposed triangles in zones. 12 nicks are visible."; reflects punched technique

1841,0711.717—hacked "silver penannular finger-ring, consisting of a plain tapering rod. The terminals are flat [and] overlap slightly. A minimum of four nicks is visible."

1841,0711.718—hacked "silver attachment or suspension ring, one of a pair with 1841,0711.719 (see separate record). The ring is made from a single rod that has been partly twisted and incised with a spiral line to give a beaded effect. The ring is now flattened and distorted. Two nicks are visible."; reflects an incised technique

1841,0711.719—hacked "silver attachment or suspension ring, one of a pair with 1841,0711.718 (see separate record). The ring is made from a single rod that has been partly twisted and incised with a

spiral line to give a beaded effect. The ring is now flattened and distorted. Two nicks are visible."; reflects an incised technique

1841,0711.720—hacked "two silver finger-rings, joined together. Both rings are made from rods decorated with incised lines to create a milled effect. Each one tapers towards its terminals, which have been twisted together. One finger-ring is slightly larger than the other. One nick is visible on the smaller ring, and none on the larger ring."; reflect incised and twisted techniques; appear similar to 718 and 719

1841,0711.721—hacked "silver 2 fragments of a loop, with stamped decoration."; reflects a punched technique; stamped decoration=punched head-to-head triangles in hourglass shapes

1841,0711.722—hacked "silver ring, of two strands of twisted wire."; reflects a twisted wire technique; ends do not overlap

1841,0711.723—hacked "silver piece of cabled wire, soldered at one end."; reflects a twisted technique; curved into a broad U-shape

1841,0711.724—hacked "silver chain fragment, 3 links of double wire."; reflects a twisted technique

~~1841,0711.725~~

1841,0711.726—hacked "silver wires, twisted into a [complete] circle."

1841,0711.727—hacked "silver wires, twisted together."; curved into a broad U-shape

1841,0711.728—hacked "silver fragment of an unidentified artefact. The fragment consists of a pair of twisted wires bent into a loop with fragments of similar loops on either side of it. The ends of the twisted wires merge into a rectangular beaten terminal, plain and cut through. One nick is visible."; reflects beaten and twisted techniques

1841,0711.729—hacked "part of a silver suspension chain, comprising five loops of drawn wire. The chain is made from lengths of doubled wire, their terminals [wrapped] around the centre to form figure-of-eight loops. No nicks are visible."; reflects a twisted technique

1841,0711.730—hacked "silver wires, twisted into a knot."

1841,0711.731—hacked "silver, U-shaped loop with incised sides."; reflects an incised technique

1841,0711.732—hacked "silver fragment of rod and filigree."; reflects a filigree technique

1841,0711.733—hacked "silver bands stamped with lozenge shapes"; reflects a punched technique

1841,0711.734—hacked "silver band, one side incised, curved."; reflects an incised technique; curved into a C-shape

1841,0711.735—hacked "silver wire, [slightly] curved with ribbed decorated."

1841,0711.736—hacked "silver fragment of wire, 2 ribbed wires, twisted together."; reflects a twisted technique

1841,0711.737—hacked "silver beaded wire."; reflects a beaded wire technique; curved into an uneven U-shape

1841,0711.738—hacked "silver beaded wire."; reflects a beaded wire technique; four beads in a line in a slight curve

1841,0711.739—hacked "fragment of plain wire in the form of a ring, [possibly] originally a suspension ring. The wire has been cut off at both ends, with one end curved suggesting the ends were originally twisted together. The wire is also slightly twisted, show that it has been unwound from a two-[string] ring. No nicks are visible."; reflects a possible twisted wire technique; ends not connected

1841,0711.740—hacked "silver spiral bead, formed from nine coils of a plain wire or rod that has been hammered flat. Four nicks are visible."; reflects a hammered technique

1841,0711.741—hacked "silver rivet for a hollow boss, probably from a bossed penannular rod. The rivet comprises a slightly bent plain rod with flattened ends. Two nicks are visible."

APPENDIX D

A Catalogue of the Non-Numismatic Metal of the Vale of York Hoard[26] [27]

2009,8023.1—Carolingian cup (in which are contained most artifacts of the hoard)
2009,8023.2—gold arm ring (Viking style)
2009,8023.3—silver arm ring (plain 'ring money' type of Viking origin)
2009,8023.4— silver fragment of bossed penannular brooch (Celtic influence; Johansen A series; filigree technique)
2009,8023.5— silver fragment of bossed penannular brooch (Celtic influence; Johansen A series; incised and pointillé techniques)
2009,8023.6— silver fragment "of a"ball-type" penannular brooch" (Celtic influence)
2009,8023.7— silver broadband penannular arm-ring band (entirety; folded and flattened)
2009,8023.8— silver arm-ring fragment from folded end of arm-ring with S-shaped terminal
2009,8023.9— hacked portion of set of brooches (pin and bead connected by chain)
2009,8023.10— hacked bossed section of disc brooch or other jewelry
2009,8023.11— hacked part of pin of (most-likely) a bossed penannular brooch; plain head with looped end (Celtic influence); *likely goes with 2009,8023.12
2009,8023.12— hacked part of pin of (most-likely) a bossed penannular brooch; plain, flattened silver folded over like tweezers w/ etched pattern of Z's on the inside (Celtic influence); *likely goes with 2009,8023.11
2009,8023.13—hacked fragment of coiled neck-ring comprised of six silver rods coiled together; cut at one end and terminating in plain hook at the other
2009,8023.14— hacked terminal of neck-ring; flattened and folded; cut at one end with a hook at the other
2009,8023.15— hacked fragment of neck or arm ring made of two twisted rods; folded
2009,8023.16— hacked fragment of neck ring made of rods twisted together and folded six times
2009,8023.17— hacked curved section of twisted rod Permian-style arm ring
2009,8023.18— silver arm ring (whole) made of two rods twisted together; taper towards twisted closure
2009,8023.19— hacked plain silver arm ring; striae on rod; knot likely hacked; ends folded
2009,8023.20— hacked plain silver arm ring (similar to 19, but ends overlap)
2009,8023.21— hacked silver lozenge rod of either an arm ring or a brooch; curved in a U-shape; plain other than lozenge
2009,8023.22— hacked silver twisted rod forming a spiral; hacked from ring at both ends
2009,8023.23— hacked silver S-shaped fragment of arm ring made of two twisted rods with one end folded back on itself, forming a loop
2009,8023.24— hacked silver J-shaped fragment of arm or neck ring with coil at tapering end
2009,8023.25— silver ingot; rounded; tapers at one end
2009,8023.26— large silver ingot; trapezoid-shaped; rounded at ends
2009,8023.27— hacked large, rib-shaped silver ingot; cut at one end, broken and curved at the other; hacked on both ends
2009,8023.28— hacked silver ovoid ingot; hacked at both ends
2009,8023.29— hacked section of silver ingot; rectangular; hacked at both ends
2009,8023.30— hacked section of ingot; cut at one end and rounded at the other
2009,8023.31— silver ingot; cigar-shaped
2009,8023.32— silver ingot; thin; cigar-shaped
2009,8023.33— hacked silver ingot; cigar-shaped; cut at one end

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[26] Data in this section taken from the British Museum Collection

[27] Bolded numbers reflect those photographed by the British Museum

2009,8023.34— hacked silver ingot; cigar-shaped; terminal; "rounded at one end, cut and broken across the other"

2009,8023.35— hacked silver ovoid ingot; terminal; "rounded at one end and cut across at the other"

2009,8023.36— hacked silver "bar-shaped ingot of rounded rectangular section"

2009,8023.37— hacked "silver terminal cut from a cigar-shaped ingot of rounded rectangular section"

2009,8023.38— hacked "silver terminal of narrow, cigar-shaped ingot of rounded triangular section, cut obliquely across one end and with a hammered lump at the rounded end"

2009,8023.39— hacked "silver terminal cut from a bar-shaped ingot of rounded triangular section, with large, flattened lump fused to the top"

2009,8023.40— hacked "silver terminal of cigar-shaped ingot of rounded trapezoidal section, rounded at one end and cut obliquely across at the other"

2009,8023.41— hacked "silver terminal of flattened, cigar-shaped ingot, cut nearly through, then broken off; two testing nicks on one edge and five on the cut end"

2009,8023.42— hacked "silver tongue-shaped terminal of broad, flat ingot of rounded rectangular section, cut obliquely across"

2009,8023.43— hacked "silver end cut from a narrow, cigar-shaped ingot of rounded triangular section"

2009,8023.44— hacked "silver long triangular fragment cut lengthwise and across from an ingot of probably trapezoidal section, with a deep nick in one edge"

2009,8023.45— hacked "silver section cut and broken at both ends from an ingot of roughly trapezoidal section"

2009,8023.46— hacked "silver length of an ingot of sub-trapezoidal section, cut across both ends and hammered"

2009,8023.47— hacked "silver section cut and broken at both ends from an ingot of sub-rectangular section"

2009,8023.48— hacked "silver length of narrow, cigar-shaped ingot of ovoid section cut across both ends"

2009,8023.49—hacked "silver short length cut and roughly broken at both ends from an ingot of ovoid section"

2009,8023.50—hacked "silver short length of ingot of rounded triangular section, cut obliquely across both ends and hammered on the base"

2009,8023.51—hacked "silver section cut at both ends from an ingot of rounded trapezoidal section; cut mark across one end"

2009,8023.52—hacked "silver short length cut at both ends from an ingot of rounded trapezoidal section"

2009,8023.53—hacked "silver short length cut obliquely at both ends from an ingot of ovoid section"

2009,8023.54—hacked "silver short length cut at both ends from an ingot of rounded trapezoidal section; bottom surface hammered"

2009,8023.55—hacked "silver section cut from an ingot of rounded sub-triangular section"

2009,8023.56—hacked "silver section cut at both ends from an ingot of rounded triangular section"

2009,8023.57—hacked "silver, small section cut at both ends from an ingot of rounded triangular section"

2009,8023.58—hacked "silver slightly curved length of rod of circular section, cut at both ends"

2009,8023.59—hacked "silver curved, tapering length of rod of circular section, cut obliquely at both ends"

2009,8023.60—hacked "silver length of thick rod of circular section with 10 testing nicks all round the sides"

2009,8023.61—hacked "silver section cut from a thick rod of circular section"

2009,8023.62—hacked "silver curved length of tapering rod of sub-circular section with 1 testing nick and 4 light cuts opposite"

2009,8023.63—hacked "silver slightly curved length of rod of circular section with two testing nicks

2009,8023.64—hacked "silver hammered stub of rod of circular section, cut obliquely at both ends"

2009,8023.65—hacked "silver curved length of lozenge-sectioned rod with 4 testing marks and a chisel cut at one end"

2009,8023.66—hacked "silver curved fragment of lozenge-sectioned rod with 6 testing nicks"

2009,8023.67—hacked "silver length of slightly curved bar of low, triangular section cut across both ends and bent down at one of them; one testing nick on the ridge, one on one base angle and two on the other"

2009,8023.68—possible lid of container

2009,8023.69-76—"lead(?) scraps from all nine levels in the silver-gilt cup (no. 1) recorded during conservation"