Burton Dassett Southend

Part 2 Section 8.7

Ironwork

by
Ian H Goodall

With a contribution by

B M A Ellis

The results of the excavations conducted at Burton Dassett Southend 1986-88, together with subsequent fieldwork (fieldwalking, and recording of the Chapel and Priest's House) are disseminated in two parts.

Part 1 is the printed volume *Burton Dassett Southend, Warwickshire: A Medieval Market Village* by Nicholas Palmer and Jonathan Parkhouse, Society-for Medieval Archaeology Monograph 44 (2022). The printed volume contains the following sections:

1. Introduction and background (aims and origin of the project, key issues, archaeological and historical contexts, fieldwork scope and methodology, summaries of earthwork survey and fieldwalking)
2. The archaeological sequence (summary of the structural evidence, ordered by phase)
3 Spatial organisation and the buildings at Southend
4 Daily life and economy at Southend
5 Conclusion
Bibliography

Part 2 consists of a series of digital files in .pdf and .xlsx format, available via the Archaeological Data Service at https://doi.org/10.5284/1083492. Whilst Part 1 is a free-standing narrative, Part 2 includes the detailed descriptions and specialist analyses underpinning the printed volume. It consists of the following sections:

6.1 Geology by John Crossling
6.2 Soils by Magdalen Snape
6.3 Earthwork survey by Nicholas Palmer
6.4 Excavation methods by Nicholas Palmer
6.5 Dovehouse Close fieldwalking 1987 & Chapel Ground fieldwalking 1991 by Nicholas Palmer
7. Fieldwork (detailed description of the structural evidence at individual context level, ordered by area/tenement and phase) by Nicholas Palmer
8.1 Medieval pottery by Stephanie Rátkai
8.2 Coins and jettons by Wilfred Seaby
8.3 Copper alloy objects by Alison R Goodall with contribution by Dr John Blair
8.4 Analyses of copper alloy objects by Dr Roger Brownsword and E E H Pitt
8.5 Pewter objects by Brian Spencer and Nicholas Palmer, with analyses of pewter spoons by Dr Roger Brownsword and E E H Pitt
8.6 Lead objects by Nicholas Palmer
8.7 Ironwork by Dr Ian H Goodall, with spurs by Blanche Ellis
8.8 Bone, jet, glass and miscellaneous by Iain Soden and Nicholas Palmer
8.9 Domestic stonework by Iain Soden, John Crossling and Nicholas Palmer
8.10 Architectural stonework by Iain Soden
8.11 Stone roofing material by Nicholas Palmer
8.12 Roof tiles and ceramic artefacts by Susan Lisk
8.13 Archaeometallurgical investigation of the smithy and other evidence by Dr J G McDonnell and Alison Mills
8.14 Coal by Dr A H V Smith
8.15 Human remains by Ann Stirland
8.16 Clay tobacco pipe by Nicholas Palmer
8.17 Flint by Dr L H Barfield
8.18 Late Bronze Age pottery by Alistair Barclay
8.19 Roman and Saxon pottery by Paul Booth
8.20 Faunal remains by Julie Hamilton
8.21 Plant economy by Lisa Moffett
8.22 Radiocarbon dating of spelt wheat by Rupert Housley
8.23 Archaeomagnetic dating of hearths by Paul Linford
9. Miscellaneous data tables

The bibliography, incorporating all the works cited in Part 1 and Part 2, is also available digitally.

(Excel spreadsheets for all tables in this section are in BD_finds_misc_data_tables)

8.7. IRONWORK *by Ian H Goodall*

with spurs, rowels and spur buckles (nos 522-529) *by B M A Ellis.*

Illustrated objects are marked with asterisks in the lists of contexts.

1-36 Tools (Figure 8.7.1)

Work with metal, wood, stone, textiles and leather is indicated by the tools, as well as some horticultural activity. The metalworking tools, an anvil (1) and some chisels (2-4) and punches (5-10), show in their size range that both iron and non-ferrous metals were worked. The anvil, whose substantial but now distorted and incomplete stem would have been set in a block of wood, is most suitable, because of its size, for work with non-ferrous metals, as is chisel 4, but the remaining chisels and punches are probably blacksmiths′ tools. The punches are shaped to make rectangular, circular and oval holes. The unillustrated chisel (3), is 55mm long, and the punch (7), 89mm long with a rectangular tip 5mm by 3mm. 11 may be an incomplete forging, perhaps a file with its teeth not yet set.

(1.* 368/5, ph D28, topsoil; 2.* 368/5, ph D28, topsoil; 3. 874, ph E7, late 15c demolition; 4.* 32, ph A8, topsoil; 5.* 2038, ph H6, early 15c demolition; 6.* 2016, ph W3, mid 15c demolition; 7. 874, ph E7, late 15c demolition; 8.* 368/5, ph D28, topsoil; 9.* 2058, ph J7, topsoil; 10.* 1940, ph H8, topsoil; 11.* 858, ph F7, late 15c demolition)

Woodworking is represented by the blade of a spoon bit (12), and three reamers (13-15) whose substantial blades cleaned out holes drilled by bits. 14 is 75mm long with a 12mm square blade. The chisel (16), is a stonemason′s tool, its expanded but not burred head suggesting that it was struck with a wooden mallet. 17 is a double-ended pick which closely resembles slaters′ picks used to peck fixing holes in stone slates (Arkell 1947, 133, fig 23 left; Purcell 1967, 61, pl 31) and mill-picks for dressing millstones (Freese 1957, 102-7). Textile manufacture required tools for fibre preparation, weaving and finishing. 18 and 19 are fragments from two combs which combed either wool or flax. Each retains the heads of some teeth, four of them in 19, which are set in sheet-iron plates. Late medieval combs from the 1507 fire deposits at Pottergate, Norwich (Goodall 1985, 62, fig 46.80-2), show how these fragments formed part of complete combs. 20-21 are tenter hooks, slender hooks which could have been driven into the timber rails of tenters on which woollen cloth was dried and stretched after fulling. Insufficient were found to confirm that tentering was carried out, in contrast to the evidence of some from Winchester (Goodall 1990a, 234-9, fig 50), so they might have been used to secure tiles. 22 is a simple needle, its tip now distorted. Awls 23-25 are the only tools associated with leatherworking. 23, which tapers to each end, is 105mm long and rectangular in section; 24 is a broken lozenge- sectioned arm 66mm long. 25, which tapers more in side than front view, has a circular- sectioned point; its other end, which acted as the tang in a wooden handle, is square in section.

(12.* 1226/1, ph E6, late 15c; 13.* 2224, ph J2, 13c; 14. 2105, ph I3, 14c; 15.* 925, ph D26, late 15c; 16.* 809, ph D27, late 15c demolition; 17.* 310/2, ph D17, topsoil; 18.* 712/1, ph D26, late 15c; 19. 1174, ph D26, late 15c; 20.* 695, ph D26, late 15c; 21.* 368/4, ph D28, topsoil; 22.* 1214, ph D26, late 15c; 23. 1174, ph D26, late 15c; 24. 31, ph A6, late 15c demolition; 25.* 369/1, ph E8, topsoil)

Agricultural and horticultural activity required a range of tools for turning the ground, weeding and harvesting. 26 is an incomplete spade-iron with a grooved rectangular blade to receive the mouth of the wooden spade blade and a side strap to secure the two parts further. 27-29 are teeth from rakes or harrows. Their tapered heads were set in wooden cross-pieces and their tips

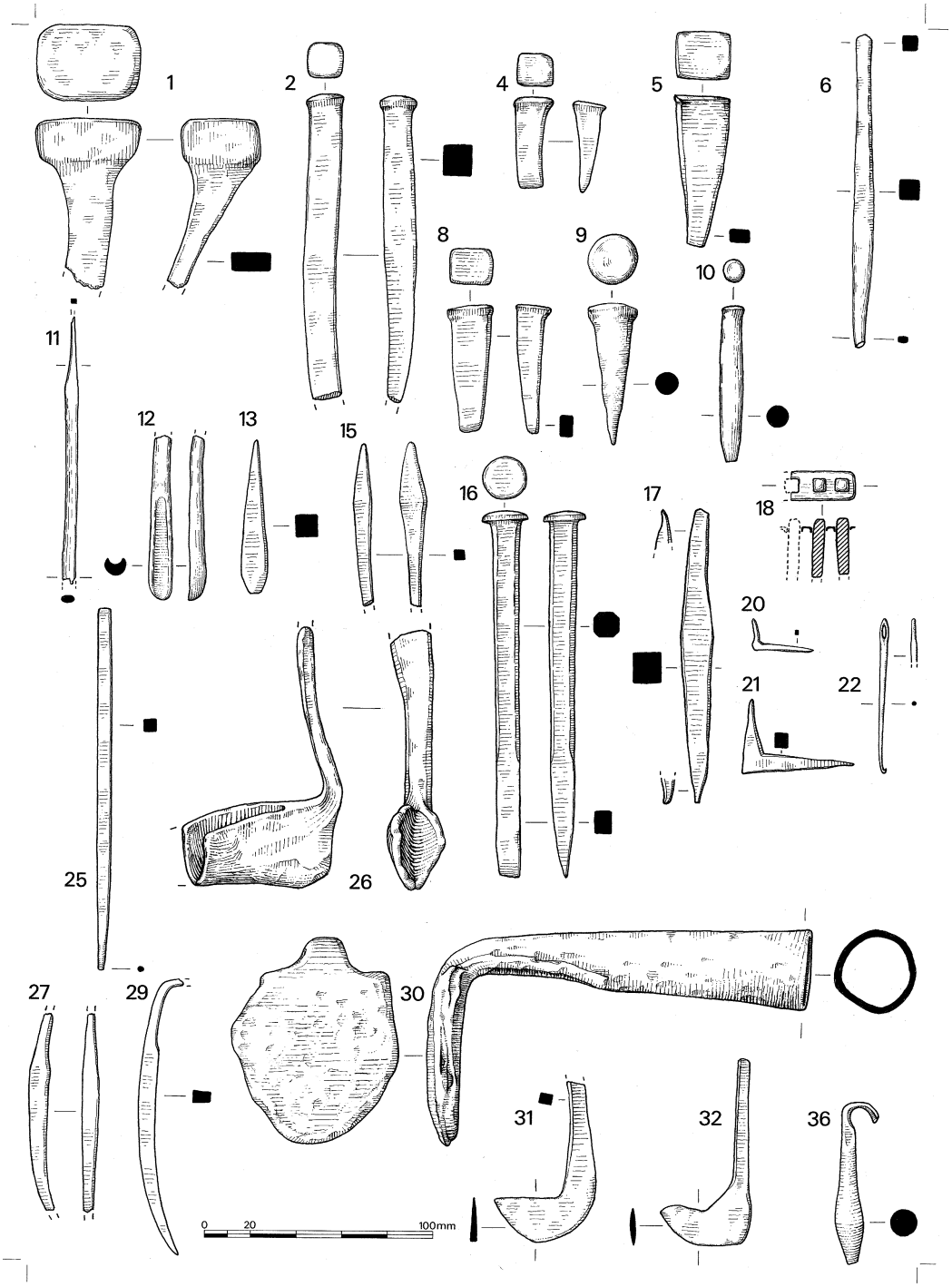

Figure 8.7.1 Ironwork: Tools 1-36

clenched over to hold them in place, as 29 indicates. 28, which is 110mm long, lacks its tapered head. 30 is a socketed hoe, 31-32 weedhooks. 33-34 are sickle and scythe blade fragments, 105mm and 81mm long respectively. The solid-handled spud (35), 212mm long, may be post-medieval. The bell clapper, 36, is likely to be from a sheep or cow bell.

(26.* 1391/1, ph E3, early 14c; 27.* 977/1, ph E6, late 15c; 28. 1176, ph E6, late 15c; 29.* 697, ph D26, late 15c; 30.* 1942, ph H8, topsoil; 31.* 2317, ph K4, mid 14/early 15c; 32.* 828, ph E7, late 15c demolition; 33. 368/1, ph D28, topsoil; 34. 1, ph A8, topsoil; 35. 2183, ph K6, topsoil; 36.* 879, ph E7, late 15c demolition)

37-114 Knives, shears and scissors (Figure 8.7.2)

A substantial number of knives, most of them broken, were excavated. Knives with whittle tangs (37-60) and scale tangs (61-86) are about equal in number; the remainder (87-111) are knife blade fragments. These knives, few of which are particularly distinctive, will have been in everyday use for domestic and industrial purposes, preparing and eating food, and in various craft occupations.

Whittle-tang knives such as 37-60 were practical knives whose tangs were inserted into handles. The majority (37-50) have blades whose back and edge taper towards the tip, the commonest shape among all medieval knives, while the remainder either have curved backs (51-4) or are too incomplete to classify (55-60). 49 has an inlaid cutler's mark, indicating that it was a fine quality knife, but none of the others has any inlay or decorative features.

(Whittle tang knives: 37.* 1200, ph D24, early/mid 15c; 38.* 1162, ph E5, early/mid 15c; 39.* 2055, ph I5, mid 15c demolition; 40. 2046, ph W3, mid 15c demolition; 41. 1214, ph D26, late 15c; 42.* 867, ph E6, late 15c; 43. 1174, ph D26, late 15c; 44.* 712, ph D26, late 15c; 45. 7/1, ph A6, late 15c demolition; 46. 811, ph E7, late 15c demolition; 47. 564/1, ph D27, late 15c demolition; 48.* 821/1, ph E7, late 15c demolition; 49.* 369/5, ph F8, topsoil; 50. 1340/1, ph D28, post-med.; 51. 433/1, ph D13, early/mid 14c; 52.* 430, ph D15, mid/late 15c; 53.* 1284, ph D24, early/mid 15c; 54.* 369/4, ph E8, topsoil; 55. 718/1, ph D15, mid/late 15c; 56.* 867, ph E6, late 15c; 57. 839, ph E7, late 15c demolition; 58. 368/3, ph D28, topsoil; 59. 2171, ph J4, early 15c; 60. 1775, ph D28, topsoil)

Scale-tang knives 61-86 belong to a type which was introduced during the 13th century, and since they had handles which were riveted into place, they were often finished to a higher standard than whittle-tang knives. The blade forms of the two are similar, and some of the earliest scale-tang knives in use during the 13th and 14th centuries show the influence of contemporary whittle-tang knives. 61-4, with a shoulder at the junction of blade and tang, show such an influence, although they must be residual in their contexts. The remaining scale- tang knives, 65-81, lack a shoulder and instead, and more usually, have the back of the blade and tang in line. A few blade shapes can be recognised: the back and cutting edges of 62-4 taper, the edges of 65-9 rise to the back, and 70 has a bellied blade. The remainder, 71-82, are too incomplete to classify, and 83-6 are scale-tang fragments. Several knives have distinguishing features, 74 and 75 inlaid cutler's marks, 72 and 74 riveted non-ferrous shoulder plates, 79 soldered shoulder plates, and 65 and 77 the solder from lost shoulder plates. 83 has decorative copper-alloy strips along its edges, 82 the solder from similar strips.

(Scale tang knives: 61.* 847, ph E7, late 15c demolition; 62.* 697, ph D26, late 15c; 63. 1, ph A8, topsoil; 64.* 1, ph A8, topsoil; 65.* 839, ph E7, late 15c demolition; 66.* 806/1, ph E7, late 15c demolition; 67. 368, ph D28, topsoil; 68. 369/4, ph E8, topsoil; 69.* 368/1, ph D28, topsoil; 70.* 1149/1, ph E5, early/mid 15c; 71.* 1161, ph E5, early/mid 15c; 72.* 898, ph E6, late 15c; 73. 839, ph E7, late 15c demolition; 74.* 7/1, ph A6, late 15c demolition; 75.* 1626, ph E7, late 15c demolition; 76.* 360/1, ph B2, medieval; 77. 867, ph E6, late 15c; 78. 1214, ph D26, late 15c; 79. 310/2, ph D17, topsoil; 80. 695, ph D26, late 15c; 81. 1474, ph D24, early/mid 15c; 82.* 1, ph A8, topsoil; 83.* 1689, ph E3, early 14c; 84. 909, ph E6, late 15c; 85. 1, ph A8, topsoil; 86.1945, ph I6, topsoil. Knife blade fragments: 87. 1656, ph E4, mid 14c; 88. 1149/1, ph E5, early/mid 15c; 89. 721/1, ph D24, early/mid 15c; 90. 1132, ph E6, late 15c; 91. 807, ph D26, late 15c; 92. 1152, ph E6, late 15c; 93. 909, ph E6, late 15c; 94. 882, ph D26, late 15c; 95. 822/1, ph E7, late 15c demolition;

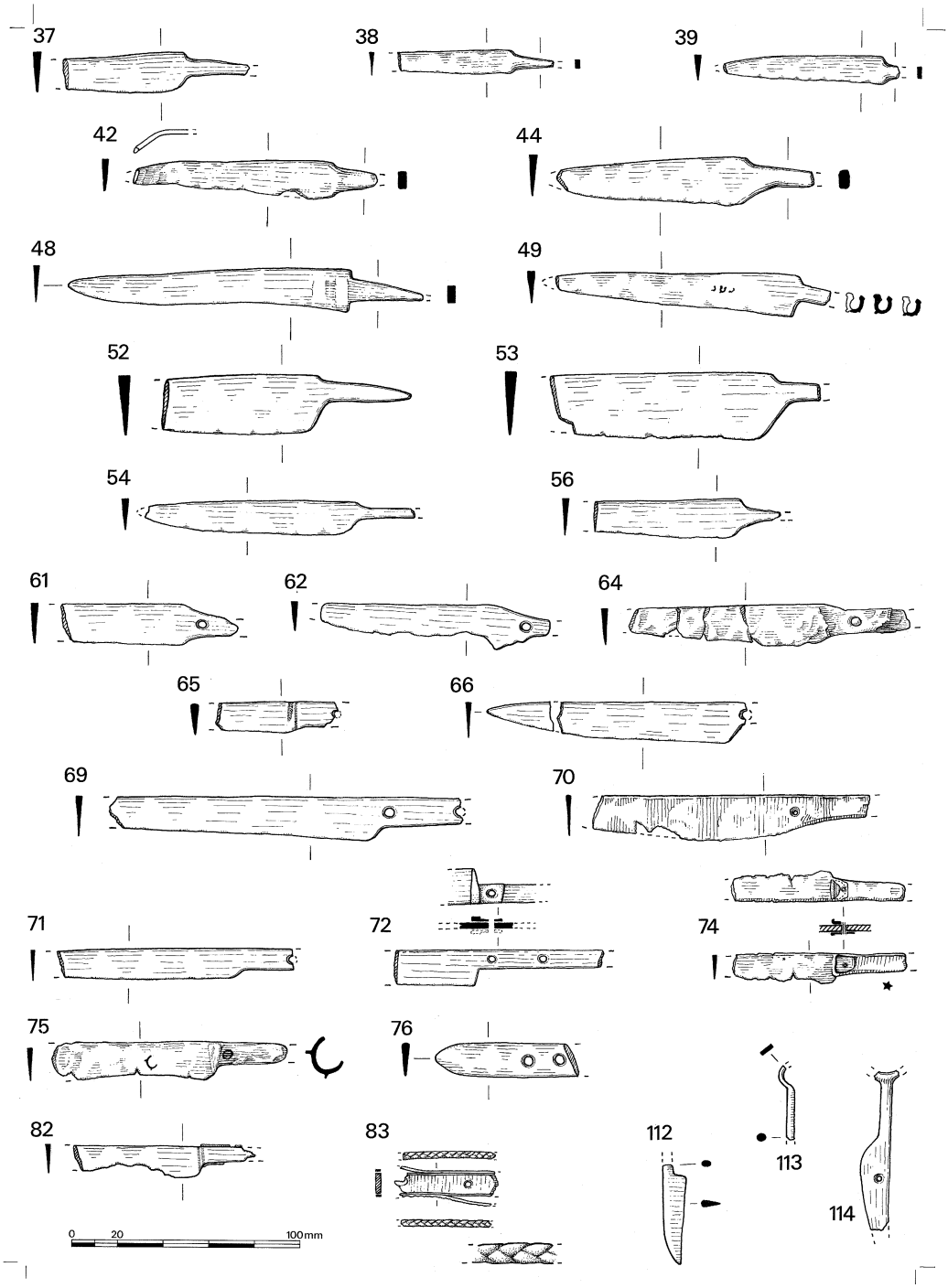

Figure 8.7.2
Ironwork: Knives, shears and scissors 37-114

96. 27, ph A6, late 15c demolition; 97. 847, ph E7, late 15c demolition; 98. 839, ph E7, late 15c demolition; 99. 369/2, ph E8, topsoil; 100. 368/1, ph D28, topsoil; 101. 369/2, ph E8, topsoil; 102. 368/2, ph D28, topsoil; 103. 368/1, ph D28, topsoil; 104. 369/3, ph D28, topsoil; 105. 369/1, ph E8, topsoil; 106. 368/4, ph D28, topsoil; 107. 368/3, ph D28, topsoil; 108. 368/2, ph D28, topsoil; 109. 368/3, ph D28, topsoil; 110. 369/2, ph E8, topsoil; 111. 369/4, ph E8, topsoil)

In contrast to the many knives, shears and scissors are both poorly represented. The shears blade and handle fragments, 112-113, are both slight and evidently for personal rather than industrial use, as are the scissors, 114.

(Shears: 112.* 1650, ph E5, early/mid 15c; 113.* 874, ph E7, late 15c demolition. Scissors: 114.* 882, ph D26, late 15c)

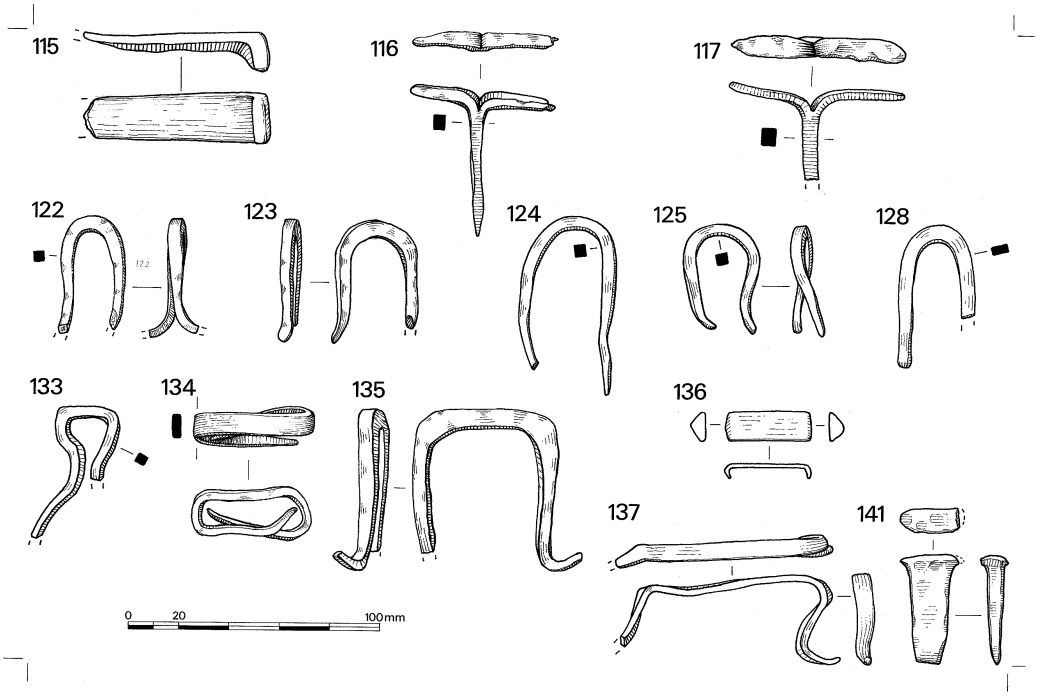

Figure 8.7.3
Ironwork: Building ironwork 115-141

115-265 Building ironwork (Figures 8.7.3, 8.7.5 and 8.7.6)

Buildings incorporated ironwork either as integral parts of their structure, or as fittings added as part of their use. The range of objects from Burton Dassett is quite wide, and includes a broken cramp, 115, which held blocks of masonry together, and two ties, 116-117, both T- shaped and probably from a piece of timber construction. Staples 118-137, are U-shaped, looped and rectangular, their different shapes and sizes reflecting the range of uses to which they were put. The U-shaped staples, 118-132, and the looped staple, 133, could have held chains or hasps in place, or have supported rings or handles. The rectangular staples 134-137 were better suited to binding timbers together. 138-42 are small wedges, some perhaps from tool handles, others from buildings.

(Cramp: 115.* 2228, ph K6, topsoil. Ties: 116.* 991, ph D25, mid/late 15c; 117.* 38, ph A6, late 15c demolition. Staples: 118. 2180, ph K5, early 15c demolition; 119. 1134, ph D25, mid/late 15c; 120. 1176, ph E6, late 15c; 121. 1203, ph D26, late 15c; 122.* 1152, ph E6, late 15c; 123.* 1142, ph E6, late 15c; 124.* 898, ph E6, late 15c; 125.* 839, ph E7, late 15c demolition; 126. 2465, ph L3, topsoil; 127. 2109, ph K6, topsoil; 128.* 368/3, ph D28, topsoil; 129. E, Unstrat; 130. 2013, ph H8, topsoil; 131. 1015, Z1, fieldwalking; 132. 1059, ph Z3, fieldwalking; 133.* 867, ph E6, late 15c; 134.* 1792/1, ph D24, early/mid 15c; 135.* 867, ph E6, late 15c; 136.* 1175, ph E7, late 15c demolition; 137.* 368/3, ph D28, topsoil. Wedges: 138. 874, ph E7, late 15c demolition; 139. 369/2, ph E8, topsoil; 140. 1944, ph I6, topsoil; 141.* 2, ph B3, topsoil; 142. Unstrat)

Type	*Pre-Med*	*Early 13th-century*	*Late 13th-century*	*Early 14th-century*	*Late 14th-century*	*14th-century*	*Early 15th-century*	*Late 15th-century*	*Medieval*	*Post-med & topsoil*	*Total*
A	5	-	10	11	10	16	76	361	2	202	693
B	-	-	1	-	-	-	2	5	-	15	23
C	-	-	1	2	1	1	4	15	-	3	27
D	-	-	-	-	-	-	2	1	-	22	25
E	-	-	-	-	-	-	-	2	-	11	13
F	-	-	-	-	-	-	1	2	1	-	4

Figure 8.7.4 Chronological distribution of timber nails

Six different types of timber nail, A-F, were recognised (Figure 8.7.5). Type A has a flat sub-rectangular head, Type B a flat, long rectangular head, Type C a flat figure-eight-shaped head, Type D a rounded, raised and faceted head, Type E a flat square head with chamfered corners, and Type F a domed head. The chronological distribution is shown in Figure 8.7.4; most of the nails from post-medieval and topsoil contexts must be derived from earlier layers. The six nail types may be compared with other groups of nails, especially those from the monastic forge at Waltham Abbey, Essex, and from Chingley Forge and Furnace, Kent (Goodall 1973, 175, fig 13, table 3; 1975, 85-7, fig 45). Types A to C at Burton Dassett are of both medieval and post- medieval date, whereas the faceted heads of Types D and E are far more common in very late medieval and post-medieval contexts. Type F is uncommon.

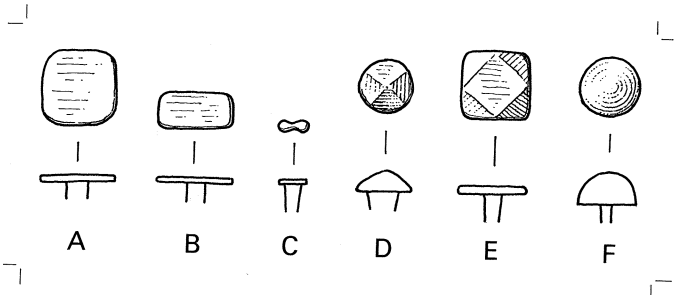

Figure 8.7.5: Ironwork: Timber nails Types A-F

Four basic types of stud, A-D, were identified, all of them with substantial heads. Type A (143- 152), the commonest, has a rectangular or sub-rectangular head generally raised in profile, Type B (153-56) is circular with a similar profile, Type C (157-58) is figure-eight-shaped, and Type D (159-164) is T-shaped.

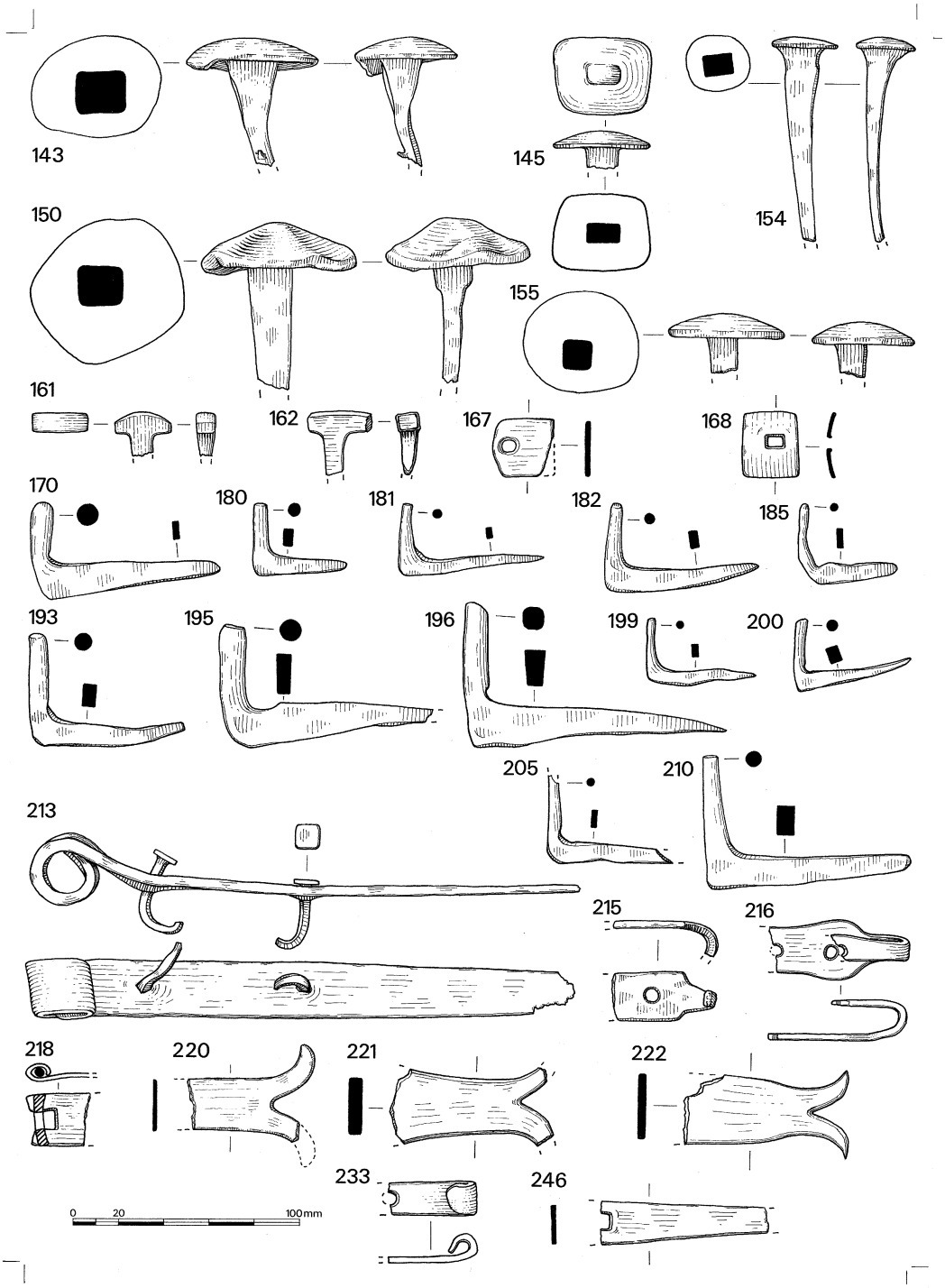

Figure 8.7.6: Ironwork: Building ironwork 143-246

(Type A studs: 143.* 239, ph B2, medieval; 144. 240, ph B2, medieval; 145.* 1301, ph F3, early 14c; 146. 909, ph E6, late 15c; 147. 697, ph D26, late 15c; 148. 898, ph E6, late 15c; 149. 695, ph D26, late 15c; 150.* 368/3, ph D28, topsoil; 151. 369/5, ph F8, topsoil; 152. 2198, ph K6, topsoil. Type B studs: 153. 700, ph D27, late 15c demolition; 154.* 883, ph D27, late 15c demolition; 155.* 369/2, ph E8, topsoil; 156. 1947, ph W4, topsoil. Type C studs: 157. 1265/1, ph D24, early/mid 15c; 158. 1/1, ph A8, topsoil. Type D studs: 159. 2105, ph I3, 14c; 160. 2019, ph H6, early 15c demolition; 161.* 2054, ph I5, mid 15c demolition; 162.* 2027, ph H7, 16c?; 163. 2027, ph H7, 16c?; 164. 2157, ph H8, topsoil)

Clench bolts, made from nails or studs whose shank tips were clenched over shaped plates called roves, were used in the construction of doors, hatches and covers whose planks were held together by rear ledges. 165-8 are diamond-shaped or square roves, 168 curved in side view, the others flat.

(Roves: 165. 2084/2, ph I5, mid 15c demolition; 166. 368/5, ph D28, topsoil; 167.*,369/1, ph E8, topsoil; 168.* 971, ph D28, topsoil)

The numerous hinge pivots, 169-211, are all of the same type with tapering shanks intended to be driven into timber. The range in size is considerable, with complete guide arms between 25mm and 64mm in height, and complete shanks from 42mm to 113mm in length. The smaller of these hinge pivots would have supported shutters, but most probably carried doors or gates. A few, 175, 195, 206 and 211, show signs of wear, caused by a turning hinge eye, at the base of their guide arms.

(Hinge pivots: 169. 2210, ph J3, 14c; 170.* 2038, ph H6, early 15c demolition; 171. 2237, ph K5, early 15c demolition; 172. 1136, ph E5, early/mid 15c; 173. 36, ph A5, mid/late 15c; 174. 2055, ph I5, mid 15c demolition; 175. 2040, ph I5, mid 15c demolition; 176. 807, ph D26, late 15c; 177. 1132, ph E6, late 15c; 178. 867, ph E6, late 15c; 179. 867, ph E6, late 15c; 180.* 1240/1, ph E6, late 15c; 181. 867, ph E6, late 15c; 182.* 695, ph D26, late 15c; 183.* 925, ph D26, late 15c; 184. 879, ph E7, late 15c demolition; 185.* 805, ph D27, late 15c demolition; 186. 66, ph A6, late 15c demolition; 187.,828, ph E7, late 15c demolition; 188. 811, ph E7, late 15c demolition; 189. 879, ph E7, late 15c demolition; 190. 822/1, ph E7, late 15c demolition; 191. 822/1, ph E7, late 15c demolition; 192. 839, ph E7, late 15c demolition; 193.* 805, ph D27, late 15c demolition; 194. 7, ph A6, late 15c demolition; 195.* 709, ph D27, late 15c demolition; 196.* 809, ph D27, late 15c demolition; 197. 1946, ph I6, topsoil; 198. 369/4, ph E8, topsoil; 199.* 37, ph A8, topsoil; 200.* 310/1, ph D17, topsoil; 201. 368/3, ph D28, topsoil; 202. 2109, ph K6, topsoil; 203. 2465, ph L3, topsoil; 204. 368/4, ph D28, topsoil; 205.* 368/3, ph D28, topsoil; 206. 368/4, ph D28, topsoil; 207. 2232, ph K6, topsoil; 208. 2013, ph H8, topsoil; 209. 368/2, ph D28, topsoil; 210.* 368/2, ph D28, topsoil; 211. Unstrat)

212-265 are hinge and strap fragments. No complete hinge survived but among the fragments are several with either looped (212-4) or U-shaped (215-7) hanging eyes which fitted over hinge pivots. 218-9 are pinned hinges, the two halves of which pivoted on the common pin. The strap fragments 220-265 include three with bifurcated terminals (220-22), but otherwise they are mainly mid-length fragments with either parallel or converging sides.

(Hinge and strap fragments: 212. 867, ph E6, late 15c; 213.* 851, ph E7, late 15c demolition; 214. 1025, Z2, fieldwalking; 215.* 1217/1, ph E6, late 15c; 216.* 874, ph E7, late 15c demolition; 217. 369/1, ph E8, topsoil; 218.* 874, ph E7, late 15c demolition; 219. 1066, Z3, fieldwalking; 220.* 695, ph D26, late 15c; 221.* 874, ph E7, late 15c demolition; 222.* 839, ph E7, late 15c demolition; 223. 752/1, ph B1, pre-medieval?; 224. 2038, ph H6, early 15c demolition; 225. 2047, ph W2, early/mid 15c; 226. 1136, ph E5, early/mid 15c; 227. 2016, ph W3, mid 15c demolition; 228. 2040, ph I5, mid 15c demolition; 229. 2015, ph W3, mid 15c demolition; 230. 1134, ph D25, mid/late 15c; 231. 912, ph F5, mid/late 15c; 232. 695, ph D26, late 15c; 233.* 712, ph D26, late 15c; 234.
1214, ph D26, late 15c; 235. 917, ph F6, late 15c; 236. 1203, ph D26, late 15c; 237. 849/1, ph E6, late 15c; 238. 1130, ph D26, late 15c; 239. 867, ph E6, late 15c; 240. 1143, ph E6, late 15c; 241. 867, ph
E6, late 15c; 242. 1197, ph D26, late 15c; 243. 697, ph D26, late 15c; 244. 867, ph E6, late 15c;

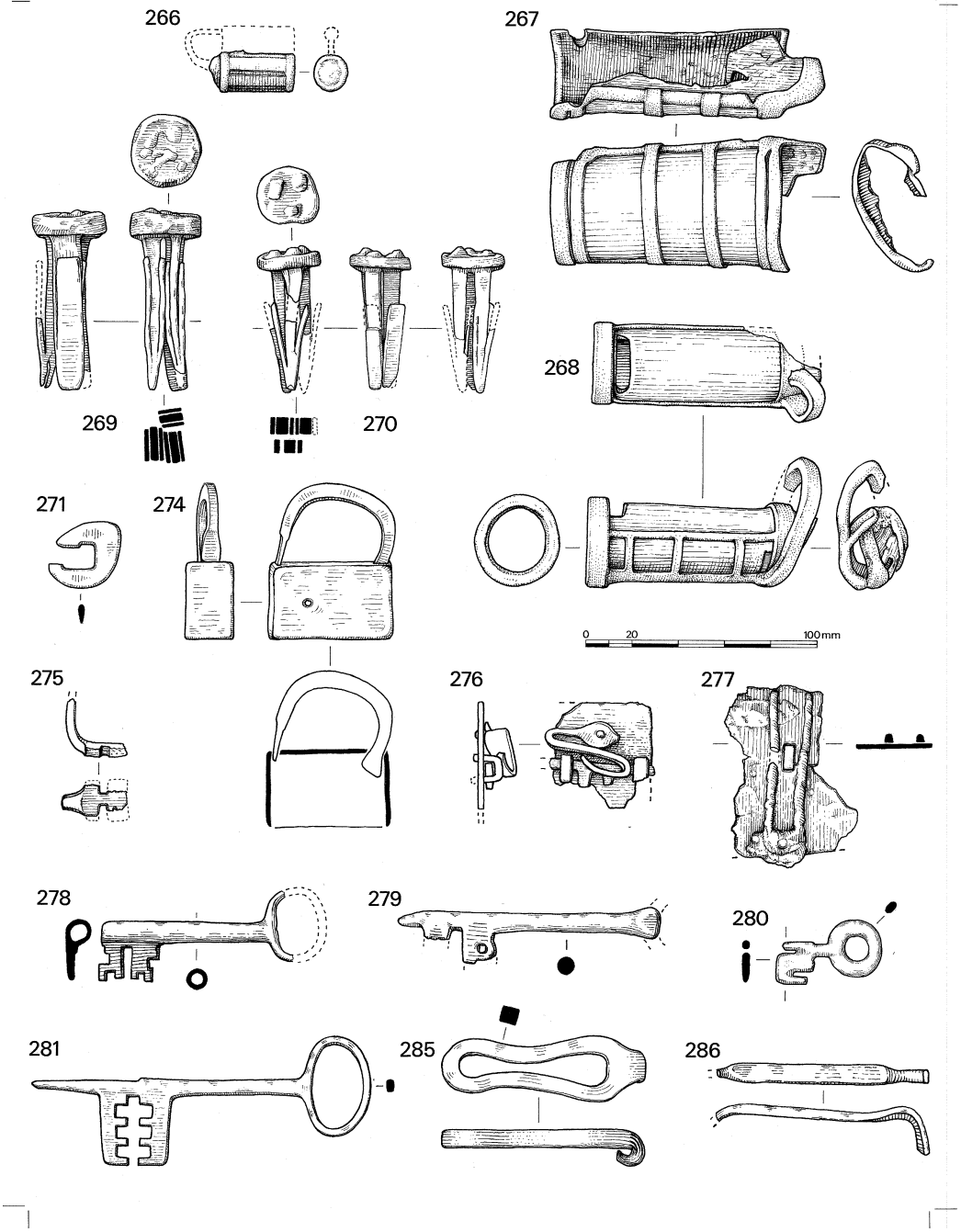

Figure 8.7.7
Ironwork: Lock furniture 266-286

245. 695, ph D26, late 15c; 246.* 697, ph D26, late 15c; 247. 1132, ph E6, late 15c; 248. 1132, ph E6, late 15c; 249. 839, ph E7, late 15c demolition; 250. 848, ph E7, late 15c demolition; 251. 688, ph D27, late 15c demolition; 252. 987, ph E7, late 15c demolition; 253. 874, ph E7, late 15c demolition; 254. 441/1, ph D16, late 15c demolition; 255. 926, ph D27, late 15c demolition; 256. 839, ph E7, late 15c demolition; 257. 1340/1, ph D28, post-med; 258. 35, ph A8, topsoil; 259. 1, ph A8, topsoil; 260. SF 1306, ph E8, topsoil; 261. 368, ph D28, topsoil; 262. 368, ph D28, topsoil; 263. 369/5, ph F8, topsoil; 264. 368/3, ph D28, topsoil; 265. Unstrat)

266-286 Lock furniture (Figure 8.7.7).

Items of lock furniture are not particularly numerous, but padlocks, locks and their keys are all represented. Barrel padlocks were the commonest type of padlock during the medieval period, and two of the five main types which evolved are represented (Goodall 1981, 60, fig 57, 2-6). 266 is a small case now lacking both its attached fin and tube, and its U-shaped bolt, while 267-8 are the incomplete cases of barrel padlocks with shackles which now also lack both their shackles and bolts. This latter type of padlock was used to restrict limbs, either animal or, as at Winchester (Goodall 1990b, 1001-3, 1011-12, figs 310, 314, 315), human, and for this reason any straps were restricted to the lower half of the case where they would not chafe. Different shapes of padlock bolt were appropriate to different barrel padlocks: U-shaped bolts were used with those similar to 266, and T-shaped bolts such as 269-70 with 267 and 268. 269 and 270 each have three spines, all with double-leaf springs. 271-3 are fragments of barrel padlocks, 271 the closing plate from a case, 272 a case fragment with longitudinal straps, and 273 a spine with a double-leafed spring.

A number of different types of padlock were introduced during the late medieval period, including box padlocks such as 274 with hinged shackles and fixed internal mechanisms which were operated not by sliding padlock keys but by revolving keys. 274 lacks its mechanism, but this must have resembled that in some box padlocks from 16th-century contexts at Norwich (Goodall 1985, 62, fig 44.70) and Winchester (Goodall 1990b, 1003. 1015, fig 316.3684). 275 is the bit from a padlock key.

276-7 are locks, 276 retains a toothed bolt and spring tumbler, whereas 277 is a lockplate fragment without any of its mechanism. Parallel rods down the front define the position of a former stapled hasp; the hole between them was for the staple of the hasp, which was secured by a bolt at the back when the object was entire. The keys 278-84 all have solid stems, but for 278 which is hollow. 283, a residual fragment, has a broken lozenge-shaped bow; other bows are circular, oval or shaped (as on 284, of post-medieval date), where they survive. 285 is a figure-eight hasp, 286 perhaps a simple form of catch.

(266.* 810/1, ph D24, early/mid 15c; 267.* 1162, ph E5, early/mid 15c; 268.* 2138, ph H8, topsoil; 269.* 854/1, ph F6, late 15c; 270.* 1948, ph I6, topsoil; 271.* 2109, ph K6, topsoil; 272. 2052, ph I5, mid 15c demolition; 273. E Unstrat; 274.* 369, ph E8, topsoil; 275.* 867, ph E6, late 15c; 276.* 925, ph D26, late 15c; 277.* 925, ph D26, late 15c; 278.* 697, ph D26, late 15c; 279.* 695, ph D26, late 15c; 280.* 31, ph A6, late 15c demolition; 281.* 874, ph E7, late 15c demolition; 282. 806/1, ph E7, late 15c demolition; 283. 2010, ph W4, topsoil; 284. 1039, Z2, fieldwalking; 285.* 867, ph E6, late 15c; 286.* 695, ph D26, late 15c)

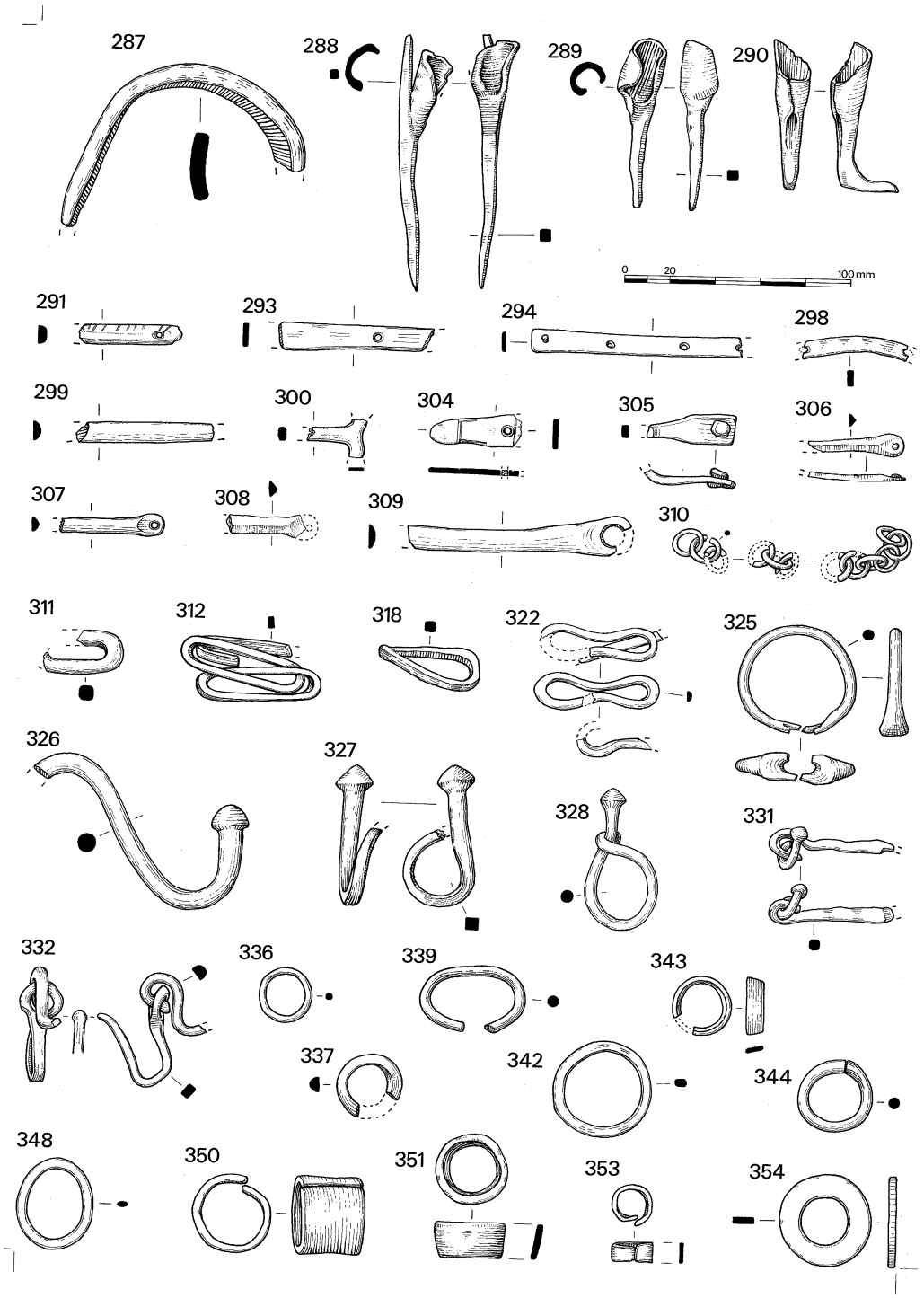

Figure 8.7.8: Ironwork: Domestic ironwork 287-354

287-354 Domestic ironwork and fittings (Figure 8.7.8)

A wide range of iron objects was used in daily life. 287, part of a distorted hoop probably from a wooden bucket, is the only vessel represented. Domestic lighting was most commonly obtained from candles: 288 combines a spiked pricket and socket on one stem, whereas 289-90 are just sockets. All have tangs which enabled them to be set in simple wooden bases.

(Bucket hoop: 287.* 1132, ph E6, late 15c. Lighting equipment: 288.* 695, ph D26, late 15c; 289.* 1626, ph E7, late 15c demolition; 290.* 2109, ph K6, topsoil)

Items of furniture incorporating iron cannot have been common in peasant households, but a number of lengths of binding strip which may have come from boxes were found. 291-303 are mid-length fragments, all of them straight but for 298, 300 and 303. 291 has decorative grooves and, like 300 and 303, has traces of non-ferrous coating. 304-308 all retain complete, or near complete, terminals. 309, with its looped eye, may be part of a small hinge.

(Binding strips: 291.* 2038, ph H6, early 15c demolition; 292. 1270, ph E5, early/mid 15c; 293.* 2040, ph I5, mid 15c demolition; 294.* 152, ph A5, mid/late 15c; 295. 807, ph D26, late 15c; 296. 839, ph E7, late 15c demolition; 297. 867, ph E6, late 15c; 298.* 840, ph E7, late 15c demolition; 299.* 1/1, ph A8, topsoil; 300.* 874, ph E7, late 15c demolition; 301. 369/2, ph E8, topsoil; 302-3. 1039, Z2, fieldwalking; 304.* 1161, ph E5, early/mid 15c; 305.* 569/1, ph D25, mid/late 15c; 306.* 1138/1, ph E6, late 15c; 307.* 867, ph E6, late 15c; 308.* 807, ph D26, late 15c. Small hinge fragment: 309.* 666, ph D25, mid/late 15c)

Chains had a multitude of uses in and around buildings, although most of those from Burton Dassett are fairly slender. 310 has circular links, 311-7 have straight sides, and 318-322 are figure-eight shaped. 323-4 are incomplete links, both U-shaped. The series of swivel fittings, 325-30, which allowed attachments to move freely at the chain end, comprise a swivel ring, 325, and a number of swivel loops, 326-30. The function of 331 is uncertain; 332-33 are plain hooks. A number of rings 334-48 may be from chains: they range from 21mm to 45mm in diameter. 349-53 are collars, most circular but 353 square. 354 is a washer.

(Chain links: 310.* 1174, ph D26, late 15c; 311.* 2044/1, ph I5, mid 15c demolition; 312.* 836/1, ph D15, mid/late 15c; 313. 699/1, ph D25, mid/late 15c; 314. 1172/2, ph D26, late 15c; 315. 685, ph D27, late 15c demolition; 316. 1055, Z2, fieldwalking; 317. 1065, Z3, fieldwalking; 318.* 464, ph D12, late 13c; 319. 1209, ph D26, late 15c; 320. 822, ph E7, late 15c demolition; 321. 368/5, ph D28, topsoil; 322.* 1944, ph I6, topsoil; 323. 1174, ph D26, late 15c; 324. 1228, ph E6, late 15c.
Swivel fittings: 325.* 2084/2, ph I5, mid 15c demolition; 326.* 2028, ph H6, early 15c demolition; 327.* 2016, ph W3, mid 15c demolition; 328.* 1187, ph F5, mid/late 15c; 329. 368/1, ph D28, topsoil; 330. 368/4, ph D28, topsoil; 331.* 369/2, ph E8, topsoil; 332.* 310, ph D17, topsoil; 333. 1087, Z4, fieldwalking. Rings: 334. 1680/1, ph E3, early 14c; 335. 2028, ph H6, early 15c demolition; 336.* 1222/1, ph D25, mid/late 15c; 337.* 712, ph D26, late 15c; 338. 925, ph D26, late 15c; 339.* 868, ph F7, late 15c demolition; 340. 1260, ph D26, late 15c; 341. 1214, ph D26, late 15c; 342.* 1214, ph D26, late 15c; 343.* 1217/1, ph E6, late 15c; 344.* 693, ph D27, late 15c demolition; 345. 368/2, ph D28, topsoil; 346. 369/4, ph E8, topsoil; 347. 1, ph A8, topsoil; 348.* 368, ph D28, topsoil. Collars: 349. 437, ph D15, mid/late 15c; 350.* 882, ph D26, late 15c; 351.* 1132, ph E6, late 15c; 352. 925, ph D26, late 15c; 353.* 1174, ph D26, late 15c. Washer: 354.* 368, ph D28, topsoil)

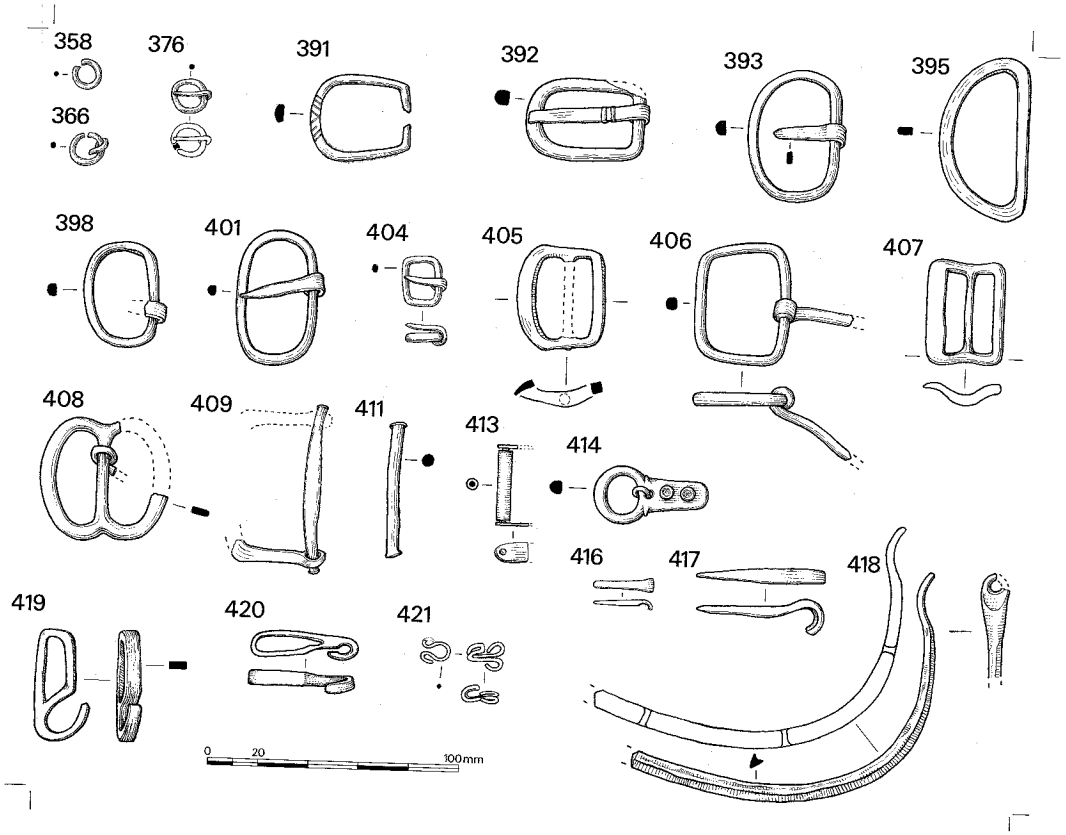

Figure 8.7.9
Ironwork: Buckles and personal fittings 358-422

355-422 Buckles and personal fittings (Figure 8.7.9)

A wide range of buckles of different shapes and sizes was found. The commonest were small circular buckles, 355-89, ranging between 11mm and 15mm in diameter, but mostly 12mm or 13mm across. They and their pins, where they survived, were made from 2mm diameter wire, and they were used on shoes, belts and hose (Gathercole 1958, 33, fig 9.9; Russell-Smith 1956). After these, the most common buckles were D-shaped (390-403), with other shapes, rectangular, bag-shaped, trapezoidal, double-looped and spectacle-shaped (404-408) less well represented. A few buckles, 409-411, have or had revolving baluster bars against which the pin rested; 412-3 are an alternative with sheet-iron cylinders. 414 has its frame and buckle plate forged in one; 415-7 are buckle pins.

(Small circular buckles: 355. 577, ph D25, mid/late 15c; 356. 756/2, ph D15, mid/late 15c; 357. 1202, ph D25, mid/late 15c; 358.* 1132, ph E6, late 15c; 359. 882, ph D26, late 15c; 360. 924, ph D26, late 15c; 361. 882, ph D26, late 15c; 362. 1174, ph D26, late 15c; 363. 700, ph D27, late 15c demolition; 364. 874, ph E7, late 15c demolition; 365. 839, ph E7, late 15c demolition; 366.* 926/1, ph D27, late 15c demolition; 367. 874, ph E7, late 15c demolition; 368. 694, ph D27, late 15c demolition; 369. 853, ph F7, late 15c demolition; 370. 683/1, ph D27, late 15c demolition; 371.
926, ph D27, late 15c demolition; 372. 369/2, ph E8, topsoil; 373. 368/3, ph D28, topsoil; 374. 368/4, ph D28, topsoil; 375. 369/4, ph E8, topsoil; 376.* 1, ph A8, topsoil; 377. 310, ph D17, topsoil; 378. 369/4, ph E8, topsoil; 379. 369/4, ph E8, topsoil; 380. 369/4, ph E8, topsoil; 381. 369/1, ph E8, topsoil; 382. 368/3, ph D28, topsoil; 383. 368/3, ph D28, topsoil; 384. 368/3, ph D28, topsoil; 385. 368/5, ph D28, topsoil; 386. 971, ph D28, topsoil; 387. 369/4, ph E8, topsoil; 388-9. D, Unstrat D-shaped buckles: 390. 1202, ph D25, mid/late 15c; 391.* 430, ph D15, mid/late 15c; 392.* 1132, ph E6, late 15c; 393.* 867, ph E6, late 15c; 394. 807, ph D26, late 15c;

395.* 874, ph E7, late 15c demolition; 396. 310/2, ph D17, topsoil; 397. 368/4, ph D28, topsoil; 398.* 368/3, ph D28, topsoil; 399. 368/1, ph D28, topsoil; 400. 368/2, ph D28, topsoil; 401.* 85/1, ph A8, topsoil; 402. 369/1, ph E8, topsoil; 403. 1093, Z4, fieldwalking. Other buckles: 404.* 822/1, ph E7, late 15c demolition; 405.* 1654, ph E5, early/mid 15c; 406.* 368/1, ph D28, topsoil; 407.* 368/1, ph D28, topsoil; 408.* 368/4, ph D28, topsoil; 409.* 1626, ph E7, late 15c demolition; 410. 839, ph E7, late 15c demolition; 411.* 874, ph E7, late 15c demolition; 412. 811, ph E7, late 15c demolition; 413.* 811, ph E7, late 15c demolition; 414.* 2038, ph H6, early 15c demolition. Buckle pins: 415. 1162, ph E5, early/mid 15c; 416.* 687, ph D27, late 15c demolition; 417.* 2, ph B3, topsoil)

Iron purse frames could be quite elaborate (Ward-Perkins 1940, 158-71); 418 is part of the curved support for the bag. 419-420 are belt hooks capable of supporting purses from belts. The eyelet hooks, 421-2, may be post-medieval.

(Purse frame: 418.* 368/3, ph D28, topsoil. Belt hooks: 419.* 839, ph E7, late 15c demolition; 420.* 369/1, ph E8, topsoil. Eyelet hooks: 421.* 1233, ph D25, mid/late 15c; 422. 1132, ph E6, late 15c)

423-521 Horse furniture (Figure 8.7.10)

The items of horse furniture are in general quite fragmentary. Bridle bits are represented by the base of the cheekpiece of a curb bit (423), by part of a probable chin strap (424), by a mouthpiece link (425), and two side links (426-7). 428 is a strap guide from a bridle. Curry-combs, used in the grooming of horses, often had handles with two or three arms (Goodall 1979, 121, fig 63.65); 429-30 are the ends of two such arms; each with a perforated terminal. They are 37mm and 72mm long respectively. Some curry-combs, particularly those of post-medieval date, had individual combs riveted to the backplate (Goodall 1984, 337, fig 189.49; 1976, 63, fig 96.43), 431 is part of one.

(Bridle fittings: 423.* 310, ph D17, topsoil; 424.* 695, ph D26, late 15c; 425.* 930/4, ph D15, mid/late 15c; 426.* 424/1, ph D28, post-med.; 427.* 2, ph B3, topsoil; 428.* 866, ph F6, late 15c. Curry-comb fragments: 429. 369/5, ph F8, topsoil; 430. Unstrat; 431.* 2058, ph J7, topsoil)

Seventy-nine horseshoes were excavated, as well as eleven oxshoes, and the chronological distribution of both is shown in Figure 8.7.11. The horseshoes range from complete examples to tip fragments: four (432-435) have countersunk nailholes, sixty-three (436-498) rectangular nailholes, and twelve (499-510) are indeterminate tips. All four examples of horseshoes with countersunk nailholes, including the largest (432), are residual in their contexts since the type went out of use in the 14th century when it was superseded by types with rectangular nailholes, of which the illustrated examples (441, 450, 468, 473 and 480) are a representative sample (Goodall 1990c, 1054-67). These later horseshoes were generally of quite broad iron, sometimes excessively so. 511, a 48mm long arm fragment, is the only stratified medieval oxshoe; 514 and 519 are from post-medieval contexts, but are typical with broad thin arms and enlarged tips with clips, part of which survives only on 514. Oxen, with cloven hoofs, had two shoes on each hoof.

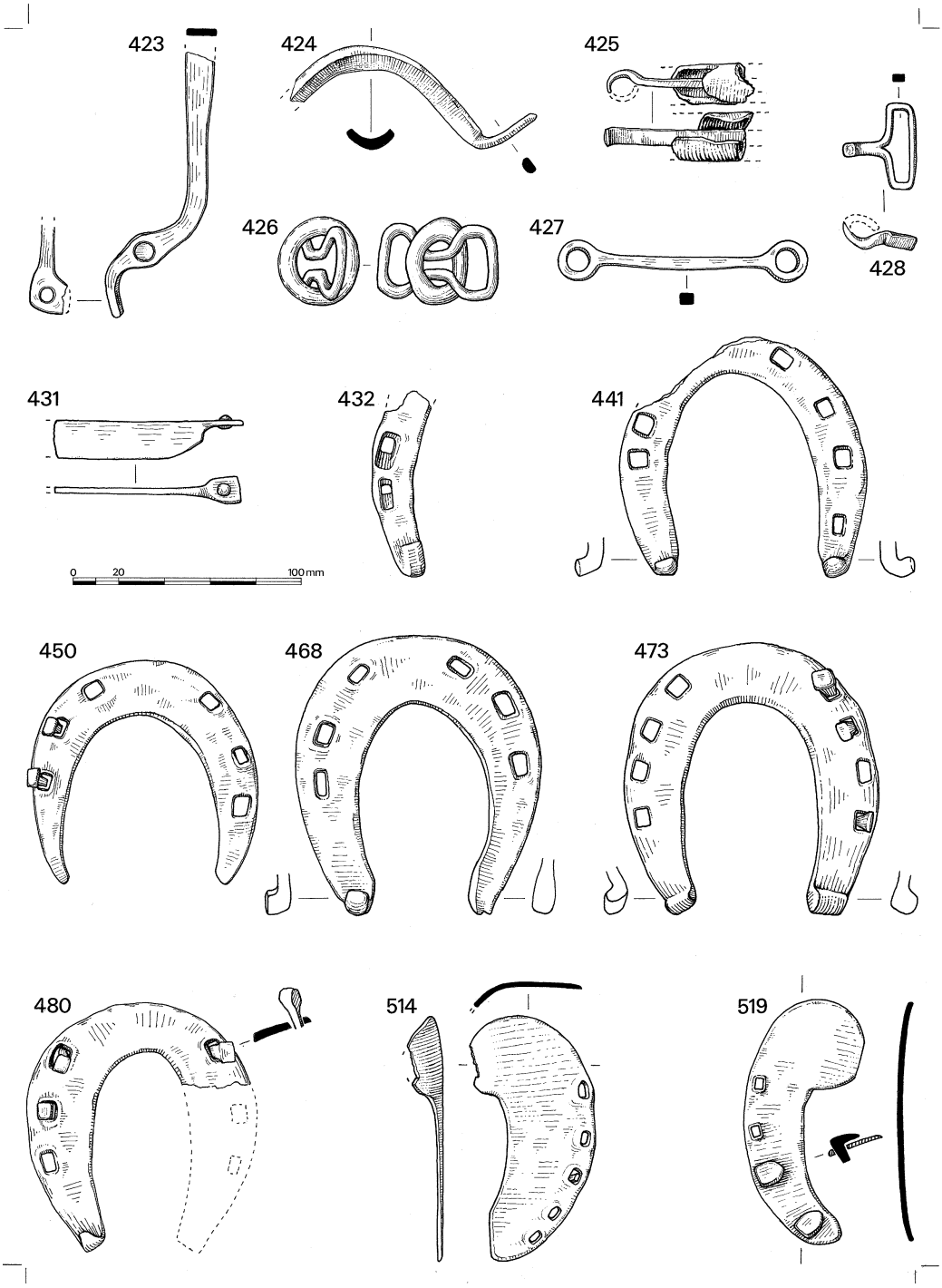

Figure 8.7.10
Ironwork: Horse furniture 423-519

(Horseshoes with countersunk nailholes: 432.* 2033, ph H6, early 15c demolition; 433. 1202, ph D25, mid/late 15c; 434. 1943, ph G3, topsoil; 435. 2011, ph I6, topsoil. Horseshoes with rectangular nailholes: 436. 2066/1, ph J5, early 15c demolition; 437. 2023, ph H6, early 15c demolition; 438. 2016, ph W3, mid 15c demolition; 439. 2040, ph I5, mid 15c demolition; 440. 2054, ph I5, mid 15c demolition; 441.* 695, ph D26, late 15c; 442. 7/2, ph A6, late 15c demolition; 443. 42, ph A5, mid/late 15c; 444. 867, ph E6, late 15c; 445. 51, ph A5, mid/late 15c; 446. 805, ph D27, late 15c demolition; 447. 685, ph D27, late 15c demolition; 448. 839, ph E7, late 15c demolition; 449. 858, ph F7, late 15c demolition; 450.* 239, ph B2, medieval; 451. 239, ph B2, medieval; 452. 240, ph B2, medieval; 453-5. 1, ph A8, topsoil; 456. D, Unstrat; 457. 1940, ph H8, topsoil; 458-63. 2, ph B3, topsoil; 464. 5/1, ph A8, topsoil; 465-7. 37, ph A8, topsoil; 468.* 14/1, ph A7, 17c; 469. 37, ph A8, topsoil; 470-1. 1/1, ph A8, topsoil; 472. 2, ph B3, topsoil; 473.* 2, ph B3, topsoil; 474. B, Unstrat; 475-6. Unstrat; 477-8. 368, ph D28, topsoil; 479. Unstrat; 480.* 369/1, ph E8, topsoil; 481. 310/1, ph D17, topsoil; 482. 368/2, ph D28, topsoil; 483. 369/2, ph E8, topsoil; 484. 368/3, ph D28, topsoil; 485. 368/4, ph D28, topsoil; 486. 1000, Z1, fieldwalking; 487. 1090,
Z5, fieldwalking; 488. 1018, Z1, fieldwalking; 489. 1068, ph Z3, fieldwalking; 490. 1003, Z1, fieldwalking; 491. 1040, Z2, fieldwalking; 492. 1005, Z1, fieldwalking; 493. 1042, Z2, fieldwalking; 494. 369/5, ph F8, topsoil; 495. 368/3, ph D28, topsoil; 496-7. Unstrat; 498. K, Unstrat. Horseshoe tips: 499. 433/1, ph D13, early/mid 14c; 500. 924, ph D26, late 15c; 501. 874, ph E7, late 15c demolition; 502. 1132, ph E6, late 15c; 503. 1202, ph D25, mid/late 15c; 504. 898, ph E6, late 15c; 505. 437/2, ph D15, mid/late 15c; 506. 2011, ph I6, topsoil; 507-10. 369/4, ph E8, topsoil. Oxshoes: 511. 625, ph D15, mid/late 15c; 512. 1, ph A8, topsoil; 513. 2, ph B3, topsoil; 514.* 369/2, ph E8, topsoil; 515. 368/4, ph D28, topsoil; 516. 1070, Z3, fieldwalking; 517. 1054, Z2, fieldwalking; 518. 1100, Z4, fieldwalking; 519.* 1103, Z5, fieldwalking; 520. 1110, Z6, fieldwalking; 521. 369/5, ph F8, topsoil.

	Early 14th-	*Early 15th-*	*Late 15th-*	*Medieval*	*Post-med*	*Total*
Type	*century*	*century*	*century*		*& topsoil*	
Horseshoes with						
countersunk nailholes	-	1	1	-	2	4
Horseshoes with						
rectangular nailholes	-	2	12	3	46	63
Horseshoe arm tips	1	-	6	-	5	12
Oxshoes	-	-	1	-	10	11

Figure 8.7.11: Chronological distribution of horseshoes and oxshoes

Four types of horseshoe nail were recognised (Figure 8.7.112): Type A a fiddle-key nail with a generally semicircular-shaped head, no thicker in side view than in the shank; Type B with a trapezoidal head, often with well-defined ears, and with a marked expansion in side view; Type C, related to Type B but with a more angular head; and Type D with a shank expanding from all sides up to the flat top of the head. Type A was intended to be used with horseshoes with countersunk nailholes, Types B and C with countersunk or rectangular nailholes and Type D

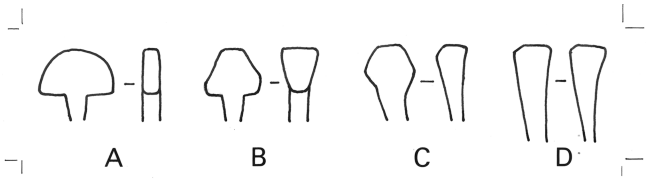

Figure 8.7.12
Ironwork: Horseshoe nails Types A-D

with those with rectangular nailholes (Goodall 1973, 173-5, fig 13, table 2; 1975, 87-9, fig 45) and their comparative numbers confirm the association at Burton Dassett. All except two of the eleven Type A-C nails are residual, like the excavated horseshoes they fitted.

Type	*Early 13th-century*	*Early 14th-century*	*Early 15th-century*	*Late 15th-century*	*Med*	*Post-med & topsoil*	*Total*
B	-	1	4	-	-	2	7
C	-	-	1	-	1	2	4
D	-	-	6	33	3	15	57

Figure 8.7.13: Chronological distribution of horseshoe nails.

522-29 Spurs, rowels and spur buckles *by B M A Ellis* (Figure 8.7.14)

The spurs, rowels and buckles are very severely rusted and although it is impossible to be certain in most cases, they have specks, and slight traces on their X-rays, which suggest the possibility of non ferrous plating. Iron spurs were very often thinly plated with tin (Jope 1956, 35-42), which would have been the most probable finish for all the medieval pieces described here, while 529 which is post medieval might have been plated with tin or silver. The spur buckles would have been worn to the outside of the foot.

522.* Rowel spur fragment, compromising part of one side and most of the neck. High magnification reveals some minute bright specks in the very severely rusted surfaces which might have been non ferrous plating, or deposits from the surrounding soil. The broken side, probably of D-section, plunges downward from its junction with the neck so that it must have bent or curved strongly under the wearer's ankle. It is drawn up into a bold pointed crest where it joined the missing side and from below this projects part of a straight neck, divided for most of its length by the rowel box. The end of the rowel box and rowel have rusted away.
Max L 75mm (broken side from top of crest L 60mm; broken neck L 37mm). (310/1, ph D17, topsoil).

Typologically this is part of a spur of *c*1340-1380, when deeply curved spur sides were combined with necks which had long rowel box divisions to accommodate the large rowels which were then fashionable. Compare the spurs depicted on the monumental brass of Sir John Gifford, *c*1348, at Bowers Gifford, Essex (Ward Perkins 1940, 104, fig 53 no 2) and those on the brass of William de Audley, 1365, at Horseheath, Cambridgeshire (Norris 1977, pl 73).

523.* Rowel spur. The surface is severely rusted and flaking but there are extremely small traces which may be of non ferrous plating. The D-section sides, which have been compressed by burial, curve gently under the wearer's ankle and rise towards the broken terminals. Only

part of one terminal ring survives, which is large enough to have been of single-ring type but could have been the upper ring of a figure-8 terminal. The neck is basically straight but with a gentle sagging curve along its length, most of which is divided by the long rowel box. One round rowel boss remains but the other and the rowel are missing. Overall L 120mm, neck L 41mm. (666, ph D25, mid/late 15c).

Typologically probably *c*1390. The length of the rowel box shows that the rowel was large, as was fashionable in the second half of the 14th century. The spur does not appear to have had a crest although heavy rusting at the junction of neck and sides makes it impossible to be certain. Despite this its general proportions suggest that it is contemporary with two spurs from Goltho dating from the end of the century (Beresford 1975, 90, fig 42 nos 131-2.

524.* Rowel spur, with definite traces of non ferrous plating. The sides project slightly downward and their front ends have broken off at the part under the wearer′s ankle where they began to turn up towards the missing terminals. They are of flat section, 20mm deep where they join, tapering to about 15mm deep at the breaks. Their top edges rise into a point, but not a crest, at their junction. The round section neck has a rowel box with prominent conical rowel bosses, each containing the remains of a rowel pin. The latter has worn or rusted away and the rowel is lost. Overall L 105mm; neck L 52mm; rowel box L *c*30mm. (582, ph D27, late 15c demolition).

Typologically this is a `short spur′ of the second half of the 15th century. Spurs with extremely long necks were fashionable throughout the 15th century but some riders did not go to such lengths and contemporary inventories list `long spurs′ and `short spurs′. Both are included in the published Wardrobe Account for the coronation of King Richard III in 1483 (Grose and Astle 1807, 29, 40). Deep spur sides with turned up front ends are found on both long and short spurs of the second half of the 15th century.

525.* Spur rowel, with considerable traces of non ferrous plating. It has eight points of rounded section. Each point has a narrow base at the centre of the rowel and broadens outwards into roughly the shape of an elongated lozenge, although they are now rounded by thick rust. Diam *c*48-50mm. (1133, ph D28, post-med).

Typologically late medieval, *c*1340-*c*1450

526.* Spur rowel, with traces which are probably of non ferrous plating. It is a star rowel of eight quite slender round-section points. Diam originally *c*26mm. (867, ph E6, late 15c)

Typologically late medieval, *c*1340-*c*1700. It is not possible to date this more closely because, although not always the height of fashion, moderately sized star rowels have been in general use throughout the history of rowel spurs.

527.* Spur buckle, with non ferrous plating. Made in one piece with a D-shaped frame to be worn uppermost, a central broad flat area pierced with a hole next to the frame for the missing buckle pin and, at the bottom, a narrow curled loop for attachment to the terminal of a spur side. This lower loop is now broken. Overall L now 38mm but originally, with loop complete, *c*45mm; frame W 25mm. (828, ph E7, late 15c demolition).

Typologically 14th- or 15th-century; this is a typical late medieval spur buckle.

528.* Spur buckle, with traces of non ferrous plating. The large circular frame has a central bar upon which the pin is looped, flanked by the ends of the buckle body. The latter is roughly Y-shaped, waisted in the middle, with its lower end formed as a ring loop for attachment to the terminal of a spur side. Frame diam 32-35mm; buckle body L 35mm. (1130/1, ph D26, late 15c).

Typologically 15th century. Spur buckles with circular frames occur most often on 15th century

spurs such as a long spur in Salisbury Museum (Ellis 1991, fig 20 no 30). They are carved on the spurs worn by the monumental effigy of a knight of the early 15th century in Ashwellthorpe church, Norfolk and also on those of Sir John Blaket who died in 1431, on his effigy in Icomb church, Gloucestershire. Their use then, combined with the context and abandonment date of the settlement, suggest a 15th century date for this piece although spur buckles with circular frames did continue to be used infrequently in the post-medieval period.

529.* Small buckle of a type used on spurs. The lower end of the buckle body is missing so that one cannot confirm by its means of attachment that it was made for a spur. Iron with considerable remains of non-ferrous plating with silver or tin. The buckle has a square frame with rounded corners and a central bar upon which the buckle pin is flanked by the ends of the buckle body. The body of the buckle is elegantly formed at the top and waisted. The middle of the body was itself hinged for added flexibility and from this hinge the lower part of the body has broken or rusted away. Overall L 32mm; frame 25 x 35mm. (1071, Z3, fieldwalking).

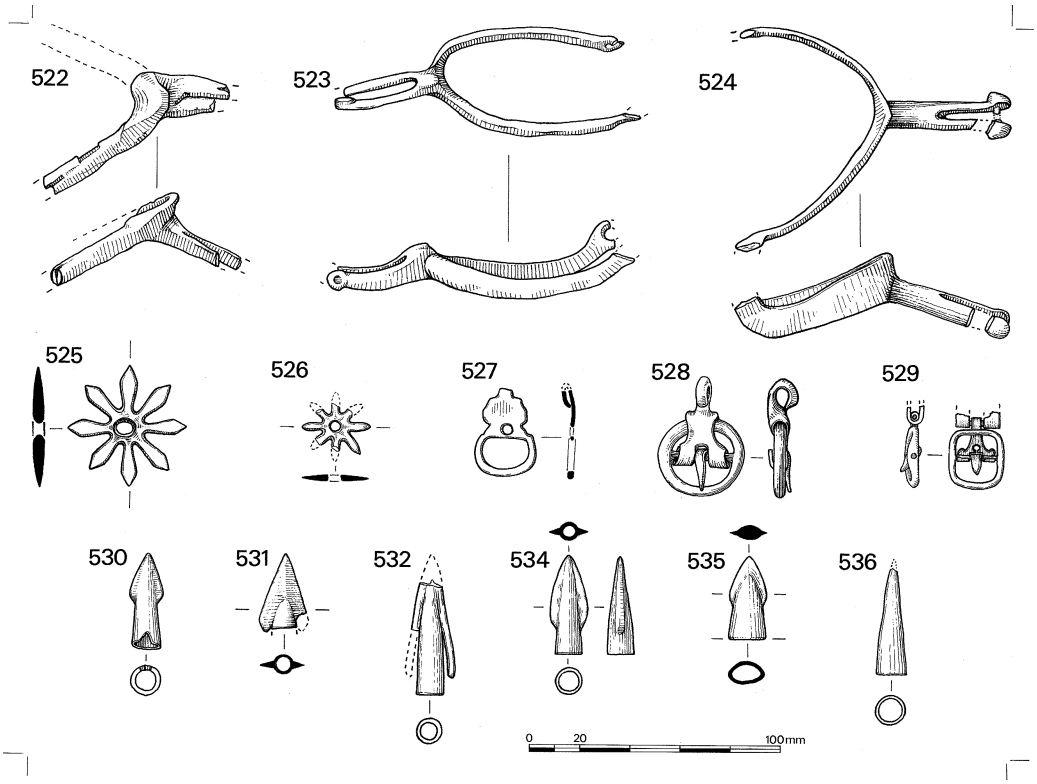

Figure 8.7.14: Ironwork: Spurs and arrowheads 522-536

Typologically *c* 1730-modern. Buckles of this type with hinged bodies were used on spurs from about 1730 onwards. A pair of silver spurs by Joshua Cooper, London 1978, has similar buckles (Sotheby 1990, lot 40), and the type is still used on some modern spurs.

530-36 Arrowheads (Figure 8.7.14)

Socketed arrowheads with lozenge-shaped blades, barbs or fins (530-35), may have been used for hunting, but the bullet shape of 536 is more appropriate for target practice. A large number of such arrowheads were found at Baile Hill, York, a site used for musters and probably therefore for archery from the late 15th century Addyman and Priestley 1977, 121, 139-40, fig 138, 29-49).

(Arrowheads: 530.* 874, ph E7, late 15c demolition; 531.* 1689, ph E3, early 14c; 532.* 2357, ph K4, mid 14/early 15c; 533. 867, ph E6, late 15c; 534.* 563/2, ph D26, late 15c; 535.* 853, ph F7, late 15c demolition; 536.* 368/3, ph D28, topsoil)