Southampton French Quarter 1382 Specialist Report Download F6: Metal Objects

By Ian Scott

Introduction

Methodology

The metalwork was initially scanned to assess the overall quantity of objects and their state of preservation. The preservation of the metal work is not good; most of the iron is heavily encrusted with corrosion products, and much of the copper alloy is quite poorly preserved and breaking up. It was important therefore that the complete assemblage was x-rayed prior to assessment. In the assessment the metalwork was identified to function and assigned to a functional category (Table 1). This data, together with provenance, measurements and object description, was recorded onto an electronic database. The minimum level of record - identification and count - was used for unidentified fragments and nail fragments. Most objects were measured and had a verbal description added to the database. During the recording process a small number of objects were identified which would benefit from cleaning and investigation by a conservator, prior to writing the final report on the metalwork. During the recording process the database was updated; in particular the entries for the conserved objects were revised as appropriate.

Table 1: Function Codes used in the finds database and report

Function Code	Description
Tools	Craft tools, from smithing to textile work.
Transport	Items relating to waggons, carts and also horse gear
Measure	Weights and scales
Household	Household furnishings and equipment including pots and utensils
Personal	Jewellery, items of dress, toilet items and writing materials
Security	Keys, locks and chains
Door	Door fittings including hinges and latches
Window	Window fittings including hinges and grills
Structural	Other structural fittings including holdfasts and staples
Nails	Nails (excluding hobnails)
Bindings	Bindings and strips with nails or nail holes
Miscellaneo us	Bar, rod, wire, strip, sheet and plate fragments, and plain
Query	rings Objects of uncertain identification
Industrial	Equipment, other than tools, used in industrial processes
Waste	Waste products from craft processes including offcuts and melted waste
Unknown	Objects or fragments, usually small that cannot be identified

Composition of the assemblage

The metal finds from Southampton French Quarter excavations form a substantial assemblage (2742 objects / 3211 fragments), although preservation is not good. However this total includes 492 unidentified fragments, many of iron, 78 pieces of slag or cinder, and 29 coins. Excluding these the assemblage comprises 2132 metal objects (2588 fragments). It is dominated by iron objects (1831 objects / 2079 fragments). Excluding coins, slag and unidentifiable fragments and here are 272 copper alloy objects. There are 27 pieces of lead, a single length of thread of gold and an object in an unidentified non-ferrous alloy.

Table 2: Summary Quantification of the Metalwork by Function and Phase (object count)

	Function								
Phase	Arms	Tools	Transport	Measure	Personal	Household	Security	Door	Window
LSAX					2	1			
AN		1	3	2	1	4			
HMED	11	3	4	2	26	8	4	1	
LMED		2	5		24	6	1	1	
PMED		9	3		26	13	4	3	9
EMOD		3	1		8	13	1	2	1
UNPH						1			
VOID		1			1	1			
Totals	11	19	16	4	88	47	10	7	10
	Structural	Binding	Nails	Misc	Query	Waste	Coins	Unknown	Totals
LSAX	2		11	7	10		2	13	59
AN	15	1	55	32	11		4	36	194
HMED	102	5	224	220	28	1	5	65	732
LMED	20	10	283	28	41	1	4	116	550
PMED	20	3	415	63	66	1	7	209	867
EMOD	20	1	133	51	23	2	7	38	304
UNPH			1						2
VOID	3		9	1	1			15	34
Totals	182	20	1131	402	180	5	29	492	2731

Chronological Distribution of the metalwork.

Almost the whole metal work assemblage comes from stratified contexts and only 19 objects cannot be assigned to a phase. The bulk of the metalwork derives from three Phases: the High Medieval phase (HMED) (639 objects / 872 fragments), the Late Medieval phase (LMED) (422 objects / 465 fragments) and Post-Medieval phase (PMED) (635 objects / 713 fragments). There are 33 metal finds (38 fragments) from late Saxon contexts (LSAX) and 125 objects (165 fragments) from the Anglo-Norman (AN) phase and 259 objects (316 fragments) from the post-medieval to modern phase (EMOD).

The phase assemblages will be considered in more detail below. The metalwork assemblages from late Saxon and Anglo-Norman contexts are quite small and are best treated as single assemblages.

Spatial distribution of the metalwork

Most of the metal objects come from contexts that can be located within identified tenements. Only 29 objects are not assigned to a tenement and most of these were derived from machining or from the overburden. The number of objects found in each tenement varies. Tenement 237 produced the most metalwork (548 objects) and Tenement 167 the least (5 objects). Tenement 172 produced 263 objects. Tenements 170-171, 173-174, 179 and 240 all produced more than 100 objects and Tenements 178 and 180 produced 90 and 77 objects respectively (Table 3).

Table 3: Summary Quantification by Tenement and Phase (count excluding 'Industrial' and 'Unknown')

	Phase								
Tenement	LSAX	AN	HMED	LMED	PMED	EMOD	UNPH	VOID	Total
166		3	12						15
167	2	1		1	1				5
168	1	1	2	13	1	5			23
169			5	3	4				12
170	2	4	11	5	41	74			137
171			120		4	2			126
172	14	13	137	30	18	51			263
173	1	13	123	6	37	10			190
174		9	2	83	10	3			107
175	1		5	1					7
176			6		10				16
177		4	14			11			29
178		8	1	79	2				90
179			20	135					155
180	4	1	13		59				77
237	3	37	116	51	339		2		548
238	1	8	10	1	13	3			36
239	1	1	26			1			29
240	1	11	2	5	96	74			189
241		3	10	3					16
242			3	6		13			22
243	2	8	1						11
General						6		17	23
N/A						6			6
Total	33	125	639	422	635	259	2	17	2132

Structure of the Report

The report comprises a catalogue of selected and illustrated metalwork and preceded by a discussion of the metalwork assemblage by phase and tenement. The catalogue includes entries on individual identified and interesting objects ordered by function. It also includes tables giving summary quantifications of selected functional groups by Phase and tenement.

The discussion treats the metalwork assemblage on a chronological basis and attempts to characterise the metalwork assemblage of each stratigraphic phase. The finds from the late Saxon and Anglo-Norman phases are treated as single assemblages, because the quantity of material from each phase is small. The material from the medieval and post-medieval phases is broken down by tenements where appropriate.

Late Saxon period (c. 900-c. 1050/1066)

Composition of the assemblage

The finds from late Saxon contexts are limited in number. Excluding slag (n = 11) and small unidentified fragments, there are 33 objects or pieces from late Saxon contexts including two coins. Nails (n = 11), miscellaneous fragments (n = 7) and fragments of uncertain function ('Query'; n = 10) formed the bulk of the late Saxon assemblage. There are two structural items, a U-staple and a washer or rove. There are two coins or tokens from late Saxon contexts: a Romano-British radiate (context 209, sf22) and an unidentified possible copper alloy coin or token (context 6782, sf251) (see *Coin and Token Report*).

Table 4: Summary quantification of metal finds from Late Saxon contexts, by Tenement, Feature and Function

		Function						
Tenement	Feature	Personal	Household	Structural	Nails	Misc	Query	Totals
167	7611		1			1		2
167 Total			1			1		2
168	6420				1			1
168 Total					1			1
170	6695	1					1	2
170 Total		1					1	2
172	48				5	1	4	10
	136				1	1		2
	287					1		1
	6894						1	1
172 Total					6	3	5	14
173	188			1				1
173 Total				1				1
175	3744				1			1
175 Total					1			1
180	5072					2	2	4
180 Total						2	2	4
237	4496						1	1
	4696			1				1
	(4791)	1						1
237 Total		1		1			1	3
238	4797						1	1
238 Total							1	1
239	606					1		1
239 Total						1		1
240	7379				1			1
240 Total					1			1
243	8128				2			2
243 Total					2			2
LSAX Total		2	1	2	11	7	10	33

The largest part of the late Saxon assemblage (n = 14) comes from Tenement 172. The finds consist of 6 nails, 3 miscellaneous fragments and 5 fragments of uncertain function. One of the objects of uncertain function comprised fragments of strip with decoration and possible tinning (Cat. No. 139). There is also a fragment possibly from a bladed tool or knife (Cat. No. 138). Both were recovered from pit 48 in Tenement 172.

No other tenement produced more than four objects (Table 4). The only items of personal adornment are a length of gold thread (Cat. No. 72; context 4791, sf228) from Tenement 237, and possibly the decorative mount (Cat. No. 36; context 6698, sf246) from Tenement 170. The object may have been mount from a vessel or box, or it may have been a brooch and probably dates to the later Saxon period, ie.

the 10th or 11th century. Finally, there is a single knife from Tenement 167 (Cat. No. 74; context 7612). The latter is not typologically diagnostic.

Distribution of the assemblage

It is not possible to draw any firm conclusions regarding the nature of any possible occupation in the period from such a small assemblage. The few finds are quite scattered across the tenements. There are 3 finds from Tenement 237 at the NE of the site, and single finds in tenements 238, 239 and 240 to the W side of the site. Two finds came from the SW corner of the site in Tenement 243. Other finds were found on the E side of the site. Four finds came from Tenement 180 in the NE corner. There was a concentration of late Saxon finds from Tenements 173 (n = 2), 172 (n = 15) and 170 (n = 3). Further finds came from Tenements 168 (n = 1) and 167 (n = 2) in the SW corner of the site. The catalogued finds - Cat. Nos 36, 72, 74, 137 and 138 - were from Tenements, 170, 237, 167. The presence of the decorative mount (Cat. No. 36), perhaps points to some form of occupation with some pretensions to status, but it is probable that it was either transitory or peripheral to any centre of occupation.

Unstratified late Saxon Finds

In addition to the stratified Saxon finds, there are finds of late Saxon date from later phases. There is a pair of prick spurs of distinctive form with long straight sides and decorative bosses, and a distinctive thick neck with short goad (Cat. No. 28) from Tenement 174 context 1323, pit 1318, in the succeeding Anglo-Norman phase. The spurs are of a type that is dated to the 10th and 11th centuries.

From a context (343, pit 172) of the High Medieval date, there is a Hinton Type C strap end of late Saxon type (Cat. No. 61) in Tenement 172. Hinton has suggested (1996, 41-2) that this form of strap end was predominantly a 9th-century type but may have continued in use until the 10th century and perhaps even into the 11th century. He noted the absence of this type of strap end from the Test side successor to the middle Saxon port of Hamwic (loc.cit.). This example is of course from within that Test-side successor. It may be a stray find, or it may confirm that the type had a long life as Hinton suggested.

Anglo-Norman period (c. 1050/1066-c. 1250)

Composition of the assemblage

There are 125 metal finds from Anglo-Norman contexts. The largest functional groups are nails (n = 55), miscellaneous pieces (n = 32), structural items (n = 15) and objects of uncertain identification (n = 11). The objects of uncertain function include a small domed copper alloy object with a hole at its apex (Cat. No. 140).

The structural items include a number of clench nails with attached roves, and clench nails and loose roves (see below Table 13) and a forelock bolt wedge. These are structural items usually associated with the structure of ships. There are many more clench nails and roves from the High Medieval Phase predominantly from Tenement 172 (see below). The remaining 12 objects include an awl (Cat. No. 17), a pair of spurs (Cat. No. 28), half of a horseshoe (context 4538), a scale pan for a small balance (Cat. No. 31) and a probable balance arm (Cat. No. 32), a buckle (Cat. No. 44), four knives or knife blade fragments (Cat. Nos 75-77, and 79), and a rectangular iron strip or binding with nail holes preserved wood grain (context 6284). The horseshoe fragment from Tenement 241 (context 4538) is poorly preserved and apparently has no diagnostic features.

Table 5: Summary quantification of metal finds from Anglo-Norman contexts, by Tenement, Feature and Function

		Function										
Tenement	Features	Tools	Transport	Measure	Personal	Household	Structural	Binding	Nails	Misc	Query	Totals
166	7544						2			1		3
166 Total							2			1		3
167	7582									1		1
167 Total										1		1
168	7109						1					1
168 Total							1					1
170	6096						1	1	2			4
170 Total							1	1	2			4
172	110						1			1		2
	179								3			3
	454					1	1					2
	465								2			2
	752									4		4
172 Total						1	2		5	5		13
173	173						1					1
	266								2			2
	671								1			1
	675								1			1
	943								3			3
	1040										1	1
	1199									1		1
	1205								2			2
	1275					1						1
173 Total						1	1		9	1	1	13
174	1225								1			1
	1242										1	1
	1261								2			2
	1272								1			1
	1315								1			1
	1317								1			1
	1318		2									2
174 Total			2						6		1	9
177	5172								4			4
177 Total									4			4
178	5147						1		4		1	6
	5149								2			2
178 Total							1		6		1	8
180	5325						1					1

The finds from Tenement 237 (n = 37) form the largest Anglo-Norman assemblage from any tenement. However the metalwork assemblage is dominated by nails and miscellaneous pieces. The only catalogued objects are the awl (Cat. No.17) and two knives (Cat. Nos 77 & 79) and a small domed object of uncertain function (Cat. No. 140). The awl, which has a tapering circular section blade or point, and a whittle tang for the handle, was probably used for leatherworking. Both of the knives have whittle tangs, one has a curved back and apparently has a nail or rivet hole through the blade the junction with the tang (Cat. No. 77). The other knife is fragmentary and has a straight back (Cat. No. 79).

Tenements 174 (n = 10), 173 (n = 14) and 172 (n = 13) produced a number of finds, but these comprised mainly nails and miscellaneous pieces. The only catalogued items were two knife blade fragments (Cat. Nos 75 & 76), and particularly interesting a pair of prick spurs (Cat. No. 28). Although poorly preserved the diagnostic features - long straight sides, distinct neck and short goad and decorative bosses - survive. They are of a type that is dated to the 10th and 11th centuries and probably residual in this phase. These two spurs came from pit 1318 (context 1323) in Tenement 174.

The only other catalogue find is from context 3091 in Tenement 238, and comprises a triangular scale pan from a small balance (Cat. No.31).

Distribution of the assemblage

The finds from Anglo-Norman contexts were similarly distributed to those from late Saxon contexts. There was a concentration at the NW corner of the site in Tenement 237 (n = 37) with, smaller numbers from Tenements 238 (n = 8) and 239 (n = 1), Tenement 240 (n = 10) and Tenement 241 (n = 3). There was a small concentration in the SW corner in Tenement 243 (n = 8).

On the E side of the site there was a concentration of finds in Tenements172-174. Tenement 180 at the NE corner produced a single object. There were small numbers of finds in Tenements 178 (n = 8) and 177 (n = 4). No metal finds of Anglo-Norman date came from Tenements 176 and 175. Tenements 174 (n = 10), 173 (n = 14) and 172 (n = 13) produced some finds, but these comprised mainly nails and miscellaneous pieces. The only catalogued items were two knife blade fragments (Cat. Nos 75-76) from Tenements 172 and 173 respectively.

High Medieval period (*c*. 1250-*c*. 1350)

Composition of the assemblage

There are metal 639 objects from the High Medieval phase. The metalwork assemblage from this phase is notable for two reasons. Firstly, all the items of arms and armour (n = 11) and the over half the structural items from the whole excavation (n/N = 102/182; 56%) came from contexts of this phase.

Table 6: Summary quantification of metal finds from High Medieval contexts, by Tenement and Function

	Function														
	Arms	Tool	Transport	Measure	Personal	Household	Security	Door	Structural	Binding	Nails	Misc	Query	Waste	Total
166					2	1			3		2	4			12
168											1	1			2
169					1				1		3				5
170									2		6	2	1		11
171						1			1		1	114	3		120
172	9	1			2				70	1	20	31	3		137
173		1	3	1	5		1		4		66	34	8		123
174					1	1									2
175											3	2			5
176											4	2			6
177					1				1		10	1	1		14
178											1				1
179									6		11	3			20
180											11	1	1		13
237	1		1		11	4	2	1	3	2	63	19	8	1	116
238					2				1	1	6				10
239	1	1							9	1	6	5	3		26

	Function														
	Arms	Tool	Transport	Measure	Personal	Household	Security	Door	Structural	Binding	Nails	Misc	Query	Waste	
															Total
240											2				2
241				1		1			1		6	1			10
242					1		1				1				3
243											1				1
HMED Total	11	3	4	2	26	8	4	1	102	5	22 4	220	28	1	639

The arms and armour comprise two arrowheads (Cat. Nos 1-2), five pieces of mail (Cat Nos 3-7) and two quite large pieces of plate armour (Cat. Nos 8-9). One arrowhead (Cat. No.2) is leaf-shaped head and is from Tenement 237, the other is a bodkin point (Cat. No.1) from Tenement 172. With the exception of a small fragment mail from Tenement 239, the pieces of armour are all from Tenement 172. Indeed all the arms and armour from Tenement 172 are from one feature, pit 172. The presence of the pieces of mail in a context dated to the late 13th or early 14th is to be expected. However, the pieces of plate armour are more problematic. The larger piece (Cat. No.8) has a curved rolled edge with regularly spaced rivets parallel to the edge. It looks suspiciously like a piece of late 16th- or even 17th-century armour. The smaller piece (Cat. No.9) is an approximate trapezoid, has one curved edge and has a line of rivets along its length.

There are three tools from High Medieval contexts: the blade of a gouge or drill bit (Cat. No.14) from Tenement 239, a billhook (Cat. No.15) from pit 172 in Tenement 172, and an incomplete copper alloy needle (Cat. No.21) from Tenement 173. Items relating to transport include part of a worn horseshoe (context 3184, oven 3228) from Tenement 237, and three horseshoe nails from Tenement 172 (see Table 10). There are fragments from two small balances; an arm from a small folding balance (Cat. No.32) from Tenement 173, and a balance probably of a type with a rigid arm (Cat. No.33) from Tenement 241. A triangular scale pan for a small balance was found in a context of Anglo-Norman date in Tenement 238 (Cat. No. 31, see above).

Amongst the personal items is a shield shaped seal matrix with three lions passant guardant (Cat. No.30). Although the object could have been a harness pendant, the fact that it is cut in negative, strongly suggests that it was intended as a seal. The three lions were the arms of England from the reign of Richard I until the Union of the crowns of England and Scotland in 1603. The seal matrix was found in Tenement 237. Other personal items include a finger ring (Cat. No. 36), a probable pendant (Cat. No.39) and a decorative cast openwork pin head (Cat. No.40). There are seven buckles or buckle fragments (Cat. Nos 41-42, 45-46, 50-52), as octofoil belt mount (Cat. No. 54, an oval strap loop (Cat. No.55), a possible decorated belt mount (Cat. No. 56), two belt mounts or stiffeners (Cat. Nos 57 and 59), and two strap ends (Cat. Nos 62-64). Two personal objects, a faience melon bead (Cat. No.37) and a Hinton type C strap end (Cat. No.61) are residual in High Medieval context. The bead is a common Roman type and the strap end is a late Saxon form and has been noted above. Other personal items include pins (n = 4) and lace chapes (n = 3) (see Table 11).

Household items include two knives (Cat. Nos.78, 80), one of which is of a post-medieval type with integral bolster (Cat. No.80), vessel fragments (Cat. Nos 92-93), sheet vessel repairs (Cat. Nos 100-101) and a cast copper alloy tap (Cat. No.102). One household item comprises numerous fragments from an embossed copper alloy vessel, which is clearly of late post-medieval or modern manufacture, but from a High Medieval context (Context 6907). The latter item has been omitted from the catalogue. In addition to the specific household items, there are fragments of decorative copper alloy bindings or mounts (Cat.

Nos 108-110) and a piece of edge binding (Cat. No.113), which may have had an application within the house, and a single iron hinge strap fragment, possibly for a door (Cat. No.118).

There are two key fragments (Cat Nos 129-130), a latch rest (Cat. No.134) and a U-shaped copper alloy bolt from a small barb-spring padlock (Cat. No.135).

The structural items from this tenement number 102 pieces, 67 of which comprise clench nails and roves (see Table 13). These are usually associated with clinker-built medieval ships. The construction sequence clinker-built ships began with the laying down of the keel. The sides of the vessel built-up from the keel by adding overlapping strakes, which were fastened together with clench nails and roves (Hutchinson 1994, 8, 30, figs 1.2, 2.3). The planks within each strake were scarf jointed and the joints reinforced with more clench nails and roves. The frame was added after the clinker-built shell was built.

Distribution of the High Medieval assemblage

The metal finds are mainly concentrated in Tenements 171 (n = 120), 172 (n = 137), 173 (n = 123) and 237 (n = 116). Between them these tenements produced 77.6% by number of the metal finds from the High Medieval phase. The obvious concentrations are centred on Tenements 171, 172 and 173 on the east side of the site, and on Tenement 237 at the NW corner of the site.

Tenement 237 has a produced 116 metal finds, including 63 nails and 19 miscellaneous objects. The latter comprise 67 fragments many of them small pieces of iron plate, including 27 fragments from context 4044, pit 4402. The identified finds from this tenement include a leaf-shape socketed arrowhead (Cat. No. 2), a horseshoe fragment (context 3184, oven 3228), a shield-shaped seal matrix showing the Royal Arms of England (Cat. No.34), a possible teardrop shaped pendant (Cat. No.39), a small circular brooch or buckle (Cat. No.41), fragments of two possible buckle frames (Cat. Nos 50-51), a decorative belt plate (Cat. No.56) and a belt stiffener (Cat. No.57). Household objects include two fragments from a poorly preserved knife blade (Cat. No.78), a knife of 17th- or 18th-century form (Cat. No. 80), a fragment of rim from a cast vessel, possibly a bowl (Cat. No.92), a possible copper alloy plate (Cat. No.93), and fragments of decorative binding or mount (Cat. Nos 108-09). There is a piece of a door hinge strap (Cat. No.118) and two keys (Cat. Nos 129-30). In addition there are two objects of uncertain identification (Cat. Nos 142-144).

Although Tenement 237 produced numerous metal finds the tenements to the south have produced very few finds of this phase. Immediately S of Tenement 237 on the W side of the site, Tenement 238 produced only ten metal finds including a belt stiffener (Cat. No.59), a decorated pin head (Cat. No.40) and decorative binding or mount (Cat. No.110). Tenement 239 produced 26 objects including a piece of chain mail (Cat. No.7), part of a gouge or drill bit (Cat. No.14), a piece of copper alloy edge binding (Cat. No.113), and 9 clench nails and roves.

Tenement 240 produced just 2 nails from High Medieval contexts. Tenement 241 produced 10 objects including 6 nails, 1 rove, and part of a small balance (Cat. No.34) and copper alloy sheet fragments with paper clip rivets, probably from repairs to sheet metal vessels (Cat. No.100). The metal finds from 242, south of 241, numbered 3 and included a nail, a pin and a latch rest (Cat. No.134). At the SW corner of the site Tenement 243 produced a single nail.

On the E side of the site finds were concentrated on tenements 171, 172 and 173. There are 13 metal finds from High Medieval contexts in Tenement 180 at the NE corner of the site. These finds include 11 nails, and an unidentified copper alloy casting, probably some form of terminal (Cat. No.142). Tenement 179 produced 20 metal objects, including 11 nails, 1 clench nail and rove, and 5 roves, and Tenement 178 a single nail. There were 14 metal finds from Tenement 177 including 10 nails, a lace chape, and 1 rove.

Tenement 176 produced 4 nails and 2 miscellaneous pieces only. Tenement 175 produced 5 metal finds comprising 3 nails and 2 miscellaneous pieces. A copper alloy double oval buckle (Cat. No.46) and a sheet metal vessel repair (Cat. No. 100) were the only finds from Tenement 174.

Tenement 173 produced 123 metal finds, including 66 nails and 34 miscellaneous fragments. The finds also included an arm from a small folding balance (Cat. No.32), a copper alloy needle (Cat. No.21) and a number of belt fittings. These comprise a cast buckle tongue (Cat. No.52), a probable stamped belt mount (Cat. No.54), a strap loop (Cat. No.55), a two-piece strap end (Cat. No. 62) and a three-piece strap end with forked spacer (Cat. No.63). There are no household objects with the possible exception of the U-shaped bolt from a small barb-spring padlock (Cat. No.135). This most likely to have been used to lock a small chest or cupboard. There are a number of objects of uncertain use (including Cat. No.141). Three clench nails with roves and a loose rove were also recovered.

The finds from Tenement 172 are the most interesting. As noted above they include fragments of armour (Cat. Nos 3-6, 8-9) and an arrowhead (Cat. No.1) and also the largest number of clench nails and roves (see Table 13). The distribution of clench nails and roves is clearly concentrated on the High Medieval phase and in Tenement 172. In total there are clench nails and roves number 150 pieces from all phases of the site. In all there are 96 pieces (64% by number) from High Medieval contexts. The clench nails and roves from Tenement 172 number 67 pieces (44.66% by number). There is a billhook (Cat. No.15), a small circular buckle or brooch (Cat. No.41) and a late Saxon Hinton type C strap end (Cat. No.61) which is clearly residual (see above Late Saxon).

The finds from Tenement 171 include 72 fragments of rod or bar, and at least 39 fragments of small irregular plate fragments, all of which were recovered from context 6907 (fill of 6908). The fragments of plate were all very small and appeared to lack any features that could help to identify their original function. Almost the metal finds from Tenement 171 were found in feature 6908 and totalled some 120 objects or 170 fragments. These comprised for the most part fragments of bar or nail stems (n = 73) although no nail heads were present, and small fragments of plate or sheet iron (n=41). The latter fragments lacked any diagnostic features. The only dateable fragments were pieces of an embossed copper alloy vessel of late post medieval or modern manufacture.

Tenement 170 produced only 11 metal finds comprising 6 nails, 2 miscellaneous fragments, a small spike with chisel end and 2 clench nails with roves. There are 5 metal finds from Tenement 169: 3 nails, a clench nail and rove and a copper alloy finger ring with oval bezel (Cat. No.38). The only metal finds from Tenement 169 are a nail and miscellaneous fragment of iron. Tenement 168 produced a nail and miscellaneous fragment. Tenement 167 produced no finds of this phase. Tenement 166 produced 12 finds comprising 4 miscellaneous fragments, 2 nails, a clench nail and rove and 2 roves. There is a medieval copper alloy tap (Cat. No.102), a buckle of medieval form (Cat. No.45) and a single dress pin.

Late Medieval period

Composition of the assemblage

There were 422 objects from the Late Medieval phase (LMED). The finds from the late medieval phase include a large socketed blade (Cat. No.16) possibly from a mattock, and a thimble (Cat. No.22). Items of related to transport comprise three horseshoe fragments (contexts 1412, 5008 and 5100) and two horseshoe nails (contexts 5100 and 7760) (see Table 10).

Householo Transport Structura Personal Nails Query Tool Tenement Total LMED Total

Table 7: Summary quantification of metal finds from Late Medieval contexts, by Tenement and Function

There are a number of personal items including buckles and belt fittings - a circular buckle (Cat. No.43), a cast buckle tongue (Cat. No.49), a belt mount or stiffener (Cat. No. 58), a pendent loop and mount (Cat. No.60), and a hooked clasp (Cat. No.65) - and clothes fastenings - including two, possibly three, wire loop fasteners (Cat. No. 68-69) and lace chapes (n=3) and pins (n=12) (see Table 11). There are also three lengths of cord plaited from fine copper alloy wire (Cat. No.73).

Household items are limited in number. They comprise a knife blade (Cat. No.81), a knife with plate tang (Cat. No. 82), both of late or post-medieval form, and an undiagnostic blade fragment (Cat. No.83). There is also a cauldron fragment with foot (Cat. No.95), and candlestick of plain early post-medieval form (Cat. No.105).

Other likely household objects include a probable hinge plate (Cat. No.115), a copper alloy decorative binding or mount fragment (Cat. No.107) from a box or chest, and piece of curved copper alloy edge binding (Cat. No.112).

There is a hinge strap (Cat. No.119) probably from a door, and a key with a kidney-shaped bow (Cat. No. 131). In addition to these catalogued items there are a number of structural fittings and nails (see Table 12) and miscellaneous fragments (see Table 13) from late medieval contexts. Finally there are number of objects of uncertain identification from late medieval contexts (Cat. Nos 145-149).

Distribution of the Late Medieval assemblage

The distribution of late medieval metal finds is very much concentrated in two areas. On the W side of the site there are 51 finds from Tenement 237 in the NW corner of the project area. Tenements to the S produced very few finds (Table 3). On the E side of the site there were few finds from Tenements 166 to

173, although Tenement 172 did produce 30 objects. Tenement 174 produced 83 metal finds. Tenement 175 produced a single nail fragment, and Tenements 176-177 no late medieval metal finds. Tenements 178 and 179 produced many more metal finds. There were no finds from late medieval contexts from Tenement 180.

The finds from Tenement 237 are quite limited in the range of functional types present, and are dominated by nails (n = 27), structural fragments and bindings (n = 8), miscellaneous fragments (n = 6), and objects of uncertain identification (n = 5). Household and related items comprise two hinge fragments (Cat. Nos 115, 119), a cauldron fragment with foot (Cat. No.95), and a candlestick of plain early post-medieval form (Cat. No.105). There are three fragments of cord plaited from fine wire (Cat. No.73) and a dress pin (context 3148). There is also an object of copper alloy plate with punched dot decoration (Cat. No.150). The function of this is uncertain.

Tenement 238 produce a single nail, Tenement 239 produce no finds, and Tenement 240 produced only 5 finds including a cauldron fragment (Cat. No.95) and a possible mattock blade (Cat. No.16). Others finds comprised a nail, a fragment of iron strip or sheet, and a small plain iron disc. Tenement 241 produced 2 nails and a fragment of folded and encrusted copper alloy strip. The finds from Tenement 242 comprise a cast buckle tongue (Cat. No.49), two miscellaneous fragments, a nail, a clench nail and rove, and a split spike loop. Tenement 243 produce no metal finds in this phase.

On the E side of the site Tenement 166 produced no metal finds and Tenement 167 a large iron binding strip. There are 13 metal finds from late medieval contexts in Tenement 168. These comprise 11 nails (see Table 12), one horseshoe nail (context 7760, pit 7763) and a very poorly preserved and encrusted object, possibly hollow, from context 7751 (pit 7753). Tenement 169 produced a plain ring, a nail and a diamond-shaped washer or rove all from a burnt layer (context 6006). There are five metal finds from Tenement 170. The finds include a nail, a clench nail and two clench nails with roves, and an elongated object with a flat leaf- or spear-shaped point (Cat. No.145). There are no metal finds from late medieval contexts in Tenement 171.

By contrast the neighbouring Tenement 172 produced 30 metal finds. The personal items include pins, and a circular buckle (Cat. No.43), a belt stiffener (Cat. No.58) and a hooked clasp (Cat. No.65) of late medieval date. Household items include a knife blade fragment possibly post-medieval in form (Cat. No. 81) and a curved cu alloy edge binding (Cat. No.112). Other finds include ten nails, five miscellaneous pieces, and a number of fragments of uncertain identity.

There are a few metal finds from the late medieval phase in Tenement 173. These comprise two bindings and third possible binding or strip, a fragment of rod, a single nail and a clench nail and rove.

Tenement 174 produced 83 metal finds, but these are dominated by nails (n = 54) and 20 small rings made from an unidentified non-ferrous metal (Cat. No.147). The only other catalogued find is a small belt fitting, a pendent loop and mount (Cat. No.59). There are two miscellaneous fragments, a fragment of plate, and a part of a horseshoe.

The only metal find from late medieval contexts in Tenement 175 is a nail stem fragment from context 3869, pit 3746. Tenements 176 and 177 produced no finds from late medieval contexts.

By way of contrast Tenement 178 produced 79 metal finds. This number includes 65 nail fragments, and a clench nail. Other finds include a horseshoe fragment (context 5008), a copper alloy thimble (Cat. No. 22), two wire loop fasteners for clothing (Cat. Nos 68-69), and a three pins and two lace chapes (see Table 11). There is a possible binding or hinge strap (context 5009, pit 5003) and a key (Cat. No.131).

Tenement 179 produced 136 metal finds including 107 nail fragments, even more than Tenement 178. Other finds included knife fragments (Cat. Nos 82-83), decorative binding or mount (Cat. No.107) and a plain copper alloy disc apparently without any nail holes or other means of attachment (Cat. No.148). There are no late medieval finds from Tenement 180.

Post Medieval period

Composition of the assemblage

Post medieval context produced the most metal objects (n=635) simply in terms of numbers. These included 415 nails, 63 miscellaneous pieces and 66 items of uncertain identification.

Table 8: Summary quantification of metal finds from Post Medieval contexts, by Tenement and Function

	Function													
	Tool	Transport	Personal	Household	Security	Door	Window	Structural	Binding	Nails	Misc	Query	Waste	
Tenement														Total
167										1				1
168	1													1
169	1	1								1	1			4
170			2	3	2			7		17	8	2		41
171										1	3			4
172		1	1							9	5	2		18
173			1	1				1		31	2	1		37
174			6							3		1		10
176	2			1		1				3	3			10
178			1							1				2
180		1	2	3				2		48	3			59
237	3		8	4	1	2	3	4	2	225	30	57		339
238					1		6	2		2	1	1		13
240	2		5	1				4	1	73	7	2	1	96
PMED Total	9	3	26	13	4	3	9	20	3	415	63	66	1	635

The identified finds included a number of tools: an adze blade (Cat. No.10), an incomplete axe or hammer head (Cat. No.11), small cross pein hammer head with part of its shaft preserved as mineralised wood (Cat. No.12), the tip of a saw blade with large teeth (Cat. No.13), a punch (Cat. No.19) and a needle (Cat. No.20) and thimbles (Cat. Nos 24-26). There is also part of a single lead cloth seal (Cat. No.30) representing trade.

There are a number of personal items (n=26), including 18 pins and 4 lace chapes. There is also a subsquare buckle frame (Cat. No.48) a button decorated with the arms of the Board of Ordnance (Cat. No. 66), and a wire loop fastener (Cat. No.70). Finally from context 3189 (pit 3188) there are mineralised hobnails and fragments of leather probably from the heel of a boot.

Household items number 13 and include a possible knife fragment with non-ferrous bolster plate (Cat. No. 84) a whittle tang knife of post medieval form (Cat. No.85) a possible knife blade fragment (Cat. No. 86) and a knife handle with antler plates and elongated solid bolster (Cat. No.87). There is a second handle of bone that may be from a knife or possible from a tool (Cat. No.88). Vessels are represented by a

cast vessel rim fragment (Cat. No.94), a cast cauldron leg and possible cauldron leg or foot (Cat. No. 96-97) and small vessel with elongated spout (Cat. No.99). There is also a paper clip rivet (layer 6408) which was probably used in repair a sheet metal vessel.

From pit 5180 came a pair of scissor candle snuffers (Cat. No.106). Other household finds include a decorative copper alloy binding or mount (Cat. No. 111), and an elongated decorative copper alloy plate or mount apparently in the form of a dummy hinge (Cat. No.114). There are a possible rectangular hinge plate (Cat. No.120), and iron hinge strap (Cat. No.121), and a hinge ride or split spike loop (Cat. No.122). Finally there are some fragments of window leading (Cat. Nos 125-27).

A pair of keys for a rotary lock (Cat. No.30) were found on a ring. They are poorly preserved, but the x-ray plate suggests that they have similar shaped bits. Another poorly preserved key with possible chain fragments (Cat. No.133) was also found. Finally there is a heavy plate with a large circular hole (Cat. No.136). This may have been a bolt plate for a large bolt, or perhaps more likely a reinforcement for a door pivot.

The objects of uncertain identification included a cast decorative copper alloy fitting (Cat. No.151) and a socketed terminal with pierced flat end (Cat. No.152).

Distribution of the Post Medieval assemblage

The tenement which produced by far the most finds of post medieval date was Tenement 237 (n = 339) at the NW corner of the site, although most of the finds from the tenement were nails (n = 225). The small cross pein hammer (Cat. No.12), punch (Cat. No.19) and a thimble (Cat. No.25) came from Tenement 237. Personal items comprise a buckle (Cat. No.48), six dress pins and hobnails and leather from a boot. Household items include a whittle tang knife (Cat. No.3), knife blade fragment and a knife handle (Cat. No.86) and a small pouring vessel (Cat. No.99). A decorative binding or mount from a casket or furniture (Cat. No.111) also came from Tenement 237. There is a hinge strap (Cat. No.121), a hinge ride or split spike loop (Cat. No.122) and window leading (Cat. Nos 125-126). A rotary key (Cat. No.133) was also found.

Tenement 238, immediately S of Tenement 237, produced 13 metal finds, including six pieces of lead window came (Cat. No.127) and heavy rectangular plate with circular hole (Cat. No.136) which may have been a bolt plate or reinforcement for a door pivot.

Tenement 239 produced no metal finds, while Tenement 240 by contrast produced 96 finds, but of these 73 were nails. Other finds include the tip of a saw blade (Cat. No.13) and ring thimble (Cat. No.26) and a bone handle from a knife or possibly a tool (Cat. No.88). There is also a large spike with L-shaped head (Cat. No.137) from Tenement 240. This measures 450 mm long. There were no metal finds from post-medieval contexts in Tenements 241-243.

On the E side of the site small numbers of finds were found in most tenements with a slight concentration on Tenements 172 and 173 and greater concentration in Tenement 180 (n = 59) at the NE corner of the site. The finds from Tenement 180 included 48 nails. Other finds from the tenement include a horseshoe nail (context 5010), two dress pins, a pair of scissor candle-snuffers (Cat. No.106) a possible cast vessel foot (Cat. No.97) and a decorative plate in the form of a dummy hinge (Cat. No.114). There were no post-medieval finds from Tenements 179 and 177 and Tenement 178 produced only a nail and a wire loop fastener (Cat. No.70).

Tenement 176 produced ten finds, including an adze blade (Cat. No.10) and a fragment of an axe or hammer (Cat. No.11), an upholstery tack (Cat. No.116), and a hinge plate (Cat. No.120). Tenement 175

produced no post-medieval finds. Tenement 174 produced ten finds including five dress pins and a lace chape, three nails and a pierced terminal or ferrule (Cat. No.152).

Tenement 173 produced 37 finds, but these include 31 nails. Other finds include a flat circular button decorated with the arms of the Board of Ordnance (Cat. No.66), a vessel rim fragment (Cat. No.94).

Tenement 172 produce 18 finds including nine nails and five miscellaneous pieces. Other finds include a cast decorative fitting of uncertain identification (Cat. No.151).

Tenement 171 produce four post-medieval finds comprising one nail and three miscellaneous pieces.

Tenement 170 produced 41 metal finds including 17 nails and eight miscellaneous pieces. There are also a knife blade fragment with non-ferrous bolster plate (Cat. No.84), a cast leg of a cauldron (Cat. No.96) and a pair of keys (Cat. No.132). There are four post-medieval finds from Tenement 169, including a thimble (Cat. No. 25) and a cloth seal (Cat. No.30). Both Tenements 168 and 167 produced a single find, a nail from Tenement 167 and needle (Cat. No.21) from Tenement 168.

Early Modern period

Composition of the assemblage

The finds from modern contexts are quite numerous, and many are clearly quite modern and have been omitted from the discussion and catalogue.

Table 9: Summary quantification of metal finds from Early Modern contexts, by Tenement and Function

	Function													
Tenement	Tool	Transport	Personal	Household	Security	Door	Window	Structural	Binding	Nails	Misc	Query	Waste	Total
168										3	2			5
170	1		1	2		1	1		1	41	19	7		74
171	1										1			2
172			4	1				3		15	23	5		51
173	1			4				1		2	2			10
174												3		3
177				2	1					5	1	2		11
238								1		1	1			3
239												1		1
240			1					13		57		1	2	74
242		1	1	1		1		2		4	2	1		13
General										4		2		6
N/A			1	3						1		1		6
EMOD Total	3	1	8	13	1	2	1	20	1	133	51	23	2	259

Among the finds though are objects, which are of post-medieval date and indeed some of which may be residual in this phase. There are a thimble (Cat. No.23) and a ring thimble (Cat. No.27) both of which are handmade, and therefore predate the eighteenth century. Personal items include a double oval buckle frame (Cat. No.47) and a large Georgian shoe buckle (Cat. No.53). They also include a strap end with

forked spacer (Cat. No.64), which is a late medieval form and clearly residual. There is a late medieval or early post-medieval clothes hook (Cat. No.67), again residual, and a small pin with looped head (Cat. No.71).

Household objects include a whittle tang knife with integral bolster (Cat. No.89), a small spoon (Cat. No.91) and a hemispherical bowl pierce with regular pattern of holes (Cat. No.103) possibly a strainer or colander. The iron hoops (Cat. No.104) from pit 886, Tenement 173, are clearly from a large cask, probably a tun or a pipe. A tun could hold anything from 204 to 216 gallons, and a pipe, depending upon its country of origin and its date, could contain from 92 to 126 gallons. There is also a furniture tack or stud (Cat. No.117), a plate hinge (Cat. No.123), hinge strap (Cat. No.124), window leading (Cat. No. 128) and a looped handle or pin, possibly decorated (Cat. No.153). There is also a large triangular iron plate (Cat. No.154) of uncertain function.

Conclusion

The distribution of metals finds is not uniform across the tenements or through the site phases (see Table 3 above). There are few finds from Late Saxon contexts, and comparatively few from Anglo-Norman phase, but there are slight concentrations on Tenements 172, 173, 237 and perhaps 238. In the High Medieval phase there are many more metal finds and the concentration of finds in Tenements 171-173 and 237 is more marked. In the later medieval phase the concentrations of metal finds appear to shift to Tenements 174, 178 and 179. In the Post Medieval phase the concentration of finds is very markedly on Tenement 237. There are lesser concentrations in Tenements 180 and 238. The lack of metal finds from Tenement 172 in the late medieval and post medieval periods would seem to be real, given the number of finds found in the High medieval phase and in the early Modern phase. In the modern phase the number of metal finds falls off and the concentrations from Tenements 170, 172 and 240 are less marked as a consequence.

The problems of looking at figures in this way is that it ignores two problems. Firstly it does not explicitly take note of the extent of investigation within individual tenements; excavations in Tenements 242 and 243, and in Tenements 166-169 were more limited than investigations in Tenements 172-175. Tenements 170 and 171 were smaller in extent than most other tenements. Tenement 237 was more extensive than many other tenements. The second potential problem concerns the nature of the contexts excavated. Recovery of finds from any particular phase in any quantity depends upon the excavation of pit fills and other deposits containing discarded material i.e. rubbish.

The concentration of clench nails and roves in High Medieval phase contexts in Tenement 172 is probably broadly a true reflection of distribution of these items on the site, rather than simply an accident of recovery. Clench nails and roves were found elsewhere and in other phases but in smaller numbers (Table 13). On the other hand it is arguable that the presence of armour almost exclusively in Tenement 172 may simply reflect the fact that only one pit (172) with discarded armour was excavated. It is to be expected that armour would have been found in other tenements, but it would not necessarily have been discarded unless damaged and no longer required. There is also the matter of re-use of metals, and in particular of copper alloy, which is readily recycled. This will reduce the amount of material discarded.

The range of types of metal finds suggests the presence of both domestic occupation and some limited craftwork on the site, but more particularly trading activities, as would expected. In particular the presence of the clench nails and roves is indicative of shipping activity. The discovery of pieces from a number of small balances, usually associated with small scale high value transactions, is interesting too, whether they represent trading in spices, or in valuable metals, or just money changing.

Catalogue of selected and illustrated finds

Arms and Armour

Arrows

- 1 **Socketed arrowhead** with possible bodkin point. Fe. L: 87 mm; D of socket: 12 mm. Context 349, Pit 172. Tenement 172, Phase HMED. [ID 415]
- 2 **Leaf-shaped socketed arrowhead**. Fe. L: 75mm, L of blade: c 45mm; W of blade: 20mm; D of socket: 10mm. Context 3337. Tenement 237, Phase HMED. [ID 681]

Armour

- 3 Possible fragment of **mail**. Mineralised and encrusted. Fe. Context 345, Pit 172. Tenement 172, Phase HMED. [ID 408]
- 4 Probable **mail**. Two fragments. Heavily mineralised. Fe. L: 78 mm. Context 348, Pit 172. Tenement 172, Phase HMED. [ID 411]
- 5 Possible mail fragment, mineralised. Fe. Context 349, Pit 172. Tenement 172, Phase HMED. [ID 414]
- 6 Large folded fragment of **mail**, plus smaller fragment. Mineralised. Fe. L: 220 mm; W: 116 mm. Context 349, Pit 172, Sf 11. Tenement 172, Phase HMED. [ID 416]
- 7 Possible **mail**, small fragment. Mineralised. Fe. L: 55 mm. Context 353, Pit 583. Tenement 239, Phase HMED. [ID 420]
- 8 **Plate armour**, probably a shoulder piece. There is clear evidence for curved rolled edge with regularly spaced rivets along margin. None of the other edges appears to be original. Fe. L: 190 mm; W: 230 mm. Context 375, Pit 172. Tenement 172, Phase HMED. [ID 434]
- 9 **Plate armour**. Tapering trapezoid fragment with evidence of rivets along its length. It has a clearly original curved edge on one side, with a probably original straight side opposite. The short straight end was also original. The fourth side is broken. Fe. W: 90 mm. Context 375, Pit 172. Tenement 172, Phase HMED. [ID 435]

The plate armour is likely to be of 15th-century date or later. Comparatively little early armour survives, and the best evidence comes from pictorial depictions, and in particular funerary monuments. Medieval brasses are an excellent source for armour knights. Less is known of the armour classes below knights. The full panoply as illustrated by brasses was expensive. It is likely that men below the rank of knight would wear a 'coat of plates', in which rectangular metal plates were sewn into a cloth garment (Eaves 1989, pls xxxviii-xxxix). A later version was the brigandine. In the latter case the plates were riveted to the garment. Neither of the plates above would be suitable for a coat or jack of plates.

The evidence of brasses and other monuments indicates that until the early part of the 14th century armour consisted almost exclusively of mail, as shown for example by the memorial brass of Sir Roger de Trumpington at Trumpington, Cambridgeshire and Sir Robert de Bures at Acton, Suffolk (Clayton 1968, pl. 1). The brass of Sir Robert de Bures is now dated to c. 1331 (Blair, C, in Alexander and Binski, 1987,

169 and 294-95, no. 235). During 14th century mail was reinforced with increasing amounts of plate armour, initially limited to the arms, knees and lower legs and feet as is well illustrated in the brass of Sir William Fitzralph, from Pebmarsh, Essex (Clayton 1929, pl. 2) and the brasses of Sir John de Creke, Westerley Waterless, Cambridgeshire and Sir John D'Aubernoun, Stoke D'Aubernon, Surrey (Haines 1861, cli-clii; Clayton 1968, pls 2 & 5). The plate used to reinforce mail tended to consist of comparatively small pieces. Eaves, Ian.1989 "On the Remains of a Jack of Plate Excavated from Beeston Castle in Cheshire." *The Journal of the Arms and Armour Society* XII

It was not until the end of the 14th-century and early 15th century that plate armour was used for body armour (see also Ffoulkes 1988, fig. 39), and only in the middle of the 15th century that full suits of plate armour came into use (see for example Ffoulkes 1988, pl xxx). The two fragments of plate armour from pit 172, and particularly large fragment with a curved rolled edge and regularly spaced rivets (Cat.No. 8), looks like late body armour that dates to the late 16th or early 17th century (see for example 16th-century high status armours: Ffoulkes 1988, pls xxvi-xxviii). It is likely that the pieces of plate armour from Tenement 172 are from a less highly developed or decorated armour, something more akin the later pikeman's corslet (see for example late 16th-century Dutch pikeman's cuirass: Puype and Wiekart, 1998, 183, cat. 115).

Tools

Carpenter's tools

- 10 **Adze blade** with rounded edge, and broken eye. Fe. L: 188 mm. Context 3647, Pit 3635. Tenement 176, Phase PMED. [ID 756]
- 11 **Axe** or **hammer, head**, incomplete. Much eroded and encrusted. Wood survives inside eye. Fe. L: 100 mm. Context 3647, Pit 3635. Tenement 176, Phase PMED. [ID 759]
- 12 **Cross pein hammer head**. Small. Badly corroded and laminated. Part of the mineralised wooden handle survives *in situ*. Fe. L: 95 mm. Context 3323, Pit 3322. Tenement 237, Phase PMED. [ID 680]
- 13 **Saw blade** tip, with quite large teeth (c 4.5 teeth per inch). Fe. L: 120 mm, W: 31 mm. Context 6677, Pit 6682. Tenement 240, Phase PMED. [ID 1055]
- 14 **Gouge** or **drill bit**, with ?circular section stem and part of hollow blade. Incomplete and heavily encrusted. Fe. L: 77 mm. Context 1372, Pit 1344.Tenement 239, Phase HMED. [ID 602]

Agricultural tools

- 15 **Billhook** with tanged blade, and collar to secure handle in situ. Very heavily encrusted. Fe. L: 425 mm. Context 430, Pit 172. Tenement 172, Phase HMED. [ID 1275]
- 16 Possible **Mattock blade** of almost diamond shape with one end rounded, and an angled ring socket at the opposite end. Very heavy (2730 g). Fe. L: 330mm; W: 180mm. Context 6680, Pit 6682. Tenement 240, Phase LMED. [ID 1277]

Miscellaneous tools

17 **Awl**, tapering to a point at one and with a tang at the other. Circular section blade. Fe. L: 107 mm. Context 4505, Pit 3265. Tenement 237, Phase AN. [ID 806]

- 18 **Tanged awl**, with a thickening of the blade at the junction with the tang. The tip of the blade is missing. Fe. L: 80 mm. Context 5151. General, Unphased. [ID 882]
- 19 **Punch**, with stem and tapering point of circular section. Fe. L: 133 mm. Context 4793. Tenement 237, Phase PMED. [ID 384]

Sewing and needlework

- 20 Well-preserved **needle**. Cu alloy. L: 71 mm. Context 7758, Pit 7759, Sf 316. Tenement 168, Phase PMED. [ID 290]
- 21 **Needle** fragment, lacks eye. Cu alloy. Context 979, Pit 1020, Sf 45. Tenement 173, Phase HMED. [ID 127]

Thimbles

Various thimbles were recovered. Cat. No.22 with its decorative border is possibly a Nuremberg thimble of mid to late 16th-century date. Cat. No.23 is a tall rimless thimble and probably of 18th- or early 19th century date. Cat. No.24 is fragmentary but has a waffle pattern rather than individual pits suggesting an 18th-century date. Cat. No.25 is also incomplete and is probably a late medieval or early post medieval type. Ring thimbles (Cat. Nos 26-27) were widely used by tailors and other professionals. These examples could well date to the 16th-century.

- 22 **Thimble**, handmade and well-preserved. The top or crown the dome has a slight peak. The sides and top have punched pits. The lower portion of the body has two decorative bands or borders. It has no rim. The metal is thin. Possibly a Nuremberg thimble. Cu alloy. Ht: 23mm; D: 18mm. Context 5005, Cess pit 5003, Sf 69. Tenement 178, Phase LMED. [ID 149]
- 23 **Thimble**, handmade. Rimless, with drilled or punched pits over the upper portion of the body and crown. The lower part of the body is plain. Cu alloy. D: 21 mm. Context 6036, Pit 6289, Sf 203. Tenement 170, Phase EMOD. [ID 222]
- 24 **Thimble** fragment, flattened, with simple decorative border. The fragment has pits in a waffle pattern. Possibly a fragment of ring thimble rather than full thimble. Cu alloy. D: 24 mm. Context 6073, ?Pit 6075, Sf 208. Tenement 169, Phase PMED. [ID 225]
- 25 **Thimble** fragmented. Poorly preserved. Rimless. Cu alloy. Ht: 23mm; D: 19mm. Context 3187, Pit 3186, Sf 96. Tenement 237, Phase PMED. [ID 147]
- 26 **Ring thimble**, handmade, with four rows of pits. Cu alloy. D: 22 mm, H: 11 mm. Context 6507, Pit 6682, Sf 242. Tenement 240, Phase PMED. [ID 241]
- 27**Ring thimble**, handmade, with four rows of pits. Cu alloy. D 20 mm; H: 10 mm. Context 6016, Sf 232. Tenement 171, Phase EMOD. [ID 227]

Transport

Items relating to transport are limited in range of types of objects. Horse transport is poorly represented with only 6 fragments of horseshoe, and 6 horseshoe nails (Table 10). The other items relating to horses are a pair of stirrups (Cat.No.28).

The most numerous class of object is the combination of clench nail and rove (see Table 13 below). These are strongly linked with wooden shipbuilding. The clench nails are very much concentrated in Tenement 172 in the High Medieval phase. In addition to the clench nails and roves, a single forelock bolt wedge was also found in Tenement 172 in an Anglo-Norman context (pit 110, context 123).

Table 10: Quantification of horseshoe fragments and horseshoe nails by Phase and context

Phase	Context	Horseshoes	horseshoe nails	Totals
AN	8538	1		1
AN Total		1		1
	259		1	1
HMED	624		1	1
	949		1	1
	3184	1		1
HMED Tota	al	1	3	4
	1412	1		1
LMED	5008	1		1
	5100	1	1	2
	7760		1	1
LMED Tota	al	3	2	5
PMED	250	1		1
	5010		1	1
PMED Tota	ıl	1	1	2
Totals		6	6	12

Riding

28 **Pair of prick spurs**, seven fragments. Both spurs have long straight sides of D-shape section, and a short goad or prick at the end of straight expanded neck. The terminals are rectangular, but it is unclear from the radiographs whether the terminals are pierced with two slots to form a buckle frame, or whether there are rivets to secure the straps. The more complete example has one complete arm with terminal *in situ*. This arm has evidence for two decorative bosses equally space along its length. The incomplete arm has one boss visible at a similar spacing. The second example has both terminals detached but extant. One of its arms has two extant bosses, the other which is less complete has one boss extant. Both spurs show slight traces of tinning or inlaid on the radiographs. Fe. 1: L: c 175mm; W: c 100 mm; 2: L: c 115mm extant; W: c 80mm. Context 1323, Pit 1318. Tenement 174, Phase AN. [ID 578]. The straight arms, the short goad on a straight expanded neck, and the presence of decorative bosses all indicate a 10th-11th century date for these spurs. Compare with examples from York, with a riveted rectangular terminal (Ottaway and Rogers 2002, 2956-57, fig. 1522: 12735). See also the late Saxon prick spurs from Thetford (Ellis 1984, 101-104, figs 140-41), and from Winchester (Ellis 1990, 1038-39, fig.331, nos 3860-3863).

29 Probable **harness pendant** with almost circular dished body - no visible decoration - and a pierced lug for suspension extending from one edge. Function uncertain. Cu alloy. L: 31mm; W: 21mm. Context 3337, sf 130. Tenement 237, Phase HMED. [ID 177]. See an example from Ludgershall Castle (Johnson and Griffiths 2000, 125, fig. 6.1, no. 4)

Trade

30 Probable cloth seal. Comprising circular flat object with central perforation. There is a cast pattern on one face, and a broken link to a second part of the seal. Pb. D: 20mm. Context 6073, ?Pit 6075. Tenement 169, Phase PMED. [ID 83].

Weights and Measures

Small folding scales or balances are found in early Saxon graves (Scull 1990), in later Saxon contexts (Kruse 1992) and right through the medieval period.

- 31 **Scale pan** from a small balance set. Concave triangular sheet with concave edges. Holes at each corner for suspension. Cu alloy. L of edges: 49 mm x 48 mm x 49 mm. Context 3091, Sf 155. Tenement 238, Phase AN. [ID 165]. See similar pans from Winchester (Biddle 1990b, 925, fig. 285, nos 3217-18, 3220).
- 32 Probable **balance arm** comprising thin cast rod of circular section, broken at one end where it is pierced with a hole or slot, and terminating in a pierced flat lug at the other end. Decorated with mouldings. Cu alloy. L: 67 mm. Context 3091, Sf 156. Tenement 238, Phase AN. [ID 166]. Probably from balance with a rigid arm rather than a folding balance.
- 33 **Balance arm** from a folding balance. Comprises a tapering stem with small collar and pierced loop with loose ring at narrow end. The other end has a flat plate pierced with a single pivot hole. Cu alloy. L: 102mm. Context 267, Pit 257, Sf 5. Tenement 173, Phase HMED. [ID 111]. Later medieval examples have been published from Winchester (Biddle 1990b, 917-18, fig. 284, no. 3212), York (Ottaway and Rogers 2002, 2952-53, fig. 1519, no. 13402), Norwich (Margeson 1993, 204, fig. 155, no. 1573), and London (Egan 1998, 326, fig. 243, no. 1055). Small balances were used to weigh coins and small items of high value.
- 34 **Small balance**. Probably parts of a small rigid balance, it appears to comprise part of the balance beam and pointer and parts of the 'fork' or stirrup. Cu alloy. L 57 mm. Context 7334, Pit 7356, Sf 280. Tenement 241, Phase HMED. [ID 264]. For small balance with rigid beams see examples from London (Egan 1998, 325-26, fig. 242, nos 1051 & 1054; & fig. 243, no. 1052) and Winchester (Biddle 1990b, 922-24, fig. 284, no. 3209).

Seal matrix

35 **Shield-shaped seal,** rather than a **harness pendant** with attachment lug at back. The shield has a round bottom, which is a shape that came in towards the end of the medieval period. The Royal Arms of England - three lions passant guardant - are clearly visible. These were the Royal Arms from the reign of Richard 1 until the union of the crowns of England and Scotland in 1603 with the accession of James I and VI. Across the top of the shield is a rectangular panel with a clearly defined border. Within this panel is a possible inscription, perhaps a name, or pattern. The lug is on the back near the top of the shield. Cu alloy. L: 24 mm. Context 4317, Pit 4138, Sf 180. Tenement 237, Phase HMED. [ID 197]

Personalia

36 Toilet implement, formed from thin rod or wire, with small spoon at one end. The other end is divided into two arms, which are flattened and widened. At the centre of the object is what appears to be corrosion build up, but the x-ray suggests that there is something wrapped around the stem. This appears to be a handle or grip formed from knotted fine wire or chain. Cu alloy. L: 55mm. Context 636, Pit 632,

sf 35. Tenement 173, Phase HMED. [ID 121]. These objects are interpreted as earscoops and toothpicks. There are very similar objects from Battle Abbey (Geddes 1985, 162, fig. 52, no. 77) and from excavations on the Thames Exchange, City of London (Egan and Pritchard, 1991, 379, fig. 251, TEX 88). Both of these exmaples have a ring fixed to the handle for the attachment of a cord. There is a simpler example from York (Ottaway and Rogers 2002, 2932, fig. 1501, no. 15227). An example from France illustrated by Gay (1887, 526) dated to the reign of Charles VI of France (born 1368, reigned 1380-1422). The French example is more ornate and has a handle in the form of cast figure.

Jewellery

37 **Decorative stud** or **mount**, with flat raised central boss with scroll pattern. Part of the surface of the boss is completely lost. The remaining portion has parts of three scrolls, positioned in such a way as to suggest that there were originally only four scrolls. There is a suggestion that edges of this boss were held by a series of triangular or tooth-like claws which spring from an angle rim decorated with a beaded raised strip. Saxon. Cu alloy. D: 27 mm. Context 6698, Pit 6695, Sf 246. Tenement 170, Phase LSAX. [ID 252]

There is no exact parallel for this piece, although Brasenose brooch (Hinton 1974 . . .) is perhaps broadly comparable. The mount is quite poorly preserved with corrosion build-up, and before selective cleaning the decoration was visible only on the x-ray plate and the object was tentatively identified in the assessment as a saucer brooch. Cleaning revealed that the scroll decoration was on the wrong face of the object to be a saucer brooch, and that the rim had a milled or beaded border. The decoration comprises scrolls on the flat central boss of the stud, with a beaded or milled border around the angled rim. The design of the decoration is nonetheless comparable to that found on some Saxon saucer brooches (eg. MacGregor and Bolick 1993, 42, and nos 2.1-2.16), although its execution is quite different. The object may have been mount from a vessel or box, or it may have been a brooch and probably dates to the later Saxon period, ie. the 10th or 11th century.

This is a Roman object and must be residual, perhaps from a Saxon context.

- 38 **Finger ring** with oval bezel. The shoulders of the hoop are decorated with three raised mouldings on each side. Cu alloy. L: 22 mm. Context 6021, Pit 6020, Sf 201. Tenement 169, Phase HMED. [ID 223]
- 39 Possible **pendant**, incomplete. Three fragments. Radiograph shows some patterning, but not conclusive. One fragment has a piercing for suspension. Possibly originally teardrop shaped. L: mm; W: 33 mm. Context 4088, pit 4086, sf 152. Tenement 237, Phase HMED. [ID 190]
- 40 **Decorative pin head** cast openwork decoration, heart-shaped overall, with internal scrolls. Cu alloy. L: 23 mm, W 20 mm. Context 4198, Sf 174. Tenement 238, Phase HMED. [ID 194]

Items of dress

Buckles

- 41 **Small circular buckle** or **brooch**. Cu alloy. D: 20 mm. Context 4115, Sf 153. Tenement 237, Phase HMED. [ID 191]
- 42 **Circular buckle** with plain frame of flat oval section and plain pin or tongue. Cu alloy. L: 31 mm, W: 30 mm. Context 374, Pit 172, Sf 14. Tenement 172, Phase HMED. [ID 117]
- 43 **Circular buckle** with central bar, incomplete, Three fragments. Cu alloy. D: 25 mm. Context 1070. Tenement 172, Phase LMED. [ID 23]

- **D-shaped buckle** frame fragment. Cu alloy. L: 26 mm, W 38 mm. Context 8538, Pit 8537. Tenement 241, Phase AN. [ID 100]
- **Oval buckle frame with ornate outer edge, and plate**. Cu alloy. L: 44 mm. Context 7599, Pit 7595, Sf 284. Tenement 166, Phase HMED. [ID 266]. In London this form of buckle seems to have been in use from late 12th to the late 14th century (Egan and Pritchard 1991, 76).
- **Double oval buckle frame** with mineralised remains of belt? Cu alloy. L: 36 mm; W: 23 mm. Context 1198, Pit 1197, Sf 76. Tenement 174, Phase HMED [ID 142].
- **Double oval buckle frame**. Incomplete, originally *c* 40 mm long. Cu alloy. L extant: 28mm; W: 37mm. Context 39. Tenement 172, Phase EMOD. [ID 1]
- **Sub-square buckle frame** with long pin, heavily encrusted. Fe. L: 45 mm; W 36 mm. Context 3656, Tank 3549, Tenement 237, Phase PMED. [ID 765]
- **Cast buckle tongue**. It has a double transverse moulding on the top of the tongue just where it joins the loop, which is broken. Cu alloy. L: 46 mm. Context 8029, Sf 304. Tenement 242, Phase LMED. [ID 270]
- 50 Possible **buckle frame fragment**. Cu alloy. L: 27 mm. Context 4168, Sf 158. Tenement 237, Phase HMED. [ID 193]
- **Buckle frame** fragment? Small curved fragment from corner of sub rectangular frame. Cu alloy. L: 14 mm, W 10 mm. Context 4315, Pit 4401, Tenement 237, Phase HMED. [ID 64]
- **Buckle tongue** formed from plain strip, with rolled over loop. Cu alloy. L: 35 mm. Context 1018, Pit 1020, Sf 47. Tenement 173, Phase HMED. [ID 129]
- **Large shoe buckle**, Large rectangular buckle frame cut from sheet. Georgian. Cu alloy. L 103 mm, W 52 mm. Context 6438, Pit 6435. Tenement 170, Phase EMOD. [ID 89]

Strap loops and belt mounts

- **Belt stud** or **plate**. Floral motif with eight petals. Cu alloy. L: 18 mm; W 17 mm. Context 1067, Pit 1069, Sf 50. Tenement 173, Phase HMED. [ID 134]
- **Oval strap loop with rivet**. Cu alloy. L: 18 mm, W 17 mm. Context 1110, Pit 1113, Sf 61. Tenement 173, Phase HMED. [ID 141]
- 56 Possible **decorative belt plate** comprising small square plate, slightly dished, with two nail or pin holes positioned in diagonally opposite corners. The radiograph shows a pattern of incomplete small circles punched into its surface. The punched decoration forms borders to the plate and a possible cross in the centre of the plate. Cu alloy. L: 16mm; W 15mm. Context 4638, Pit 4579, sf 205. Tenement 237, Phase HMED. [ID 219]
- **Belt mount** or **stiffener** formed of narrow cast strip with squared ends and attachment points with washers. Bent. No visible decoration. Cu alloy. L: 40 mm; W: 6 mm. Context 3440, Pit 3493, sf 137. Tenement 237, Phase HMED. [ID 183]

- 58 Possible **belt mount** or **stiffener**. Formed from sheet, it is long and thin and slightly curved in cross-section, with an embossed moulding at one end. L: 52 mm; W: 6 mm. Context 6577, Pit 6553. Tenement 172, Phase LMED. [ID 91] Found with hooked clasp Cat.No.63.
- 59 **Belt mount** or **stiffener**, comprising long hollow strip rounded at the ends and fastened with two pins. Cu alloy. L: 54 mm, W 4 mm. Context 3083, Sf 116. Tenement 238, Phase HMED. [ID 164]. Compare the mounts from London (Egan and Pritchard 1991, 213, fig.134, nos 1147 & 1151).
- 60 **Pendent loop and mount**. This comprises a small cast circular pendent loop with a collared terminal knob, which was attached by a narrow strip or plate to the edge of a belt. The narrow strap was folded around the bar of the pendent loop and has one nail or rivet hole extant. It was apparently undecorated. Cu alloy. Strap: L: 12 mm, W 4 5mm; pendent loop: L: 15 mm; W: 12 mm. Context 1357, Pit 1361. Tenement 174, Phase LMED. [ID 29]

Strap ends

- 61 Strap end, Hinton type C: flat double riveted with convex sides. Cleaning has revealed the outline of the decorative panel clearly, but only tantalising glimpses of the decoration within the panel. The tip of the tag, which would have been decorated with an animal however stylised shows very little. The radiograph does not show any clear decoration. There are some very small traces of gilding on the face of the tag. Cu alloy. L: 32 mm, W 12 mm. Context 343, Pit 172, Sf 9. Tenement 172, Phase HMED. [ID 114]. See Hinton 1996, 40-43, fig.16) for examples from Hamwic.
- 62 **Two-piece strap end**, incomplete. It is plain and tapers and has a pair of nail or rivet holes at the wider end. Cu alloy. L extant: 19 mm, W 10 mm. Context 267, Pit 257, Tenement 173, Phase HMED. [ID 14]
- 63 **Three-piece strap end with forked spacer**, fragment. It is incomplete and badly corroded. It shows quite clearly on the radiograph. Cu alloy. L: 25 mm, W 13 mm. Context 1089, Pit 1092, Sf 57. Tenement 173, Phase HMED. [ID 139]. Strap ends with forked spacers are a 14th-century type: see examples from London (Egan and Pritchard 1991, 140-43, fig. 93) and York (Ottaway and Rogers, 2002, 2900).
- 64 Strap end with forked spacer. Narrow example with a collared knop. Cu alloy. L 29 mm. Context 6367, Sf 226. Tenement 240, Phase EMOD. [ID 232]. Similar to, though smaller than, an example from London (Egan and Pritchard 1991, 143, fig. 94, no. 676).

Hooked clasp

65 **Hooked clasp** formed from embossed and folded sheet. Iron hinge pin. This example is incomplete and has lost its hook. Cu alloy. L: 25 mm, W extant: 25 mm. Context 6577, Pit 6553. Tenement 172, Phase LMED. [ID 90]. Found with possible belt mounted Cat. No.56. Compare a complete example from London (Egan, 2005, 46, fig. 28, no.167).

Clothes fastenings

66 **Flat circular button** with cast loop on back. X-ray shows the arms of the Board of Ordnance: shield with three cannon in pale and three cannon balls in chief. Cu alloy. D: 25 mm. Context 669, Brick-lined feature 854, Sf 32. Tenement 173, Phase PMED. [ID 123]

- 67 **Clothes hook**. Formed from wire. A form of fastening common in the late 16th century and 17th century. used to hook breeches and cost together. Cu alloy. L: 19 mm, W: 9 mm. Context 76. EMOD. [ID 3]
- 68 **Wire loop fastener**, comprising ring of wire with twisted closure. Cu alloy. L: 16 mm, W: 11 mm. Context 5008, Pit 5003. Tenement 178, Phase LMED. [ID 279]
- 69 Possible **wire loop fastener(s)**, two fragments possibly from one, or two separate, wire loop fasteners. Cu alloy. L: 12 mm and 12 mm. Context 5009, Pit 5003. Tenement 178, Phase LMED. [ID 280]
- 70 **Wire loop fastener**. Cu alloy. L: mm; W; mm. Context 5089, pit 5087. Tenement 178, Phase PMED. [ID 1284]
- 71 **Pin with looped head**, bent double. Originally c. 55mm long. Cu alloy. L: 31mm; loop D:8mm. Context 133, Cess pit 169. Tenement 172, Phase EMOD. [ID 7]

Lace chapes (Table)

A small number of lace chapes was recovered from the excavations, exclusively from medieval and post-medieval contexts. The numbers are so small that there are no meaningful concentrations in any phase or tenement. The chapes include examples with overlapped seams, in-turned seams and butting seams. The latter include examples with pin holes.

Table 11: Lace chapes and pins

(a) Numbers by Phase

Phase	lace chapes	pins	Phase totals
HMED	3	4	7
LMED	3	12	15
PMED	4	16	20
No Phase		1	1
Totals	10	33	43

(b) Numbers by Tenement

Tenement	lace chapes	pins	Tenement totals
166		1	1
170	1	1	2
172	1	2	3
174	1	3	4
177	1		1
178	2	3	5
179	1	6	7
180		2	2
237	2	9	11
240	1	4	5
242		1	1
General		1	1
Totals	10	33	43

Pins

Dress pins were found in small numbers predominantly from late medieval and post-medieval contexts. The pins include examples with wire wound heads and cast heads. Wire wound heads are predominant. No tenement produced many pins: the largest numbers were nine pins from tenement 237 and six from tenement 179. The small number of pins is notable. Pins are often very common on late medieval and post medieval sites.

Other fragments related to dress

72 Thread of gold. Very fine long single strand scrunched and folded. Gold. Not measured. Context 4791, Sf 228. Tenement 237, Phase LSAX. [ID 220]

73 Cord plaited from fine wire. Three fragments. Cu alloy. L: 35 mm, 33 mm, 32 mm. Context 3133, Pit 3130, Sf 75. Tenement 237, Phase LMED. [ID 145]

Household

Knives and cutlery

74 **Whittle tang knife**, very encrusted. Tip of blade missing. Curved back and centrally placed tang. Fe. L: 96 mm. Context 7612, Pit 7611. Tenement 167, Phase LSAX. [ID 1094]. Good early medieval form.

75 Possible **knife blade fragment**, mineralised and encrusted. Could parallel sided blade with angled point, and triangular section. ID not certain. Fe. L: 80 mm. Context 455, Pit 454. Tenement 172, Phase AN. [ID 374].No diagnostic features.

76 Possible **knife blade fragment**, from whittle tang knife. Poorly preserved and heavily encrusted. Fe. L: 95 mm. Context 1279, Pit 1275. Tenement 173, Phase AN. [ID 562].No clear diagnostic features.

77 Probable **whittle tang knife**. The tang is largely lost but is centrally placed. The blade has a curved back. There is a possible a nail or rivet hole through the blade at its junction with the tang. Fe. L: 109 mm. Context 3236, Pit 3237. Tenement 237, Phase AN. [ID 666]. The blade is a good early medieval form.

78 **Knife blade** of triangular section, much mineralised and encrusted. Two fragments. Tapers to a point. Fe. L: 111 mm. Context 4168. Tenement 237, Phase HMED. [ID 788]. Undiagnostic.

79 **Whittle tang knife**. Tapering blade with straight back. Three fragments. Fe. L: 108 mm. Context 4169, Pit 4170. Tenement 237, Phase AN. [ID 791]. Good medieval form.

80 **Whittle tang knife** with integral bolster, little of blade extant. Remains of handle (organic) on tang. Post-Med type. Fe. L: 84 mm. Context 4632, Pit 4519. Tenement 237, Phase HMED. [ID 383]. 17th- or 18th century form.

81 **Knife blade**. Parallel sided blade incomplete, with possible plate tang. Radiograph shows a small bolster of different material, probably copper alloy but is not visible to the naked eye. Two fragments. The form of knife unclear since insufficient survives. Fe. L 99 mm; W: 19 mm. Context 1070. Tenement 172, Phase LMED. [ID 531]. Plate tang suggests a post medieval form.

- **Plate tang knife**, very heavily encrusted and mineralised. Two fragments. Two nail holes and a rounded choil are visible Fe. L: 123 mm. Context 5100, Pit 5099. Tenement 179, Phase LMED. [ID 867] Plate tang suggests a post-medieval form.
- 83 Tapering point of a **knife blade** of triangular section. Fe. L: 63 mm. Context 5100, Pit 5099. Tenement 179, Phase LMED. [ID 865]. Undiagnostic.
- 84 Possible **knife blade fragment**, with whittle tang and non-ferrous bolster plate. The surviving blade appears to parallel-sided with a dropped edge. Fe. L: 50 mm. Context 6647, Pit 6855. Tenement 170, Phase PMED. [ID 1044]. Post medieval form.
- **Whittle tang knife**, with bone handle. Only part of the probably parallel sided blade survives, with a nail fragment fused to one face. The blade has a dropped edge. Two fragments. Fe. L: 117 mm. Context 3323, Pit 3322. Tenement 237, Phase PMED. [ID 674].Post medieval form.
- 86 Possible **knife blade**, parallel-sided, with possible plate tang, incomplete, and dropped edge. Two fragments. Triangular section. Very poorly preserved. Fe. L: 120 mm. Context 3323, Pit 3322. Tenement 237, Phase PMED. [ID 676].Post medieval.
- **Knife handle** with a plate tang and probably an elongated oval section bolster. The handle plates are antler and secured by three rivets. Little or nothing of the blade survives. Encrusted. Fe. L: 107 mm. Context 3187, Pit 3186. Tenement 237, Phase PMED. [ID 651]. Post medieval form with plate tang.
- **Bone handle** on whittle tang with a solid bolster. Little of the blade survives. Could be a knife, or possibly a tool, handle. Fe. L: 145mm. Context 6483, Wall. Tenement 240, Phase PMED. [ID 1005].Post medieval.
- **Whittle tang knife** with integral bolster. Possible maker's stamp on bolster. Blade incomplete, but parallel sided? Post Med form. Fe. L: 104 mm. Context 76, overburden. Phase EMOD. [ID 322]. 17th- or 18th century form.
- **Knife blade** point, triangular section. Mineralised. Fe. L: 45 mm. Context 5151. General. Unphased. [ID 881]. Undiagnostic form.
- **Small spoon** with fig-shaped bowl and oar pattern stem and handle. Non-ferrous alloy. L: 134 mm. Context 8055, Sf 314. Tenement 242, Phase EMOD. [ID 271]. Probably of 19th-century date.

Vessels

- **Cast vessel rim**, perhaps a bowl. Cu alloy. L: 38 mm. Context 3098, Sf 140. Tenement 237, Phase HMED. [ID 168]
- 93 Possible **plate**. Broad copper alloy disc slightly dished, no obvious rim or shaping. Possibly a plate. Cu alloy. D: 260 mm. Context 3106. Tenement 237, Phase HMED. [ID 293]
- **Vessel rim fragment**. Everted rim. Cu alloy. L 82 mm; W: 37 mm. Context 669, Pit 854. Tenement 173, Phase PMED. [ID 18]
- **Cauldron**. Curved cast fragment of irregular outline, with stump of handle at one corner. Cu alloy. L: 115 mm, W: 70 mm. Context 6679, Pit 6682, Sf 247. Tenement 240, Phase LMED. [ID 250]

- 96 Cast **cauldron leg**. Cu alloy. L: 80 mm. Context 6699, Posthole 6664, Sf 248. Tenement 170, Phase PMED. [ID 253]
- 97 Possible **vessel leg** or **foot**. Very dense and heavy. Wider at one end. Splayed to form a foot at the narrower end. Fe. L: 110mm. Context 5010, Pit 5180. Tenement 180, Phase PMED. [ID 854]
- 98 **Cauldron rim** fragment with handle in situ. Cast Fe. L: 148 mm. Context 3566, Pit 3573. Tenement 237, Unphased. [ID 718]
- 99 **Small vessel** with elongated spout. Cu alloy. L 42 mm; W: 27 mm. Context 3168, Pit 3169. Tenement 237, Phase PMED. [ID 43]

Sheet repairs

- 100 Two **strips** laid one on the other and joined by three paper clip rivets inserted through slots, two on one edge and the third on the opposite edge. Broad strips, curved in cross-section. Cu alloy. L: 96mm; W: 34mm. Context 1409, Ditch 1408, sf 124. Tenement 174, Phase HMED. [ID 161]. A repair for a sheet metal vessel. Compare an example from London (Egan 1998, 177, fig. 144, no. 494), and numerous examples from York (Ottaway and Rogers 2002, 2813-4, fig. 1399).
- 101 **Sheet fragments**, irregular and folded. Many pieces clearly joined by means of paper clip rivets. 15 fragments. The largest measures 36mm x 34mm. Cu alloy. L: 36mm; W: 34mm. Context 7212, Pit 7199, sf 278. Tenement 241, Phase HMED. [ID 262].

Tap

102 Tap. A decorative tap or finial and plain tapering tap case. Cu alloy. L: 65 mm. Context 7614, Pit 7619, Sf 289. Tenement 166, Phase HMED. [ID 263]. A very similar though slightly larger tap from London is published by Egan (1998, 242-44, fig. 189, no. 746).

Strainer or colander?

103 Possible strainer in the form of a hemispherical bowl pierced with a regular pattern of holes. The bowl has a roughly triangular flange, a little squashed. The flange is not regular and has some fixing holes. Pb. L: 330mm; W: 280mm. Context 886, Barrel 885. Tenement 173, Phase EMOD. [ID 496]

Cask hoops

104 **Cask hoops**. 33 large to medium fragments and 34 smaller fragments. Fe. L: 450 mm to 550 mm extent. W: 45 mm to 55 mm. Context 886, Pit 885. Tenement 173, Phase EMOD. [ID 1278-1280]. Although there is evidence for mineralised wood, the information is not very clear. It is not possible to establish with any confidence the width of any individual cask stave. The x-ray plates show some vertical lines on the iron hoops that might indicate that some staves were 90 mm wide. One hoop fragment, measuring c. 55 mm wide and at least 420 mm long, has extensive mineralised deposits that show possible traces of two staves, one c 85 mm and the adjacent example c 70 mm wide. There are at least two hoop fragments, which have been joined with lap joints fastened by pairs of rivets. Although the hoops are fragmentary, they are clearly from a large cask. The likelihood is that the cask in pit 886 was either a pipe or a tun, both of which were large and used for transporting wine. The sizes of both tuns and pipes could vary depending on their country of origin.

Lighting

105 Candlestick with plain dish-shaped tray and skirted flange. In two pieces. The quite tall stem has two plain mouldings and is topped by a plain cup. Cu alloy. H: 166 mm, Base D: 132 mm. Context 3643, Pit 3582. Tenement 237, Phase LMED. [ID 294]. The stem is comparable to an example from London found with mid 16th-century ceramics (Egan 2005, 81, fig.69, no.337).

106 **Scissor candle snuffers**, one arm missing. Decorated with ring and dot on top plate. Fe. L: 169 mm. Context 5010, Pit 5180, Sf 74. Tenement 180, Phase PMED. [ID 822].

Decorative bindings or mounts

- 107 **Decorative binding** or **mount**, comprising cast strip of half round section pierced with three elongated slots, and terminating in a flat plate decorated with punch marks. Cu alloy. L: 93 mm; W: 5 mm; end plate W: 12 mm. Context 5105, cess pit 5104, sf 80. Tenement 179, Phase LMED. [ID 154]
- 108 **Decorative binding** or **mount** fragment. cast with an open circle and a pierced expansion. Cu alloy. L: 35 mm; open circle D: 14 mm. Context 3440, Pit 3493, sf 136. Tenement 237, Phase HMED. [ID 182]
- 109 **Decorative binding** or **mount**. Cast Y-shaped fragment with at least three pierced expansions. Originally a fourth arm, now missing. Two of the arms terminate in pierced expansions and points. The third arm ends in a pierced expansion. Cu alloy. L: 97 mm. Context 4315, Pit 4401, sf 178. Tenement 237, Phase HMED. [ID 195]
- 110 **Decorative binding** or **mount**. Two cast fragments. Single pierced expansion. 2 fragments. Cu alloy. L: 89 mm. Context 4164, sf 179. Tenement 238, Phase HMED. [ID 192]
- 111 **Decorative binding** or **mount**. V-shape fragment of cast binding with fixing hole at the junction of the two arms. One arm has a single flattened circular expansion and is broken at the end. The other arm has a flattened circular expansion and second pierced expansion with a terminal point. Cu alloy. L: 62 mm; W: 42 mm. Context 3413. Tenement 237, Phase PMED. [ID 48]

Edge bindings

- 112 **Curved edge binding** with slight fold along inner edge. Formed from sheet. No certain nail holes. Possibly edge of a vessel. Cu alloy. L: 87 mm; W: 19 mm. Context 6576, Pit 6553, sf 236. Tenement 172, Phase LMED. [ID 247]
- 113 Possible **edge binding** formed from sheet.. No nail or rivet holes visible. Cu alloy. L: 125 mm; W: 14 mm. Context 1376, Pit 1344, sf 114. Tenement 239, Phase HMED. [ID 162]

Other household fragments

- 114 **Elongated decorated plate**. Possibly for a box or casket. Looks like a dummy hinge. Cu alloy. L 77 mm; W: 15 mm. Context 5010, Pit 5180, Sf 70. Tenement 180, Phase PMED. [ID 150]
- 115 Possible **hinge plate** comprising rectangular plate with 2 nail holes. At the centre of one long side is a strip extending at right angles. This broken and appears to have been curved originally perhaps as part of the hinge itself? Fe. L: 21 mm, W: 24 mm. Context 3370, Sf 139. Tenement 237, Phase LMED. [ID 179]

- 116 **Tack** with hollow domed head. Possible upholstery tack. Heavily encrusted. Cu alloy. L 17 mm; head D: 12 mm. Context 3647, Pit 3635. Tenement 176, Phase PMED. [ID 61]
- 117 **Tack** or **stud** with hollow domed head, and little of stem extant. Cu alloy. Head D: 10 mm. Context 76. Phase EMOD. [ID 4]

Door fittings

- 118 Probable hinge strap, bifurcated at end to form a scroll (?). One extant nail hole. Fe. L: 82 mm, W: 60 mm. Context 4144, Pit 4152. Tenement 237, Phase HMED. [ID 784]
- 119 Probable hinge strap comprising two fragments. One a large broad strip with two nail holes, broken at both ends. The second fragment a narrower tapering strap with single nail hole. Although the two fragments do not join directly, they are probably parts of same hinge strap. Wood graining preserved on face of both fragments. Fe. L: 135 mm, W: 55 mm; and L: 75 mm, W: 48 mm. Context 3612, Pit 3512. Tenement 237, Phase LMED. [ID 722]
- 120 Possible rectangular hinge plate, with two nail holes visible. Heavily mineralised, the identification not completely certain. Fe. L: 92 mm, W: 42 mm. Context 3645, Pit 3635. Tenement 176, Phase PMED. [ID 752]
- 121 Hinge strap, folded back on itself. Mineralised, and encrusted. Fe. L: 97 mm, W: 56 mm. Context 3189, Pit 3188. Tenement 237, Phase PMED. [ID 659]
- 122 Hinge ride or split spike loop. Fe. L: 140 mm. Context 3641, Pit 3549. Tenement 237, Phase PMED. [ID 742]
- 123 Plate hinge with one rectilinear plate and one with a rounded edge. At least four nail holes can be identified. Fe. L: 52 mm, W: 40 mm. Context 6157, Linear feature 6156. Tenement 170, Phase EMOD. [ID 939]
- 124 Hinge strap bent into a U-shape, with a nail with mineralised wood bridges the space between the two arms. Each end appears expanded. Heavily encrusted. Fe. L: 150 mm. Context 8017, Pit 8016. Tenement 242, Phase EMOD. [ID 1111]

Window leading

- 125 Possible **window leading**, though perhaps too small in section for confident identification? Pb. L 33 mm. Context 3642, Tank 3549. Tenement 237, Phase PMED. [ID 311]
- 126 **Window leading**, two fragments. Pb. L mm. Context 3163, Cess pit 3169. Tenement 237, Phase PMED. [ID 631]
- 127 **Window leading**. Five straight fragments, and one fragment with a joint. No milling discernible. L: 118 mm, 83 mm, 78 mm, 47 mm, 20 mm. Context 3556. Tenement 238, Phase PMED. [ID 310]
- 128 **Window leading**, or came, crushed. It is not possible to determine whether or not it is milled. Pb. L: 85 mm. Context 6273, Sf 218, Pit 6278. Tenement 170, Phase EMOD. [ID 304]

Security

- 129 Key fragment comprising hollow stem and complete symmetrical bit. There is a collar where the stem or shoulders met the bow, which is missing. Fe. L: 85 mm. Context 3586, pit 3588. Tenement 237, Phase HMED. [ID 720]
- 130 Key with diamond bow. Only a little of the bit survives. Fe. L: 60 mm. Context 4088, pit 4086. Tenement 237, Phase HMED. [ID 782]
- 131 Key with solid stem and bit of uncertain form. The key is heavily encrusted and mineralised and no detail of the bit shows on the radiograph. The handle is kidney shaped. Fe. L: 150 mm. Context 5009, rubbish pit 5003. Tenement 178, Phase LMED. [ID 1225]
- 132 Pair of keys for rotary locks on a ring. Very heavily encrusted. On the radiograph the two keys appear to have the same shape bit. Fe. Key L: 50 mm, 47 mm; bow W: 22 mm, 22 mm. Context 6647, rubbish pit 6855. Tenement 170, Phase PMED. [ID 1051]
- 133 Key fragment. Key encrusted with possible chain links. Stem and large bit visible on radiograph. Fe. L: 70 mm; W: 31 mm. Context 3172, cess pit 3169. Tenement 237, Phase PMED. [ID 643]
- 134 Latch rest with incomplete stem. Fe. L: 94 mm. Context 8146. Tenement 242, Phase HMED. [ID 1138]
- 135 Barb spring padlock bolt. U-shaped bolt from a small padlock. Cu alloy. L: 38 mm. Context 1018, pit 1020, sf 56. Tenement 173, Phase HMED. [ID 131]
- 136 Bolt plate or reinforcement for a pivot. Thick, approximately rectangular plate widened at each end. It has a large circular hole in the centre and the corners are pierced with nail holes. Poorly preserved and encrusted. Fe. L: 180 mm; W: 80 mm. Context 3556. Tenement 238, Phase PMED. [ID 716]

Structural fittings and nails

The number of structural fittings is not large. Table 12 includes nails and, under 'Structural', it includes some 150 clench nails and roves which have also been separately tabulated (Table 13). Nails form the largest single part of the metalwork assemblage.

137 **Large spike**, with stem if circular section, and with L-shaped head. Fe. L: 450 mm. Context 6507, pit 6682. Tenement 240, Phase PMED. [ID1276]

Table 12: Bindings, Nails and other Structural fittings (inc. clench nails and roves) by Phase and Tenement (count) (see Table 13 for a separate listing of clench nails)

		Function					
Phase	Tenement	Structural *	Nails	Door	Window	Binding	Total
	168		1				1
	172		6				6
Late Saxon	173	1					1
	175		1				1
	237	1					1
	240		1				1
	243		2				2
LSAX Total		2	11				13
	166	2					2
	168	1					1
	170	1	2			1	4
	172	2	5				7
	173	1	9				10
	174		6				6
Anglo-Norman	177		4				4
	178	1	6				7
	180	1					1
	237	2	6				8
	238	1	3				4
	239		1				1
	240	1	9				10
	241	1					1
	243	1	4				5
AN Total		15	55			1	71
	166	3	2				5
	168		1				1
	169	1	3				4
	170	2	6				8
	171	1	1				2
	172	70	20			1	91
	173	4	66				70
	175		3				3
High Medieval	176		4				4
	177	1	10				11
	178		1				1
	179	6	11				17
	180		11				11
	237	3	63	1		2	69
	238	1	6			1	8
	239	9	6			1	16
	240		2				2

		Function					
Phase	Tenement	Structural *	Nails	Door	Window	Binding	Total
	241	1	6				7
	242		1				1
	243		1				1
HMED Total		102	224	1		5	332
Late Medieval	167					1	1
	168		11				11
	169	1	1				2
	170	3	1				4
	172		10			2	12
	173	1	1			2	4
Late Medieval	174	4	54				58
	175		1				1
	178	1	65			1	67
	179	2	107			2	111
	237	6	27	1		2	36
	238		1				1
	240		1				1
	241		2				2
	242	2	1				3
LMED Total		20	283	1		10	314
	167		1				1
	169		1				1
	170	7	17				24
	171		1				1
	172		9				9
Post Medieval	173	1	31				32
	174		3				3
	176		3	1			4
	178		1				1
	180	2	48				50
	237	4	225	2	3	2	236
	238	2	2		6		10
D) (TD T)	240	4	73			1	78
PMED Total	1.50	20	415	3	9	3	450
	168		3				3
	170	2	41	1	1	1	44
	172	3	15				18
E 1 M 1	173	1	2				3
Early Modern	177	4	5				5
	238	1	1				2
	240	13	57				70
	242	2	4	1			7
	General		4				4
EMOD T : 1	N/A	20	1				1
EMOD Total		20	133	2	1	1	157

		Function					
Phase	Tenement	Structural *	Nails	Door	Window	Binding	Total
Unphased	237		1				1
UNPH Total			1				1
Void	General	3	9				12
VOID Total		3	9				12
Total		182	1131	7	10	20	1350

Clench nails and roves

Clench nails and roves are used in clinker construction to fasten together the overlapping strakes of the vessel. Although the number of clench nails and roves is not large, their concentration in Tenement 172 in the High Medieval Phase is significant.

Table 13: Clench nails and Roves by Phase and Tenement

Phase	Tenement	clench nails and roves	clench nails	clench nail heads	clench nail stems	roves	Total
Late Saxon	237			1			1
LSAX Total				1			1
	166					2	2
	168					1	1
	170	1					1
	172	1					1
	173	1					1
Anglo-Norman	180	1					1
	237		2				2
	238	1					1
	240					1	1
	241		1				1
	243	1					1
AN Total		6	3			4	13
	166		1			2	3
	169	1					1
	170	2					2
	172	47	14	2	4		67
High Medieval	173	3				1	4
	177					1	1
	179		1			5	6
	237	1				1	2
	239	9					9
	241			1			1
HMED Total		63	16	3	4	10	96
	169					1	1
	170	1	1				2
	173	1					1
Late Medieval	174	4					4
	178		1				1
	179			2			2
	237	1					1

^{*} Structural, including clench nails

Phase	Tenement	clench nails and roves	clench nails	clench nail heads	clench nail stems	roves	Total
	242		1				1
LMED Total		7	3	2		1	13
	170	1	2			3	6
Post Medieval	180					1	1
	238		1				1
	240					2	2
PMED Total		1	3			6	10
Post Medieval	172					1	1
to Modern	240		4			8	12
	242		1				1
EMOD Total			5			9	14
VOID	General			2	-	1	3
VOID Total				2	-	1	3
Totals		77	30	8	4	31	150

Miscellaneous pieces

Miscellaneous pieces comprise fragments of metal strip, sheet, bar, rod, rings etc, which cannot be identified to a specific function.

Table 14: Summary of Types of Miscellaneous metalwork by Phase and Tenement

Phase	Tenement	Plate	Sheet	Strip	Bar	Rod	Wire	Block	Ring	Total
	167			1						1
Late Saxon	172	2			1					3
	180	2								2
	239				1					1
LSAX Total		4		1	2					7
	166	1								1
	167	1								1
Anglo Norman	172	5								5
	173						1			1
	237	2	4	11	2	1				20
	238								1	1
	243	2		1						3
AN Total		11	4	12	2	1	1		1	32
	166			2	2					4
	168				1					1
	170				1			1		2
	171	39	1			73			1	114
	172	10		7	13		1			31
	173	23		7		2			2	34
High Medieval	175				1				1	2
	176			1	1					2
	177				1					1
	179	1			2					3
	180				1					1
	237	10	1	3	2		3			19

Phase	Tenement	Plate	Sheet	Strip	Bar	Rod	Wire	Block	Ring	Total
	239	1		2	2					5
	241	1								1
HMED Total		85	2	22	27	75	4	1	4	220
LMED	169								1	1
	172			1	3					4
	173					1				1
	174			1	1					2
Late Medieval	179	8		1			1			10
	237	1			4	1				6
	240			1						1
	241			1						1
	242	1	1							2
LMED Total		10	1	5	8	2	1		1	28
	169		1							1
	170	1	1	1	4			1		8
	171						3			3
	172	2				1		2		5
Post Medieval	173	1			1					2
	176		1			1			1	3
	180	2			1					3
	237	11	5	3	3	2	4	1	1	30
	238			1						1
	240		2		1	2	2			7
PMED Total		17	10	5	10	6	9	4	2	63
	168				1		1			2
	170	2			15		1		1	19
	171				1					1
Early Modern	172	2		5	8	2	6			23
	173								2	2
	177						1			1
	238			1						1
	242	1		1						2
EMOD Total		5		7	25	2	9		3	51
VOID	General	1								1
VOID Total		1								1
Total		133	17	52	74	86	24	5	11	402

Uncertain Identity

The following pieces cannot be positively identified. The large number of pieces that cannot be certainly identified is in part due to the poor preservation of much of the assemblage.

138 **Object** with flat ?blade and possible handle, very badly corroded and laminated. See x-ray. Fe. L: 46mm. Context 497, Pit 48. Tenement 172, Phase LSAX. [ID 1158]

139 **Thin strip**, heavily encrusted. Two pieces. The radiograph suggests the presence of decoration and tinning. Function uncertain. Fe. L: 26mm. Context 504, Pit 48. Tenement 172, Phase LSAX. [ID 1160]

- **Small domed object** comprising hemispherical dome, pierced at its apex with pin hole. Thin wire of pin passes through the hole. The dome is thin. Cu alloy. L: 15mm; W: 9mm. Context 3283, Pit 3303, sf 115. Tenement 237, Phase AN. ID 174]
- **Object** formed from thin rod or wire, with small spoon at one end. The other end is divided into two arms. Both arms are flattened and widened. At the centre of the object is what appears to be corrosion build up, but the x-ray suggests that there is something wrapped around the stem. This appears to be a very fine chain. Function uncertain. Cu alloy. L: 55mm. Context 636, Pit 632, sf 35. Tenement 173, Phase HMED. [ID 121]
- **Cast object**. Possibly a terminal. The broader end is broken. The other end has a round moulding with neck and the further round terminal moulding. Flat on one face, moulded on other face. Leaded bronze? Function uncertain. Cu alloy. L 49mm; W: 20mm. Context 5170, Pit 5166, sf 86. Tenement 180, Phase HMED. [ID 157]
- 143 Possible **pendant** with almost circular dished body no visible decoration and a ?pierced lug for suspension extending from one edge. Function uncertain. Cu alloy. L: 31mm; W: 21mm. Context 3337, sf 130. Tenement 237, Phase HMED. [ID 177]
- **Object** comprising rod or wire of oval section, flattened into a pierced terminal at one end. Possibly a piece of decorative binding. Cu alloy. L: 58 mm. Context 4334, Pit 4579, sf 190. Tenement 237, Phase HMED. [ID 198]
- 145 Possible **binding** formed from strip or bar of rectangular section, flattened and expanded at one end to chisel-like terminal. Near the centre it widens, at which point it is pierced by a neat rectangular hole. Beyond this the strip narrows and changes to a circular section. Fe. L: 127mm; W: 27mm. Context 1376, Pit 1344. Tenement 239, Phase HMED. [ID 603]
- **Long tapering spike with flattened spear-shaped terminal** at thin end. Fe. L: 280mm. Context 7373, Pit 7351. Tenement 170, Phase LMED. [ID 1083]
- **Small rings**. 13 complete rings; 6 half rings; 13 smaller fragments. At least 20 rings and possibly as many as 32 rings represented. Suitable size for mail. Material of rings is uncertain. Not cu alloy? D: 9-10mm. Context 1357, Pit 1361, sf 102. Tenement 174, Phase LMED. [ID 160]
- **Disc**, very slightly dished. Has iron corrosion adhering to one part, but x-ray makes it clear that there are no holes in the disc and no attachments. Cu alloy. D: 43mm x 45mm. Context 5102, Pit 5099, sf 78. Tenement 179, Phase LMED. [ID 153]
- **Object** formed from tapering strip with a slightly expanded perforated terminal at the narrower end. The wider end is probably incomplete, buy encrusted. Midway along there is an expansion at one edge with a hole through it. Fe. L: 178mm: max W: 26mm. Context 3136, Pit 3130. Tenement 237, Phase LMED. [ID 625]
- **Plate** or **sheet fragments** decorated with punched dots. There are two small fragments which probably join. The punched dot decoration comprises short lines within a lightly incised border. The larger fragment measures 12mm x 11mm; the smaller 11mm x 5mm. Cu alloy. L: *c*. 17mm; W: 11mm. Context 9025, Pit 9027. Tenement 237, Phase LMED. [ID 101]

- 151 **Cast decorative fitting**, broadly T-shaped with two thin short arms, and a body pierced for attachment perhaps to a strap. Cu alloy. L: 33 mm; W: 37mm. Context 794, Post hole 793, sf 37. Tenement 172, Phase PMED. [ID 124]
- 152 **Ferrule** or **terminal** comprising tapering socket/stem, which appears to be threaded internally, and to end in a pierced flat circular terminal. Cu alloy. L: 43mm; terminal D: 18mm. Context 1284, Pit 1280, sf 90. Tenement 174, Phase PMED. [ID 143]
- 153 **Looped handle** or **pin**, formed from square section bar, with traces of inlaid decoration on loop. Visible on the radiograph. Fe. L: 67mm. Context 5200, Tenement 177, Phase EMOD. [ID 895]
- 154 Large **triangular plate**, possibly with bar or rod attached along one edge near one corner. Fe. L: 230mm. Context 8017, Pit 8016. Tenement 242, Phase EMOD. [ID 1109]

Bibliography

Biddle, M (ed.) 1990a Object and economy in medieval Winchester, Winchester Studies 7, 2 volumes, Oxford

Biddle, M, 1990b Weights and measures, in Biddle 1990a, 908-28

Clayton, Muriel, 1968 Catalogue of rubbings of brasses and incised slabs, 2nd edition, Victorian and Albert Museum, London 1929, reprinted HMSO, London

Eaves, I, 1989 On the remains of a Jack of Plate excavated from Beeston Castle in Cheshire. *Jour Arms and Armour Soc* XII, 81-155

Egan, G, 1998 *The Medieval Household: Daily Living c. 1150-c. 1450*, Medieval finds from excavations in London: 6, HMSO, London

Egan, G, 2005 Material culture in London in an age of transition. Tudor and Stuart period finds c 1450-c 1700 from excavations in riverside sites in Southwark, MoLAS monograph 19, London

Egan, G, and Pritchard, F, 1991 *Dress accessories* c.1150-c. 1450, Medieval finds from excavations in London: 3, HMSO, London

Ellis, B M A, 1984 Spurs, in Goodall, I H, Iron Objects, in Rogerson and Dallas 1984, 76-106

Ellis, B M A, 1990, Spurs, in Biddle 1990, 1036-41

Ffoulkes, C, 1988 *The armourer and his craft from the XIth to the XVIth century*, Methuen, London, 1912, reprinted Dover Publications, New York

Haines, Rev Herbert, 1861 A manual of monumental brasses comprising an introduction to the study of these monuments and a list of those remaining in the British Isles. Part 1, Oxford and London 1861

Hinton, D A, 1974 A catalogue of the Anglo-Saxon ornamental metalwork, 700-1100 in the Department of Antiquities, Ashmolean Museum, Clarendon Press, Oxford

Hinton, D A, 1996 *The gold, silver and other non-ferrous alloy objects from Hamwic*, Southampton Finds Volume Two, Southampton

Hutchinson, G. 1994, Medieval ships and shipping, Leicester UP, London and Washington

Kruse, S E, 1992 Late Saxon balances and weights from England, Medieval Archaeology, 36, 67-95

MacGregor, A, and Bolick, E, 1993 A summary catalogue of the Anglo-Saxon collections (non-ferrous metals), Ashmolean Museum, BAR British Series 230, Oxford

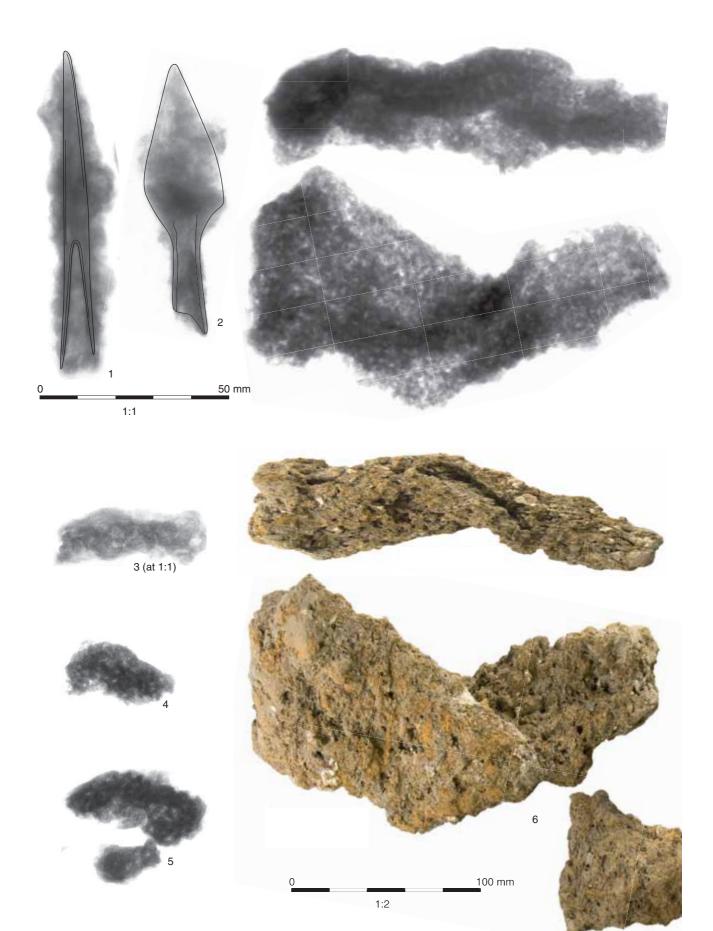
Margeson, S, 1993 Norwich households. Medieval and post-medieval finds from Norwich Survey excavations 1971-78, East Anglian Archaeology 59, Norwich

Ottaway, P, and Rogers, N, 2002 *Craft, industry and everyday life: Finds from medieval York*, The Archaeology of York, The Small finds 17/15, YAT/CBA, York

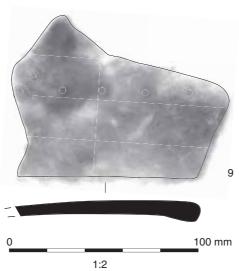
Puype, J P and Wiekart, A A, 1998 Van Maurits naar Munster. Tactiek en triomf van het Staatse leger / From Maurice to the Peace of Westphalia. Tactics and triumphs of the Dutch Army, Legermuseum, Delft

Rogerson, A, and Dallas, C, 1984 Excavations in Thetford, 1948-59 and 1973-80, East Anglian Archaeology 22, Norwich

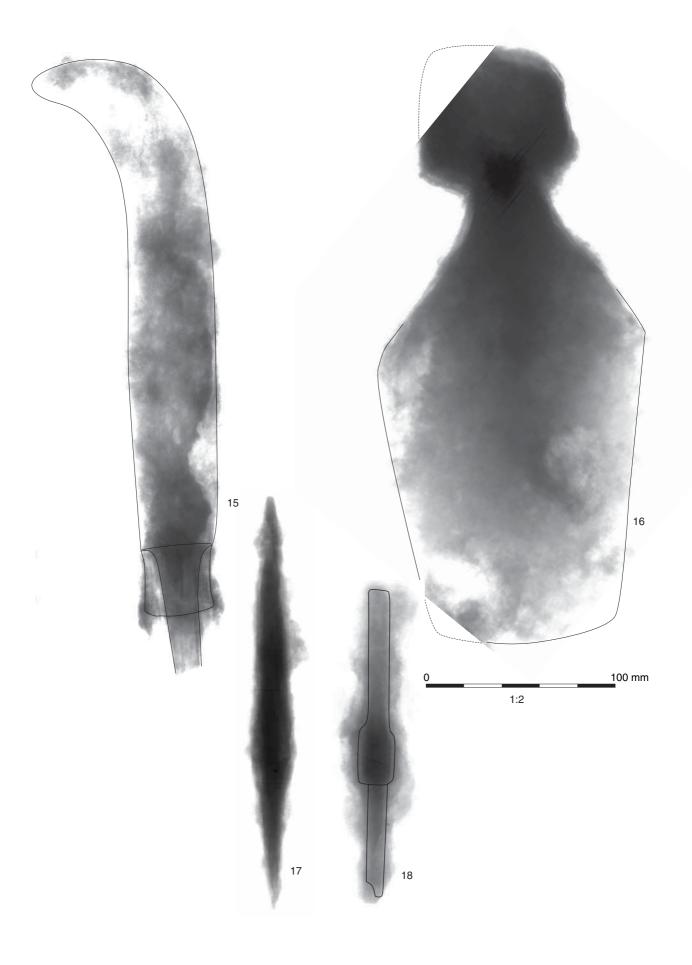
Scull, C, 1990 Scales and weights in early Anglo-Saxon England, Archaeol J, 147, 183-217

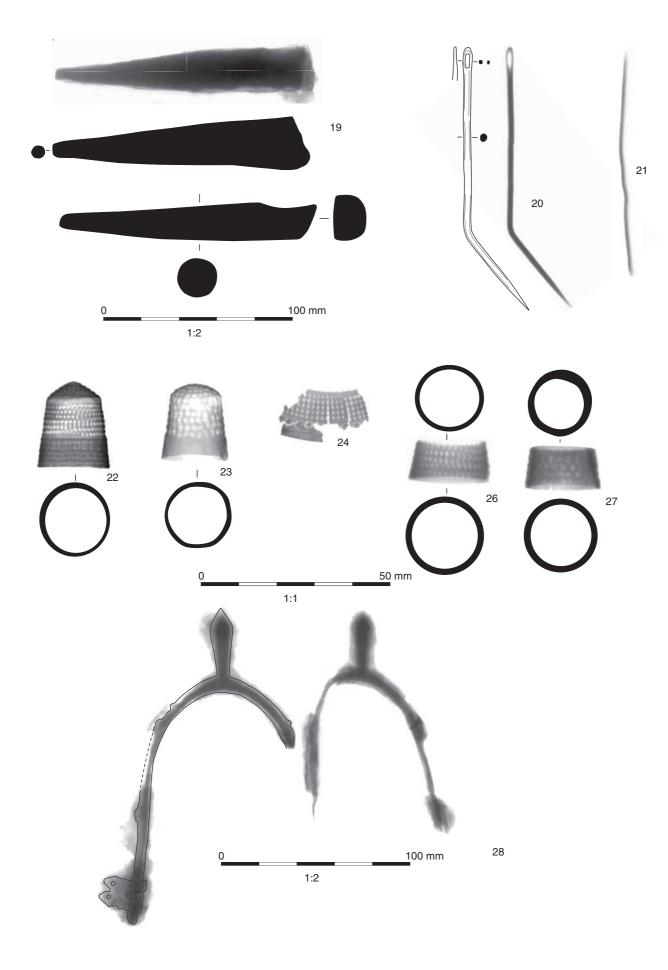




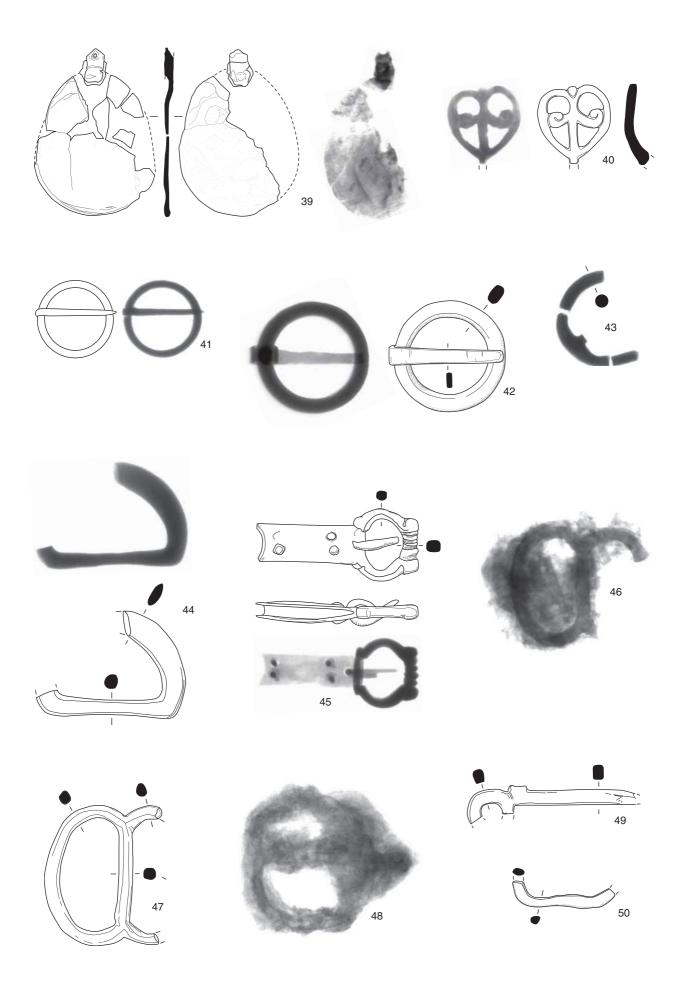


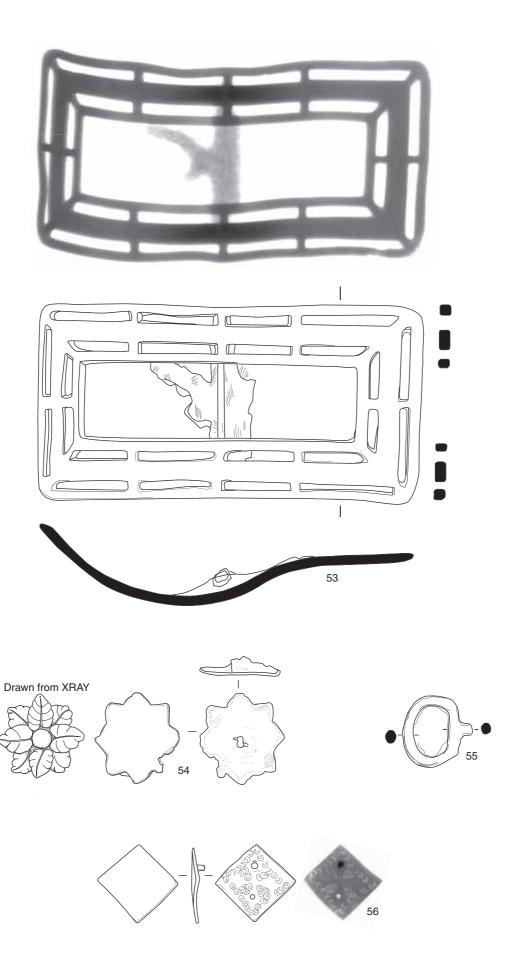


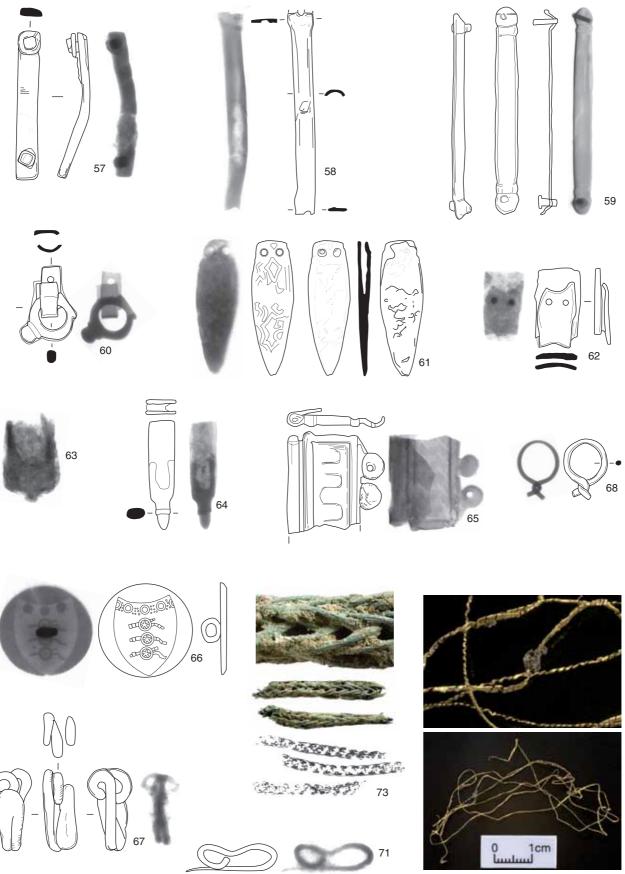


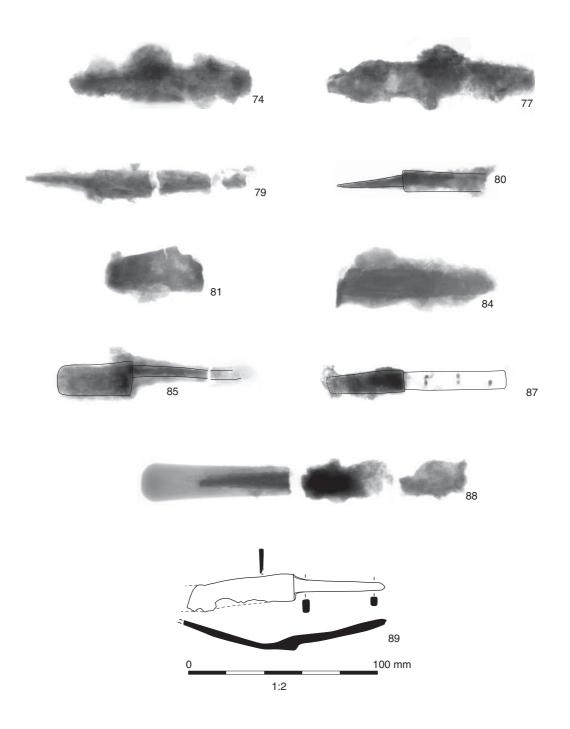


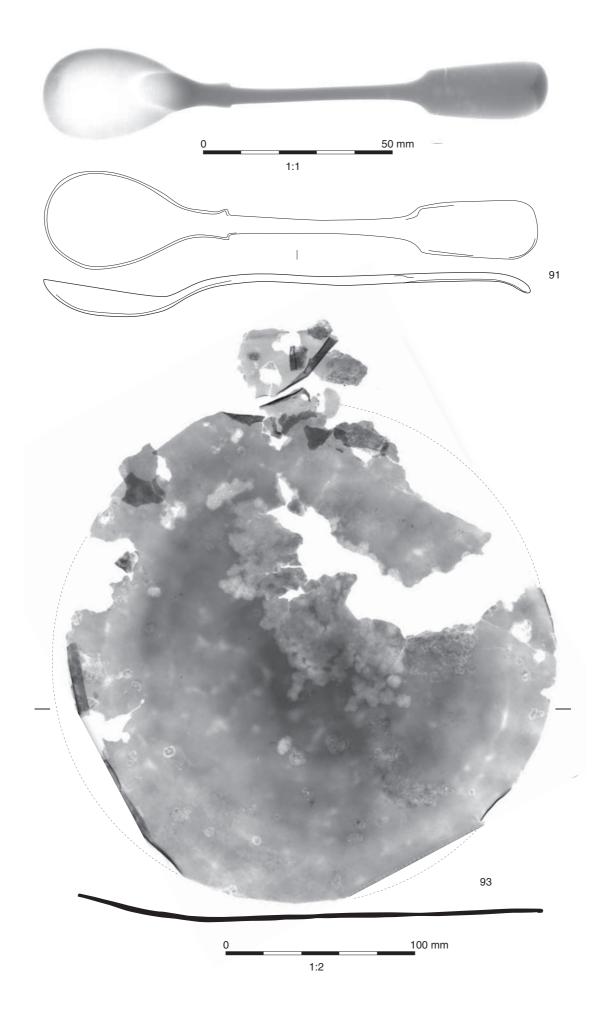


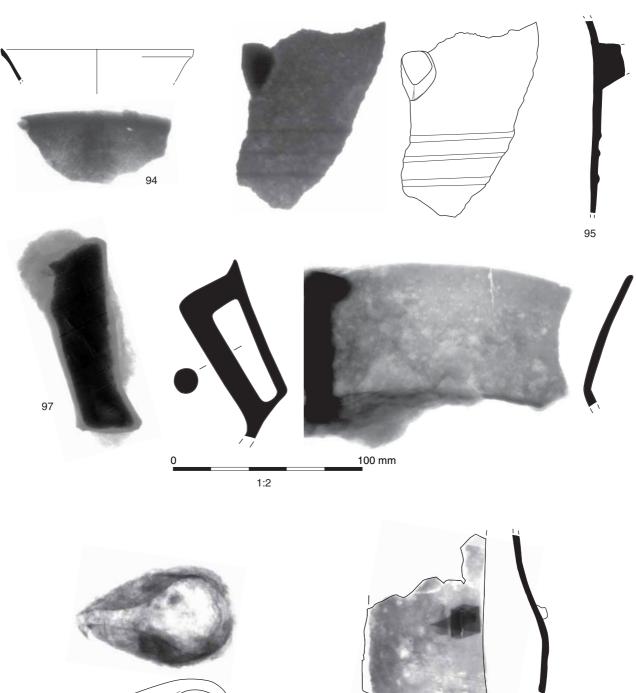


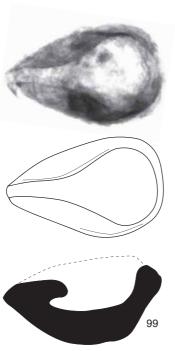




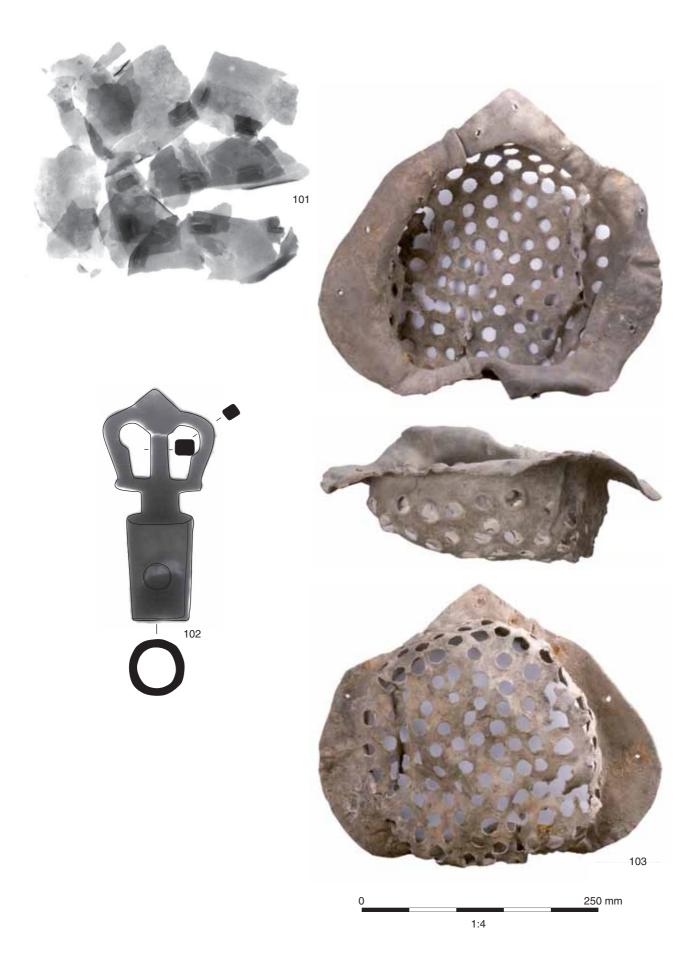


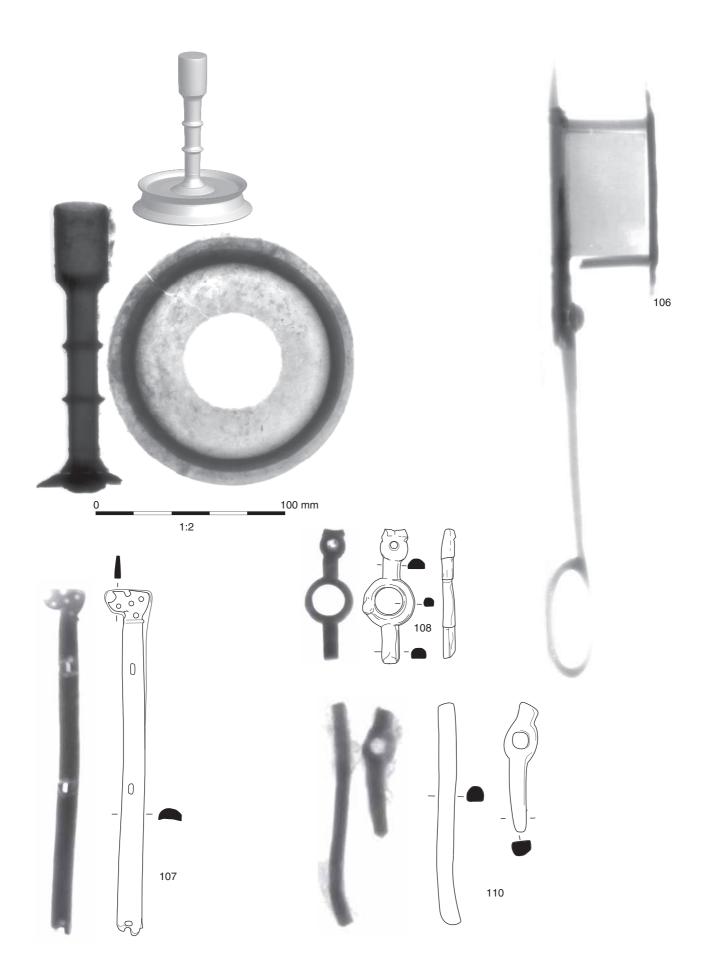


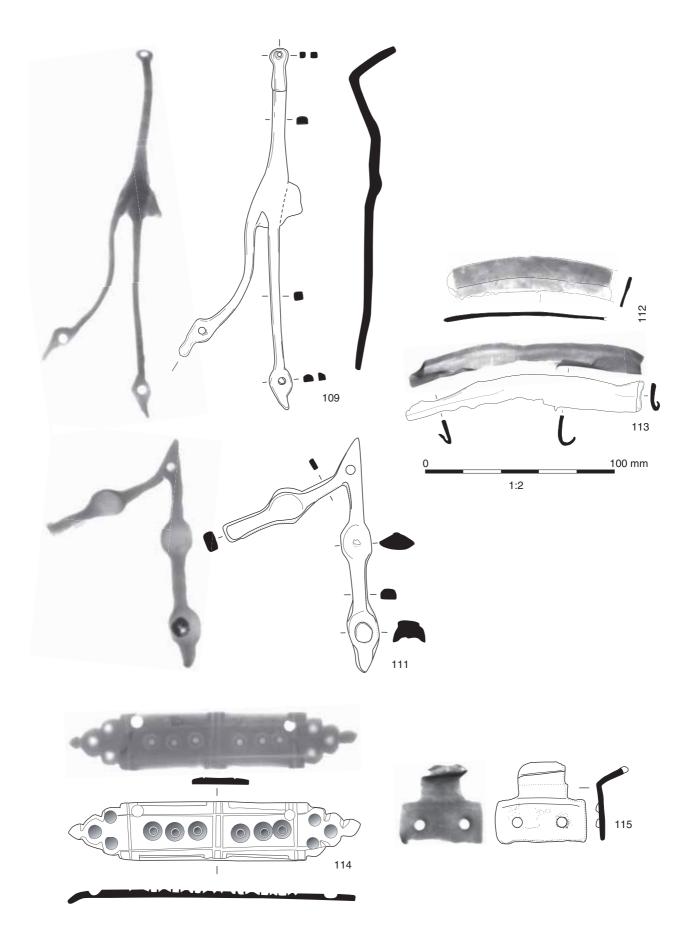


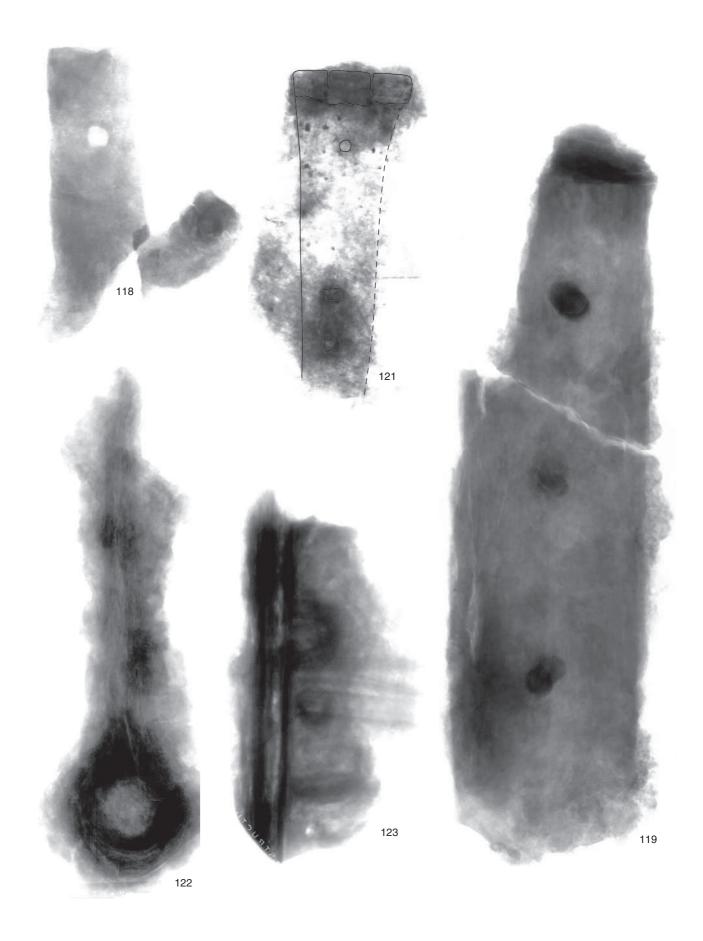




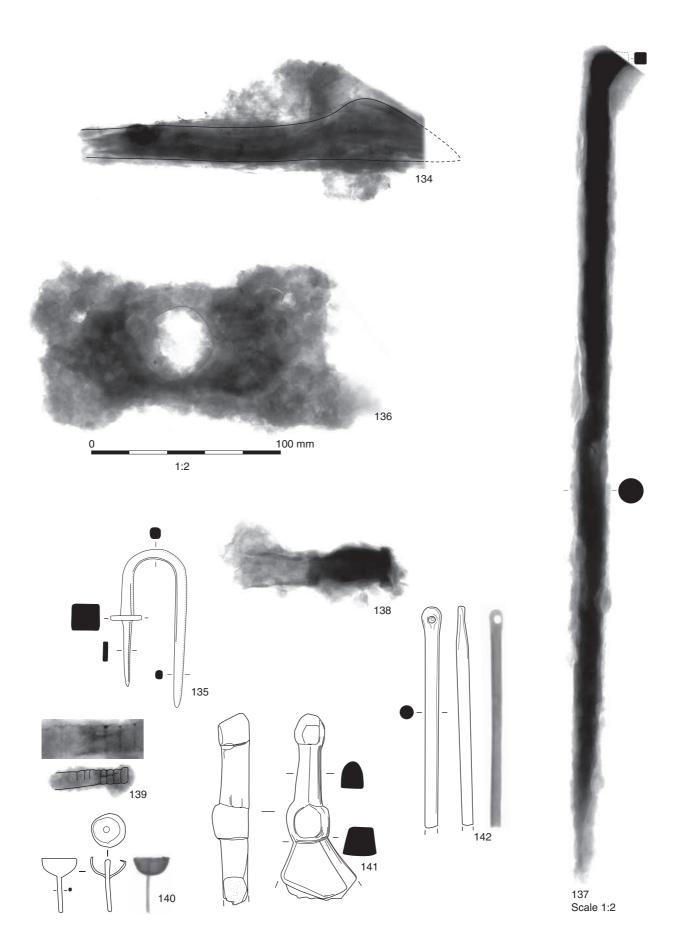




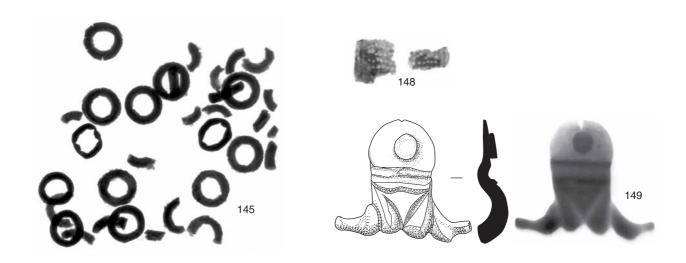


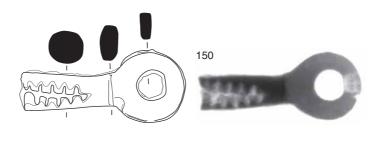




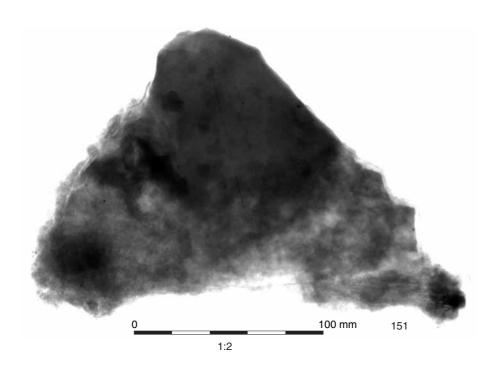














0______100 mm

1:2

Clench nails (unnumbered in catalogue)