

◆ Part 3 – The finds

THE COIN FINDS FROM FISHBOURNE, 1961–1999 by David Rudling

INTRODUCTION

The excavations at Fishbourne during 1995–1999 recovered a total of 100 coins (Figs 180–85). These date from various periods: Late Iron Age, Roman, medieval and post-medieval. Although unfavourable soil conditions caused some copper-alloy coins to corrode badly, all coins have been recorded and identified where possible (*see* The Coin Catalogue). Owing to the corroded state of many of the coins, no attempt has been made to grade them in terms of condition/amounts of wear.

THE COIN CATALOGUE (1995–1999 EXCAVATIONS), BY DATE, PROVIDING ALSO CONTEXT AND SMALL FIND NUMBERS. 📖

Table 71 📖 provides a consolidated list, and the

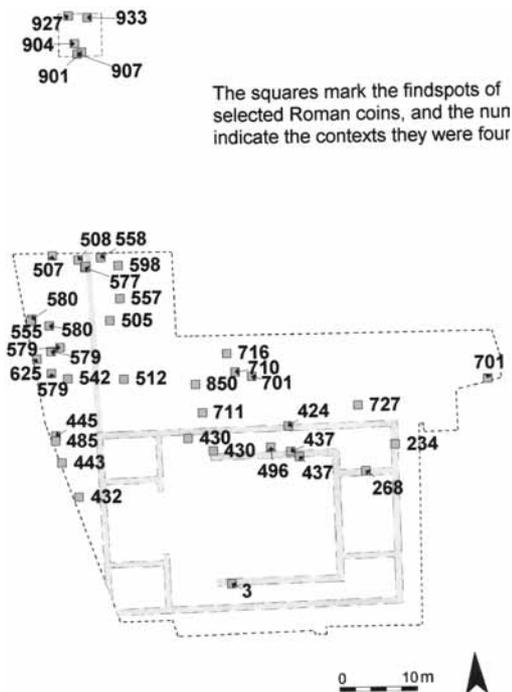


Fig. 180. Distribution of selected (see caption Fig. 172) Roman coin finds from the 1995–99 excavation.

opportunity has also been taken to tabulate coins from Alec Down's 1983 excavation (which cut across the area of the 1995–99 dig) and his excavations to the east of Building 3 in 1985–6, underneath the modern A27.

Coins from the 1983 and 1985–6 excavations

The evidence of coin loss at the recent excavation site is supplemented by the discoveries made during the investigations in 1983 (*see* above) when 29 coins were recovered. Unfortunately, the lack of published information concerning the majority of the 1983 coin finds made meaningful comparisons with the more recent finds impossible. The reason given for the limited report on the Roman coins from both the 1983 and the 1985–1986 excavations was: 'Due to the acid soil conditions...42 Roman coins out of a total of 57 [being] completely illegible' (Kenny & Lintott 1996).

In an attempt to try and provide at least some basic dating and identifications of all the 1983 and 1985–86 coin finds (all of which had fortunately been cleaned/conserved), and in order to satisfy the writer's curiosity about a 'Carthaginian' 'AR or AE Denarius', it was decided to re-examine all 69 coins recovered from Alex Down's 1983–86 excavations. This task proved to be very useful: it allowed the identification of two Iron Age bronze coins and more 1st-century Roman coins, and the correction of several previous identifications (as published), including the Carthaginian coin referred to above. This interesting coin is not a denarius, but a bronze issue of Carthage dating to the late 3rd /early 2nd century BC (ie a very rare and important find in Britain). All of the 1983 and 1985–86 coin finds have been catalogued in the same way as for the 1995–1999 coin finds and a selection of the more interesting coins is described. A consolidated listing of all the coins forms part of Table 71.

Discussion

The coin finds from the 1983 and 1995–99 excavations at Fishbourne can be considered together and compared with the assemblages (Reece 1971; Bone 1996) recovered nearby during the 1961–69 and 1987–88 excavations to the west of the stream (i.e.

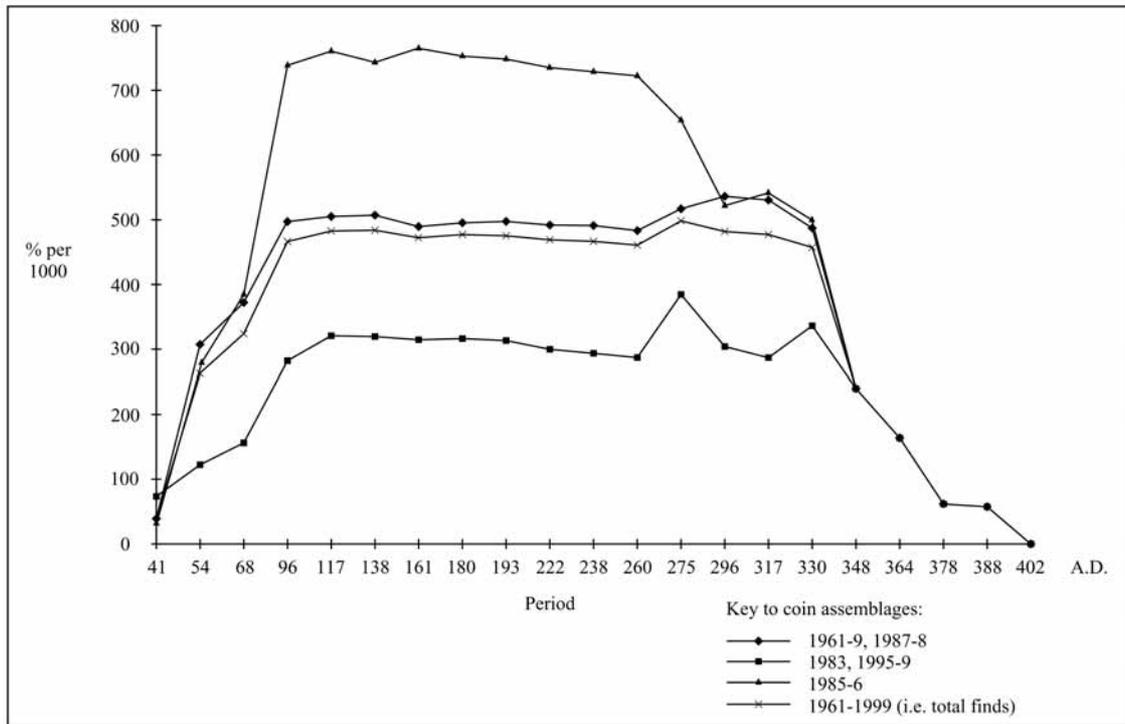


Fig. 181. Profiles of the three Roman coin assemblages from Fishbourne by periods of issue and numbers of coins in each group out of coins per thousand. A profile is also provided for the total assemblage of coin finds from Fishbourne (1961–99).

the main Palace site) and also that (*see above*) resulting from the 1985–86 excavations to the east (ie along the route of the A27: Down 1996) (Table 72; Fig. 8).

It is important, however, to note a significant change in archaeological sampling methodology used in the 1995–99 excavations. This was the systematic use, from 1997 onwards, of metal detectors to scan all excavated soil. The recovery of coins, especially of the smaller types, is thus likely to have been more thorough than during any of the earlier excavations. Table 72 provides summary lists of all the coins, tokens and jetons from the 1961–69, 1983, 1985–86, 1987–88 and 1995–1999 excavations at Fishbourne. The lists have been arranged to reflect the locations of the assemblages, starting in the west (ie the Palace) and ending in the east (i.e. the new A27). The compositions by period of issue of the Roman assemblages of coins at these three main areas of excavations at Fishbourne are also shown (Fig. 181). This was produced by Richard Reece and follows his methodology as put forward in *Britannia* (Reece 1995). Reece (*pers. comm.*) notes that the

profiles for the coin assemblages from the 1983/1995–99 and 1985–86 excavations vary either side of the profile for the coins recovered during the 1961–69/1987–88 excavations. They also have the combined effect of making the profiles (Fig. 181) of the 1961–69/1987–88 coin finds and the total (1961–99) coin assemblage, virtually the same.

Previously, in commenting upon the coin finds from the 1961–69 Palace site excavations, Reece (1971, 96) stressed the unusual nature of the assemblage, and urged the utmost care on anyone who attempts to use the Fishbourne coin list as a whole in any work of synthesis or comparison. Whilst Reece, who was of the opinion that the history of Fishbourne 'is so well documented', correlated the 1961–69 coin finds with the excavator's phasing of the site (Cunliffe 1971), such correlations are used here cautiously, since it now seems possible that Cunliffe's phasing of the site, in parts at least, may need to be lengthened, with the possible omission of a significant pre-conquest period of occupation (Creighton 2001, 9–11), and perhaps the need for revisions to the dating of the construction of the



Fig. 182. Tincomaros. Gold quarter stater. SF 11914.

Palace itself (Black 1987, 84–6; 1993, 236). It should be noted that to date the earliest feature which has been identified as such at Fishbourne, i.e. the large ‘Early Ditch’ containing pre-conquest Arretine pottery in its primary fill, has failed to yield any coins from its lowest deposits. A single coin of Claudius I was, however, recovered from context 927 — a deliberate filling of the ditch.

The Iron Age coins ■

The 1995–99 excavations yielded two Iron Age coins: a gold quarter stater (Fig. 182) and a silver minim (Fig. 183) respectively of Tincomaros, king of the local Atrebatas tribe. Although both coins are thought to have been issued c. 25–20 BC, it is possible that they were still in circulation during the early 1st century AD. Whilst the minim was unstratified, the quarter stater was found in a pit at the south-west corner of a beam-slot — context 900 from Phase AD. Other finds from this context included a chip of 1st century samian, and a small amount of ceramic building material. It is assumed on this evidence that the quarter stater may have still been in circulation in the middle of the 1st century AD.

Whilst no Iron Age coins have been found on the main Palace site, two bronze issues were discovered during the excavations in 1985–86 on the line of the new A27. Both coins are of types minted to the north of the Thames. One was issued by Tasciovanus, probably c. 20–5 BC (i.e. similar dating to that of the two coins of Tincomaros referred to above). Although the other coin is illegible, it dates to the late 1st century BC/early 1st century AD and was probably struck for either Tasciovanus or Cunobelin.

Another coin which may have reached the site during the Iron Age is the late 3rd/early 2nd century BC Carthaginian bronze coin found in 1983 (Fig. 184). Unfortunately, this was an unstratified find. Carthaginian/Siculo-Punic coin finds from Britain are rare, the only examples known to the writer be-



Fig. 183. Tincomaros. Silver minim. SF 1626.

ing: a coin found at Sandwich in Kent, which appears to be of similar type to the Fishbourne coin (Philip de Jersey pers. comm.); an example of a similar but slightly larger type of coin (Sear 1979, no. 6520), which was discovered ‘about 70 yards to the north’ of the Iron Age hillfort at Mount Caburn in East Sussex (Spokes 1927); and twelve examples of a different, earlier type (Sear 1979, no. 6444). Eleven of these earlier coins were found in Kent: four from a site in ‘north-east Kent’ (Cuddeford 1991; 1992) and one each from Ebbsfleet (Minster in Thanet), St Nicholas at Wade, Goodnestone, ‘near Ashford’, Worth, Sutton (from a possible Middle Iron Age site) and Elmham (Philip de Jersey pers. comm.). The four coins from ‘north-east Kent’, which may represent part of a hoard, were found at a location which has ‘produced many Iron Age coins...including many Gaulish potin’. The other coin of this type was found at Saham Toney in Norfolk (Philip de Jersey pers. comm.).

The Roman coins

Pre-conquest silver

Five Republican silver coins were recovered from the 1983 and 1995–99 excavations, this total matches the number of Republican coins discovered during the 1961–69 excavations of the Palace site. An additional Republican silver coin was found during the 1985–86 excavations to the east. One of the coins found in 1998 is a rare example from Britain of a quinarius (ie half a denarius) dating to c. 100 BC. This coin was initially identified in error (Rudling 2001, 10) as a much earlier (c. 211–208 BC) victoriatius, which was the prototype of the obverse and reverse designs for the later quinarii.

Other finds include examples (one each from the excavations of 1983 and 1986) of the debased legionary-type denarii of Mark Antony. The *absence* of such coins of Mark Antony from the 1961–69 coin assemblage was specifically highlighted by Reece (1971, 98), who used this fact to argue for an early

date of arrival at Fishbourne of the eight pre-conquest denarii discovered during the excavations. The discovery of such coins during subsequent excavations may thus indicate that at least some of the early silver coinage may have arrived at Fishbourne later in the 1st century AD. Reece (1987, 15), for instance, has noted that c. AD 100 at least 30–40% of all denarii in circulation in Britain were Republican issues. It should also be noted that after AD 100 some Republican silver coins remained in circulation, with examples of legionary denarii of Mark Antony forming parts of hoards closed as late as AD 260 (Robertson 2000, 439–41). It is possible, however, that *some* of the early silver coins at Fishbourne may have arrived *before* the conquest and relate to the postulated phase/s of Late Iron Age or pre-conquest Roman occupation at the site. The various Iron Age coin finds reported above may also belong to such early usage of the site/vicinity.

Claudian coins ■

The excavations of 1961–69 recovered a total of 66 coins of the time of Claudius I, the large majority being irregular copies of bronze asses with the ‘Minerva advancing right’ reverse-type. The 1983 and 1995–99 excavations yielded a further three regular and one irregular Minerva-type asses (with other unrecognised examples possibly being present amongst some of the otherwise illegible 1st- to 2nd century bronze coins), a probable Claudian copy of an as of Agrippa and a plated, imitation denarius of Claudius (*see* below). The 1985–86 excavations produced a further two Minerva-type asses of Claudius I (one is an irregular issue) and probably five examples of otherwise illegible Claudian asses (others may be present amongst the illegible 1st- to 2nd century bronze coins). Reece (1971, 98) suggests that the Claudian bronze copies in Britain quickly dropped out of circulation with the availability of the copious issues of Nero (AD 64–68) and Vespasian. He further suggests that the majority of the Fishbourne Claudian copies were ‘lost during its military phase’. Some indication of the relative scale of such Claudian military activity at Fishbourne (1961–1999 excavations) might be obtained by comparing the 79 Claudian coins with the 323 such coins found at Richborough (Reece 1968, 203).

It must be stressed, however, that the discovery at both Fishbourne and at Richborough of relatively large numbers of Claudian coins does not necessarily indicate that the Roman military phases at these

sites were established in AD 43. Thus Eberhard Sauer, who has put forward the case that ‘in the Julio-Claudian period copper-alloy coins from military sites allow for fairly close dating’, has suggested that ‘the most useful numismatic criterion to date forts established within the 1st decade of the invasion is the rapidly shrinking proportion of coins of Caligula’ (Sauer 2000, 44). Sauer notes that ‘at Hod Hill coins of Caligula make up almost two-thirds of all copper-alloy coins minted before AD 79’, but that at ‘sites established in the AD 50s their proportion had decreased to about one in twenty’. Whilst the site at Richborough has yielded a considerable proportion of coins of Caligula, that at Fishbourne has not (Sauer notes that from the 1961–69 excavations at Fishbourne only 2.94% of the coins of Caligula or Claudius are those of Caligula, and none at all of the 29 coins from the Period 1 level. In contrast, Sauer (2000, 49) points to the fact that at nearby Chichester (where there may have been a military establishment), 44.19% of the coins of these two reigns are those of Caligula. The subsequent excavations at Fishbourne (i.e. 1983, 1985–86, 1987–88 and 1995–99) have yielded just one more coin (a commemorative issue of Agrippa) struck by Caligula, as compared to a further 12 coins of Claudius. Thus whilst it is possible that Fishbourne is an exception to Sauer’s rule (which relies heavily on the coin evidence from Hod Hill where Richard Reece (pers. comm.) suspects the presence of a dispersed hoard of coins of Caligula), we need to consider the possibility that the first phase of major Roman Claudian activity and/or ‘coin loss on an intensive scale’ at Fishbourne might date to the years after AD 43, and perhaps as late as the first half of the 50s. Such activity, perhaps associated with the construction of the ‘?principia’ revealed by Manley and Rudkin, may have replaced an earlier phase of Late Iron Age indigenous, or Roman, occupation of the site.

The plated denarius of Claudius found at Fishbourne in 1983 (Fig. 185) and referred to above is a very interesting and rare find. It is a copy of an issue of Claudius I with Nero as caesar, but the obverse legend is different to that on a regular coin. Reece (1971, 98) notes that very little Claudian silver seems to have entered this country, and the production of the plated denarius may perhaps have been an illegal attempt to exploit this shortage of silver coinage. This particular copy is not paralleled in the dispersed ‘Norfolk Suffolk’ hoard, which was recovered by detectorists from a site somewhere in

the Norfolk/Suffolk area during 1995 and 1996 (Orna-Ornstein & Kenyon 1997). This hoard, which consists of 172 coins, includes at least 110 (and perhaps 172) plated coins (NB the remaining 62 coins were found after the report on the initial batch had been prepared for publication). Of the 110 plated coins found in 1995, all but two coins were copies of official coins of Claudius; the other two coins being single examples of copies of official coins of Augustus and Tiberius respectively. Since plated denarii are rarely found in hoards it can be assumed that such coins were regularly rejected. Reece (quoted by Orna-Ornstein & Kenyon 1997, 42) is of the opinion that plated denarii are also rare as site finds — perhaps as few as ‘one in 1000’.

Coins of Vespasian and Domitian

Reece (1971, 98) comments upon the relatively large number (30) of coins of Vespasian that were recovered from the 1961–69 excavations, and uses them to argue for a ‘cessation of major building activity sometime soon after AD 75’. Reece’s main argument against a later end to the period of major building activity is that he would in such circumstances have expected to see significantly more coins of Domitian which usually beat those of Vespasian (Reece pers. comm.). The subsequent excavations at Fishbourne have yielded a further 15 coins of Vespasian and thus perhaps support the theory that this, and possibly also the reign of Domitian which is represented by a further seven coin finds, were periods of construction and the start of the main period of Palace occupation.

Coins of the 2nd and early 3rd century

The numbers of coin finds of the 2nd and early 3rd century at Fishbourne are fairly small, especially for the issues of Trajan and Hadrian which are common in Britain. Whilst Reece (1971, 98–9) with regard to such findings from the 1961–69 excavations suggests that such absences may be due to the nature of the occupation of the Palace, with ‘continual sweeping and cleaning’ reducing the numbers of lost coins, the reason for such absences in other areas at Fishbourne is uncertain.

Coins of the late 3rd century and 4th century

The Palace site was destroyed by fire during the late 3rd century and subsequently demolished/robbed during the period c. 293–313 (Reece 1971, 98). Later Roman coins (ending with an issue of Gratian) from the Palace site are explained by Reece as correlating

initially to some continuing robbing activity and then agricultural activities. The somewhat larger numbers of 4th century coins recovered during the subsequent excavations at Fishbourne can probably in part (ie for the 1997–99 investigations) be explained by the use of metal detectors and thus the more successful recovery of generally smaller coins. Despite the small increase in the number of 4th-century coin finds, the overall numbers of such coins are low and can probably be explained in similar ways to those from the Palace site.

Post-Roman coins

The post-1969 excavations at Fishbourne, especially those undertaken between 1995 and 1999, yielded further examples of medieval and post-medieval coinage, and some tokens and jetons (casting-counters). Again the use during the excavations of metal detectors was significant in aiding the discovery of such finds, especially the medieval coins. Although the context for the loss of such items might have been agricultural activities (such as manuring/the depositing of ‘night soil’) as was suggested for coins of this period found during the 1961–69 excavations (Reece 1971, 97), the number of such coins that have now been found may perhaps also indicate other activities (*see* the evidence from phases AI and AJ in this report).

Distribution

Figure 180 shows the locations of selected Roman coins found during the 1995–99 excavations. (Note that coins found by metal detectorists which did not have precise grid references, are not shown.) This distribution illustrates the general characteristics of the distributions of many of the other categories of finds. Most coins were found to the north and west of Building 3, with relatively few over the building itself.

Table 72 : Summary lists of coins, token and jetons from the 1961–69, 1983, 1985–86, 1987–88 and 1995–99 excavations at Fishbourne (see Fig. 8 for location of excavations). Note that the columns are ordered so as to reflect excavations trending from west (Palace 1961–9) to east (A27 1985–6).

N.B. Unless otherwise stated, all references are to *Roman Imperial Coinage (RIC)*. Other references are to: Müller (1860–63); Van Arsdell (1989); BMC (Roman Republic) = Grueber (1910); Sydenham (1952); HK = Hill & Kent (1972) and North (1975 and 1980).

POTTERY (THE SIGILLATA)

by Geoff Dannell

GENERAL COMMENTS

The policy on the excavation was to record as small finds all fragmentary samian sherds larger than a fingernail. This resulted in the recording of some 2185 sherds of samian, the vast majority of pieces being found to the north of Building 3. None of the contexts which would help to date firmly the construction of Building 3 contain much samian, and generally the samian is not helpful in dating the building. The condition of what was sent is highly suggestive of redistribution, rather than primary deposition. Indeed, the degree of abrasion and the smallness of many of the sherds is quite clear evidence on this point. These deposits contained the smallest sherds ever sent to me for comment. Their small size, the degree of abrasion, and water-washing, suggests that they were residual to the contexts in which they were found (Figs 192, 193). This point is exemplified by the fact that of the 1997 material (by sherd count), some 54% could not be identified by form; for 1998, the figure is 47%. That there is no discernible late-Antonine material means that the cut-off should be *c.* AD 150. The 1st century material follows the general supplies to the Palace, and I would guess came from there as its source.

Decorated vessels are also scarce. In both the 1997 and 1998 only some 6% occurs, and this is low for Fishbourne in particular, and for contemporary sites in general. Moreover, despite the fact that decorated vessels are thicker and generally stronger than plain forms, very little decoration survives, just six sherds with ovolos, and the largest decorated sherd is only 210 mm². Decorated forms are most numerous in the Antonine period.

The analysis was taken one stage further and the various Arretine and Samian forms were described according to basic shape (*e.g.* cup, bowl etc.). This is problematic in that, for example, the English word 'plate' implies a certain modern function or functions, and the Roman functionality for the same form may have been very different. The question revolves around whether the vessel was used, in the first instance, for 'dry or wet' food, and that is very difficult to determine. My inclination is to stick with the *Conspectus* forms. This means that 15/17 should fall in the platter or plate category, and probably also Ritt. 1. However, the development of Drag. 18 with its incurved wall suggests containment — and

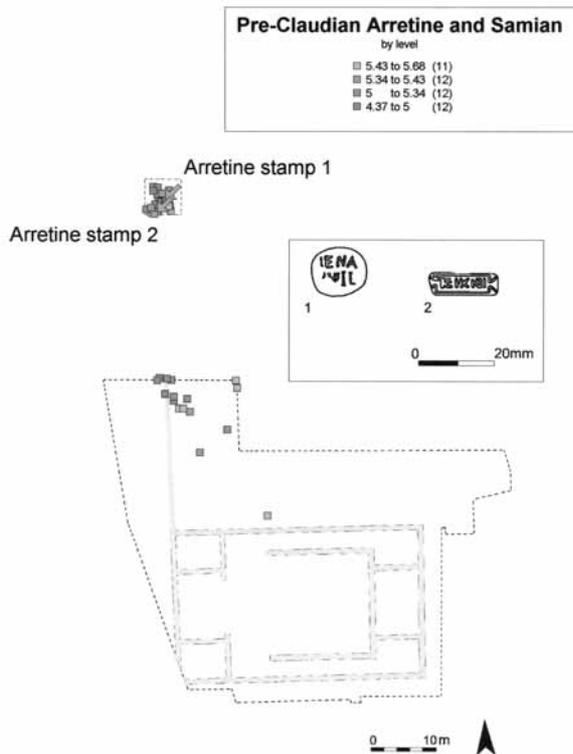


Fig. 199. Samian: pre-Claudian distribution.

therefore I believe it is a shallow bowl, and its successors 18/31 and 31 progressively, medium and deeper bowls.

The cups are more problematic, because of the rim forms; Drag 24/5 is described conventionally as a cup — but I wonder. Similarly, some Drag. 46 lips look a little difficult to drink from. It may be necessary to look at the etymology of the vessels described on the graffiti at La Graufesenque. Why are the decorated bowls 29 and 37 described as 'pannas'? The origin appears clear, yet some 37s have pouring spouts and handles, suggesting that they may have been used for wine mixing.

The percentages of different shapes by period shows that in the pre-Claudian phase, platter, cup and dish forms predominated. Subsequently, cups and dishes formed the majority, but by the Trajanic period bowls had become more popular than dishes. In the Late Antonine period deeper dishes took precedence over bowls. Whether these changes relate to changes of dietary preferences, table manners, the status of the users, changing suppliers, overall

change in the output of samian producers or the inappropriateness of our modern categories, is difficult to determine (Figs 194, 195, 196).

South Gaul (probably all from La Graufesenque) accounts for approximately 60% of both collections, with 2nd century Central Gaul (probably all from Lezoux) at approximately 33%, while Les Martres-de-Veyre shows at between 2–4%. Of the balance, there is very little from East Gaul; Montans appears in minute quantities, as does 1st century Lezoux. The products of the various regions by date are provided in bar-chart form (Figs 197, 198).

In general, practically all the samian found appears to have originated in either pre-Palace buildings or the Palace itself, and found its way onto the site of Building 3 as refuse disposed of in the midden to the north of the building (Figs. 199–216)■. One of the few exceptions to this statement concerns the Arretine ware from the bottom of the ditch in Area B. Of the 52 pieces of Arretine ware recorded as small finds during the excavation, five pieces, including some large fragments, came from the bottom of the ditch in Area B;³² one stamped piece came from the old ground surface into which the ditch was dug. A further 24 finds of Arretine ware came from the deposits dumped, presumably redeposited, in the upper fills of the ditch, or in deposits sealing the ditch in Area B. The remaining 22 sherds of Arretine were located as redeposited finds in the main area of the excavation.

DECORATED SAMIAN (21 SHERDS) ■ (Figs 186, 187, 188)

ARRETINE STAMPS (2 EXAMPLES) ■ (Figs 189, 190)

SAMIAN POTTERS' STAMPS
(19 EXAMPLES) ■ (Fig. 191)
by Brenda Dickinson

POTTERY (FINE AND COARSE WARES)
by Malcolm Lyne ■

INTRODUCTION

The five seasons of excavation yielded more than 352 kg of pottery, of which the overwhelming bulk is Roman and of 1st- to 3rd century date. Small amounts of Late Iron Age 'Atrebatian overlap' pottery and pre-conquest imports are also present and there are significant quantities of medieval sherds from the upper levels (Figs 217–20).

THE CHANGING PATTERN OF POTTERY SUPPLY TO FISHBOURNE

The earliest Phase AB/BA occupation at Fishbourne is characterised by a variety of local Atrebatian Overlap soot-soaked coarse wares which are for the most part handmade in a variety of calcined-flint, quartz-sand and grog-tempered fabrics: fine wares consist almost entirely of Arretine bowls and dishes from Italy and Terra Rubra beakers from north-east Gaul.

The construction of Building 3 coincided with the appearance of locally-produced Romanised grey and fine wares at Fishbourne. Chief amongst the sources of such vessels was one producing grey wares in the very distinctive Fabric C.13: this accounts for nearly a quarter of all the pottery in Assemblage 6. Significant quantities of soot-soaked Atrebatian Overlap wares were still supplied up to c. AD 60 and nominal amounts of Rowlands Castle (Fig. 2) and locally-produced sandy orange Fabric C.12 wares appeared for the first time. Fine wares are dominated by a variety of beakers, flagons and other forms in cream to pink Fabric F.6, but also include a variety of Gallo-Belgic fabrics, Arretine and South Gaulish samian.

The late Neronian to early Flavian *proto-palace* occupation is characterised by a great increase in the significance of both Arun Valley/Hardham and Rowlands Castle grey wares to a quarter each of all the pottery from the site. Vessels in the distinctive Fabric C.13 continued to be supplied until c. AD 70. A waster jar from the north-south wall robbing trench indicates that some at least of the increase in supply of Rowlands Castle-type wares was due to manufacture on site. A corresponding increase in the presence of wares in oxidised sandy Fabric C.12 was also due to similar manufacture nearby to supply the needs of the *proto-palace*. Atrebatian Overlap wares are still present in small quantities, but are probably all residual in their contexts. Fine wares are insignificant in the quantified assemblages, but include South Gaulish samian, early micaceous Lezoux samian, Wiggonholt cream ware and Gallo-Belgic Whiteware vessels.

There are no significant purely Phase AE assemblages of late Flavian date, but the combined Phases AD/AE material from the canalised stream indicates a decline in the supply of Hardham grey wares and a corresponding increase in that of Rowlands Castle wares to more than 40% of all the pottery. The production of wares in the local oxidised Fabric C.12 continued throughout the period and fine wares in-

clude Wiggonholt vessels and Hardham ‘London’ wares.

The pattern of pottery supply changed little during the early 2nd century except for a marked increase in the supply of fine Wiggonholt and Hardham products. This increase in the supply of local finewares coincided with the collapse of the South Gaulish samian industry *c.* AD 110 and a resultant 20-year shortage of Continental fine imports until the establishment of large-scale Central Gaulish samian production during the reign of Hadrian. The early 2nd century also saw the appearance of small-scale coastal trade in Dorset BB1 and Thameside BB2 products, perhaps as an adjunct to sea-salt supply from the two sources. Cologne and Colchester Colour-coated beakers were also supplied in small quantities to Fishbourne after AD 130.

The late 2nd century saw a continuing increase in the volume of Rowlands Castle wares supplied to the site, to the point where they account for nearly half of all the pottery in the quantified assemblages. Wiggonholt cream wares, Hardham fine wares and local oxidised wares in Fabric C.12 disappear from the scene, but small-scale coastal supply of BB1 and BB2 coarse wares continues. Fine wares are virtually confined to small numbers of Central Gaulish samian open forms and Cologne and Colchester colour-coated beakers.

There was a great decrease in the number of sources supplying pottery to Fishbourne during the early 3rd century: Hardham grey wares disappeared from the scene and coarse wares became almost entirely restricted to Rowlands Castle products. Fine-ware supply was now confined to the occasional Moselkeramik beaker imported from Trier alongside barrels of Moselle wine.

The period after AD 250 and just before the destruction of the Palace was marked by significant changes in the pattern of pottery supply to the site. Rowlands Castle wares remained important, but were now joined by Alice Holt/Farnham grey wares from the Hampshire/Surrey borders and increasing amounts of BB1. New Forest purple colour-coated indented beakers and the occasional grey ware vessel from the same source made their appearance as part of a pattern of trade in such vessels which had extended across Sussex within a few years of the setting up of the industry.

THE CERAMIC EVIDENCE FOR DECLINING SOCIAL STATUS AT FISHBOURNE ROMAN PALACE

It is always difficult to determine the social status

of a site from the range of pottery that is present. A low-status site might be expected to have limited quantities of fine pottery, but this could also be the case on a high-status one where glass and metal tableware was in use and only coarse grey kitchen pottery vessels and storage-jars were bought in any quantity.

High-status activity is, however, indicated for Fishbourne during the period between the Roman conquest and the late 1st century by the extensive variety of amphorae that are present and also by the setting up of kilns to supply the proto-palace and later palace with Rowlands Castle-type grey wares and an unusual range of vessels in sandy oxidised Fabric C12.

The amphorae from the recent excavations (*see* Williams in this report) include CAM 186s and Dressel 7-11s used to transport fish-based products such as garum sauce from the coastal regions of southern Spain, Haltern 70s and Dressel 20s loaded with olives and oliveoil respectively from the valley of the River Guadalquivir in the same area and Dressel 2-4s carrying both Italian wine and that of Catalonia. More unusual containers are the Richborough 527 amphora (thought to have carried alum from the island of Lipari north of Sicily), Rhodian wine amphorae from the Aegean and carrot amphorae of possible Palestinian origin: the latter may have been used to transport dates. It appears, therefore, that the owners of Fishbourne had access to exotic foodstuffs and wines from all over the Roman Empire: none of their containers, however, need be later in date than AD 80.

The production of pottery at Fishbourne is also associated with the proto-palace, but seems to continue into the early 2nd century. The deep bowl forms in the sandy orange Fabric C.12 (Cunliffe 1971, Types 86 to 89) owe nothing to local Atrebatian potting traditions, but are similar to coarse 1st century cooking-pots/casseroles (*caccabi*) from Rome (Hayes 2000, fig.14, fig. 15.6): it may be that the potter himself came from Rome and was given to Togidubnus by the Emperor in order to supply cooking-vessels suitable for Roman-style cuisine.

It seems as if the building of main Palace was followed very soon after by a decline in its owner's fortunes. Perhaps imperial favour ceased with Togidubnus's death: at any rate, 2nd- and early 3rd century pottery assemblages from the site differ little from others elsewhere in the Chichester area. There are very few contemporary imported ampho-

rae and little in the way of exotica. The fine wares are similar to those on sites elsewhere in south-eastern Britain and include little other than Central Gaulish Samian open forms, Cologne and Colchester rough-cast and barbotine-decorated beakers and similar Lezoux colour-coated and Moselkeramik vessel types.

Distribution

The fine and coarse ware sherds from the 26 assemblages described were collected as bulk finds during the excavation and therefore no accurate distribution plot can be made of them. However, it is possible to suggest that the distribution of the sherds of Roman date across the site almost certainly reflected the general distribution patterns of most other finds in Area A. In particular, it is likely that many of the sherds mimicked the distribution patterns of the 1st- and 2nd century samian (Figs 213, 215). In addition, as has been noted above, there were significant concentrations of sherds in some of the features, especially from the western pit in Area B, and in Area A from the aqueduct, the stream, the linear slot in the central eastern part of the site, from the robber trench of the northern boundary wall, the surface of the flint road, from the fills of the beam slots, the midden and from demolition debris associated with the Palace.

AMPHORAE

by David Williams 

The 1995–99 excavations produced some 46 k of amphorae fragments, constituting some 969 sherds (Fig. 221). Amphorae from southern Spain, containing olive oil and fish-based products, account for just under half of the total number of sherds recovered during the five seasons of excavation. These are mostly made up of thick bodysherds of the globular Baetican olive-oil container Dressel 20, which was made in a series of kilns situated along the valley of the River Guadalquivir and its tributaries between Seville and Cordoba (Peacock & Williams 1986, Class 25). By and large, the amphora types Camulodunum 186, Southern Spanish and Dressel 7-11 seem mainly to have carried fish-based products and probably originate from the coastal region of southern Spain, especially the area between Cadiz and Malaga (Peacock & Williams 1986, Classes 16–19). Also present are a rim, handle and various body sherds of the Haltern 70 form. This shares a

similar fabric to that of Dressel 20 and also comes from the Guadalquivir Valley (Peacock & Williams 1986, Class 15). However, rather than olive oil, this amphora type seems mainly to have carried olives or defrutum (Liou 1982; van der Werff 1984). There is also a possible handle from the Catalan wine amphora Dressel 1/Pascual 1 (Peacock & Williams 1986, Class 6).

The overwhelming majority of the remaining identified sherds belong to the bifid-handled Dressel 2-4 amphora form which normally, but not exclusively, carried wine (Peacock & Williams 1986, Class 10). Over a third of the Dressel 2-4 sherds are in Italian fabrics, suggesting that Italian wine was reaching the site in some quantity. Of this group, material in the ‘black sand’ fabric and characteristic of a source in the Bay of Naples region (Peacock 1977), is predominant. Italian wine amphorae may be even more common on the site, since it is probably likely that there are other Italian sherds amongst the visually unidentified group of Dressel 2-4 material. Also present are two sherds from Catalan amphorae, probably Dressel 2-4 (Peacock & Williams 1986, 106).

Taking the amphorae assemblage as a whole, there seems to be nothing present that could not fit in with a conjectured date in the early second half of the 1st century AD. All of the eight Dressel 20 rims present can be dated to this period, according



Fig. 221. Amphorae sherds: the two handles and body sherds came from the infilling of the stream.

Table 9. Amphorae sherds.

	By Weight	By Count
Dressel 20	25,345 g	369
Dressel 2-4		
[Dr. 2-4 'black sand']	3034 g	91
[Dr. 2-4 'Italian']	2027 g	31
[Dr. 2-4 'Catalan']	45 g	1
[Dr. 2-4 undesignated]	5252 g	202
Haltern 70	1488 g	26
Southern Spanish	2075 g	63
Cam. 186A	285 g	2
Cam. 186C	668 g	7
Cam. 186sp	1145 g	6
Dressel 7-11	95 g	2
?Dressel 1/Pascual 1	72 g	1
P & W 59	457 g	5
Carrot Amphora	78 g	6
Rhodian	476 g	6
Richborough 527	442 g	14
?Gauloise 4	783 g	22
Undesignated	2350 g	115
TOTALS	46,117 g	969

COMMENTS: The other amphora material is represented by a small group of sherds. The origin of the cylindrical-shaped Richborough 527 amphora has recently been identified as Lipari, one of the Aeolian Islands situated to the north of Sicily, and the contents carried may well have been the locally produced alum (information M. Cavalier; Peacock and Williams, 1986, Class 13). Amphorae from France are represented by a rim, handle and bodysherds (probably all from the same vessel) of the form Peacock and Williams 59 (1986). This type, which seems to have been influenced by the shape of the Spanish Haltern 70, was made in the area of Lyons in the Rhône Valley (Dangreux and Desbat, 1988). Other material that may possibly be French is made up of two flat-bottomed bases and a number of bodysherds that could be from a Gauloise 4-type vessel (Laubenheimer, 1985). Amphorae from the eastern Mediterranean account for only 12 sherds and represent two different forms. One is the Rhodian style amphora type in Peacock's Fabric 2, which has a likely source in the Rhodian Peraea (Peacock and Williams, 1986, Class 9). The other three are small ridged bodysherds from the small carrot type. It has been suggested that this unusually shaped form originated from Egypt (Tomlin 1992). However, the absence of finds from Egypt and the lack of similarity of fabric with amphorae known to have been produced in that country is puzzling. If dates were indeed carried in this small vessel, then a better case could perhaps be made out for an origin in Palestine (Carreras and Williams, forthcoming). It is worth noting the wide variety of types present in the assemblage, which carried Italian, French, and Rhodian wine, Spanish olive oil, ?olives/defrutum and fish products, together with ?Egyptian/Palestinian dates and Liparian ?alum.

to the chronological scheme drawn up by Martin-Kilcher and based on the numerous Dressel 20 finds from the well-dated Swiss sites of Augst and Kaiseraugst (1987; see catalogue). Moreover, a date prior to the eruption of Vesuvius in AD 79 might

appear to be a reasonable premise for the production of the Fishbourne 'black sand' Dressel 2-4 sherds. It is as yet unclear how long it would have taken for the devastated vineyards in the Bay of Naples region to resume production following the Vesuvian eruption, although it seems unlikely that the local wine trade would have recovered much before the main thrust of Italian Dressel 2-4 exports had tailed off towards the end of the 1st century AD (cf. D'Arms 1981, chapter 4; Tchernia 1986, 230–32). It is true that this does not leave too much time for the possible arrival of Gauloise 4, which does not appear in Britain in pre-Boudiccan contexts (Peacock 1978). However, it is not certain that this form is actually represented here or, if it is, it may well have been amongst one of the first batches to arrive in the country. There is also the possibility of a Dressel 1/Pascual 1 handle being present. The majority of dateable finds of Dressel 1/Pascual 1 are normally Augustan though finds from Pompeii suggest that the form was also produced in the second half of the 1st century AD (Williams 1981).

A comparison with the amphorae recovered from the 1961–69 excavations at Fishbourne show that both Dressel 20 and Dressel 2-4 commonly occur in Period I contexts (Cunliffe 1971, Types 145 and 148). Dressel 2-4 are also found in some numbers in late 1st- and early- 2nd-century AD levels, though finds of Dressel 20 are sparse after AD 75 (Cunliffe 1971). With the high percentage of Italian Dressel 2-4 recovered from the 1995–99 excavations, it is perhaps quite likely that many Dressel 2-4 from Period I of the 1961–69 excavations are also of Italian origin (including vessels from the Bay of Naples region), though it is not possible to infer this from the limited fabric descriptions in the report. In addition to Dressel 20 and Dressel 2-4, carrot amphora are also common in Period I contexts (38 found with another 24 from Period 2-3, *ibid*, Type 152). It may be significant that they are only represented by six sherds from the 1995-1999 excavations.

It is interesting to compare the amphorae assemblage from the 1995–99 excavations with those recovered from the A27 roadworks nearby to Fishbourne (Cunliffe *et al.* 1996). The total number of amphorae sherds from the A27 was 960, very close in total to that of the 1995–99 excavations. Moreover, with the exception of the lack of Richborough 527 and carrot amphora forms from the A27, a very similar set of amphorae types is represented by both groups. The major difference between the two as-

semblages is the relative proportions of Dressel 2-4 sherds to Gauloise 4. At the A27 site it was 93 Dressel 2-4 sherds (including Italian, 15 'black sand' sherds and Catalan types) against 105 Gauloise 4. While from the present excavations the figures are 326 Dressel 2-4 and only 22 possible Gauloise 4. This suggests that Italian wine, or more correctly, wine from Dressel 2-4 vessels (whatever their origin) was more common than French wine from the flat-bottomed Gauloise 4 form at the site of the 1995-1999 excavations, while the reverse seems to have been the case at the A27 site. It is possible that the difference in the proportions of these two types may be due to chronological factors. Gauloise 4 was only introduced after the Boudican revolt (Peacock, 1978) and its relative frequency on the A27 site may indicate that the bulk of the assemblage is dated more towards the latter part of the second half of the 1st century AD (and into the 2nd century AD, since the typological dating of the Dressel 20 rims at the site range from the Tiberian period to the mid-2nd century AD). In contrast, the very much smaller Gauloise 4 element in the 1995-99 excavations, combined with the relatively high proportion of 'black sand' fabrics amongst the Dressel 2-4 types (91 sherds), may point to the first part of the second half of the 1st century AD for the assemblage.

Distribution on site

The distribution of amphorae sherds is predominantly residual, with the sherds being redeposited in later Roman contexts. Some of these contexts are indicated (in italics) in the catalogue which follows

CATALOGUE OF AMPHORAE SHERDS

MORTARIA

by Kay Hartley ■

Sherds from mortaria were not recorded as small finds. This was largely because of the difficulties of recognising sherds of mortaria in the field. Suffix letters after the given context number (and numbers after the suffixes), therefore, are used to differentiate between several sherds from the same context. Where relevant, details of significant contexts and their phasing are given below. Fabrics were examined with hand lens at X20 magnification. Fabric descriptions are standardised, but care is taken to point out any unusual feature of the fabrics of sherds under examination (Figs 222, 223, 224).

FABRICS

CATALOGUE

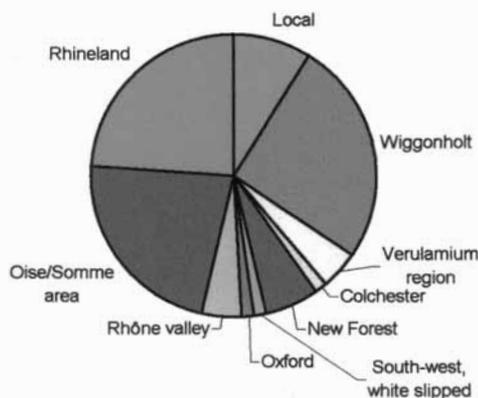
DISCUSSION

One of the most striking aspects of the distribution of the mortaria within the 1995-99 excavations was the distribution of those sherds of mortaria that could be linked to a military supply source. These come from Area B, contexts 908, 918 and 922. This, of course, is the location for the ditch which could be interpreted as of possible military origin.

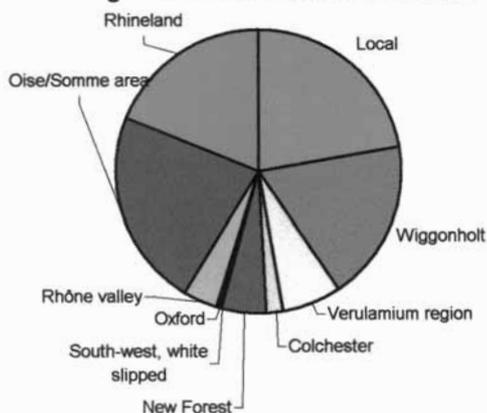
With regard to where the mortaria were originally produced, Table 10 shows a breakdown of the 67 sherds examined into numbers of sherds, total weight and numbers of vessels. Body sherds 580E and 443 are clearly from vessels not otherwise represented and they have therefore been counted as individual vessels; other body sherds have not. Because the total number of sherds is small and the characteristics of the vessels differ sufficiently, it is possible to have a realistic minimum total of vessels which may even be the true number. Although there is some obvious correspondence between the sherds, total weight and vessel numbers, the tables and charts illustrate the potential lack of correlation between total weights and sherd numbers for the Rhineland, local products and even Wiggonholt. The periods on Table 11 overlap in order to be able to indicate the optimum dates for mortaria from the various sources. The numbers suggest steady usage of coarse ware mortaria during the 1st and 2nd centuries. Because of lack of close dating evidence, usage during the 3rd and 4th centuries is more problematic. However, there are some indicators. The terminal date for production of some of the Wiggonholt mortaria could well be as early as AD 210/230. The near absence of Oxford mortaria in an area which they normally reached, at least after AD 240 onwards, could well be significant. Three of the four New Forest mortaria are likely to be among their earliest products and compared with the numbers of mortaria from northern France in the 1st and 2nd centuries (11) the total number for the New Forest potteries is definitely low, although they were very important in this area. This is a very small sample of approximately 40 vessels dating throughout the Roman period, but it would certainly fit with very limited usage of mortaria in the 4th century.

Well over a third of the sample came from the Continent; a third, in fact, from Gaul, mostly from

numbers of sherds from each source



weight of sherds from each source



numbers of vessels from each source

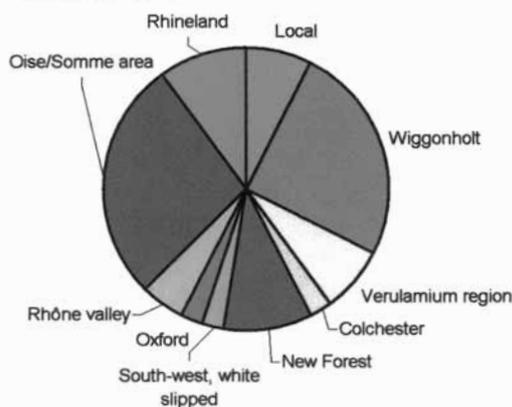


Fig. 225. Pie charts showing the number of sherds, the weight of sherds and the number of vessels from each mortaria production centre.

potteries in the Oise/Somme area (Hartley 1998; in prep.); four came from the Rhineland. The numbers imported varied at different periods, partly on account of local and regional production, partly perhaps because the imports were using trade routes already established for materials other than pottery. It is particularly interesting to see that few mortaria came from the potteries in the Verulamium region. Despite the great importance of the Verulamium region potteries from the Flavian into the Hadrianic period, imports from the Oise/Somme area were preferred at Fishbourne for the majority of the mortaria at this date. Three of the pre-Flavian mortaria at Fishbourne were probably produced in the vicinity of Fishbourne by the army. They show the rim forms, the diversity of forms and the restriction of distribution typical of early army production; they show also the relatively small production of such workshops, e.g. at Longthorpe, Trent Vale, Metchley and Usk. The military production ceased perhaps in the late Neronian period, by which time mortaria from the major potteries in northern Gaul were reaching Fishbourne.

There were never any really important mortarium-producing potteries in the Surrey-Sussex area, but the regional importance, c. AD 140–250, of nearby workshops like that at Wiggonholt is well-illustrated in this sample (10). Nevertheless, imports remained notable, both from the Oise/Somme area and from the Rhineland. Gillam 238, Gillam 255, and Bushe-Fox 22-30 from northern France and Gillam 272 from the Rhineland are always better represented on sites in southern and south-western England than in the midlands and in the north of England, where major supplies came from British sources. This pattern presumably owes something to the trade in objects other than pottery (Fig. 225).

GLASS

by Denise Allen  

INTRODUCTION

The excavations produced about 840 fragments of Roman vessel glass (Figs 226–35), 630 fragments of Roman window glass, one glass bead fragment, one probable glass tessera, five glass gaming pieces or counters and two enigmatic pieces of ?rod of glass or rock crystal. There were, in addition, nearly 400 fragments of post-medieval / modern glass.

ROMAN VESSELS

Amongst the vessel fragments, 128 have been catalogued or listed, representing perhaps 82 different vessels. An additional 161 fragments can be identified as coming from blue-green bottles of common 1st- to 2nd century types, making these the most numerous vessel finds on the site, as is usual with glass assemblages of this date.

The rest of the vessel glass is comprised largely of commonly occurring forms spanning the second half of the 1st century to the 3rd century. There are 3 vessel bases which may possibly be late Roman, but are perhaps more likely to be post-medieval (listed as probable post-medieval). Very late forms are otherwise missing from the assemblage. All the glass is extremely fragmentary, and many fragments can only be identified by general vessel type (i.e. jug, jar, cup) but not more specifically to a known form.

Cast-and-ground glass is relatively well represented: there are six polychrome fragments representing at least 4 bowls (nos 1–6), one blue-green pillar-moulded bowl fragment (no. 7), and 12

colourless fragments representing perhaps nine bowls or plates (nos 8–17). One of the latter has cut decoration (no. 8). Some of these, and the ?jug fragments of dark blue glass with marvered blobs (no. 45) are probably the best-quality vessels represented. The rest are very standard forms of common tableware varieties: tubular-rimmed bowls (nos 18–21), two ‘Hofheim’ cups (nos 22–23), colourless cylindrical cups (nos 30–35), a convex jar with collared rim (no. 43), probable long-necked jugs (nos 47–49). Glass containers include the numerous bottles already considered, and smaller toilet vessels for oils and unguents, including a bath-flask (no. 50), and simple flasks and unguent bottles (nos 51–58). Later colourless bottles are represented by fragments 61–64.

The great majority of the indeterminate vessel fragments are blue-green, meaning that this colour dominates the assemblage (428 fragments). In addition, there are 104 indeterminate colourless fragments, six dark blue, four amber, two each of olive green, pale green and emerald green and one each of yellow-green and brown.

ROMAN WINDOW GLASS

All the 629 fragments are of the matt-glossy, ‘cast’ variety, common until c. AD 300. 441 fragments are blue-green, and 188 are colourless.

It has long been believed that making this variety of window glass was a simple process of pouring molten glass onto some form of tray, resulting in a matt under-surface and rounded ‘thumb’ edges. Recently Mark Taylor and David Hill of Quarley, Hampshire, who make very detailed replica Roman glass vessels, were asked to produce Roman-style window glass for a BBC television programme, and found the process far more difficult than had been imagined. The molten glass cannot be poured like toffee, as the temperature drops instantly on con-

Table 10. The origins of mortaria sherds.

Source	No. Sherds	Weight g	No. Vessels
Local	6	818	3
Wiggonholt	17	688	10
Verulamium region	3	240	3
Colchester	1	80	1
New Forest	4	185	4
South-west, white slipped	1	10	1
Oxford	1	5	1
Lyon	3	148	2
Oise/Somme area	15	835	11
Rhineland	16	695	4
TOTALS	67	3704	40

NB. Body sherds 580E and 443 are counted as individual vessels.

Table 11. Numbers of mortaria vessels from different sources at different periods.

Source	Date								Totals
	43–60	50–85	65–100	70–150	140–180	180–250	150–300	240–300/400	
Local	-	3	-	-	-	-	-	-	3
Wiggonholt	-	-	-	-	1	9	-	-	10
Verulamium region	-	-	1	2	-	-	-	-	3
Colchester	-	-	-	-	1	-	-	-	1
New Forest	-	-	-	-	-	-	-	4	4
South-west, white-slipped	-	-	-	-	-	-	-	1	1
Oxford	-	-	-	-	-	-	-	1	1
Lyon	1	1	-	-	-	-	-	-	2
Oise/Somme area, France	-	-	5	3	3	-	-	-	11
Rhineland	-	-	-	-	-	-	4	-	4
TOTALS	1	4	6	5	5	9	4	6	40

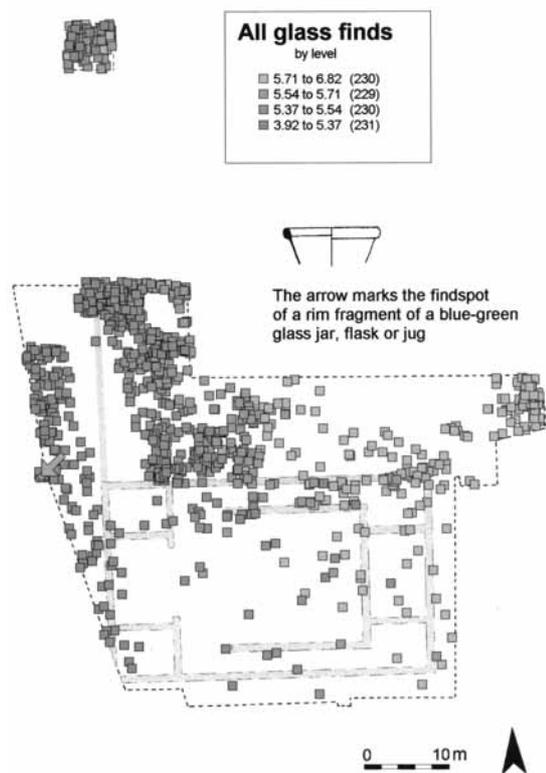


Fig. 234. The distribution of selected (see caption Fig. 172) Roman glass finds.

tact with the tray or mould, and it stops flowing. They eventually managed to produce authentic-looking panes by the following method.

A large blob of molten glass was dropped onto a damp surface (in this case a kiln shelf), and immediately flattened with a large block of damp wood. A flat disc, about 5mm thick, was thus produced. This was then transferred to a dry kiln shelf, which had been coated with a wash to prevent the glass sticking, and which was supported on a long pole. One worker then introduced and reintroduced the shelf with the disc to the furnace via a narrow rectangular opening, whilst another laboriously pulled and stretched the disc, one corner at a time, into a square. The resulting toolmarks, using pincers and metal hooks and rods, compare extremely closely to those on excavated Roman fragments, and the undersurface bore the impression of the kiln shelf surface. Both participants complained of bad chests from the heat and fumes for some time after the

series of experiments, and having watched the process, this writer will not be so dismissive again about the ease with which matt-glossy window glass was made during the Roman period.

DISTRIBUTION

The distribution map (Fig. 234) clearly illustrates the spread of fragments of Roman glass over Area A and Area B. It must be remembered that gaps in the distribution pattern can be accounted for by Alec Down's two trenches C and D (Fig. 117), and concentrations of glass in the central north-east corner of Area A and to an extent in Area B are caused by the fact that excavations were undertaken in these areas by hand from the surface down. The blank in the north-west corner of Area A is due to the fact that that area was not excavated down to Roman levels. However, the overall pattern is relatively clear, with concentrations of glass north of Building 3, especially in the area of the midden at the north end of Area A, and the glass finds at lower heights above sea-level concentrating in the lower contexts filling the stream. The graph illustrating contexts with more than nine finds of glass (Fig. 235) demonstrates that the context with the most glass finds is 507, which is a general deposit spread over the north-east corner of Area A. Significant quantities of glass finds came from 557 (under 507 in the north-east corner of Area A), 558 and 598, the latter two deposits directly associated with the midden of phase AF. In addition, a high number of finds came from C710, a deposit overlying the eastern end of the 'greensand road'. Many of the finds overlying Building 3 came from topsoil deposits such as C3 and C202 and are therefore found at higher levels than finds north of the Building. A large number of finds came from the topsoil (C701) to the north of Building 3.

TWO INTAGLIOS

by Martin Henig ■
(Figs 236, 237, 238)

Two intaglios were found during the excavations, one from a Palace demolition context, C564.

1. A NICOLO INTAGLIO DEPICTING A VICTORIOUS RACEHORSE (FBE 97 408 SF900)

The subject is a racehorse standing to the left upon a ground-line with, behind it, a palm of victory. The gem is of superb quality, very carefully cut in an

assured classicising style characteristic of the mid-1st century. It is tempting to ascribe the gem under discussion to the same period which means, at Fishbourne, that of the proto-palace. Certainly, its very high quality (comparable with that of the well-known amethyst depicting the god Mercury, Henig in Cunliffe 1971, 83–8 no.1) is not out of place in such a context and it is tempting to think it may originally have been mounted in a gold ring of a similar form to the child's ring from the aisled hall (Henig in Cunliffe 1971, 88–9 no.2) or the more substantial all-metal signet of Tiberius Claudius Catuarus (Tomlin 1997).

Its interest, however, extends beyond its artistic excellence or its probable luxurious setting to suggest another very Roman activity practised at or near Fishbourne, not previously attested, but one which was very plausibly enjoyed by those who lived here (probably the family of Togidubnus), even though chariot-racing would have had to be conducted on a makeshift racetrack rather than a purpose-built circus.

2. IRON RING SET WITH A NICOLO INTAGLIO SHOWING A LION WITH THE HEAD OF AN ANIMAL IN ITS JAWS (FBE 98 564 SF4702)

The field is a somewhat lighter blue than the race-horse gem and the device is a lion with the head of an animal in its jaws, walking to the left; there is a ground-line. The ring form is found as early as the mid-1st century and is well represented at Pompeii (e.g. Pannuti 1983, 143 no.257, cited above) although it continued to be common well into the 2nd century. The cutting of the gem is more schematic than that of the last, with coarser grooving, and this can be assigned to the 'small grooves style' which accords with a Flavian- Hadrianic date. The lion was probably a memento mori as it is, for example, on the well-known 2nd century mosaic from Verulamium (Toynbee 1962, 197 no. 179; see Henig 1977, 356–7), although Leo was a sign of the zodiac, and the Chichester intaglio where the lion is surmounted by a crescent may well have had that meaning. In any case the image would have been thought to protect the wearer from evil forces.

DISTRIBUTION

These two intaglios come from contexts associated with the infilled stream on the western edge of the site. Both contexts (408; 564) are contexts that occur at the very top of the stream and were therefore deposited in the late 3rd century or later. It seems

possible that these two rings were kept as heirlooms in the Palace throughout its entire life and only lost when the Palace was finally abandoned.

NON-FERROUS METAL ARTEFACTS by David Dungworth

INTRODUCTION

A total of 280 objects was examined (Figs 239–54). A few have been identified as pre-Roman, some as post-Roman although most can be recognised as either Roman or at least are not out of place among a Roman assemblage.

DETERMINATION OF ALLOY TYPE

NATURE OF OCCUPATION

The range of copper-alloy artefacts includes items of personal adornment, household objects and fittings, and some military fittings. Relatively few artefacts have certain military associations and most of these are with auxiliaries of the 2nd or 3rd century. The presence of a few military fittings should not be taken as compelling evidence for the presence of soldiers, as such fittings can be found on many civilian sites, e.g. Gorhambury villa (Wardle 1990).

CATALOGUE OF COPPER-ALLOY ARTEFACTS (Figs 250, 251)

POSSIBLE IRON AGE OBJECTS (4 FRAGMENTS)

CATALOGUE OF SILVER ARTEFACTS (4 FRAGMENTS)

DISTRIBUTION

The distribution of the copper-alloy finds, which account for most of the non-ferrous metal artefacts, suggests broadly depositional processes and patterns similar to those of the glass finds. The majority of copper-alloy finds lie to the north of Building 3, or in the stream to the west of the building (Figs 252, 253). The finds in the central-eastern end of the site can be accounted for by the fact that excavations in this area were undertaken by hand from the topsoil down, as was the case in Area B. Most of the copper-alloy finds overlying Building 3 came from higher levels and were residual finds in post-Roman contexts. The graph illustrating contexts with more than one copper-alloy find show that concentrations of finds occurred in topsoil contexts (e.g. 202; 701;

901) or in deposits later than the Roman period that covered sizeable areas of the site (e.g. C416; C417). Other significant numbers of finds occurred in anticipated contexts such as the midden in Area B (C907) and the lower layer of the midden (C598) in Area A.

THE IRON

by Luke Barber ■

INTRODUCTION

The five seasons of excavation at the site yielded 6052 pieces of ironwork from 228 individually numbered contexts (Figs 255–8). These are fully quantified by year of excavation (Fig. 9) and general category in Table 12. It is very apparent that the assemblages from the different years vary greatly in size with the largest coming from the 1998 and 1999 seasons which were located to the north of the masonry building in areas used for rubbish disposal. It is interesting to note that the 1995-7 seasons, when excavation was located over the building, contain generally very small assemblages.

The ironwork from the site is generally in poor condition with extensive mineralization in many pieces and most being covered with thick corrosion products. As a result, the combined assemblage contains a large number of unidentifiable objects and/or fragments thereof which are completely hidden in amorphous lumps of corrosion products. In an attempt to rectify this a large selection of ironwork was x-rayed in order to ascertain its form and function. The samples x-rayed from each year were as follows: 1995 - 71 objects; 1996 - none; 1997 - 26; 1998 - none; 1999 - 111. Unfortunately, it became apparent during the analysis of the ironwork that the nature of the unidentified objects was rarely clarified by the x-rays if the object's form was not already discernible.

The main aims of the ironwork report can be summarized as follows:

- 1) to outline the size, nature and quality of the excavated assemblage
- 2) to help interpret the site, if possible, through the characterization of the ironwork assemblage and its chronological and spatial distribution.

METHODOLOGY

It is clearly apparent from a comparison between the totals of ironwork from all contexts (Table 12) and only sealed Roman contexts (Table 13) that the

majority of the ironwork assemblage from the excavations may contain medieval and later material. Although a considerable quantity of Roman ironwork is present in later (or reworked) contexts, only a few categories of material can be attributed to the Roman period in their own right. These categories include many handmade general purpose nails (Type 1 - *see* below), hobnails (Type 6) and a scattering of objects such as the water-pipe collars (*see* below). Most objects in these unsealed contexts are either of post-Roman origin (i.e. the horseshoes) or could belong to either period (i.e. knife blade fragments). Indeed, it is interesting to note the dramatic reduction in number of objects and 'unidentified' pieces (174 to 36 and 334 to 69 respectively) when only sealed Roman contexts are considered. This suggests that the majority of objects and 'unidentified' pieces in Table 12 are likely to be of post-Roman date and that the Roman assemblage itself does not contain a wide diversity of functional pieces. For this reason, although an overview of the material from these post-Roman contexts is given, the current report has concentrated on only sealed Roman contexts. These 130 contexts contain a total of 3247 pieces of ironwork of which 3010 are nails or nail fragments (Types 1-5) and 109 are hobnails (Type 6).

THE POST-ROMAN IRONWORK

The assemblage of ironwork which can be relatively confidently ascribed to the medieval and post-me-



Fig. 250. Late 1st- to 2nd-century brooch in the midden of Phase AF – number 8 in the Copper Alloy catalogue.

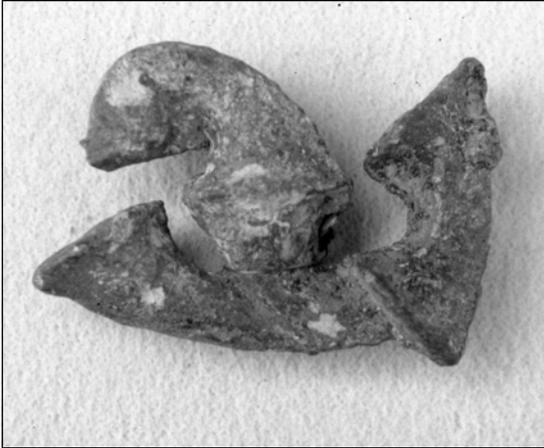


Fig. 251. A trumpet-shaped fitting from the topsoil in the 1998 season – number 32 in the Copper Alloy catalogue.

dieval periods contains a variety of objects. The most frequent type consists of horseshoe fragments of which at least 20 are present. These include both medieval and post-medieval types. Other related items include a horse bridle ring (context 501), an 18th- to 19th century rectangular framed harness buckle (context 701), a medieval leather stud in the form of a lobed flower (context 710) and a number of farrier's nails. The assemblage of identifiable objects has a heavy bias towards equestrian items, which suggests that the site has been subjected to fairly extensive bouts of arable cultivation, particularly in the post-medieval period. This would also explain the very mixed nature of the upper topsoil/subsoil deposits at the site and account for many of the intrusive objects in earlier Roman contexts.

Other material includes at least 15 knife or shear blade fragments which again may have originally been used during agricultural work. Items of a more domestic nature include a catch from a latched door (context 701), a pair of dividers (context 701) and fragments of three 'figure eight' buckles likely to be of the later medieval or early post-medieval periods (contexts 479, 701 and intrusive into 716: cf Museum of London Cat. Plate LXXVII, No. 8 for general type). A number of tool fragments, of indeterminate function, and clench-bolts (with or without roves) are also present. These objects may relate to nearby occupation but could equally be derived from domestic rubbish being spread on the fields during manuring.

THE ROMAN IRONWORK

The range of ironwork definitely attributable to the Roman occupation of the site is somewhat limited. Most can be broadly classified into general groups: nails (inc. hobnails), strips/sheeting/unidentified, four possible tools, two complete (and some fragments of) water-pipe collars, and other objects. 

CONTEXT TYPE AND DISTRIBUTION OF ROMAN IRONWORK

Although ironwork is present in most types of contexts at the site, from post-holes to road surfaces and robber trenches, the larger groups are confined to three main context types. These consist of contexts interpreted as midden/rubbish deposits, demolition layers or general layers with as yet no defined reason for deposition (though most are undoubtedly the result of disposal of domestic and/or

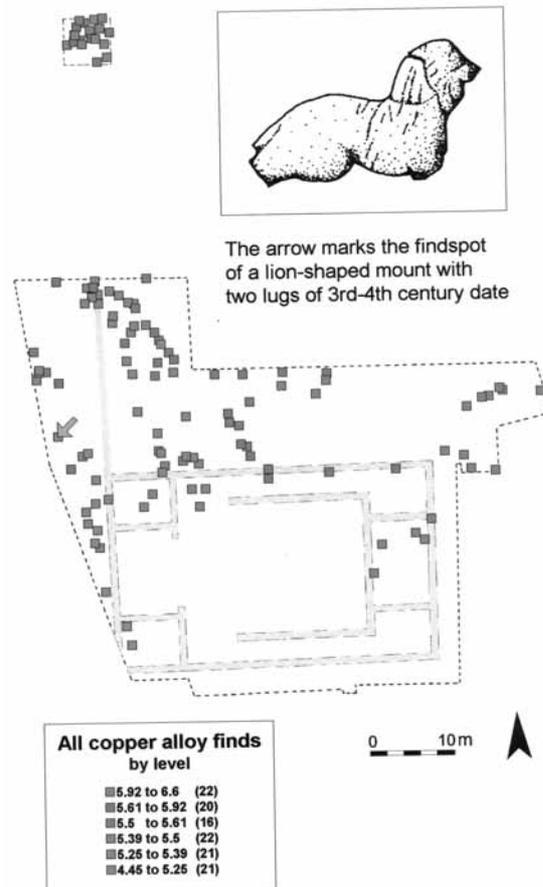


Fig. 252. Distribution of selected (see caption Fig. 172) Roman copper-alloy finds.



Fig. 254. Annie does some metal-detecting on boards on the spoil-heap. Metal detectorists worked with us every day from the 1997 season onwards.

Table 12. Ironwork quantification for all contexts.

Year	Incomplete nails/frags.	Complete nails	Hobnails	Objects	Sheet fragments	Strip fragments	Unidentified objects	No. of contexts
1995	46	2	-	10	-	4	9	16
1996	135	8	-	27	1	7	13	32
1997	542	30	10	51	13	9	82	32
1998	2890	37	86	23	17	4	85	74
1999	1493	97	78	63	12	23	145	74
Totals	5106	174	174	174	43	47	334	228

Table 13. Ironwork quantification: sealed Roman contexts only (excluding any contexts with intrusive later material).

Year	Incomplete nails/frags.	Complete nails	Hobnails	Objects	Sheet fragments	Strip fragments	Unidentified objects	No. of contexts
1995	7	-	-	1	-	-	2	7
1996	16	1	-	9	-	-	-	5
1997	75	-	1	3	-	-	-	12
1998	2138	28	73	13	10	1	46	54
1999	713	32	35	10	4	8	21	52
Totals	2949	61	109	36	14	9	69	130

demolition material). The general distribution of all nails is illustrated (Fig. 257). This follows the pattern for most finds' distributions. Nails that occurred higher up in the excavation were mostly over Building 3. Most of the nails were found to the north of Building 3, with the deepest nails, not surprisingly, being located in the stream. The spread southwards of the main concentration of nails slightly across the northern side of Building 3 is probably accounted for by medieval and post-medieval plough disturbance. The distribution of nails by context shows several concentrations (Fig. 258). Nail concentrations were found in deposits associated with the demolition of Building 3 (C557, C559), with the midden in Area A (C585, C558, and C598), with the greensand road (C512, C513) and with a layer above the midden in Area A (C507).

The 1995 and 1996 seasons produced no large groups and are indeed notable for their lack of ironwork. The 1997 season only produced one reasonably large group from a 3rd- to 4th century 'destruction' layer (context 443-upper stream fill, Phase AH). This group, although small in comparison to the 1998–99 seasons' groups, contains 42 nails (inc. fragments) (Type 1), one hobnail (Type 6), a corner bracket and six strip/unidentified pieces.

The 1998 season produced a number of much larger groups. These include 136 nails (inc. fragments) and six hobnails from context 512 (a 2nd- to 3rd century layer above the greensand road) and 142 nails (inc. fragments) and 10 hobnails from context 513 (a layer of similar date immediately

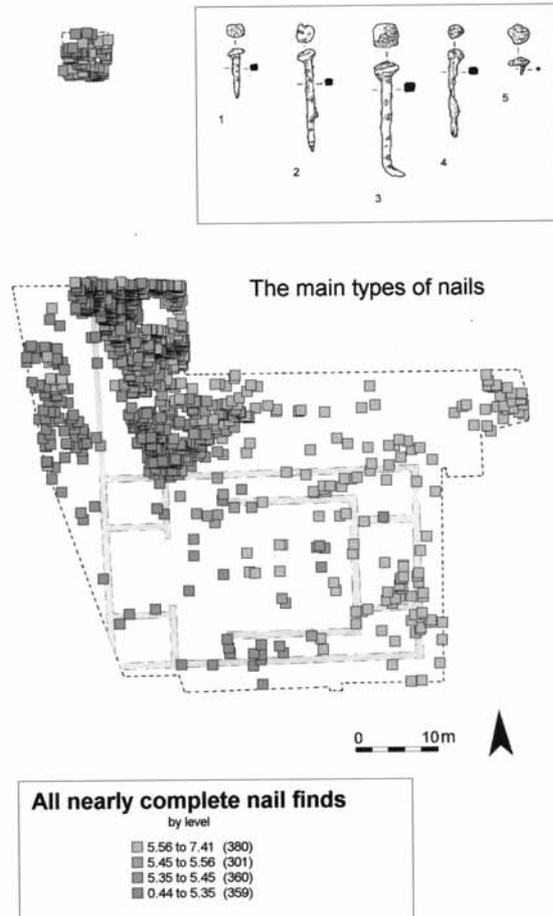


Fig. 257. The distribution of selected (see caption Fig. 172) nails.

south of the greensand road). A late 1st- to 2nd-century layer (context 585-midden Phase AF) produced 175 nails (including seven Type-2 examples), two hobnails and a key bit (*see* above). However, the largest group is from context 598 (1st- to 2nd century midden layer) which contains 369 Type-1, one Type-2, two Type-3, one Type-5 and one Type-6 (hobnail) nails. This assemblage is augmented by two key shank fragments, a fragmentary ?bracket, a wall-hook fragment, two blade fragments, five sheeting fragments and five unidentified amorphous lumps. Two layers interpreted as resulting from demolition also contain large groups. Context 557 (dated 2nd to early 3rd century; demolition of Building 3, Phase AG) contains 258 nails (inc. fragments) of Type 1, three of Type 2, one of Type 6 and only three other objects (all unidentifiable lumps). Context 578 (dated 3rd to 4th century; above the infilled stream), also interpreted as a demolition deposit, has a notably smaller assemblage of nails consisting of 25 Type 1, one Type 2 and two Type 6 but no other objects. As such, if this is a demolition layer, it is likely to relate to a structure, or part thereof, which did not contain many iron fixings. Two ‘midden’ deposits containing high quantities of ironwork are also present. The first of these, context 558 (containing late 1st- to early 3rd-century pottery; midden, Phase AF), is of a similar date to context 557 and it is probable that they are related: the 253 Type 1 nails, two Type 2 and one Type 6 in context 558, along with seven sheet/undiscovered fragments, gives a similar assemblage profile to that from C557. The infill of the aqueduct ditch (context 535: containing late 1st- to 3rd century pottery) contained 90 Type-1 and four Type-6 nails as well as two unidentified pieces.

The 1999 season produced less material, particularly nails, than that of 1998. Only two large groups are present, both from Area B. The largest, from a midden deposit containing late 1st- to 2nd century pottery (context 905), perhaps gives one of the most diverse assemblage of ironwork from any one secure Roman context at the site. In addition to the 190 Type-1, two Type-2, three Type-5 and three Type-6 nails a number of objects were also located. These include a fragment from a ?punch, a wall hook, a stylus (*see* above) and a number of sheeting/undiscovered fragmentary objects. Context 907, the lowest layer of the midden (Phase BE) contained 137 Type-1 nails and four fragmentary items from larger objects only.

DISCUSSION

The assemblage of Roman ironwork from the site is limited in its variety: by far the majority consisted of nails. Taking the group from secure Roman contexts as a whole, two initial observations become apparent. Firstly, there is generally very little ironwork in 1st century contexts and secondly there is very little ironwork from the first three seasons’ excavations (1995–97). The small quantity of ironwork from 1st century contexts is likely to be partly due to the lack of extensive earlier occupation providing a spread of material for residual incorporation into the deposits. However, the general lack of ironwork from the first three seasons is more interesting in that the area investigated in these years equates with the area of the building. This negative evidence, even notable in the robber trenches, suggests that if the building comprised much timber within its construction it was not simply left to decay but rather subjected to a systematic and comprehensive dismantling with material being removed from the area for reuse elsewhere. The virtually complete absence of Type-2 structural nails and other fixtures and fittings tends to reinforce this theory. The paucity of even general purpose (Type 1) nails in the area may also suggest that the building was not in use for any length of time as one would expect a general scatter of nails etc. from repair and maintenance work. Alternatively, the building may have been kept scrupulously clean, and any associated debris from maintenance works completely removed.

The 1998–9 excavations, to the north of the building, produced large quantities of ironwork, particularly nails. Although larger groups of ironwork are found in contexts of different dates, none are found in purely 1st century deposits, with the bulk coming from deposits dated to the 2nd to 3rd centuries. It is possible some of this material was derived from the building to the south if this area was used for ‘temporary’ storage and preparation of reused building materials. However, the presence of the post-hole alignments in this area suggest it is perhaps more likely the ironwork relates to these structures: a high percentage of the post-hole fills of row 5 contained nails. Alternatively, much of the ironwork in this area may have been dumped here as a result of later disposal from other, more distant, parts of the site (Figs 257, 258).

The post-Roman period is represented by a much wider array of ironwork. However, the general bias is toward items related to agriculture. It appears from

this material that cultivation occurred on the site in the past during both the medieval and post-medieval period. This would probably have resulted in the rediscovery of any surviving masonry from the foundations of the Roman building during ploughing and may account for the possible secondary medieval robbing of the Roman foundations during the medieval period as suggested by the pottery.

METALWORKING RESIDUES

by Luke Barber

The site did not produce a particularly large assemblage of metalworking residues: a total of 419 pieces, weighing 9869g, from 65 individually numbered contexts. The material falls within one of five categories: iron smelting slag, iron forging/smithing slag, fuel ash slag, blast furnace slag and furnace/hearth lining. The material from all contexts on the site is quantified by year and category in Table 14.

All metalworking residues were quantified using count and weight by category per context, with this information being recorded on pro formae in the archive. Owing to the fact that most metalworking waste is not diagnostic of date, especially prior to the post-medieval period, a similar approach used in the study of the ironwork was adopted for the metalworking waste: a second quantification, using only secure Roman contexts with no intrusive material (as attested by the ceramic evidence), was undertaken to screen out possible medieval and post-medieval metalworking waste. The results of this second quantification are shown in Table 15.

A total of 164 pieces of slag, weighing 5149g from 43 individually numbered contexts was therefore recovered from secure Roman contexts. As would be expected, the presence of the glassy blast furnace slag (which is post-medieval in date) was eliminated by the screening. This material was commonly used for road-making in the county during the post-medieval period and as a result it is often found well outside the area of Wealden iron production and its presence at Fishbourne is not therefore surprising.

All other categories of metal-

working waste are present in secure Roman contexts. The dominant type is forging/smithing slag from secondary working of iron in a blacksmith's forge. Two examples are plano-convex 'cakes' of slag which probably collected at the bottom of the hearth (forge bottoms) while the majority consists of irregularly shaped lumps. The two probable examples of forge bottoms from the current site consist of two conjoining pieces (220g) from the 1st century road surface (context 717 – Phase AE) and three conjoining pieces (662 g) from a 1st century pit fill (context 918 – Phase BC). The former example has a roughly circular diameter of 75 mm while the latter is lozenge-shaped and measures 120 × 80 mm by some 40 mm thick.

In addition to the forging slag there is also a small quantity of fuel ash slag. This material, which is always in small irregular lumps at the current site, forms when silicate materials such as clay are strongly heated in contact with the ash of a fire causing them to flux and produce a lightweight, often glassy, vesicular slag. Although not diagnostic of process on its own (it can equally be formed in lime-burning etc.) its presence alongside iron-forging slag suggests it is probably an additional residue from the forging process. Likewise, the possible fragments of furnace/hearth lining, which consist of fired clay with fuel ash slag adhering, are probably from forging hearths. The single piece of smelting/tap slag from context 905 may have been accidentally imported to the site with a consignment of iron for

Table 14. Metalworking residues quantification (no./weight in grams) from all contexts.

Year	Iron Smelting	Iron Forging	Fuel Ash	Blast Furnace?	Furnace Lining	No. of Contexts
1995	-	8/110	-	-	-	1
1996	-	16/255	-	-	-	1
1997	-	7/120	-	-	-	4
1998	-	57/2454	26/230	-	15/562	22
1999	1/14	207/5442	47/501	34/161	1/20	37
Totals	1/14	295/8381	73/731	34/161	16/582	65

Table 15. Metalworking residues quantification (no./weight in grams) from sealed Roman contexts only.

Year	Iron Smelting	Iron Forging	Fuel Ash	Blast Furnace?	Furnace Lining	No. of Contexts
1995	-	-	-	-	-	-
1996	-	-	-	-	-	-
1997	-	2/40	-	-	-	1
1998	-	53/2100	25/225	-	15/562	19
1999	1/14	48/2082	19/106	-	1/20	23
Totals	1/14	103/4222	44/331	-	16/582	43

the smithy.

The Roman metalworking waste at the site was found in many different types of contexts. These include road surfaces (i.e. context 717), demolition layers (ie context 726 – Phase AH), general layers (ie context 778) and pit fills (ie contexts 824, 909 – Phase BF, 917 and 918 – both Phase BC). No very large groups of metalworking waste are present in individual contexts. The following contexts contained the largest groups: context 576 (1st- to 2nd century post-hole fill – Phase AE) - five conjoining pieces of forging slag (290g); context 604 (late 1st to 2nd century fill of aqueduct – Phase AG) - two pieces of furnace/hearth lining with adhering fuel ash slag (92g) and five conjoining pieces of forging slag (44g); context 624 (1st century pit fill – Phase AE) - 12 pieces of furnace/hearth lining (434g) and 22 pieces of forging slag (830g); context 626 (late 1st- to 2nd century robber trench fill – Phase AC) - 16 pieces of fuel ash slag (180g); context 778 (1st century layer – Phase AD) - 16 pieces of forging slag (370g); context 918 (1st century pit fill) - one piece of fuel ash slag and three fragments from a probable forge bottom (*see above*).

Small quantities of forging slag are frequently



Fig. 260. A lead die, formed from an irregular cube, from the topsoil in the 1999 season.

found on sites of Roman date and as such, this material is not unexpected here. However, what is clear from the current assemblage is that a large proportion of it was located in 1st century contexts. This total includes both probable forge bottoms (contexts 717 and 918) and the largest single group of forging slag and furnace/hearth lining (context 624 – Phase AE). As such, it seems reasonable to conclude that the metalworking residues at the site are probably primarily the result of 1st century smithing undertaken to produce fixtures and fittings for the construction of the excavated building, or the Palace across the stream. The relatively small size of the excavated assemblage suggests this smithing did not actually occur within the excavated area, although the slight concentration of slags and hearth-linings in pit 624 suggest that smithing is likely to have taken place somewhere in the vicinity. The metalworking residues in post-1st century contexts may simply be the result of the reworking of earlier deposits.

PEWTER

by David Dungworth 
(3 fragments)

LEAD OBJECTS

by David Rudkin 

Of the 7.624 kg of lead recovered from the excavations, the vast majority, 4.869 kg, comprised irregular lumps and dribbles, demonstrating the extensive use of this easily worked material. Of the remainder, 1.42 kg had been formed into sheets, strips or rods, cut, bent or rolled, while 0.72 kg had been manufactured into more recognisable artefacts (13 fragments) (Figs 259, 260, 261).

DISTRIBUTION

It is noticeable that the majority of objects listed above come from contexts (Figs 261, 262) that are post-Roman in date, suggesting either that Roman lead objects are residual, or that many of the objects are of medieval or later date. The only dated Roman context in the list above is 905 from Area B. The putative later date of many of the lead objects can be suggested also from the distribution of all recorded lead small finds. These, by and large, were found in higher levels above Building 3, and redeposited in the stream. There are noticeably fewer

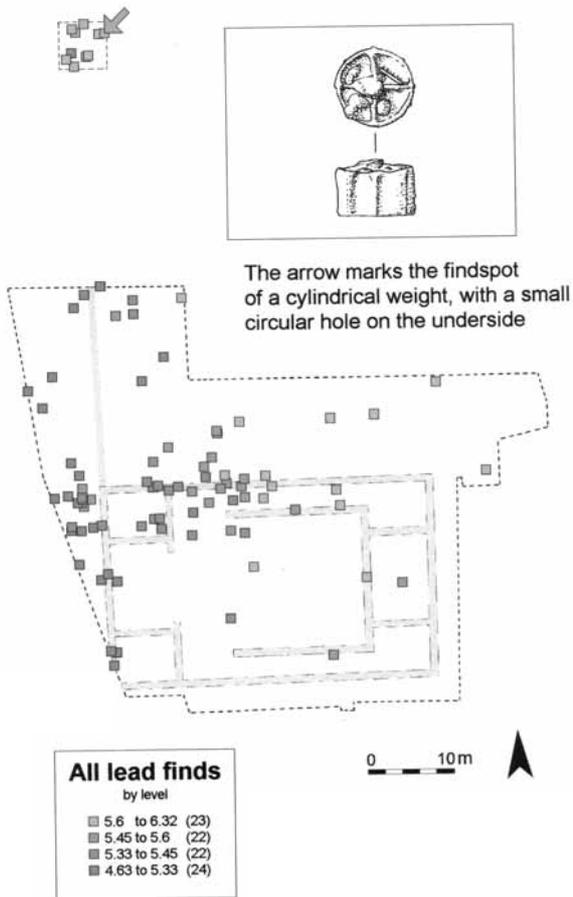


Fig. 261. The distribution of selected lead finds.

lead finds at the northern end of Area A, where the heaviest concentration of most small finds of Roman date occurs. The bar chart indicating the

distribution of lead finds by contexts indicates concentration in general upper layers overlying Building 3 (e.g. C416; C417; C424) or topsoil layers in Area B (C903; C904).

GOLD OBJECTS

by David Rudkin 📖 ■

With the exception of a gold quarter stater of Tincomaros, (SF11914, context 900) which is reported on separately under 'Coins', there were only two items of gold recovered from the excavations (Fig. 263).

WORKED BONE

by David Rudkin 📖 ■

Fourteen items of worked bone were found during the excavations, the majority of which were bone pin fragments (Fig. 264).

DISTRIBUTION

In contrast to the distribution of lead small finds, these five worked bone objects all come from securely dated Roman contexts.

WORKED SHALE

by David Rudkin 📖 ■

Only two artefacts of shale were recovered from the excavations, both from Roman contexts (Fig. 265).

CLAY PIPES

by David Atkinson 📖
(Figs 266, 267)

