SUSSEX ARCHAEOLOGICAL COLLECTIONS

RELATING TO THE HISTORY AND ANTIQUITIES
OF THE COUNTIES OF EAST AND WEST SUSSEX

VOLUME 131

PUBLISHED BY
THE SUSSEX ARCHAEOLOGICAL SOCIETY
LEWES

1993

ISSN 0143–8204

Published by the Sussex Archaeological Society, Bull House,
Lewes, East Sussex BN7 1XH.

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PRINTED IN GREAT BRITAIN BY
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May 1993

ABBREVIATIONS

used in References and Notes in this volume

Add. MS.	Additional Manuscript
Antiq.	*Antiquarian, Antiquaries, Antiquities*
Arch.	*Archaeologia, Archaeological, Archaeology*
Assoc.	*Association*
B.A.R.	British Archaeological Reports
Coll.	*Collections*
Edn.	*Edition*
Geog.	*Geographical, Geography*
Hist.	*Historical, History*
Inst.	*Institute*
Jnl.	*Journal*
Mag.	*Magazine*
NGR	National Grid Reference
N. & Q.	*Notes and Queries*
O.S.	Ordnance Survey
Prehist.	*Prehistoric*
Proc.	*Proceedings*
Rec.	*Record*
Repr.	*Reprinted*
Sci.	*Science*
Ser.	*Series*
Soc.	*Social, Society*
Suss.	*Sussex*
Univ.	University
V.C.H. Sussex	*Victoria County History of Sussex*
Vol.	Volume

Sussex Archaeological Collections **131** (1993), 1–20

IRON AGE AND ROMAN LITTLEHAMPTON

by Oliver J. Gilkes
with a contribution by Malcolm Lyne

INTRODUCTION

During the post-war period the town of Littlehampton underwent a period of substantial growth, a process which has continued up to the present. During this development a great deal of damage was sustained by the local archaeological heritage. The work of salvaging at least some information was left to a group of local archaeologists, notably Mr G. Cutler and Mr C. F. Blick, without whom the loss of knowledge that occurred would have been a great deal more thorough than it actually was.

Two principal sites were examined: the former Royal Naval Air Station housing estate, where Gosden Road now exists, between 1949–50, and the Wickbourne housing estate from 1950 onwards. Both sites produced evidence for occupation from at least the Iron Age, but were never published.

The finds were stored in Littlehampton Museum, in a dispersed state. What follows is largely based on an unfinished manuscript by Mr Blick, which means that this paper is, to some extent, a work of editorship. Nevertheless the opportunity has been taken to update the report and to add new material. Finally I would like to take the opportunity to dedicate this paper to the memories of George Cutler and Francis Blick without whom our knowledge of ancient settlement in the Littlehampton area would be much the poorer.

THE GOSDEN ROAD VILLA (Fig. 1)

Two plans and a typescript by C. F. Blick survive giving details of this site. The site (TQ 0395 0260) had been bulldozed before Mr Cutler was able to begin work, removing all but intrusive features and wall foundations. The technique used was to plan the visible features and to explore the underlying stratigraphy via a series of trial trenches. At least six were dug in the short time allowed, although unfortunately it is no longer possible to plot their positions or the relationship of trench to trench. The finds are marked, but their numbering and that of the features on the two plans differ. Nevertheless an attempt has been made to provide a tentative sequence for the site.

PERIOD I

Pit 9 and ditch H both produced pottery of early 1st-millenium B.C. type. The surviving sherds fit well into Cunliffe's (1978, 38) Park Brow tradition, dated to the 6th to 4th centuries B.C., although this is now known to have its origins during the Later Bronze Age. The excavator was of the opinion that ditch H might have been part of a gully surrounding a round-house. Other sites of this date are known nearby (Bedwin 1979, 255; P. Hammond pers. comm.).

PERIOD II

Pit 10 contained Middle Iron Age saucepan pots. This type of vessel is now known to have a long development ranging from the 4th to the 1st centuries B.C. (Champion 1980, 49). Although little remains of these vessels, the decorative style is more in keeping with Cunliffe's (1978, 43) Saint Catherine's Hill group, than with the more local Caburn/Cissbury style. The pit also seems to have contained some grog-tempered sherds of pottery of Cunliffe's (1978, 89–92) Eastern Atrebatic tradition, which might indicate either the residual nature of the deposit or a date in the early to mid 1st century B.C. Ditch J also contained saucepan pottery of 4th- to 1st-century date. This feature had been backfilled with brickearth, and in its eastern stretch domestic debris was sealed by a layer of carbonised grain.

It would appear that this phase probably dates to the Late Iron Age, 100 B.C. onwards, although an earlier start to this stage of occupation, at some point during the Middle Iron Age, is not impossible.

PERIOD III

A large irregularly-shaped pit (Pit 11) produced a quantity of domestic and building refuse. The pit had been dug into ditch J and the dump of rubbish sealed by a layer of brickearth and above this large flints. The fill of this feature consisted of broken

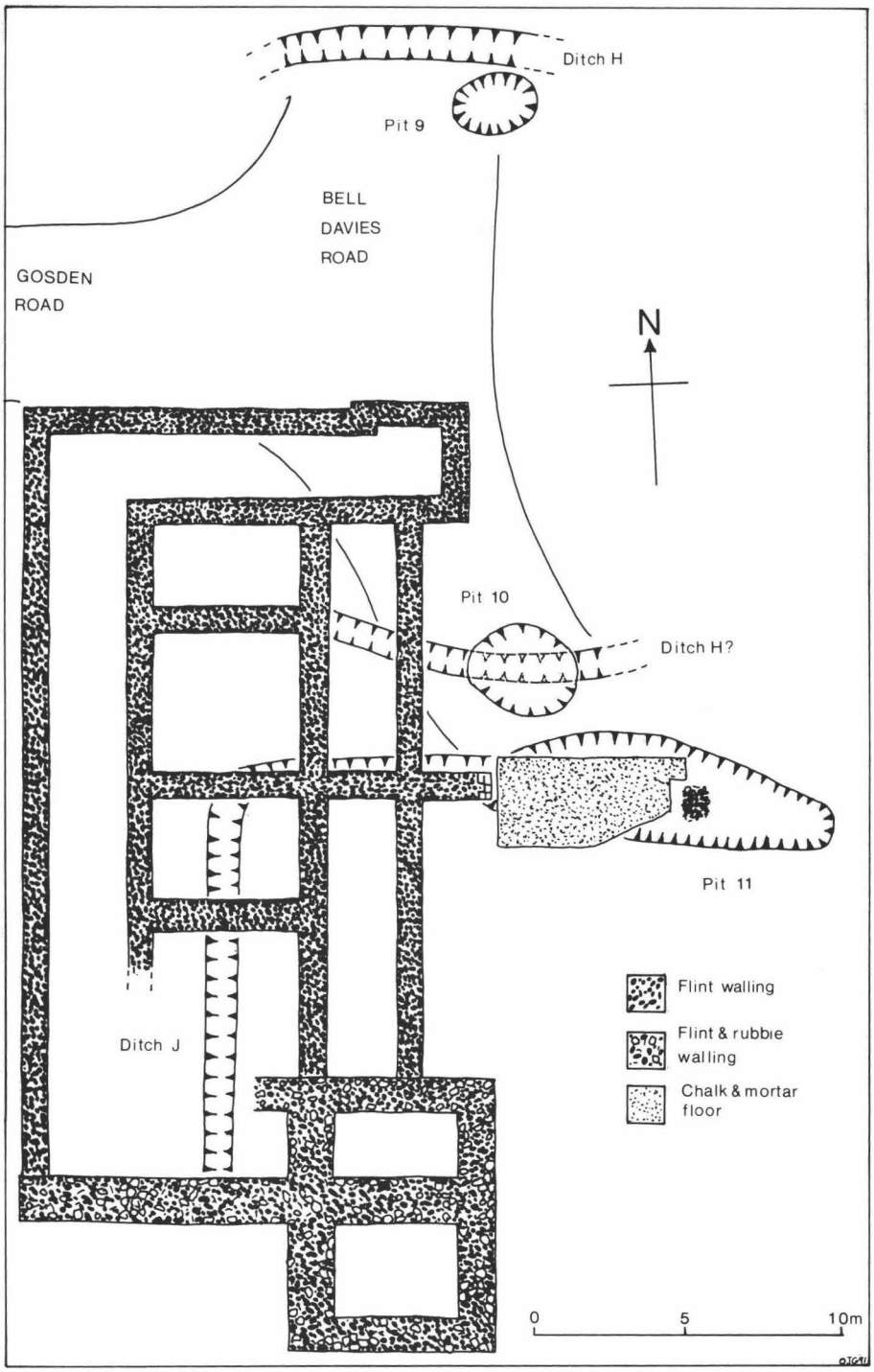

Fig. 1 Gosden Road site.

tiles, large tile and chalk tesserae, shells, iron nails, bronze objects, glass and bone. The Samian contained within the pit is datable to the mid-late 2nd century and none of the other pottery need be much later than this, although earlier types were present. A sherd of Terra Rubra and one of Terra Nigra suggest occupation by at least the mid 1st century.

The nature of the site at this stage is problematic. Only one feature appears to have been excavated and the fill suggests the clearance of building rubble and other debris. This may point to the demolition of a nearby building and the clearance and levelling of the site, possibly for a period of reconstruction. The excavator was of the opinion that the material in Pit 11 resulted from alterations being undertaken in the villa building itself. While this is possible, a fairly early date for this structure would then be feasible. However, it seems unlikely to this writer that the rebuilt villa would be extended straight away over a disturbance such as pit 11, as it did at a later date, or that the rubbish would be disposed of in such close proximity to the building. For my own part it seems preferable to regard the fill of Pit 11 as the remains of an earlier, possibly less substantial farmstead, demolished to make way for the villa building, and later levelled up to produce a cobbled surface.

PERIOD IV

During this period a small masonry building was constructed. This had been badly damaged during development; only the wall footings of mortared flint set in deep V-shaped foundation trenches survived. The structure was probably timber framed on dwarf walls, and may have had a tiled or thatched roof.

The building consisted of a range of four rooms running north–south. A corridor ran along the western side and also on the northern and southern ends. This corridor ended in a wing room on the north-eastern side of the building, and possibly originally also on the south-eastern, although any trace of this had been removed by later rebuilding. A further corridor along the western side completed the basic structure.

There is no direct dating evidence for the construction of the villa, and Pit 11 may or may not provide a *terminus post quem* of uncertain value. However a mid to late 2nd-century date would seem likely.

PERIOD V

The basic villa building later underwent a series of alterations and additions. It is not certain what the exact sequence of alterations was, or indeed if there was more than one phase.

At some point after the completion of the building an east–west wall of flint construction was added which effectively divided the eastern corridor into two sections. This wall projected for a short distance beyond the outer eastern wall of the villa before terminating. Its end seems to have been finished with tiles or stone slabs to produce a quoined effect.

Other modifications were more drastic. The southern end of the villa was demolished, and replaced with a new structure founded on wide footings of flint and rubble set in wide shallow foundation trenches. A southern wing was erected with two small rooms, again with wide footings. The nature of the new southern wall suggests that some structural problems had been encountered which necessitated strengthening of the walls—possibly subsidence. The southern wing room poses a different problem. The wide wall footings could indicate that the whole of this structure was intended to act as a buttress to the southern wall. Another possibility is that there was a considerable vertical load, perhaps a tower structure of timber framed construction.

One final addition is represented by a feature constructed to the east of the projecting wall on the villa's eastern side. All that remained of this was a surface of rammed chalk and mortar with a short stretch of flint and rubble walling surviving on its eastern edge. This probably represents a small building associated with the villa and possibly of the same phase as the southern rebuilding.

The dating of Period V is uncertain. Although there is no direct evidence of post-2nd-century occupation on the site, the various modifications do suggest a considerable period of utilisation, possibly into the 3rd century. The paucity of extensive late settlement (later 3rd and 4th centuries) on the coastal plain is a notable feature of the settlement pattern. A number of causes and explanations have been advanced, from environmental deterioration to external military threats. However other explanations, such as changes in the nature of local society, and possibly even a largely aceramic phase, could also apply.

Thus despite appearances the occupation of the Gosden road villa may have continued until a late date. On the basis of the available evidence no more can be said.

PERIOD VI

The final activity on this site was the robbing of the building's superstructure. Robbing had occurred right down to foundation level, and the lack of any building debris or remains of roofing material suggested that the rubble had been removed for reuse elsewhere. A few small sherds of 2nd- to early 3rd-century date appeared to seal one of the wall footings. However, this stratigraphic relationship is extremely uncertain, and in any case this pottery could be residual.

A CREMATION BURIAL GROUP FROM GOSDEN ROAD (Fig. 2)

During the same building activity that uncovered the villa, at least one Roman cremation burial was disturbed. This was found during the cutting of a service trench some 76 metres west of the junction of Bell Davies and Gosden Roads at a depth of about 1 metre. Other pottery was observed in the sides of the trench. In a number of sources 'burials' are mentioned, although Cutler's notes refer only to one. The numbering of the finds still extant in Littlehampton Museum suggests the existence of two burials, and in the absence of contrary information the finds are described here as two groups; although this number should be considered only a guide. The accession number for all these is A1252. Numbers with an asterisk are illustrated.

Group 1

1*. Large pear shaped beaker in a sandy grey fabric.

2*. Pear shaped beaker in a fine sandy grey fabric with inclusions of black ironstone. Some of these are 'smeared' in a fashion reminiscent of the Rowlands Castle potting tradition. Below the neck the beaker is decorated with horizontal and diagonal burnished streaks.

3. A third vessel belonging to this group, larger in size than the others, contained cremated bone, but was unfortunately broken and discarded before recovery.

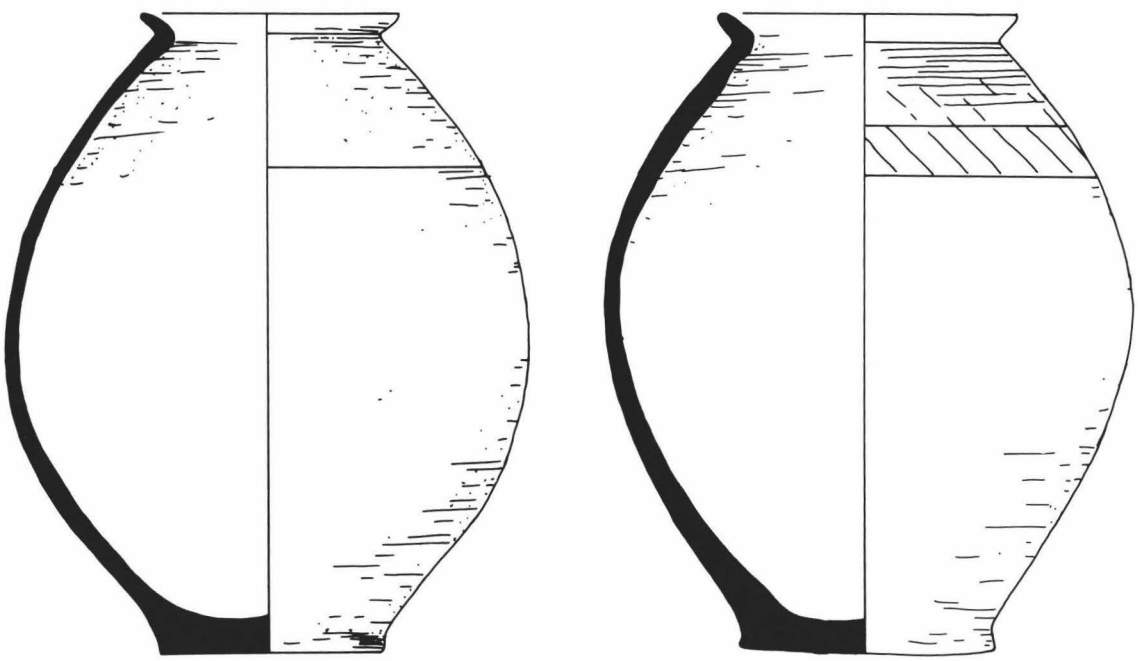

Fig. 2 Cremation burial vessels from Gosden Road.

Group 2

1. A Dr. 33 cup in an East Gaulish fabric with incised line around the outside, a mid-late 2nd-century product.
2. A Dr. 36 dish in a Lezoux fabric, with barbotine decoration around the rim. A mid-late 2nd-century product.

EXCAVATIONS ON THE WICKBOURNE ESTATE (Fig. 3)

During the construction of the Wickbourne Estate in the late 1940s and early 1950s a large number of archaeological features were uncovered. Rescue excavations in the area of Wick Farm Road (TQ 0238 0278) revealed a series of pits and enclosures dating from the 6th century B.C. to the 2nd century A.D. Recording and excavation was carried out in areas where topsoil stripping had occurred and a number of sections were dug across some of the larger enclosure ditches.

PERIOD I

Seven large pits were found. Pits 1 (Fig. 4, Section 4) and 2 and 4–6 were oval in plan and about 1 metre deep. These had been backfilled with domestic refuse, and from the numerous burnt horizons and hearths may have been used to burn rubbish or possibly for some industrial activity. A quantity of carbonised grain (seven bushels from the lowest horizon) was recovered from these layers (Arthur 1954; 1957). Pits 2–5 and 7 were subrectangular in plan and seem to have produced no indications of burning.

Three concentrations of burnt flint were found in association with the pits. Two of these were adjacent to Pits 1 and 6. It is conceivable that they may have been connected with the evidence of burning in the latter, possibly as part of some industrial process.

Ditch A (Fig. 4, Section 1) was a shallow feature to the south and west of the pit groups. It was 60 cm. wide and some 30 cm. in depth and traced an irregular course southward for at least 24 metres. The fill of this feature again produced evidence of burning where it was adjacent to Pit 1. This may indicate the contemporaneous nature of these two features. However, it was noticed that the ditch was at one point truncated by Pit 3, suggesting that the activity in this area occurred over an extended period of time.

All these features produced pottery datable to the early 1st millennium B.C., of similar type to Cunliffe's Park Brow/Caesar's Camp group. Traditionally this has been dated to the 6th to 4th centuries B.C. However, it is now apparent that this tradition originates in the later Bronze Age. The ceramics from the Wickbourne features are all undecorated, a characteristic which seems to become common in the Iron Age. This may suggest an earlier date for these particular examples.

PERIOD II

To the east of the cluster of pits another series of features was investigated. This consisted of some five postholes and a larger irregular pit. Blick was of the opinion that these represented part of a structure. While this is possible, the arrangement of the postholes is odd and would produce a strangely triangular shaped building. It may in fact be the case that the arrangement of features here is fortuitous.

The larger feature had been backfilled with domestic refuse including a weaving comb and pottery of Cunliffe's (1978, 43) St Catherine's Hill–Worthy Down group. This suggests a date of between the 4th and 1st centuries B.C.

Pit 3 also produced a few fragments of pottery, largely from one vessel, which seem to belong to this date. No further Middle Iron Age activity was recorded from Wickbourne, and indeed evidence of extensive settlement of this date in the Littlehampton vicinity is slender. However, this apparent lack may simply reflect the lack of fieldwork locally, or the continuation of earlier cultural traditions.

PERIOD III

A watching brief and limited excavation traced the southern and eastern sides of a rectangular enclosure ditch (B) (Fig. 4, Sections 1–3). No entrance was observed and this may have been on the western or northern sides. The southern stretch of the ditch was slightly irregular, having a northward kink about halfway along. The ditch itself was roughly V-shaped and averaged 1.21 metres in depth and 2.43 metres in width. It had been partly backfilled with domestic refuse and dumps of clay and brickearth.

The ceramics contained within the fill have a number of local parallels, particularly at Copse Farm (Bedwin and Holgate 1985) and North

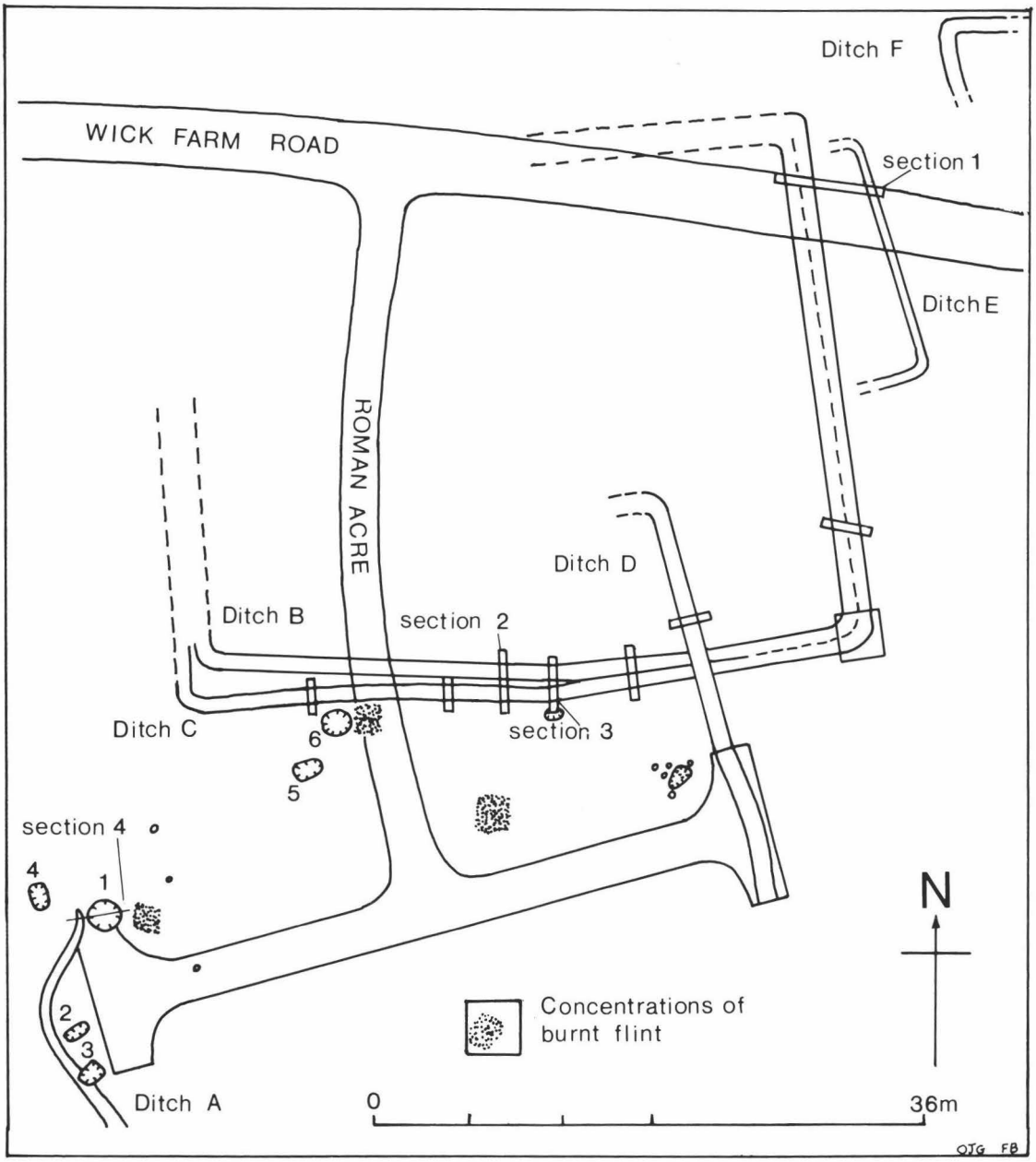

Fig. 3. Wickbourne Estate: archaeological features.

Bersted (Bedwin and Pitts 1978), and also sites such as Lancing Down (Frere 1940; Bedwin 1980). The assemblage from this ditch contains vessels with stylistic similarities to 'Aylesford-Swarling' and 'Southern Atrebatic' traditions but in contrast to the coastal plain sites to the west of the Arun there are also some examples of the grog tempered 'Eastern Atrebatic' tradition. The pottery assemblage from this ditch suggests a date in the early decades of the 1st century A.D. Among the surviving finds in

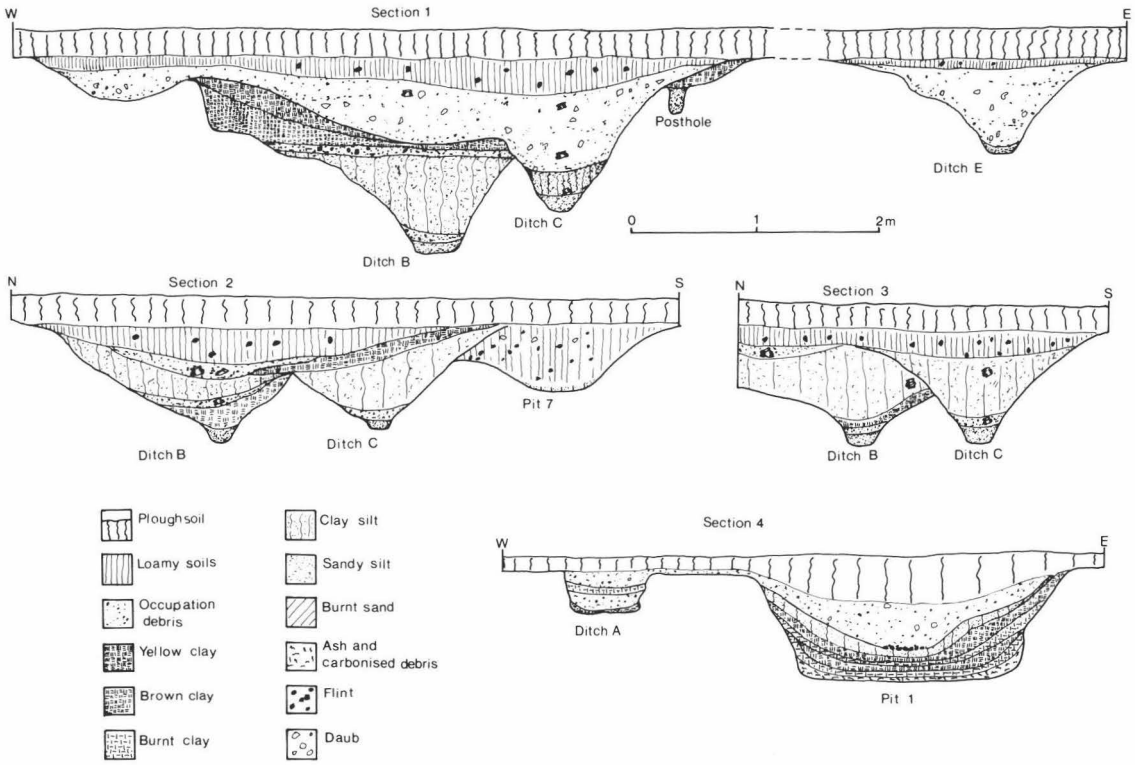

Fig. 4. Wickbourne Estate: sections.

Littlehampton Museum are some sherds of a saucepan pot, which are probably residual. Certainly ceramics of a later date predominate.

It was not possible to excavate within the enclosure so its purpose, whether for example a field boundary or building compound, is unknown. The presence of the refuse within the ditch fill might suggest the latter, but this is far from certain.

PERIOD IV

At some point in the immediate pre-Conquest period the enclosure ditch was recut. The new ditch C delineated roughly the same area as ditch B had done, with some slight discrepancies on the south western side. This new ditch was V-shaped and of roughly the same dimensions as its predecessor.

A number of dumps of occupation debris had been deposited within this feature. The pottery is an interesting assemblage containing a number of imported Gallo-Belgic vessels, with a possible date range of A.D. 18–45. The lack of any quantity of Samian ware may suggest that the ditch had been infilled before Samian imports reached Sussex in any quantity. The coarse wares tend to support this suggestion. There are certainly no forms which need be later than the mid-late 1st century A.D. The presence of some vessels with clear affinities to the 'Aylesford-Swarling' tradition in the assemblage lends credence to this concept.

Two sherds of Samian ware (Dr. 18/31) were found in the upper deposit of occupation debris in Ditch C. This could be taken to suggest an early 2nd-century date for the close of this deposit. However examination of the ditch profile strongly suggests the existence of another unrecognised feature here. At no other point where excavation occurred did Ditch C have this wide form. It is possible that the Samian is intrusive and may be indicative of limited activity on the site in the 2nd century.

The ceramic assemblage from Ditch C would then seem to span the immediately pre-Conquest and early Roman periods. If this hypothesis is correct then it is possible to postulate continuity of activity from Period III; the first time that this has been observed on the coastal plain. The suggestion of Bedwin and Holgate (1985, 241) that later Iron Age settlement in this area suffered a recession in favour of the Selsey/Chichester *oppidum* might be questioned on the basis of the Wickbourne evidence.

PERIOD V

Activity continued in the area even following the infilling and presumed abandonment of the rectangular enclosure. Three further ditches, D, E, and F, were observed. These ran on a different alignment to the early enclosure and in the case of Ditch B appeared to truncate and so seal the earlier features. Blick suggested that these three features might represent later field boundaries.

Unfortunately Ditch D produced no dating evidence, but the Ditches E and F produced some sherds of New Forest ware, as well as daub, giving a date for their period of use somewhere in the 3rd or 4th centuries. The contemporary nature of all three features must be questioned and it is possible that they might represent successive periods of activity. On the other hand it would be tempting to see them as part of a general reorganisation of field boundaries occurring in the late 2nd or 3rd century associated with the node of late Roman activity in Belloc Road to the north.

EXCAVATIONS IN BELLOC ROAD (Fig. 5)

Housing development to the north-west of the site in Wick Farm Road revealed further Roman features. Two ditches, G and H, possibly delineated field boundaries but were not traced for any great distance.

Ditch G to the south of Belloc Road produced a group of pottery dating to the early-mid 3rd century (see below). Although its full extent was not determined the western stretch was observed to run for 24 metres before making a turn southward. Ditch H, now under the junction of Belloc and Clun Roads, does not appear to have produced any closely datable finds.

In addition to the boundary ditches a series of three corn drying ovens and associated features were found. Oven 1 was found 11 metres to the north east of ditch G. It appeared to be of a double-flued type with a straight and L-shaped flue leading out from a firing chamber. Construction was simple with the oven being dug directly into the brickearth. No evidence remained to suggest the nature of a firing chamber.

The ceramics from Oven 1 formed a fairly coherent group which permitted analysis. This suggested a date of c. A.D. 280–350 (M. Lyne pers. comm.), making this feature later still broadly contemporary with ditch G.

Oven 2 was situated 152 metres to the west of Oven 1, and south east of Ditch F. Again this was of simple construction with a single flue, and possibly a T-cross flue. The main flue had been fired red and it is possible that it had been lined with clay. Equally however, the brickearth subsoil into which the cut for the oven was dug would also react in this fashion. The section seems to suggest that the oven may have been deliberately dismantled and possibly used for some industrial process. The datable finds were few. However, a BB1 jar and a beaded and flanged bowl suggest a date in the 3rd or 4th centuries.

To the north west of Oven 2 an area of different soil colour, roughly square and measuring approximately 2.8 by 2.7 metres, seemed to indicate an activity area or possibly a building. This feature appears to have had a slightly sunken bottom and a raised area 80 cm. by 1 metre on its north eastern side. The fill contained the fragments of a Rowlands Castle finger-impression storage jar, which has a wide chronological range. Also found here was a fragmentary millstone with clear indications of having had a mechanical drive.

Oven 3 was found at the northern corner of the junction of Belloc Road and Clun Road. Unfortunately this was destroyed before it could be examined.

A quantity of carbonised grain was found in the corn drying ovens. The results of an examination of this material have already been published (Arthur 1954; 1957).

Two further features, Pits 7 and 8, were found in proximity to Ovens 1 and 2. Although these were excavated they do not appear to have produced any datable finds.

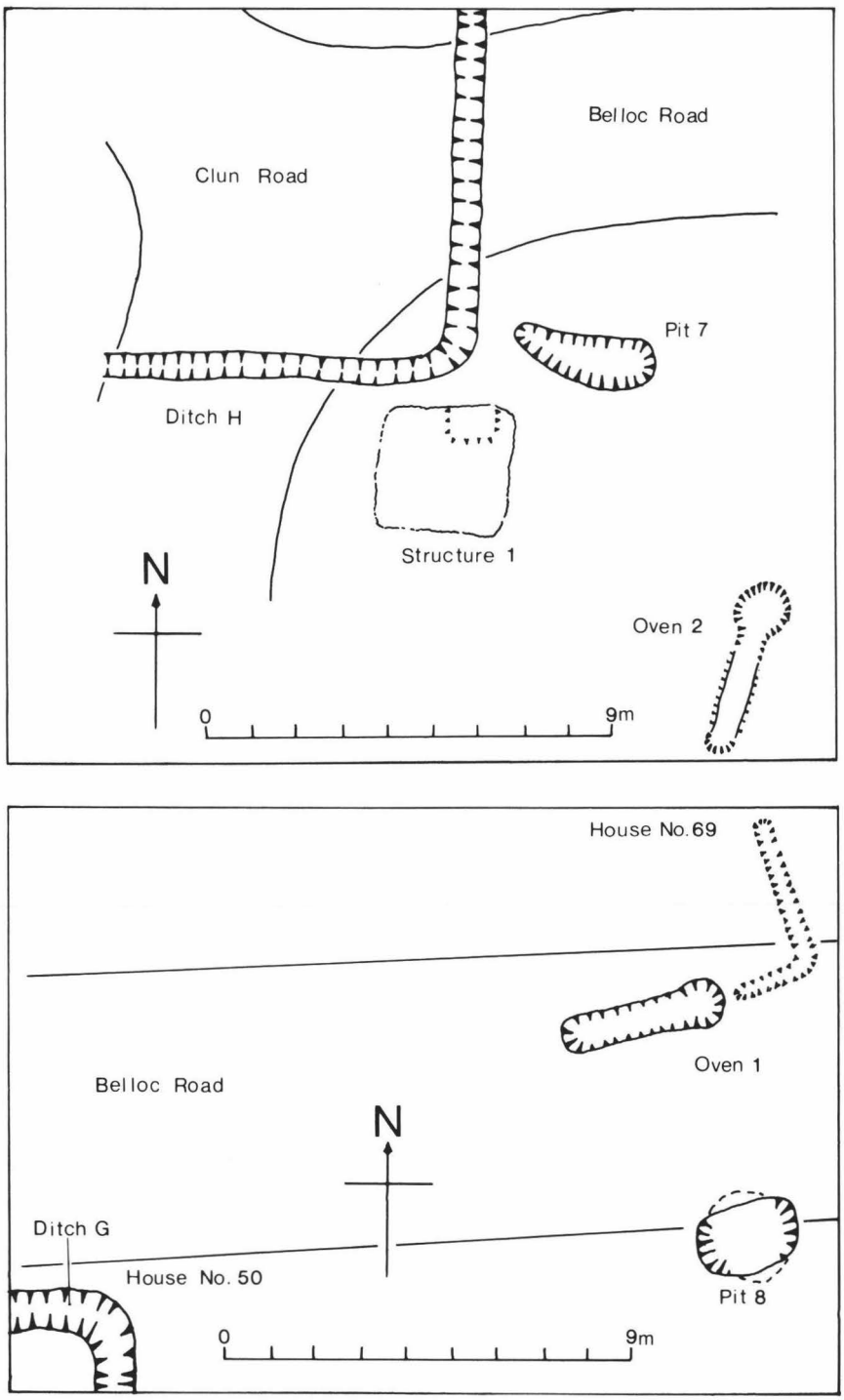

Fig. 5. Belloc Road: location of archaeological features.

GENERAL DISCUSSION

The sites described above represent only a small sample of the local later prehistoric and Roman settlement pattern. Salvage work undertaken on recent developments makes it abundantly clear that activity was intensive and settlements widespread. Given the fertility of the coastal plain soils this should not be surprising, and the existence of a landscape as clear and organised as that of today is highly probable. Forest clearance seems to have been an accomplished fact by the dawning of the Bronze Age. Evidence from the Rifes of the coastal plain indicates that the forests and woods once existing on their banks had been removed; certainly substantial quantities of timber are known from the lower colluvial deposits of those few which have been substantially sectioned, but are lacking from higher horizons (B. Wedmore pers. comm.).

The major factor affecting the settlement pattern was undoubtedly sea level change. The Littlehampton area is effectively a marine wetland, highly susceptible to changing base water levels. Settlement tends to concentrate on higher points of land, especially above the 5-metre contour. Marshland was once extensive and the streams and wetlands provided a series of rich environments for the exploitation of local inhabitants.

Earlier work in this area has suggested that settlement in the earlier 1st millenium B.C was sparse in nature (Bedwin 1983, 35). It is now apparent that this impression has been created by the unsystematic method in which evidence was recovered. A number of settlement sites are well known—at Wickbourne, Gosden Road, and Angmering, both beneath the Villa site and on a new site observed during development in Station Road. Occupation of these settlements seems to span the 6th to 4th centuries B.C. However, it is becoming apparent that the ceramic traditions represented here have an origin within the later Bronze Age (Sue Hamilton pers. comm.). This would provide a longer time span for this phase as well as filling a considerable lacuna in the settlement pattern of the coastal plain (Bedwin 1983, 34–35).

Whilst settlement sites are known, evidence for associated field systems is lacking. This may simply be due to the paucity of finds, making identification difficult. Nevertheless their absence is interesting and may suggest a relatively unenclosed agricultural system, in itself perhaps a reflection of a lack of depth to social structures. Certainly, the Wickbourne evidence shows clearly that cereal growing was a major activity.

The close proximity of several settlement sites to waterside locations suggests but does not prove the exploitation of the extensive wetland resources then existing. Judging by earlier (Bedwin 1983, 34) and later evidence, proximity to marshland was a major determining factor in the location of settlement.

Settlement continues in the second half of the 1st millennium, but there is a distinct paucity of evidence for intensive occupation. The only certain indications of activity come from Wickbourne and Gosden Road, but even here the traces are slight and may not imply permanent habitation. However, once again the disjointed nature of the archaeological evidence may account for this. Another possibility is the continuation of preceding cultural traditions, perhaps into the 3rd or 2nd centuries B.C.

The later Iron Age appears to represent a period of revival in the intensity of the settlement pattern. A much larger number of nodes of activity are known when compared with the middle centuries of the 1st millennium. Sites are known at Wickbourne; Gosden Road; Toddington (the Watersmead Industrial Park); North Lane, Rustington; and possibly on the Villa site at Angmering. Virtually all the evidence pertaining to these was recovered as the result of salvage operations, so definite statements are not really possible. However, from the limited information it appears that enclosures and extensive field systems were part of this pattern.

At Wickbourne it seems possible to be able to postulate occupation in the early decades of the 1st century A.D. (see above). This would seem to contradict Bedwin and Holgate's (1985, 241) suggestion of a hiatus in rural settlement on the West Sussex coastal plain at this time. It is of course possible that the wide Arun flood plain acted as a social boundary as has been suggested by Cunliffe (1973, 10–11), insulating the eastern parts of Sussex from changes further west, as well as providing a cultural frontier (Cunliffe 1978). This frontier was to some extent permeable, as can be determined from the mutual overlap of ceramic traditions from both banks (Sue Hamilton, pers. comm.).

Waterside locations continued to be important. The southern bank of the Black ditch is notable in this respect, but the enclosure at Wickbourne is also positioned to take advantage of lower lying land.

Initially the Roman conquest had little effect on the settlement and cultural pattern of the Littlehampton area. Both the Wickbourne and Gosden Road sites continued in occupation, and insofar as evidence is available so did other sites. The chief feature of this period is the apparent intensity of activity. Deposits of ceramics and other artefacts in archaeological contexts are noticeably richer than in later centuries. Quantities of early continental imports are known from Wickbourne, Gosden Road, Northbrook College and Angmering. What this material actually represents is problematic; is this the expenditure of wealth by the local aristocracy expressing an interest in Romanisation? Or possibly a material representation of the advantages accruing to the region under the aegis of the Regni?

Field systems are for the first time extensively known, and it is possible to reconstruct a landscape intensively subdivided around a series of farmsteads, including Wickbourne and Gosden Road, but also introducing other sites: Toddington (Watersmead Industrial Park), Courtwick, and the buildings and yard surfaces found on the Beaumont Estate (Blick 1969, 114–5 and information in Littlehampton Museum). It is interesting how few of these sites developed into more elaborate complexes of masonry buildings. Only Gosden Road and further east Northbrook College, eventually saw the erection of 'Villas'.

The utilisation of waterside locations continued. Evidence from the Rustington By-pass construction suggests net fishing in the tributaries of the Arun. It is possible that water milling also occurred in this area. Certainly a substantial deposit of quern- and mechanically-driven millstones were also discovered in a waterside situation, possibly associated with a timber building (information: author). Waterside sites also seem to have provided frequent opportunities to act as refuse tips. At least two sites in the Littlehampton area, and others elsewhere in West Sussex, have produced substantial deposits of ceramics and other domestic rubbish (Pitts 1979, 76).

The frequent watercourses and the Arun in particular may also have acted as highways (Black 1987, 13 and Lyne below). The "Villa" at Angmering was deliberately placed in close proximity to the Black Ditch and possible canalisation works were carried out (information: author). This complex of buildings differs markedly in arrangement from what is known of the other early villas of Sussex, while reflecting their elaboration in at least one of its structures. It is suggested here that far from being a Villa, Angmering was intended to serve as a local centre for this area of the coastal plain. Further work is now urgently required on this important but plough-damaged site.

A marked change in the settlement pattern appears to occur at the end of the 2nd century. The extensive deposition of artefacts of all kinds which characterised the preceding century and a half ceased; the site at Wickbourne may have been abandoned, and the Gosden Road settlement seemed to suffer a similar fate. Other evidence for abandonment can be seen at Angmering (Scott 1938, 22), and the possible settlement at Darlington Nurseries (Rudling 1990, 13). The Villa at Northbrook College shows little sign of intensive occupation after the last decades of the 2nd century, although activity here may continue into the 3rd century (Frere 1983, 333).

Later settlement is difficult to pin down. Industrial reuse of buildings, possibly in conjunction with a small Villa complex, occurred at Angmering in the 3rd century (information: author), and at Wickbourne a new field system was laid out over the top of the Iron Age and early Roman enclosure, also during the 3rd century. This appears to have been associated with a node of settlement found in Belloc Road to the north. Here corn drying ovens were in use and mechanical milling seem to have been occurring into the 4th century. Beyond this there is only one late 3rd- or 4th-century cremation group from Littlehampton and a scatter of coins and occasional sherds of pottery to indicate that some form of activity was still occurring.

The reasons for this sudden change are still elusive. A change in the social pattern leading to the concentration of land ownership in the hands of a few has been suggested (Rudling 1990, 18). However the centre of such a concentration of wealth is as yet unknown. Another possibility is the well-worn explanation of political instability,

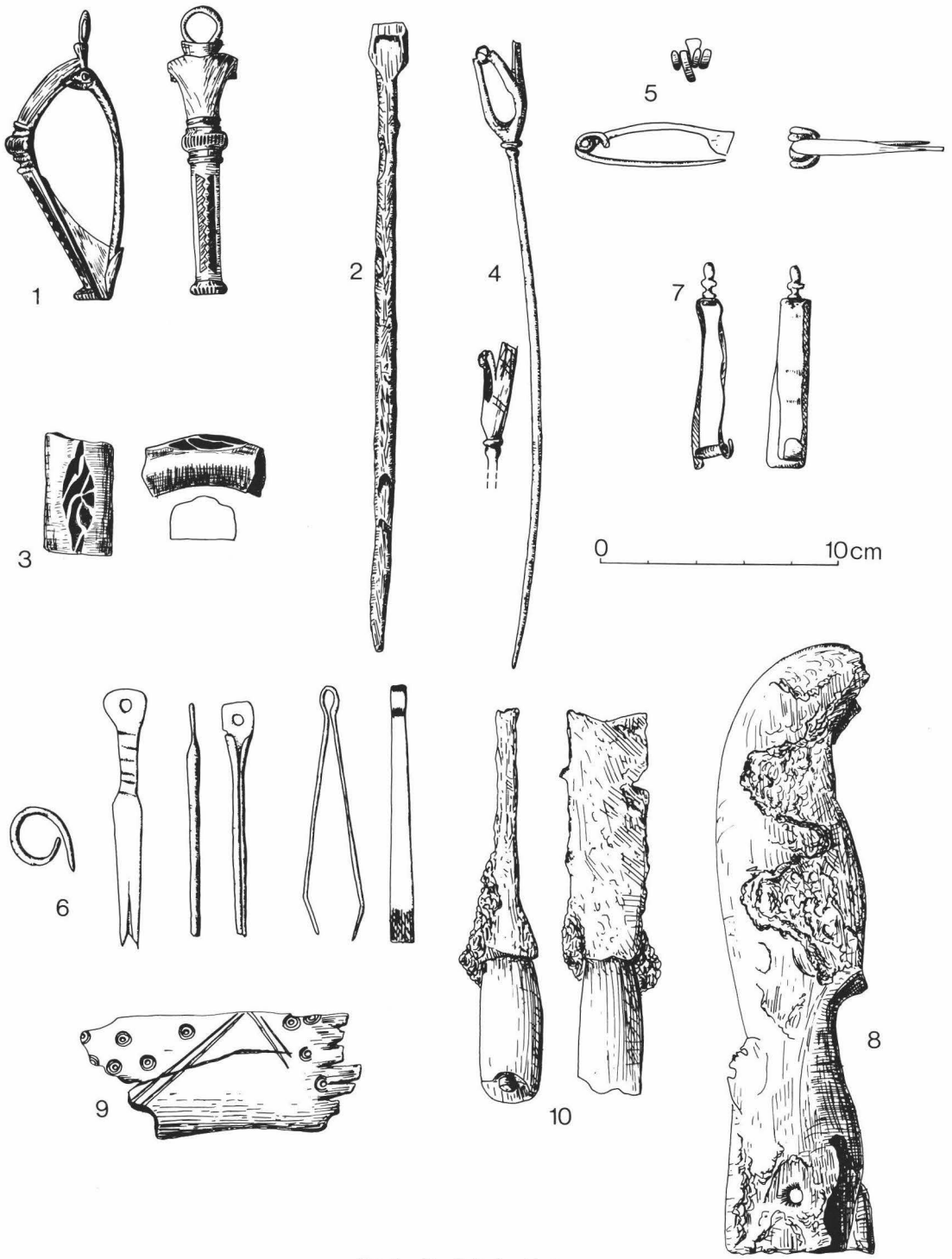

Fig. 6. Small finds: all sites.

although this seems to be somewhat out of favour of late. A further hypothesis is that of environmental deterioration. Sea level rises have been postulated elsewhere in Britain during the 3rd century (Cunliffe 1973, 69–70; Potter 1981, 128) which would certainly have had an adverse effect on the low lying coastal plain. Unfortunately this suggestion is now at variance with the well established sequence of water frontages at London, where transgression seems to have followed regression in or after the mid 4th century. It is interesting though that in an annoyingly inconclusive note C. F. Blick mentions evidence of water-deposited silts overlying part of the Wickbourne settlement (Archive in Littlehampton Museum, D1740).

As far as is known none of the few later Roman sites shows convincing evidence of occupation after the 4th century. In fact the later Saxon and medieval settlement patterns were organised on a markedly different basis, although still affected by the same factors of environmental determination that applied to earlier occupation. Much more work is required before the transition from Roman to Saxon in this area of Sussex is understood.

THE SMALL FINDS (Fig. 6)

A number of the small finds recovered from the excavations at Gosden Road and Wickbourne are no longer extant. Fortunately, drawings were made by Francis Blick and these have been adapted and are used here.

Finds from Gosden Road

1. Bronze trumpet brooch of Collingwood's type Riii. Decorated on leg of the bow with a fixed chain loop cast onto the head. Probably early 2nd century. Pit 11.
2. Iron stylus. Pit 11.
3. Fragment of a green glass bangle or handle, decorated with applied blue and white glass. Pit 11.
4. Tinned bronze pin with a head in the form of a stylised human (right) hand holding a ring. Possibly originally part of a pair? Pit 11.
5. Bronze fibula of Collingwood's type A2. Pit 11.
6. Set of bronze manicure instruments, tweezers, nail cleaner, and ear pick, with a bronze suspension loop. Pit 11.
7. Bronze object, possibly a case or container. Fastened at one end with an iron rivet. Bronze attachment affixed to one end. Originally another item, now missing, may have pivoted on the iron rivet. Pit 11.

Finds from Wickbourne

8. Iron bill hook, with a socket for a haft and pierced for fixing with a nail. From Period II "structure".
9. Bone weaving comb with six teeth. Decorated with a series of concentric circles and scored lines. From Period II "structure".
10. Small tanged iron knife with a bone handle. From Ditch G, Belloc Road.

THE QUERNSTONES (Fig. 7)

The following report incorporates comments made by Dr John Cooper of the Booth Museum, Brighton.

1. A907, fragmentary saddle quern, in Lodsworth green sandstone. Iron Age from Pit 1, found with a grinding stone. Wick Farm Road.
2. A988, fragmentary lower rotary quernstone in Lodsworth green sandstone, reused as a saddle quern or mortar, late 1st-century B.C. from Ditch B. Wick Farm Road.
3. A993, fragmentary lower rotary quernstone in Lodsworth green sandstone, reused as a saddle quern or mortar. Wick Farm Road, unstratified.
4. A989, fragmentary upper rotary quernstone with hopper in Lodsworth green sandstone. Unstratified from Wick Farm Road but a 2nd- to 4th-century A.D. type.

The following stones are all of a size to warrant questioning the nature of the techniques used to turn them. At least one shows definite signs of having had a more complicated drive than those listed above. The others are very sizeable but being fragmentary or lower stones show no features which would allow reconstruction of the drive mechanism. Possible forms of locomotion include human, water or animal power. Whilst the Arun is

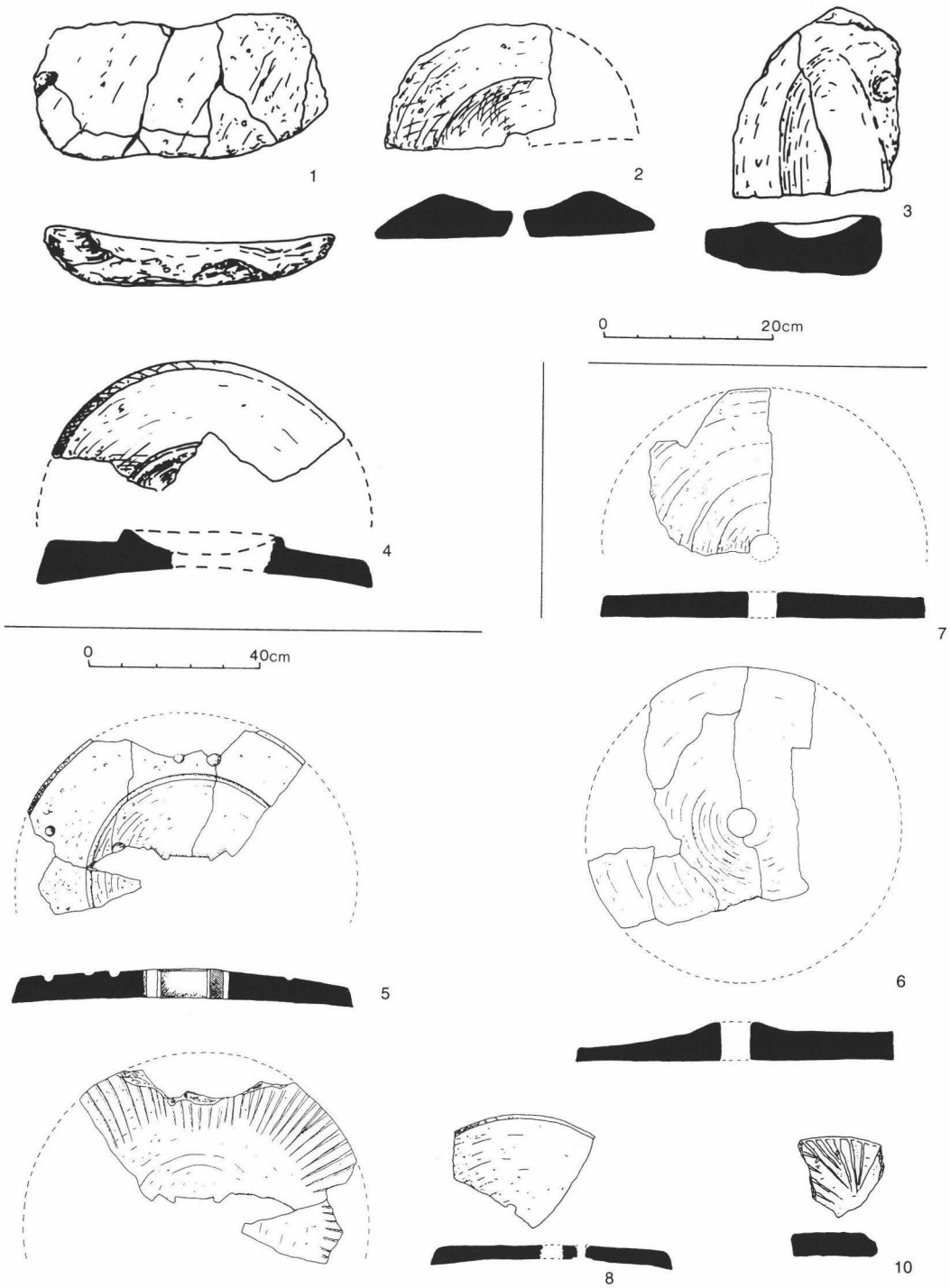

Fig. 7. Quernstones: all sites.

nearby it seems unlikely that the stones would have been moved back into the site from a waterside location. Locomotion by human or animal power, with a mechanical drive, contends strongly here. Moritz (1958, 122 ff) has suggested several possible arrangements for such facilities.

5. A990, large fragmentary upper stone in Lodsworth green sandstone. A square central socket and dovetailed cutaways to accommodate a rynd suggest a mechanical drive. The underside is furrowed and depressions and grooves on the upper surface may be associated with the drive mechanism. From Structure 1, Belloc Road, and probably later Roman in date.
6. A1000, fragmentary lower stone in a sandstone with much iron staining. Found in Oven 1, Belloc Road, late 3rd to mid 4th century in date.
7. A991, fragmentary rotary lower stone in Lodsworth green sandstone. Unstratified from Wick Farm Road.
8. A984, fragmentary rotary upper stone in a green sandstone, possibly from Lodsworth. The grinding surface is very worn and the remains of furrowing can be seen on the edge of the stone. Oven 1 or 2, Belloc Road.
9. A998, 1 fragment or rotary lowerstone in Losdworth green sandstone. From Oven 1, Belloc Road, late 3rd- to mid 4th-century date. Not illustrated, 500 mm. in diameter and 45 mm. thick.
10. A999, 1 fragment of a rotary upperstone possibly in Lodsworth green sandstone with a furrowed underside. From Oven 1 or 2, Belloc Road.

THE POTTERY

A large quantity of pottery was recovered from the rescue excavations of the 1950s. For the reasons outlined above much of this is now effectively unstratified, and most of the identifiable groups that do remain may not be complete. Detailed discussion of the ceramics is therefore limited to two apparently intact later Roman groups from Belloc Road. The remainder of the Iron Age and early Roman material from Gosden Road and Wickbourne, a substantial body of material, is not in a state to permit a similar examination; consequently a microfiche catalogue of the diagnostic pottery is provided.

TWO LATE ROMAN POTTERY ASSEMBLAGES FROM BELLOC ROAD (by M. A. B. Lyne)

There are two significant 3rd- to 4th-century pottery assemblages surviving from the Belloc Road site. The assemblage analyses which follow use the estimated vessel equivalent or EVE method (Orton 1975) based on percentages of vessel rims surviving as per vessel type and fabric. Each of the two tables has vessel types tabulated horizontally and fabrics vertically. The first part of each table lists coarse ware rim percentages per fabric and form converted into percentages of total coarse ware. The coarse ware total is then shown as a percentage of all pottery in its respective group. The second part of each table is devoted to fine wares with their percentages shown as of all pottery in the group.

Both of the assemblages are rather small and have probably suffered some material loss since their discovery. Despite these drawbacks, the almost total lack of published late Roman pottery groups from the Sussex Coastal Plain east of Chichester makes detailed analysis worthwhile.

The earlier of the assemblages is that from Ditch G and appears to consist mainly of early–mid 3rd-century material but with some late 1st- and 2nd-century vessel fragments. The extant pottery consists of 153 sherds weighing a total of 4102 grams and representing a minimum of 28 vessels.

The dominant coarse fabric is B.B.1 from the Poole Harbour region of East Dorset. Recent work by the author (Lyne forthcoming) shows the marketing pattern for this ware to differ in character from those of all other Romano-British pottery industries. The pottery is hand-made and has the widest distribution of all Romano-British coarse wares; being found in virtually all parts of the province as well as in Normandy. B.B.1 was the subject of intensive study by Gillam (1970; 1976), Farrar (1973) and Peacock (1973) during the period 1950–1976 and more recently by Bidwell (1977; 1985). The black-fired fabric is heavily tempered with rounded and sub-angular quartz sand with a little shale and varies considerably in coarseness.

During the 3rd century, such wares were being marketed through Chichester in large quantities and probably by sea. The level of this trade was already high by the middle of the century, with the combined coarse pottery assemblages from the

TABLE 1

Fabric	Jars EVE	%	Bowls EVE	%	Dishes EVE	%	Beakers EVE	%	Store Jars EVE	%	Others EVE	%	Total EVE	%
BB.1	0.23		0.29		0.27								0.79	42.2
Vectis	0.05												0.05	2.7
Alice Holt	0.06												0.06	3.2
Rowlands Castle	0.15												0.15	8.0
Oxidised sandy					0.05								0.05	2.7
Miscellaneous grey-wares	0.28		0.18				0.31						0.77	41.2
Total coarse wares	0.77	41.2	0.47	25.1	0.32	17.1	0.31	16.6					1.87	45.2
New Forest parchment ware									Mortaria	0.32			0.32	7.7
New Forest colour-coat							0.32						0.32	7.7
Nene Valley colour-coat							0.20						0.20	4.8
Colchester colour-coat							0.51						0.51	12.3
C. G. Samian			0.31		0.47								0.78	18.8
Oxidised sandy									Mortaria	0.14			0.14	3.4
Total all	0.77	18.6	0.78	18.8	0.79	19.1	1.34	32.4			0.46	11.1	4.14	

contemporary pits O.40 and P.37 at the Central Girls' School site in Chapel Street (Down 1973, 262) having up to 31.8% of B.B.1. This ware seems to have been marketed in considerably smaller quantities from Chichester into the rural hinterland. Analyses of 3rd-century coarse ware assemblages from Sidlesham, Slindon and Bignor give only 9.6, 10.9 and 8.4% of B.B.1 respectively.

The 42.2% of B.B.1 from Belloc Road Ditch G is even greater than that from the Chichester deposit referred to above and includes three incipient beaded-and-flanged bowls of Gillam's Form 227. there are also rims from two everted-rim cooking pots of earlier 3rd-century type and a straight-sided dish. The assemblage has a date range of *c.* 220–280 and suggests that there may have been direct B.B.1 marketing by sea to a small port or harbour at the mouth of the Arun. Further east, a similar trading point may have existed at the mouth of the Adur as a small 3rd-century pot group from Pit 32 at Slonk Hill behind Shoreham (Fulford 1978, 127) included a similarly high EVE-generated 46.4% of B.B.1.

A rim sherd from a handmade, sandy grey, black-fired, Vectis ware jar (Tomalin 1987, 30) also came from the ditch and indicates some sort of intercourse with the Isle of Wight. This isolated representative of that industry does not have to be the result of deliberate trade but could have been discarded by a fisherman putting in at the mouth of the river. Vectis ware does not occur in any significant quantities beyond the confines of the Isle of Wight but small amounts found their way into Chichester, Portchester and other Hampshire coastal sites (Lyne forthcoming). The industry would appear to have ceased production around A.D. 300 although possibly continuing into the early 4th century.

Coarse pottery from two other long-distance sources is also present. The first such source is the Alice Holt/Farnham pottery industry which was situated in the north-west corner of the Weald on the Hampshire/Surrey border and is represented in the ditch assemblage by a hook-rimmed Class 3C jar rim (Lyne and Jefferies 1979). Fine-sanded, self-slipped 3rd-century Alice Holt/Farnham wares are found across much of Sussex although usually in very small quantities traded down the Silchester/Chichester road and along the Greensand way. The pottery assemblages from Kilns 5, 6 and 8 at West Blatchington included several vessels from this source (Norris and Burstow 1952, Plates VI-41 and VII-61, 62).

The Rowlands Castle industry (Hodder 1974), centred north of Havant, supplied Chichester and Sussex west of the Arun with much of its coarse pottery needs during the 2nd and 3rd centuries. The Arun formed something of a barrier to trading but small quantities of the high-fired sandy grey ware are found across the rest of the county as far east as Beddingham villa near Lewes. The Ditch G assemblage contains one solitary cooking-pot rim in the fabric.

The remainder of the coarse pottery (43.9%) comes from a variety of relatively local sources.

Recent work by the author on late Roman pottery assemblages from Sussex sites indicates the presence of a pottery industry or complex of industries of considerable size centred on the coastal plain in the vicinity of the River Adur (Lyne forthcoming). This industrial complex made use of a variety of clays including an iron-free ball-clay which fired white and frequently had a thin, blue-grey firing slip applied to it. Such white-firing clay is not characteristic of the Wealden formations but does occur in thin bands towards the base of the Eocene sequence. These clays were used by the New Forest and Alice Holt grey ware industries in applied decorative slipped bands on their products. Similar Eocene clays outcrop along the Sussex coastal plain as far east as Brighton and the variability of their composition may explain the variety of other fabrics appearing to be associated with this newly discovered industry. Some of the 'Adur Valley' products are very close copies of 3rd- and 4th-century Alice Holt forms, but in different fabrics, and suggest a connection between the two industries.

Although the white ware variant is not represented in the Belloc Road ditch assemblage, one dish fragment present is in an oxidised sandy fabric recognised at West Blatchington, Cissbury and Truleigh Hill and probably produced by the same industry. It is probable that many of the miscellaneous coarse-ware vessels have a similar origin. These latter include two vertical-sided sandy black-fired bowls, one of which has horizontal rilling (Fig. 8.1) and the other, carinated, one burnished diagonal-line decoration on its exterior (Fig. 8.2). They, along with a slack-profiled jar (Fig. 8.3), are of late 1st- to 2nd-century type. The two bowls are in black-fired sandy fabric and are both paralleled at Wiggonholt (Evans 1974, Fig. 12.65 and 67) although not products of the kilns there. The horizontally rilled type also occurs at Newhaven and Angmering (Green 1976 and Wilson 1947).

The fine and specialised wares, which make up an unusually high 54.8% of all the pottery, include a New Forest purple-colour-coated beaker of Fulford's Type 27 and a parchment ware mortarium rim from the same source. Evidence from a number of sites in Hampshire and Sussex indicates that the accepted date of *c.* A.D. 260–70 for the commencement of this industry may be about twenty years too late (Lyne forthcoming). There is also a rim from a Colchester ware colour-coat beaker which should be earlier than *c.* A.D. 250. A variety of Central Gaulish Samian fragments include a DR.37, a DR.33 and four DR.18/31 dish rims.

The second pottery assemblage is that from the corn-dryer, Oven 1. This, with a total sherd weight of 6269 grams is somewhat larger than that from Ditch G and rim sherds from 41 vessels are present. The character of this assemblage suggests that it dates from sometime between A.D. 270 and 330. The assemblage includes a number of vessels similar both in form and fabric to examples from the West Blatchington corn-dryers, Kilns 5 and 6, which contain pottery which appears to be contemporary with both Belloc Road Ditch G and Oven 1.

The B.B.1 fabric is no longer the predominant one in the oven 1 assemblage; being reduced to a mere 13.9% of the coarse-ware element. A dramatic slump in B.B.1 trading is a feature of early 4th-century assemblages in south-eastern Britain. Layer A1.3 from the upper fills of a drainage ditch sectioned in the 1970 Tower Street, Chichester excavations (Down 1974, Fig. 5.4) had only 13.5% of B.B.1. The B.B.1 forms present in the Oven 1 assemblage consists of an everted-rim cooking-pot, two developed beaded-and-flanged bowls and a small short-rimmed jar (Fig. 8.11). This latter is almost certainly a rubbish survival from the late 2nd or early 3rd century.

The dominant coarse-ware fabric is now the Alice Holt/Farnham one. All of the vessels present, with the exception of a self-slipped Class 5C strainer, are post-A.D. 270 types and include a white-slipped Class 6A dish, two Class 5B bowls and four jars (Fig. 8.8). This industry took over much of the Chichester pottery market from the B.B.1 and Rowlands Castle industries at the beginning of the 4th century, although it is not certain as to whether it was instrumental in or merely a beneficiary of their decline. This take-over of the Chichester coarse-ware market by the Alice Holt industry was just one small part of a general expansion of its trading area during the late 3rd-early 4th-centuries.

A surprise element in the Oven 1 assemblage is the abnormally high Rowlands Castle ware presence. This consists of six cooking-pots (Fig. 8.5) and a

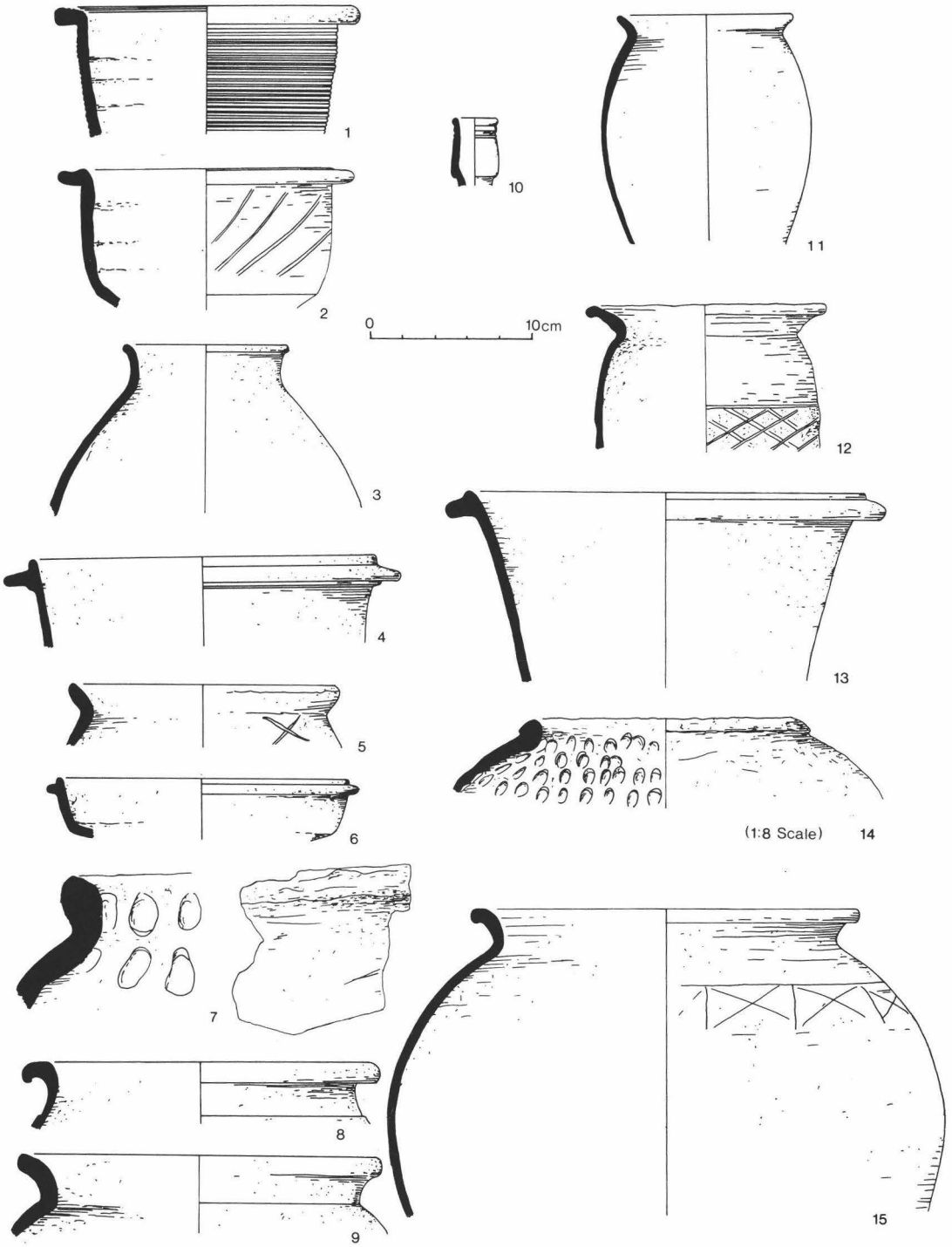

Fig. 8. Late Roman pottery from Belloc Road.

TABLE 2

Fabric	Jars EVE %	Bowls EVE %	Dishes EVE %	Beakers EVE %	Store Jars EVE %	Others EVE %	Total EVE %
BB.1	0.06	0.30		0.22			0.58 13.9
Alice Holt A.D. 270–						Strainer 0.16	0.16 4.1
Alice Holt A.D. 270+	0.50	0.23	0.10				0.83 19.4
Rowlands Castle	0.70				0.07		0.77 18.5
'Adur Valley' sandy oxidised		0.48	0.22		0.08		0.78 18.8
'Adur Valley' white ware	0.07						0.07 1.7
'Adur Valley' ?Vectis ware	0.51						0.51 12.3
gritty blue-grey	0.09						0.09 2.2
Misc. grey	0.39						0.39 9.3
Total coarse	2.32 55.8	1.01 24.3	0.32 7.7	0.22 5.3	0.15 3.6	0.16 3.8	4.18 75.1
New Forest parchment ware						Mortaria 0.10	0.10 1.8
New Forest colour-coat				0.11			0.11 2.0
Oxford white-ware						Mortaria 0.06	0.06 1.1
Oxford colour-coat		0.11					0.11 2.0
Miscellaneous					Bottle 1.00		1.00 18.0
Total all	2.32 41.7	1.12 20.1	0.32 5.8	0.33 6.0	0.15 2.7	1.32 23.7	5.56

storage jar (Fig. 8.7). The Rowlands Castle potteries went into terminal decline around A.D. 300 and the exaggerated presence here, along with the B.B.1 short-rimmed jar, would appear to confirm that there is a considerable 3rd-century element present in the assemblage.

The bulk of the remainder of the pottery is in three fabrics associated with the 'Adur Valley' industry or industries. An oxidised orange, coarse-sanded beaded-and-flanged dish (Fig. 8.6) and a developed beaded-and-flanged bowl in similar fabric (Fig. 8.4) together with a finer orange copy of an Alice Holt storage jar of Lyne and Jefferies type 4-41 make up 18.8% of the coarse pottery and a jar in the grey-fired white fabric described above, 1.7%. The third fabric, a gritty blue-grey one, is also represented by a solitary jar. The remaining 21.6% of the coarse ware consists of miscellaneous, grey, sandy wares; some of which may be of local or 'Adur Valley' origin but possibly including some very late Vectis ware. The vessels which may come from this source are two in number; both jars with squared-off, everted rims (Fig. 8.9, 8.15). They do however have red angular inclusions mixed in with the quarz sand temper, making a Vectis attribution somewhat questionable.

The fine and specialist wares includes a New Forest parchment-ware mortarium and a folded beaker rim from a pre-A.D. 340 variant of Fulford's Type 27. There is also an Oxfordshire white ware mortarium rim of Young's type M22 and a colour-coated bowl of Type C71 (Young 1977). The former type appears around A.D. 240 but is more common after 300. The bowl is a purely 4th-century type. A complete bottle neck in a grey-cored buff-brown fabric without colour-coat is of uncertain origin (Fig. 8.10).

Apart from the above two assemblages there is a much smaller one from the Oven 2 corn-dryer. This consists of most of a 3rd-century B.B.1 cooking-pot (Fig. 8.12) and a developed beaded-and-flanged bowl in a coarse-sanded and grogged fabric of possible 'Adur Valley' origin (Fig. 8.13).

The accompanying hut yielded the greater part of a Rowlands Castle store jar (Fig. 8.14); very similar to an possibly the same as that from Oven 1. Blick regarded this vessel as a product of the Alice Holt/Farnham kilns but, although the store jars of this type from the two sources are superficially similar, the sandy Rowlands Castle fabric of the Belloc Road example is much harder and has a hackly texture on the breaks.

Acknowledgements

I would like to thank the following people for the considerable help they have provided during the

writing of this article. Irene and Charles Blick very generously made available C. F. Blick's manuscript. Tony King, Valerie Rigby and Sue Hamilton kindly examined various parts of the pottery assemblage, Mark Taylor permitted access to the West Sussex Sites and Monument Record and Peter Hammond kept the writer informed concerning new discoveries in the area. Finally my thanks to Carolyn Brown for her patience during the writing of this.

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THE EXCAVATION OF A LATE ANGLO-SAXON SETTLEMENT AT MARKET FIELD, STEYNING, 1988–89

by Mark Gardiner

With contributions from Maureen Bennell, Pat Hinton, Duncan Hook, Nigel Meeks, Elisabeth Okasha, Clive Orton, Rod O'Shea, Ian Riddler, David Rudling and Leslie Webster

Excavations in advance of a housing development revealed a 10th-century enclosure, two buildings and associated pits. A sequence of ditches marked the boundary of the enclosure and an entrance way was indicated by two post-settings and a central stake-hole. The entrance is similar to those from other Late Anglo-Saxon sites. One of the buildings was constructed with planks set on end, the other with squared timbers and a central line of round posts. Three types of pits were identified and these seem to have served as wells, and for the disposal of rubbish and cess. Sealed groups of pottery were recovered from the pits suggesting that some activity on the site may date from the 9th century, though the main period of activity was in the following century. A notable find was an inscribed gold ring bearing the name of the owner discovered in a rubbish pit. Analysis of the metal suggests that it was made from primary gold, not recycled material. The bone assemblage from the pits shows it was mainly derived from food waste. Carbonised samples from sealed contexts suggest a variety of plants were grown including cereals, flax and vetch. The weed seeds reflect the environments in the area around the settlement.

INTRODUCTION

Since 1976 the Field Archaeology Unit of University College London has sought to examine the area of all major developments in Steyning as part of a programme of research into the origins of the town. Earlier excavations undertaken by Worthing Museum during the 1960s had located traces of Late Anglo-Saxon activity to the south of Steyning church and this reinforced speculation that the centre of early occupation was in the vicinity (Barton 1986; Evans 1986). An area to the south-west of the church was examined in 1977 by the Field Unit and further Late Anglo-Saxon remains were recorded (Freke 1979). Work on the south side of the High Street in 1985 confirmed that the early area of settlement was confined to the land close to the church (Gardiner 1988) (Fig. 1).

In 1988 outline planning permission was sought by the owners of land to the east and north-east of the church to build new houses. The area included a possible site of the 11th-century 'Port of St Cuthman' and land which may have been within the area of the Late Saxon town (*V.C.H. Sussex* **6,** i, 220; Hudson 1987; cf. Evans 1986, 81–3). Trial excavations isolated an area with Late Anglo-Saxon features and the following year the hillslope below the site of the former animal market was stripped and fully excavated.

Steyning church lies on a slight spur between two streams which drain northwards into an area of flat, low-lying, alluvial land. On the east side the land slopes gently upwards from the flat valley bottom to the site of the former railway station. Next to the station are cattle and sheep pens of the disused market (Fig. 2).

DOCUMENTARY EVIDENCE

The main area of excavation lay on land which, until sold for development in 1989, belonged to the Diocese of Chichester. It is shown on the Tithe Award map as part of Steyning glebe, which measured in total 38 acres (Fig. 1).[1] Seventeenth-century glebe terriers record a similar area and show that the excavated portion was then under plough.[2] In 1340 the glebe was 30 acres in extent, which allowing for the rounded figure, suggests that the same land was then held by the Church.[3] It is not known when the land was acquired by the Church, though it may be significant that part of the north, east and south sides of the glebe are coincident with the boundary between the parishes of Steyning and Bramber. This implies that the glebe was already a discrete block of land when the boundary was established.

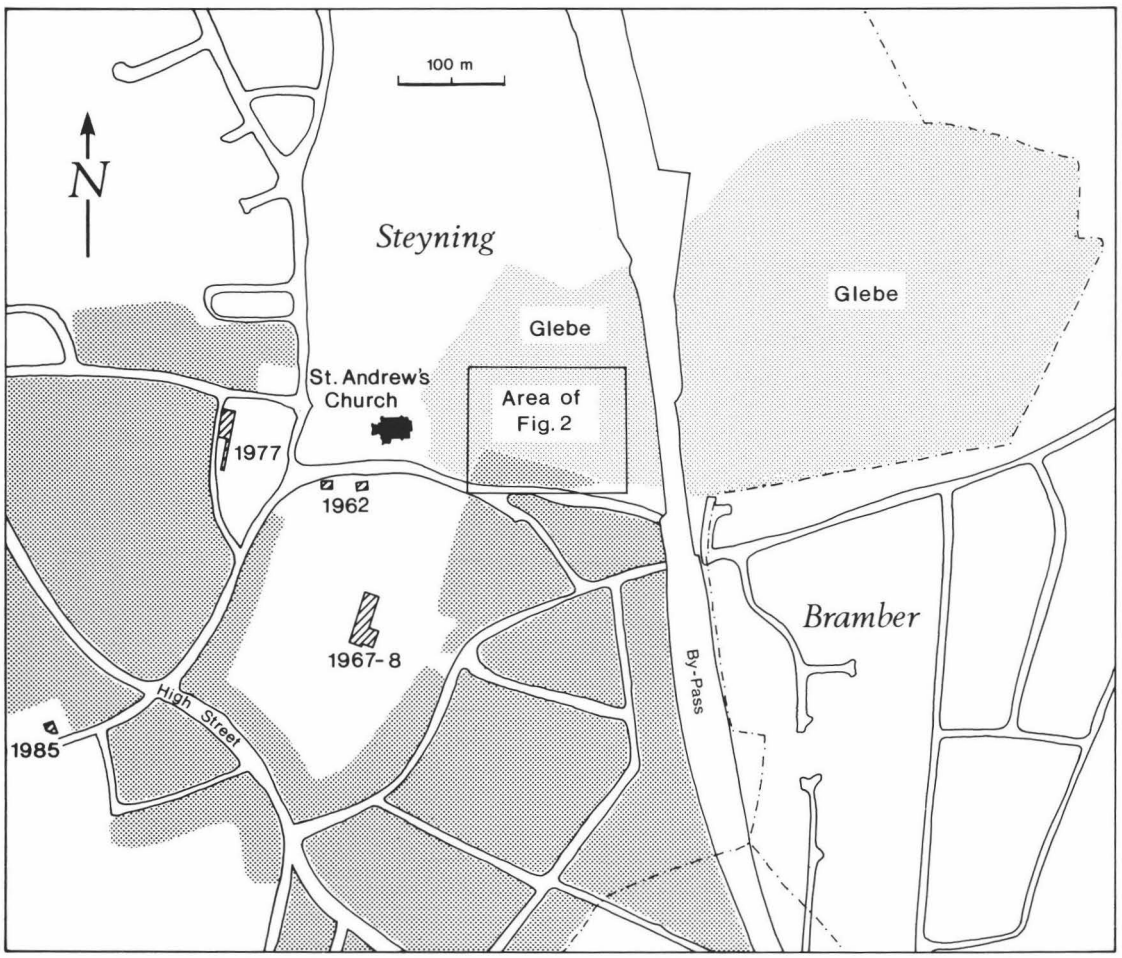


Fig. 1. Steyning showing the location of previous excavations (hatched), the main built-up area (dark tone), the glebe *c.* 1840 (light tone) and parish boundaries (dashed-and-dotted lines).

ASSESSMENT EXCAVATIONS

by Maureen Bennell

In May 1988 the Field Archaeology Unit undertook assessment work to determine whether archaeological remains were present in the proposed development area. A number of minor earthworks were recorded in the pasture fields, but a study of 19th-century maps suggested that these were likely to be of recent date. Three test pits were dug by hand and from one of these a coin of Eadgar was recovered (see below). A series of areas and transects were then stripped by machine and were expanded where necessary to record archaeological features.

No archaeological remains were found in the area on the north side of the alluvium. The lower part of the slope on the south side was covered with up to 2 metres of colluvium (hillwash) containing numerous abraded Saxo-Norman sherds (e.g. Fig. 2, Trench no. 3). At the top of the slope a number of archaeological features were recorded and these included a series of pits and inter-cut ditches. The area was progressively enlarged to record their extent. A number of transects were then excavated by machine to the west on the hillslope below the former animal market and revealed further pits indicating extensive remains (transects are not shown in Fig. 2 as they were subsumed in the later

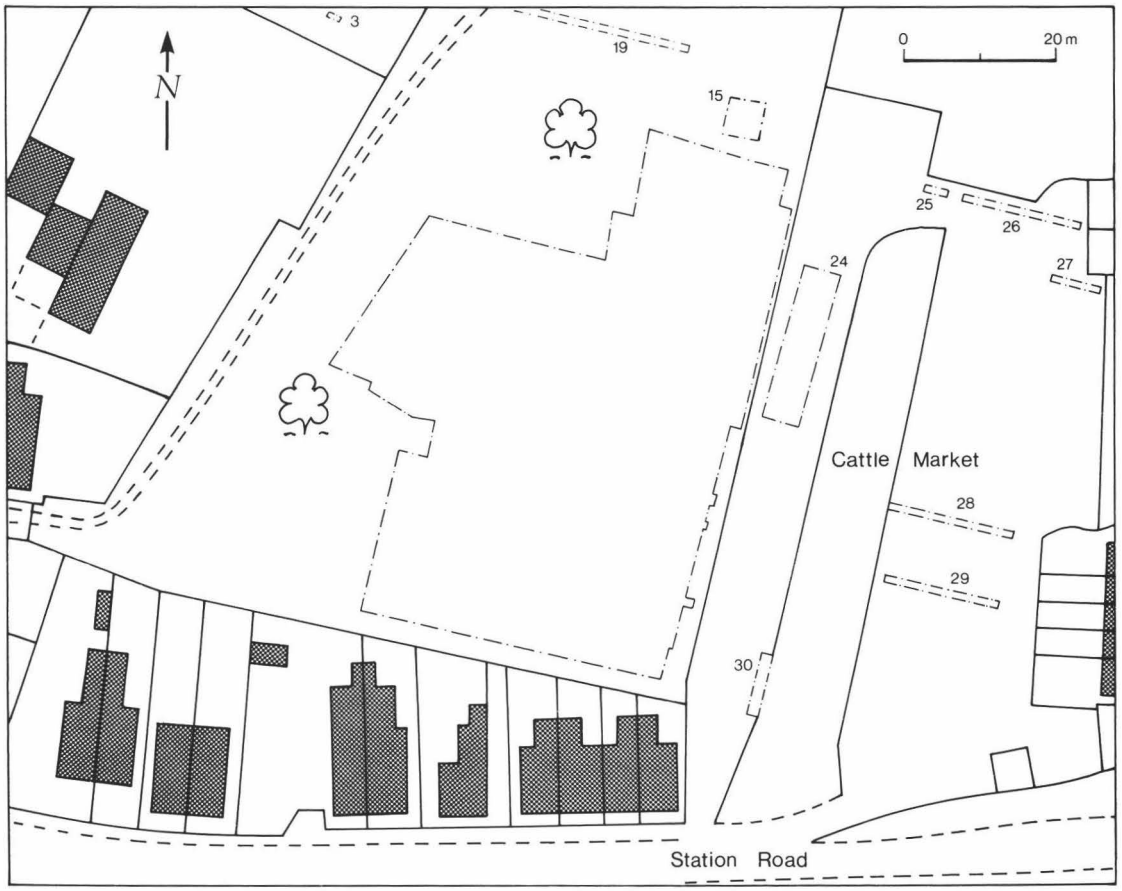


Fig. 2. Market Field, Steyning. Location of 1989 excavations and some of the 1988 trial trenches.

area excavation). These features were partially excavated by hand to obtain dating evidence. On the crest of the hill, in the area of the former cattle market, further machine trenches were cut. These showed that the ground below the concrete had not been truncated. The only feature discovered, however, was a single, undated post-hole (Fig. 2, nos. 25–30).

FULL EXCAVATION

The results of the assessment indicated that more extensive excavations were appropriate and in July 1989 work was resumed with funding from West Sussex County Council. The topsoil was removed with a JCB 3C and a 360-degree slew excavator to the level of the Upper Greensand. The presence of mature trees restricted the area excavated on the west side. After removing the topsoil, the remaining soil was allowed to dry and the site was then swept by brooms to reveal the features cut into the rock. The surface of these was then trowelled and the features planned before excavation (Fig. 3). Intermediate plans were made of some features during the course of excavation and at the end the whole site was replanned.

The site can be divided up into a series of areas or groups of features and these are described and discussed separately.

THE EASTERN DITCHES AND GATEWAY

(Figs. 4, 5 and 10)

A series of inter-cut ditches forming a complex sequence of boundaries lay parallel with the eastern

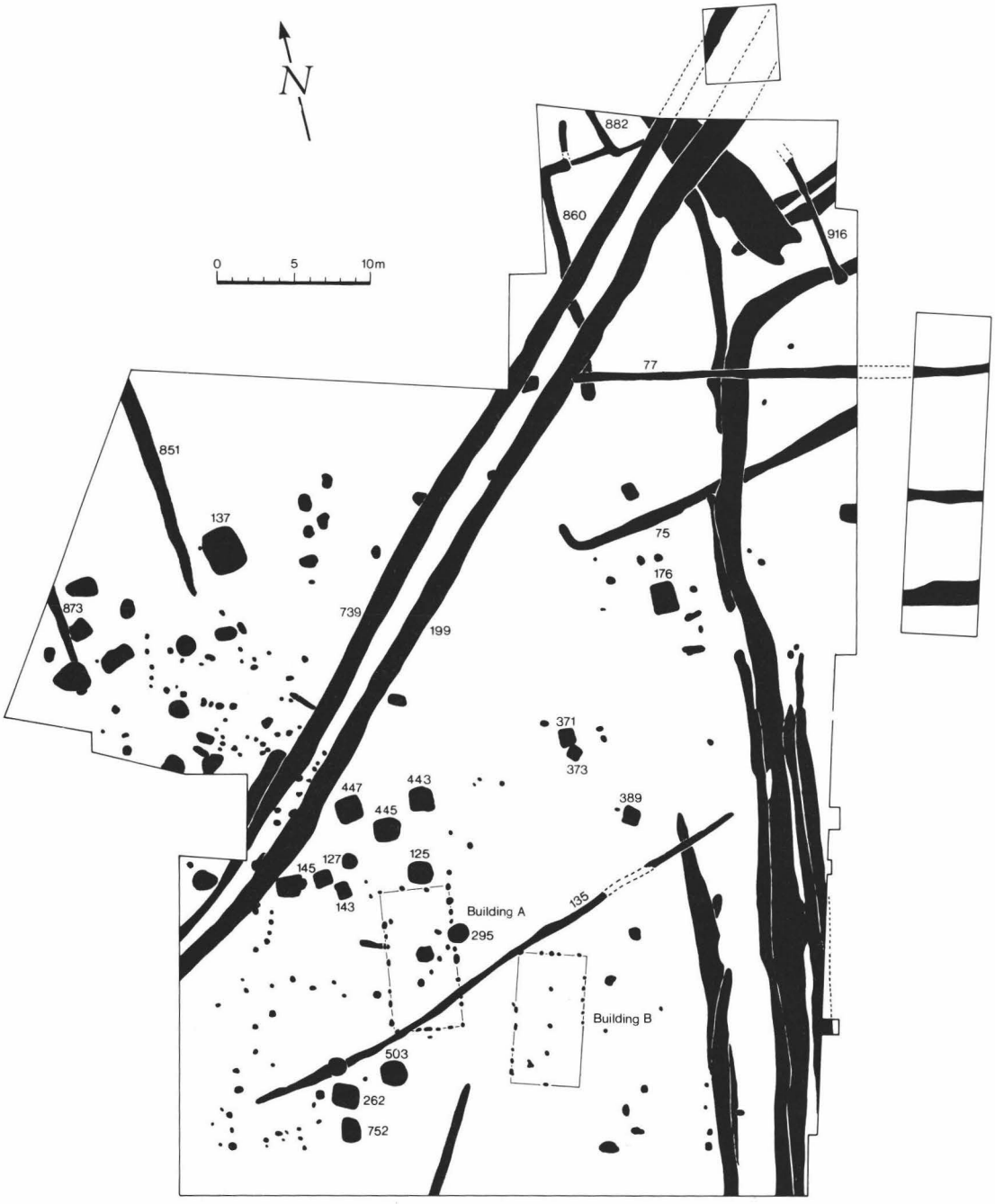


Fig. 3. Market Field, Steyning. Features recorded in 1988–9.

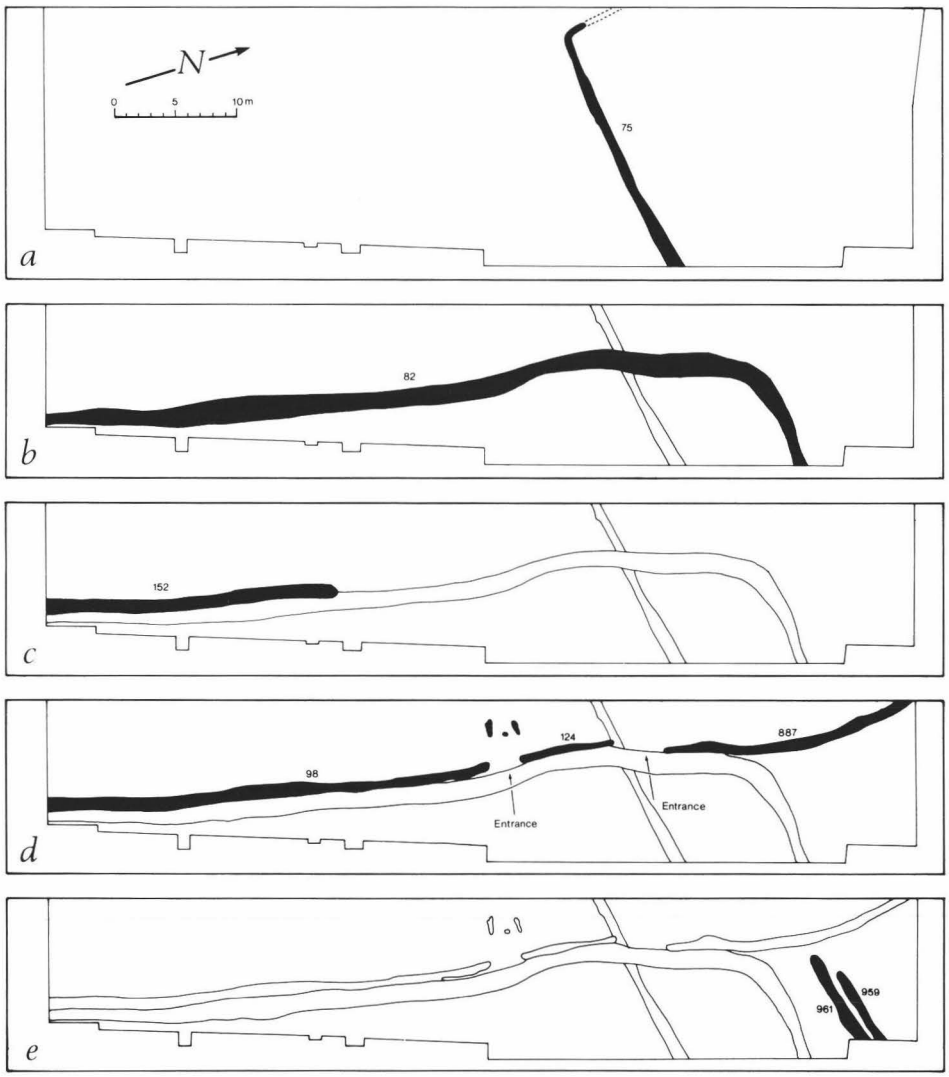


Fig. 4. Phase plan of eastern ditches. New features in each phase are shown solid; earlier features are shown in outline.

edge of the excavation. These were examined by digging one-metre wide sections every 3.5 metres and at other significant points. The ditch fills, which were often only subtly different, were then traced along their length.

The earliest ditch (75) ran almost at right angles to the main group. It may have enclosed a rectilinear area on the hillslope, but its extent could not be fully traced because the ditch ran out shortly after turning to the north (Fig. 4a). Trial trench 24 (Fig. 2) to the east of the main excavation failed to identify the continuation of the ditch, though it is not clear whether this was because the ditch did not continue, or did not survive at the level of excavation.

The first ditch was cut by a second broad, flat-bottomed ditch (82) which ran along the edge of the hillslope, turning eastwards as the land began to drop away to the north so that it enclosed the hill top (Fig. 4b). Later it had been recut on the same line

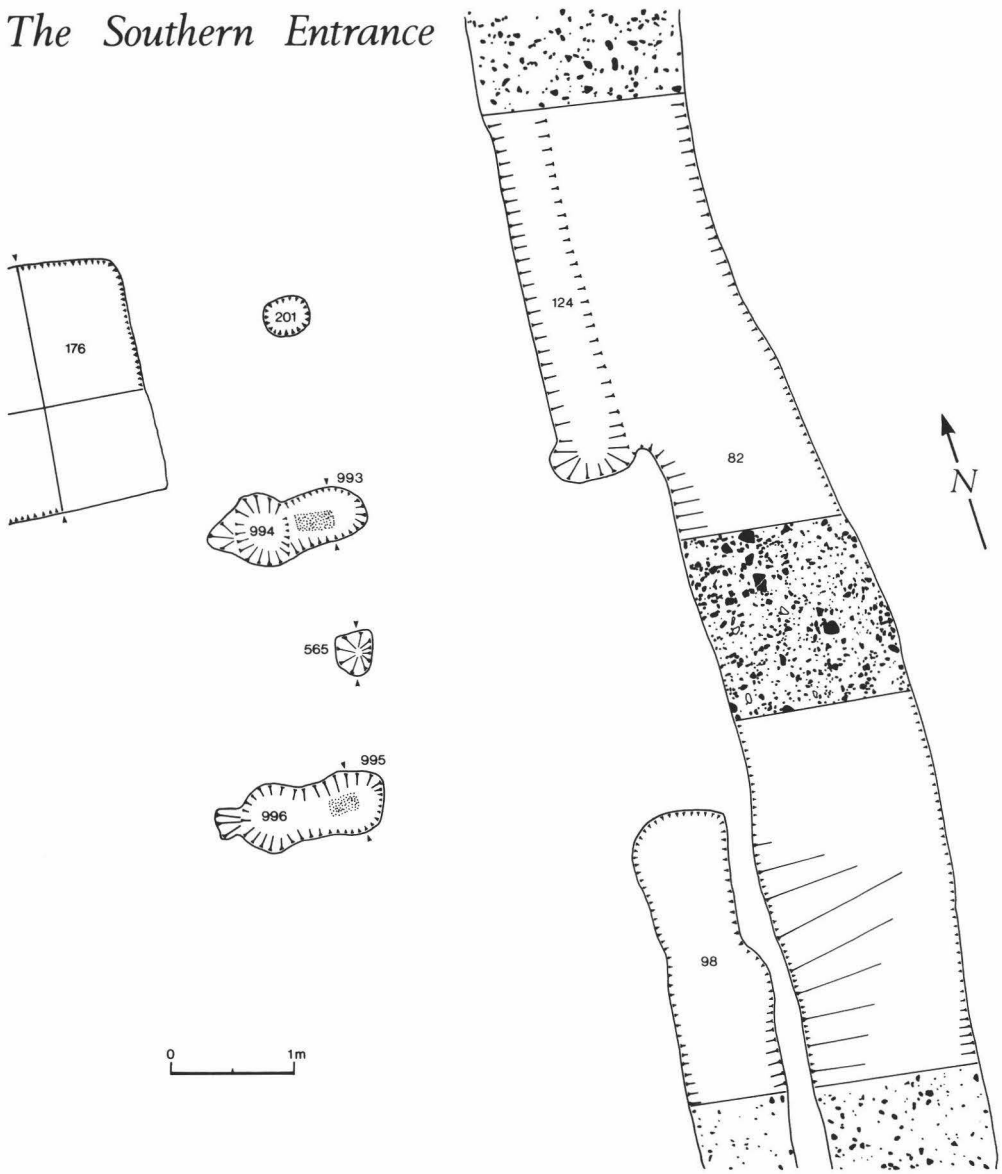


Fig. 5. South entrance to enclosure. The position of sections in Fig. 10 are shown by arrows.

with a more rounded profile (237). After it had silted up, a new ditch (152) was dug a little further to the west. This was notably different in section being much deeper and with more sharply sloping sides. The position of the north terminal was not recorded, but must have lain in an unexcavated length between two sections (Fig. 4c).

This ditch had partially silted up when rubbish, including layers of charcoal and burnt clay, had been dumped into it. It was then recut (98, 124, 887) and extended northwards so that it swung around to enclose the land on the west lying within the area of excavation (Fig. 4d). Two causeways across the ditch allowed entry to the enclosure. In line with the

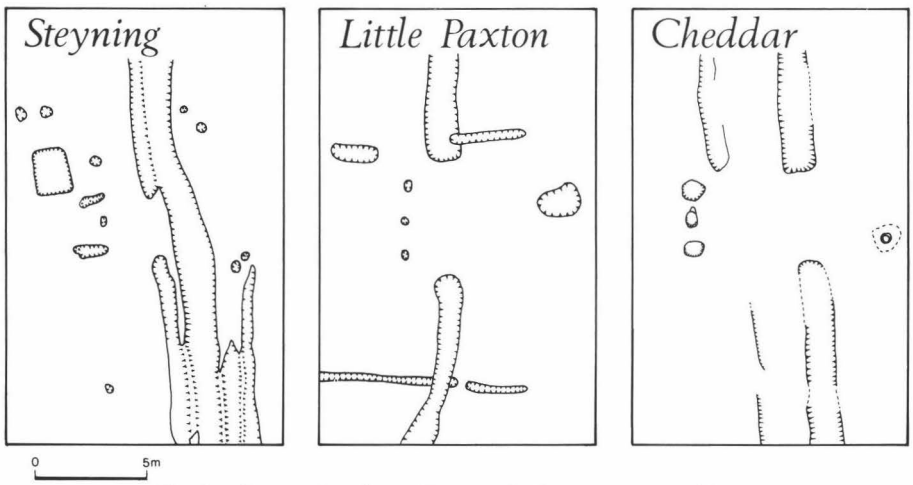


Fig. 6. Comparative plans of Late Anglo-Saxon entrances with gates: Steyning, Little Paxton (after Addyman) and Cheddar (after Rahtz).

more southerly entrance, but set back within the enclosure, were two pairs of post-holes (993, 994, 995, 996; Figs. 5, 10). These marked the position of successive pairs of post-settings. Traces of darker fill in one pair suggested they held squared posts with a cross-section of about 300 by 140 mm. set about 2.3 metres apart. Between these two was a single hole with an unusually sharply-pointed profile (565) (Fig. 10).

The more northerly causeway was not marked by any entrance structure and lay within 10 metres of the first. The causeway here was larger, measuring 4 metres between the two terminals. It may be significant that the south terminal of the north causeway coincided with ditch 75 which may still have survived as an earthwork.

Sometime later the ditches around the western enclosure were recut and subsequently the ditch around the top of the hill (on the line of feature 82) was also cleared out. Digging out the latter ditch would have blocked the two entrances to the western enclosure. During excavation it was noted that the ditchfill in front of the southern causeway was particularly stony. This length may have been intentionally infilled to allow continuing access.

The final ditches (959, 961) lay on the north side of the excavated area and appear to separate the land on the hill top from the area to the north (Fig. 4e). Though there was no stratigraphic relationship with the ditches already described, they would make little sense if ditch 887 had not already been dug and for that reason they are placed at the end of the sequence.

On either side of the main ditch group were other lines of ditches (Fig. 3). The shallow outer lines had no clear stratigraphic relationship with the central group and attenuated to the north, so it was not possible to establish their full length. The western, inner line lay about 4 metres from the central ditches and comprised three successive cuts. The stratigraphy of the eastern line was less clear, but at least two, and probably three cuts were recorded.

Discussion of Ditches

With the exception of the earliest feature, 75, the ditches mark a boundary between two contemporary enclosures, one on the hill slope and the other on the hill top. The importance and longevity of this boundary are indicated by the repeated digging of new ditches to mark its line. At one stage an entrance was made to allow access to the property on the hill slope. The two posts set behind the causeway across the ditch may be readily interpreted as supports for a pair of gates (Fig. 5). The deep, narrow, pointed middle hole (565) between them made in the Greensand could hardly have been formed with anything but a metal object. It was presumably for a ground-fast bolt used to secure the gates when shut. The gates were placed more than 2 metres behind the edge of the ditch and probably in line with a bank thrown up on the west (inner) side of the ditch.

The two causeways across the ditch may have given access to separate areas within the enclosure. The broader entrance way on the north would have been more suitable for driving animals, possibly to pasture in the northern half of the enclosure. The southern entrance with its substantial gates gave access to the buildings, rubbish and cess pits, an area of domestic activity.

A close parallel for the enclosing ditch and entrance ways is found at the Late Saxon site at Little Paxton (Hunts.) (Fig. 6). The area excavated there included a ditched enclosure with one, and possibly two entrances. One entrance lay across a causeway between two lengths of ditches. Set back inside the enclosure about 1.2 metres were two post-holes, which seem to have held a pair of gates similar to those at Steyning, and a central catch post set between them. The distance between the outer posts was about 2.5 metres. A possible second, slightly broader entrance way lay 25 metres from the first, but there was no evidence for a gate. The excavator interpreted the enclosing ditch as a trench for a palisade, but the published section shows a ditch with one recut which had been filled by silting (Addyman 1969, 66–8).

A second site with a gateway of very similar type occurs at the royal palace at Cheddar (Som.). The enclosure was entered past a flagstaff or other free-standing post over a causeway between two lines of ditches, through a gateway of three post-holes and led directly to a door of a nearby hall (Rahtz 1979, 163–70). The parallels with Little Paxton and Steyning are so close, that it may be concluded that though shallow, the three post-holes almost certainly were for a double gate with central stop.

These three sites suggest that a standard pattern on Late Anglo-Saxon sites was an entrance approached over a causeway and closed by a pair of gates with a central catch post. Other entrances to the enclosures were sometimes provided for other uses.

THE BUILDINGS (Figs. 7, 8)

Traces of two buildings were identified during the planning of the site. Careful cleaning of the post-holes suggested that many of these had two fills. This was most apparent in Building A where a dark grey-brown silty clay loam with few pieces of Greensand could be differentiated from a mid brown silty clay loam with a large number of small pieces of Greensand. The fills of the post-holes were carefully planned at the scale of 1:10 and then excavated with sketch plans made after digging every 30 mm. In this way it was possible to show that the grey-brown fills had vertical edges. The two fills are interpreted as the 'ghosts' of wooden planks set on end and the packing of Greensand fragments used to secure them (Fig. 8). In Building B the contrast in soil was more subtle, but a number of ghosts were identified and recorded in a similar manner.

Building A (Figs. 7, 8)

Traces of the lines of all four walls of the building were recorded, though the post-holes of the west wall were particularly shallow owing to the fall in slope. Some of the post-holes for the wall may have been entirely lost. The line of the south wall was clearly marked by five post-holes including one corner post. Other posts had been removed by a later ditch. The carefully cut, rectangular post-holes were arranged symmetrically around a slightly larger central post (291). Plank ghosts were recorded in four of the post-holes showing that the timber had been set hard against the inner face of the vertically cut slots. No ghost was detected in the corner post (179), which was oval in shape with the long axis lying at 45 degrees to the wall lines. Behind the central plank was a circular hole (381) which may have held a bracing post, though it was set too close to be very effective.

The holes for the timbers of the west and east walls were less carefully cut. Some planks were set against the inside edges of the post-holes, but others were positioned centrally within the cut. The north wall was marked by four holes including the two corner posts (335, 343).

The building measured 8.88 by 4.38 metres internally and may have had an entrance either in the north wall between the two inner posts, or, since doors in the end wall are not very common, more probably in the west side between posts 357 and 997. The wall lines cut the fill of an earlier slot (365) and were themselves cut by a later ditch (135) and pit (295). Among the posts within the building, only 367, which lay on the central axis, is possibly related to the structure. This hole contained the ghost of a large circular post. Other features within or adjacent to the building were less certainly

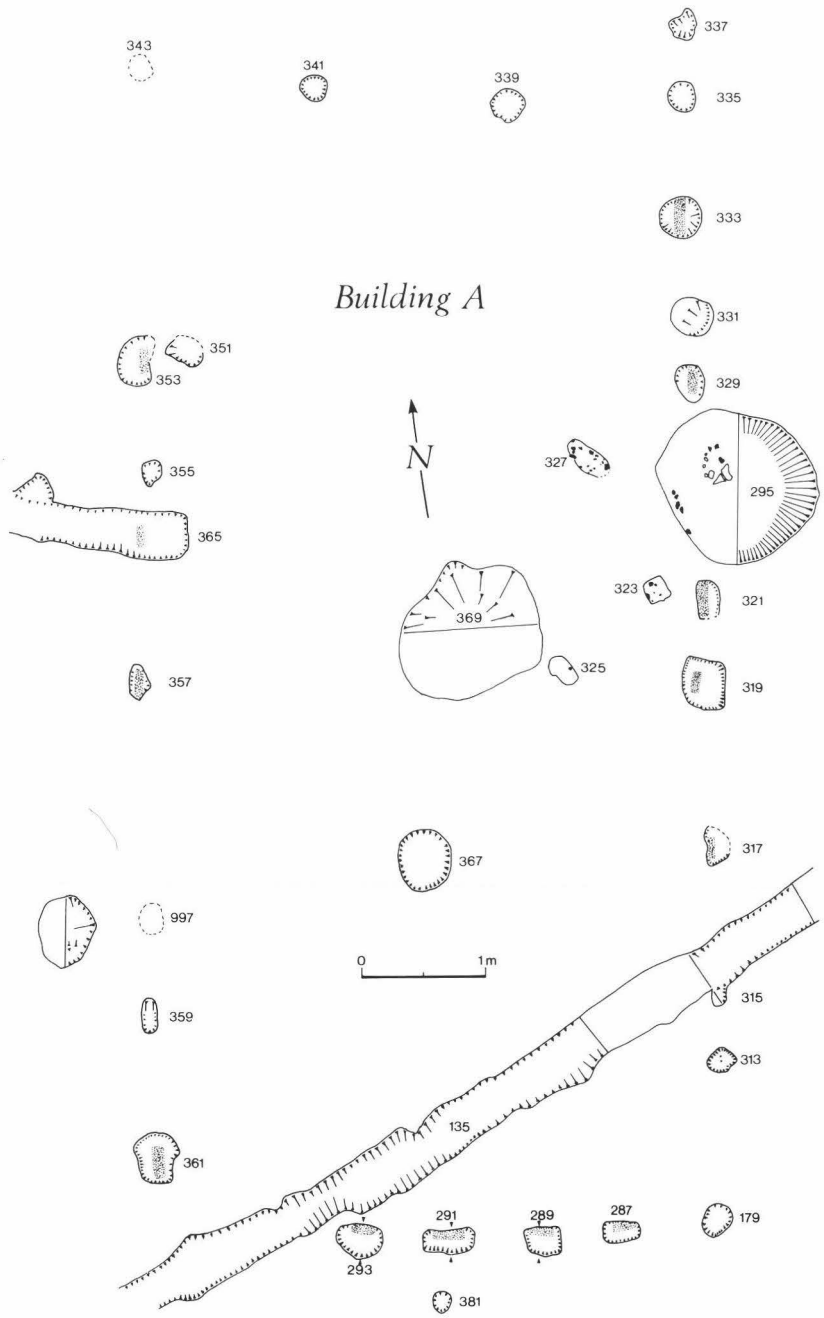


Fig. 7. Building A. The position of sections in Fig. 10 are shown by arrows.

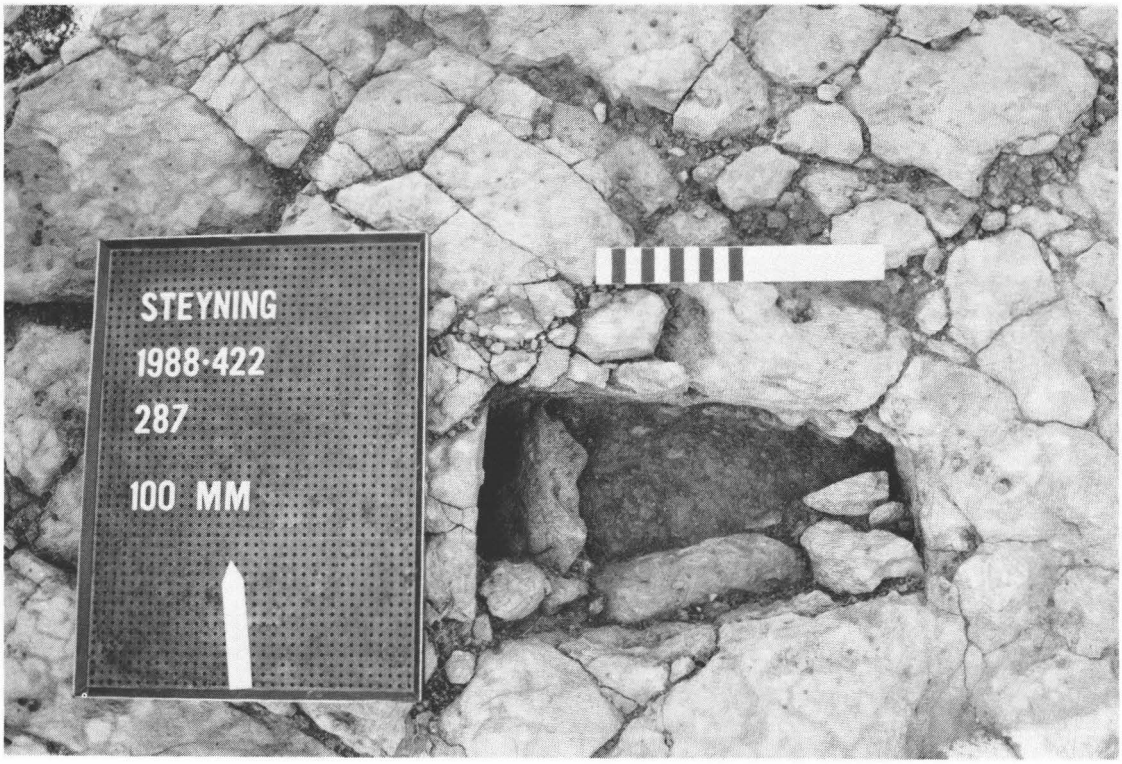


Fig. 8. Feature 287, showing the plank ghost and packing at the south side of Building A. Scale length 200 mm.

associated with the structure. A depression near the centre of the structure (369) was filled with clay and was without finds. It could not be determined if this was a natural depression. A post-hole (337) beyond the north-east corner aligned with the eastern wall was very shallow and no ghost was identified. Similar slight holes were found beyond the side walls of the nearly contemporary buildings, Structures B and D at Botolphs and it seems possible that they were for posts used in setting out (Gardiner 1990, Figs. 9, 11).

It was possible to measure the dimensions of the 10 plank ghosts. These had cross-sections which lay in the range 60 to 100 by 150 to 320 mm., though the majority measured about 80 by 220 mm. Some of the long faces of the planks were not parallel (Fig. 8), but were slightly tapering, producing a trapezoidal cross-section, a feature particularly apparent in the plank ghosts in holes 287 and 289. This suggests that the planks had been radially split, a type of working which it has been suggested may also have been used in the Early Anglo-Saxon plank buildings at Cowdery's Down (Hants.) (Millett and James 1983, 198).

Only a single sherd of pottery was found in the post-holes of Building A, but later features which cut the structure suggest a 10th- or 11th-century date.

Buildings B (Fig. 9)

The building was represented by the lines of three walls and a row of five central posts. The post-holes were less deep in the southern part of the building and the probable line of the south wall is represented by a single hole (405). The building had a single entrance on the west side which was marked by two rectangular post-settings (435, 437). The shapes of these suggest they had held planks, though no ghosts were identified. Three shallow post-holes of the west wall were found to the south of the entrance, but on the north side only the corner post-hole remained. The posts of the north wall were symmetrically arranged around the central hole (411). The post-holes at the corners of this wall

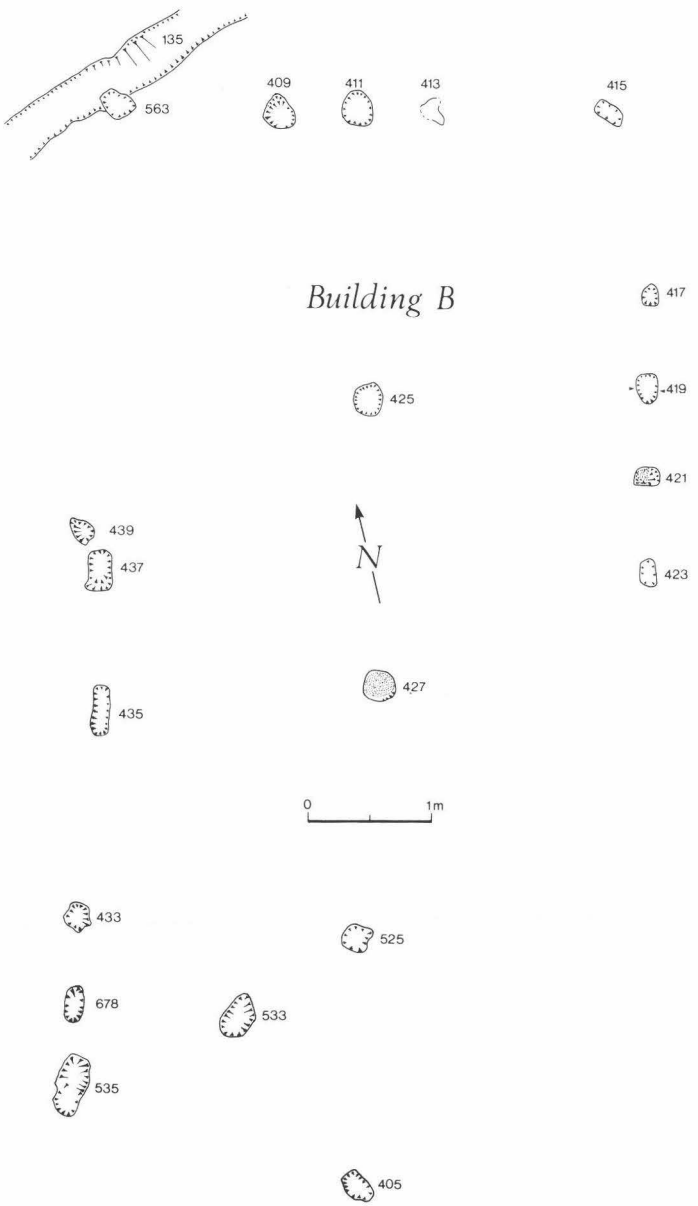


Fig. 9. Building B. The position of the section in Fig. 10 is shown by arrows.

(415, 563) were rectangular in shape and set at approximately 45 degrees to the axes of the walls. In the west and east walls the post-holes became shallower to the south and all trace disappeared before the south-east corner was reached. Ghosts were noted in the fill of holes 419 and 421 and indicated that the posts were rectangular, or nearly square in cross-section, and in both cases had been set hard against the inside edge of the cut. The post-holes in the centre-line were more substantial than the others and the ghosts identified in 411, 425 and 427 were circular in section.

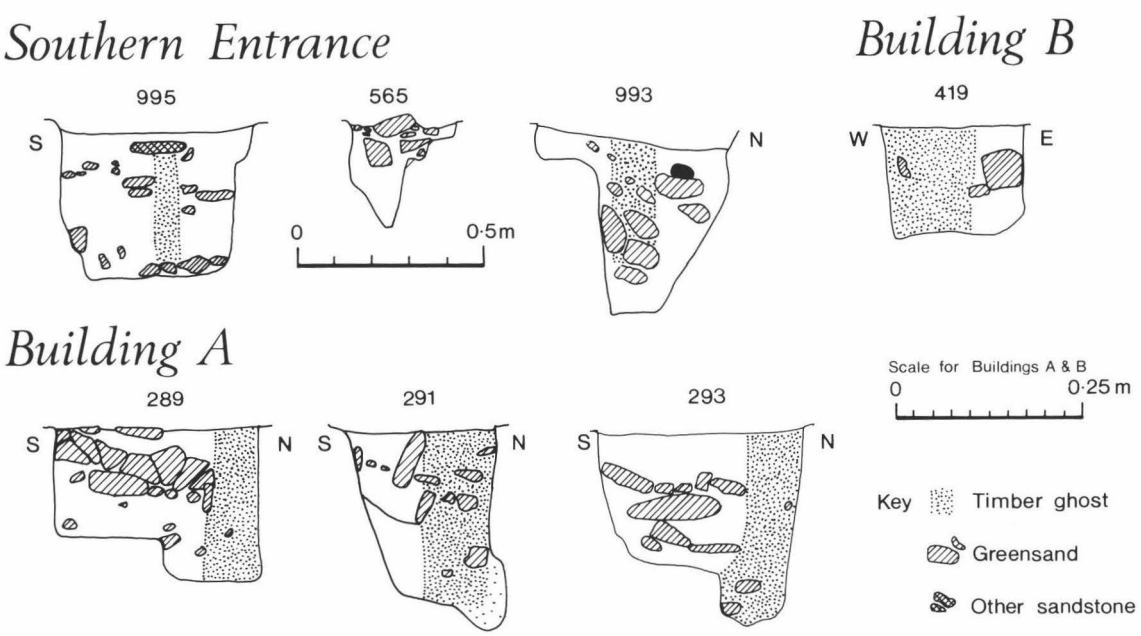


Fig. 10. Sections of post- and plank-holes.

The building measured internally 4.25 metres in width and, assuming post-hole 405 lay on the line of the south wall, 8.43 metres in length. On this assumption, the entrance would have been at the centre of the long wall, a very common arrangement in Anglo-Saxon buildings. No direct dating evidence was found for Building B, although the post-hole at the north-west corner (563) was cut by ditch 135, which contained Late Saxon or Saxo-Norman pottery.

Discussion of Buildings

The two buildings recorded in the excavation had a number of similarities. Their size was nearly the same, both had the double-square plan commonly found in Anglo-Saxon structures (James *et al.* 1984) and they were broadly aligned in the same direction across the fall in slope. Planks set on end were used in both buildings, but whereas they were employed for all the timbers in the walls of Building A, they were confined to the door posts of Building B.

Plank-on-end buildings have been excavated at Cowdery's Down (Hants.), Yeavering (Northumbria) and Cowage Farm, Foxley (Wilts.), but all of these sites have been dated to the Early or Middle Anglo-Saxon period (Millett and James 1983; Hope-Taylor 1977; Hinchcliffe 1986). The closest parallels for the Steyning buildings are those excavated at nearby Botolphs (Gardiner 1990). It is intended that the common features of the Steyning and Botolphs buildings and parallels from sites elsewhere will be considered in detail in a future article. Although the use of ground-fast planks in the walls of Later Anglo-Saxon buildings is not common, other structural features may be found in buildings of this date elsewhere.

The slight evidence from the Anglo-Saxon period has suggested that planks might be formed by radially splitting wood, and the trapezoidal shapes of some of the post-ghosts (Fig. 8) may indicate a similar process was used in the Steyning buildings. Splitting tree trunks is not necessarily more time-consuming than hewing squared posts (Darrah 1982, 221–2), but it is interesting that the use of planks is reserved only for the jambs of the doorway of Building B and that the other principal posts used squared timbers. The south wall of Building A makes an extravagant use of planks clearly exceeding the number required purely for structural purposes and it contrasts with the smaller number employed in the north wall. It is possible that this was the equivalent of close studding used in

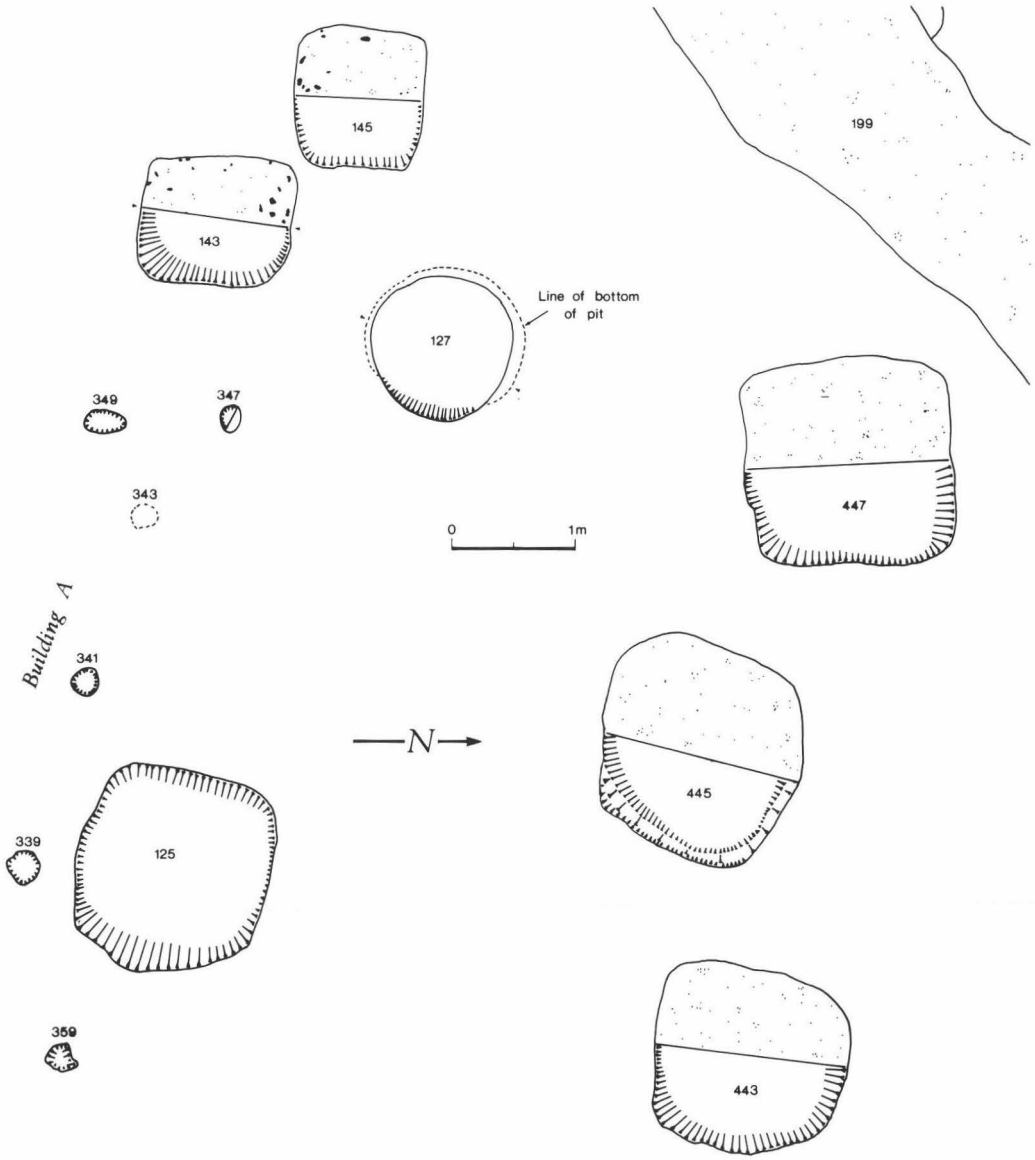


Fig. 11. Rubbish pits (125, 143, 145, 443, 445, 447) and a well (127) on the north of Building A. The positions of sections in Fig. 10 are shown by arrows.

later medieval buildings and served a similar purpose: to display the status and wealth of the owner. But as with close studding, the use of a large amount of timber on the faces of the buildings most likely to be seen by passers-by was not continued on the less visible, rear walls.

The roof of Building B was supported both on the wall posts and possibly also on the line of central posts. These may have supported a ridge purlin which ran the length of the building between what would have been two gable ends. The central posts were larger in section than the wall timbers and

were not squared, perhaps because they were mostly hidden from view within the building. The single post (367) which lies beneath the ridge line in Building A may have served a similar function.

The use of central posts to support the ridge is hardly known in the later medieval period, though it does occur in Anglo-Saxon buildings. Structures S, Z1 and Z2 at North Elmham (Norf.) and Building B at Maxey (Northants.) are both thought to have been constructed in this way (Wade-Martins 1980, 60–2, 64–7; Addyman 1964, 25–8). It implies a fundamentally different building structure with the roof timbers partly supported from the ridge piece and a roof construction that can only be conjectured.

It has been noted that the post-holes on the north side of Building B were aligned diagonally to the walls, suggesting posts set at 45 degrees to the wall line. The north-eastern post (415) was clearly set in from the line of the east wall, but on the north-west side the evidence was less clear. In Building A the pattern may have been similar, certainly on the south side. Post-hole 179 is slightly set in, and on the south-west corner, though the position of the post had been largely removed by a later ditch, it could not have been directly in line with the west wall. Given the care with which the buildings were laid out and the ability of the builders to align timbers, it is clear that the insetting of the corner posts was a deliberate feature. The aim was to produce buildings with rounded or diagonal corners. There are many parallels for this from other Anglo-Saxon sites. A local example is Portchester (Hants.) where Building S10 had diagonal corners and S15 rounded ends (Cunliffe 1975, 27–9, 41–3).

THE LARGER PITS (Figs. 3, 11, 12)

A number of pits were uncovered and partially sectioned during trial work. Although the finds from these were predominantly Late Anglo-Saxon in date, it was noted that the upper fills included later medieval finds. As the fills of the pits had collapsed, material from the topsoil had been introduced. It was not possible to distinguish an upper 'sag fill', but in the 1989 season the top 100 mm. of each pit was given a separate context number to isolate intrusive material.

In most cases only half of the pit was excavated. Thirty-litre samples of soil were taken for flotation from most of the larger fills and these were processed in a tank similar to the Siraf unit (Williams 1973). The flot was collected in 0.5 mm. and 1.0 mm. sieves and the residue was collected. The dried residue was sieved through a quarter-inch (6 mm.) grid and any larger finds were extracted. The fraction passing through the sieve was collected and carefully sorted after the excavation to extract small bones and unfloated carbonised material.

Sixteen large pits were excavated. These fall into three categories based upon their shape and size. The biggest group, represented by eleven pits (125, 143, 145, 262, 295, 371, 373, 389, 443, 445, 447) were sub-square in plan with slightly rounded corners. The sides had a mean length of about 1.35 metres and a mean depth below the surface of the Greensand of 0.7 metres. Two pits (373, 389) were particularly shallow, measuring less than 0.15 metres deep. One of the pits (371), though square in shape at the surface, had a shelf-like projection lower down where the Greensand had been incompletely dug away. The digging of this pit had not been finished.

The large quantities of bone and pottery in the fills show that these pits were dug for rubbish. Some of the pits contained layers of Greensand fragments, which may have been thrown into the pit to seal the rotting material beneath. Some evidence of the dumping of rubbish came from pit 262. The second fill (273) above the base 262 was finely laminated. This could not simply be the result of silt being washed into the pit, because the laminae were horizontal. The fill must have been water-laid and had accumulated from fine soil blowing or being washed into a puddle at the base of the pit. The laminated soil formed around and above the partially articulated vertebrae and skull of a juvenile sheep, which had presumably been thrown away after butchery, and clearly showed traces of the outline of flesh present on the bone at deposition (see bone report).

Most of the rubbish pits occurred at the ends of Building A and may be related to it. Pit 295, however, cuts the wall of the structure and must therefore be later. Among the finds from the pits were a Roman fibula, pieces of whetstone, fragments of lava quern, pieces of wall plaster and an inscribed gold ring. These are discussed below.

Two pits measuring 1.95 and 2.20 metres deep may be placed in a second category (137, 176).

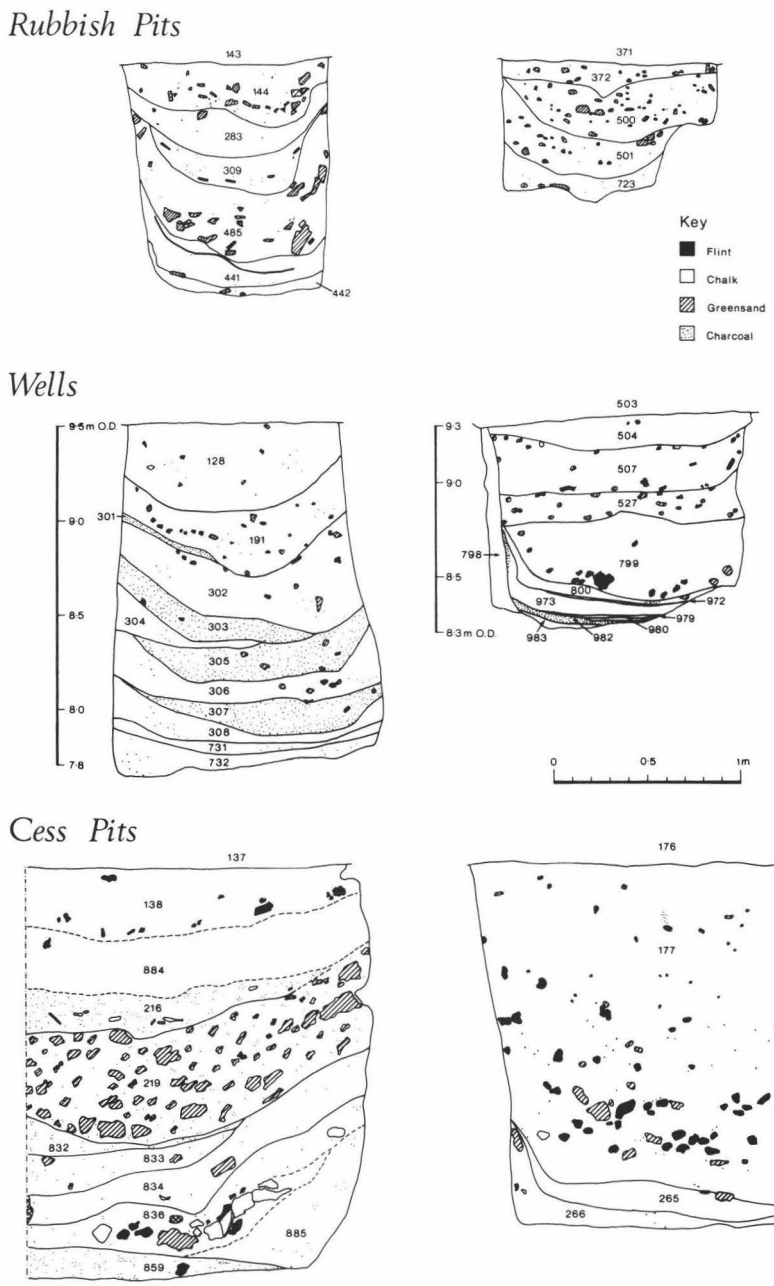


Fig. 12. Sections across selected pits.

These were larger than the pits in the first group and were sub-rectangular in shape. Pit 137 contained very few finds and had a largely homogeneous fill. Anaerobic conditions at the base of the pit had allowed the partial preservation of fine organic material, though this did not survive sufficiently well to allow identification. Pit 176 contained a greater density of finds and had more varied fills. A

thick layer (219) of Greensand fragments had been thrown in during the use of the pit to seal the deposits beneath.

Though the size and shape of the pits are similar, their fills could suggest different functions. The fill of pit 137 indicates that it served as a cess-pit. Pit 176 might have been used for general rubbish, but Hinton in her report on plant remains (below) suggests that the number of mineralised seeds from this feature may indicate the proximity of faecal material. This suggests that the pit was also used for cess. It is notable that pit 137 is set away from the other pits and from the buildings. It is possible that the cess pit could have been covered by a latrine building similar to those at North Elmham (Norf.), Faccombe Netherton (Hants.) or Cheddar, but if so the structure must have been so slight that it left no trace (Wade-Martins 1980, 125–131; Fairbrother 1990, 114; Rahtz 1979, 156–7).

The third group of pits is represented by three examples (127, 503, 752). These were roughly circular in plan with diameters between 1.22 and about 1.45 metres and were all more than 1 metre deep. Their fills were similar to the rubbish pits. There is some evidence that pit 503 was lined with wood or wattle, for the shape of fill 798 could hardly have been produced by a recut. If it was so lined, however, there was no evidence for the wood or wattle on the north side.

Some or all of the pits in this class may have been wells. The lining of pit 503 certainly supports this interpretation. Wattle- and barrel-lined wells are known from North Elmham and possibly from Thetford (Wade-Martins 1980, 74–94; Rogerson and Dallas 1984, 27). Pit 127 has a curious bell-shaped profile which may have been formed by frost-shattering around the water-line. Pit 752, by contrast, tapers towards the base. The need for wells so near the course of a stream is not evident, though the convenience of a water source near to the buildings may have justified the relatively small amount of work involved in digging these shallow pits. Although this may have been the primary use of the pits, they were later used for the disposal of rubbish. Hinton (below) has noted mineralised seeds in pit 127 and suggests that this may indicate the presence of faecal material.

The pits, with the exception of the top 100 mm. spits, contained closed groups of finds. To elucidate the sequence of pits the pottery within 10 of them was ordered by seriation. The results discussed below show that six of these could not be distinguished on the basis of their ceramics and this gives some grounds for indicating that they might be broadly contemporary. Pits 125 and 262 were separated by this technique and contain fabric types which are probably earlier.

THE WESTERN AREA (Fig. 13)

An area to the south-west of the excavation was cleared, but not further excavated because of the degree of recent disturbance. This confirmed the findings from the trial trenches, which showed that though Anglo-Saxon finds were present, they were residual in later contexts. In one of the trial trenches a coin of Eadgar was discovered in a deposit of recent building material.

On the west and north-west of Building A was situated a series of post-holes, shallow pits and ditches. Most of these could not be dated, but pottery from others showed they ranged from the Late Anglo-Saxon period to the present century. The earliest features were probably a group of pits set apart to the north and two of these (671, 673) may date from the 9th century. To the west of these were two shallow pits with metalworking debris. Both were half-sectioned and in pit 663 lumps of melted lead weighing 1.50 kg. were found. Pit 559 contained 2.21 kg. of smithing slag, and fragments of hearth lining. There was no evidence of burning at the base of either pit to show that the metalworking had taken place there. Small quantities of iron slag also occurred in the fills of three other adjacent pits, but it is uncertain if this was of significance.

The original function of most of the features on the western side of the site could not be determined. One ditch (873) evidently dated to the 13th or 14th century and a second parallel ditch (851) to the east, though it contained only Late Anglo-Saxon pottery, was probably contemporary for reasons discussed below. Two adjacent undated shallow pits (587, 589) nearby had been dug as graves to bury a dog and a pig.

LATER MEDIEVAL AND POST-MEDIEVAL ACTIVITY (Figs. 3, 13)

Settlement ceased on the site by the late 11th or 12th century and the evidence for later activity is relatively slight. A small ditch (873) and shallow pit

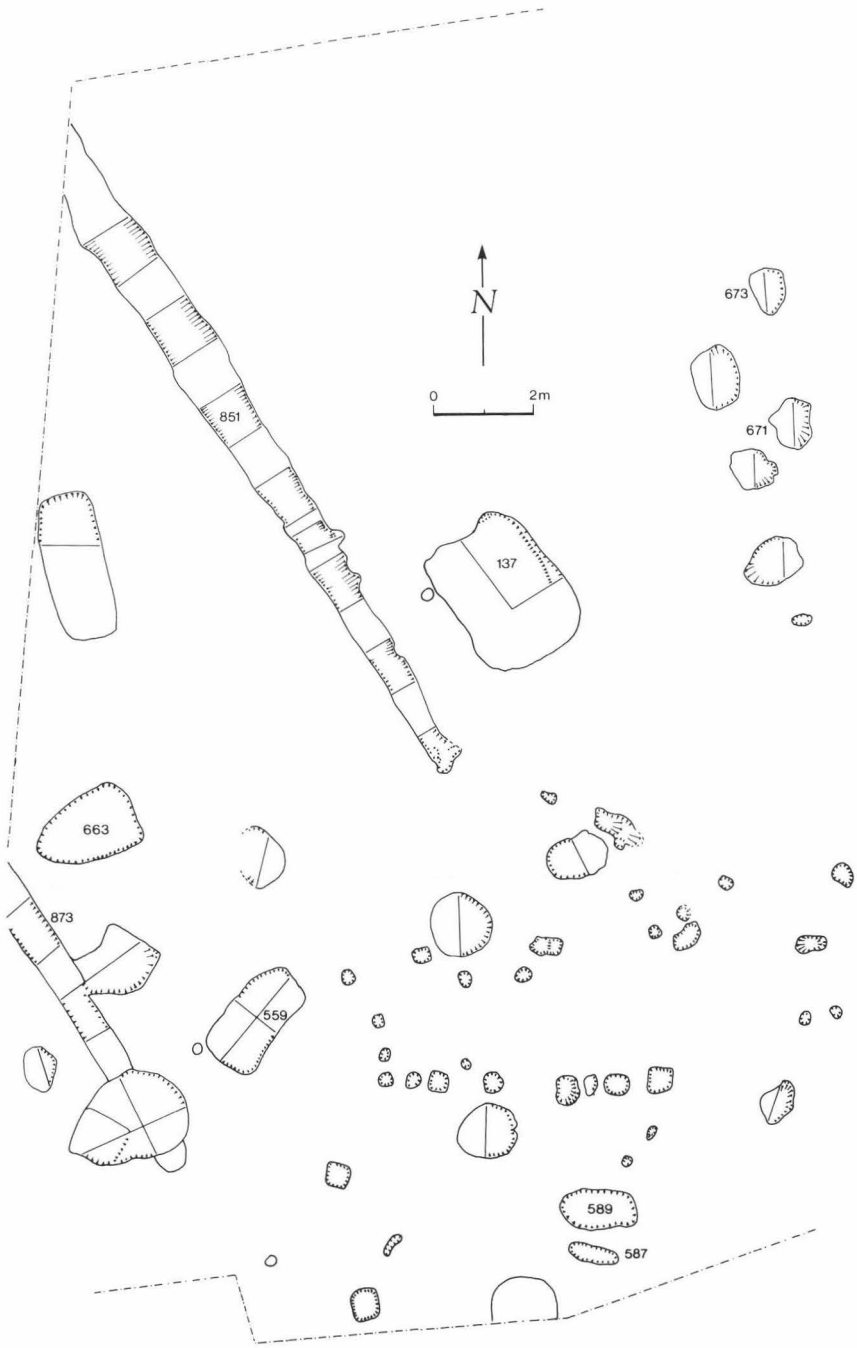


Fig. 13. The western area.

(922) in the western area contained later medieval pottery (Fig. 12). At the northern end of the excavation a series of shallow ditches (860, 882, 916) seem to belong to the 13th or 14th century, though the dating evidence is limited. They seem to delimit a series of small plots of land. It may be significant that the later medieval ditches 860, 873, 916 and probably 851 lie parallel to one another and have terminals which lie nearly in a line. These may be the ditches between a series of strip fields. Though ditch 851 contained only Late Anglo-Saxon pottery, it is likely that this was residual in a later feature.

The most significant features from the post-medieval period were two parallel ditches (199, 739) which crossed the site diagonally. These underlay a slight lynchet which was noted before topsoil was stripped and coincided with a field boundary shown on the tithe map. One of these ditches was cut by a channel (77) loosely filled with flints, probably a field drain made early last century.

DISCUSSION OF EXCAVATION

It was possible by stripping a large area in Market Field to recover the plan of a substantial part of an enclosure, two buildings and other features. But as on many rural sites, where there are few stratigraphic relationships, it remains uncertain how many of the features shown in Fig. 3 were contemporary. Some were clearly later, as the finds demonstrate, but many features contained Late Saxon or Saxo-Norman pottery. Pottery of this date was the most common found (Table 1) and it occurred as residual material in later features. The pottery gives little information that might allow the site to be tightly phased. Seriation applied to the pottery from 10 of the pits with larger collections of ceramics was not able to separate most of these and to suggest a clear chronological sequence. Two pits (125, 262), which have higher proportions of fabrics DJ and DL, however, were distinguished and these are probably earlier than the others (see below). Other features with similar high proportions of these fabrics are pit 445 and the two small pits, 671 and 673 (fig. 13) lying adjacent to one another. No clear pattern otherwise emerges from the distribution of the features with early pottery.

Stratigraphy does help to clarify some of the relationships. Ditch 135 cut the south-west corner of Building A and probably the corner of Building B, though the relationship here was not certainly established. It also cut one of the eastern ditches (849), but was itself cut by pit 906. The east wall of Building A was cut by pit 295, but the other pits seem to respect the building and indeed cluster around its two ends suggesting they may be contemporary. Groups of pits have been found to lie close to houses on a number of Late Anglo-Saxon sites (Astill and Lobb 1989, 84).

The evidence for the contemporaneity of Buildings A and B is yet more tenuous. Both are similar in size, but in other respects are contrasting. There is a clear difference in the standard of construction of the two buildings. The first makes use of timber planks which exceed purely structural needs and evidently were used for purposes of display. The second is much more modest and uses squared wood of a smaller scantling; the use of planks were restricted to the jambs of the doorway. The interior of the building was obstructed by a line of rounded posts. The rubbish pits and wells clearly cluster around Building A where food may have been prepared or consumed, but there is no similar grouping around the second structure. These differences may suggest that the two buildings served separate, but complementary, functions. Building A might tentatively be identified as a house in which meals were cooked and eaten. The building behind it was perhaps a storehouse or outbuilding. The entrance way was inconveniently narrow for stock and it is unlikely these were accommodated there.

Insofar as the Late Saxon features seem to form a coherent plan, there may be some basis for regarding the buildings, the main pits and probably the enclosure ditches (which were recut so many times that they must have been in use over a considerable period) as broadly contemporary. The pottery discussed below supports a date of the 10th century for the messuage, as it may fairly be called. The description of the excavation presented here has emphasized that the site may be broken down into separate areas. The whole was enclosed by a surrounding ditch in which were a pair of buildings set close together. An area of rubbish pits may be recognised, with the cess-pits set away from the building. On the north side the absence of features

suggests that this was a close of pasture land or a garden, or perhaps was what was termed, later in the medieval period, a forstal. The site at Steyning fits in with the emerging picture from other Late Anglo-Saxon rural settlements. Typically these had a small number of buildings set inside large ditched enclosures, sometimes with two-gate entrance ways (Astill and Lobb, 1989, 83–4).

Examination of the bones and carbonised plant remains from the pits casts some light on the economy of the settlement. The proportions of sheep, cattle and pig are similar to those found on many Late Anglo-Saxon sites. Horse is represented by a small number of bones. Hunting does not appear to have made a significant contribution to diet, though a few deer bones were found. Fish bones were found, but have not been identified. The fowl and geese found were presumably domesticated and kept in the farmyard.

The remains of cultivated wheat, barley and possibly of oats were found in the rubbish pits and ditches. Flax, and perhaps beans and vetch, were also grown. Hazel nuts, blackberries, apples, sloes, plums and rose hips were gathered from hedgerows or scrub. The seeds of the non-cultivated plants seem to reflect the types of environment around the settlement. Weeds from the light soils, such as those formed on the Greensand, and from the heavier soils, such as those on the clays immediately to the north of the settlement, were found. Waterside plants including sedges and bulrushes were found, and these may have come from low-lying ground beyond the settlement enclosure. It is interesting that plants include species likely to have grown near salt water, for the river Adur was sufficiently saline at this period to allow salt-working just to the east of Steyning and an inlet from the river occurs to the north of the site (Holden and Hudson 1981). All the cultivated and non-cultivated plants, therefore, may have come from the vicinity of Market Field.

The documentary evidence has shown that the land was held by the church in the 14th century and probably before. A connection between the excavated site and the church may be implied by the presence of wall plaster and mortar in one of the rubbish pits, because the only masonry building in the area at this date is likely to have been Steyning church. The proximity of the church graveyard is also emphasised by the presence of a piece of human femur found in the boundary ditch, which may have been moved by a scavenging animal. During the Anglo-Saxon period and until *c.* 1260 Steyning was a collegiate church and was served in later centuries by four priests (*V.C.H. Sussex* **6,** i, 241). The evidence from similar establishments at Christchurch (Hants.) and Bampton (Oxon.) suggests that the clergy lived in separate houses around the church and shared some communal buildings (Hase 1988, 52; Blair 1985, 140). The locations of the priests' houses are unknown, but there is no evidence that the excavated site was one of these (Hudson 1980, 14). There is indeed nothing to distinguish this excavated site from a typical Late Saxon farmstead.

The only find which is incongruous on an ordinary farmstead is the gold ring discovered in a rubbish pit. The circumstances of its loss can only be conjectured. The ring, which stylistically dates to the 9th century, and possibly to the second half of that century, may have been of some age when deposited. The pottery from the same pit is unlikely to be so early and probably dates to the 10th century. Analysis by the British Museum has shown that the gold in the ring was primary, which is unusual at this period when most gold is thought to have derived from recycled material.

The excavation at Market Field has helped clarify the topography of Steyning. The evidence for the location of the original centre of the town near the church and its later expansion towards the High Street has been discussed elsewhere (Gardiner 1988). The assessment showed no evidence that the settlement extended north of the church and produced no sign of the pre-Conquest Port of St Cuthman, which might have been on the low-lying ground there (cf. Aldsworth and Freke 1976, 58). The use of close-set planks on the south wall of Building A and the contrast with the north wall argues that it was the former side which would normally have been seen. The use of timbers on the most visible sides may have been the Late Anglo-Saxon equivalent of the later medieval practice of close studding on the public faces of buildings. It is also, perhaps, worth noting that there is a similar elaboration in the decoration on the south side of the church, though this was not constructed until the late 12th century. This argues that the area to the south of the excavated site was the more important, an interpretation supported by the absence of finds in the assessment in the area to the north. Hudson

(1980, 15) has suggested, moreover, that before the construction of a crossing over the River Adur at Bramber, probably in the later 11th century (Holden 1975), an important route passed to the south of the church. It was perhaps for display to travellers on this road that the south wall of Building A was built.

Some evidence was found of earlier periods in the excavation. David Rudling has noted in his archive report that the finds of Roman tile, pottery and the brooch discovered in medieval contexts are probably associated with a nearby building of 1st-century date. The flue-tiles indicate it would have had at least one heated room and the possible voussoir fragment appears to come from a bath house. Roman finds have been found in most of the excavations in Steyning, though the source or sources of this material has yet to be located.

It will be necessary shortly to review the evidence for the origins and development of Steyning, but it is clear that the early town has little resemblance to close-set tenements of later medieval towns or to the major Late Anglo-Saxon urban centres of London, York, Winchester and Thetford (Horsman *et al.* 1988, 116; Hall 1988, 130; Biddle 1975; Davison 1967). Excavations in Steyning, which collectively now amount to a considerable area, have shown no evidence for closely-set buildings. The elements found in the extensive excavations at Market Field, ditched enclosures and rubbish pits, are apparently repeated in the smaller areas examined elsewhere in the town. Nowhere has evidence been found for intensive occupation. The implication of this, especially if it is reinforced by future work in Steyning, is significant, for it may reflect more generally the charcter of minor Late Anglo-Saxon towns in England.

THE FINDS

POTTERY (Figs. 14–15)

The finds from Market Field allow the examination of medieval pottery in the Adur Valley begun at Botolphs to be continued (Gardiner 1990). The pottery from the latter site was divided into five main groups (A to E) according to broad date, and the subdivisions according to fabric indicated by a second letter. This nomenclature has been retained in the present report with the addition of the fabrics DK, DL and DM.

The pottery was examined and identified using a hand lens where necessary, and quantified by sherd number, weight and estimated vessel equivalent (EVE). Prehistoric, Roman, later medieval and post-medieval fabrics, lettered A, B, E and P respectively, were not further subdivided. These formed only a small part of the whole assemblage, 4% by sherd number (Table 1). The remainder of the locally produced wares were divided according to fabric. Reference should be made to the Botolphs report (Gardiner 1990, 245–55) for detailed descriptions of categories C and DA to DJ.

Nineteen sherds were recognised as Early to Middle Anglo-Saxon in date. Most pieces were found in contexts where they were evidently residual, but the pottery from pits 125 and 671 may have continued in use and overlapped with Late Anglo-Saxon fabrics such as DJ. The most common fabric of the earlier date was CB, which is tempered with coarse flint and shell. Little of this was found in the late 5th-/early 6th-century contexts at Botolphs and it seems to belong to a slightly later date (Gardiner 1990, 249). There were only two organically-tempered pieces, which by analogy with finds at Southampton and Portchester Castle

TABLE 1
Division of Pottery by Period

Total	*Prehistoric A*	*Roman B*	*Early/Middle Saxon C*	*Late Saxon D*	*Later Med. E*	*Post-Med. P*
Number						
3574	10	49	19	3254	173	69
Weight (kg.)						
31.17	0.08	0.26	0.25	29.03	0.87	0.68
EVE						
13.47	–	0.03	–	12.96	0.27	0.18

(EVE—Estimated Vessel Equivalent)

would date from before the later 9th century (Timby 1988, 111; Cunliffe 1970, 72).

The Early Anglo-Saxon tradition of burnishing the exterior of the pot and interior of the rim is found on some vessels and may represent a continuing tradition of decoration. The forms of an upright cooking pot in Fabric CB and a number of small pots in Fabric DJ (Fig. 14, 1, 5–7) resemble vessels from pit 135 at Portchester dated to the late 8th and 9th century and pots in Group IV fabric from Southampton (Cunliffe 1970, 73; 1975, Fig. 106, 107; Timby 1988, Fig. 6). Southampton Group IV seems very similar to the fabric called here DJ. These parallels and the dates obtained by radiocarbon and dendrochronology from sites to the south of Chichester (Gardiner 1990, 251) point to a later 9th-century date for the start of any significant activity on the site at Steyning. The fabrics probably attributable to this period are CB, DI and DJ, and, less certainly, DC which has a coarse flint temper.

As at Botolphs, a clear distinction is evident between the 9th-century and later Anglo-Saxon fabrics. The latter are generally oxidised, at least partially wheel turned and have characteristic forms and decoration. Raised applied bands, incised stick-end and stamp decoration, and 'pie-crust' rims, which are typical of this period, all occur on vessels from Steyning. Fabric DK, which is distinguished by numerous fine calcereous inclusions, may now be added to the other 10th- and 11th-century fabrics found in the Adur Valley. A rim in this fabric previously found at New Monks Farm, Lancing has been published as a sherd of Portchester-type ware, though this identification must be doubted (Holden and Hudson 1981, 142 and Fig. 5 no. 1). Some of the sherds at Steyning are closely rilled in the manner of the Lancing pot and others are decorated with a large lattice stamp (Fig. 15, no. 12).

A second new fabric, DM, also has affinities with pottery originating in Hampshire. Vessels with applied bands and small stamp decoration are known from Portchester and from the kilns at Michelmersh (Cunliffe 1975, Fig. 118, no. 335; Addyman *et al.* 1972, 129, Fig. 37c). The small number of sherds of Fabric DM found at Steyning may indicate that the site lies on the edge of the area of distribution.

The greater part of the Late Anglo-Saxon or Saxo-Norman pottery comprises fabrics tempered with flint sand of varying degrees of coarseness (Table 2). The most coarse flint-tempered fabrics DC, DI and DK are often reduced and were gradually superseded by oxidised pottery with finer temper. Pottery with calcereous tempers, DA, DB and DK, became common and these probably continued in production until about 1100 (Gardiner 1990, 251–4). The vessels are well made and the large size of some of the vessels (e.g. Fig. 15, no. 11) demonstrates the considerable ability of the potters. A group of kilns producing a similar fabric has been excavated at Chapel Street, Chichester, where there was a small pottery workshop (Down 1981, 136).

Fifteen sherds of imported pottery were discovered, some bearing traces of red paint. A single sherd had parallel lines characteristic of the 'ladder' decoration on Beauvais-type pottery. All the sherds are likely to be from a north French rather than a Rhenish source. Excavations at Tanyard Lane also recovered Beauvais sherds of a similar type (Freke 1979, 141). Imported pottery is commonly discovered in excavations in Steyning and the vicinity (Gardiner 1990, 255).

A considerable part of the assemblage was very fragmentary and no attempt was made to categorise vessels by form. Cooking pots and storage vessels predominated, but pieces of at least two lamps of the typical 'hour-glass' form were also found.

To examine the character of the assemblage further, the details of pottery from 10 pits with largest quantities of pottery were submitted to Clive Orton. Pottery from the top-most fill, which might have been contaminated by intrusive material, was excluded from the analysis.

TABLE 2
Later Anglo-Saxon Pottery

Fabric	*DA*	*DB*	*DC*	*DD*	*DE*	*DF*	*DG*	*DH*	*DI*	*DJ*	*DK*	*DL*	*DM*	*DP*	*Total*
Number	122	38	148	1056	733	185	1	89	71	308	364	120	3	15	3254
Weight (g.)	905	325	1298	1514	4304	788	2	1032	945	343	3283	1057	16	70	29032
EVE	0.06	0.11	0.12	5.14	1.60	0.48	–	0.27	0.91	2.30	0.99	0.88	–	–	12.86

TABLE 3
Pottery from Selected Pits
Indices of Agreement of Pottery Weight

Context no.	*262*	*125*	*127*	*137*	*176*	*143*	*503*	*443*	*389*	*447*
262	–	84	85	<	<	<	<	<	<	<
125		–	102	<	<	<	<	<	<	<
127			–	106	110	103	95	99	97	<
137				–	150	175	135	147	97	57
176					–	125	160	141	88	<
143						–	125	153	108	63
503							–	149	<	<
443								–	129	<
389									–	<
447										–

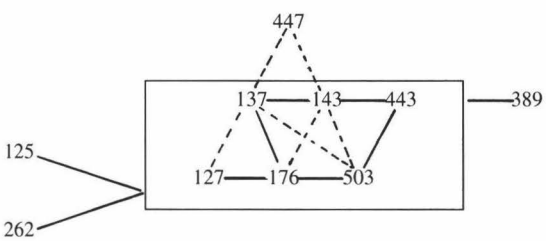
TABLE 4
Pottery from Selected Pits
Percentage of each Fabric by Weight

Context no.	*262*	*125*	*127*	*137*	*176*	*143*	*503*	*443*	*389*	*447*
Fabric										
DL	58	–	1	–	2	–	6	3	6	1
DJ	37	90	41	2	–	2	–	–	–	4
DD	5	6	26	42	27	48	25	46	78	20
DE	–	–	17	25	25	28	31	24	4	–
DC	–	1	4	4	6	4	8	–	–	–
DA	–	–	1	13	19	4	11	3	–	1
DB	–	–	2	3	6	–	–	–	–	–
DF	–	–	2	3	1	3	–	2	–	–
DH	–	–	1	2	11	1	18	19	12	–
DI	–	–	6	–	4	–	–	2	–	18
DK	–	–	–	6	–	9	–	–	–	55
Total	100	99	101	100	101	99	99	99	100	99

Seriation by Clive Orton

An attempt was made to seriate the pottery using Brainerd's (1951) index of agreement and the close-proximity method of Renfrew and Sterud (1969). This approach failed because there was a 'cycle' of five contexts 137, 143, 443, 503 and 176. More *ad hoc* methods were therefore employed.

There appears to be a 'core' of six contexts (those listed above plus 127), with two more (125, 262) related to one 'end' and one (389) to the other. The remaining context, 447, does not relate closely to anything, but formally is nearest 143 and 137. These relationships can be represented schematically as:



where solid lines represent close or fairly close relationships and dashed lines weaker ones. Within the 'core', there seem to be two distinct sequences, 137–143–443 and 127–176–503, which run in parallel.

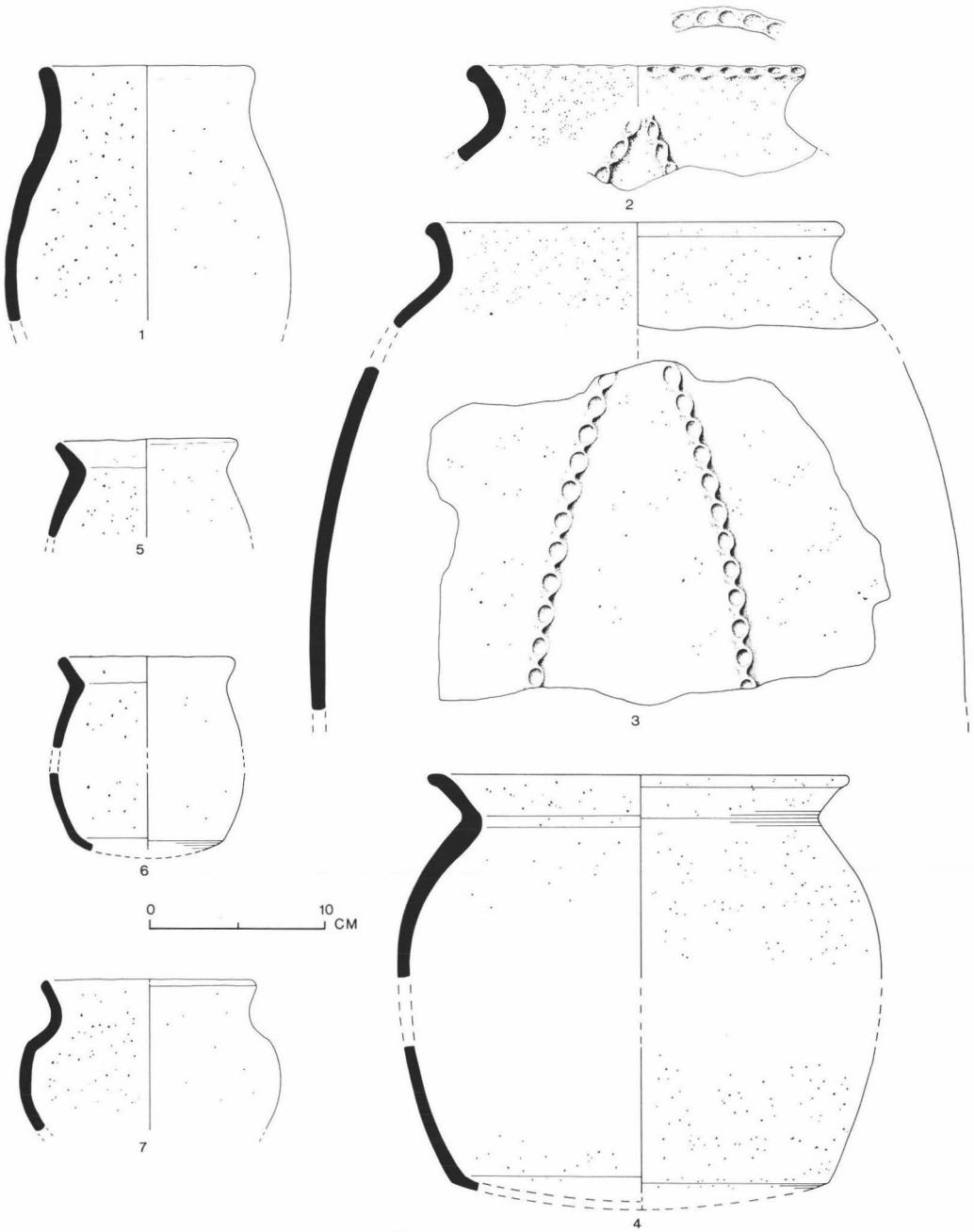


Fig. 14. Pottery (×¼).

The indices of agreement (< indicates values smaller than others in their row and/or column) and the ordered percentages of fabrics in pits are shown in Tables 3 and 4.

The analysis by Orton separates out on the one hand pits 125 and 262, which contain a high proportion of fabrics DJ and DL. These are types, which by comparison with other sites, would be

placed earlier than the other fabrics. At the other end it also identifies pit 389 with its very high percentage of fabric DD. The implication of this is not clear. The failure of seriation to separate the other pits is of interest. This *might* suggest the broad contemporaneity of these contexts.

Fabrics (Figs. 14–15)

CB—multi-coloured coarse platy flint temper up to 1.5 mm. across

1. A hand-made small, upright cooking pot with traces of sooting on the side. Context 948.

CC—similar with flint temper up to 0.25 mm. across

CE—tempered with fine to medium white sand grains or lumps of sandstone

CF—similar to CC, but with greater proportion of organic material

CH—distinguished by inclusions of fragments of shell

CI —water-rounded, sub-angular white or translucent quartz temper up to 0.75 mm.

DA—tempered with chalk and limestone fragments

DB—similar with greater quantity of fine sand quartz

DC—coarse flint temper greater than 0.75 mm. across

DD—finer flint temper less than 0.75 mm., coarser than DE

2. A storage vessel with wheel-turned, 'pie-crust' rim and narrow, raised applied straps. Context 390.
3. Rim and sides of a coil-built storage vessel with wheel-turned rim and applied straps similar to those of no. 2. Context 945.
4. Cooking or storage vessel with coil-built body and wheel-turned rim. There is no trace of sooting on the exterior to show that this was used for cooking. Context 900.
8. Rim of pot with deep groove marking the junction between the rim and body. Context 900.

DE—rounded flint or quartz temper

DF—medium to coarse sand quartz with occasional fragments of flint and chalk

DG—angular white or light grey flint temper

DH—similar to DE, but with greater proportion of chalk or shell

DI —handmade, reduced, tempered with sub-angular flint and chalk up to 2 mm., but usually less than 0.75 mm. across

DJ —unsorted platy, sub-angular flint and frequent shell

5. Small hand-made vessel. Context 900.
6. Small uneven, hand-made vessel with slight burnishing on exterior and interior of rim. Context 524.
7. Small hand-made vessel with sooting over most of exterior. Context 875.
9. Large coil-built vessel. Context 140.
10. Sharply everted rim from hand-made vessel. Context 827.

DK—oxidised and/or reduced surfaces and core, a hard fabric with jagged fracture which can be smooth or rough to feel according to the amount of flint added. It is characterised by the inclusion of copious fine shell or chalk (>2%), usually 0.5 mm. across or less, but occasionally larger. The quantity of fine sand and flint temper varies.

11. Storage vessel with strap handle. Context 899/900. Cf. Down 1978, fig. 11.4, no. 75.
12. Sherd with lattice stamp, one of a number of pieces from context 448.

DL—reduced and/or oxidised, a fairly soft fabric with jagged fracture and smooth to feel. It is tempered by very fine sand grade quartz, occasional fragments of chalk, shell and angular or rounded flint. Some vessels in this fabric are clearly handmade.

DM—orange-red faces and core, a fairly hard fabric with a slightly sandy feel and sharp, slightly laminar fracture. It is tempered with fine sand quartz (2%) and occasional pieces of sub-rounded multi-coloured flint up to 1 mm. across.

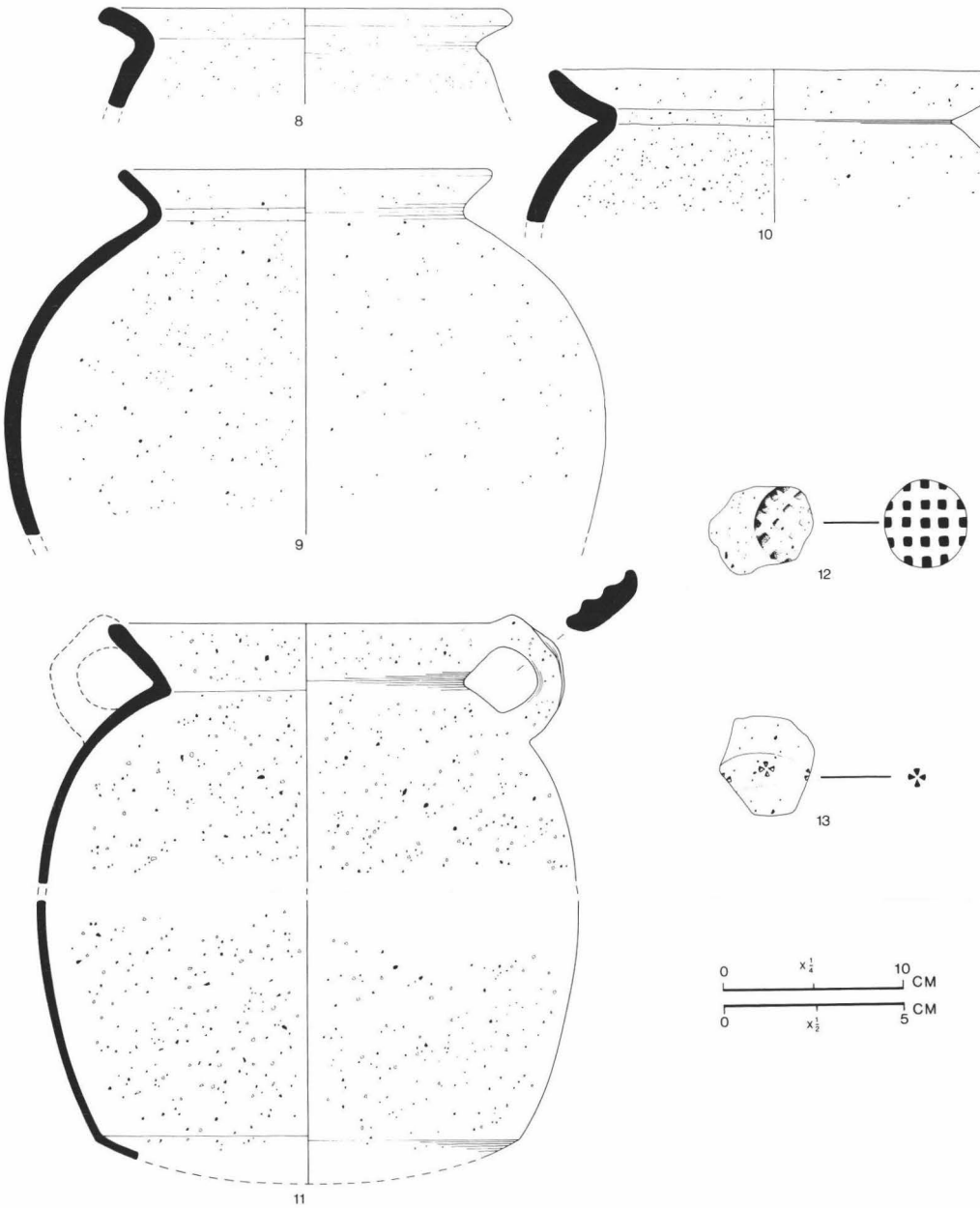


Fig. 15. Pottery (Scale: 8–11 ×¼; 12–13 ×½).

Vessels in this fabric were decorated with thin slightly raised bands with a cross stamp 5 mm. in diameter.

13. Sherd with raised band decoration with small stamp. Context 832.

IRON OBJECTS (Fig. 16, nos. 14–27)

14. Socketed ferrule with pointed tip. A similar object from Thetford has been identified as the end of a pole used to propel people wearing bone skates (Rogerson and Dallas

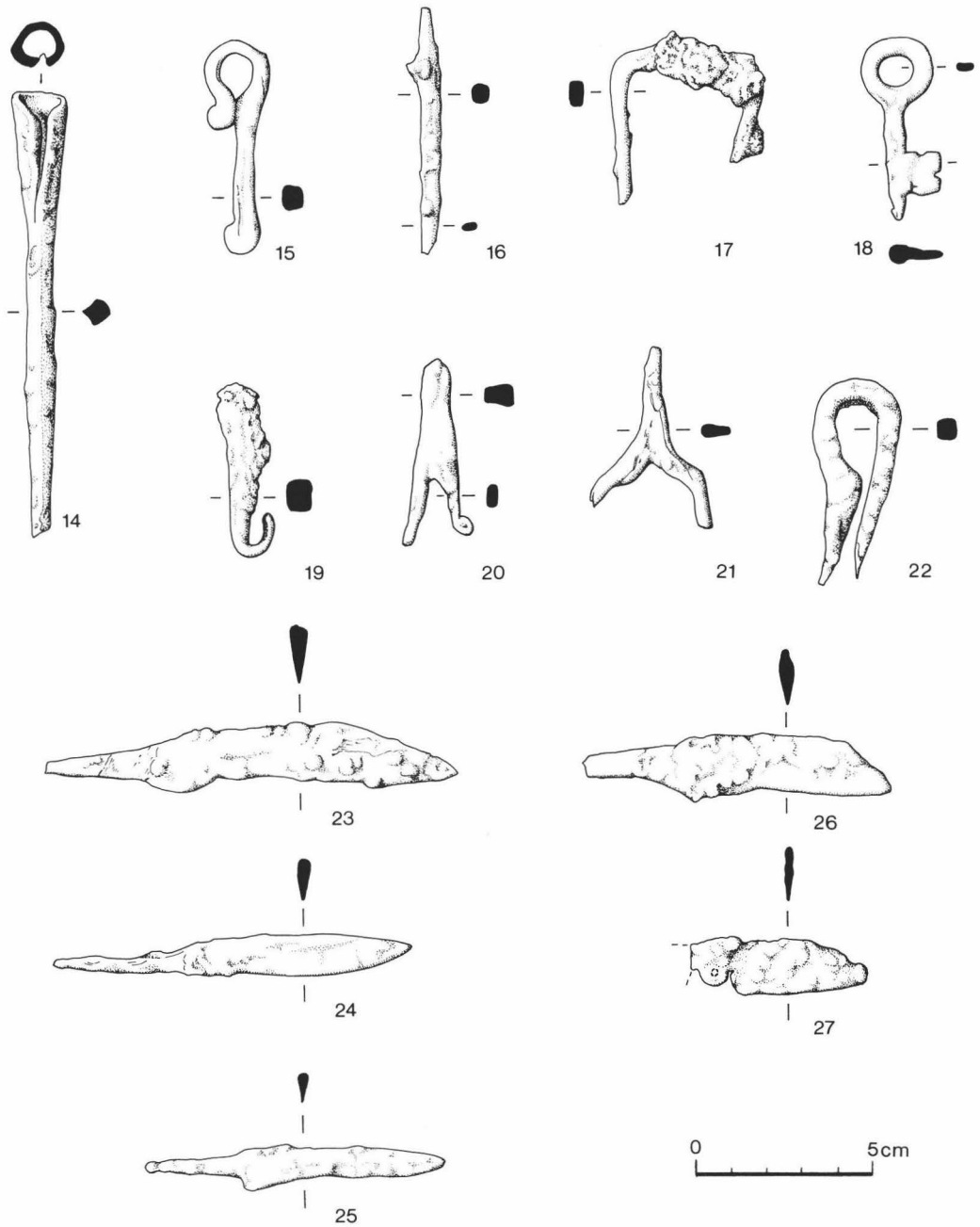


Fig. 16. Ironwork (×½).

1984, 97; Cunliffe 1975, Fig. 135, no. 41). Context 13, find no. 5 (1988).

15. Looped object with rounded terminals of uncertain function. Context 310, find no. 30.
16. Leatherworking awl (cf. Goodall 1990a, Fig. 9.1, nos. 47 ff.). Context 99, find no. 3 (1988).
17. Staple for binding together pieces of wood. The cross-bar has a rectangular section, but the feet are more nearly square. Both feet are broken. Context 519.
18. Padlock key. Similar keys are known from pre-Conquest contexts at Thetford (Rogerson and Dallas 1984, Fig. 132, no. 183) and Cheddar (Goodall 1979, Fig. 90, nos. 4, 15, 96). Context 136.
19. ?Hook of uncertain function. The broad end indicates this is not a wall hook. Context 830.
20. Wedge-shaped object with rounded terminals of uncertain function. Context 83, find no. 8 (1988).
21. Part of flesh hook or flesh fork. The terminals of the points do not survive. Context 551.
22. Wood staple. Context 304.

Whittle-tanged knives

23. Rising back which angles down to tip. Context 548, find no. 14.
24. Roughly parallel blade which narrows to tip. Context 136, find no. 10 (1988).
25. Worn, but originally parallel blade which narrows to tip. Context 310.
26. Parallel blade which angles down to tip. Context 505, find no. 9.
27. Fragment of a reversible or pivoting knife. This type of knife has recently been discussed by Goodall (1990b) and Pritchard (1991, 128).

NON-FERROUS OBJECTS (Fig. 17, nos. 28–32)

28. Lead off-cut with knife marks where it has been cut through. Context 31.
29. Lead roundel (cf. Geddes and Carter 1977, Fig. 131, no. 39). Context 845, find no. 23.
30. Large copper-alloy ?needle, bent and with a broken tip. Context 83, find no. 31.
31. Copper-alloy pin with head of uncertain form covered in corrosion product. Similar dress-pins are known from London, York and elsewhere (Pritchard 1991, 150). Context 765, find no. 16.
32. Roman copper-alloy brooch. David Rudling comments, 'Nauheim derivative brooch with no decoration, but a plain diminishing bow and solid catch plate. This type of brooch was very widespread at the time of the Roman conquest and it continued to be popular almost to the end of the 1st century (Mackreth 1973, 11; Hattatt 1982, 57–9). A similar brooch has recently been recovered from Rustington (Rudling 1990, 15). Context 126 (pit 125), find no. 7 (1988).

GOLD RING by Leslie Webster (Fig. 17, 33).

The ring consists of a gold band hammered into 11 facets, each incised with a framed letter (in one case, a pair of letters) of an inscription which reads ÆSCPVLFMEACAH. The ring has been distorted into an approximately oval shape. Maximum diameter 23.5 mm., minimum diameter 20.0 mm., height 5.0 mm., thickness 1 mm. Weight 3.65 grammes.

The inscription is lightly but fluently incised with a fine-pointed graver. With the exception of the M and E which share a frame, each letter is individually set within a simply sketched sub-rectangular frame, against a background generously speckled with wedge-shaped nicks produced by the point of a graver. The letters were executed after the frames were drawn, since they make regular use of the frame structure to form the edges; the speckling was added last of all.

The gold is pale, and the high silver content is confirmed by an XRF analysis which gives the surface constituents as 75% gold, 23% silver and 2% copper. Microscopic examination of the surface reveals several small nodules of silvery appearance: these are inclusions of osmium/iridium, which are characteristic of primary gold from an alluvial deposit that has not undergone refining or recycling processes. Unfortunately it is not possible to identify the source (see below).

The ring fits comfortably into a 9th-century horizon on a number of stylistic counts. Its subdivision of an ownership formula (X owns me) into neatly framed fields containing paired or individual letters is paralleled on the Bodsham ring (Okasha and Webster 1970); while the use of a pounced ground to highlight the lettering may be seen in the Lotmead Farm, Swindon, ring (Wilson

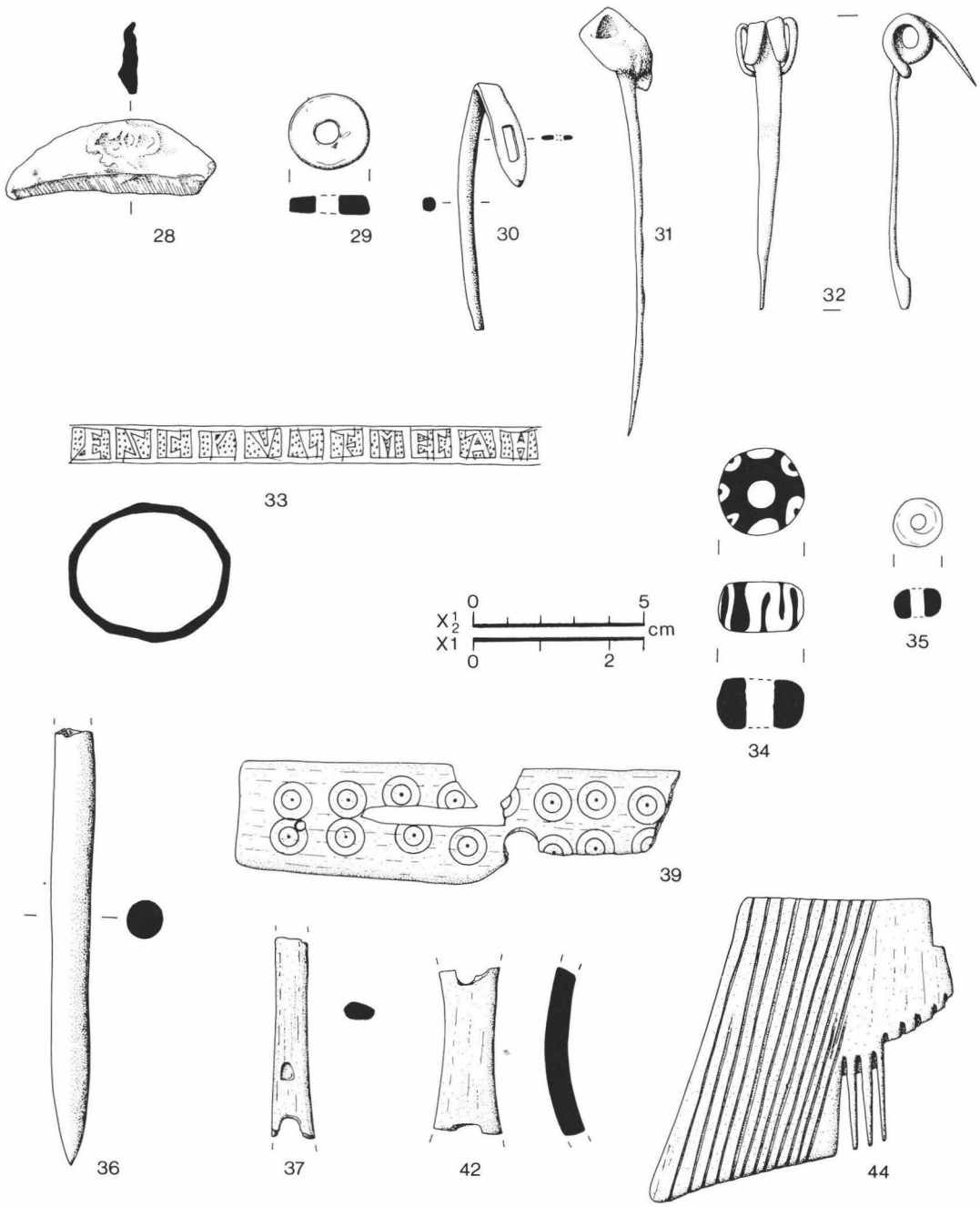


Fig. 17. Lead objects (28–9), copper alloy objects (30–2), gold ring (33), glass bead (34–5) and worked bone (36–44). Scale: 28–30 ×½; 33–44 ×1.

1964, cat. 85). This speckling, and the tendency to subdivide the inscription into small framed fields, are particular hall-marks of the Trewhiddle style. Faceting occurs on a number of plain gold rings of Late Saxon date, all from Wessex or the South-West: at Exeter (Devon), Trewhiddle (Cornwall), Corsham (Wiltshire) and Barton (Oxfordshire) (Graham-Campbell 1982; *Wiltshire Archaeological Magazine* **83** (1990), 234. Its use here, though otherwise unparalleled on decorated Anglo-Saxon rings, serves to accentuate the separation of the ornamental fields where the decoration is so reticently sketched in. Indeed, where the normal means at this period of emboldening ornament was to fill it with or reserve it against a niello inlay, this ring is unusual in its simple, but confidently-drawn decoration, which was clearly never intended to be emphasized by an inlay. Only the Swindon ring (Wilson 1964, cat. 85) comes close to it in effect and execution, but that is a somewhat more considered piece. Although clearly sketched in at speed, the fluent strokes of the graver on the Steyning ring show a craftsman wholly at ease with his medium, shaping the letters confidently and elegantly. This is indeed in notable contrast to the often clumsy lettering of nielloed inscriptions on, for example, the Æthelwulf and Bodsham rings (Wilson 1964, cat. 31; Okasha and Webster 1970).

This particular type of owner formula appears to have been popular on rings of the second half of the 9th century as identical formulae on the Lancashire and Bodsham rings (Wilson 1964, cat. 30; Okasha and Webster 1970) indicate; the Trewhiddle-style element in the decoration confirms this dating. The predominantly Wessex-centred distribution of other examples to which it is stylistically linked may indicate an origin in this region.

Inscription by Elizabeth Okasha

The gold finger ring is inscribed with an Old English text which is set completely around the outside of the hoop. The letters are placed in individual rectangular panels except for the letters EC of MEC which share a panel. Inside each panel the background is pounced and the lettering left plain. The script used is Anglo-Saxon Capitals. the text is legible and reads:

ÆSCPVLFMECAH |

The text has been transliterated using the following system:

A indicates a legible letter A
A indicates a letter A, damaged but legible
| indicates the end of a text.

The text divides into words as, ÆSCPVLF MEC AH, that is 'Aescwulf owns me'. This Old English owner formula is well recorded amongst Anglo-Saxon inscriptions occurring sometimes on its own, sometimes with other formulae (Okasha 1971, 8). It is used, for example, on a gold ring of probably 9th-century date, 66 Lancashire, whose text reads: +ÆDRED MEC AH EANRED MEC AGROF, that is '+Aedred owns me; Eandred engraved me' (*ibid.*, 89, no. 66 and Figs.).

The Old English name on the Steyning ring, *Aescwulf*, although not particularly common is recorded; it occurs twice, for example, in the 9th-century *Liber Vitae* (406, 423; Sweet 1885, 164–5). The spelling MEC for the accusative singular *me* occurs sporadically in Old English manuscript texts, more frequently in verse than in prose; it is quite common in inscribed texts of all dates, as on the Lancashire ring quoted above.

There is no linguistic evidence for dating the text. The use of the Old English owner formula suggests a date from the 9th century onwards, since no instances of its use are recorded earlier than this. There is only one dating feature in the letter forms used, the consistent use of angular forms of the letters, C, S and P. These are more common of objects dating earlier in the Anglo-Saxon period, the 7th to the 9th century, rather than from later.

The ring from Steyning joins a group of 15 other Anglo-Saxon inscribed finger rings known to me, of which the majority are gold (Okasha 1971, nos. 5, 13, 14, 33, 36, 66, 70, 86, 103, 107, 112, 115, 155, 156; the 15th is a newly-found ring from Flixborough, as yet unpublished). The most similar in workmanship is 115 Swindon (*ibid.*, 117 and Figs.). This ring is gold and also has plain lettering set against a pounced background, although without panels.

The Metal Composition by Duncan Hook and Nigel Meeks

The ring was analysed using x-ray fluorescence spectrometry (XRF) on an area of uncleaned surface metal. The figures quoted below should therefore be regarded as semi-quantitative only: 75% gold, 23% silver, 2% copper.

Silvery-coloured, platinum-group metal inclusions, were clearly visible in the surface of the gold. They were characterised using the scanning electron microscope (SEM) and were found to be of the Osmium/Iridium type; the ratio of Osmium to Iridium varying, with either element being dominant (e.g. Ogden 1977). This variation is a common feature of ancient gold objects. Ruthenium, an element which is sometimes present in platinum-group inclusions, was found to be low in all the inclusions analysed.

Inclusions of this type are common in gold from placer deposits. The action of refining, remelting and reusing gold generally removes the inclusions, and thus the presence of so many inclusions in this ring indicates that it was probably made of primary gold. However, it is not possible to use the composition of the inclusions to provenance the gold of the ring.

Context 539 (pit 447), find no. 13.

COIN by David Rudling

Eadgar, 959–75. Silver Penny. Pre-reform coinage (959–73). Cross type (B.M.C. *iii*).

Obverse: + EADGAR REX ANGLORVM, small cross pattée

Reverse: + EA'DGILD MONETA HA ∴, small cross pattée

i.e. the moneyer Eadgild of the mint of Southampton or Northampton (both mints shared the mint signature HA which is an abbreviation for HAMTVN, or, in the case of a few Southampton coins, HAMPIC). The moneyer Eadgild does not appear to have previously been recorded for either the reign of Eadgar or for the mints of Southampton or Northampton. A moneyer named Eadgild did, however, strike coins during the reign of Aethelstan (924–39) in the southern and Mercian areas of England (North 1980, 99).

The coins weighs 0.97 g. and has a die axis of 180 degrees. Context 3, find no. 1 (1988).

METAL-WORKING SLAG (identifications by Dr G. McDonnell)

A total of 5.3 kg. of slag-like material was recovered in excavation. It was sorted into smithing slag, cinder, hearth bottom and hearth lining. This material was found predominantly in Late Anglo-Saxon features. The two hearth bottoms had diameters of about 180 and 260 mm.

The presence of hearth-lining fragments suggests that smithing was taking place in the vicinity, but slag is a robust material and may remain on the surface or within the ploughsoil for some time before deposition.

LEAD

Lead weighing 1.5 kg. was found in pit 663 (context 830), which may be attributed to the Late Anglo-Saxon period on the evidence of the pottery within the same feature. The lead is in the form of large driplets and a single lump which had been poured on to a flat surface when molten.

GLASS BEADS (Fig. 17, 34–5)

Of the three glass beads found during excavation, two came from Late Anglo-Saxon contexts and one from cleaning the site. Necklaces of glass beads were often worn by women in the Early Anglo-Saxon period, but between the 9th and 15th century dropped out of fashion (Biddle and Creasey 1990, 660). Glass beads are rarely found on Late Anglo-Saxon sites, and where discovered may be residual. Certainly, the largest bead from Steyning (Fig. 17, no. 34) is indistinguishable from similar finds of an earlier date. The two others might be contemporary with the occupation of the site.

34. Opaque black glass bead with yellow pattern, diameter 13 mm., height 6.5 mm. Context 830, find no. 25.
35. Opaque light turquoise bead, diameter 7.2 mm. max., height 4.2 mm. Context 235 (site clearanace), find no. 15 (cf. Oakley and Hunter 1979, Fig. 130, no. 35).
36. Opaque mid turquoise bead, diameter 2.9 mm., height 1.9 mm. Context 83, find no. 13 (1988) (not illustrated). A similar minute bead was found on the Middle Saxon excavations at Melbourne Street, Southampton (Hunter, 1980, Fig. 11,6, no. 8).

WORKED BONE by Ian Riddler (Fig. 17, 36–44)

In the following text bone and antler are distinguished as raw material types, even though

antler is, in effect, a form of bone. In terms of the working of skeletal materials there are good reasons for making this distinction (MacGregor 1989, 107). The terminology used for combs follows that of Galloway (1976).

Anglo-Saxon

36. Double-pointed pinbeater—part of a double-pointed pinbeater of circular cross-section, of which only one end now remains. It is highly polished and has been burnt. Context 918.

The objects known variously as pinbeaters, threadpickers or 'pickers-cum-beaters' were first identified as weaving implements by Elizabeth Crowfoot (Dunning 1952, 50). Hoffman has described how they can be used with a warp-weighted loom to pick out threads and adjust the weft; as such they can be described as utilitarian weaving tools (Hoffman 1964, 126–7, 135–6). Double-pointed pinbeaters occur throughout the Anglo-Saxon period, effectively for as long as the warp-weighted loom was in use. In contrast, it has recently been suggested that the broader and generally shorter single-pointed variant which is first seen in the Late Saxon period can be related to the advent of the vertical two-beam loom (Biddle 1990, 204, 227–8; Pritchard 1991, 203–5). A study of double-pointed pinbeaters from 19 sites, mainly of Early Anglo-Saxon date, suggested that they occurred in two distinct lengths and that they may have been used in pairs (Riddler forthcoming a).

Anglo-Saxon/Early Medieval

37. Modified pig fibula—part of the head and shaft of a pig fibula, broken across a square perforation 3 mm. in diameter, with a secondary indentation below this passing nearly through part of the bone. Context 128.

Comparatively few bones of the pig were suitable as raw material in bone working and during the Anglo-Saxon and Saxo-Norman periods only the metapodia and fibulae were transformed into objects. The fibula was usually sharpened to a point at the proximal end and perforated at the distal end as here. The splayed distal end was sometimes trimmed and shaped.

Modified pig fibulae are commonly found in post-Roman British sites extending into contexts of the Saxo-Norman period. They have previously been identified as rudimentary dress pins (Leeds 1923, 182–3; Graham-Campbell 1980, 59; MacGregor 1982, 91–2; 1985, 120–1; Pritchard 1991, 207; Foreman 1991, 183–4). It is surprising, therefore, that they are largely absent from Early Anglo-Saxon burials, as well as from Scandinavian burials of the Viking period (Riddler forthcoming a). As an alternative, it has been suggested that they are implements used in textile manufacture or in basketry (Biddle 1990, 232–3; Riddler 1990b, fiche 3/17; 1991, 47; forthcoming a, b; Ulbricht 1984, 54–5; West 1985, 125; Williams 1987, 100). Their precise function remains uncertain, however, as does the significance of the lack of perforation on some examples.

38. (not illustrated) A small fragment from a decorated mount made from animal rib and impressed with double ring-and-dot designs. Context 859.
39. A fragmentary section from a decorative mount shaped from animal rib and decorated by paired double ring-and-dot motifs. A rivet hole at one end includes traces of iron corrosion. Context 372, find no. 1.

Strips of shaped animal rib incised with ring-and-dot motifs are commonly found in settlement contexts from the Late Roman to Early Medieval periods. At least 1700 such pieces came from a Roman context at Gloucester and they are often found on post-Roman sites both in England and on the Continent (Gabriel 1988; Hassall and Rhodes 1974, 73, Fig. 28.36; MacGregor 1985, 197–200; 1988, 191; Pritchard 1991, 210; Ulbricht 1984, 37–8, 55–7). Certain sections of rib bone, which were not decorated with ring-and-dot motifs, also formed parts of combs (Riddler 1991, 46, Fig. 36.26). The majority, however, were used as decorative casket mounts. Caskets of this type have come from Richborough, Caistor-by-Norwich, Emden, York, Ipswich, South Cadbury and Ludgershall Castle, as well as Schleswig and Oldenburg (Bushe-Fox 1949, 152 and Pl. LVII, 276g; Myres and Green 1973, 85–7 and Pls. XX–XXI; MacGregor 1985, 197 and Fig. 107; Waterman 1959, Pl. XVII; Ulbricht 1984, Tafn. 36–7, 83–4; Gabriel 1988, Abb. 18, 21). The

decorative patterns, although not figural, may nonetheless possess some iconographic significance (Elbern 1972).

40. (not illustrated) Comb connecting plate fragment—part of an undecorated connecting plate fragment for a double-sided composite comb of narrow, D-shaped section. There is a vestige of a rivet hole placed off-centre at one end. Marks from sawing of comb teeth have been cut decoratively into both sides, indicating that the comb originally possessed five teeth per centimetre on each side. Context 548.
41. (not illustrated) Comb tooth segment—part of an antler tooth segment for a single-sided composite comb, originally of six teeth per centimetre. The segment is centrally-rivetted and has been burnt. Context 554.
42. Comb connecting plate fragment—a section from an antler connecting plate for a double-sided composite comb, broken across rivet holes at either end. Corrosion traces about the holes indicate that the comb was originally fastened by iron rivets. The fragment is now distorted by incineration. Context 264.
43. (not illustrated) Horn comb connecting plates—five sections of animal rib, forming parts of two connecting plates for a double-sided horn comb. Tooth marks on both sides indicate that the comb originally possessed up to three teeth per centimetre on one side and nine on the other. It was fastened by two iron rivets at 96 mm. spacing. Context 524.
44. Comb end segment—an incomplete antler end segment from a single-sided composite comb originally of four teeth per centimetre. The segment is decorated on both sides by incised saw-lines which are generally parallel with its outer edge and extend inwards as far as the graduated comb teeth. The surviving comb teeth show no signs of wear. Context 532, find no. 12.
45. (not illustrated) Comb end segment—a fragmentary part of an antler end segment, probably for a double-sided composite comb which has been burnt and now lacks any traces of teeth or rivetting. The surviving pieces show that it was originally of rectangular shape, but no further detail can be discerned. Context 264.

The six fragments of combs stem from single- and double-sided composites and from a Late Saxon horn comb. It is conceivable that the end segment and connecting plate fragment (Fig. 17, 42) recovered from context 264 come from the same double-sided composite comb which has been heavily distorted by burning. The remaining pieces of combs, which included several small fragments retrieved from sieving, each represent distinct items and provided a minimum number of five combs from the assemblage as a whole.

Comparatively little remains of the comb fragments from context 264 or the small connecting plate from context 548 which also comes from a double-sided comb. It is possible that the combs were undecorated, although marks from the sawing of teeth have been carefully cut into one of them, and this itself can be regarded as a form of decoration. The fragments are generally too small to allow any certainty as to whether they were entirely undecorated along both sides and across their connecting plates and tooth segments.

Double-sided composite combs with little or no decoration are seen in contexts from the 6th century onwards and are particularly common in the Middle Saxon period. The slender nature of these combs, with their narrow connecting plates and even tooth values also imply a Middle Saxon date, although they are too fragmentary to be securely tied to that period. It has been observed that undecorated double-sided composite combs are found more frequently in settlements than within cemetery assemblages (Riddler forthcoming d). The deliberate cutting of tooth sawing marks into the connecting plates for decorative effect can be seen on combs throughout the Anglo-Saxon period.

The horn comb, also, is double-sided, with 2.5 to 3 teeth per centimetre on one side and nine on the other. The identification of such fragments of animal rib as the connecting plates of horn combs is based on the rare survival of combs with intact horn tooth segments. These have largely been recovered from London and York. One example was published by Winter at the beginning of the century, but they have otherwise remained unrecognised as an object type until recently (Winter 1907, no. 45; MacGregor 1985, 95–6; Pritchard 1991, 199–200; Mann 1982, 7–8). The fragments surviving here allow the comb to be allocated to Biddle's type A, for which connecting plates with two rivets secured

a single sheet of horn (Biddle 1990, 679, Fig. 187A). Evidence from *Hamwic*, Winchester and London suggests that double-sided horn combs were being produced from the 9th to 12th centuries (Pritchard 1991, 199–200, Figs. 3.80, 3.81; Biddle 1990, 683–4; Riddler forthcoming c). To judge from the situations where either the horn survives or tooth marks are present on the connecting plates, as here, it is evident that horn combs were invariably produced with overtly coarse and fine teeth. The reversion to the use of double-sided combs with teeth of two distinct finenesses, a practice seen in the Early Anglo-Saxon period (Elder and Riddler 1988, 141), forms one of a number of innovations in comb design apparently occurring in the 9th century.

Single-sided combs are represented by a fragment of tooth segment and by a decorated end segment (Fig. 16, 44). The latter can also be firmly placed in the Late Anglo-Saxon period. The well-defined point, and the extended form of the segment, which originally stretched some way beyond the end of the connecting plate, are both characteristic of elongated single-sided composite combs of this period. Similar types of extended comb can be seen at London, Winchester, Waltham, York and Canterbury, for example (Pritchard 1991, Fig. 3.76; Biddle 1990, Fig. 183.2158; Huggins 1976, Fig. 42.1; Waterman 1959, Fig. 16 and pl. XVIII; Riddler 1990a). The decoration of the end segment also reflects Late Anglo-Saxon practice. The use of the saw to cut bands of incised lines can be seen on comparable combs from Goltho and London (MacGregor 1988, Fig. 161.5; Pritchard 1991, Fig. 3.78). The London comb, in particular, appears to be an elaborate version of the Steyning end segment. Its closely-spaced, systematic rivetting (which follows contemporary practice and is not a consequence of poor workmanship) suggests that it is not earlier than the 10th century. It was retrieved from a context of the 11th or 12th centuries. The Goltho comb comes from a context of *c.* 850–950 (MacGregor 1988, 193) and all the indications are that the Steyning comb would also fit into this Late Saxon milieu.

FIRED CLAY OBJECTS (Fig. 18, 46–47)

Two nearly complete loomweights and six other fragments were discovered. All are the bun-shaped type defined by Hurst (1959, 23–5) characteristic of the Late Anglo-Saxon period. The two nearly complete weights and one of the fragments have grooves either side of the central hole to take the warp threads (Fig. 18, 46). These indentations have clearly been formed before firing and are not the result of wear. Similar grooves have been noted on loomweights from Faversham (Kent) and Medmerry (West Sussex) (Groves 1955, 209; White 1934, 339).

The two nearly complete weights (from context 900) have a mass of 888 g. and 1080 g., and must originally have each been about 1.1 kg. One loomweight fragment has dimple marks in the outside edge. Similar decoration has been noted on weights from nearby Old Erringham and elsewhere (Holden 1976, 315).

A nearly complete cone of fired clay (Fig. 18, 47) was found at the boundary of contexts 899 and 900. It is evenly fired in a yellow-white clay and shows no evidence that it has been later subjected to heat, which precludes its interpretation as a piece of kiln furniture. A further explanation of its function which may be discounted is that it served as part of a bell mould. Its irregular and faceted outside face is unsuitable for this purpose. Theophilus in the 12th century described a method of making bell moulds on a pole lathe to obtain an even core (Theophilus, n.d., Book 3, Chapter 85). Its purpose therefore remains undetermined.

ROMAN TILE by David Rudling

A total of 81 pieces of definite or probable Roman tile/brick were recovered from 44 contexts. A full report is included in the site archive.

One piece of flue-tile from context 214 is of particular interest. This is an example with relief-patterned keying, and is probably from a Westhampnett-type voussoir (Ernest Black, pers. comm.). The die is Lowther (1948) type 37. This and other 'Diamond and Lattice' patterned dies of the so-called 'London-Sussex Group' have been dated to the period *c.* 75–110 AD (Black 1985, 358; 1987, 86).

WALL PLASTER

Four fragments of wall plaster with mortar weighing 19 g. were discovered in rubbish pit 447,

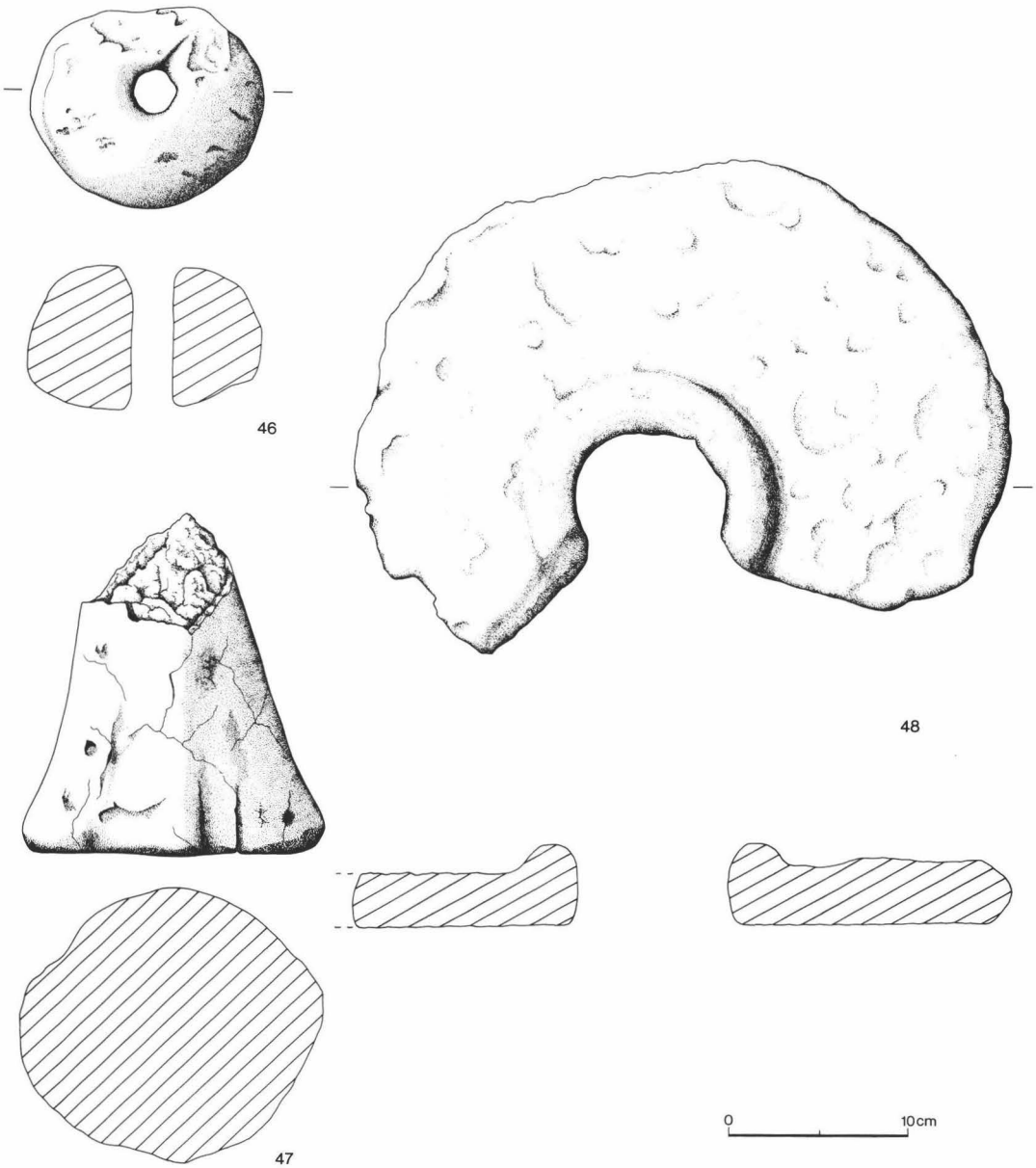


Fig. 18. Fired clay objects (46–7), lava quern stone (48) (×¼).

layer 539. The lime wash surface survives on two of the pieces. These pieces were firmly stratified in a Late Saxon context and it seems probable that they come from Steyning church, which is likely to have been the only masonry building in the vicinity.

STONE ARTEFACTS (identifications by John A. Cooper) (Fig. 18, 48)

The two main types of stone artefacts represented at Steyning were hones and querns. Most of the stone was from Wealden or other nearby sources. The

greatest number of hones were made from a slightly micaceous sandy limestone with fragments of ostracod and are probably of Wealden origin. Other stone types which were utilised for hones were a claystone with mica, limestone with fossil bivalves and a fine-grain Wealden sandstone. It is likely that all these stone types were from the Weald. A single hone which came from a later (post-medieval) ditch could be a sarsen stone, but otherwise might be from a non-local source.

The quern stones were from two sources. A total of 7.4 kg. of Lower Greensand which may be certainly identified as quern fragments, and 3.6 kg. which might have served the same function, were recorded. The Lower Greensand beds in the Weald have been exploited since the Iron Age as a source of stone for querns (Peacock 1987). Fragments of Mayen or Niedermendig lava querns from the Rhineland weighing a total of 9.1 kg. were also discovered. Querns of this type are a common discovery on Late Anglo-Saxon and Later Medieval sites. An almost complete upper stone with hopper was found in pit 447 (Fig. 18, 48). A single piece from a quern of quartzite sandstone, possibly sarsen stone, was also recovered.

One of the pieces of Lower Greensand quern had been pierced by two holes. A close examination of the wear marks around the holes suggests that after the quern had broken the piece of stone had been reused as a weight, perhaps for fishing or for a loom.

BONES by Rod O'Shea

A total of 6,721 bone fragments were examined, of which 51% were identified. Fragments were counted, but not weighed. Each fragment was put into one of five size classes, so that fragmentation indices could be calculated by the method of Levitan (1990). In fact, these data did not prove useful indices as the majority of fragments were in class 1 (less than 25% complete) and produced too little differentiation between contexts.

Sheep bones were most common in nearly all contexts examined. An attempt was made to separate sheep and goat bones following the techniques in Davis (1987), but all bones were either of sheep or fell outside the useful size ranges. Cattle bones were second most common, and one context illustrated the problems of fragment counting. There were 70 small pieces of cattle skull which gave a weighting to the calculations which would not have occurred with an intact skull. Third most common were pig bones, and other animals were represented by a few bones: deer, dog and cat. There were a small number of human bones. Some sieved samples were examined, and produced a few small mammal bones, and a number of probable sheep bone fragments.

The contexts examined were divided into groups as follows:

1. Pits
2. Boundary ditches
3. Ditch 135
4. Animal burials.

Percentages (of the number of fragments) of each meat species were calculated for each feature. As the calculations were to the nearest percentage point the totals do not always add up to exactly 100.

The Pits (Table 5)

Each pit is identified by its feature number, not that of the fills within it which contained the bones. All pits included bones with butchery marks, some gnawed bones and some with modern (excavation) marks.

The bones from pit 262 were divided into two and those from context 285 are not included in the totals given in Table 5. Context 285 contained the remains of at least three sheep and no other bones. There were skull and jaw bones from at least three sheep and vertebrae and parts of pelvis from two sheep. The only other contexts with bones of a single species were the burials of single animals. There is a possibility that context 285 contained an animal burial of some sort, but there is no evidence that it is not food debris.

Cattle formed a smaller proportion of the assemblage than sheep in all pits except 373. The fact that cow bones were the most common identified fragment in that pit is not significant as so many remained unidentified. Six horse bones without butchery marks were found in pit 127, a single bone in pit 262, three foot bones of a small horse in pit 447 and a single bone occurred in pit 503. Deer bones were found in pits 262 (a burnt metatarsus), 447 and 503. Pit 447 contained two mandibles of a dog and one of a cat.

Eleven pits out of the 17 contained rabbit bones. Other remains of small mammals were

TABLE 5
Bones from the Larger Pits

		Percentages						
	Bone number	*Sheep*	*Cattle*	*Pig*	*Horse*	*Burnt*	*Other*	*Unident.*
Pit 125	636	31	13	6	–	4	–	46
Pit 127	753	32	9	7	<1	1	–	50
Pit 137	611	52	12	10	–	<1	–	26
Pit 143	196	30	10	9	–	1	–	51
Pit 145	78	67	24	–	1	8	–	–
Pit 176	253	33	19	4	–	2	–	42
Pit 262	159	40	<1	4	–	3	<1	52
Pit 295	117	36	21	7	–	–	–	36
Pit 371	271	41	4	3	–	–	–	52
Pit 373	252	7	8	2	–	–	<1	83
Pit 389	130	13	5	5	–	–	–	77
Pit 443	426	55	5	5	–	–	–	38
Pit 445	341	26	10	2	–	<1	–	62
Pit 447	668	24	15	8	<1	2	<1	51
Pit 503	273	14	6	4	<1	6	<1	70
Pit 753	37	49	30	8	–	–	–	14

TABLE 6
Bones from Boundary Ditches

	Percentages						
Bone number	*Sheep*	*Cattle*	*Pig*	*Horse*	*Burnt*	*Other*	*Unident.*
1491	28	10	8	<1	<1	<1	54

house mouse bones in pit 127, two common shrew mandibles in pit 143 and a mandible of a wood (?) mouse in pit 445. All these are presumably intrusive.

The most common bird bones were those of galliforms, followed by domestic goose. Pit 262 contained pigeon and duck bones as well as chicken and goose. Pit 447 contained chicken and a skull of a chicken-sized bird, but not a modern breed, which had a butchery mark across the back of the cranium.

The Boundary Ditches (Table 6)
The bones from the boundary ditches were examined to determine if they showed any variation over time; but they do not appear to conform to any pattern. The bones seem to comprise a mixed accumulation of debris, rather than to come from organised dumping of food residue, although some butchery marks were recorded. In addition to the species shown in Table 6, the other bones represented included one piece of human femur, three bones of dog and also some chicken and rabbit bones.

Ditch 135
This ditch produced a reasonably-sized collection of 309 bones. Sixty-four *per cent* were sheep, 13% were cattle and 9% pig. Only 14% were unidentified. There were also some rabbit bones. Some bones showed evidence of butchery, gnawing and modern (excavation) marks. The bones from the fills of this context do appear to be more evidence of organised dumping rather than a random accretion.

Animal Burials
Two undated burials of animals were found lying adjacent. Context 587 contained the complete skeleton of a large, old dog. The vertebral epiphyses were well fused and the canine teeth were well worn

down, both suggesting an animal of some age. Context 599 contained the axial skeleton of a young pig. Other skeletal parts may have been excavated in adjacent contexts. As well as ribs and vertebrae, there were also a right scapula with modern breaks and a part of the pelvis. The only limb bone was the right patella.

Miscellaneous

A few examples of bone pathology were noted. Context 128 contained a sheep radius with a proximal growth of additional bone. Context 305 in pit 127 contained deformed rabbit phalanges and context 548 in pit 445 contained a sheep metacarpal with a slight addition of bone near the proximal end.

A number of measurements were made following von den Driesch (1976) and are kept in the site archive. Tooth wear data were collected following Grant (1982). There were few complete mandibles of sheep and none of cow and pig. The sheep mandibles had wear of, or around, Grant's stage g, which she states is a relatively long lasting stage.

Most contexts contained highly fragmented bone, and it was not possible to draw any overall conclusions.

PLANT REMAINS by Pat Hinton (Table 7)

The 'flot' and residue from samples of approximately 30 litres of soil were sorted with binocular stereo microscope at 7×—40× magnification. The majority of the seeds were preserved by charring but some were mineralised. Some seeds (one species) from several of the pits remain to be identified.

In Table 7 the cereals are listed first since they dominate all the other remains. The order and nomenclature of the remainder are in accordance with *Flora Europoea* (Tutin *et al.* 1964–80). With the plant names is a code to provide a very rough guide to the type of habitat in which the seeds may have originated.

Cereals are the most abundant plant remains, with grains of wheat, barley and oats present in most samples. There is also evidence of other cultivated plants in flax, poppy and possibly cabbage, mustard or a root vegetable such as turnip. Many of the other seeds are from characteristic weeds of arable fields and open areas such as trackways, others are from grassland plants, and some would have grown in damp or muddy ground or at the edges of streams or ponds.

Cereals

Most of the cereal grains which were counted are poorly preserved. They have the coarse vesicular structure resulting from charring in fierce heat and more or less open conditions and are distorted to varying degrees. Many samples also included fragments which were too small or damaged to be identified to species. In most cases the fragments probably equate to only one or two grains and these have not been listed. In the case of the sample from context 172 (a pit cut by an enclosure ditch), however, a large proportion of the sample consisted of small fragments and this has been estimated to be the equivalent of approximately another 900 grains, almost doubling the total.

Almost all the wheat grains which are sufficiently well preserved to study appear to be from free-threshing bread wheats, and the great majority of these are small, short grains of club wheat (*Triticum compactum*) type. Thirty-four of the few measurable grains in one-eighth of the larger sample from context 172 had a range in length of 3.4 mm. to 6.3 mm. with an average L/B index of 1.36. This sub-sample, however, included five more slender grains, from 3.8 mm. to 6.3 mm. in length, with an average L/B index of 1.7, which would come within the range of *Triticum aestivum* ss. In view of the difficulty of distinguishing the grains of these very closely related wheats, all apparently free-threshing grains have been listed as *Triticum aestivum* sl.

The few bread wheat rachis fragments unfortunately are very incomplete, but three from contexts 524 (one) and 172 (two), have the short, strongly curved internode of *T. compactum* type and clearly show the veins typical of hexaploid wheats on the outer surface.

Scattered throughout the samples are a few grains and chaff fragments which are comparable with the glumed wheats emmer (*Triticum dicoccum*) or spelt (*T. spelta*). One grain, from context 527, conforms in all respects to typical emmer, but most of the glume bases, in what can be seen of the remnants of their keels and venation, are probably those of spelt. This was the principal wheat of the Roman period but its presence as a

TABLE 7
Plant Remains

Pit			*125*				*127*								*137*				*143*		
			126	*132*	*140*	*298*	*128*	*191*	*274*	*301*	*302*	*305*	*308*	*732*	*859*	*832*	*833*	*834*	*284*	*441*	*309*
Triticum cf *spelta* L. (spelt wheat)	glume bases	C																			
Triticum cf dicoccum/ spelta (emmer/spelt wheat)	grains glume bases	C																1			
Triticum aestivum s.l. (bread wheat)	grains rachis frag.	C	15	19	2	2	17	6		5	1	2	1		16	42	56 2	21	28	19	107
Triticum sp. (wheat)	grains	C			1	1			4 1M		5	2							3		
Hordeum sp. including *Hordeum vulgare* L. (hulled barley)	grains rachis frag.	C	129	16	44	7	28	12	3	1	19	8			5	12	58	20	81	3	98
Avena sp. (oats)	grain awn frag.	C	6	1	1		1	4	2 1						3	2	1	3	5		6
Cerealia indet. (unidentified cereals)	grains	C	19	2	3	2	5	4	1	4	7	3		1	4	4	21	1	5	1	18
Corylus avellana L. (hazel)	shell frag.	H		6	4	1	3			1	1	2					3	5	4		4
Urtica dioca L. (stinging nettle)		O																			
Polygonum aviculare agg. (knotgrass)		O			1		1						1M				1	1			
Polygonum cf *lapathifolium* L. (pale persicaria)		O													1		2	1			
Bilderdykia convolvulus (L.) Dumort (black bindweed)		O	2					1													
Rumex cf *crispus* L. (curled dock)		OG	4	1		1	2			1	4					1	2		3		
Chenopodium album L. (fat hen)		O	16	1			1				1	1			1	1	1				
Chenopodium cf *polyspermum* L. (many-seeded goosefoot)		O	4													3	5				
Atriplex patula/hastata (common/hastate orache)		O	3														1				
Stellaria media/neglecta (chickweed)		O	3														1				
Agrostemma githago L. (corn cockle)		O	2																		
Lychnis flos-cuculi L. (ragged robin)		GW																			
Silene alba/dioica (white/red campion)		OH	2																		
Ranunculus repens/acris/ bulbosus (creeping/meadow/ bulbous buttercup)		GO	1																		
Papaver somniferum L. (opium poppy)		CO	2																		
Fumaria sp. (fumitory)		O																1			
Brassica oleracea/rapa (cabbage/turnip etc.)		OC	282	7			1	2	4	2	2								7		1

TABLE 7
Plant Remains

176		*262*				*295*	*371*		*443*				*445*			*447*			*503*		*171*	*75*	*523*
256	*265*	*268*	*271*	*273*	*285*	*299*	*500*	*501*	*506*	*517*	*549*	*554*	*505*	*548*	*555*	*516*	*524*	*538*	*507*	*527*	*172*	*532*	*531*
		10									1							2			9		
							1	1	1	2	1	1	1						1	1	12		1
							1														4		
2	13	3	2		2	29	10	10	23	46	15	22	30	16	18	62	78	114	14	30	1033	18	33
																	4	2			32		
2	20	3							20			17				9	20				35	2	
7	6	27	1		1	178	8	4	59	146	25	21	24	25	7	31	23	29	12	18	162	19	10
1	1																				5		
	1	1				3	1	1		9	5	12	2	5		8	9	5		3	88	3	3
																	1						
9	6	8	2	2	1	10	4	3	12	11	9	13	14	11	4	11	13	26	8	8	c900*	2	12
	3	1	10		1	1			1	3			1		1	2	14	2	2	7	7	3	2
1	2[M]																1			1			
1	1[M]	1								1	1			1				2	1[M]			1	1
																				1	1	3	1
						2																	
1		1				9	2	1		1	4	3	1	2	3	2	1	4	1	4	10	1	1
1	2	5						3	3					5		2	5	4		7	5	1	
						1	2	1	3		2						7			6	3	5	
	2[M]									1				1			1	3		2		1	
1	1	1			1	1	1					1		1						4	1		
	2[M]																						
						1																	
1	1						1																
	1[M]										1			1				1					
																							1
																							1
	2					11					1	2	4	7	1	2	1		1	1			
	8[M]																						

TABLE 7
Plant Remains

Pit			*125*				*127*							*137*				*143*		
			126	*132*	*140*	*298*	*128*	*191*	*274*	*301*	*302*	*305*	*308*	*732*	*859*	*832*	*833*	*834*	*284*	*441*	*309*
Sinapis sp. (charlock/mustard etc.)		O	55	3																	
Brassica/Sinapis spp			57																		
Raphanus raphanistrum L. (wild radish)	pod segment	O		1																	
Rubus fruticosus agg. (blackberry)		H																			
Prunus spinosa L. (sloe)		H																			
Prunus domestica s.l. (plum)		H																			
Rosa sp. (rose)		H												1[M]							
Malus sp. (apple)		H							2[M]				5[M]								
Vicia tetrasperma (L.) Schreber (smooth tare)		G			2			1			1				1						
Vicia cf. sativa L. (common vetch)		G			1			1			2						1				
Vicia faba L. (broad bean)		C																			1
Vicia/Lathyrus sp. (vetch/vetchling)					2	1			1[M]					1[M]					1		
Medicago lupulina L. (black medick)		G	1																		
Trifolium cf *pratense* L. (red clover)		G									1								1		
Linum usitatissimum L. (flax/linseed)		C													76	13	42	25	2		
Scandix pecten-veneris L. (shepherd's needle)		O																			
Apium graveolens L. (wild celery)		W																1			
Galium cf *palustre* L. (marsh bedstraw)		W					1									11	19	6			
Galium aparine L. (goosegrass, cleavers)		O	3	1				1			1				6	2	2		1		
Solanum nigrum L. (black nightshade)		O											1[M]								
Plantago lanceolata L. (ribwort plantain)		G																	1		
Valerianella dentata (L.) Pollich (narrow-fruited cornsalad)		O		2															1		
Anthemis cotula L. (striking mayweed)		O		2														2			
Matricaria perforata Merat (scentless mayweed)		O																			
Articum lappa L. (great burdock)		O																			

TABLE 7
Plant Remains

176		*262*				*295*	*371*		*443*				*445*			*447*			*503*		*171*	*75*	*523*
256	*265*	*268*	*271*	*273*	*285*	*299*	*500*	*501*	*506*	*517*	*549*	*554*	*505*	*548*	*555*	*516*	*524*	*538*	*507*	*527*	*172*	*532*	*531*
																			1				
										1										1			
																					1		
3									1	1	1							1					
1																							
2						2	1[M]													1[M]			
1																1							
1[M]			1							1		2		1	2						1		
						1		1			1		1	1	1		3	1	1	2	2		
																					1		
1											1					1	1				1		
2[M]																							
		1									1						2	2					
1[M]																							
																					1		
1[M]																							1
1									11	19	6					2							
1[M]																							
						1	1						2	1			1	2	1			2	
2[M]																							
			1								1												
	1																			1			
6			1		6			1			1					1				6	34	1	
							1																
1[M]																							

TABLE 7
Plant Remains

Pit		*125*				*127*							*137*				*143*		
		126	*132*	*140*	*298*	*128*	*191*	*274*	*301*	*302*	*305*	*308*	*732*	*859*	*832*	*833*	*834*	*284*	*441*	*309*
cf Festuca sp. (fescue)	G	2										1[M]		3	3		2			
Lolium cf *temulentum* L. (darnel)	O																			
cf *Poa annua* L. (annual meadow grass)	GO	6				1											3			
Bromus Sect. *Bromus* (brome grass/chess)	GO	32	1				3									2	1	1	1	1
Gramineae indet. (unidentified grasses)	G	1							1	2					1	2	1	2		
Scirpus maritimus L. (sea club-rush)	W															1				
Scirpus lacustris L. (bulrush)	W																			
Eleocharis palustris/ uniglumis (common spike-rush)	W	2		1		1									2	4				
Carex cf *otrubae* Podp. (false fox-sedge)	W															1	1			
Carex hirta/riparia (hairy sedge/great pond sedge)	GW	1								1										
Carex cf *nigra* (L.) Reichard (common sedge)	GW																			
Carex sp. (sedge)															1					

Key: C= Cultivated
G= Grassland
H= Hedge, scrub, woodland
O= Open ground (fields, waysides, waste)
W= Ditches, river sides, wetter grassland
M= Mineralised
*= Estimated from sub-sample

minor component in Steyning and other Late Saxon contexts, for example Wraysbury (Jones 1989) and sites in eastern England (Murphy in press) suggests that its cultivation may have been continued on a small scale, or that it persisted as a weed of other cereals.

Barley is present in all samples and surface features indicate that it is hulled barley. Recognition of the six-row form may be through the presence of asymmetric grains (from the lateral florets) which in theory should out-number straight grains by 2:1, but preservation here is not sufficiently good to distinguish these certainly from distorted grains. However, there are a few apparently naturally twisted grains and one of the rachis fragments (context 256) bears the scars of the three florets.

Oat grains also are present in most samples, but in smaller numbers. There is no evidence in the form of floret bases to indicate whether they are from cultivated or wild species.

Other cultivated plants

Flax (*Linum usitatissimum*) remains came mostly from pit 137, with a few seeds in two other pits. There is no evidence to say whether this crop was grown for fibre, or for the oil from the seeds.

TABLE 7
Plant Remains

176		*262*				*295*	*371*		*443*				*445*			*447*			*503*		*171*	*75*	*523*
256	*265*	*268*	*271*	*273*	*285*	*299*	*500*	*501*	*506*	*517*	*549*	*554*	*505*	*548*	*555*	*516*	*524*	*538*	*507*	*527*	*172*	*532*	*531*
											1										1		2
											1										2		
1		3			1	1	1										1			2	2	1	
	1[M]	2				4		1	1	2	1	1	3			2	2	3			1		
	1	2				2				2							1	2	1	2	7	22	1
										1												1	
																1	2						
1	1		9			1		1	2	4				1			2			11			
																						1	1
										1			3				1					1	
																	1						
	1		2							1													

The broad bean, or horse bean (*Vicia faba* var. *minor*), represented here only by two incomplete seeds, is edible but was often grown as animal feed. Common vetch (*Vicia sativa* spp. *sativa*) is also grown as a fodder plant, and the form and size of the charred seeds (2.9–(3.4)–3.9 mm.) perhaps indicates that they are of cultivated vetches rather than the slightly smaller wild grassland sub-species (*V. sativa* ssp. *nigra*), but these seeds are difficult to identify. Currie (1988) has documentary evidence for the purchase in 1206–7 of vetch seeds for sowing in Kent, implying that they were already being grown in southern England, but it is not known when they were first grown as a crop.

Seeds of *Brassica* and *Sinapis* species which possibly represent cultivated plants occur throughout, with a larger concentration in pit 125. Unfortunately these are difficult to identify to their various species and it is not possible to say whether they might represent plants used as vegetables (cabbage, turnip etc.), as flavourings (mustards) or whether they were troublesome weeds (charlock).

Seeds of the opium poppy (*Papaver somniferum*) were probably used for their oil and are not infrequently found in Roman and medieval sites in Britain. An earlier appearance, in fact, was in Sussex, at the Late Bronze Age site at Itford Hill (Helbaek 1957). Whether the plants were

deliberately grown at this time in Steyning cannot be said. The seeds have a long dormancy in the soil and will germinate when the soil is turned, and may persist as weeds.

Non-cultivated plants

Most of the seeds of the non-cultivated plants are those which grow in tilled fields, or in cleared spaces such as waysides, around houses or in open grassy places. Typical of arable weeds, which will grow in most soils suitable for crops, are black bindweed (*Bilderdykia convolvulus*) corn cockle (*Agrostemma githago*), fumitory (*Fumaria* sp.), wild radish (*Raphanus raphanistrum*), cornsalad (*Valerianella dentata*), shepherd's needle (*Scandix pecten-veneris*) and stinking mayweed (*Anthemis cotula*). Cornsalad and shepherd's needle, however, are particularly associated with light chalky soils, and stinking mayweed with heavier clays. Darnel (*Lolium temulentum*), often the host of the fungus ergot, was a particularly unwelcome contaminant of crops.

Hazel nuts (*Corylus avellana*), blackberries (*Rubus fruticosus* agg.), apples (*Malus* sp.), sloes (*Prunus spinosa*), plums (*Prunus domestica* sl.), and rose hips (*Rosa* sp.), readily available in hedgerow and scrub, were probably gathered fruits. In most samples the few fragments of nut-shell would represent only one or two nuts. The apple seeds cannot be distinguished between the wild crab apple and cultivated varieties. The one plum stone from context 265 is long and slender, (17.2 × 9.0 × 7.0 mm.) and slightly S-shaped. Hedgerows have long included a large range of wild, domesticated and feral *Prunus* species (cherry, sloe, bullace, plum) with a corresponding range in size and form of fruit stones which are often found in archaeological samples. The stone from Steyning however appears to be from one of the larger domesticated plums (*P. domestica* sl.). Stones of similar dimensions have been found in an 11th-century cess pit in Norwich (Murphy 1988).

Wild celery (*Apium graveolens*) which grows in damp places, usually near the sea, was probably used as a flavouring. Other plants indicative of wetter places are ragged robin (*Lychnis flos-cuculi*), marsh bedstraw (*Galium palustre*), the sedges (*Carex otrubae* and *C. hirta* or *riparia*, bulrush (*Scirpus lacustris*), and sea club-rush (*S. maritimus*), plants of riverside and ditches, the latter near the sea and spike-rushes (*Eleocharis palustris/uniglumis*) from muddy places. It could be that spike- and club-rushes were utilised, for flooring, bedding, and so on, but with such small numbers it cannot be said that these represent gathered plants. Indeed spike-rushes often occur in samples with charred cereals (Jones 1981) and they may have been troublesome weeds in poorly-drained fields.

The plant content of all the pits appears to represent domestic rubbish, probably from a variety of sources. Mineral replacement of seeds often occurs in proximity to faecal material in cess pits or middens and this may be the origin of mineralised seeds in pits 127 and 176. Pit 171, however, contained only cereals and, with the exception of the blackberry seeds, seeds of arable weeds; but since, as in all other samples, wheats, barley and oats are all present, it is unlikely to represent a single crop but is probably the result of the clearing of a barn, house or working area.

The plant remains from this excavation are very similar to those recovered from Tanyard Lane, Steyning in 1977 (Freke 1979) except that no evidence of oats was recorded from those samples and the only evidence there of wet-land plants was the single seed of the celery-leaved crowfoot (*Ranunculus sceleratus*). The larger number of sampled contexts from this excavation however has produced further evidence of glumed wheats continuing into this period, and of the occurrence of larger-fruited plums or bullaces. Definite evidence for cultivated vetches remains uncertain.

SITE FINDS AND ARCHIVE DEPOSITION

The finds and site records have been deposited in Worthing Museum, accession number 1988.422.

ACKNOWLEDGEMENTS

The asssessment excavation was funded by the owners, Chichester Diocesan Fund, Mr R. J. Millman, G. H. Strivens Ltd and West Sussex County Council. Maureen Bennell wishes to thank her assistant, David Underwood.

The main excavation was funded by West Sussex County Council and post-excavation work was supported by grants from Horsham District Council and English Heritage. Permission to

excavate was granted by the owners of the land, MacLean Homes Ltd, who also made a machine available to extend the area of excavation. I am grateful to Andrew Reynolds who acted as my assistant during the excavation and to Mark Taylor (W.S.C.C.) and Amanda Chadburn (English Heritage) who helped in the difficult negotiations to secure funding for the work. I am also indebted to the specialists who advised or submitted reports and particularly Leslie Webster who arranged for specialist examination of the gold ring. All the finds drawings are by Jane Russell.

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Notes

[1] W(est) S(ussex) R(ecord) O(ffice) TD/W118.

[2] W.S.R.O. Ep. I/25/3.

[3] *Nonarum Inquisitiones in Curia Scaccarii*, ed. G. Vanderzee (1807), 386.

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The Society is grateful to English Heritage for a generous grant towards the cost of publishing this article.

Sussex Archaeological Collections **131** (1993), 68–72

AN EARTHWORK AT TOTTINGWORTH, HEATHFIELD

by Mark Gardiner

A section excavated across the ditch of an oval-shaped enclosure at Tottingworth, Heathfield recovered medieval pottery dated to the 13th or 14th century, and squared pieces of stone apparently from a building. The documentary evidence for the site does not allow the identification of a tenant sufficiently wealthy to have constructed the earthwork and masonry buildings. The enclosure can best be categorised as a poorly defended ringwork.

INTRODUCTION

In a recent article it was suggested that the earthwork at Tottingworth in Heathfield might be of Iron Age date.[1] In April 1992 the Field Archaeology Unit (Institute of Archaeology), with a grant from East Sussex County Council, examined this site further and a small excavation was undertaken with the aim of determining its date.

The earthworks, which now lie mostly within the grounds of Oak Hall School near Heathfield in East Sussex (TQ 614224), are situated on a south-west facing slope near a col between the hills of Tottingworth and Broad Oak. The bank and ditch have been almost entirely levelled, though they can still be traced with difficulty. The destruction of the upstanding remains had occurred before 1901 when the Geologists' Association visited the site and reported that a former owner has become so annoyed by the visitors who had come to visit the monument, that he had attempted to eradicate it.[2] It is possible, however, that the earthworks had been levelled when the landscaped grounds of Tottingworth Park were created in the 19th century. The only part of the bank which still survives to near its original height is a short length adjoining the drive (Fig. 1, *a*). This was evidently preserved because an old beech tree which stood upon it was retained within the park landscape.

A bank with external ditch encloses an oval-shaped area. The long axis of the enclosure is aligned nearly north–south and the whole measures about 40 metres by 30 metres. A possible second ditch may be traced on the north side (Fig. 1, *b*), beyond which the land falls sharply away. South of the drive, at the point marked *c* upon the plan, the line of the bank appears to have been hidden by a dump of soil, which may have been deposited when the earthworks were levelled. The only feature apparent within the enclosure is a slight platform marked *d* on the plan.

THE EXCAVATION

A trench measuring 7 metres long by 1 metre wide was excavated by hand on the south side of the earthwork, at a point at which the ground drops away to the south (Figs. 1e; 2). It was hoped that some evidence for the tail of the bank and the infilled ditch might be found. After removing the topsoil, the ditch was located further north than expected. The fills were excavated by hand until undisturbed rock was reached. Two successive ditch cuts were recorded. The first (7) had a gently sloping north side and a more sharply sloping southern face. The earliest fill (10) was a slightly laminated silt, which had probably formed from the gradual inwashing of soil. The succeeding layer (9) contained a concentration of stone near the base and decreasing proportions higher in the fill. Layer 8 contained a number of red sandstone squared blocks and sherds from a single medieval jug. It was apparent from the proximity of joining pieces that the jug was not highly fragmented when cast into the ditch.

At a later date the ditch had been recut (4) with an almost vertical north face, but a slightly sloping opposite side. Sediment (6) had accumulated in the angle of the north face and then the ditch had filled up with a mixed soil (5). Later layers (2, 3) may have been formed from downwashed material from the bank. Layer 2 contained a notable quantity of angular fragments of stone.

A small feature (11) was found above the north side of the ditch. This may have been a post setting.

THE FINDS

Pottery was found in layers 8 and 9. A number of sherds of pottery, all from a single jug, were found in layer 8 (Fig. 3, 1). The fabric has an orange-red core and faces, is slightly soft with a rather rough feel and is tempered with about 2% sub-rounded

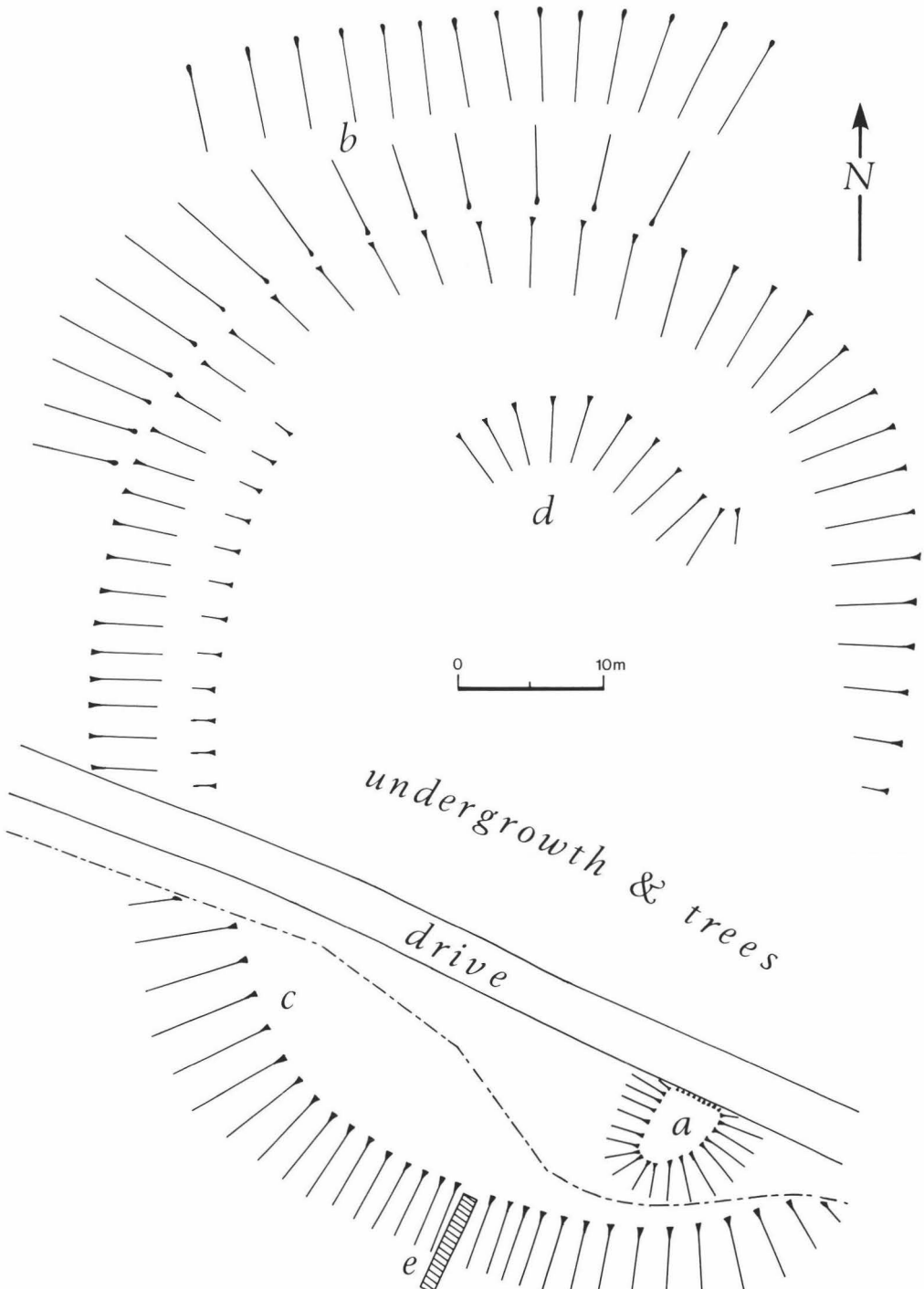

Fig. 1. Plan of the earthworks at Tottingworth (a: part of surviving bank, b: possible second ditch, c: dumped soil concealing original line of bank, d: platform within enclosure, e: excavated trench).

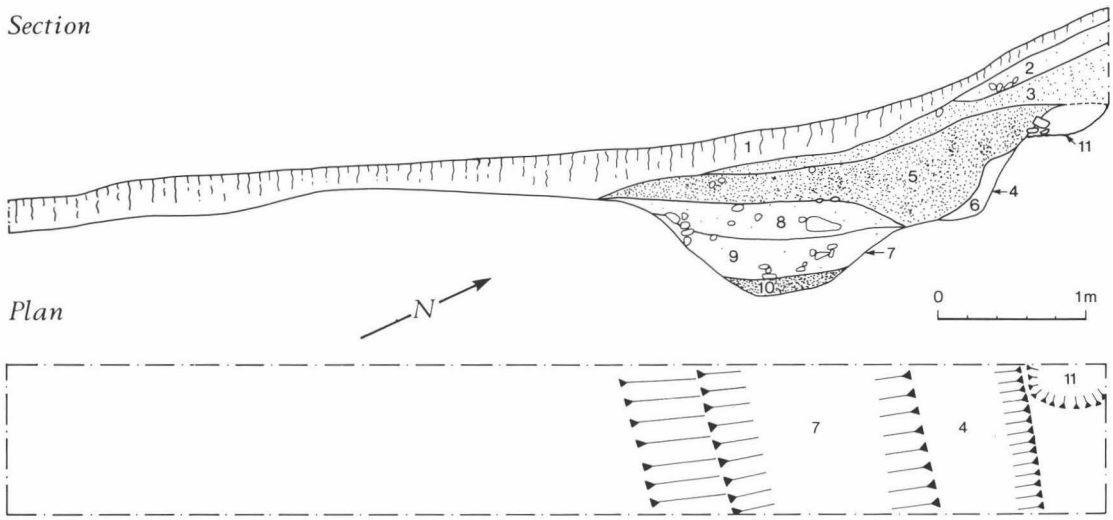

Fig. 2. Plan and section of excavation: 1 Topsoil, 2 light yellow silty clay, 3 light yellow-brown silty clay, 4 ditch cut, 5 light grey-brown silt clay with 2–5% light grey mottles, 6 light yellow-brown silty clay, 7 ditch cut, 8 mid grey silty clay with 40% brown mottles, 9 light grey silty clay with 5% yellow-orange mottles, 10 light grey silt with 40% orange mottles, 11 cut of feature.

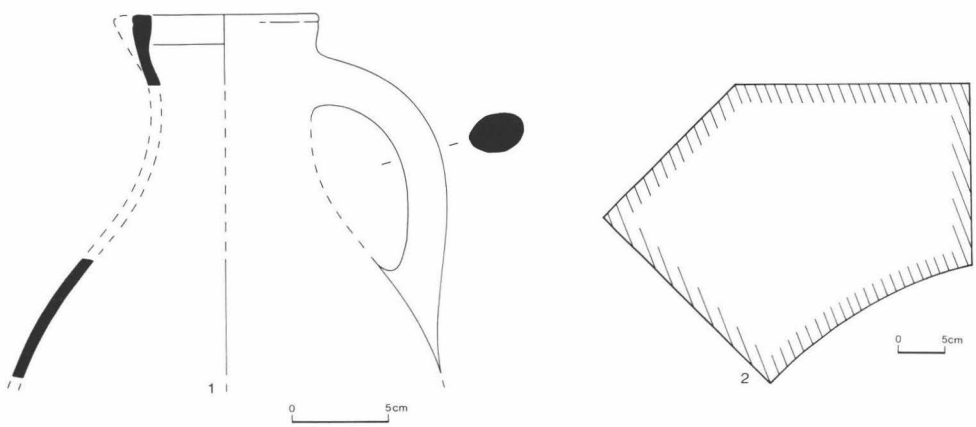

Fig. 3. 1 Medieval jug (×¼), 2 moulded stone (×⅛).

translucent quartz grains. The exterior has a light green glaze and though most sherds are decorated with bands of lightly incised horizontal combing between which are set a zig-zag pattern, the complete pattern cannot be ascertained. From layer 9 two small further sherds in the same fabric were found and a single sherd with an orange-red face and core with a soft fabric and coarse feel tempered with 2–5% angular multi-coloured flint. The likely date range for these pieces is from the 13th to 14th century.

A moulded stone was found in layer 8 (Fig. 3, 2). the outer faces meet at about 135 degrees, suggesting that it is part of an octagonal structure. The radius of the inner curved face is about 450 mm. The narrow radius and the octagonal outer faces suggest that this piece could have formed part of a chimney.

THE DOCUMENTARY EVIDENCE

The tenement of Tottingworth formed part of a holding called Basok's Fee and was held of the

bishop of Chichester's manor of Bishopstone by military service. It may formerly have been an undifferentiated portion of the major Wealden outlier of that manor.[3] The earliest reference to Tottingworth is a confirmatory grant by Robert de Basok to Reinbert de Milkhurst of the land of Milkhurst and the demesne of Tottingworth, which formerly had been held by Reinbert's father and brother respectively. The tenement of Milkhurst lay to the east of Tottingworth. Though the charter is undated and the text only survives as a later copy, it may be attributed to the period 1215–50 when Robert de Basok issued and served as a witness for other deeds.[4]

Tottingworth, though it had been part of the demesne, was peripheral to the main holdings of the Basok family which lay in Sedlescombe.[5] During the 1220s lands at Sedlescombe were relinquished in a series of sales and leases to the abbeys of Battle and Robertsbridge. It is possible that the grant of the demesne of Tottingworth is a reflection both of the peripheral nature of this holding and perhaps also the difficulties which necessitated the sales of the Seddlescombe lands.[6]

By 1310 the quarter fee of Basok at Tottingworth was among the property of which Stephen de Burgherst died seised; his son-in-law, Walter de Paveley, was in possession in 1320. A rental of the manor of Burghersh of *c.* 1290 includes two tenants Adam and Richard de Milkhurst who might have held land there.[7] The former appears among the contributors to the 1296 subsidy, but the amount for which he was assessed does not suggest that he was particularly wealthy.[8] The names of tenants at Tottingworth are not known before the 16th century. When the manor of Burgherst was sold to William Wybarne by Anthony Rous in 1538 he retained Tottingworth which was then held by William Roberts.[9] In 1588 Thomas Packham granted 300 acres of land at Tottingworth to John Elpheck and John Collen. Three years later Elpheck granted 15 acres on the north side of this holding including 'one piece thereof called the Mote of Tottingworth' to William Wenmer. This is the first reference specifically to the earthwork.[10] Wenmer built a house and barn on his holding, the site of which seems to be remembered in the later name, 'Old House Field'. A map of the early 18th century shows 'Moat Plat' and an outline of the earthwork.[11]

DISCUSSION

Although described in post-medieval sources as a moat, the slope of the land is such that the ditch could never have held water. Tottingworth might be categorised as a ringwork, though the small size of the ditch at the point excavated barely justifies this title. The excavated section, however, lies where the ground falls most steeply and the site here required little additional defence. Sections on the north side might reveal more substantial ditches. The defensive capacity of the site was limited for it lies on a hillslope, overlooked by the higher ground on the north-east. The Tottingworth earthwork probably should be regarded as the type of site for which the appearance of a defensive enclosure was more important than any capacity to engage in warfare.[12]

The discovery of moulded stone, possibly from a chimney, securely stratified within the ditch, is of particular interest. During this period stone was used within the Weald only for the structure of ecclesiastical buildings and a few manorial buildings. The hall of the archbishop's palace at Mayfield, the Robertsbridge abbey grange at Park Farm in Salehurst, John of Gaunt's manor house at Crowhurst and the gatehouse and curtain wall at the manor house at Glottenham are some examples of stone-built structures in this area.[13] The documentary record does not allow the identification of a tenant wealthy enough to construct the ringwork and the stone buildings which it possibly contained. The Milkhurst family were major free tenants, holding about 100 acres at Milkhurst and 250 acres of land including woodland at Tottingworth, insufficient, without other sources of wealth, to produce an adequate income to engage on a major programme of building.[14] Furthermore, moated sites elsewhere in the Weald generally enclosed manorial dwellings and Tottingworth was not of that status.[15]

The work discussed here has established a probable date for the Tottingworth earthworks, but the documentary evidence does not provide a satisfactory context for their construction.

ACKNOWLEDGEMENTS

I am grateful to Mr D. Browning of Tottingworth Farms Ltd. for permission to excavate on his land and to Chris Greatorex for his assistance in the

work. Mr Alec Parks kindly discussed with me the date of the creation of the park at Tottingworth and David Martin kindly read and commented on a draft of the text. Figures 2 and 3 were drawn by Jane Russell. The excavation would not have been possible without a grant from Dr A. G. Woodcock on behalf of East Sussex County Council. Christopher Whittick made available his calendar of Battle Abbey deeds at the Henry E. Huntington Library and greatly improved the text. I would also like to acknowledge the receipt of a Margary grant for the purchase of a microfilm of Lincoln's Inn Library, MS Hale 87.

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Notes

[1] M. F. Gardiner, 'The Archaeology of the Weald—a Survey and a Review', *Suss. Arch. Coll.* **128** (1990), 46. The idea that the site is pre-Roman is of long standing: C. Dawson, 'Excursion to Heathfield and Brightling', *Proc. Geologists' Assoc.* **17** (1902), 171–5; A. H. Allcroft, *Earthwork of England* (1908), 45.

[2] Dawson, *ibid.*

[3] P(ublic) R(ecord) O(ffice) C134/16 (2) says that Tottingworth was held for a quarter of a knight's fee. P.R.O. SC11/658 states that it was for three-quarters of a fee.

[4] E(ast) S(ussex) R(ecord) O(ffice) ASH 206, ff. 37v.–38r. For Robert de Basok, see also Lincoln's Inn Library Hale MS 87, ff. 54r., 56v–58v., 60v.; Historical Manuscripts Commission. *Report of the Manuscripts of Lord De L'Isle and Dudley, preserved at Penshurst Place* (Historical Manuscripts Commission **77**) **1**, 71, 111; L. F. Salzmann (ed.), *An Abstract of Feet of Fines Relating to the County of Sussex from 2 Richard II to 33 Henry III* (Sussex Record Society **2** (1902)), 108–9; Henry E. Huntington Library (San Marino, California) BA 34/1143, /1171, 36/1232, 37/656, /1128, /1271, 40/851, /1252, /1375, 42/777.

[5] Robert de Basok was also known as Robert de Sedlescombe. His status in the area is also reflected in his apparently unsuccessful claim to the advowson of Sedlescombe, *Curia Regis Rolls* **12**, nos. 936, 1200.

[6] See note 4 above. On the decline of the family generally, R. A. McKinley, *The Surnames of Sussex* (English Surnames Series **5** (1988)), 68–9. Oxford.

[7] A namesake of Walter de Paveley, perhaps his son, was said, perhaps erroneously, to hold Burgherst in 1379/80, W(est) S(ussex) R(ecord) O(ffice) Ep VI/1/3, f. 155v. Centre for Kentish Studies (formerly Kent Archives Office) U386/M18. The rent list is not identified as that of the manor of Burgherst, though the locative names of the tenants clearly allow it to be recognised as such.

[8] W. Hudson (ed.), *The Three Earliest Subsidies for the County of Sussex in the Years 1296, 1327, 1332* (Suss. Rec. Soc. **10** (1910)), 10.

[9] D. N. Steward, 'The Descent of the Manor of Burghersh', *Suss. Arch. Coll.* **128** (1990), 263; E.S.R.O. AMS 5692/1, f. 72r.

[10] E.S.R.O. SAS/D72; D77.

[11] E.S.R.O. SAS/D77; SAS Acc. 1178.

[12] C. Coulson, 'Structural Symbolism in Medieval Architecture', *Jnl. of the British Arch. Assoc.* **132** (1979), 73–90.

[13] J. H. Parker, *Some Account of Domestic Architecture in England*, **2** (1853), 290–3; M. F. Gardiner, G. Jones and D. Martin, 'The Excavations of a Medieval Aisled Hall at Park Farm, Salehurst, East Sussex', *Suss. Arch. Coll.* **129** (1991), 81–97; *V.C.H. Sussex* vol. 9, 77–8; D. Martin, 'Three Moated Sites in North-East Sussex. Part 1: Glottenham', *Suss. Arch. Coll.* **127** (1989), 89–122.

[14] On the area of these tenements, see E.S.R.O. SAS/HB511 and B.L. Add. Roll 31265, m. 3r.

[15] E.g. Martin, *op. cit.*; D. Martin, 'Three Moated Sites in North-East Sussex. Part 2: Hawksden and Bodiam', *Suss. Arch. Coll.* **128** (1990), 89–116.

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EXCAVATIONS AT THE PHOENIX BREWERY SITE, HASTINGS, 1988

by David Rudling and Luke Barber
with David Martin

Rescue excavations were undertaken in 1988 at the former Phoenix Brewery site, Old Town, Hastings. Three areas were investigated, including part of the western street frontage of Bourne Street. The excavations demonstrated that the site had been intensively occupied since the 13th century.

INTRODUCTION

In June and July 1988 the Field Archaeology Unit of the Institute of Archaeology, London, with the assistance of the Hastings Area Archaeological Research Group (H.A.A.R.G.), undertook rescue excavations on the site of the former Phoenix Brewery, Bourne Street, Hastings (Fig. 1) in advance of redevelopment. These excavations ('Phase 1') were directed by David Rudling.

At the end of the allocated time and financial resources for the excavations, the Field Archaeology Unit left the site. Since redevelopment work was not imminent, H.A.A.R.G. asked the developers, Freshfield Properties Ltd., for permission to continue the excavations. Permission was granted, and the additional work ('Phase 2') was directed by Zoe Vahey (1991).

Responsibility for the post-excavation stage of the fieldwork undertaken by the Field Archaeology Unit was shared by David Rudling and Luke Barber, the latter being responsible for producing the Site Archive (which is stored at the Institute of Archaeology) and various parts of this report, including most of the illustrations (the exceptions are those of the glass finds which were drawn by Prue Maxwell-Stewart, and Figures 1–4, which were prepared by Jane Russell). Help from members of H.A.A.R.G. continued during the post-excavation stage of the project and included specialist reports from John Clements (animal bones) and Christopher and Prue Maxwell-Stewart (glass). Although some of the pottery finds from the Phase 2 excavations are described in this report, for a fuller account of these investigations the reader is referred to the H.A.A.R.G. report by Zoe Vahey (1991). All the retained finds from the Phase 1 excavations have been deposited at Hastings Museum.

The Phoenix Brewery site was of particular interest owing to its fairly large size and location in the heart of Old Town, Hastings (Fig. 1). Only a few small excavations had previously been undertaken in the Old Town (Rudling 1976; Devenish 1979; Vahey and Masters 1985; Vahey 1989) and as a result its possible Saxon origins and development during the medieval period are poorly understood.

THE DEVELOPMENT OF OLD HASTINGS

by David Martin

Although the present Old Town of Hastings is situated in the Bourne valley to the east of Hastings Castle, there is substantial evidence to suggest that the original settlement was sited to the west of the castle, on the western side of the Priory Creek: in particular the headland later known as The White Rock (Fig. 2). It was in this vicinity that the churches of St Michael, St Margaret and St Peter were located, as too was the Augustinian Priory of the Holy Trinity. St Michael's, situated on Cuckoo Hill immediately inland from the White Rock, appears on the town seal and seems historically to have been the principal church of the Old Town. Even so, the parish which it served was very small—only two acres in 1828—perhaps pin-pointing the centre of the township. In 1291 the Pope Nicholas Taxation valued the three churches of the old Town at £10, but by the following century this figure had been reduced to just 20 shillings (Baines 1963, 113).

The first references to a new town of Hastings are found in the 1180s, though it is possible that by then the settlement had already existed for a century or more. There is reference to a 'New Borough' in the Domesday survey of 1086. This entry could relate to New Hastings, though most authorities agree that it most likely refers to either Rye or Winchelsea. Whether or not this is so, it is here suggested that the references to New Hastings should be ascribed to the present Old Town, or more

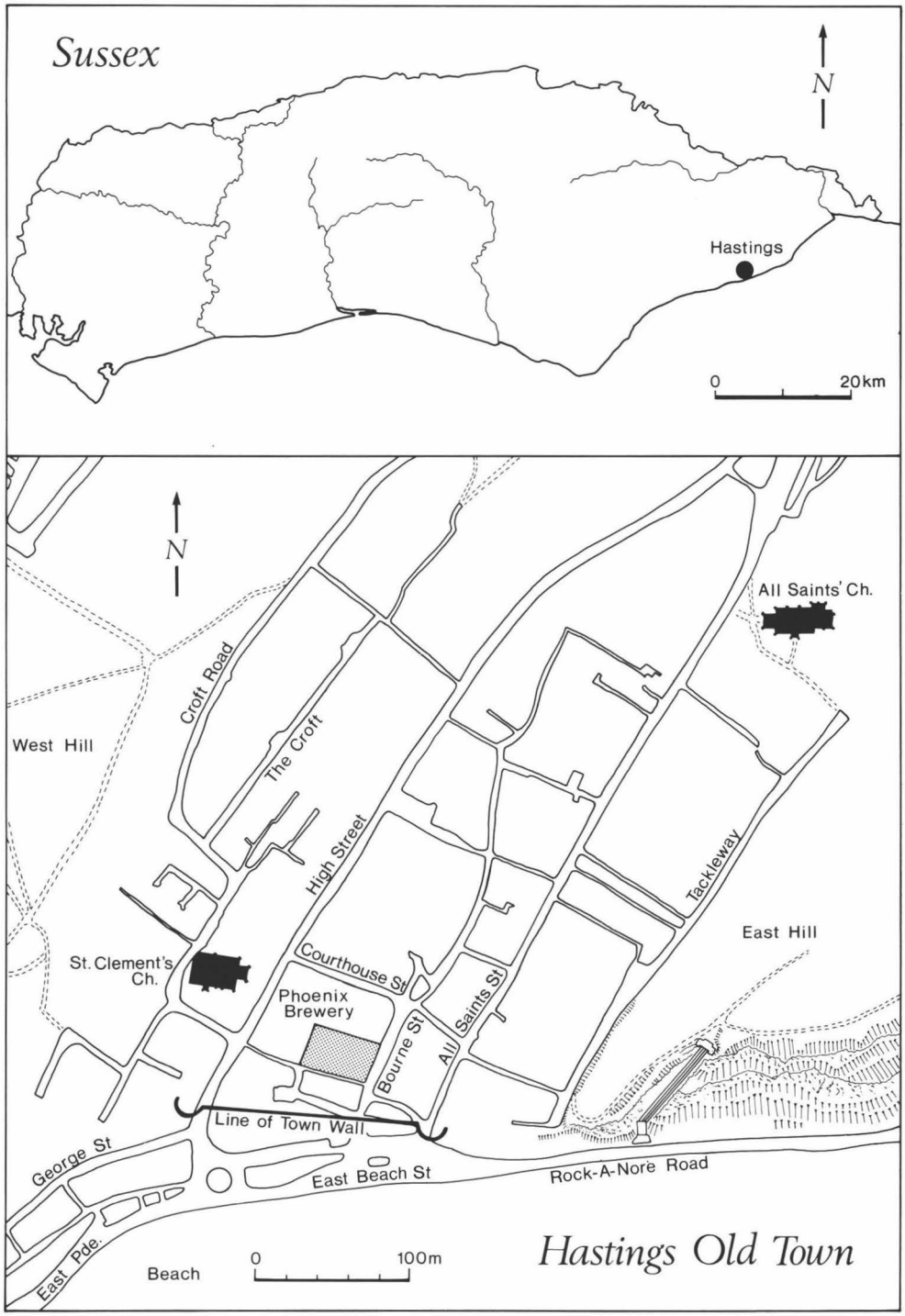

Fig. 1. Phoenix Brewery, Hastings, 1988. Site location plan.

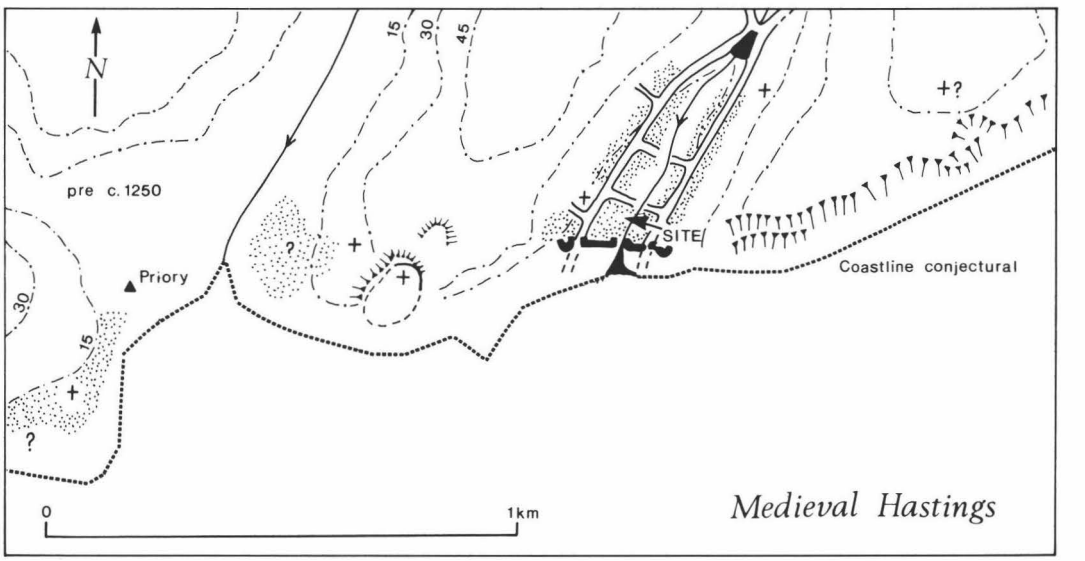

Fig. 2. Medieval Hastings. Plan to show areas of settlement and churches. *After* Aldsworth and Freke, 1976.

specifically the lower part of the Old Town. As can be seen from Fig. 3, there is a distinct variation in the street pattern to the north and south of Courthouse Street. South of Courthouse Street it is possible to reconstruct what appears to be a relatively regular grid (Fig. 4). This grid is clearly cut by the town wall, first referred to as late as 1558, but probably built during the second half of the 14th century (Baines 1963, 187–190). From its relationship to the surrounding streets, there can be no doubt that the wall post-dates the original foundation of the settlement. North of Courthouse Street the pattern changes markedly. In this area narrow plots extend back from both sides of the two streets (High Street and All Saints Street) which run up the valley on either side of Bourne Stream. Two narrow twittens or passages cross the stream to link the two streets (Fig. 3).

It is here suggested that the 'New Hastings' mentioned in the 12th century (Salzman 1937, 9, Col. B) is represented by the grid of streets recognizable at the southern end of the Old Town (Fig. 4). It is further suggested that this original settlement extended southwards, and was destroyed by the inundations of the sea during the storms of the late 13th century. The reason for founding the new settlement is seen as simliar to that for founding New Shoreham, namely the coastal drift which deflects the mouths of the Sussex rivers and streams eastwards along the coast (Aldsworth and Freke 1976, 60–61).

That area of 'New Hastings' to the north of Courthouse Street is here seen as a later northward extension designed to rehouse those inhabitants displaced by the late 13th-century and subsequent inundations of the sea. The dramatic reduction in the value of the three churches within the older settlement to the west of the castle during this same period suggests that it was at this time too that the original settlement of Hastings was deserted. It is therefore possible that many of the inhabitants of this settlement likewise moved to the new northern extension of New Hastings.

During the late 16th and 17th centuries new suburbs grew up on the shingle beach to the south of the town wall and castle cliffs (Aldsworth and Freke 1976, 31).

What is the evidence to support the hypothesis given above? It is known that St Clements Church was moved to its present location in 1286, the older church having been 'overthrown and laid waste by the violence and inundations of the sea' (Salzman 1937, 23, Col. A). According to the Hastings historian John Baines, there is a certain body of evidence to show that All Saints Church may also originally have been sited very much nearer the sea (Baines 1963, 114). Certainly it was described as the 'New Church of All Saints' in a will dated 1436,

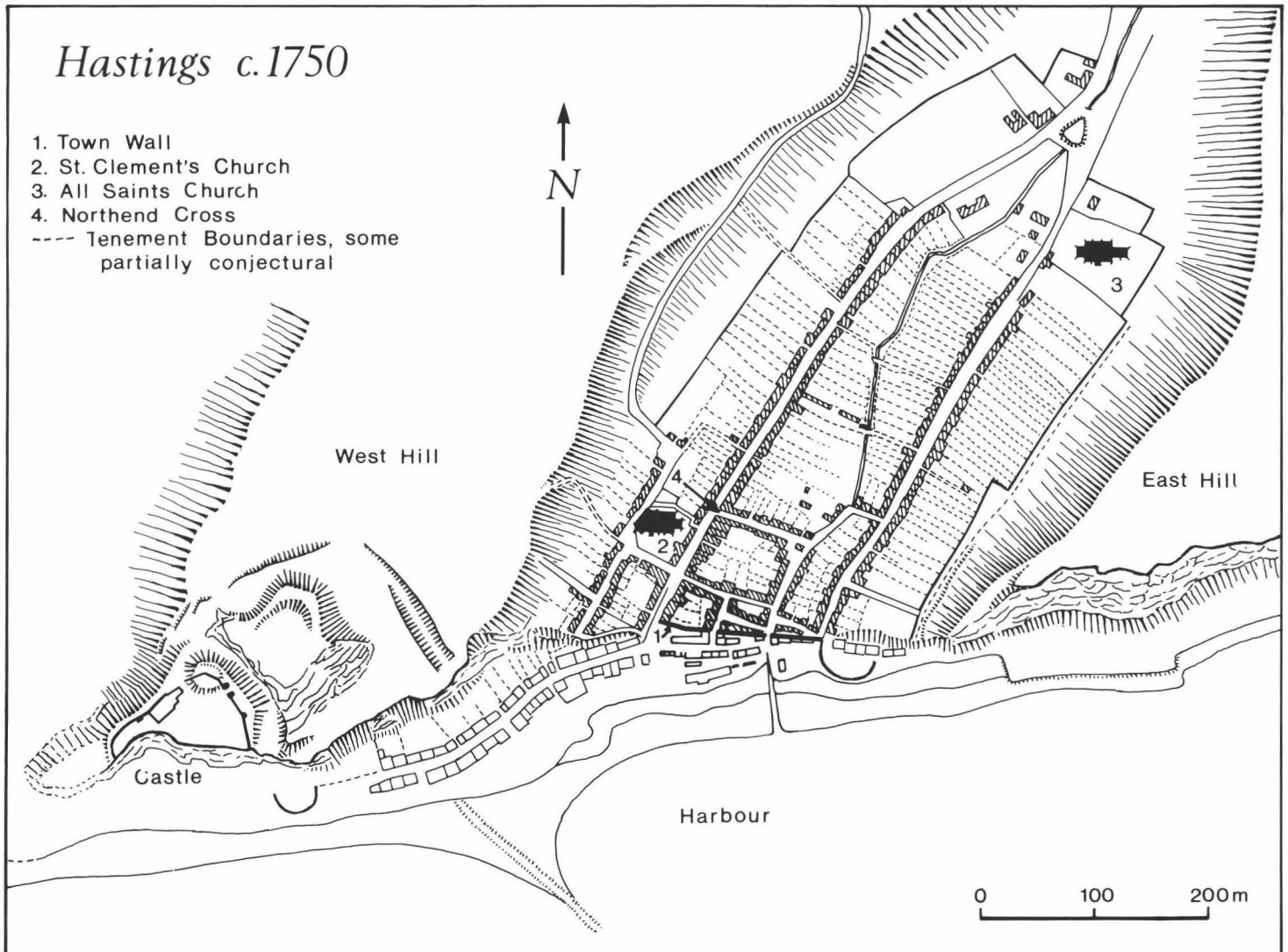

Fig. 3. Hastings, *c.* 1750.

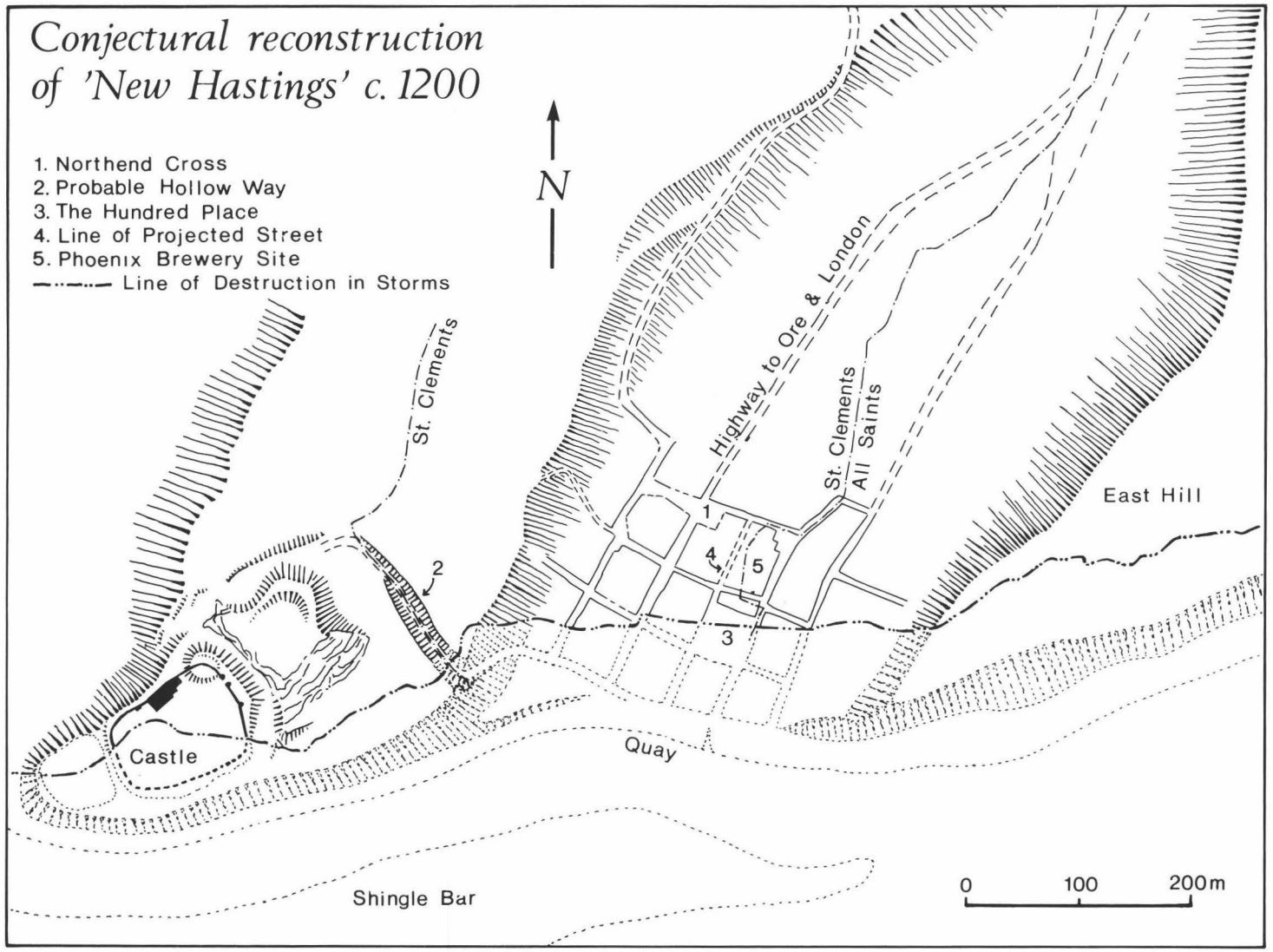

Fig. 4. 'New Hastings' *c.* 1200: conjectural reconstruction.

at which time the present church was clearly in the process of being built (Salzman 1937, 21, Col. B; Baines 1963, 114). What is not clear is whether the mid 15th-century church was in the process of being reconstructed on an entirely new site, or merely rebuilt on the old one.

The old market site of Hastings was located at the junction of Courthouse Street and High Street and was called 'Northend Cross', also 'Nordens Cross'. Because of the name, Northern Cross was formerly thought to have been located at the northern end of the present township (Baines 1963, 92, 142, 151 and 158) but further research by Baines and others has allowed the correct location to be identified (Baines 1963, 435—correction to p. 158). Such a name makes no sense in the centre of the town. However, if the sequence of development suggested above is correct, the site would have been situated at the northern end of the original town. Lastly, there is a deep gully running south-eastwards from the castle towards the cliff edge. This gully appears to represent the remains of a hollow way. If so, it presumably originally ran down to the port area within the destroyed southern part of the town.

The relevance of the above to the Phoenix Brewery site is that the hypothetically reconstructed grid demands that Winding Street formerly extended northwards to join Courthouse Street. This theoretical northerly projection crossed the area available for excavation. Unfortunately because the above hypothesis has never before been published it was unknown to the excavators and thus the possible existence of the road was not tested for. However, Area C of the excavation is sited immediately to the east of the projected street alignment, and the possible significance of the excavated remains in this area is considered in the Discussion.

FORMER BUILDINGS AT NOS. 21–24 BOURNE STREET

Bourne Street, a once picturesque street with the Bourne Stream flowing down the centre, has been greatly changed during the 19th and 20th centuries. As it now forms the lower section of a wide and busy thoroughfare, it is hardly surprising that only three houses of pre-1800 date survive. All three are on the western side, the entire eastern part of the street having been demolished this century in order to make way for road widening. Drawings made by E. L. Badham in the 1920s show that much of the eastern side of the street appears to have been of considerable antiquity, though hidden behind modernized fronts. Few early illustrations exist of these buildings and consequently, with three exceptions, no detailed information is available.

The western side is better represented (Example Pl. 1) and here details exist for all but the northern two buildings. Of these, six are of obvious antiquity; two of these still survive (Martin and Martin 1974a; 1974b).

At the head of the street, by its junction with Courthouse street, formerly stood the Courthouse, whilst the Town Wall originally formed the southern boundary of the street.

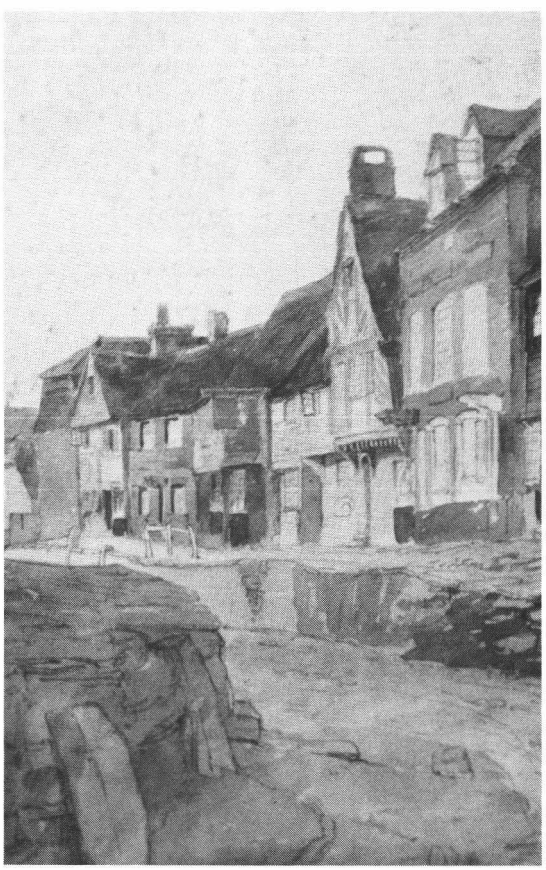

Plate 1. Bourne Street, Hastings. Looking south along west side of street. Detail from a watercolour of *c.* 1800 (artist unknown). Reproduced by permission of Hastings Musesum and Art Gallery.

Plate 2. Bourne Street, Hastings. Numbers 20 (extreme left) to 24. Drawn by W. H. Brooke. Dated 1851. Reproduced by permission of Hastings Museum and Art Gallery.

The Phoenix Brewery land occupies the sites of three timber-framed buildings, those at nos. 21, 22/3 and 24 Bourne Street. The surviving illustrations (Example Pl. 2) provide the following information.

No. 21 Bourne Street

A two-bay continuous jettied building aligned parallel to the street, with gabled and tiled roof. No framing is shown, but the joist ends are clearly visible, suggesting an early to mid 16th-century date. A chimney is shown incorporated into the northern gable. This building was destroyed between 1841 and 1860, and replaced by the Ship public house, which in recent years was used as the brewery office. Approximate street frontage: 25 ft.

Nos. 22/23 Bourne Street

A two-bay 'wealden'-type house aligned parallel to the street, with single bay hall to the north. The two detailed illustrations of this structure (Pl. 1 and 2) show the upper framing of the south bay as being of close vertical stud, interrupted either by a midrail or moulded string course—probably the former. Below, the ends of the joists are clearly shown.

The upper section of the hall front had been reconstructed during early post-medieval times in order to convert the building into one of continuous jettied type. The framing to this section is of small square panel type with intermediate bracing, whilst the joists carrying the jetty are masked by the bressummer which appears not to be moulded. One of the two drawings shows a footbrace in the upper

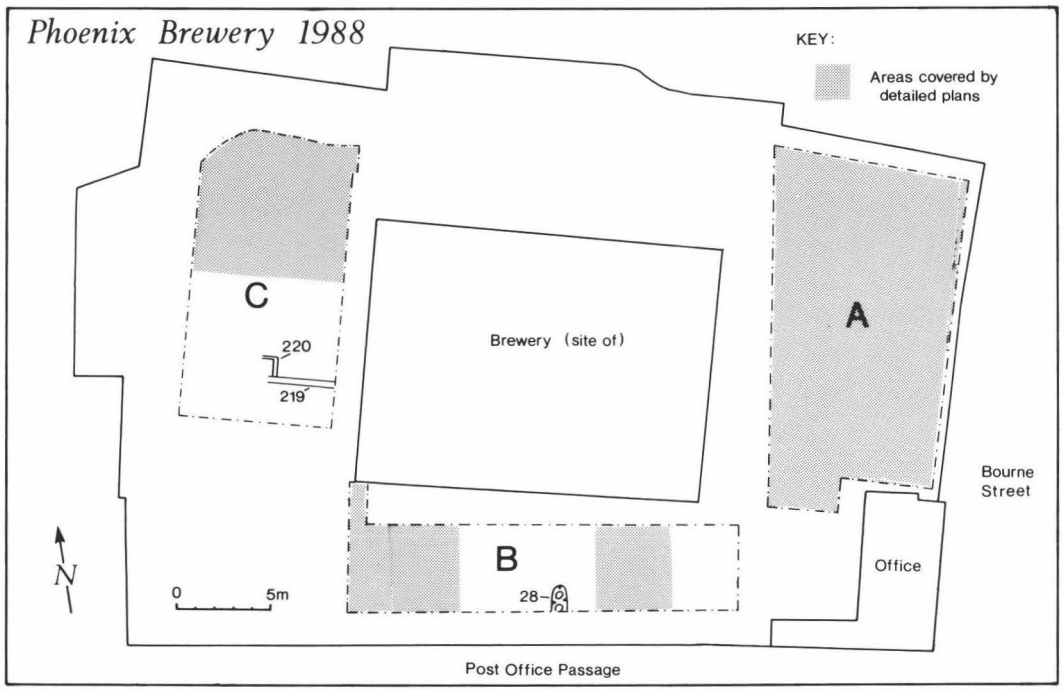

Fig. 5. Phoenix Brewery, 1988. Location of excavations.

southern square of the framing, but in the other sketch this brace is shown springing in the opposite direction, thus carrying the plate of the original recessed open front. The roof, which appears to have been gabled, is shown partially clad with Horsham Slab, though the remainder is tiled. Approximate street frontage: 27 ft.

No. 24 Bourne Street

Destroyed prior to 1841, this building is shown in few drawings, and in detail only in a pencil sketch by Marrianne Johnson made in *c.* 1815 (Source: Hastings Museum and Art Gallery). It was a jettied two-storeyed structure set at right angles to the road, with a gabled roof. Although the ground floor wall aligns with that of the building at no. 22/23, to which it is connected, the first floor is depicted as projecting slightly further, and the storey heights are also greater. The jetty, with its heavy medieval joisting, was carried on three brackets, the middle bracket being set south of centre in order to flank the southern doorway which is illustrated with either an elliptical or four-centred head. To the north, four windows (one blocked) appear to suggest the former existence of a shop front. The walls above are of close vertical stud and show clearly the crownpost, collar and collar-purlin of the medieval roof. Approximate street frontage: 15 ft.

THE EXCAVATIONS

Three areas of the Phoenix Brewery site were investigated during the Field Archaeology Unit excavations: A, B and C (Fig. 5). The reasons for choosing these locations were as follows. In the case of Area A, to investigate the Bourne Street frontage; in Area B, to locate any remains fronting Post Office Passage, and in Area C, to sample an area to the rear of the tenements. The site of the brewery itself was not investigated owing to the possibility that any deep foundations present there might have destroyed the archaeology in this area.

Detailed information about the various archaeological contexts, together with additional plans and sections, form part of the site archive. A summary list of the main contexts is provided on microfiche. In this report context numbers are provided in brackets.

AREA A (Fig. 6)

A large area bordering Bourne Street was mechanically stripped to reveal the archaeological features and deposits. Unfortunately this area had been badly disturbed by the construction of a number of modern drains and walls (e.g. Contexts 114, 115, 116, 124 and 128). Little stratigraphy remained, and few stratified finds were made, making dating in this area very difficult. Two one-metre wide test trenches (one north–south, the other east–west) were dug by hand to a depth of 20 cm. to establish the nature of the underlying deposits.

At the south-eastern end of the east–west test trench, a short stretch of north–south wall (212) was located. Consisting of large, close-set sandstone blocks with smaller rubble packed between, this wall is interpreted as being part of the street frontage. To the south-west, a short stretch of east–west sandstone rubble walling (209) probably represented the remains of the southern wall of the building incorporating (212). The northern wall of this tenement may have been completely destroyed by a modern east–west wall (114). The remains of two drains (113 and 126), possibly serving this building, were also located. Context 113 drained west to east and was formed by two rows of vertical sandstone slabs. Context 126, however, consisted of vertical slabs laid in sandy clay packed with stone slivers, and drained north to south. Both were badly disturbed and no datable material was discovered in association with them.

Also located within this building were areas of burning (117, 123). These consisted of hard sandy clay, varying in colour from yellow/orange to dark brown/black, with occasional charcoal and ash inclusions. The intensity of burning varied, though a marked area of intense burning within 117, centred around a setting of stones, possibly represented a hearth. Despite the occurrence of Rye Ware pottery in these layers, their disturbed nature made positive dating impossible. Similar areas of burning, again presumably representing floor levels/hearths, were located further north (112, 131, 132, 137) although, as before, they were badly disturbed. No finds were associated with them.

Close to Context 132 and disturbed by a modern wall (115) to the south, were the remains of two clay walls (111, 133). The more substantial of the two (111), consisted of a north–south stretch of hard yellow clay set in a small construction trench. Context 133 was of a similar composition, and ran at a right angle to Context 111. However, modern disturbance had badly damaged the former, masking its relationship to 111.

To the south of another modern wall (116) an area of substantial masonry was found (154). This was composed of irregular sandstone blocks set horizontally in a hard orange/yellow clay. A 'C'-shaped recess in the southern side proved to be the remains of a fireplace set onto an east–west wall. Context 174, lying further west, may have been part of the same wall. The fireplace, which was completely exposed by subsequent excavations by H.A.A.R.G., had splayed jambs on both sides. It was examined by David Martin, who reports that it was typical of the 17th and 18th centuries, and could not be earlier than the 16th century (Vahey 1991). To the east, remains of a north–south wall were located, probably forming the street frontage to this building. An east–west drain (213) cut into a sterile clay layer (216—see below), and consisting of vertical sandstone slabs supporting horizontal slabs, was found protruding to the south of a modern wall (116). Unfortunately no reliable dating material was found within its fill. The remains of an extremely disturbed north–south wall (179) were located to the south-west of Context 174 and may represent the line of the back wall to this building. To the east, a shallow cut (176), possibly the base of a drainage gully, was discovered. Although its stratigraphic relationships were absent, its fill yielded substantial parts of two medieval cooking pots (see Barber, pottery report in this article, 105–106).

North of Context 116 (a modern wall) two drains (164, 165) were found. They were constructed of large sandstone slabs bedded in clay and drained towards the east where they joined. No building or finds were located in association with these drains.

Within the north–south test trench a number of small pits were found (195, 199) cutting a sterile clay layer (216). These pits yielded 13th- to 14th-century material. To the south was an east–west drain (211) of horizontal sandstone flags laid over courses of tightly packed flint cobbles.

The sterile clay (216) located at *c.* 7.0 metres O.D. could not be investigated further by the Field Archaeology Unit owing to the ending of the agreed

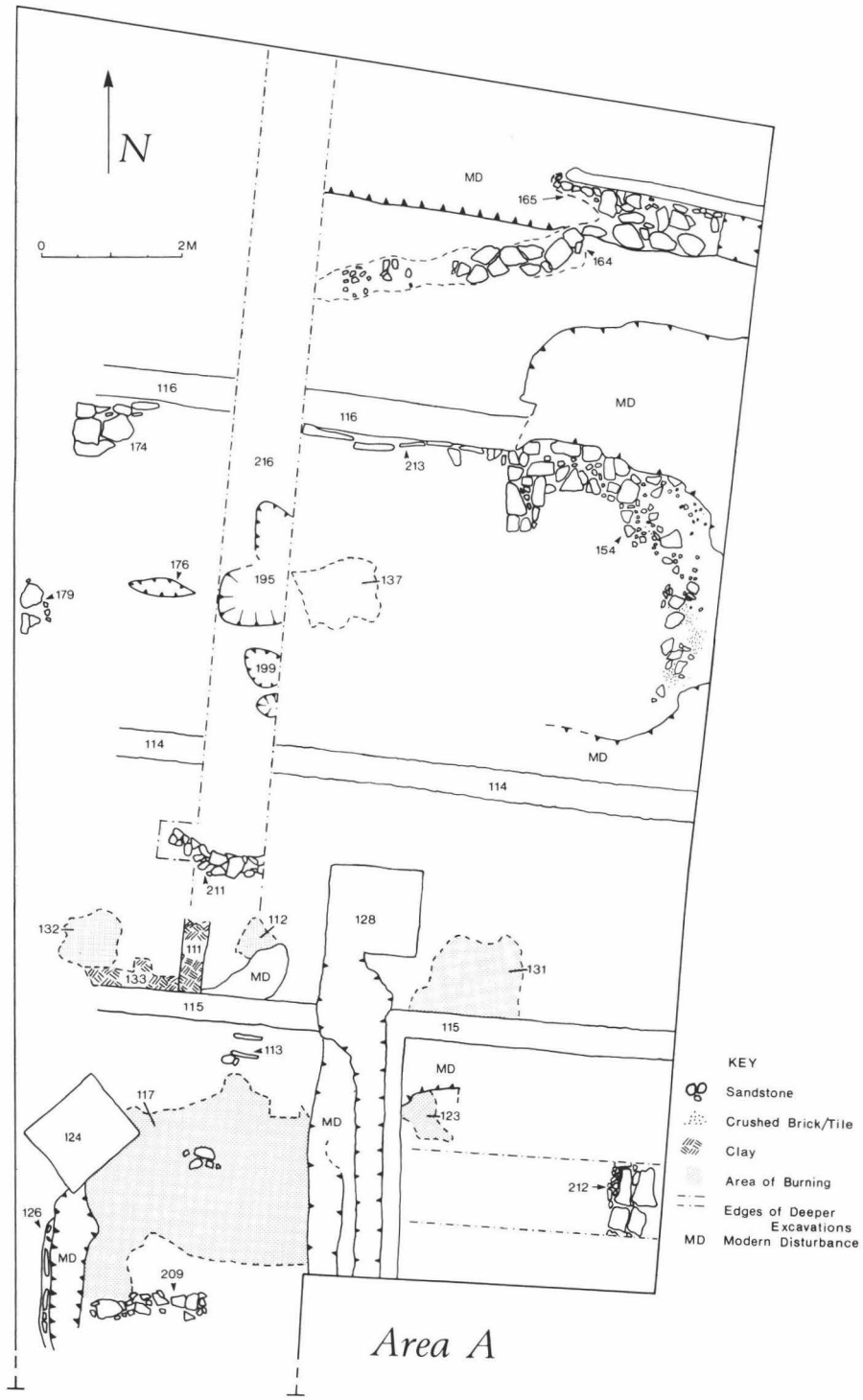

Fig. 6. Phoenix Brewery, 1988. Area A. Plan of features.

time limit for the excavations, and related funding. However, the Hastings Area Archaeological Research Group (H.A.A.R.G.), under the direction of Zoe Vahey continued excavation in this area after the Field Archaeology Unit had left the site. The sterile clay was found to vary between 10–45 cm. in thickness and overlay midden deposits (217: see Barber, pottery report in this article, nos. 107–108). These in turn overlay burnt deposits (218) associated with the 11th- to 12th-century pottery (Barber, *ibid.*, nos. 109–111) which lay immediately above sterile alluvial clay. It is interesting to note that a pottery sherd from this lowest level conjoined with one of the pots from Cut 176 (Barber, *ibid.*, no. 106). For a further account of these deposits below Layer 216 please refer to the H.A.A.R.G. report (Vahey 1991).

AREA B (Figs. 5, 7, 8)

This area consisted of a long east–west trench bordering Post Office Passage. Owing to the limited time available, two sub-areas formed the focus of excavation within this area (shaded areas on Fig. 5). Both the eastern and western sub-areas (Fig. 7) contrasted with Area A in that modern disturbance was minimal, leaving a good sequence of late medieval deposits with large quantities of stratified pottery.

The Western Sub-Area: Sequence of Events

The lowest level of the excavation reached a sterile yellow clay layer (similar to 216 in Area A) which averaged 6.9 metres O.D. Above this a thick layer of silty loam (187) had been deposited (Fig. 8, Section L–K). Pottery from this layer suggests that it does not pre-date the 13th century. Cutting Layer 187 were two north–south ditches (77 and 72). Ditch 77 (fill 76) consisted of a small gully running parallel to the large ditch 72 (fills: 71, 188, 189). The latter ditch was only sampled (Fig. 7; Fig. 8, Section C–D), and produced little pottery. Finds from Ditch 77 suggest a 13th- to 14th-century date. Sealing the two ditches was a thin, often indistinct, layer (61) which was in turn cut by Pit 58 (Fig. 7). A series of Layers (53, 55, 52) were subsequently laid over the area. Layer 52 contained frequent brick or tile flecks and chips and possibly represented a floor level, though no structural features were found in association with it.

To the west, Layer 52 was cut by a deep pit (158) which also cut a small pit (161) (Fig. 8, Section B–A). Unfortunately only a quarter of Pit 158 was available for excavation. Its fills (151, 162, 150, 149, 145, 146, 144, 110, 109) contained relatively little domestic rubbish, suggesting its primary purpose was for cess and/or as a soakaway for drainage. The organic nature of some of the fills, particularly 150, 149 and 146, certainly suggest that cess material may have been present. Pottery finds indicate a 13th- to 14th-century date.

Pit 158 was subsequently cut by a shallow ditch (156), although this was only noted in section and yielded no finds. A roughly north–south ditch (108) possibly drained into Pit 158, though this is not certain as subsequent recuttings had destroyed the relationships. These recuts (see below) had destroyed the original profile of 108 for much of its length. The fills of 108 (80, 81, 82, 83, 84, 85) were often localized and generally consistent with a gradual silting process (Fig. 8, Section F–E). This silting appears to have caused problems with the ditch's drainage, for it was partially recut twice. The first recut (107, Fill 106), ran south from a point just north of Pit 158, though this too appears to have silted fairly rapidly (Fig. 8, Section L–K), for a further recut (185, Fill 186) was soon needed (Fig. 8, Section B–A). This second cutting, being deeper than both 108 and 107, eradicated their profiles and was set slightly further south than the start of 107 (note it does not appear in Fig. 8, Section L–K, despite its greater depth than 107).

Ditch 108 and both recuts were eventually replaced by Ditch 51 (Fig. 8, Sections B–A, F–E, L–K) which followed the same north–south line. This new ditch widened and deepened as it progressed southwards, presumably to increase its drainage capacity. The nature of its fills (40, 47, 48, 50) suggests that after a period of performing its primary task, it was ultimately used as a dump for domestic rubbish, as large quantities of food remains, particularly shell, were found in its upper fill. Finds suggest a 14th-century date (Barber, pottery report in this article, no. 91). This ditch complex was cut by a north–south wall (46) of roughly coursed sandstone blocks and rubble set in a clay matrix. To the west the wall was badly disturbed, and its full length could not be ascertained.

To the east, a steep-sided pit (74, Fills 192, 73) was found cutting deeply into the underlying

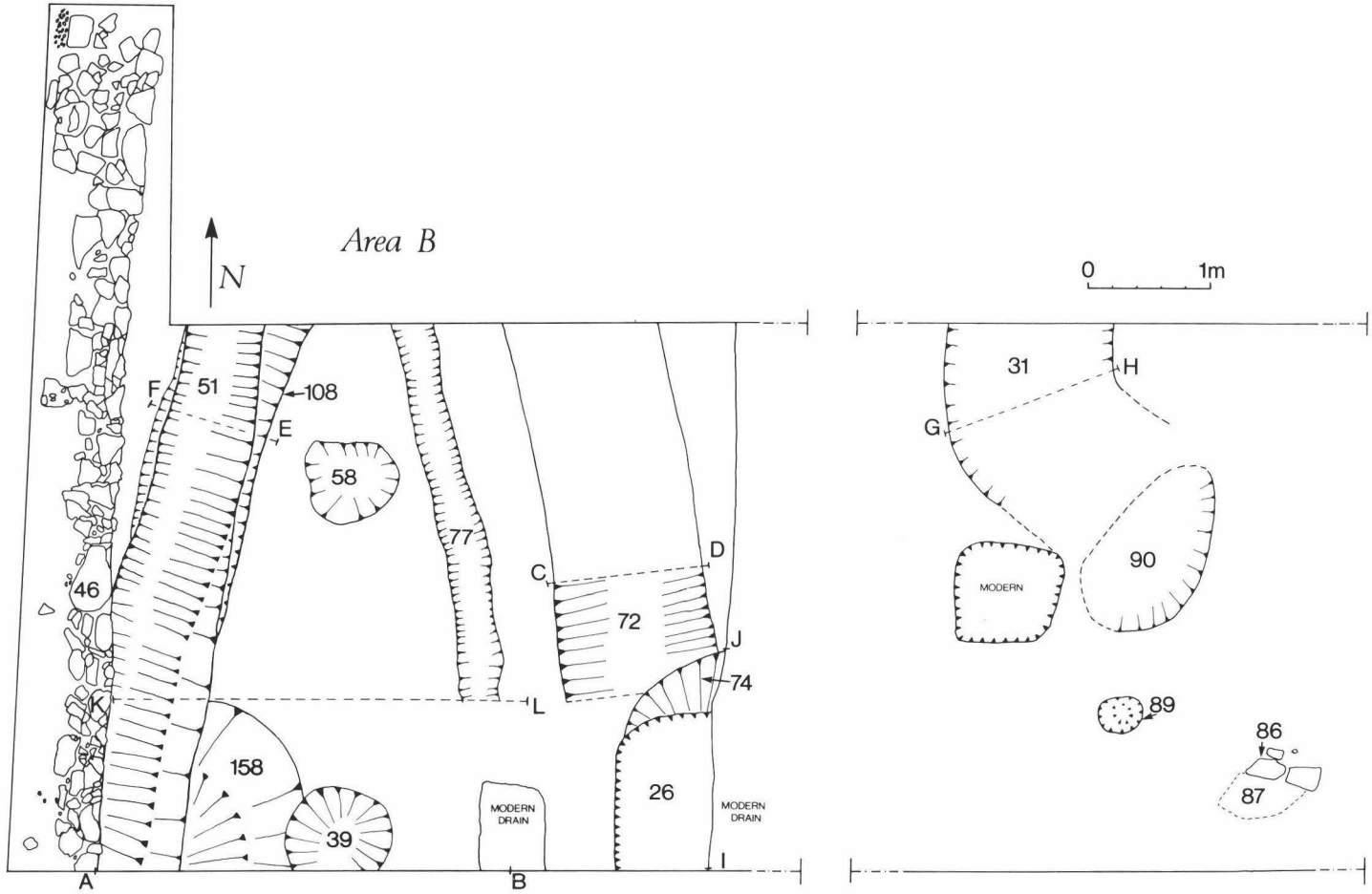

Fig. 7. Phoenix Brewery, 1988. Area B. Plan of features.

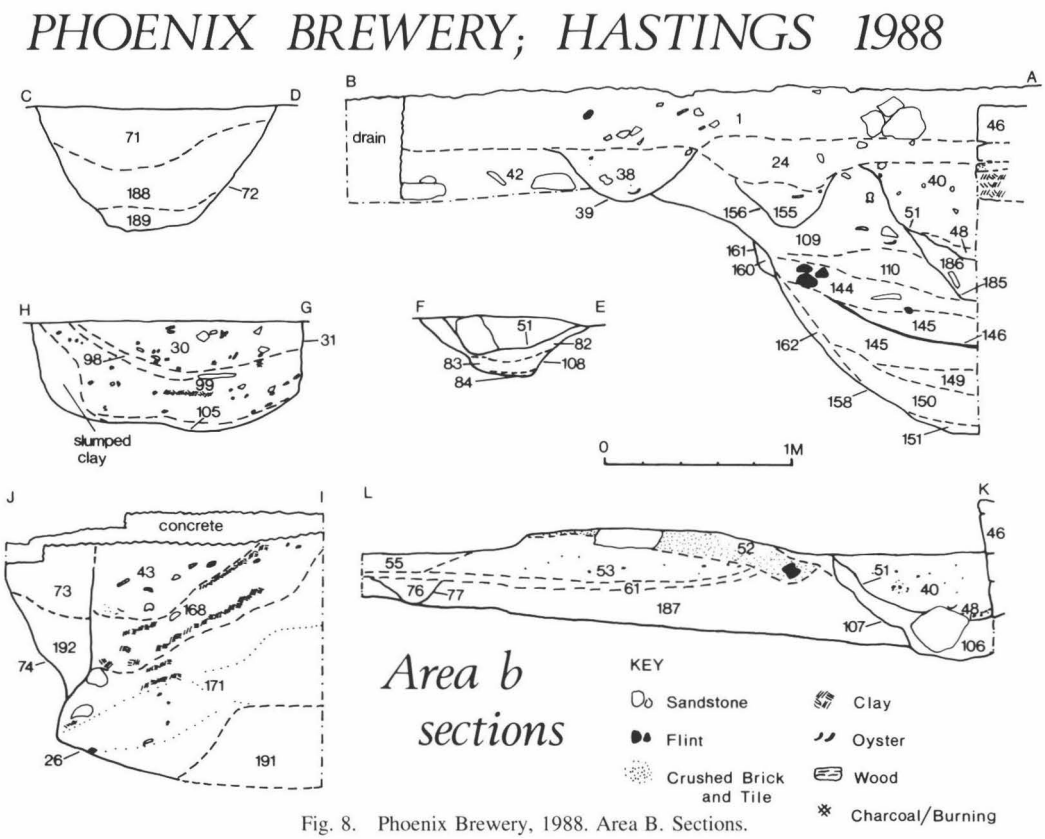

Fig. 8. Phoenix Brewery, 1988. Area B. Sections.

deposits (Fig. 8, Section J–I). A date of the 13th to 14th centuries seems likely from the few finds found within it. Layers 24 and 42 were subsequently laid down, though they were cut by Pit 39 (Fill 38) which obscured their relationship to each other (Fig. 8, Section B–A). Further east, underlying a modern drain, a steep-sided sub-rectangular pit (26) was found cutting Layer 42 and Pit 74. The northern side of 26 had slumped, causing an overhang (Fig. 8, Section J–I). The nature of the fills (191, 171, 168, 43) suggested a cesspit; a number of clay tip lines dipping towards the north were noted and probably represent layers deliberately placed periodically to seal the contents of the pit. Although the lower fills contained 17th-century material, the latest fill (43) also produced some early 18th-century finds, suggesting a prolonged use of the pit.

The Eastern Sub-Area: Sequence of Events

Cutting the sterile clay found at the lowest level of excavation, Ditch 31 was encountered, curving from south-east to north. Owing to the dry conditions it was impossible to trace Ditch 31 without full excavation; thus its south-easterly course (and its relationship to context 90—see below) must remain uncertain. The sample section showed it to have a steep-sided profile (Fig. 8, Section H–G). The fills (105, 99, 98, 30) yielded large quantities of 13th- to 14th-century material.

To the south, a kidney-shaped pit (90) with light burning and a possible clay lining, was revealed. Whether Pit 90 could have acted as a sump for Ditch 31 could not be proved. Further south, an isolated post-hole (89) was located. Its fills (201, 88) contained no finds.

Sealing these features was an extensive clay loam layer (29) which contained abundant domestic refuse as well as earlier residual material. A 13th- to 14th-century date seems most likely for this layer. Resting on Layer 29 were the remains of a possible wall of clay-bedded sandstone blocks (86). This bordered a small area of yellow clay (87), possibly

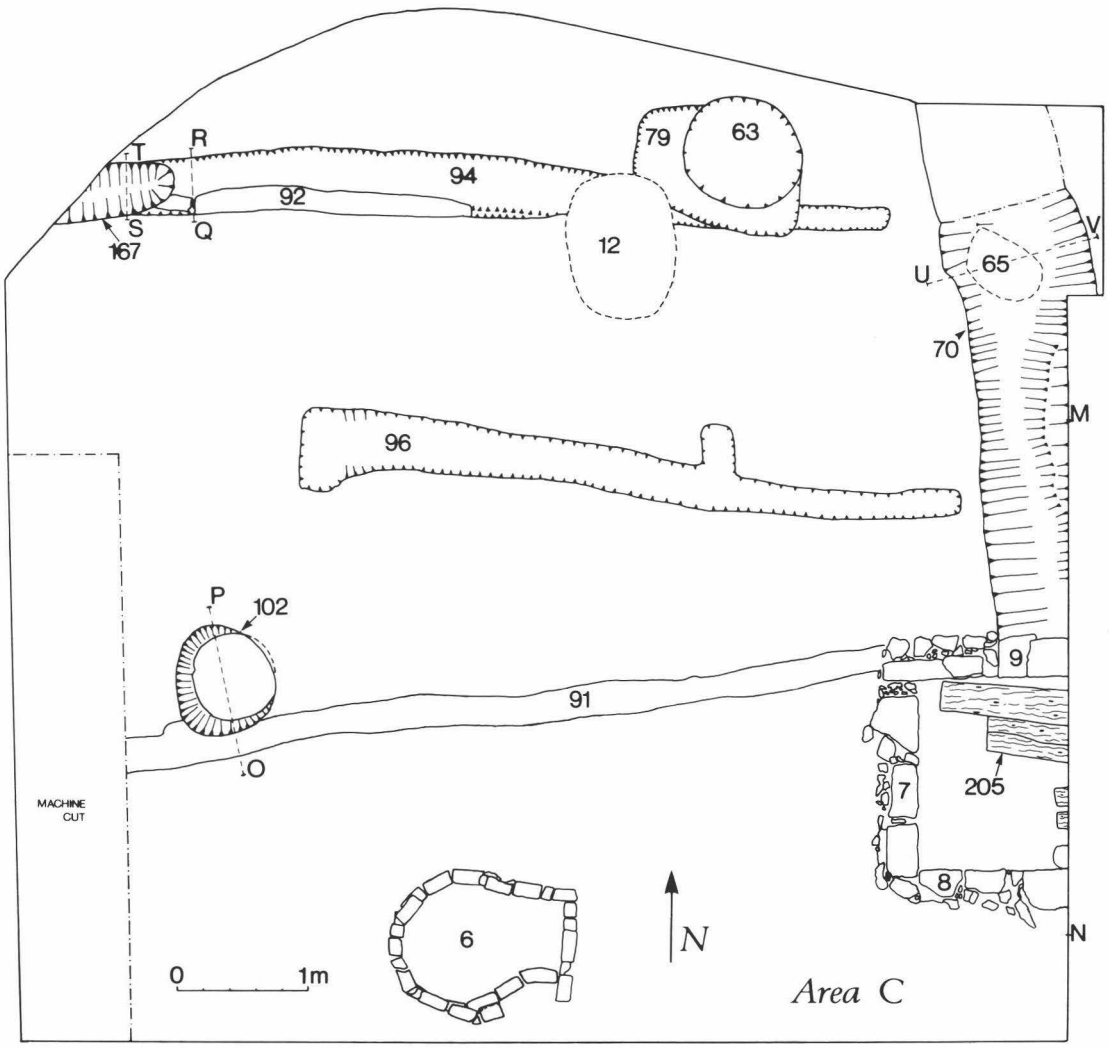

Fig. 9. Phoenix Brewery, 1988. Area C. Plan of features.

the last vestiges of a floor. The fragmentary nature of these features must, however, keep their interpretation tentative. Cutting Layer 29 to the west (Fig. 5) was a steep-sided ditch terminal (28) with two circular impressions, possibly from barrels, at its base. Pottery of 13th- to 14th-century date was associated with this feature.

AREA C (Figs. 5, 9, 10)

Area C consisted of a large machined north–south trench (see Fig. 5 for dimensions). As with Area B, time prevented total excavation, and work was therefore concentrated on the northern half of the trench (shaded area on Fig. 5). Within this area (Fig. 9) a number of medieval and post-medieval features were excavated.

The lowest level of excavation reached a sterile orange clay averaging 7.3 metres O.D., which was overlain in places by a thin charcoal-flecked layer (104). Against the eastern trench edge a roughly north–south ditch (70) was located cutting the sterile clay. Its fills (67, 66, 69, Fig. 10, Section U–V) produced 13th- to 14th-century

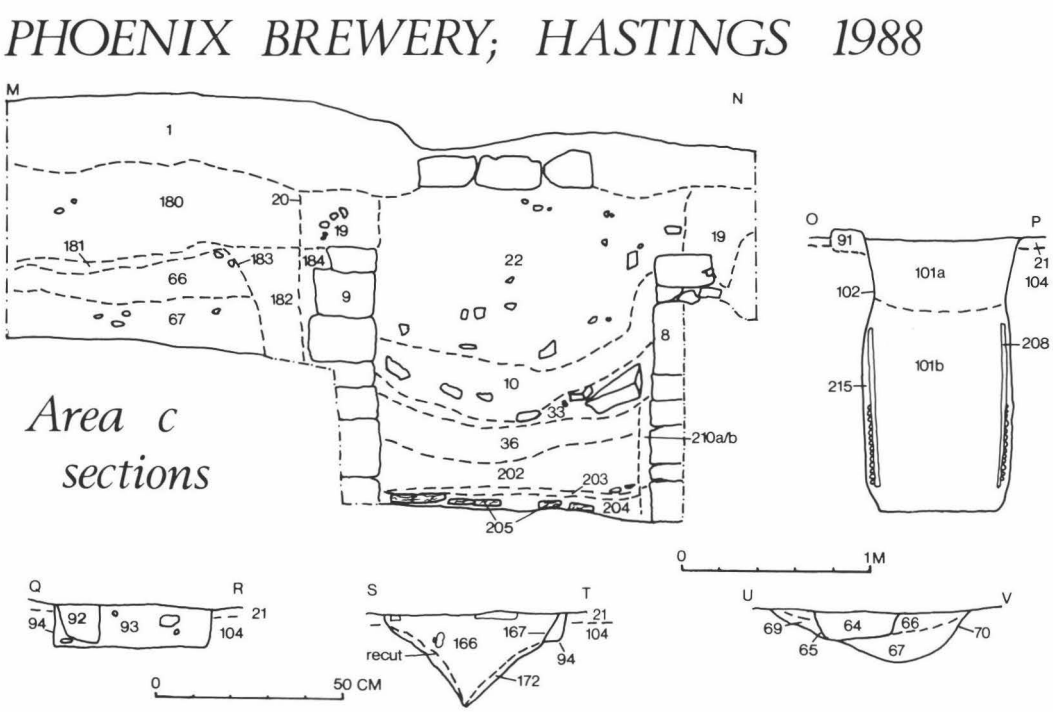

Fig. 10. Phoenix Brewery, 1988. Area C. Sections.

pottery, as well as earlier residual material. Ditch 70 may have formed the upper course of Ditch 72 (Area B, see above), since they are roughly aligned with each other. A small pit (65) had been cut into the fills of Ditch 70, and subsequently Layer 181 had sealed the ditch (Fig. 10, Section M–N).

To the south, cutting 181, was a steep-sided pit (183) which was apparent only in section. No finds were found in its fill (182). This was sealed by a thick, gritty loam layer (180).

Cutting Contexts 180, 183 and 91 (see below) was a stoned-lined pit (37). Not all of this feature was available for excavation, so that its full dimensions are uncertain. It may, however, have been connected with Wall 46 located in Area B (see above). Constructed in a steep, narrow cut (184), Pit 37 consisted of Walls 7, 8 and 9, and a conjectural fourth wall which probably underlay the section. These walls were of roughly coursed sandstone blocks set in a degraded coarse sandy mortar. The floor was of nailed wooden oak planks (205) running east–west, and lying directly on the sterile clay. The fills (204, 203, 202, 36, 210a/b, 33, 10, 22) and the extracted environmental evidence (see Hinton, and Towner and Roote below, reports on plant remains and insects) suggests that the pit was originally for cess manure (context 36 was a black humic fill with remains of straw). The decay of the pit was illustrated in Fills 33 and 10, which contained sandstone blocks and rubble which had presumably collapsed from the pit walls. Glass and pottery suggest a late 16th- to 17th-century date for the fills, though the exact date of the pit's construction is uncertain. The upper limits of the stone lining had been dismantled when a robber trench (20) was dug. The fill (19) contained only residual material and could not be dated.

To the west of Pit 37 and Ditch 70 an extensive layer of silty loam (21) was encountered, overlying the sterile clay and Layer 104. This layer (similar to Context 29 in Area B, see above), contained large quantities of domestic rubbish, giving a date range between the 13th and 14th centuries, although earlier residual material was also present. The layer pre-dated all the features west of Ditch 70.

Two parallel east–west 'beam-slots' (94, 96) were found cutting Layer 21. Both their depths (averaging 10 cm.) and widths (generally tapering toward the east) varied considerably. The southern slot (96) had a small northern off-set. The fills (93, 95) produced 13th- to 14th-century pottery. Both slots stopped short of Ditch 70, suggesting they may all have been contemporary.

Cutting 94, on the same alignment, was a short stretch of disturbed clay walling (92). To the south, a similar, though longer section of clay wall (91) was found, cut by the stone-lined pit (see above). Within this clay wall were found traces of wattle-work and associated charcoal. It seems likely that the two clay walls (91 and 92) were contemporary, possibly replacing the structure(s) formed by Beam-slots 94 and 96. The insubstantial nature of the walls may suggest, however, that they represent tenement fence lines rather than the footings for timber-framed dwellings or outbuildings.

Wall 92 was cut to the west by a similarly aligned ditch with a V-shaped profile (167). Its fills (172, 166) contained few finds and appeared to be the result of natural silting. The ditch had been recut at least once (Fig. 10, Section S–T). Cutting Beam-slot 94 to the east was a series of three intercutting pits (79, 63, 12). The earliest, Pit 79, contained much charcoal but no pottery. It was cut by Pit 63 (dated to the 13th- to 14th-century), and a Victorian pit (12), the latter possibly being contemporary with the brick wall/soakaway (6) further south.

Cutting Clay Wall 91 towards its western end was a barrel-lined pit (102). This feature probably functioned as a well or cesspit. The unsupported sides above the barrel later began to bulge outwards, thus causing a slight overhang (Fig. 10, Section O–P). The sides of the barrel (208) consisted of 22 oak staves (varying in width from 8–18 cm.), held together with 14 close-set withies of split round-sectioned hazel. The construction fill (215) behind the barrel yielded early post-medieval pottery similar to types found within the fills (101a, 101b). Both fills contained a wide range of domestic rubbish (including a complete pottery jar—Barber, pottery report in this article, no. 99), suggesting a 16th-century date for this feature.

As in Area A, members of H.A.A.R.G. continued excavation in the uninvestigated southern half of Area C after the expiry of the Field Archaeology Unit's allotted time on site. An east–west sandstone wall was revealed (219, Fig. 5 only), possibly forming part of the same construction as Wall 46 in Area B. Towards the western extent of Wall 219, north–south and east–west walls (220—see Fig. 5) had been added, probably to form a pit similar to Context 37 (see above). A fuller description may be found in the H.A.A.R.G. report (Vahey, 1991).

THE FINDS

THE POTTERY by Luke Barber (incorporating comments by Clive Orton)

A large quantity of pottery spanning the 11th to 19th centuries was found at the site. For the purposes of this report it has proved necessary to describe only a selection of the material in order to give a guide to the range of fabrics, forms and dates of the excavated pottery.

Although the report concentrates on the medieval material, some post-medieval pottery groups have been included owing to the lack of published groups of such material from Hastings. Study of the dating of many of the local medieval fabrics is still in its infancy (Rudling 1976, 169) and unfortunately no early dated, sealed contexts were encountered at the Phoenix Brewery site, though much residual 11th- to 12th-century material was present in later medieval deposits.

The later medieval assemblage consists predominantly of Rye, Winchelsea, and French products which are described elsewhere (Barton 1979; Vidler 1933; Orton forthcoming). The lack of Dutch and German wares tends to suggest that the overall medieval assemblage from the site covers the 13th century rather than the 14th to 15th centuries.

The unprovenanced coarse wares, most probably local, were divdided into five general groups based on a visual examination of the fabrics with a hand lens.

Fabric A

A fairly distinctive group with frequent coarse flint and quartz temper, usually sub-rounded to angular, averaging *c.* 1 mm., though some inclusions measure up to 3 mm. The inclusion colours are

mainly milky, though yellow, brown and red are also present. Some red haematite was also noted. The fabric is generally hard with an irregular breakage. Core colour is usually light to medium grey, though some is black. Surface colour varies considerably from light grey to orange-brown to black. Recognisable forms inluded cooking pots, bowls and lids, some with simple incised line or thumbnail decoration. Catalogue Nos.: 5, 6, 7, 8, 59, 60, 62, 94, 97, 106.

Fabric B
Possibly a sub-group of Fabric A. Fairly frequent medium sub-rounded milky flint and quartz with some haematite. Temper generally less than 1 mm., though some to *c.* 2 mm. The fabric is fairly hard, with a light grey, buff or orange-red core and buff or grey to black surface. Recognisable forms included cooking pots and jugs with little decoration. Catalogue Nos.: 9, 10, 11, 16, 61, 105.

Fabric C
Possibly a sub-group of Fabric D. Fine sand with larger inclusions of rounded flint, quartz (with some shell) up to *c.* 1 mm. though inclusions are predominantly on the surface. A hard fabric with light to medium grey core and very variable surface colouring (red/orange/buff to brown/grey/black). Forms recognised included cooking pots, jugs and bowls. No decoration was noted. Catalogue Nos.: 12, 13, 14, 57.

Fabric D
This is a very wide group of 'sandy' wares. Temper is predominantly of fine to medium sand (often more prominent on interior surfaces) with occasional larger inclusions of rounded flint. A hard fabric, often with a light to medium grey core and orange/buff to grey/black surfaces. Recognizable forms included cooking pots, bowls and pipkins, some with horizontal incised line and thumb-pressed strip decoration. Catalogue Nos.: 15, 17, 18, 19, 20, 58.

Fabric E
This formed a fairly large but distinctive group. This fabric is similar to the Kingston products of Surrey Off-White Ware, although Clive Orton has pointed out that it is unusual to find Kingston products making up such a large group this far from their source. The group consists of hard fine to medium sand-tempered ware with core colours varying from off-white to light grey predominantly, though some darker grey and pinkish cores were noted. Surfaces are usually off-white to cream, though pink/orange is present in some examples. Recognizable forms included cooking pots, bowls and glazed jugs. Glaze is usually a patchy light green, though some clear to yellow/brown is also present. Decoration, usually on jugs, consisted of incised horizontal lines and applied strips. Catalogue Nos.: 23, 24, 65, 68, 96.

CATALOGUE (Figs. 11 and 12; Sherds marked with an asterisk are illustrated)
Context 1

1. Strap handle with stabbing, from large pitcher. Fine sandy grey ware with black exterior surface. Winchelsea Black Ware. 13th- 14th-century.
2. Rim and base from cup. Very fine off-white fabric with all-over mottled green glaze. French.

3*. Decorated body sherd from face jug. Fine pink/buff fabric with even dark green glaze over applied anthropomorphic decoration in the form of a hand. Interior shows burning. Scarborough Ware.

4. Part of a bridged parrot beak spout. Sandy grey fabric with orange surfaces. Patchy green glaze on exterior. Probably a Rye imitation of a French jug.

Context 21 (Area C)

5*. Rim sherd of cooking pot. Fabric A. Frequent coarse sub-angular to rounded flint/quartz tempering. Light grey core with buff inner and black/buff outer surfaces.

6*. Rim sherd of cooking pot. Fabric A. Temper as No. 5. Light grey core with buff inner and grey-buff outer surfaces.

7*. Rim sherd of cooking pot. Fabric A. Light grey core with off-white to grey surfaces. Temper as No. 5 though slightly finer (less than 1 mm.).

8*. Rim sherd of cooking pot. Fabric A. Frequent semi-rounded flint/quartz up to 1 mm. in dark grey fabric with brown to black inner and black outer surfaces.

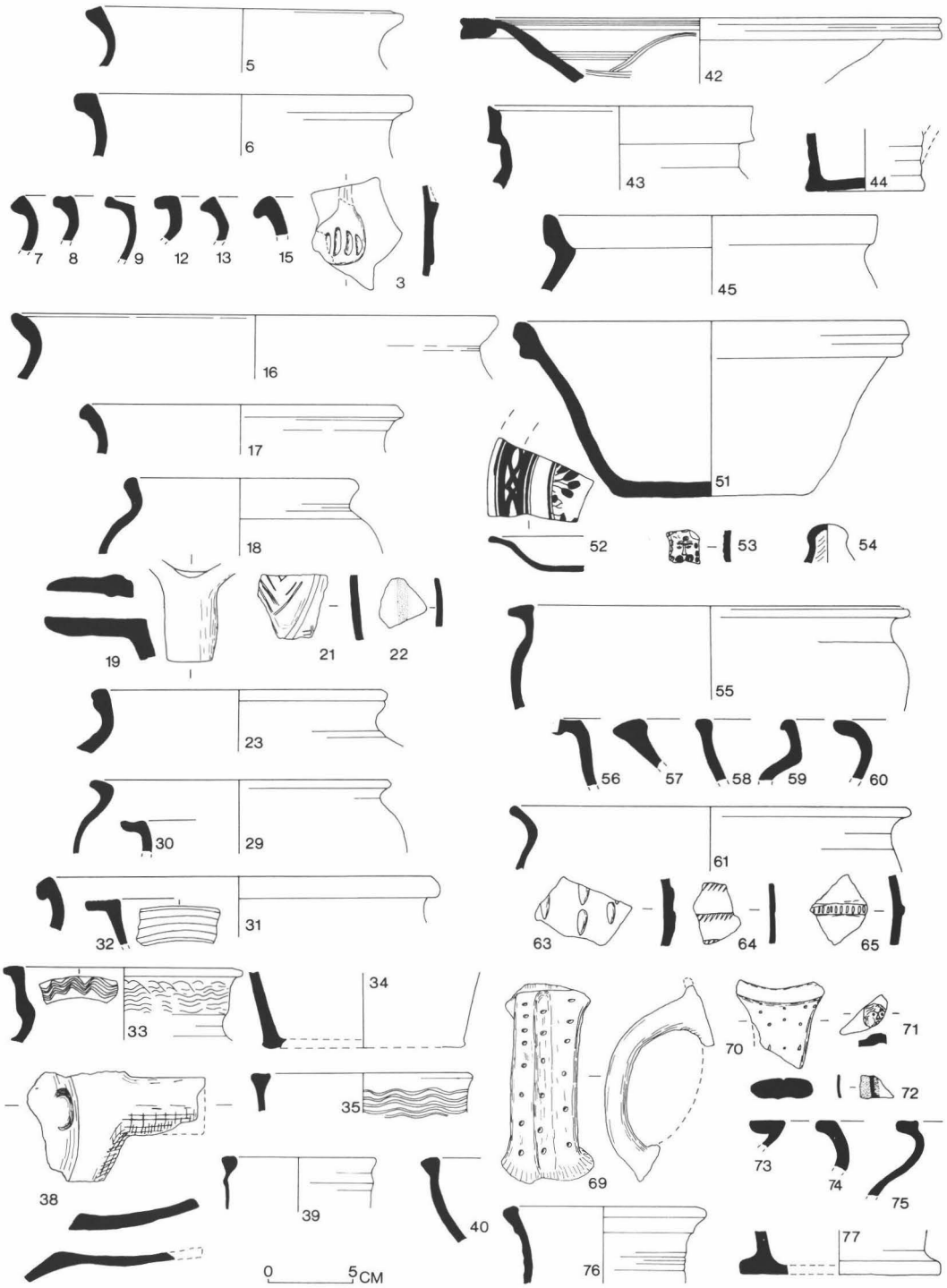

Fig. 11. Phoenix Brewery, 1988. Pottery (½).

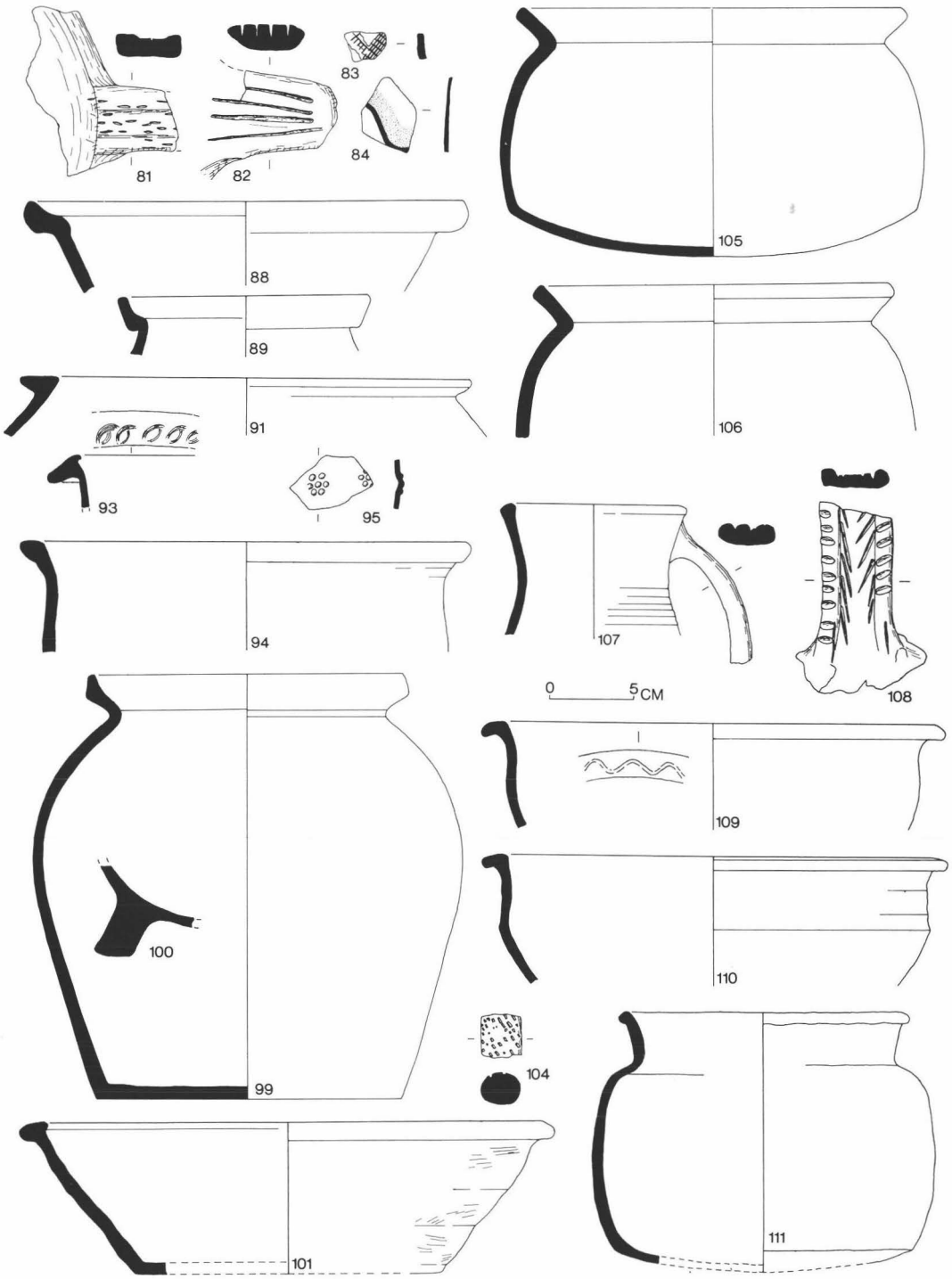

Fig. 12. Phoenix Brewery, 1988. Pottery (½).

9*. Rim sherd of cooking pot. Fabric B. Frequent sub-rounded flint with some small shell in a dark grey to black fabric.

10. Rod handle with irregular shallow stabbing. Fabric B. Coarse, sub-angular flint/quartz with some shell and haematite in brown/buff fabric. Surfaces have been smoothed.

11. Base sherd of sagging-based cooking pot. Fabric B. Moderate inclusions (as No. 10). Light grey core with orange buff inner and black outer surfaces.

12*. Rim sherd of cooking pot. Fabric C. Fine flint and quartz (though some to 2 mm.), haematite and shell(?) in a medium grey fabric with dark grey to black surfaces.

13*. Rim sherd of cooking pot. Fabric C. Moderate sub-angular flint with some rounded quartz in a light grey fabric with orange/brown surfaces.

14. Rim sherd of lid. Fabric C. Moderate fine flint and quartz in medium grey fabric with grey inner and brown outer surfaces. Exterior burnished.

15*. Rim sherd of bowl(?). Fabric D. Moderate sand with occasional flint up to *c.* 1 mm. in dark grey fabric with buff margins and patchy black surfaces.

16*. Rim sherd of cooking pot. Fabric A. Temper as No. 5. Grey core with buff orange surfaces.

17*. Rim sherd of cooking pot. Fabric D. Fine to medium sand with occasional flint in light grey fabric with orange/buff surfaces.

18*. Rim sherd of cooking pot. Fabric D. Fine sand with some haematite in a light grey fabric with light to dark grey surfaces. Faint incised horizontal line on shoulder.

19*. Tubular pipkin handle. Fabric D. Fine sand in a light grey fabric with orange/buff outer and grey interior surfaces.

20. Body sherd with applied strip decoration. Fabric D. Fine sand in a light grey fabric. Dark grey surfaces.

21*. Body sherd of jug. Brown/buff fine sandy ware. Patchy olive green glaze over sgraffito decoration. Rye Ware.

22*. Body sherd in fine off-white fabric with grey painted stripe.

23*. Rim sherd of cooking pot. Fabric E. Light grey sandy ware with cream/buff surfaces.

24. Jug handle of rectangular section. Fabric E. Colour as No. 23. Patchy light green glaze with two rows of stabbing.

25. Strap handle with wide, centrally applied strip. Off-white sandy ware with even, light yellow-green glaze. French(?)

26. Body sherd of jug. Grey sandy ware with orange external margins and grey/black surface. White slip decoration under patchy olive green glaze. Rye Ware. 13th- to 14th-century.

27. Rim sherd of jug. Grey sandy ware with buff internal surface. Even brown mottled glazed interior. Rye Ware.

28. Base sherd of jug. Light grey sandy fabric with orange-brown surfaces. Spots of light green glaze on exterior. Three thumb marks at base forming a foot.

29*. Rim sherd of cooking pot. Sandy ware with grey core and orange margins. Orange brown inner, black outer surfaces. Rye Ware.

30*. Rim sherd of cooking pot. Fabric as No. 29 but no orange margins. Rye Ware.

31*. Rim sherd of cooking pot/jar. Fine, light grey sandy fabric with black surfaces. Possibly Roman.

32*. Rim sherd of bowl. Medium grey sandy (with shell) ware with black surfaces. Incised lines on rim. Winchelsea Black Ware.

33*. Rim sherd of jug. Fine off-white/grey sandy ware with combed wave decoration on neck and rim. French.

34*. Base sherd of jug. Fine off-white/buff fabric. Spots of mottled green glaze on both surfaces. French.

35*. Rim sherd of jug. Very fine white/off-white, soft fabric. Combed wave decoration. French.

36. Body sherd and handle of jug. Very fine grey fabric with off-white internal surface. Thick, even dark green glaze with brown mottles over groups of vertical combed lines. French.

37. Rod handle with anterior ribbing and two thumbed marks at join of body. Fine buff/orange fabric with thick, dark, even green exterior glaze. Scarborough Ware.

38*. Tubular skillet handle. Grey sandy (with shell) ware with black surfaces. Incised lines on joint of handle to body on underside. Winchelsea Black Ware. 13th- to 14th-century.

Context 24 (Area B)

39*. Rim sherd of jug. Very fine off-white fabric with patchy light green mottled glaze on exterior and rim. Saintonge Ware.

40*. Rim sherd of bowl. Quartz and shell-tempered grey fabric with black surfaces. Spots of brown glaze internally. Winchelsea Black Ware.

41. Rim sherd of cooking pot. Grey sandy ware with orange/brown surfaces. Soot encrusted. Rye Ware.

Context 26 (Pit): fills 43, 170 (Area B)

42*. Rim sherd of plate/bowl. Hard earthenware with light grey core and red/orange margins. Red-brown outer surface. Inner surface decorated with incised lines under a thick, dull green glaze with brown mottles. Late 17th- to early 18th-century.

43*. Rim sherd of tripod pipkin. Hard earthenware with grey core and red/orange margins. External surface light brown. Internal brown/yellow glaze with brown spots. Similar example from Southampton (Platt and Coleman-Smith 1975, Vol. 2, no. 708). Late 16th- to 17th-century.

44*. Base sherd of tyg (high sided drinking vessel). Hard orange-brown fabric with all-over glaze. 17th-century.

45*. Rim sherd of jar. Light orange-red earthenware with traces of brown and green glaze. 17th- to 18th-century.

46. Body sherd with light yellow glaze and brown combed slip. Staffordshire Ware. Post-1670 to early 18th-century

47. Body sherd of plate. Orange earthenware with thick brown glaze over white slip decoration. 18th-century.

48. Two body sherds from plates. Tin-glazed. Probably from Lambeth. Early 18th-century.

49. Rim sherd from salt-glazed mug. London stoneware. 1680/90 to 18th-century.

50. Decorated body sherd from Bellarmine. 17th-century.

51*. Bowl in light grey earthenware with red/orange surfaces. Internal even, dull green glaze with brown spots. Patches of glaze on exterior. 17th- to 18th-century.

52*. White tin-glazed plate. Decorations of light blue lines and flowers, often overlain by tan. Stalks in green. *c.* 1700–1720.

53*. Decorated body sherd. Face in applied relief. Westerwald stoneware. 17th-century.

Context 28 (Ditch): fill 27 (Area B)

54*. Top from money box. Fine sandy pink-orange ware with external green glaze. Rye Ware(?)

Context 29 (Area B)

55*. Rim sherd of cooking pot. Hard orange-brown sandy ware with brown exterior. Thick with soot. Rye Ware. 13th- to 14th-century.

56*. Rim sherd of bowl. Hard grey sandy fabric (some flint inclusions) with orange-brown surfaces. Soot on exterior. Rye Ware.

57*. Rim sherd of bowl. Fabric C. Quartz, flint and shell-tempered light grey fabric with buff surfaces. 11th-century(?).

58*. Rim sherd of bowl. Fabric D. Grey sandy fabric with dark grey to pink/red surfaces. 11th-century.

59*. Rim sherd of cooking pot. Fabric A. Coarse flint/quartz tempered light grey fabric with brown/buff surfaces.

60*. Rim sherd of cooking pot. Fabric A. Temper as no. 59. Grey fabric with orange-brown surfaces. 12th- to 13th-century(?).

61*. Rim sherd of cooking pot. Fabric B. Flint and quartz tempered grey fabric with buff to black surfaces.

62. Base sherd from large sagging-based cooking pot. Fabric A. Flint, quartz and some haematite in dark grey fabric with red-brown surfaces. Thumbnail decoration around base.

63*. Decorated body sherd. Grey sandy ware with buff inner surface. Exterior has a dark green glaze with brown mottles over applied lozenge decoration. Rye Ware.

64*. Decorated body sherd. Orange sandy ware with green/yellow glaze over incised external decoration. Possibly Scarborough Ware.

65*. Decorated body sherd. Fabric E. Off-white sandy ware with mottled green glaze over incised applied strip.

66. Base sherd of cup. Very fine off-white/buff fabric. Internal dark green glaze with spots on exterior. North French.

67. Base sherd of jug. Fine off-white fabric with external light green glaze. Thumbed feet. North French.

68. Rim sherd of cooking pot. Fabric E. Light grey sandy fabric with off-white/cream surfaces.
69*. Strap handle with central groove and three rows of stabbing. Hard grey sandy fabric with orange-red surfaces. Patches of yellow/green glaze on anterior of handle. Rye Ware. 13th- to 14th-century.
70*. Part of strap handle and rim with stabbing. Sand and shell tempered grey ware with red-brown margins and black surfaces. Winchelsea Black Ware.
71*. Decorated body sherd. Grey sandy fabric with orange internal surface. Exterior dull green glaze with brown spots over applied fine white clay decoration in form of a face. Rye Ware.
72*. Body sherd of white polychrome ware. Decoration in form of a black line bordered by green. Saintonge Ware. *c.* 1275–1300.
73*. Rim sherd of cooking pot. Light grey sandy ware with orange-brown surfaces. Rye Ware.
74*. Rim sherd of cooking pot. Flint, quartz and shell tempered black fabric. Winchelsea Black Ware.
75*. Rim sherd of cooking pot. Fine sandy grey fabric with thin orange-red margins and grey surfaces.

Context 31 (Ditch): fills 30, 98, 99 (Area B)

76*. Rim sherd of jug. Sandy grey ware with orange-brown surfaces. Exterior patchy dull green glaze. Rye Ware.
77*. Base sherd of jug. Fine off-white fabric with sparse, milky quartz up to 1 mm. Base and exterior in dark mottled green glaze.
78. Rim sherd of cooking pot. Hard grey sandy ware with orange-red surfaces. Rye Ware.
79. Rim sherd of bowl. Similar to No. 32. Winchelsea Black Ware.
80. Rim sherd of jug. Fine pink-orange sand and grog(?) tempered ware with green external glaze over incised decoration (similar to No. 64). Scarborough Ware(?)
81*. Skillet handle with stabbing. Brown-buff fabric with moderate quartz temper. Traces of green/brown internal glaze. Rye Ware.
82*. Skillet handle with deeply incised lines (shallow incised lines on base). Dull orange-red sandy fabric with quartz inclusions up to 1 mm. Brown to buff surface with grey base. Rye Ware.
83*. Decorated body sherd of jug. Fine pinkish ware with applied yellow glazed rouletted strips on an orange brown glaze background. Rouen Ware.
84*. Body sherd of white polychrome ware. Decoration in form of red, curving line bordered on one side by green band. Saintonge Ware. *c.* 1275–1300.

Context 37 (Stone-Lined Pit): fills 10, 33, 36 (Area C)

85. Pipkin handle. Orange-red earthenware with internal amber-brown glaze. Thumb impressed at handle base. Similar examples from Southampton (Platt and Coleman-Smith 1975, Vol. 2, nos. 702–3). Late 16th- to 17th-century.
86. Base sherd of earthenware plate. Light grey fabric with orange-red surfaces. White internal slip under green glaze. Guys Hospital Ware. 16th-century.
87. Decorated body sherd. Cologne Stoneware. Petalled flower decoration. Mid 17th-century.
88*. Rim sherd of orange-red earthenware bowl with dull olive-brown internal glaze. Grey-brown exterior with spots of glaze. 17th-century.
89*. Rim sherd of orange earthenware jar with internal green/brown glaze. 16th- to 17th-century.
90. Body and neck sherds of salt-glazed stoneware jug. Cologne/Frechen Ware. *c.* 1550–1600.

Context 51 (Ditch): fills, 40, 47 (Area B)

91*. Rim sherd of cooking pot. Hard grey sandy ware with orange-brown surface. Rye Ware. Rim form suggests later 14th-century.
92. Rim sherd of bowl. Hard orange-brown sandy ware. Traces of internal tan glaze. Rye Ware.
93*. Rim sherd of large bowl. Hard grey sandy ware with orange-brown surfaces. Some quartz inclusions up to 2 mm. present. Spots of glaze on surfaces. Light incised decoration on rim.

Context 70 (Ditch): fill 67 (Area C)

94*. Rim sherd of bowl. Fabric A. Frequent coarse flint and quartz tempered grey fabric with brown surfaces. Thick soot on outer surface.

Context 90 (Pit): fill 90 (Area B)

95*. Decorated body sherd. Fine pink-orange sandy ware. Decoration in form of raspberries in relief under mottled green glaze. Rye Ware.

96. Rim sherd of jug. Fabric E. Off-white sandy ware with applied strip with rouletting under patchy dark green glaze. Imitation of Rouen Ware.

Context 94 (Cut): fill 93 (Area C)

97. Rim sherd of lid. Fabric A. Temper as no. 94. Grey fabric with buff outer and orange-brown inner surfaces.

98. Rim sherd of jug. Very fine off-white fabric with orange inner surface. Even mottled green glaze on exterior and rim. Probably French.

Context 102 (Well/Pit): fill 101B (Area C)

99*. Jar/cooking pot in hard orange sandy fabric. Grey-brown surfaces in places. Late 15th- to 16th-century.

100*. Leg from tripod pipkin. Orange-red earthenware with internal orange-brown glaze. 16th-century.

Context 108 (Ditch): fill 82 (Area B)

101*. Bowl in grey sandy ware with orange surfaces. Mottled green/brown glaze on interior base. Rye Ware.

102. Body sherd in very fine white fabric with triangular-sectioned applied strip under exterior mottled green glaze. French.

Context 158 (Pit): fills 109, 144 (Area B)

103. Strap handle with stabbing from pitcher. Sandy grey fabric with pale orange inner and brown-grey outer surfaces. Rye Ware.

104*. Rod handle with rouletting(?) on anterior surface. Sandy grey fabric with orange-brown surfaces. Rye Ware(?)

Context 176 (Cut): fill 177 (Area A)

105*. Cooking pot with sagging base. Fabric B. Frequent sub-angular quartz, sand and haematite(?). Black fabric with brown-black surfaces.

106*. Rim sherd of cooking pot. Fabric A. Frequent coarse, sub-rounded quartz and flint up to *c.* 2 mm. in medium grey fabric. Surfaces buff to off-white (slip?) over grey. 11th- to 12th-century.

Context 217 (Area A)

107*. Rim and part of strap handle from jug. Sandy grey fabric with buff-brown surfaces. Patchy external olive glaze. The handle has a centrally applied strip with random stabbing and slashing. Rye Ware. 13th- to 14th-century.

108*. Strap handle with elaborate thumbnailing and slashing. Fine sandy (with occasional shell) grey fabric with black surfaces. Winchelsea Black Ware.

Context 218 (Area A)

109*. Rim sherd of large bowl. Sparse, coarse flint and quartz (with some haematite) tempered fabric. Coarse inclusions noticeably absent from interior surface. Grey core with orange-brown surfaces. Shallow incised wavy line decoration on rim. 11th- to 12th-century.

110*. Rim sherd of large bowl. Coarse flint, quartz and sand tempered orange fabric with soot on exterior.

111*. Cooking pot with sagging base. Coarse flint, quartz and sand tempered fabric with some haematite inclusions. Grey fabric with buff-brown inner and orange-brown outer surfaces. Blackened towards base. 11th- to 12th-century.

THE CLAY PIPES by David Atkinson

The full list of clay pipes forms part of the Archive. A selection is catalogued below.

Context 1

1. Bowl of London type with crowned M/H at base. *c.* 1700–20.
2. Broken bowl with CW/CW on sides of spur. Unknown, possibly Charles Walker of Hastings, 1832–35. Bowl type *c.* 1780–1820.
3. Two plain milled pipes. London type. *c.* 1680–90.

4. Small bowl with plain heel, *c.* 1640.
5. Bowl fragment with initials T/H, *c.* 1720–40. Thomas Harman of Lewes, working *c.* 1720–60.
6. Bowl fragment with T/W moulded at sides of base. *c.* 1700.

Context 3

7. Piece with spur. Initials I/W (possibly John Walker of Rye, working in 1798; the Watkinsons are too late). *c.* 1770–1810.

Context 6

8. Small pipe with stub-spur and milled rim. *c.* 1620–30.
9. Piece of bowl with fluting etc. *c.* 1820–40.

Context 13

10. Bowl. London type with initials T/W at base, *c.* 1700–20. Thomas Whitewood recorded 1693–1710; buried 1711.
11. Part of bowl, London type with initials T/H (maker as no. 5). *c.* 1720–40.
12. Part of bowl with fluting, *c.* 1820–40.

Context 25

13. Part of bowl, London type, *c.* 1690–1700. Early upright moulded initials T/W (maker as no. 10).
14. Part of bowl with base. Relief crown moulded either side. *c.* 1720–40.
15. Bowl. London type with intial T/?, *c.* 1700–20.

THE GLASS by Christopher and Prue Maxwell-Stewart

Of the glass that was found on the Phoenix Brewery site, there was a predominance of late forest glass dating from the final quarter of the 16th century and the first quarter of the 17th century.

Most of the pieces found appeared to be from the tall, cylindrical beakers which were prevalent at this time. These, and similarly other vessels of this period, were often made from one piece of glass which was blown into a patterned mould then, while the glass was still malleable, the base was pushed up to form a high kick inside a pedestal stem which was then tooled into a flared foot. This method of glass making was introduced into England by the Lorrainer glassmakers who were working in Southern England during the latter half of the 16th century. Whole or parts of four such stems were found, three of them probably from beakers. The related rim and body sherds showed evidence of ten different types of mould-blown pattern, two with wrythen ribbing, three with vertical ribbing, two honeycomb-moulded, two with a diaper pattern of dots, and one with an even diaper pattern. This last piece, although only a very small fragment, was of almost colourless glass and the pattern very fine. All these different rims were slightly incurved and all would have given a diameter of approximately 8 cms., which is consistent with the classic beaker of this period from Nonsuch Palace, now in the Museum of London.

Another type of beaker current at that date and known as 'Flemish Style', was represented by a piece of base from an almost flat-bottomed mould-blown vessel with an applied, thick trail of glass attached at the basal angle. This was made of a light grey almost colourless, metal unlike the light olive green of most of the other pieces.

Parts of two other vessels from the same period were the neck of a small bottle in dark green glass, and a large piece from a pedestal-stemmed base similar to those mentioned above. The latter was too large to have been from a beaker, and there were signs that the attached bowl had splayed out sharply at the point where it separated from the base; this suggests that the vessel had been a bowl, or possibly a flask of the 'inghistera' type common during the previous century.

The remaining early glass was all window glass made by the muff or cylinder method, and mostly of pale green forest glass with some pieces of light blue/green. Three sherds showed edges which had been grozed, (*ie.* chipped with a glazier's tool), as distinct from being diamond cut. Since diamond cutting of window glass was introduced about 1500, these pieces could have been of earlier manufacture or they could be evidence of primitive methods persisting through the 16th century.

There were a few finds from the 18th century, notably a rim sherd from an early to mid 18th-century ribbed tumbler in soda metal with an engraved design. This is similar to the larger tumbler found on the 'Amsterdam' and now in Hastings Museum. It is possible this one too could have been Dutch. There were also parts of several wine bottles, mostly dating from the latter years of the century.

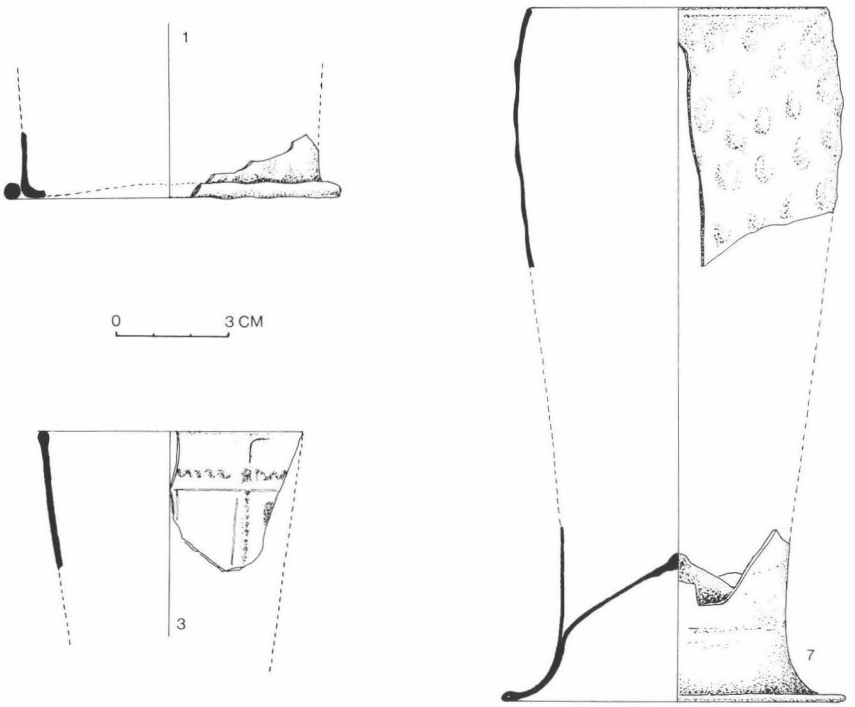

Fig. 13. Phoenix Brewery, 1988. Glass.

The early glass found on the site is likely to have been of fairly local manufacture and it would be interesting to speculate whether it might have been made at the glass house set up about a mile outside Hastings by one Gerard Ansye and another Frenchman in 1581, "much to the annoyance and injury" of the people of Hastings. Certainly the styles of vessel found and the different moulded patterns are consistent with other glass from Lorrainer sites, notably the Woodchester finds now in the Gloucester Museum.

CATALOGUE (Fig. 13)

The full catalogue of glass finds forms part of the Archive. A selection is described below (pieces marked with an asterisk are illustrated).

Context 1

1*. Base sherd of pale grey glass from a flat-based, mould-blown beaker with an applied thick thread of glass round the basal angle. A body sherd, probably from the same vessel, shows wrythen moulded ribs. Late 16th- to early 17th-century.

2. Large piece of thick base from a pedestal-footed vessel made in one piece with pushed-up base, approx. 12 cm. in diameter × 2.7 cm. high, possibly belonging to a bowl. *c.* 1600.

Context 6

3*. Rim sherd from a small tumbler in clear soda metal with mould-blown ribs and engraved with a zigzag band round the top, and notches down the ribs. First half of the 18th century.

Context 26 (Pit): Fills 170–171

4. Pedestal stem in thin, light green forest glass with a folded foot *c.* 8.5 cm. in diameter, probably from a ribbed beaker. *c.* 1600.

5. Four pieces of muff window glass, three showing grozed edges. All forest glass. 16th- to 17th-century.

Context 37 (Pit): Fills 10, 33, 36

6. Two rim sherds and five body sherds of thin forest glass showing mould-blown ribbing. Late 16th- to early 17th-century.

7*. Cylindrical beaker with a slightly incurved rim and mould-blown diaper pattern of dots in pale grey/green forest glass (Fill 33). The base (coming from Fill 36), was made in one piece by pushing the base up to form a pedestal foot. Late 16th- to early 17th-century.

THE COINS by David Rudling

1. Charles II. Copper farthing. First Issue. 1672–79. Date illegible. Context 1.
2. George III. Copper Penny. Second Issue. 1797. Unstratified. Area A.
3. George III. Copper halfpenny. Third Issue. 1799. Unstratified. Area A.

4–5. Unidentifiable. Two extremely corroded copper halfpennies. 18th- to 19th-century. Contexts 1 and 34.

THE METALWORK by Luke Barber (Fig. 14)

Iron

Numerous nails and shapeless or undrawable pieces of ironwork were found. A selection of the more diagnostic pieces is given below (items marked with an asterisk are illustrated).

1–7* Fishhooks. A representative sample of size range and type from the site. The shanks are formed from circular-sectioned iron wire. All with discernible terminals are of the spade-end type (nos. 5, 6, 7). Both barbed and barbless hooks are present in the assemblage. Contexts: 10: 1–2; 21: 3–5; 30: 6–7.

8*. Shears. The small size suggests they were for personal or domestic use. A similar form is dated to the 13th century (London Museum Medieval Catalogue 1975, 156, no. 7). Badly fragmented and corroded. Context 29.

9*. Clench bolt. Nail with tip clenched over plate (known as a rove). Probably from boat construction. Similar examples have been found in Hull (Armstrong and Ayers 1987, 200, nos. 105–6). Context 30.

10. Clench bolt. Broken. Rove dimensions 23×24 mm. Context 30.

11. Square-headed nail. Shank length 38 mm., head width *c.* 20 mm. Possibly for boat construction. Context 30.

12. Clench bolt. Overall length 50 mm. Nail head diameter *c.* 33 mm., rove dimensions *c.* 35×40 mm. Context 29.

13*. Key from a casket or padlock. Round-sectioned stem with round bow. The bit is asymmetrical, thus the key was only capable of opening the lock from one side. Badly corroded. Context 21.

14*. Socketed arrowhead with leaf-shaped blade. Similar examples from Folkestone and Marlborough (London Museum Medieval Catalogue 69, Types 1 and 2). 12th- to 13th-century. Socket extremely corroded—drawing conjectural. Context 21.

15. Clench bolt. Overall length *c.* 58 mm. Nail head diameter *c.* 25 mm., rove dimensions *c.* 25×30 mm. Square-sectioned nail. Context 34.

16*. Tanged knife (incomplete). Cutler's mark of a six-petalled flower incised on blade. Context 33.

Copper Alloy

17*. Rectangular decorative mount. Decoration consists of raised rectangular areas on the frame, which have an incised lattice pattern. A small pin hole for fixing is located on each corner. One still contains a copper alloy rivet/stud which has been filed flush on the decorated side. The back of the mount shows signs of finishing by file. Probably a box decoration. Context 1.

18. Domed button with a diameter of 11 mm. Probably 17th-century. Context 1.

19*. Ring formed from a tapering length of round-sectioned bronze. A similar example from the Lancaster Street excavations, Lewes (Freke 1975, 81–2, no. 59) is described as a pennanular ring of 12th- to 13th-century date. Context 1.

20. Large late 18th-century button (diameter *c.* 36 mm.). Context 1.

21. Fragment of 18th-century shoe buckle. Context 1.

22. Fragment of tap handle. Probably 19th-century. Context 6.

23*. Two round-headed pins. Lengths 26 and 31 mm. (the larger of the two is illustrated). Context 10.

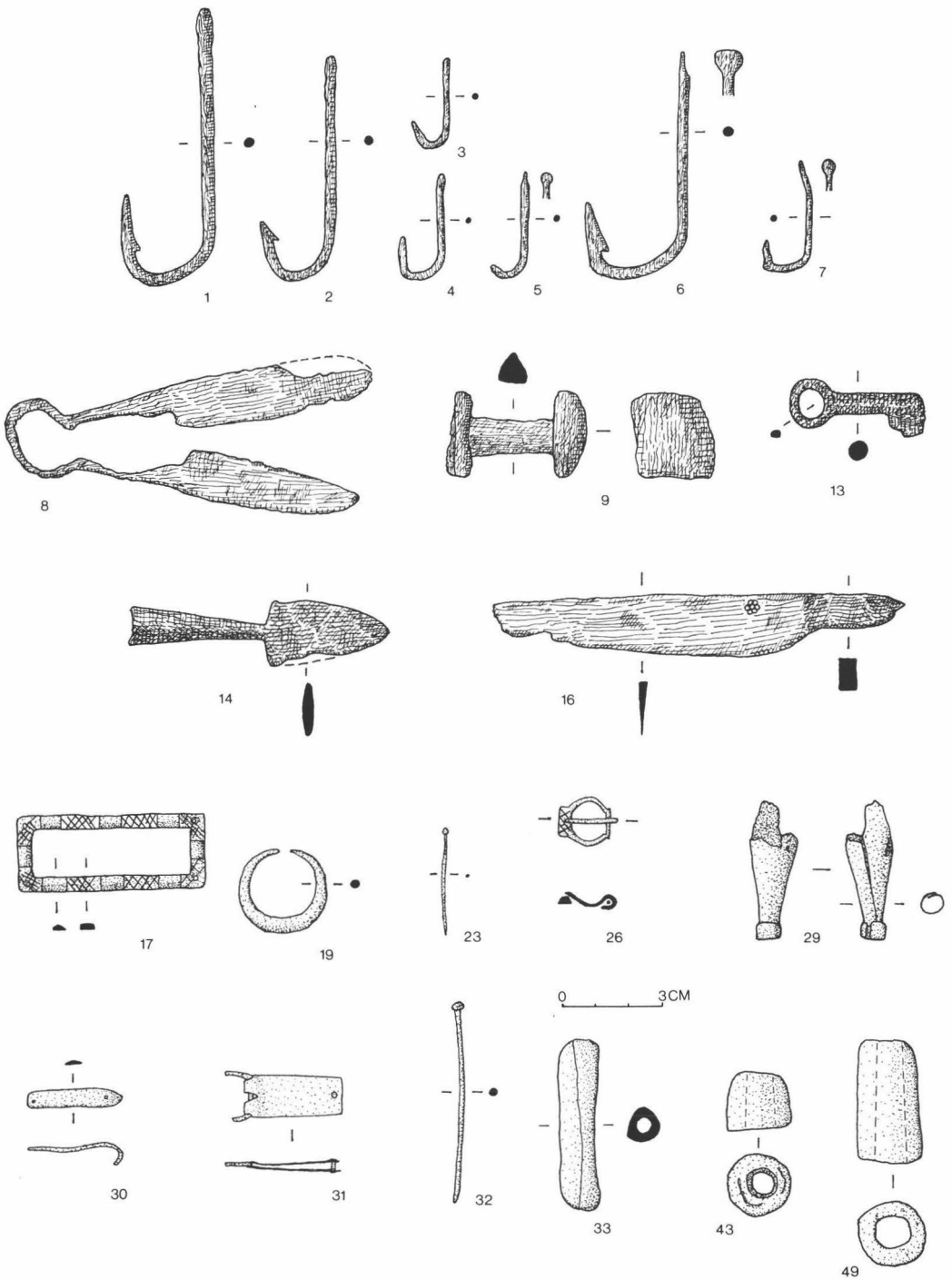

Fig. 14. Phoenix Brewery, 1988. Metalwork. 1–16: iron; 17–32: copper alloy; 33–49: lead.

24. Round-headed pin. Length 32 mm. Head diameter 2 mm. Context 21.
25. Spherical head from pin(?). Traces of rust suggest the shank was of iron. Head diameter 5 mm. Context 21.
26*. Small buckle. The pin, of round-sectioned wire, is of a different copper alloy to that of the frame. Decorated with deeply incised lattice decoration on widened segment of frame. Signs of finishing with a file on the side and rear surfaces. *c.* 1250–1350. Context 21.
27. Folded piece of sheeting, 24×51×1 mm. Broken. Context 21.
28. Fragment of thin sheet with copper alloy round-headed fixing stud in corner. Leather decoration(?). Context 21.
29*. Scabbard chape(?) from dagger. Tapering cylinder of copper alloy sheeting with strip copper alloy securing the end. Similar example from London (London Museum Medieval Catalogue, Plate LXXX, no. 6). Context 21.
30*. Gilded strip, bent at one end to form a hook. Two small pinholes are present for fixing. Possibly a clothing fastener. Context 30.
31*. Buckle plate from strap-end with remains of the buckle frame. The plate is formed by a single sheet of bronze folded over the buckle frame (with a gap for the pin) and held together by a single copper alloy rivet. Traces of leather remain inside the plate. *c.* 1250–1400. Context 30.
32*. Large round-headed pin. Context 101.

Lead

33–42*. Rolled cylindrical net weights. A total of ten such weights were found during the excavtion. They vary in length between 40–65 mm., though most average around 50 mm. Similar examples have come from Hastings (Devenish 1979, 130, no. 5a). Contexts 76: 33; 150: 34; unstratified: 35–42.
43–49*. Cylindrical weights. A total of seven weights of this type (all unstratified) was found. They are cast with a wide central hole and average between 16–19 mm. high, though no. 49 is much longer. Their precise function is uncertain, although spindle whorls or some form of fishing weight are two possibilities.
50. Fragment of globular topped pewter spoon handle. Context 171.

N.B. Many fragments of waste lead, mainly dross or sheeting, were also found on the site (e.g. Contexts 21; 81) and may represent waste from the manufacture of objects such as the net weights.

SLAG MATERIALS by Jon Wallis

There were 14 pieces of slaggy material from eight contexts (see catalogue on microfiche). Five pieces were selected for X-ray fluorescence analysis. Most samples were non-metallurgical, but from other high temperature processes such as cooking fires. There is, however, some evidence of minor smithing on the site.

THE FLINT by Chris Butler

A small quantity of flintwork was recovered during the excavation, and is summarised in Table 2 (microfiche). The raw material is a dark grey, or light orange/brown nodular flint. Cortex is present on most pieces, and is thin and very abraded. With the exception of the burin, all of the flint appears to come from beach pebble material; which is the most common source of flint used for the manufacture of flint implements in this part of Sussex.

Most of the flint recovered has been hard-hammer struck, and probably dates from the Neolithic/Early Bronze Age. This would be consistent with other flint material that has recently been found nearby, which also dates from the Neolithic (A. Woodcock, pers. comm.). The only exception to this is the burin, which dates from the Mesolithic and has probably been brought into the area as it is not made from beach pebble flint.

THE STONE by Luke Barber (incorporating comments by Ken Brooks)

The majority of stone from the site was of local origin, coming predominantly from the Ashdown Beds. All the sandstone walls encountered (e.g. Context 7, 8, 9, 154 and 46) were constructed with this Ashdown material. More exotic stone did fall within the site's catchment area, however, as the Mayen/Niedermendig lava quern fragments and

Norwegian whetstone show. A full list of the geological material forms part of the Archive. A selection is described below.

1. Mayen-Niedermendig lava, probably quern fragments. Contexts 21, 29, 49, 148 and 187.
2. Fragment of gritstone quern. Context 21.
3. Whetstone of square section. Tapers from 25×20 mm. to 20×20 mm. Broken at one end. Length 125 mm. Norwegian 'ragstone'. (Identified by the Natural History Museum). Context 52.
4. Ironstone corner from a bevelled floor tile. 27 mm. thick. Context 21.

BRICK AND TILE by Luke Barber

Although brick and tile fragments were found in both medieval and post-medieval deposits, no complete dimensions were obtainable. The majority of roof tiles were between 0.5–1 cm. thick, often with square peg-holes. A ridge tile fragment was recovered from Context 52. Both yellow and red bricks were found on site, some showing signs of burning/overfiring. Thickness ranged from 2.5–5 cm.

A full list of the brick and tile finds forms part of the Archive.

TEXTILES by Brian Weightman

Evidence for two pieces of textile were found. The first of these, from Context 202, seems to have been a tablet-woven braid with Z-spun warp and weft. Fibre analysis by M. Wright showed it to be made of wool. It seems to have been woven with four threads per tablet, the tablets all being threaded in the same direction.

The second textile fragment, from Context 36, had been replaced by metal oxides and it was not possible to determine the nature of the fibres. However, it would seem that this was a 2/2 twill with Z-spun warp and weft.

PLANT REMAINS by Pat Hinton

Flotation samples were submitted from Contexts 36, 150 and 202.

The sample from Context 36 in the stone-lined pit included many seeds, mostly of edible fruits and plants; pieces of wood; charcoal; animal and fish bones; fly pupae and a small fragment of woven cloth. The greater part of the sample, however, consisted of lumps (up to *c.* 3×2 cm.) of brown, opaque material, many of which were brittle; these could be broken and appeared to be consolidated masses of very small fragments of probable cereal bran and larger pieces of denser material, possibly fragments of grains or pulses. There were also some lumps of harder, somewhat crystalline material and in these were embedded seeds, fruit stones and fragments of bone and these could be only partly broken down. There were also present several light brown, opaque, cylindrical lumps with more or less pointed ends, *c.* 10×3 mm., and these are assumed to be rat droppings.

The larger seeds and fruit stones in the harder material were extracted or counted, but some small seeds must remain hidden. The figures in Table 3 therefore are minimum numbers. The large numbers of fig and blackberry seeds were estimated from counted sub-samples.

The oat grain was charred but many of the other seeds are mineralised, that is they have been almost entirely replaced by a hard, light brown, semi-transluscent material. Others, such as the plum and sloe stones and the apple pips, although degraded appear superficially normal, but broken specimens show a crystalline deposit on the inner surfaces or embryos (cotyledons) which are now hard, light cream in colour, and opaque. Plant remains preserved by mineralisation in this way are often found in cesspits.

The plum stones have not been more closely identified. There are at least two varieties present; the ovoid stones of *Prunus* cf. ssp. *institia* (bullace) and the flatter, longer than broad stones of cf. ssp. *domestica* (plum) and some intermediate forms. There are also two varieties of sloe stones, some very small, cf. var. *microcarpa*, some considerably larger, cf. var. *macrocarpa*, and, as with the plums, a number between the two extremes.

Unfortunately the probable date stone is represented by only one fragment. The middle part is present, with a deep, irregular furrow on one side and on the other a less pronounced furrow leading to a small depression.

The date and the figs must represent imported fruits, and perhaps the grapes, but all the remainder could have been locally grown. All, except the few docks, buttercups, grasses and bracken, represent

food plants and many of them may have been through the human digestive system. Certainly the appearance of some of the pieces of compacted light brown comminuted matter suggest a faecal origin. It is more than probable that the larger items, such as the plum stones, some up to 20 mm., represent food refuse, but is should be noted that a clump of 24 cherry stones in a pictish midden was proved, by the presence of coprosterol, to have been a mammalian coprolite (Dickson and Brough 1989) and it is possible in the past people have been less particular about what they swallowed.

The presence of the larger fruit stones, the animal and fish bones (unless these too were swallowed) and the cloth fragments suggest the disposal of rubbish, and in view of the edible nature of almost all of the items, the conclusion must be that the sample represents the contents of a cesspit to which other refuse has been added.

The other sample from the stone-lined pit, Context 202, although very much smaller, has a similar range of fruits, some of them enclosed in small lumps similar to those described for Context 36, and again suggestive of being derived from faeces. The identifications from the Context 202 sample have been combined with those from Context 36 in Table 3.

TABLE 3
Plant Remains from Contexts 36 and 202

Pteridium aquilinum L	Bracken—leaf fragment	1
Ficus carica L.	Fig	5,500*
Chenopodium album L.	Fat hen	1
Rumex acetosella L.	Sheep's sorrel	1
Rumex sp.	Dock	2
Ranunculus repens/acris/ bulbosus L.	Buttercup	2
Brassica cf. *oleracea/ campestris*	Cabbage etc.	38
Brassica cf. *nigra*	Black mustard	26
Rubus fruticosus agg.	Blackberry	2,250*
Rosa sp.	Rosa	6
Fragaria vesca L.	Wild strawberry	223
Malus sylvestris/domestica	Apple	219
Prunus spinosa L.	Sloe	232
Prunus domestica s.l.	Plum	202
Prunus cf. *avium* L.	Wild cherry	7
Prunus cf. *cerasus* L.	Cultivated cherry	2
Vicia cf. *sativa*	Common vetch	2
Vitis vinifera L.	Grape	640
cf. *Foeniculum vulgare* L. Miller	Fennel	2
cf. *Anethum graeolens* L.	Dill	7
Pastinaca sativa L.	Wild parsnip	1
cf. *Metha* sp.	Mint	2
Avena sp.	Oat	1 charred
Lolium perenne L.	Rye grass	1
Gramineae	Unidentified grass	1
cf. *Phoenix dactylifera* L.	Date	1

*=estimated

TABLE 4
Plant Remains from Context 150

Cannabis sativa L.	Hemp	3
Polygonum aviculare agg.	Knotgrass	28
Polygonum persicaria L.	Persicaria	35
Rumex sp.	Dock	2
Chenopodium album L.	Fat hen	9
Stellaria cf. *holostea* L.	Greater stitchwort	1
Brassica sp.	Cabbage/mustard	1
Malus sylvestris/domestica	Apple	1
Prunus spinosa L.	Sloe	2
Calluna vulgaris (L.) Hull—		
flower	Ling, Heather	1
Leafy shoot		1
Seeds		15
Sambucus nigra L.	Elder	10
Bromus sp.	Brome grass	1

The sample from Context 150, however, is very different in that there is a smaller proportion of seeds of edible plants (Table 4). The seeds show varying degrees of preservation but no obvious signs of mineralisation, and the appearance is more suggestive of a scatter of rubbish and the chance inclusion of seeds from several different sources.

The hemp, represented by three (non-matching) half achenes, was probably grown for the production of fibre for rope-making. Persicaria, knot-grass and dock may occur in cultivated soil, but are also common on waste land and waysides. Elder is a common shrub of hedgerows on different types of soil. Its fruits are edible, but the seeds are also widely spread by birds. Sloe and greater stitchwort are also frequent in hedgerow and scrub while heather is typical of more open acidic heath or waste land.

WOOD, CHARCOAL AND COAL REMAINS by Jon Hather

Wood

In addition to the waterlogged wood remains found *in situ* in Area C described above, the excavations also yielded other fragments of waterlogged wood including fragments of *Quercus* sp. (oak) from Area B, Context 191 (fill of a post-medieval pit), and

TABLE 5
Total Numbers of Bones Recovered from the Phase 1 Excavations by Period

Species	*C13/14th*	*C16th*	*Late 16th/ Early C17th*	*Late 17th/ Early C18th*	*Undated*
Horse	1 0.1%	1 1·2%	– 0·0%	– 0·0%	6 1·4%
Cattle	232 26·5%	34 40·0%	81 55·1%	40 29·6%	182 28·6%
Sheep	325 37·2	42 49·4%	44 30·0%	55 40·7%	303 47·6%
Goat	– 0·0%	– 0·0%	3 2·0%	– 0·0%	– 0·0%
Pig	1 0·1%	2 2·4%	4 2·7%	2 1·5%	12 1·9%
Dog	30 3·4%	– 0·0%	5 3·4%	11 8·1%	18 2·8%
Cat	6 0·7%	– 0·0%	– 0·0%	– 0·0%	3 0·5%
Chicken	8 0·9%	– 0·0%	2 1·4%	2 1·5%	4 0·6%
Rabbit	10 1·1%	– 0·0%	3 2·0%	19 14·0%	9 1·4%
Other fowl	6 0·7%	4 4·7%	1 0·7%	2 1·5%	6 0·9%
Unidentified	255 29·2	2 2·4%	4 2·7	4 3·0%	91 14·2%
Total	874	85	147	135	637
		Grand total: 1,878			

Area C, Contexts 36 and 203 (fills of the post-medieval stone-lined cess pit). Context 36 also produced one fragment of waterlogged *Betula pendula* (birch). Several fragments of waterlogged wood from Contexts 33 and 36 were identifiable due to partial mineralisation. In addition, a waterlogged fragment from the rim of an alder bowl was found in Context 108, Area C (see miscellaneous finds report).

Charcoal

wood charcoal was recovered from nine contexts. A quantified listing forms part of the Archive. Species present include *Quercus* sp. (oak), *Corylus avellana* (hazel), and *Alnus glutinosa* (alder).

Quercus sp. was found in medieval contexts 30, 40 and 50 (all in Area B). It also occurred in post-medieval Contexts 43 (Area B) and 10 (Area C). *Corylus avellana* was found in medieval Contexts 30 (Area B) and 78 (Area C). It also occurred in post-medieval Contexts 43 (Area B) and 10 and 101 (both in Area C). *Alnus glutinosa* was present in post-medieval Context 43 (Area B).

Coal

Fragments of coal were recovered from medieval Context 30 (Area B) and post-medieval Context 10 (Area C).

ANIMAL BONES by John Clements

Excavations at the Phoenix Brewery site were conducted in two stages: the first by the Field Archaeology Unit in the early summer, the second by Hastings Area Archaeological Research Group in the late summer and early autumn. This report is essentially concerned with the first stage, but a number of discoveries during the latter are relevant. Although most of the bones were recovered by hand-collection, others resulted from the wet-sieving of samples from specific contexts.

Over 4,000 bones and fragments were recovered in total, 1,878 of these from the first phase of excavtions. The breakdowns by totals and dates are reproduced in Table 5. Table 6 shows comparative figures with other Sussex Cinque Port sites (Clements 1987, 19; Clements 1990, 15; and Clements forthcoming). A major surprise is that the Old Monastery, Rye, produced more cattle bones than sheep, but this is probably due to the fact that the assemblage was obtained during a watching-brief.

The bones were generally well preserved, but often coated in a yellow-green accretion not responsive to washing, and possibly night soil spread on the gardens over a long time. This greatly hampered identification, especially of the fish bones.

The excess of cattle bones over sheep in the 16th/17th-century layers at the Phoenix Brewery site is much harder to explain. It may be that Winding Street acted as a cattle market in the 17th century (Mainwaring-Baines 1986, 159). The Phoenix Brewery tenements could well have taken advantage of so close a resource, perhaps by ancient tradition since Winding Street was originally the

TABLE 6
Percentage Bone Counts Compared from Other Sussex Cinque Port Sites

Species	*Maidenhead Hastings C13th*	*Maidenhead Hastings C17th*	*Cooks Green Winchelsea C16th*	*Cooks Green Winchelsea C17th*	*Old Monastery Rye Medieval*
Horse	0%	0%	0%	0%	0·9%
Cattle	14%	17·5%	11·1%	29·8%	42·1%
Sheep	56%	67·9%	18·5%	34·9%	32·4%
Goat	0%	0%	0%	0%	0%
Pig	1·4%	1·0%	0%	1·9%	1·0%
Dog	2·0%	2·2%	0%	1·9%	1·5%
Cat	0%	0%	0%	0%	0·1%
Rabbit	1·4%	0·3%	1·9%	4·7%	2·0%
Chicken	1·4%	0·3%	37·0%	2·7%	0·1%
Other fowl	0%	0·3%	31·0%	4·8%	0·3%

Hundred Court. The site is only *c.* 30 metres east of the Shambles site, and the many horn cores suggest that some form of skinning, leather working, or horn working was carried out. Tallow making is recorded by Mainwaring-Baines (1986, 240), as is Tudor leather exporting (*ibid.*, 246).

The higher percentages of sheep bones could be a result of mutton produced as a surplus by the wool trade, rather than a preference for that meat. England's wealth was wool until the 18th century, to which the Lord Chancellor's Woolsack bears testament. Much wool was exported from Hastings, frequently without the King's licence required by law, precursor to 18th century smuggling in the other direction which became equally profitable free trading (Mainwaring-Baines 1986, 256). It should also be borne in mind that even a tiny medieval ox would carry much more meat than a sheep for fewer bones. The paucity of pig bones has long been a local archaeological puzzle, perhaps indicating a preference for pork or ham off the bone, or that it was simply an expensive luxury beyond the pocket of the ordinary urban housewife (Clements 1987, 2, 9).

Complete mammal long bones made it possible to calculate a number of wither heights. The smallest ox was found in Context 81, 11.41 cm., and the largest in Context 25 at 148.3 cms., both rather larger than the beasts referred to by Chaucer with his "littel oxes stalle". However, much smaller horn cores were demonstrated, a particularly fine specimen coming from Context 25. Sheep ranged around 54 cm., slightly smaller than the norm for medieval England, but comparable with other Hastings examples. A very big one at 66.02 cm. was almost certainly a ram. Dogs varied from 34.8 cm. to 49.2 cm., a wide variety that were probably mongrels. However, two complete burials found in the second phase excavation hard against Pit 31 seemed to be a lap dog, comparable with a Yorkshire-terrier type, and a small hound, possibly a brachet (Malory 1963, 64). Dogs would account for the many gnawed bones lying around the tenement gardens.

The proximal end of the radius of a large baleen whale from Pit 21, identified by the British Museum (Natural History), undoubtedly is associated with a phalange from the same animal found during the later excavations. Of 13th/14th-century date, size indicated that it was from a blue whale, and it seems most likely that this was washed ashore rather than deliberately hunted, a similar event happening in 1865 and being recorded on a contemporary photograph. By a charter of 1148, a stranded whale's right flipper belonged to the King (Peckham 1946) but tradition suggests that a different law appertained in the Cinque Ports, where the whole animal's carcase was deemed the property of the Lord Warden.

Fish bones were infrequent, probably simply reflecting their fragility. However, it can be seen from Table 6 that a very different situation appertained at Cooks Green, Winchelsea. Being nearer to Romney Marsh, wildfowl may simply have been more readily available, but the matching percentage of chicken bones may suggest a generally wealthier populace and higher variety of choice. This is reinforced by the presence of early turkey bones at Cooks Green in the 17th-century

context (Clements 1990, 13), especially so since there is no fishbone reference collection in Sussex. By far the most prevalent species at Phoenix Brewery was cod, *Gaddus morhua*, but the smaller ling, *Molva vulgaris*, of the same family, was also identified in medieval contexts. Pit 30 contained the vertebrae of a large flat fish, probably turbot *Scophthalmus maximus*.

Fine, almost hair-like ribs and spinous processes were found all over the site in both phases, and undoubtedly came from herring, *Clupea harengus*, a staple industry only second to wool in medieval England (Wheeler and Jones 1989, 4), and almost a substitute currency in Hastings (S. Peak, pers. comm.). It is interesting that the beach price of 13 per penny for salt herring rose to 13 per shilling after being transported across the Weald to Tonbridge (Clements 1987, 3), cartage obviously proving expensive.

Other species identified were gunard, *Trigla lucerna*, and spur dog, *Squalus acanthius*, the only dog fish noted. Small sharks are cartilagenous and only the spur is likely to survive. The occasional accidental netting of twenty-foot basking sharks and twelve-foot threshers is recorded by local photographs, and these would undoubtedly have been a useful addition to meat proteins throughout history. Bucklers from the thornback ray, *Raja clavata*, were identified by Oliver Crimmer at the British Museum (Natural History). They have frequently been found in every period all over Hastings, but were wrongly identified in the past. A few small, flattened vertebrae probably came from mackerel, *Scomber scombus*, which was Hastings' other staple fish (Peak 1985). Context 37 (see below) also yielded evidence for eel, *Anguilla anguilla*, sprat, *Sprattus sprattus*, and dory, *Zeus faber*.

No obvious wild animal bones were noted, but deer would have been denied the ordinary people by decree, and fur animals trapped for their pelts would probably have been skinned away from the town. It is clear, however, that fleshmeat was not stinted and was well supplemented with fish and shellfish. On the whole, the picture throughout the period is of a relatively affluent economy.

BONE REMAINS FROM THE STONE-LINED CESS PIT by Brian Irving and Simon Parfitt

Wet-sieving of samples from Context 36, a black humic fill of the late 16th/17th-century stone-lined cess pit (Context 37) in Area C, yielded a quantity of bone remains, including fish, bird and mammal bones. Of these three groups, fish make up the highest percentage followed by bird and mammal. The material was extracted by wet sieving through a 500 micron mesh, the residues were air dried, then sorted using a stereo microscope. All the remains are in a very fragmentary state due to digestion by some mammalian agent.

Fish Remains

A total of 691 fish bones was recovered from the context. Ribs and fin spines make up the highest percentage of skeletal elements, representing 77% of the total. As ribs and spines are not species-specific, no identification could be made from the bulk of the faunal assemblage. Vertebrae make up 18% of the total, and from these, four species are represented. Finally, cranial elements make up the rest of the fish bone material, representing three species.

The four species represented are herring, *Clupeus harengus*, sprat, *Sprattus sprattus*, eel, *Anguilla anguilla*, dory, *Zues faber*. These species are typically found on late medieval sites from England and conform very well with the fishing techniques employed at this time. The use of the drift net was widespread by this time, and would catch pelagic shoaling fish such as herring and sprat, although the trawl would catch them in large numbers as well (Holdsworth 1877). The dory could also be caught using surface nets and trawls and would, as now, be seen as a bonus fish during herring fishing. Eel fishery in England was also well established by this time using spears, traps or eel bucks within the intertidal reaches of rivers.

The vertebrae of the herring show evidence of chewing and digestion, whereby the centre of the vertebrae is crushed and deformed, similar to that identified by Jones (1986). This type of damage, according to Jones, is consistent with human consumption. The remains of the dory are exclusively cranial and could therefore represent butchery refuse rather than direct faecal material, although the bones are abraded chemically.

Bird Remains

The bird remains comprise a total of 23 bones of which only two could be identified to species. The bones were heavily abraded chemically and

probably represent faecal material; the abrasion is consistent with that of cat or dog. The fact that all of the bones are of small passerine birds makes it more likely that cat is the predator, as small passerines make up a large part of the diet in both feral and domestic cats. The identifiable material consists of two distal humeri which may be from the same individual. Certain points on the articular surfaces of these bones are consistent with those of the robin (*Erithacus rubecula*).

Mammal Remains

The mammal bones from the sieved sample consisted of a large number of extremely comminuted bone fragments. The only identifiable bones from the samples were four pig foetal phalanges and a rabbit patella, all heavily digested. The majority of the unidentifiable bone fragments also showed extreme surface etching and rounded break surfaces. This type of digestive corrosion is characteristic of bones which have passed through a mammalian digestive system (Andrews and Evans 1983). Of the digested bone fragments, 76% (146 fragments) were under 1 cm. in length and the largest digested bone fragment was just under 2 cm. Although humans may occasionally accidentally ingest bone fragments, it is extemely unlikely that these bones passed through a human gut. In a series of experiments with domestic dogs, Payne and Munson (1985) showed that dogs frequently ingest bone during feeding and the faeces from the dogs contained small bone fragments which were heavily corroded. It is probable that the digested bones of mammals from this context are derived from canid faeces which were incorporated into the cess pit fill.

MARINE MOLLUSCS by Mary Rudling

The excavations at Phoenix Brewery yielded a total of 563 marine molluscs. It should be noted that oyster and mussel shells become easily fragmented. While it was only possible to record whole shells there were also a large number of fragmented pieces, and thus the total of oyster and mussel shells may have been larger.

The range of shells on the site was as follows in order of decreasing numbers: oyster, 332 (59% of the total sample); periwinkle, 173 (31%); limpet, 26 (4.6%); mussel, 12 (2.0%); great scallop, 9 (1.6%); whelk, 5 (1%); queen scallop, 3 (0.6%); prickly cockle, 2 (0.4%); and common cockle, 1 (0.2%). All of the shell types are commonly found on the south coast of Britain.

The medieval layers contained the following shells: oyster, whelk, periwinkle, limpet, mussel, great scallop and prickly cockle; the post-meieval layers contained oyster, winkle, limpet, mussel and common cockle.

Contexts with a notably high number of shells included No., 47 (medieval ditch fill—77 shells), No. 29 (56 shells), and No. 24 (53 shells).

All the shells were catalogued, and summary details by context are provided in Table 7 (microfiche).

MISCELLANEOUS

A Didactic Slate by Christopher Whittick

This irregularly-shaped fragment of West Country slate, with overall dimensions of 113 mm. × 97 mm., is extensively inscribed both front and back (Pls. 3 and 4). One face, referred to here as the obverse, carries a deeply-cut alphabet aligned to its left and top margins, which is subscribed with a variety of less determined alphabets and phrases, and superimposed by geometric designs. The reverse has a more irregular surface and is inscribed with the opening words of the Lord's Prayer in a lightly cut and unconfident hand.

First to be described will be the sequence of fractures by which the slate assumed its present appearance; a description of the texts, their dates and the order in which they were inscribed will follow. Finally, parallels for this object will be suggested, and the context of its discovery discussed.

The slate has five edges, two of which (1 and 5) are straight and display evidence of tooling. The profiles are distinctly rounded, either by working or by handling. On the reverse of edge 1 is a mass of indentations about 4 mm. in length, perpendicular to the edge. Towards the centre of edge 1 appears the bottom third of a drilled hole. It is clear from the layout of the inscriptions that edges 1 and 5 provided the original margins. The remaining edges are irregularly fractured, one (3) in two stages. The break at edge 2 has removed about 10 mm. of slate as is evident from the layout of the upper alphabet, but the edge produced, although rough, displays considerable evidence of handling. The break at

Plate 3. Phoenix Brewery, 1988. Obverse of the didactic slate. (1:1).

edge 3, which has also removed portions of the lower texts, is possibly the result of two not necessarily contemporary fractures. Edge 4 is also ragged, but the break which produced it does not seem to have removed any text. All the breaks appear to have been made in antiquity.

The clearest, and undoubtedly the earliest, text is an alphabet written in a hand of *c.* 1180–1200, extending to three lines of text. In addition to 22 (of an original 23) Roman letters, the alphabet closes with ⊤, the Tironian abbreviation of *est* (it is). The appearance of this sign, the use of which became increasingly uncommon after 1200, argues in favour of an earlier date, yet the notched ascenders of the letters *b, h* and *l* indicate a date nearer the end of the century (Johnson and Jenkinson 1915, 1, 1–55, 63; Hector 1958, 33–4). At the right margin of the same line, in a similar but shallower hand, the abbreviation is glossed *est*. The remainder of the obverse is taken up with several imitative single letters, alphabets and aphorisms—*salutem* (hail) and *ameno dico vobis* (I say unto you Amen)—which can be distinguished neither by hand nor date. Whereas the initial alphabet runs parallel to the top edge and ignores the alignment of the left-hand side, the imitative inscriptions respect the left-hand margin at the expense of the top.

On the reverse of the slate are written the opening words of the Lord's Prayer (*Pater noster qui es in celis sanctificetur*). *Pater* has been lost as a

Plate 4. Phoenix Brewery, 1988. Reverse of the didactic slate. (1:1).

result of the break at edge 3. Of *sanctificetur* only the first three letters appear before the margin; the remainder, possibly followed by *nomen tuum* to complete the sentence, was presumably written on the next line and lost with *Pater*. The text respects edge 5 as its right margin and is set perpendicular to it. The letters are more crudely formed than can be explained by the irregularity of the surface, but nevertheless are of sufficient clarity to suggest a similar date to those on the obverse.

Geometric marks, many deeply cut, appear on both sides of the slate. Those on the obverse—two crosses and a circle—are superimposed on the text; the marks on the reverse—small and large crosses and a stright line—appear in otherwise blank areas, but seem to have no relationship to the text.

Although a number of inscribed slates have been found in the British Isles, no exact parallel has been published. The appearance of this slate—a master alphabet followed by imitative letter-forms and texts in an inexperienced hand or hands, clearly suggests that its original purpose was didactic. Its use seems to have continued despite the break at edge 2, but to have been terminated by the fracture

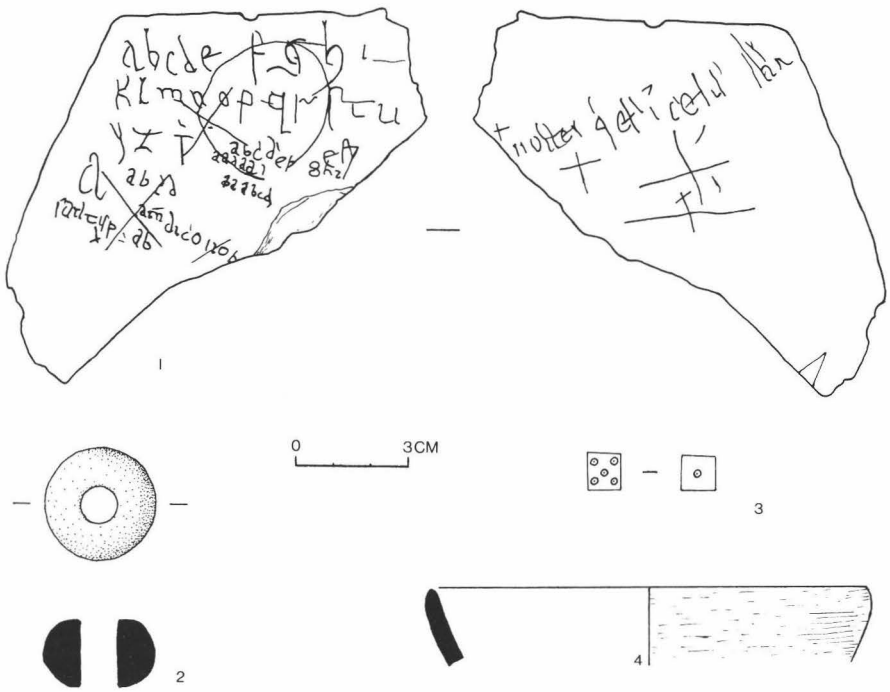

Fig. 15. Phoenix Brewery, 1988. Miscellaneous objects. 1: slate; 2: baked clay; 3: bone; 4: wood.

at edge 3. The only texts to survive are those cut into the surface of the slate; students may also have produced work in an erasable form.

By the end of the 12th century, the population of Hastings must have included a large number of clerks. As well as six parish churches, the town contained an Augustinian Priory and a college of Benedictine canons, who presumably staffed the chancery of the Count of Eu and provided clerks for his sheriff, and for the King's Bailiff of the Port of Hastings. When Count Henry confirmed the foundation charter of the college in the first half of the 12th century, both a grammar school and a singing school were run by the canons (*V.C.H. Sussex* 9, 1, 26–7; *V.C.H. Sussex* 2, 75–7, 112–17; *V.C.H. Sussex* 2, 409–10 quoting Public Record Office E210/1073 calendared in Peckham 1946, no. 945). Although this object cannot be specifically associated with any of these establishments, their existence provides a plausible context for its production and use.

Unstratified (Area A) (Fig. 15, 1; Pls. 3, 4).

Baked Clay

Spindle whorl. Fine buff fabric, blackened in places. Signs of burnishing. Context 21 (Fig,. 15, 2).

Worked Bone

Die of polished black bone. Ring-and-dot drilling for values. Not quite a perfect cube. Varies from a normal die (where all opposite sides add up to 7). The numbers 6 and 2 have been reversed. Roundels are uniform in size and fairly evenly spaced. A similar example from Southampton (Platt and Coleman-Smith 1975, 274, no. 1945) suggests this example may be early 14th-century (Fig. 15, 3).

Wood

The only diagnostic waterlogged wood fragment found was that of a rim sherd from an alder bowl (identified by the Royal Botanic Gardens, Kew). Context 101B (fill of well/pit: 102; Fig. 15, 4).

INSECT REMAINS by Erica Towner and John Roote

Flotation of Context 36, a black humic fill of the late 16th/17th-century stone-lined cesspit (Context 37) in Area C, produced a small quantity of insect remains.

Coleoptera—Beetles

1 head rove beetle (Staphylinidae) possibly *Creophilus maxillosus*.

1 carapace small ground beetle (Carabidue) possibly *Pterostichus* sp. (flightless). *Crophilus* feeds on other insects living in carrion, rotting vegetation and dung.

Diptera—Flies

1 head of a hoverfly (Syrphidae)—species uncertain. Male (the eyes meet).

2 tergite plates from the abdomen—possibly from the hoverfly listed above.

c. 100 large puparia.

4 small puparia.

Probably all puparia (pupal cases) are of species belonging to the family *Phoridae*. Some members of this family live in cesspits and similar conditions. The smaller puparia are probably larvae arrested in development (example drowned) and of the same species. Some of the larger puparia have holes that might have been parasite bore-holes. A likely candidate for such a parasite would be the wasp *Nissonia vitripennis*.

The authors wish to thank Dr Z. Erzinclioglu, a forensic entomologist in the Zoology Department at Cambridge University, for his help in identifying the insect remains.

DISCUSSION

The finds from the site in general suggest intense occupation (Fig. 16) starting in the 13th century. The lack of a closely dated sequence for Rye products, however, does not allow a tighter dating for many of the 13th-century/14th-century features. The relatively small quantities of Tudor material are not surprising, for from as early as the 14th century until the 17th century, rubbish in many urban centres was disposed of on the town's dump rather than at the rear of the tenements (Carver 1987, 69).

Nineteenth- and twentieth-century occupation had caused little disturbance to Areas B and C, though considerable damage had been done to the features and deposits in Area A. However, despite the badly disturbed condition of building remains bordering Bourne Street, it is still possible to relate them to buildings known to have stood in this area. Although these timber-framed buildings were demolished during the 19th century, surviving sketches have allowed David Martin (see above) to identify the various building types and to calculate their approximate street frontages. This information is very useful when trying to interpret the results of the recent excavations. Thus, in the case of the two-bay 'wealden' type house identified for nos. 22/23 Bourne Street, the estimated street frontage of approximately 27 ft. suggests that this building may correlate with excavated walls 209 and 212, assuming, that is, that the north wall underlies modern Wall 114. Similarly, excavated Walls 154, 174 and 179 may correlate with the jettied two-storeyed structure with an approximate street frontage of 15 ft., formerly occupied by no. 24 Bourne Street. Although these buildings appear to be late medieval to Tudor, it is likely they replaced earlier houses on the same alignment.

From the excavation of Area B it seems unlikely that medieval/early post-medieval houses fronted Post Office Passage. Thus the tenements in the excavated area probably all ran east–west. The maintenance of approximately the same line by Ditch 108, Ditch 72, Ditch 51 and Wall 46 suggests that this north–south line (perhaps carried through into Area C by Ditch 70) possibly marked the rear of the Bourne Street tenements. David Martin has pointed out to us that if Ditch 72 (Area B) and Ditch 70 (Area C) represent (as looks likely) different parts of the same ditch, the alignment of this feature would coincide with both the ward boundary (Fig. 17) and the boundary between the parishes of All Saints and St Clement, which at this point inexplicably kinks away from the line of the Bourne Stream. Assuming that the excavation remains discussed above do represent the rear of the Bourne Tenements the features in Area C (to the west of this line), might have been at the rear of the High Street tenements. Alternatively, these features, which are at some distance from the built-up frontage along the High Street, may belong to tenements which once fronted David Martin's postulated northwards

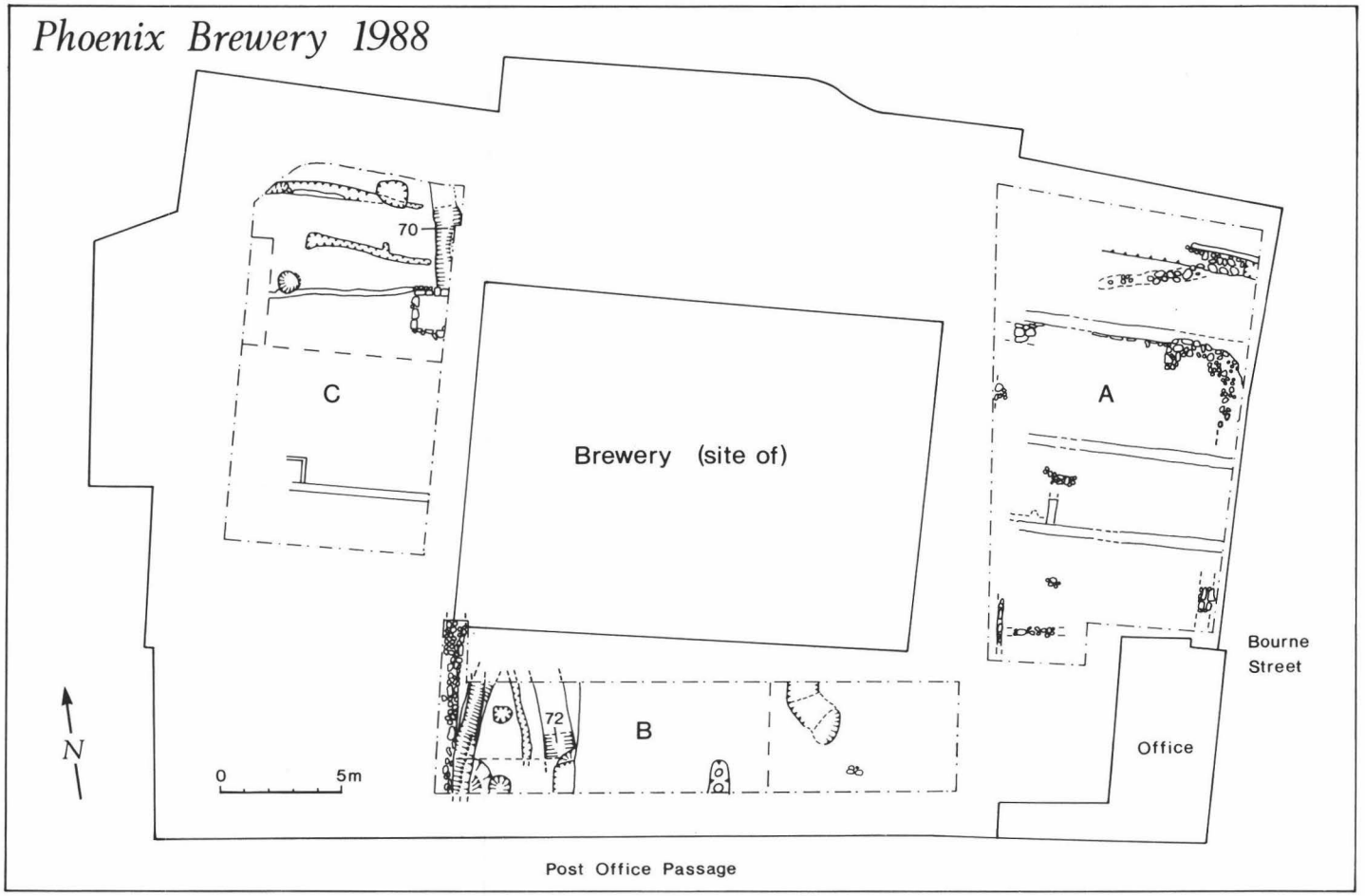

Fig. 16. Phoenix Brewery, 1988. Summary plan of the main archaeological discoveries.

Fig. 17. Phoenix Brewery, *c.* 1900. The position of the ward boundary is indicated.

extension of Winding Street to join Courthouse Street. With regard to the remains themselves, the re-use of the same east–west line in Area C by Beam-slot 94, Clay wall 92 and Ditch 167 suggests that this was possibly a tenement boundary. However, as the full extent and nature of these features could not be ascertained, their interpretation as boundaries or parts of buildings must remain uncertain.

In view of the few relevant undisturbed areas now left to archaeological investigation within Hastings Old Town, it is essential that in future no opportunity is missed to test further David Martin's hypothesis regarding the development of the settlement.

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ACKNOWLEDGEMENTS

The Field Archaeology Unit would like to thank the developers, Freshfield Properties Ltd., for permission to undertake the excavations on their site. Mr P. Gouch, Managing Director of Freshfield Properties Ltd., deserves particular thanks for his constant help throughout the project. Most of the funding for the project was provided by Hastings Borough Council through the good offices of Mr R. Dennett, Director of Tourism and Leisure. The staff of Hastings Borough's Museum and Art Gallery, particularly Ms V. Williams and Ms C. Walling, also provided help and advice and gave permission for the reproduction of Plates 1 and 2. Other sources of funding for the excavations were the Margary Research Fund of the Sussex Archaeological Society, the Robert Kiln Trust, East Sussex County Council, the Magdalen and Laser Charity, the Isobel Blackman Foundation, and the Old Hastings Preservation Society.

Thanks are also due to all those who helped during both the excavation and post-excavation stages of the project. Most of the volunteers on site were members of H.A.A.R.G., of whom Mrs A. Scott deserves particular thanks both for her practical work and for organizing the help of other members. Full time staff included Site Supervisors Mr C. Place, Mr A. Lupton, Mr N. Price and Mr L. Pontin. Mrs M. Rudling was the Finds Supervisor. We are very grateful to all those who helped with the preparation of this report, both the specialists whose names appear in the text, and Mr K. Brooks (British Museum, Natural History), staff at the Royal Botanical Gardens, Kew, Mr M. Gardiner, Ms N. Tompsett and Ms C. Crickmore.

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ARUNDEL'S BLACKFRIARS LOCATED

by T. P. Hudson

The medieval buildings beside Arundel bridge, consisting of one roofless range and remains of two others, (Figs. 1, 2) have been hitherto claimed to be the hospital of the Holy Trinity or Maison Dieu. It is clear, however, that they really belong to the town's Dominican friary or Blackfriars.[1]

The Maison Dieu was founded for the aged and infirm poor by Richard, Earl of Arundel, in 1395.[2] The identification with the buildings by the bridge, however, goes back no further than to a note in the *Gentleman's Magazine* of 1793,[3] though it has been accepted by nearly every writer since.[4]

All other evidence links the buildings with the Dominican friary, which was founded by 1253 and survived until 1538.[5] Two drawings of the south range by Grimm dated 1780 are captioned 'the Friary Chapel',[6] while reference was made in a borough account book in 1619–20 to the building of a pier or jetty at the north side of the bridge 'towards the fryers'.[7] Corroborative evidence of a riverside site for the friary is a reference in a 16th- or 17th-century survey to a close next to it called Friars meadow,[8] the report of an inquest on a body washed ashore at 'Fryers' within the borough in 1543,[9] and mention of a boathouse beside the cloister of the Friars Preachers (i.e. Dominicans) in a late 14th-century account roll at Arundel Castle.[10]

Further, though the buildings themselves lack dating evidence, except for a possibly 14th-century doorway in the demolished west range (Fig. 1), finds made during partial excavation of the site in the 1960s included three jettons of the 1310s and Rouen pottery of 1280–1320, suggesting occupation well before the date of the hospital's foundation.[11]

The site was in fact ideally suited to the Dominicans. Friars often put up with low-lying or otherwise unsuitable land, as at the London Blackfriars,[12] or the Franciscan site in Lewes, recently excavated.[13] They also liked to be close to the people to whom they were preaching;[14] at Arundel the Dominicans were beside not only the bridge, but also the port and the market.[15]

The function of the surviving south range is unclear, but since it was two-storeyed it cannot have contained the church; that must have been in the north range. The west range seems likely to have included the dormitory. A special feature of Dominican houses, because of the emphasis placed by the order on learning, was the inclusion in a dormitory of study carrels or cubicles;[16] the cells decorated by Fra Angelico in the Dominican convent of San Marco in Florence, though intended for meditation rather than study, are a grander version of the same idea. At the south range of the Gloucester Blackfriars, now in the care of English Heritage, such carrels are expressed externally by small oblong windows quite closely spaced.[17] Grimm's drawing of the west range at the Arundel friary (Fig. 2) seems to show just such a row of windows in its upper floor. It is not clear whether there was ever an east range to close the courtyard, though every English Dominican friary whose plan can be reconstructed had a regular courtyard in monastic style.[18]

The Arundel friary buildings were not well treated after the Dissolution. In the 17th century part of the site at least was apparently let as a dwelling, and repairs were mentioned in 1659.[19] In the late 18th century the west range was used as a malthouse, having been rebuilt at its north end (Fig. 2). The south range by the same date had been gutted, only its east wall, with a large window, surviving above ground-floor level. It was then being used as a timber yard because of its nearness to the river,[20] and it continued to be in the mid 19th century.[21] By the late 18th century, too, the north range was evidently in ruins (Fig. 2).[22]

Most of the west range was destroyed during the 19th century,[23] and the tree-lined Mill Road was laid out across the site in 1894 to replace the narrow Mill Lane leading to Swanbourne Mill;[24] it seems safe to say that had the devout 15th duke of Norfolk realized the true character of the buildings he would be unlikely to have allowed such a desecration of them. Further damage was done in 1965, when a rear access road to the Post Office in High Street was driven through what was left of the west range; its surviving north wall collapsed in a gale later the same year.[25]

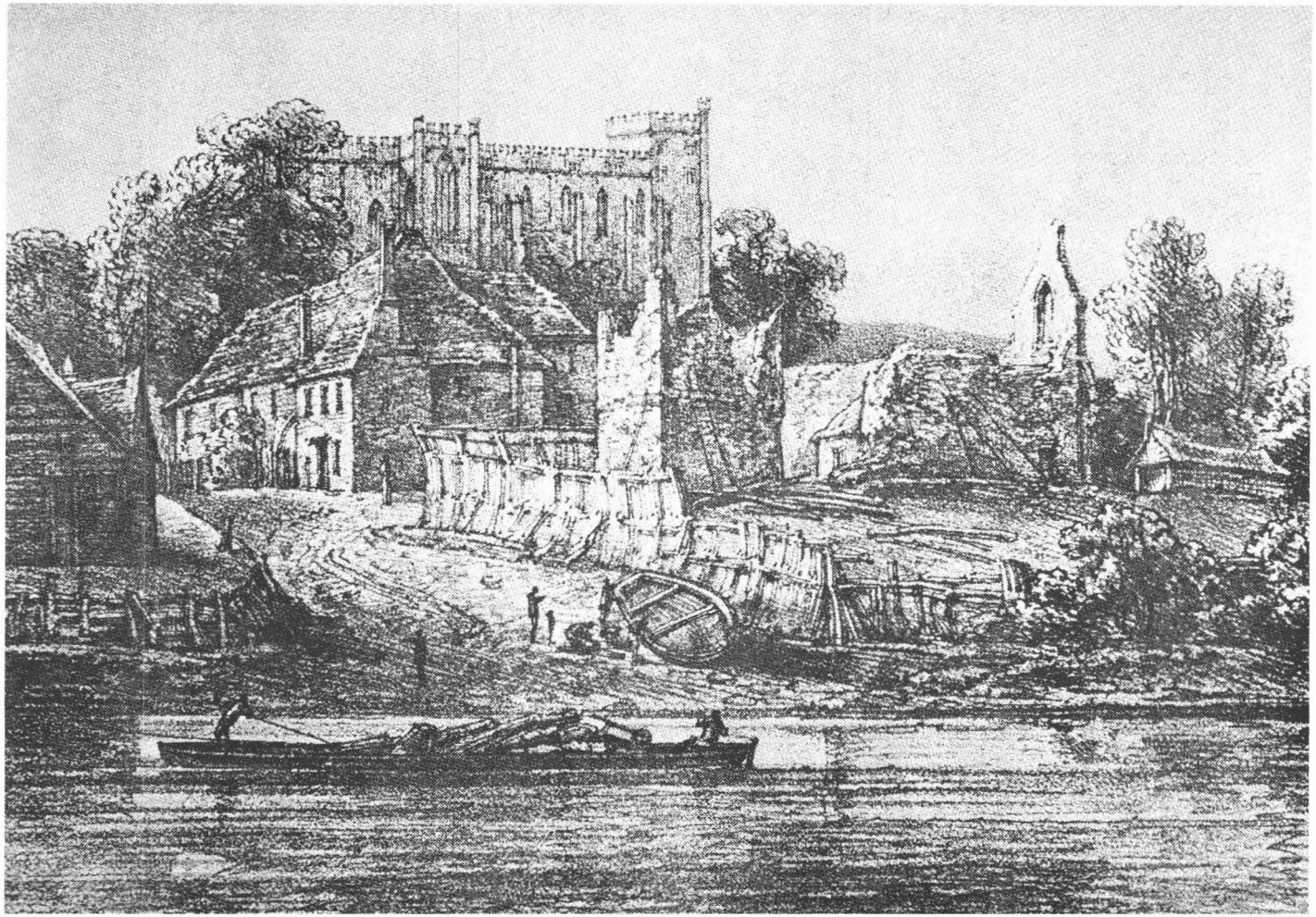

Fig. 1 Arundel: Dominican friary: south and west ranges (early 19th-century etching by W. P. Sherlock, W.S.R.O., PD 2245). Reproduced by permission of the County Archivist, West Sussex Record Office.

Fig. 2 Arundel: Dominican friary: west range and remains of north range (drawing by S. H. Grimm, 1780, B.L., Add. MS. 5674, f. 15). Reproduced by permission of the British Library.

The remains of the south range were given by the 16th duke to the town in 1935, and a garden was laid out around them soon afterwards.[26] However, the building was not well protected by the borough council, which in 1961 had to fence off parts because of the danger of falling stone.[27] It was, however, well restored in 1990–1 by Arun District Council.

The ruins of the north range were cleared of vegetation in the mid 1960s, and a garden was laid out around them too.[28] But already unprepossessing public lavatories had been erected nearby, within the friary precinct; neither they nor the adjacent day centre for the elderly built in 1967[29] took any account of the alignment of the medieval buildings. Before long the surviving walling of the west and north ranges had again been covered by undergrowth, which by 1990 was doing much damage; almost unbelievably, a tool shed had by then been put up within the north range.

Fortunately, plans were under way in the summer of 1993 to strip the north range of undergrowth and consolidate it; a new interpretative panel for the site was to be installed at the same time. More could still be done. When opportunity arises, it would be appropriate for the lavatories to be resited, perhaps in the town's main car park not far away. It might also be possible at some future date for what is known of the plan of the lost ranges to be outlined on the ground.

The true site of the hospital of the Holy Trinity (the Maison Dieu) can also be identified. The hospital was founded in connection with the college of secular canons which the Earl of Arundel had attached in or after 1380 to the parish church,[30] and the buildings of which, in flint and stone, partly survive on its south-east side. The logical site for the hospital would be nearby, as indeed its original statutes imply: noon prayers were to be said in the chapel of the college, now known as the Fitzalan

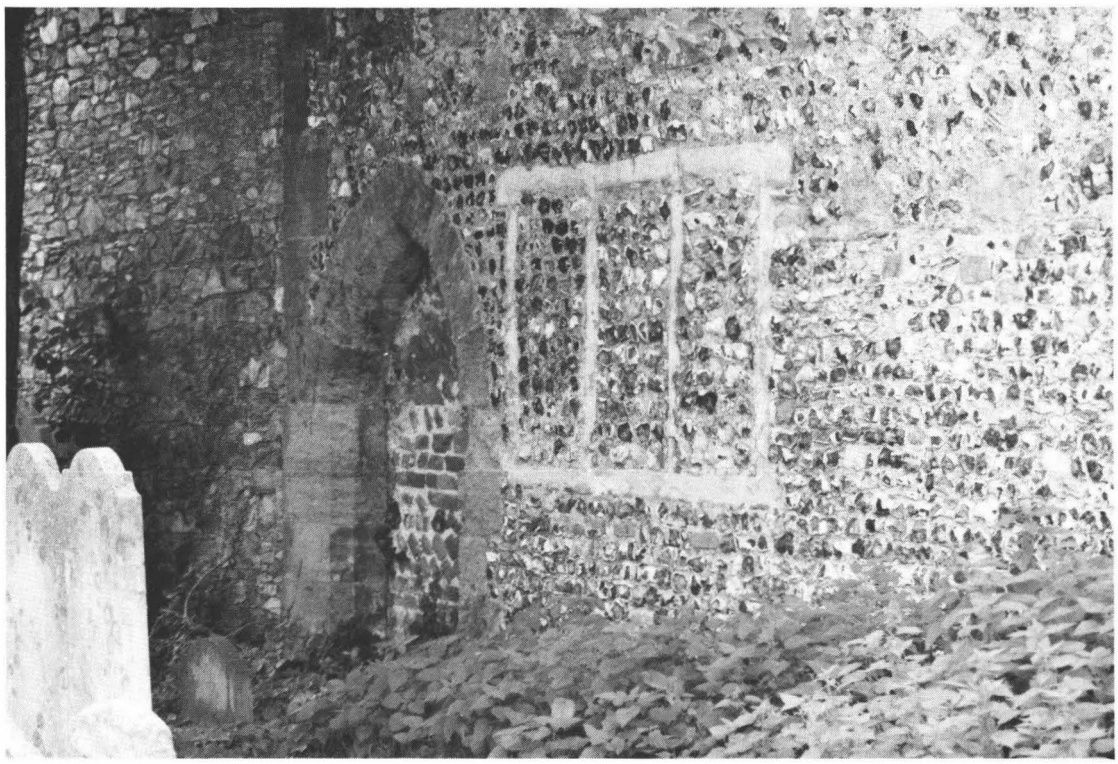

Fig. 3 Arundel: remains of the Maison Dieu, in the churchyard of St. Nicholas' church. Photograph copyright Ron Ham.

chapel, by all except the more infirm inmates, while one of the tasks enjoined on them was weeding the churchyard walks.[31] Both activities would have been difficult to carry out if it was necessary to climb the length of the steep High Street.

The northern part of the west wall of the churchyard in its lower courses contains flint and stone work including blocked windows and doorways of 14th- or 15th-century character (Fig. 3). The westwards continuation of the churchyard's north wall is similar in style, with an open doorway into what is now the castle car park. These remains have puzzled researchers,[32] but new documentary evidence again supplies the clue to what they were. A survey of the property of the Earl of Arundel dated 1636 mentions an almshouse standing west of the churchyard;[33] in the same place an anonymous visitor to Arundel in the 1720s mentioned an 'old priory' in the process of being demolished, stone from it being used to build the new town bridge.[34] It seems certain that this was the Maison Dieu, which together with the contemporary church and college would have formed a matching group of three buildings linked by foundation and patronage.[35]

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Notes

[1] The present article amplifies the one in which the new identification was first published: *Country Life*, 12 July 1990. I am indebted to the General Editor of the Victoria County History for permission to use material from the forthcoming *V.C.H.* volume on the Arundel area. I am also grateful to Mrs. Sara Rodger of Arundel for much help received.

[2] *V(ictoria) C(ounty) H(istory), Sussex*, **2**, 97–8.
[3] *Gentleman's Magazine*, **63** (2) (1793), 1165.
[4] A notable exception was G. Hillier, *A Day at Arundel* (1851), 60–1.
[5] *V.C.H. Sussex*, **2**, 93–4; M. A. Tierney, *The History and Antiquities of. . . Arundel* (1834), **2**, 672–5.
[6] B(ritish) L(ibrary), Add. MS. 5674, f. 14.
[7] W(est) S(ussex) R(ecord) O(ffice), Arundel Borough Archives, F2/1, f. 9.
[8] W.S.R.O., PHA 1407, f. 56v.
[9] *Sussex Coroners' Inquests, 1485–1558*, ed. R. F. Hunnisett (Suss. Rec. Soc. **74**), 34.
[10] A(rundel) C(astle) M(uniments), uncatalogued late 14th-century account roll (Sussex box 3, no. 1).
[11] *Suss. Arch. Coll.* **107**, 73–4.
[12] W. A. Hinnebusch, *The Early English Friars Preachers* (Rome, 1951), 33–4, 69; cf. L. Butler and C. Given-Wilson, *Medieval Monasteries of Great Britain* (1983), 57.
[13] *Medieval Arch.* **33**, 213.
[14] Hinnebusch, *Friars Preachers*, 68, 133.
[15] Tierney in his *History of Arundel*, **2**, 675, noted that Wenceslaus Hollar's view of Arundel dated 1644 shows two churches, the parish church on the skyline and another. On the basis of somewhat dubious hearsay he identified the latter as the Dominican church, and suggested a site in Maltravers Street, off High Street half way up the hill on which the town is built; for the site of the custom house mentioned see A.C.M, uncatalogued drawings, plan of Arundel borough, 1849. Tierney's identification was followed by later writers: G. W. Eustace, *Arundel: Borough and Castle* (1922), 51; *West Sussex Gazette*, 9 July 1987. Hollar's view of the town, however, is untrustworthy in other details: *Country Life*, 12 July 1990, pp. 94–5. It is more likely that the second church in it was added simply for artistic effect.
[16] Hinnebusch, *Friars Preachers*, 164–6, 180.
[17] Ibid. 171 and pl. XVII.
[18] Ibid. 132.
[19] A.C.M., A 262, f. [38v.], mentioning the Friary House; ibid. MD 505, f. [3].
[20] *Suss. Arch. Coll.* **107**, facing 68; A.C.M., estate survey by J. Hodskinson, 1778, f. 4.
[21] A.C.M., H 2/44; cf. Fig. 1.
[22] Cf. W.S.R.O., MP 3041 (photocopy of town map, 1785); *Arundel: a Picture of the Past*, comp. J. Cartland (1978), 32.
[23] O.S. Map 1/2,500, Sussex, LXIII. 1 (1877 edn.); *Arundel*, comp. Cartland, 32. It had apparently still been standing in 1851: G. Hillier, *A Day at Arundel* (1851), 61; cf. Tierney, *Arundel*, **2**, 670–1; W.S.R.O., TD/W 5.
[24] *West Sussex Gazette*, 9 Aug. 1894.
[25] *Suss. Arch. Coll.* **107**, 68, 72.
[26] *Arundel, the Gem of Sussex* (Arundel, 1937), 23.
[27] *West Sussex Gazette*, 16 Nov. 1961.
[28] *Suss. Arch. Coll.* **107**, 68.
[29] *West Sussex Gazette*, 16 Feb. 1967.
[30] *Calendar of Patent Rolls*, 1377–81, 494.
[31] Tierney, *Arundel*, **2**, 666–7.
[32] e.g. West Sussex County Council, Sites and Monuments Record, no. 1960.
[33] A.C.M., MD 505, f. [1v.].
[34] B. L. Lansdowne MS. 918, f. 23, perhaps the source of the idea that the friary buildings were so used: e.g. Tierney, *Arundel*, **2**, 670.
[35] When the present castle car park west of the churchyard was laid out as a kitchen garden in the early 19th century, numerous human bones were found, perhaps from the chapel of the hospital: C. Wright, *The Antiquities and Description of Arundel Castle* (Brighton, 1817), 39; Tierney, *Arundel*, **2**, 677.

Sussex Archaeological Collections **131** (1993), 119–123

DALLINGRIDGE'S BAY AND BODIAM CASTLE MILLPOND —ELEMENTS OF A MEDIEVAL LANDSCAPE

by Christopher Whittick

Contracts between Sir Edward Dallingridge and his monastic neighbours allow Dalyngreggesbay *and its attendant leat to be conclusively located. The dating and purpose of this great water-engineering effort enhance our understanding of the context of Bodiam Castle.*

By letters patent of 20 October 1385, the crown granted Sir Edward Dallingridge licence to crenellate the manor of Bodiam. The enrolment presents few difficulties of interpretation; the castle still stands as manifest evidence of Dallingridge's subsequent action. More enigmatic, however, is the text of a further licence obtained by Sir Edward, which was enrolled on 3rd February 1386. That licence permitted him to divert a watercourse from *Dalyngreggesbay* in the vill of Salehurst to power his watermill in the vill of Bodiam.[1]

The texts of both patents were published in 1857 by Lower, who suggested that the water-supply to the castle moat was uppermost in the grantee's mind. That suggestion was dismissed somewhat brusquely in 1926 by Lord Curzon, who seemed blind to the possibility that a leat, if taken sufficiently far upstream, could bring river-water to a level above that of the stream of the Rother at Bodiam Bridge.[2]

In 1955 F. C. Clarke devoted a lavishly illustrated but poorly argued publication to an attempt to show that the river to be diverted was the Kent Ditch and not the Rother (as both Lower and Curzon had correctly supposed) and that the mill to be powered was that still standing at Peters Green on the northern boundary of the parish, near the moated site usually taken as the castle's predecessor.[3]

The text of the patent and topography of Bodiam have until recently been the only clues to the whereabouts of Dallingridge's elusive water-engineering; but this article presents evidence from two contracts between Sir Edward and his neighbours at Bodiam which relate specifically to the building and maintenance of the watercourse, and allow its location to be precisely determined.

Each contract makes it clear that both the dam, or bay, in the Rother, and the watercourse leading to the mill, were to follow the line of the existing boundary ditches[4] which divided the demesne lands of Sir Edward's manor of Bodiam from the land of Battle and Robertsbridge Abbeys; indeed the establishment of the future liabilities for their maintenance is the major purpose of each deed.

The first of these contracts, with the abbot and convent of Battle, survives in the form of a badly damaged original, and is dated 20 July 1386. The agreement with Robertsbridge is represented by a mid 16th-century translation with a date—Saturday in the feast of St Bartholomew, 20 Richard 2—which is impossible; in that year, 1396, St Bartholomew (24 August) fell on a Thursday. In Richard's reign St Bartholomew fell on a Saturday in 1381 (4 Richard 2), 1387 (11 Richard 2) and 1392 (16 Richard 2), and it is tempting to see the middle year as the correct one, and to ascribe the error to the misreading of *xj* as *xx*.[5]

The holdings of both abbeys in Bodiam lay along the northern bank of the Rother, which forms the southern boundary of the parish between Bodiam Bridge on the east and the boundary with Salehurst on the west. Both holdings were the result of pious grants by former lords of Bodiam of low-lying marshland which they lacked either the will or perhaps the resources to exploit. Battle's holding, called Battle Meads, lay to the east and that of Robertsbridge to the west; both houses had been granted an apparently identical right of way from the highway to their meadows through Bodiam manor's demesne and tenant land.[6]

Apart from the documents already discussed, there are no medieval sources which have a direct bearing on the leat. But details of the early topography of the area can be reliably traced from a number of documents, principally a 1567 survey of Robertsbridge manor, including the demesne, a map of the same estate in 1811, and from a court of survey of the demesne, free and copyhold land of Bodiam manor illustrated by a map, completed in

1671. These documents enable us to determine the boundary between the demesne of Bodiam and the monastic land to the south, and thus establish the course of the leat.[7]

The area to be discussed may conveniently be broken down into five sections: the dam or bay itself and the diverted course of the Rother immediately to its east; the boundary with Robertsbridge's meadows; the boundary with Battle Meads; the course of the leat in Dallingbridge's own grounds before it entered his millpond; the pond and the site of the mill itself (Fig. 1).

Both contracts immediately clarify one point—the dam is stated to be 'in the river called Limene', the ancient name for the Rother.[8] The contract with Robertsbridge is largely concerned with the maintenance of the dam and the assumption by Dallingridge of the liability to scour the former boundary ditch, into which he had diverted the Rother, which had hitherto been the responsibility of the monks. The agreement was to last for as long as the mill continued to operate. As well as maintenance of the dam itself, the contract ensured that the monks would not obstruct the flow of the Rother by *any manner of trenches, ditches, guts nor other subtleties* on their land above the bay, and that they might use the new channel to bring *all manner of victuals and necessaries* from Bodiam Bridge by boat to the bay.

The bay or dam, referred to in the contract as a *sluice called Pollydebay*, was constructed of timber and earth. It was bounded by the abbey's meadow called Long Marsh to its south, and Sir Edward's demesne to the north. The 1811 map shows two fields called Upper and Lower Bay Brook which lie north of Long Brook; it is clear from the 1567 survey that the boundary between Udiam's land and the demesne of Robertsbridge lay between them and it is suggested that the same division also marked the pre-diversion course of the river (Fig. 1, B–E). In 1567 Long Brook was called Long Mead, which may readily be identified with the Long Marsh of 1387; its western boundary was then described as a wall, or embankment, leading to Bay Brook. Bodiam Park was said to lie across the river from Bay Brook, and indeed that area is marked on the 1671 map as former demesne.

The line of the dam which forms the western boundary of Upper and Lower Bay Brook is clearly visible on the ground (Fig. 1, A–C). It takes the river almost at a right angle out of its predominantly east–west course to head due north for a little over 300 metres, at which point (Fig. 1, C) an equally sharp bend leads the stream eastwards again. The course of the river before it reaches the bay forms the boundary between the parishes of Salehurst and Ewhurst, but the boundary with Bodiam to its north was disputed, perhaps as a result of the diversion. With the river in its ancient course the dam, as the patent says, lay in the parish of Salehurst. The Rother does not regain its accustomed course until a point immediately west of Udiam Farm (Fig. 1, E).[9]

In 1811 the land of the Robertsbridge estate north of the Rother consisted of a block of seven pieces of brookland; that was also the extent of the holding there in 1567. The fields across the entire northern boundary of the block were marked as former Bodiam demesne on the 1671 map and in 1811 formed part of the land of Park Farm.

On the ground, the ditch which now forms the boundary between the two estates leaves the Rother (Fig. 1, D) in a fairly wide channel but soon narrows. Halfway along the boundary, the ditch is joined by a footpath which leads from Park Farm towards Higham; the path is raised on a slight embankment which also retains the ditch on its north side (Fig. 1, F–G).

East of the Robertsbridge holding lay Battle Meads, which in 1688 consisted of 65 acres.[10] They are shown on the 1671 map lying south of two Bodiam copyhold tenements called Tomsetts and Bines, and a parcel of demesne land which had been sold. It is only along the central portion of the boundary south of Bines that the course of the leat followed the boundary between these two estates. To the west it is most likely to have run south of Oasthouse Brook, the most northerly field in Battle Meads. In 1526 the abbot of Battle granted a lease of a field called *Snapyswisshe* otherwise *Snapysmede* which contained five acres, to John Mores of Bodiam. Other fields in Battle Meads lay to the east and south, the abbot of Robertsbridge's land to the west and to the north lay a stream called *The Mylryvere*. Although the field cannot be precisely located, the other boundaries must place it at the north-western extremity of Battle Meads, quite consistent with the suggested course of the leat. The description of the mill river as a stream suggests that in 1526 it retained its function as a leat to Bodiam Castle mill.[11]

Fig. 1.: 1a: The Course of the River Rother and the mill leat between Dallingridge's Bay and Bodiam Bridge;
1b: The course of the River Rother, the mill leat and the elements of the medieval landscape at Bodiam.

To the east of Bines two course are possible: the more northerly follows the boundary between a copyhold called Scopps and a triangular piece of Bodiam demesne (Fig. 1, H–I–K); that to the south is marked by a field boundary (now removed) and a footpath which formed the boundary between the Bodiam and Battle estates (Fig. 1, H–J–K). The former course would account for the otherwise curious intrusion of a piece of Bodiam demesne between Bodiam copyhold land and the Battle demesne; the tenement may have been created after the construction of the watercourse and adopted it as its southern boundary, leaving a piece of demesne isolated on the southern bank. A faint suggestion of a bank was observed in the newly ploughed field in 1983, but that could have been the vestige of the former field boundary rather than of Dallingridge's leat. Neither does any sign remain of the drainage system called *Wallgripp* which according to the contract was to be constructed by Sir Edward on Battle's land.[12]

It is fortunate that the topographic evidence for the leat's final section (Fig. 1, K–L) is so clear since no documentary evidence survives to suggest its route. The track leading from above the Castle Inn westwards towards New House Farm (which is built on Scopps tenement) is carried until it turns north by a pronounced bank which has a deeply cut drainage ditch to the north. That this bank continues after the divergence of the footpath outlining the putative southern course discussed in the last section, is further evidence in support of the northern course.

There is no evidence to show how the leat traversed the road; a ford or bridge is possible. It entered the millpond, a depression erroneously known since Curzon's time at least as the Tilting Yard, between two copyhold tenements called Groves and Summers; a gap in the western wall of the depression at its northern end is clearly visible at that point (Fig. 1, L). It is to be regretted that the recent removal of large pieces of timber from the ground in that area was not subject to archaeological observation.[13]

The agreement with Robertsbridge states that Dallingridge had built a new mill at Bodiam; it is clear that it lay on the bay which forms the eastern end of the millpond. In 1567, 'the watercourse leading from the millshot' formed the eastern boundary of the Robertsbridge manor tenement called *Frerenmead*, which straddled the Rother; 'the bank of Bodiam millpond' formed its northern boundary.[14]

The evidence advanced proves the course of the diversion of the Rother licensed in 1386 conclusively. That the work of the new mill at Bodiam followed so closely on the licence to crenellate implies a conception far wider than has previously been suggested. Three years earlier Dallingridge had obtained the grant of a market and fair at Bodiam, one of the last such grants to be enrolled for any Sussex manor.[15] It is difficult to avoid the conclusion that we see in these three grants evidence for the plantation of a planned, almost model village on the bank of the Rother—moated castle, mill, cottages and market-place. If, as Hohler has suggested, Bodiam as we see it is the realisation of an old soldier's dream, it was perhaps a far more ambitious dream than he imagined.[16]

ACKNOWLEDGEMENTS

I should like to thank Gwen Jones for bringing the Robertsbridge contract to my attention, David Martin and Margaret Whittick for many helpful suggestions and assistance in the field, the Rev. Dr. Malcolm France of Newhouse Farm and Richard Bailey of Park Farm, Bodiam for permission to inspect the course of the leat and particularly Mark Gardiner for unstinted help, encouragement and for drawing the map.

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Notes

[1] *Calendar of Patent Rolls, 1385–1389*, 42; ibid., 98, calendaring P(ublic) R(ecord) O(ffice) C66/621, m.38.

[2] *Suss. Arch. Coll.* **9** (1857), 290–91; Lord Curzon, *Bodiam Castle* (1926), 26–28.

[3] F. C. Clark, *Bodiam Castle, Sussex, Did its builder also construct Dalyngrigge's Bay* (Rye, 1955); for a report of excavations at the moated site, *see* D. Martin, 'Three Moated Sites in North-East Sussex, part 2: Hawksden and Bodiam', *Suss. Arch. Coll.* **128** (1990), 89–116.

[4] *Pace* Charles Coulson, 'Some Analysis of the Castle of Bodiam, East Sussex', in *The Ideals and Practice of Medieval Knighthood*, **4**, 103–4, n. 84.

[5] H(enry) E. H(untington Library), San Marino, California, New Acquisition 870; for a photocopy, *see* E(ast) S(ussex) R(ecord) O(ffice) AMS 5789/9 (Battle); C(entre for) K(entish) S(tudies) (formerly Kent Archives Office) U1475 E57 (Robertsbridge).

[6] H.E.H. BA vol. 29, ff. 124v.–125 (Battle cartulary); *Report on the Manuscripts . . . Preserved at Penshurst Place*, ed. C. L. Kingsford (Historic Manuscripts Commission **77** (1925)), 66–7, 120–21; deeds of Battle Meads at C.K.S. U813 and Accession 3118 (Morland of Lamberhurst, calendar at E.S.R.O.); for the grants of rights of way by William de Bodiam see H.E.H. BA vol. 29, f. 125, charter number 4 and *Penshurst Place*, 66.

[7] *The Survey of the Manor of Robertsbridge*, R. H. d'Elboux (ed.) (Suss. Rec. Soc. **47**, 1947), entries 295, 329; E.S.R.O. BAT 4435, map 20; British Library Add. MS. 66,693 (court of survey, 1671), microfilm E.S.R.O. XA15/1, with E.S.R.O. AMS 5691/3/1 (map by Thomas Russell).

[8] A. Mawer and F. M. Stenton, *The Place-Names of Sussex* (English Place-Name Society, vol. 6) **1** (1929), 7.

[9] W(est) S(ussex) R(ecord) O(ffice), Ep II/5/6 ff. 242–43, 245–47 and 249–50 for depositions *Bathurst* v *Hawes* in the court of the Archdeacon of Lewes in 1600.

[10] C.K.S., U813 T47/4–6, and Accession 3118/3–8 (Morland).

[11] H.E.H., BA 55/1606 (detailed calendar at E.S.R.O.)

[12] A. H. Smith, *English Place-Name Elements* (English Place-Name Society, vol. 25) **1** (1956), *s. v. grype*.

[13] Mrs Vivienne Coad, personal comment.

[14] d'Elboux (op. cit.), entry 93 (pp. 32, 33).

[15] *Victoria County History*, Sussex **9**, 263.

[16] Christopher Hohler, '"Kings and castles: court life in peace and war', in J. Evans (ed.), *The Flowering of the Middle Ages* (1966), 140, followed by Charles Coulson, 'Structural Symbolism in Medieval Castle Architecture', *Jnl. Brit. Arch. Assoc.* **132** (1979), 76 and 'Some Analysis of the Castle at Bodiam', 51–107; but see D. J. Turner, 'Bodiam, Sussex: True Castle or Old Soldier's Dream House?' in W. H. Ormrod (ed.), *England in the Fourteenth Century* (1986), 267–77, dubitante.

Sussex Archaeological Collections **131** (1993), 124–125

THE BUILDING OF THE SIXTEENTH-CENTURY ROOD LOFT IN WESTBOURNE CHURCH

by Alison McCann

The date of the 16th-century rebuilding work in Westbourne Church has been the subject of some discussion. The Rev. J. H. Sperling, writing in 1870, narrowed it down to between 1548–1551, in the time of Henry, 12th. Earl of Arundel,[1] and the Rev. J. H. Mee reproduced his conclusions some 40 years later.[2] Lindsay Fleming in his Church Guide to Westbourne in 1958 dated it to the time of the 11th Earl of Arundel, who died in 1544.[3] Francis W. Steer, writing in the same year, argued for a date of *c.* 1491–1511.[4] All based their conclusions on their interpretation of the achievement of arms on the carved beam which is now above the north door. Fleming adds that a bequest for building the north porch was made in 1531.[5]

Further information has now come to light in the records of a Chichester City Court concerning the building of the rood loft. Records of the Guidhall Court of Real and Personal pleas survive for June 1535 to March 1536 in the same volume as the record of the late 15th-century Views of Frankpledge held for the city.[6] The court dealt chiefly with cases of small debt between local tradesmen. Little if any detail is given of most of the cases.

However, one exception to this is the case between William Samford, plaintiff, and Simon Whitehead, defendant, heard on 16 August 1535. In this case a full account is given of the circumstances leading up to the dispute:

> 'that the said defendant on 20 November 25 Henry VIII (1533) . . . made a bargain and conditional agreement (*barganizavit et conditionavit*) with the churchwardens of the church of St. John of Westbourne . . . to build and erect a certain wooden structure called in English a rood loft before the Feast of Saint John Baptist then next to come (24 June 1534), for 5 marks sterling (£3 6*s* 8*d*) to be paid to him. And so that the said defendant would erect the said structure, competently and skilfully before the feast aforesaid the said plaintiff stood surety for the said defendant . . . .'[7]

The Westbourne churchwardens had therefore paid 4 marks, of the agreed fee of 5 marks, to Samford, who had duly paid it to Whitehead. However, despite Samford's frequent urgings, Whitehead had not finished the rood loft, and had not safeguarded Samford from the claims of the Westbourne churchwardens, therefore causing Samford to suffer 20*s*. loss. It was for this reason that Samford had brought the case. Whitehead appeared in court to answer the case, and admitted that Samford's statement was true in all particulars. Whitehead then brought into court John Boyes of Stockbridge near Chichester, Robert a Parkes and William a Chamber, to stand surety that he would discharge Samford from his obligation to the Westbourne churchwardens, and that he would finish the rood loft before the Feast of St. Andrew the Apostle (30 November). The case was then adjourned *sine die*, Whitehead having paid a fee of 6*d* to the court.

A little is known of the parties in the case. They were fairly near neighbours in Chichester, both being in 1533/4 tenants of the Dean and Chapter in houses on the south side of West Street.[8] This was the area in which Cathedral employees often lived, and both Samford and Whitehead worked for the Dean and Chapter. Samford was a gentleman, a citizen of Chichester,[9] who seems to have acted for the Dean and Chapter in a number of ways. In 1529 he was associated with them in a purchase of land.[10] In 1534 he acted as an attorney for livery of seisin of a gift of land to the Chapter.[11] In 1540 he acted as proctor for an absentee clerk.[12] In 1543 and 1544 he was responsible for keeping the chapel of St. Mary clean, and taught the choristers.[13] He also collected the tenths and subsidy owed by the Cathedral, as Collector of the King's Tenths and Subsidies.[14] These duties were performed by other people from 1550, which presumably implies Samford's death or retirement.[15]

He had also, in the 1530s, acted as the Dean and Chapter's agent to collect certain of the rents due to them, and to employ workmen for the repair and upkeep of the Cathedral, and the many other Dean and Chapter properties within the City of Chichester. It is in this capacity that he would have known Whitehead.

Simon Whitehead was a carpenter, who in 1533 was employed by Samford, on behalf of the Dean and Chapter, 'for mending the well of the great bell in the great belfry with board and nail . . . and for timber and workmanship on a piece that lies under the table at St. Richard's Head'.[16] That same year he also had three days work making a new floor and doors for a property in South Street.[17] In this latter job, he was helped by William Chamber, and it may not be coincidence that Chamber appears more frequently as employed by the Cathedral in 1534/5.[18] An unidentified Simon is mentioned in these accounts,[19] but does not appear at all thereafter. It may be that Samford did not employ Whitehead again for the Cathedral, after he had let him down over the Westbourne job.

Whitehead certainly seems to have been in trouble. In September 1535, he was again before the Chichester Court to answer two separate cases: one of debt and the other of detaining a pledge.[20] The result of these is not known. On 24 July 1536, he was again summoned for a debt.[21] Once again no more details are known of the case.

There remains the question of whether Simon Whitehead ever finished the Westbourne rood loft. He had agreed on 20 November 1533 to complete it by 29 August 1534, but had failed. He promised on 17 August 1535 to complete it by 30 November 1535, which implies that about one-third of the work remained to be done. In January 1547 Thomas Greenliffe left by his will 12*d.* 'to the Rood Loft or to the Seats there as ye se most need'.[22] In the same month Philip Dane left a quarter of malt 'to the Holy Rood Loft making or to the seats'.[23] It seems that over 13 years after Whitehead's original agreement, the rood loft may still not have been finished, and, as rood lofts were not permitted after 1548, it may never have been finished at all.

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Notes

[1] Rev. J. H. Sperling, 'The Parochial History of Westbourne', *Suss. Arch. Coll.* **22** (1870), 77–115.

[2] Rev. J. H. Mee, *Bourne in the Past being a History of the Parish of Westbourne* (1913).

[3] Lindsay Fleming, *The Church of St. John the Baptist, Westbourne in the Diocese of Chichester, Sussex: Descriptive Guide* (1958), 6.

[4] Francis W. Steer, 'Carved Beam at Westbourne Church, Sussex: A Problem of identification', *Antiq. Journal* **38** (1958), 247–9.

[5] W. H. Godfrey, (ed.), R. Garraway Rice, *Transcripts of Sussex Wills, vol. IV: Racton to Yapton, S(uss) R(ec) S(oc)*, **45** (1940), 318. Richard Till of Almodington 40s., 'to make a porch at the north door or the church of Bourne'.

[6] W(est) S(ussex) R(ecord) O(ffice), Chichester City Archives, K1. This volume is being indexed by Bernard Vick, a volunteer worker at the Record Office, as part of the compilation of the Vick/Pilbeam index of pre-1642 Chichester sources.

[7] W.S.R.O., K1, f. 19v.

[8] W.S.R.O., Cap. I/23/1, f. 169r., and 110r.

[9] W.S.R.O., Cap. I/3/0, f. 124r.

[10] W.S.R.O., Cap. I/3/0, f. 106r.

[11] W.S.R.O., Cap. I/15/13.

[12] W.S.R.O., Cap I/3/0, f. 88r.

[13] W.S.R.O., Cap I/23/2. ff. 57r, 58v.

[14] W.S.R.O., Cap. I/23/2, ff. 64r, 58v.

[15] W.S.R.O., Cap. I/23/2, f. 70.

[16] W.S.R.O., Cap. I/23/1, f. 71r.

[17] W.S.R.O., Cap. I/23/1, f. 73r.

[18] W.S.R.O., Cap. I/23/1, ff. 79ff.

[19] W.S.R.O., Cap. I/23/1, f. 79v.

[20] W.S.R.O., K1, f. 22v.

[21] W.S.R.O., K1, f. 35v.

[22] *S.R.S.* **45** (1940), 314.

[23] *S.R.S.* **45** (1940), 315.

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ON THE ALLEGED MURDER OF HIS CHAPLAIN BY HENRY BROWNE, 5TH VISCOUNT MONTAGUE OF COWDRAY

by Timothy J. McCann

Two hundred years ago, on the night of 24 September 1793, Cowdray House, the magnificent seat of the Browne family, Viscounts Montague, was destroyed by fire. Although it has never been rebuilt, legends and stories about the house and its owners continue to circulate. The long-repeated legend of the Cowdray curse was best dealt with by A. A. Dibben in his introduction to the catalogue of the Cowdray Archives.[1] He did not deign to mention it. The legend of the 5th Viscount's murder of his chaplain continues to be repeated—most recently by Mark Bence-Jones in his book *The Catholic Families*[2]—and needs to be discredited.

The legend first appears in an article in a Catholic periodical *The Lamp* in 1878. The author, writing as K. S., records tht she heard the story when she was 16 years old from an old lady of 84, the daughter of the last house-steward of Cowdray. She reported the old lady saying that the 5th Viscount Montague

> 'was, according to tradition, a violent and wicked man. That he preserved the outer form of his religion is certain, but his life was a standing negation of its precepts. He seems to have given great cause of scandal by persistent immorality, and to have been more than once refused absolution by his chaplain and confessor on this ground. The courageous priest had required the removal of the cause of sin before granting the pardon of the Church, and Lord Montague's pride revolted at such an act on the part of one whom he evidently considered as a mere officer of his household. There is some discrepancy in the accounts of the crime I am about to relate. My aged informant always declared that the dispute arose in the confessional, and that Lord Montague killed the priest of God as he sat in the seat of pardon and judgment. The present local tradition is that the dispute on the absolution preceded another, as to whether the chaplain should begin mass before the entry of Lord Montague. He refused to keep the congregation waiting . . . The Viscount Montague entered when it was half over, and, furious at the slight he conceived to be offered him, he drew a pistol and shot the priest at the Altar'.[3]

Lady Montague kept up full state at Cowdray, she added, while the unhappy Lord Montague, by a just and striking retribution, lived concealed for nearly 15 years in the priest's hiding-hole in the Keeper's Lodge.

In spite of the inherent absurdity of the story, it has never been gainsaid, and continues to be repeated. Mrs Roundell, writing in 1883, gave credence to the story by reprinting a large part of the article in *The Lamp* as an appendix to her book.[4] But in spite of the fact that her book has largely accounted for the persistence of the legend, Mrs. Roundell slightly distanced herself from the legends of the curse and the murder, remarking that 'it is impossible now to establish the accuracy of these stories, but they are firmly believed in Midhurst and in its neighbourhood, and appear to have been handed down from father to son with very little variation'.[5] The official Guide to Midhurst repeated the story without comment in 1915,[6] but W. St. John Hope in his *Cowdray and Easebourne Priory* in 1919[7] does not mention it. Thomas Torrens, in the guide to Cowdray published by the Estate Office in 1932 repeated the tales, but added that 'such tales are probably somewhat coloured by tradition'.[8] In 1936 *The Complete Peerage* mentioned the story and referred to Mrs. Roundell's book in a footnote,[9] thus giving the story a slight legitimacy.

The Rev. H. M. Willaert, the parish priest of Midhurst, writing in 1928 in his study of the Catholic mission in the town, was the first to challenge the story. 'I can find no positive proof of these statements', he wrote: 'every known source of information has been probed and no clue to such a crime can be found'.[10] However, in 1976 J. C. H. Aveling, in his study of the Catholic recusants in England, accepted the story at face value. 'The 5th. Lord', he wrote, 'alternated between bouts of profligacy and fits of superstitious piety and

penance. In 1691 he was at St. Germain as James II's Secretary of State. Yet later he threw up his job, left the King and shot dead a priest who refused him absolution. He lived in hiding until his death in 1717'.[11] Not content with retelling the legend, he repeated it twice more in the same book.[12] As recently as 1992, Mark Bence-Jones still felt able to write that 'the fifth Viscount had shot his confessor dead for refusing him absolution'.[13]

In defence of the legend, there is something to be said for the unknown K. S's informer. The 84 year old lady was identified by Mrs. Roundell as Elizabeth Barlow. She was born Elizabeth Newman, the daughter of William Newman, the last Steward of Cowdray before the fire, at Lodsworth *c.* 1758, and had lived in the neighbourhood of Cowdray all her life.[14] In 1804 she married William Barlow, a local surveyor and the author of *The Feofees Chest*.[15] She was a keen local historian and antiquary, corresponded with Samuel Lysons about Bignor Roman Villa,[16] and was described by Alexander Brown, her father's successor as agent at Cowdray, as together with her niece, 'the depositories of all the ancient lore of Midhurst'.[17] The 1851 census described Elizabeth Barlow as being aged 93 and blind, and as living in North Street, Midhurst, with her niece Elizabeth Newman.[18] The house was pulled down in 1880 to make room for the new Town Hall.[19] She died in 1881. However, if K. S. is to be believed, her interview with Elizabeth Barlow must have taken place in 1842, some 140 years after the supposed event, and she then waited another 36 years before publishing the story. These facts do not increase its credibility.

But what of the alleged murder victim, and his alleged murdered? Despite a great deal of research, only two chaplains at Cowdray can be identified with any certainty during the 5th Viscount's lifetime. Henry Preston, a secular priest, was ordained at Lisbon and came on the English mission in 1692.[20] He was chaplain at Cowdray for some years between then and 1702, but cannot have been Montague's victim as he outlived him and died peacefully on 11 July 1733.[21] Fr. John Smith otherwise Warham, also educated at Lisbon, came to England in March 1681, and was said to have been chaplain at Cowdray for thirty years.[22] He died there on 19 march 1714,[23] but there is nothing to suggest that his death was a violent one.

As for the 5th Viscount Montague, there is nothing in the records to suggest that he deserved the reputation attributed to him. Indeed there is very little trace of him in the surviving records. He was born before 1641, and, sometime before 1685 married Barbara, daughter of Thomas Walsingham, who bore him two sons and six daughters. He was appointed a Commissioner of Customs in 1687/8 and served his Catholic master James II in exile as Secretary of State. At least two-thirds of his estates were sequestered for recusancy.[24] Indeed he became so poor as a price of his recusancy that he was forced to pull down part of Battle Abbey for the sale of the materials.[25]

The story of the murder is totally inaccurate with regard to the consequences of the alleged crime. Far from spending 15 years in hiding at Cowdray before fleeing to the continent for an early death, he lived only nine years after succeeding his brother as Viscount Montague, and died at Epsom on 25 June 1717.[26] Although he was a neigbour and co-religionist of John Caryll of Harting, Montague is only mentioned once in the extensive Caryll correspondence when in 1716, Caryll was pressed to intercede between him and the Dowager Viscountess of Montague in their extensive litigation over Lady Montague's settlement.[27] The litigation concerned Lady Montague's attempt to recover her legacies under the will of Montague's brother the 4th Viscount. In July 1710 she had married, as her third husband, Sir George Maxwell, and, in the following year, they both brought a bill against Montague for satisfaction. Montague cross-petitioned, and the case was heard before the Lord Chancellor in January 1715. Montague appealed against that decision in May 1716, and there was a hearing of the case in King's Bench in October.[28] The case was to be heard at the Bar of the House of Lords on 1 April 1717.[29] Nowhere in all this litigation is any mention made of Montague having committed an offence. Since much of the case hinged on whether or not the 4th Viscount was of sound mind when he made his will, any such offence would surely have been brought up against the 5th Viscount.

The account of the alleged murder in *The Lamp* is based exclusively on oral tradition: an oral tradition, moreover, that was more than 140 years old before it was first recorded. No single piece of documentary evidence has ever been produced to

substantiate the allegations. No chaplain or priest has ever been identified as the alleged victim, and there is no evidence to suggest that Viscount Montague ever committed such a crime. The story of the alleged murder of his chaplain by Henry Browne, 5th Viscount Montague, may be dismissed as fantasy.

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Notes

[1] A. A. Dibben, (ed.), *The Cowdray Archives. A Catalogue*, Part 1, (1960).
[2] Mark Bence-Jones, *The Catholic Families*, (1992), 34.
[3] K. S., 'The Story of a Curse', in *The Lamp*, 3rd. series, 15 (1878), 375–6. It is significant that Catherine Powlett, Duchess of Cleveland, *History of Battle Abbey* (1877), in her discussion of the Browne family only a year before, does not mention the legend.
[4] Mrs. Charles Roundell, *Cowdray: The History of a great English House*, (1884), 159–175.
[5] *ibid.*, 89.
[6] *The Official Guide to Midhurst and District*, (1915), 45.
[7] W. St. John Hope, *Cowdray and Easebourne Priory in the County of Sussex*, (1919).
[8] Torrens Trotter, *Cowdray in the Parish of Easebourne, near Midhurst, Sussex*, 2nd. ed. (1932), 22.
[9] G. E. C(ockayne), *The Complete Peerage*, IX (1936), 102.
[10] Rev. H. Willaert, *History of an old Catholic Mission. Cowdray—Easebourne—Midhurst* (1928), 59, 60.
[11] J. C. H. Aveling, *The Handle and the Axe*, (1976), 244.
[12] *ibid.*, 247, and 258.
[13] Mark Bence-Jones, *ibid.*, 34.
[14] *Roundell*, 160.
[15] William Barlow, *An Inventory of the Contents of The Feoffees Chest of the Town of Midhurst*. (1814).
[16] W(est) S(ussex) R(ecord) O(ffice)., Add. MS. 7542, nos. 29 and 33. Printed in Francis W. Steer, (ed.), *The Letters of John Hawkins and Samuel and Daniel Lysons, 1812–1830*, (1966), 24, 25 and 33.
[17] W.S.R.O., Cowdray MS. 5128 no. 38.
[18] *Roundell*, 160.
[19] Public Record Office, HO 107/1654, p. 107. Copy at W.S.R.O., MF 54.
[20] Rev. Godfrey Anstruther, *The Seminary Priests. Volume 3: 1660–1715* (1976), 175, 176.
[21] J. Kirk, *Biographies of English Catholics*, (1909), 191. See also Raymund Stanfield, *Obituaries of Secular Priests, 1722–1783*. Catholic Record Society, 12 (1913), 4.
[22] Rev. G. Anstruther, *ibid.*, 207, 208.
[23] J Kirk, *ibid.*, 191.
[24] W.S.R.O., QDR/5/WE1.
[25] Lady Cleveland, *ibid.*, 193.
[26] G. E. C. *ibid.* IX (1936), 102.
[27] Robert Gordon to John Caryll, Paris, British Library, Add. MS. 28, 227 f. 296.
[28] *Henry, Lord Viscount Mountague, appellant. Sir Geo. Maxwell, Bart, & Mary, Viscountess Mountague, his wife . . . respondents. The Apellants Case. To be heard at the Bar of the House of Lords, on Monday the First of April 1717.*
[29] *The Right Honourable Henry Lord Viscount Montague, Brother and Heir and Administrator with the Will and Codicil annex'd of Francis, Lord Viscount Montague, deceas'd appellant. Sir George Maxwell, Bart, & Mary, Viscountess Dowager Montague his wife (who was the widow and relict of the said Francis, late Viscount Mountague, her former husband deceas'd) respondent.*

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THE LONG MAN OF WILMINGTON, EAST SUSSEX: THE DOCUMENTARY EVIDENCE REVIEWED

by John H. Farrant
with a note on some local place-names by Richard Coates

The Long Man of Wilmington is a hill-figure of uncertain origin, on the scarp of the South Downs at N.G.R. TQ 542034. Hitherto, the earliest record has dated from 1781. This article publishes a drawing made in 1710; considers the dearth of documentary evidence from the 18th century and earlier; and offers corrections and clarifications to the secondary literature on the figure, particularly in respect of place-names. It does not speculate on the figure's origin.

Until 1873, the Long Man of Wilmington was reported as a faint indentation in the Downland turf, visible in the oblique light of morning or evening or after a shower of snow. In 1873-4 the figure was marked out with bricks in its present form (Fig. 1). These were replaced by pre-cast concrete blocks in 1969, when the opportunity was taken to undertake archaeological investigations which Eric Holden published in 1971, in what is still the principal account of the Long Man.[1]

THE LONG MAN IN 1710

So slight is the evidence on the Long Man's origins, that any new piece is worthy of note. Reproduced here is a drawing made in 1710 (Fig. 2). It appears on a map at Chatsworth House, 'A Survey of The Demeasn Lands of the Mannor Of Wilmington belonging to the Hon'ble Spencer Compton. Surveyed by Jno. Rowley, 1710', at the scale of 1 inch to 12 perches (1:2376).[2] Spencer Compton, later Earl of Wilmington, inherited the manor from his father, the Earl of Northampton, in 1681; on his own death without issue in 1743 the manor passed back to the main line and in 1782 by marriage to the Cavendish family and so to the Dukes of Devonshire. The map seems to have come to Chatsworth House, not from the Devonshire estate office at Compton Place, Eastbourne, but from the family's London solicitors, Currey & Co.[3]

John Rowley is not known as a Sussex surveyor, but was active in Kent and Surrey.[4] The main body of the map carries only numbers, keyed to a table of field-names and acreages. The Long Man is drawn in plot 2, 'Court Laine with the Great Sheep Down', on the sheep down, Court Laine being an arable field below, next to the road to Litlington. It has no caption; nor does the bird's-eye view, in the margin, of Wilmington Court Farm from the south, showing the church, the farmhouse, the ruinous hall of the priory and several detached farm buildings.This was probably added to record the farm's composition, rather than out of antiquarian curiosity.

Rowley's task was to map his client's estate at Wilmington and the Long Man was incidental to that task. But as a professional draughtsman working at Wilmington for several days, he must have been able and inclined to attempt an accurate representation—which he sketched on the map in pencil, presumably following field notes, and then inked in. The figure's width is exaggerated, in that at the given scale the distance between the staffs is about 200 feet, compared with about 115 feet today. The ratio between this width and the height of the staffs (today 231 and 235 feet) is 1:1.6, compared with 1:2 as measured on the ground slope, 1:1.88 if reduced to a horizontal plane on a map and roughly 1:1 as seen from the farm buildings.[5]

Hitherto the earliest known representation of the Long Man has been the drawing in the collections made by Sir William Burrell (1732–97) (Fig. 3).[6] It carries the caption: 'The above is a Sketch of a rude figure cut out in the Chalk 80 feet high on the side of the Downs opposite Wilmington priory, the Spot being covered with grass may be plainly discovered in Summer by the colour of the Grass'; '80 feet' must be an error for '80 yards'. It is undated, but immediately before it on the same folio is the monumental inscription to the vicar who died in 1779, and the note on the church and the extracts from the parish register indicate that (as he then was) Dr William Burrell visited Wilmington in the summer of 1781.[7]

Fig. 1. The Long Man in 1918, an aerial photograph (Sussex Archaeological Society, Misc. 1/24)

The first published description appeared in Royer's local guidebook of 1787:[8]

> On the side of a hill is the figure of a man, eighty yards in length, which, by the different shades of grass, each hand appears to grasp a staff in a parallel direction with the body.

The Rev. Stebbing Shaw stayed with his friend James Capper, vicar of Wilmington, in November 1'790 and published a fuller account:[9]

> On one side of [the south Downs] is a curious representation of the figure of a man in the different tincture of the grass. The length of the figure is 240 feet; and each hand grasped a scythe and rake in a parallel direction with the body; but these latter are not so visible; the whole shall be shewn in a picturesque view of this place in the future. This, no doubt, was the amusement of some idle Monk belonging to the neighbouring cell. It is formed by a pavement of bricks underneath the turf, which gives it this difference of colour. In time of snow it is still more visible.

From Royer the Long Man entered the tourist literature, featuring for example in the 1868 edition of *Murray's Handbook*, on the excursion from Berwick Station. Indeed, the reasons for marking out the figure with bricks in 1873–74 were later stated to be both strict preservation of the outline, and rendering it visible at all times of day, as many visitors to the district in the middle of the day did not like to go home without having seen anything.[10]

It was through Shaw that the Long Man entered the antiquarian literature. Gough copied him for the 1806 edition of Camden's *Britannia*, omitting that the scythe and rake were 'not so visible'. M. A. Lower copied Gough. The next first-hand descriptions, by Horsfield (1835) and Cooper (1851), both mention only staffs and that the figure was marked by a slight indentation in the turf and most clearly seen from a distance, particularly with snow on the ground or, said Cooper, in a strong

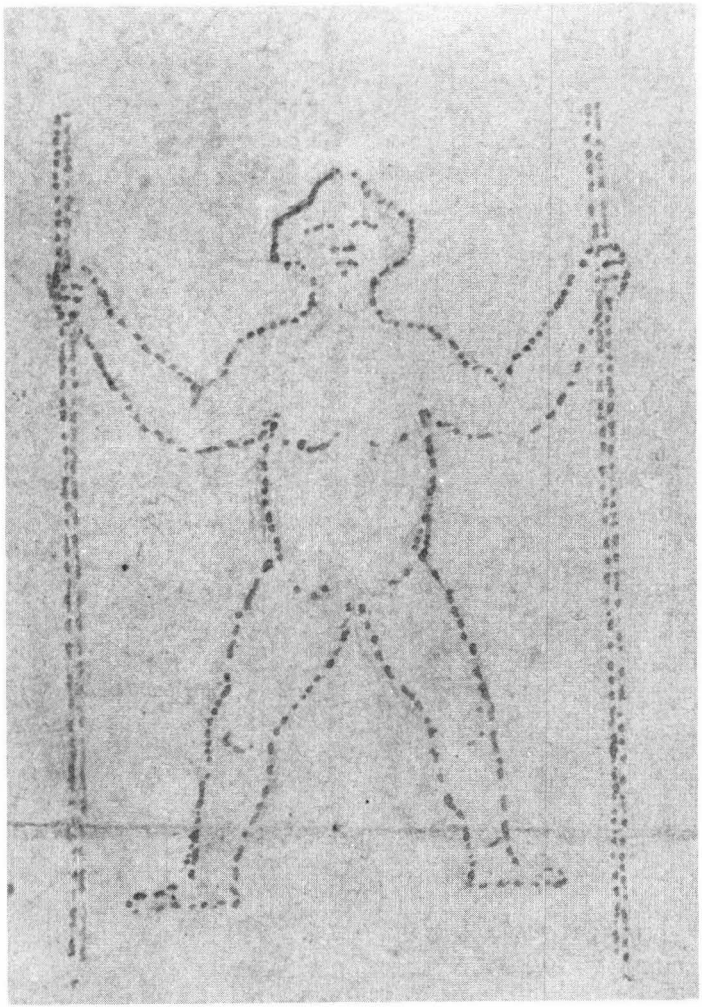

Fig. 2. The Long Man in 1710, by John Rowley (Devonshire Collections at Chatsworth House, Map 4108)

Fig. 3. The Long Man in 1781, by William Burrell (British Library, Add. MS. 5697, f. 342v.)

side light, in morning or evening; Horsfield rightly doubted whether it was paved. That it was the work of idle monks was the only explanation offered until 1873.[11]

Six points arise from Rowley's drawing. First, the pecked lines suggest that he saw the shadows cast by indentations in the grass or a different colour of grass produced by a lesser depth of humus, rather than a clear outline in chalk or subsoil which he would more probably have shown by solid lines.

Second, the bodily features. Surveying the figure in 1918, Flinders Petrie found that 'the eyes are marked by plain hollows; the nose is a boss, possibly with recesses for the nostrils; the lips are a long boss of turf'. These features can be seen on an aerial photograph of the same year (Fig. 1); George Marples plotted them in 1936. But they could easily have been added by pranksters; and subsequent writers have been sceptical.[12] Rowley showed eyebrows rather than eye sockets. The lower edge of breasts, the line of the groin and the kneecaps emphasise the figure's nudity. However, Rowley was not working from a clear image for the main outline and the terracettes formed by soil creep could easily have misled him into seeing more minor features than were present. A photograph of 1874 suggests that, as would be expected, terracettes covered the whole hillside; but by 1918 (Fig. 1) visitors had trodden them out over much of the turf both within and around the brick outline. The movement of the surface of the steeper north-facing Downs is probably fast enough for the features observed by one generation to disappear within a couple of generations.[13]

Third, the impression is of a masculine rather than feminine figure, particularly on account of the narrow hips, much narrower than in the 1873 outline. However, the Long Man invites comparison with the Cerne Abbas Giant whose erect penis and testicles leave no doubt as to gender. These were clearly shown in the first published illustration in 1764, but were omitted in all those appearing between 1774 and 1918, even to the extent of retouching an aerial photograph.[14] In Burrell's drawing the Long Man is clothed, and in deference to contemporary standards of public decency any genitals detectable in 1873 would have been omitted from the brick outline. But Rowley in 1710 is much less likely to have been inhibited from portraying genitals and we can infer that none were visible.

Fourth, the position of the legs and feet. Those who drew sketches in 1850 and 1873, the latter immediately prior to the figure's delineation with bricks, were unable to detect traces of feet and showed none. As restored, both feet pointed to the figure's right, or east, side. In the 1874 photograph, taken immediately after the bricks had been laid, a left leg and foot pointing north-west are visible.[15] Three witnesses who, writing at least 25 years later, considered the restoration mistaken, claimed that the figure was previously 'standing on his toes', that it was coming straight forward and that the feet pointed downwards in line with the form—as if, perhaps, the feet pointed north-west and north-east.[16] Rowley offers strong support, along with Burrell, for the left foot pointing west. Both Rowley and Burrell show the legs as slightly flexed, consistent with a figure standing still with feet pointing outwards; it is difficult to be sure whether either intended the figure's right side to be slightly further forward.

Fifth, the rake and scythe. Rowley offers no support for these. From Shaw's description of 1790 it can be inferred that scythe and rake were part of local legend—to which Burrell succumbed. He may have drawn each staff as a double line for emphasis, rather than because it appeared as two lines in the grass. The eye of faith can see a scythe pointing towards the shoulder, in a pair of converging terracettes in the 1874 and 1918 photographs (Fig. 1). James Levett in 1873 claimed that he had plainly seen the outline of a cock cut in the hillside to the right of the figure.[17]

Sixth, the shape of the head is sufficiently distinctive, but without obvious meaning, for it to record what Rowley saw rather than to be artistic licence. It may afford comfort to proponents of an Anglo-Saxon origin for the Long Man, as a helmeted war-god (but see Richard Coates' note below on the place-name evidence). They can also point to recent research which has highlighted the concentration of early Saxon settlement on the Downs between the Ouse and Cuckmere Rivers.[18]

The similarities between Rowley's and Burrell's drawings are striking. Though implausible as the representation of a hill-figure, Burrell's drawing emerges with reinforced credibility, and doubts about what the 1873 outline recorded are increased. Rowley's drawing is claimed as the earliest known attempt to record an English hill-figure as it looked.[19]

THE SILENCE OF THE DOCUMENTS

Now that we know that the Long Man was extant in 1710, it is salutary to reflect on the silence of other 18th-century records. Although the vicar, James Capper, may have pointed it out to both Burrell in 1781 and Shaw in 1790, his sister, who stayed for nearly a year in 1781–2, failed to mention it in her brief journal of local walks and visits.[20] Nor did the Long Man take the attention of Burrell's fellow Sussex antiquarians, the Rev. William Hayley (1714/15–89) and John Elliot (1725–82).[21] Eastbourne and Lewes lay on a frequented tourist trail, but travellers had a choice of three routes. The most northerly, along the scarp-foot through Folkington, gave a clear view of the Great Sheep Down from the road south of Wilmington, towards Longbridge. The hilltop route, the principal one for business travellers and today's South Downs Way, passed above and south of the site before descending to Longbridge and did not give a good view. The coastal route attracted tourists to Beachy Head, and so to Exceat and Seaford; by that travelled John Macky (August 1713) probably and John Whaley (August 1735) certainly. George Vertue in the Earl of Oxford's party (September 1738) more likely took the hilltop route.[22] Although Jeremiah Milles (September 1743) noted both the Roman remains at Eastbourne and barrows on the Downs, and Richard Pococke (September 1754) wondered whether Belle Toute hillfort was William the Conqueror's camp (and the next month viewed the Cerne Abbas Giant), neither was evidently seduced to turn from the Exceat route by reports of the Long Man.[23] However, like most tourists they were strongly influenced in what they visited by what they had read in books. As John Aubrey had not fulfilled in the 1670s his intention to follow up his *Perambulation of Surrey* with one of Sussex, James Douglas, in the second decade of the 19th century, was the first to give systematic attention of the county's archaeology.[24]

If literary records are silent, what of administrative ones? The Long Man does not appear on Richard Budgen's map of the manor in 1725. His bird's-eye view of the priory, also dated 1725, is antiquarian rather than a record of farm buildings and maybe a companion sketch of the Long Man has been lost. Nor does it appear on Peter Potter's survey of 1801, on which the 1839 tithe map was based.[25] The Great Sheep Down was part of the demesne of the manor of Wilmington, but, as the manor's only sheep down, the freeholders and copyholders of the manor evidently had stints on it; and the lord seems not to have started buying up tenements until the 1710s.[26] Such common rights were probably regulated through the court baron, but the only recorded instance was in 1617, when the tenants agreed that the stint should be set at 10 sheep for each wist of land. No obligation is evident, such as fell on customary tenants of neighbouring arable fields to maintain the White Horse at Uffington.[27] Surviving from the 18th century are many letters and accounts from the estate stewards who were responsible for day-to-day dealings with the tenant farmer of the demesne and with the manorial freeholders and copyholders; these were sorted, filed and carefully read by Walter Budgen around 1920. It is hard to imagine that they contained references to the Long Man which Budgen did not publish nor even record in his extensive notes.[28] There are no surviving churchwardens' accounts in which we might have found expenditure from parish rates on maintaining the Long Man. The surviving views of frankpledge are silent; but the Long Man was not a point on any road which might have been out of repair. The perambulation of the bounds of the borough of Wilmington in the hundred of Longbridge passed 'Man's Basher' and 'Walking Poles', but alas these were near the river west of the village.[29]

If surviving records from a period at which the Long Man was visible are silent, it must be unsound to draw any inference about its date from the silence of earlier (and less plentiful) records. William Camden who passed close by *c.* 1580 was attracted to sites associated with the history of the nation. John Norden, *c.* 1595, noticed no field monuments. Lieutenant Hammond, riding the summit of the Downs in 1635, commented only on the view of the Weald.[30] Records of proprietors and occupiers are minimal for the period up to the dissolution of Wilmington Priory in 1413, and I have not been able to add to those identified by Budgen;[31] scarcely any early records of the estates of the Dean and Chapter of Chichester survive; and after the manor passed into lay hands (the Sackvilles of Buckhurst and Knole from 1565 to 1661, then the Comptons of Castle Ashby until 1782), only from the 18th century is there any quantity of records.

The poverty of documentary evidence is paralleled at Cerne Abbas whose Giant entered the antiquarian literature rather earlier, in 1742. At that time this Giant was evidently visible as a chalk outline, rather than a mere shadow in the grass, so either was a recent creation or was being cleaned. Yet, despite a more promising array of records, the only earlier, administrative, reference is in the churchwardens' accounts, on 4 November 1694, 'for repaireing of ye Giant 3*s.* 0*d.*' Perhaps the churchwardens' and overseers' accounts are jumbled together and the parish poor were being employed on public works.[32]

THE DEBATE OF 1923

Hill-figures have attracted popular interest and, alas, some poor scholarship, often because the earlier literature has not been followed back fully.[33] On the Long Man more recent writers have relied on Sidgwick's 1939 summary of 'the known facts' and 'the numerous theories of origin', without going back to his main (and inadequately referenced) source, namely a debate initiated by Arthur Beckett in the columns of *The Herald Magazine*, which was issued as a supplement to the *Sussex County Herald*.[34] Items appeared each week from 21 July to 10 November 1923 and on 19 January 1924, from some 20 contributors, some of whom in turn referred imprecisely to other material.

First, there are notes and newspaper cuttings and offprints collected by the Rev. W. D. Parish, vicar of Selmeston, at the time of the 1873–74 restoration.[35] The cuttings fill out Holden's account of the inception of the restoration and show that local action was stimulated by J. S. Phené's talk to the Royal Institute of British Architects in May 1873, and that the appeal for funds was launched in late August. Phené turned the first sod in mid-September.[36] Second, other records of local folklore about the Long Man were collected by J. P. Emslie in 1875, 1890, 1891 and 1905.[37]

Third, two contributors to the debate in *The Herald Magazine* referred to a report of a Special Committee of the Sussex Archaeological Society in 1889–90. In 1889 the vicar of Wilmington, W. A. St John Dearsley, drew attention to the Long Man's condition: it was suffering from the depredations of time, with weeds invading the dry bricks and rabbits dislodging them, and of 'excursionists', who rolled bricks down the hill. The Duke of Devonshire was prepared to support whatever scheme of repair the Society's Committee put forward. The first proposal was to remove the bricks and to dig trenches down to a sound bed of chalk, to restore what was deemed to be its original form; the trenches would then be periodically scoured. Experimental trenches, however, revealed that the soil beneath the turf was too deep for the outline of the figure to be trenched to the chalk. The Committee was divided between those who would replace the bricks and those favouring in their place a shallow trench, two foot wide at the top and narrowed at the bottom, filled with 9 inches of rammed chalk; it decided in November 1889 that the figure had never been trenched to the chalk, and that as a temporary and experimental measure where the bricks were missing a trench be dug to the width of the bricks and filled with rammed chalk. Dearsley was put in charge, and he asserted in print the following year that the results were successful. But the Committee made fruitless attempts to get any report from him, and in June 1891 it concluded that, although not executed as instructed, the experiment had been a failure. It settled for reinstating bricks which should be periodically cleaned and whitewashed. Mr J. S. Ade, a local farmer who had known the Long Man for nearly 70 years, recommended white glazed bricks, possibly cemented in. He was commissioned to put only repairs in hand.[38]

Public interest engendered by *The Herald Magazine* may well have encouraged the Duke of Devonshire to convey the site of the Long Man to the Sussex Archaeological Trust in 1925. The Trust's architect W. H. Godfrey found the figure's condition on the whole sound, and he may have instigated the practice of cementing loose bricks back in place. During the Second World War, they were concealed by green paint or other colouring matter. The concrete blocks laid in 1969 were intended to reinstate the outline marked by the bricks, but a survey in September 1990 found three yellow bricks apparently remaining from the 1873–4 outline and suggesting that the 1969 blocks were not all placed where the bricks had been.[39]

THE LONG MAN AND SOME LOCAL PLACE-NAMES

by Richard Coates

The Long Man of Wilmington has no current name except *The Long Man of Wilmington* which de St Croix reported in 1875 as the name used locally. *The Wilmington Giant* was the name used in archaeological circles, perhaps by analogy from the Cerne Abbas Giant, but has fallen into disuse in the present century. A note by the Rev. William D. Parish in his notebook (written principally in 1873, but this particular note is an interpolation) says, on the testimony of John Guy, then aged 82, that around 1800 the monument was known as *The Green Man*; but this is uncorroborated.[40] No other alternative has ever been recorded. Nothing would therefore need saying on this topic if it had not been for an article by Jacqueline Simpson.[41] She claims (a) that the name *Wandelmestrei*, denoting in Domesday Book (D.B.) one half of the later hundred of Longbridge, of which Wilmington formed a part in medieval times and after, contains an allusion to the Long Man, and (b) that it can be relevantly linked with the name of *Wandlebury*, a hillfort in Stapleford (Cambridgeshire). This is associated, like Wilmington, with chalk-cut hill-figures. The existence of the Wandlebury figures is documented in the 16th and 17th centuries (e.g. by Layer in 1640), but their precise nature is very controversial, especially in view of the extraordinary appearance of the shapes which the excavator, T. C. Lethbridge, claimed to have discovered.[42]

The relation between the place-name *Wandlebury* and the existence of hill-figures I discussed in an article published in 1978; I claimed that the name of Wandlebury was more likely to have contained a personal name than that of a mythic personage **Wændel*, a probabilistic conclusion by which I stand.[43] That article is used as a platform by Simpson in her article; she chooses to emphasize my comment that the use of a name which was that of a mythic-divine being 'cannot be ruled out'. (It is worth remembering that, in various cultures, many human beings have borne such names as *Dana*, *Thor*, *Jesus*, *Shiva*, and so on). It is true that the partial similarity of the names *Wandelmestrei* and *Wandlebury* (*Wendlesbiri* in a 17th-century MS. of the 10th-century Chronicle of Ramsey),[44] and indeed the similarity of these to others attaching to places of high folkloric significance, is very provoking and tantalizing, but any claim of a connection needs to have thorough linguistic and historical grounding. I shall show that the necessary grounding is lacking for Simpson's claim in both these departments. (N.B. the asterisk* indicates an unattested form whose possible former existence can be inferred from other considerations.)

Even presuming the D.B. form really to derive from **Wændelhelmestrēow* 'Wændelhelm's tree' (on which see further below), Simpson's interpretation is philologically unsound. She claims that **Wændelhelm* is to be interpreted as 'helmeted Wændel', and adduces the 1850 engraving to support her view.[45] But *-helm* is a well-known Old English (OE) personal-name second-element (even in Sussex, as in *Brihthelm*, recorded in *Bright(helmst)on*, and *Sigehelm*, recorded in *Selmeston*), and the presumption must be that that is what it is in this name too. In any case, the element cannot be a specifier (i.e. a word specifying which or what sort of *Wændel* is involved), because such things precede the word for the thing which is specified in Germanic languages. Though the relevant evidence is restricted to Scandinavian, it would not be foolish to expect *Helm-Wændel* if 'helmeted Wændel' were the meaning. Some Scandinavian names are convincingly explained in this way, with the specifier coming before the personal name proper, as in *Billockby* (Norfolk), apparently 'randy Áki's farm' (Scan. *Biðil-Áka býr*).[46] But this is entirely in accordance with the grammar of name structure in Scandinavian. At best, an OE **Wændel helm* might include a metonymic by-name. We would then have to do with a certain 'Wændel the Helmet'. But such by-names (for instance Hereweard *waca* 'vigilant', Eadric *strēona* 'acquirer') are pretty rare in OE; and even the ones just cited are not grammatically exact parallels for **Wændel helm*; one is not a noun, and the one that is is not used metonymically but as a straightforward descriptive term. Moreover it is striking how many of such by-names in Anglo-Saxon times are of Irish or Danish persons: the majority. Even if such a by-name were likely in English, I would find it impossible to imagine that one could be built into the supposed ancestor-form of the place-name under discussion because the

shape of **Wændelhelmestrēow* would (a) require one in apposition to a personal name, and (b) require it, but not the name which to it is in apposition, to be in the genitive case. No instance of a name plus a by-name in a place-name formulated in English is known to me, and therefore, of course, no instance of the mismatch of case between the names.

If such a by-name is not involved, the situation is difficult for the supposed personal name which must, by default, be implicated. The name *Wantelmus*, latinized in form, appears in the *Liber Vitae* of Durham, and clearly suggests that the name **Wandhelm* was known in England. The structural possibility of **Wændelhelm* is suggested by the existence of the names *Wendelburh* in the *Liber Vitae* of Hyde and *Uendilbercht* in that of Durham, but there is no actual attestation.[47] On this basis, it is difficult to share Mawer and Stenton's opinion that **Wændelhelm* is likelier in *Wandelmestrei* than **Wandhelm* is.[48]

Whatever the truth about the original outline of the Long Man, therefore—whether he wore a helmet or not—the form of the name of the D.B. hundred will not settle the question in Simpson's favour. And even if he were called by the name of possible mythic import **Wændel*, his name does not recur in the hundred-name, which probably contains **Wandhelm*.

We also need to take into account the name of Wilmington itself. The OE masculine personal name *Wilm(a)* from which it derives seems to be a short form of *Wighelm*. If this is so, the geographical association of two *-helm* names is entirely consistent with Anglo-Saxon dynastic naming practices, where a name-element could be passed down through the generations. There is, therefore, no reason why *-helm* should bear a meaning here that it does not bear elsewhere in OE personal (and therefore place-) names.

It should not be overlooked, however, that *Wilm(a)* could be for *Wilmund* (attested in Sussex, inferrable from a minor name recorded in 1318, location uncertain)[49] or *Wilmær*, and therefore totally irrelevant to *-helm*.

Simpson's historical association of *Wandelmestrei* and the Long Man is itself open to question. D. B. records Wilmington as *Wilminte*, *Wineltone*. The first mention is of land of the abbot of Battle, and it is not assigned to a hundred. The second mention is of the abbot of Grestain's land.[50] This is indeed in the later Longbridge hundred, but in that constituent half of it which D.B. calls *Avronehelle*. That is, there is no known early legal or tenurial link at all between *Wandelmestrei* hundred and Wilmington. The appearance of such a link arises only because the old hundred and the parish containing the Long Man both eventually finished up within the later Longbridge hundred. No support for Simpson's view of the relation between the hundred name and the Long Man emerges, therefore, from a consideration of the historical relation between the places involved.

Lastly, *trēow* names with a personal-name first element are common. There are far too many of them for these names all to refer to mythic individuals, and since the structure (personal name *+trēow*) is the norm, it is open to serious doubt whether any of them has mythic reference. If it were not for the Sussex D.B. hundred name *Ghidenetroi* (OE *gydena trēow* 'goddesses' tree'[51]—which does not, of course, contain a proper name), I would be totally confident that a man with the rare but regularly formed name *Wandhelm*—a man of normal human stature—had once been associated with a tree in the Wilmington area, but not in Wilmington itself or its hundred.

The only defensible conclusion, therefore, is that Simpson is wrong in her belief that the name of *Wandelmestrei* hundred has mythic reference, that it alludes in any way to the Long Man, and that there is any direct connection at all between the location of the giant and that of the hundred.

ACKNOWLEDGEMENTS

The illustrations appear by permission of the Sussex Archaeological Society (Fig. 1), the Trustees of Chatsworth Settlement (Fig. 2) and the British Library (Fig. 3). I am most grateful for assistance to Peter Day, Tom Askey and Ian Fraser-Martin at Chatsworth, and to Jane Bellam, Richard Coates, Fiona Marsden, Christopher Whittick and Rendel Williams.

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Notes

[1] E. W. Holden, 'Some Notes on the Long Man of Wilmington', *Sussex Archaeological Collections* (hereafter *S.A.C.*) **109** (1971), 37–54. His working notes are Sussex Archaeological Society (hereafter S.A.S.) Library, Holden papers, 4D/9, 10 and 11; see also S.A.S. office file on the 1969 repairs. The most important earlier account is M. Marples, *White Horses & other Hill Figures* (1949), 180–203; the most recent contribution to the debate on the Long Man's origin is R. Castleden, *The Wilmington Giant* (Wellingborough, 1983).

[2] Devonshire Collections at Chatsworth House, Map 4108.

[3] The map is not listed in W. Budgen, 'Deeds and Documents belonging to His Grace the Duke of Devonshire at Compton Place, Eastbourne' (TS, *c.* 1920). C. Hussey, *English Country Houses, Early Georgian 1715–1760*, rev. ed. (1965), 87–96, for Spencer Compton's rebuilding of Compton Place.

[4] P. Eden, *Dictionary of Land Surveyors* (1979), 219.

[5] I have taken today's measurements from Sir Flinders Petrie, *The Hill Figures of England*, Royal Anthropological Institute, Occasional Papers No. 7 (1926), 7–8 and plate I; M. S. Drower, *Flinders Petrie, A Life in Archaeology* (1985), 339; Castleden, 24–25.

[6] British Library (hereafter B.L.), Add. MS. 5697, f. 342 v., as refoliated. The only photographic reproduction hitherto has been by E. Heron Allen, 'The "Long Man" of Wilmington and its Roman Origin', *Sussex County Magazine* **13** (1939), 655, 657, with the wrong reference, probably by reason of copying E. C. Curwen in *S.A.C.* **69** (1928), 99. For Burrell, J. H. Cooper, 'Cuckfield families, III', *S.A.C.* **43** (1900), 38–40.

[7] B. L., Add. MS. 5697, ff. 344, note on the church dated August 1781, and 345, note that the most recent event in the register was dated 13 May 1781; the original register, East Sussex Record Office (hereafter E.S.R.O.), PAR 510/1/1/2, has the next in time as on 4 July, but was evidently not kept up-to-date.

[8] [J. Royer], *East-Bourne, being a Descriptive Account of that Village . . . and its Environs* (1787), 115.

[9] [S. Shaw], 'Excursion from Lewes to Eastbourne in Sussex', *The Topographer* **3** (1791), 376. On Shaw, 1762–1802, see *D.N.B.* Shaw's picture of Wilmington Priory from the south-east appeared in *Topographical Miscellanies* **1** (1792).

[10] *Handbook for Travellers in Kent and Sussex* (1868), 320. S.A.S., Committee minute book 1888–95, A.G.M. 1890, 1892. Almost the same words as Royer's appear in, e.g., *Homely Herbert's Eastbourne Guide* (Eastbourne, 1862), 50.

[11] William Camden, *Britannia*, ed. R. Gough **1** (1806), 294. M. A. Lower, *Sussex* . . . (Lewes, 1831), 245. T. W. Horsfield, *History, Antiquities and Topography of the County of Sussex* **1** (1835), 326. G. M. Cooper, 'Illustrations of Wilmington Priory and Church', *S.A.C.* **4** (1851), 63–64; this paper, illustrated with numerous drawings, was read at Eastbourne in May 1850 (p. viii).

[12] Petrie, 7. Marples, 11, 181. J. B. Sidgwick, 'The Mystery of the "Long Man"', *Sussex County Magazine* **13** (1939), 408. Castleden, 90–91. Holden, pl. II, for the 1874 photograph (contemporary print in W. D. Parish, 'Wilmington—the Giant 1873', MS. notebook in S.A.S. Library; print from modern negative in Holden papers, 4D/11).

[13] I do not know of any systematic measurements over time, but see J. E. Bellam, 'Preservation of the Long Man of Wilmington', unpub. report, S.A.S., 1990, for movement of the 1969 blocks and T. Watson, 'Terracettes', unpub. B.Sc. dissertation, Univ. of Sussex, 1985, for local fieldwork.

[14] L. Grinsell, 'The Cerne Abbas Giant: 1764–1980', *Antiquity* **54** (1980), 29–33.

[15] Holden, 44–47; pl. II.

[16] Bunston (1912) and Woodman (1900) as cited in Holden, 47–48; and Mrs Ann Downs (born 1840/41) who can be identified as 'Octogenarian' writing in *The Herald Magazine* (supplement to *Sussex County Herald*), 10 Nov. 1923, 4, and recalling 1844–64.

[17] Parish, MS. notebook in S.A.S. Library.

[18] C. Hawkes, 'The Long Man of Wilmington: A Clue', *Antiquity* **39** (1965), 27–30; for another possible figural parallel, from Hough-on-the-Hill, Lincs., see K. R. Fennell, 'The Loveden Man', *Frühmittelalterlichen Studien* **3** (1969), 211–15. M. G. Welch, *Early Anglo-Saxon Sussex*, BAR British Series **112** (1983), 217–20, 255–9.

[19] D. Woolner, 'The White Horse, Uffington', *Trans. Newbury District Field Club* **11** (1965), 32–33, for earlier but crude representations.

[20] [K. Backhouse (ed.)], *A Memoir of Mary Capper, late of Birmingham, a Minister of the Society of Friends* (1847), 54–63.

[21] B.L., Add. MSS. 6343–61. S.A.S. Library, Elliot papers; Eastbourne Public Library.

[22] Richard Budgen, *An Actual Survey of the County of Sussex* (1724), which is dedicated to Spencer Compton. J. Macky, *A Journey through England, in Familiar Letters from a Gentleman here, to his Friend Abroad* (London: T. Caldecott, 1714), letter VI. B.L., Add. MS. 5957, ff. 11–12; Loan 29/232, ff. 384–6, 400.

[23] B.L., Add. MS. 15776, ff. 213–16. J. J. Cartwright (ed.), *The Travels through England of Dr. Richard Pococke . . .* **2** (1889), 102, 143–4.

[24] M. Hunter, *John Aubrey and the Realm of Learning* (1975), 72n. R. Jessup, *Man of Many Talents . . . James Douglas* (1975), ch. 9 and 10.

[25] E.S.R.O., AMS 5879/4, photocopy of 1725 map (I have not been able to locate the original at Chatsworth House); PAR 510/7/1 (1781 copy of sketch of the Priory). Devonshire Collections at Chatsworth House, Map 4103. E.S.R.O., TD/E117.

[26] E.S.R.O., ADA 45 (summary rental, 1618–19); SAS/CP 218, 221, 225, 226 (detailed rentals, 1673, 1703, 1733, 1738); A2327/2/7/1, p.164 (court baron).

[27] E.S.R.O., AMS 5441 (court book, 1606–17); also ADA 42 (1637–48); A2327/2/7/1–3 (1687–1805). Some records of the manor were destroyed in the Fire of London: B.L., Add. MS. 39504, f. 316. Woolner, 30.

[28] Devonshire Collections at Chatsworth House, Compton Place Papers, boxes L and P; I have consulted these, but not as thoroughly as Budgen. S.A.S. Library, Budgen papers, notebooks 86–88, 117, 119, 125; E.S.R.O., SAS/accn. 1402.

[29] E.S.R.O., A 3597, for 1575–81, 1587–91, 1640–56 and 1731–46; ASH 1171A (bounds of the Duchy of Lancaster hundreds and their constituent boroughs in 1579, 18th c. copy). A 1563 survey (Public Record Office, DL 42/112) does not include borough boundaries.

[30] Camden, **1** (1806), 271. Northamptonshire Record Office, Finch-Hatton MS. 113. L. G. Wickham Legg (ed.), 'A Relation of a Short Survey of the Western Counties', 29, in *Camden miscellany* **16** (1936).

[31] W. Budgen, 'Wilmington Priory: Historical Notes', *S.A.C.* **69** (1928), 29–52.

[32] J. H. Bettey, 'The Cerne Abbas Giant: the Documentary Evidence', *Antiquity* **55** (1981), 118–21. The 1694 payment has been noted more recently (V. Vale, *Times Literary Supplement*, 4 Sept. 1992, 15), in Dorset Record Office, PE/CEA/CW2, and I am grateful to Dr Bettey for checking it for me.

[33] e.g., P. Newman, *Gods and Graven Images. The Chalk Hill-Figures of Britain* (1987).

[34] Sidgwick (1939), 408–20. E.S.R.O. has the relevant issues of the newspaper. E. C. Curwen, 'The Antiquities of Windover Hill', *S.A.C.* **69** (1928), 98–101, drew on it as well.

[35] W. D. Parish, 'Wilmington—the Giant 1873', MS. notebook in S.A.S. Library, presented to the Society in 1915.

[36] Holden, 43–47. *Eastbourne Gazette* (27 Aug., 26 Nov., 31 Dec. 1873) and *Eastbourne Herald* (23, 30 Aug., 20 Sept., 22 Nov. 1873) in the British Newspaper Library, Colindale, allow the cuttngs to be dated.

[37] [F. Henley, ed.], 'Scraps of Folklore Collected by John Philipps Emslie', *Folklore* **26** (1915), 162–3.

[38] S.A.S., Committee minute book, 1888–95, entries between 21 Mar. 1889 and 24 Mar. 1893. W. A. St John Dearsley, 'The Wilmington Giant', *The Antiquary* **21** (1891), 108–110.

[39] S.A.S., Trust minute book, 13 Oct. 1926. Marples, 183. Bellam, 3.

[40] W. de St Croix, 'The Wilmington Giant', *S.A.C.* **26** (1875), 104. Parish, MS. notebook in S.A.S. Library.

[41] J. Simpson, '"Wændel" and the Long Man of Wilmington', *Folklore* **90** (1979). 25–28.

[42] T. C. Lethbridge, 'The Wandlebury Giants', *Folklore* **67** (1956), 193–203; *Gogmagog: the buried gods* (1957).

[43] R. Coates, 'The Linguistic Status of the Wandlebury Giants', *Folklore* **89** (1978), 75–8.

[44] P. H. Reaney, *The Place-Names of Cambridgeshire*, English Place-Name Society **19** (Cambridge, 1942) 88–9.

[45] G. M. Cooper, 63.

[46] E. Ekwall, *Concise Oxford Dictionary of English Place-Names*, 4th ed. (Oxford, 1960), *s.n.* A. D. Mills, *A Dictionary of English Place-Names* (Oxford, 1991), *s.n.*, offers the same interpretation with more caution.

[47] W. G. Searle, *Onomasticon Anglo-Saxonicum* (Cambridge, 1897).

[48] A. H. Mawer & F. M. Stenton, with J. E. B. Gover, *The Place-Names of Sussex* **2**, English Place-Name Society **7** (Cambridge, 1930), 480.

[49] Mawer & Stenton, 564.

[50] J. Morris (ed.) *Domesday Book: Sussex* (Chichester, 1976), 8, 6; 10, 39.

[51] O. S. Anderson (Arngart), *The English Hundred Names*, 3 vols. (Lund, 1934–6), *s.n.*

Sussex Archaeological Collections **131** (1993), 139–151

THE MEDICAL PRACTITIONERS OF WESTERN SUSSEX IN THE EARLY MODERN PERIOD: A PRELIMINARY SURVEY

by D. A. Beaufort

Evidence on medical personnel from the late 16th century until the onset of the English Civil War survives in Susex and probably elsewhere in rural England mainly in ecclesiastical records, since by the 1512 Act of Parliament (3 Henry VIII c.11) the Church was empowered to license medical practitioners and thus control their activities under canon law. By this means both witchcraft and charlatanism were to be eliminated using the existing parochial network with its machinery for accountability to the church courts. The research material not only illustrates the availability of medical treatment by identifiable practioners, but also casts light on various issues such as the role of women, clerics and cunning folk in the field of medicine at this time. It also demonstrates how far an assessment of provincial physicians is borne out by local figures and to what extent medical personnel were educated or prosperous. Finally the number of practitioners per head of population is estimated and compared to the figures produced by a parallel case study.

The diocese of Chichester comprises the archdeaconries of Lewes in eastern Sussex and Chichester in the west, the latter being the focus of this research. The geographical area concerned therefore relates not to the present administrative county of West Sussex, but to that major part outlined by the pre-1929 boundaries of the Archdeaconry of Chichester, the eastern confine of which lay about three miles west of the Adur. Since the major source of evidence is provided by the church courts, it is subject to the usual limitations encountered in official records, including poor or uneven documentation; moreover as the church courts were located in Chichester, the city healers may be more fully represented than those outside. The Sussex terrain varied from southern coastal plain to the band of chalk downs giving way to the more northern forests and farmlands of the Weald; there was access to both London and foreign trade via the south coast which may have influenced the development of many services including medical practice. The overall population of England during this period was undergoing a general increase with regional and chronological variations: the estimated figure of 2.7 millions in 1541 almost doubled to 5.1 millions by 1641.[1] The population figure for western Sussex is difficult to assess, but that of the Cathedral city and county town of Chichester is estimated at 2,500 in 1625,[2] whilst population density in the combined 297 parishes of eastern and western Sussex was slightly above the national county average.[3]

Within the sources themselves the classification of personnel is unreliable since it was often the public that furnished a practitioner's title and the term Doctor which was increasingly used for medical personnel often led to confusion with Doctors of Divinity or Law.[4] There was also a blurring of distinction between types of practice, and healers often took a flexible approach to their medical duties.[5] But despite all difficulties, there are sufficient numbers of identified healers to provide a general picture of where a patient in western Sussex around 1600 might seek medical treatment. The location and types of healers recorded as practising between approximately 1579 and 1642 are displayed on Fig. 1 and their numbers shown in the table; for a focus on a specific town in a single year, the 1642 plan of Chichester offers a detailed guide to medical personnel (Fig. 2).[6]

Although the three main categories of medical practitioners were physicians, barber-surgeons and apothecaries, midwives will be examined first, for despite their being only on the periphery of the medical establishment they played a vital role in society and there is a useful quantity of detailed information. This was provided by the parish churchwardens of 1579 who were then obliged to submit reports to the ecclesiastical authorities on parochial matters, including local midwives. Only 46 out of 133 parishes in the Chichester Archdeaconry complied,[7] but many parishes were tiny even when amalgamated, such as Wiggenholt cum Greatham. However, of the 55 midwives recorded, only 16 (29%) were definitely licensed or authorised, 25 were unlicensed or unauthorised

Fig. 1. Medical personnel in the Archdeaconry of Chichester prior to 1642: map

Key to map:
♣ Physicians
♦ Barbers/surgeons
♠ Apothecaries
♥ Midwives
A Acting Midwives
▲ Cunning Folk
† Clerics

Area unknown: ♣ ♦ ♦ A

TABLE 1
Medical personnel in the Archdeaconry of Chichester prior to 1642

Location	PH	BS	AP	M	AM	CF	CL	TOT	Location	PH	BS	AP	M	AM	CF	CL	TOT
Aldingbourne				1				1	Lyminster				3				3
Arundel	1	2		1				4	Midhurst	1	2		1				4
Billingshurst	1							1	North Chapel				1				1
Birdham				1				1	North Mundham				1				1
Boxgrove				2				2	Nuthurst		1						1
Bury				1		1		2	Parham				1				1
Chichester	14	24	4	3			2	47	Petworth	2	2		4				8
Chidham				1				1	Poling				1				1
Coldwaltham				1				1	Pulborough	1		1	1				3
Compton				1				1	Rusper	2							2
Eartham				1				1	Selsey				1				1
Easebourne				1				1	Shipley				2				2
Eastdean				1				1	Singleton				1				1
East Marden				1				1	Sompting						1		1
East Wittering				1				1	South Stoke				1				1
Felpham				1				1	Steyning				2				2
Findon				2				2	Storrington				1				1
Fishbourne				1				1	Stoughton				1				1
Fittleworth				1				1	Thakeham	1							1
Funtington				1				1	Tillington				1				1
Grayshott (Sy)				1				1	Warminghurst				1				1
Harting		1						1	Warnham	1							1
Heyshott				1				1	Washington				1				1
Horsham	2	5	1	6		1		15	Westbourne		1			1	1		3
Houghton				1				1	West Grinstead		1		1				2
Hunston				1				1	Westhampnett				1			1	2
Iping				1				1	West Itchenor				1				1
Itchingfield				1				1	West Wittering				1				1
Kirdford			1					1	Wisborough Green		2						2
Linchmere				1				1	Woolavington				1				1
Lurgashall				3				3	Area Unknown	1	2			1			4
Subtotal:	18	32	6	39		2	2	99	Total:	27	43	7	69	2	4	3	155

Key to Table:
PH Physicians
BS Barbers/surgeons
AP Apothecaries
M Midwives
AM Acting Midwives
CF Cunning Folk
CL Clerics

(45.5%) and 14 were of unknown status (25.5%). This may indicate that the majority practised merely by popular consent and outside the formal licensing system wherein a midwife, recommended by matrons for her skill and the parish minister for her religious character, swore a 15-part oath administered by the bishop or his chancellor.[8] Alternatively, many unlicensed midwives may have been accountable to an official midwife who under article 14 of the oath swore that any deputy was 'of right honest and discreet behaviour and also apt, able and having sufficient knowledge and experience'; thus a deputy to a licensed midwife did not herself require a licence and when experienced and trusted could continue to practise without one.[9] The evidence of 1579 suggests that a good moral character was more important than practical skill, for the term 'honest woman' with variations of 'good and sound religion' etc., was frequently used whether the midwives were licensed, unlicensed or of unknown status. Some parishes refer to midwives who practised 'for charity sake' indicating a

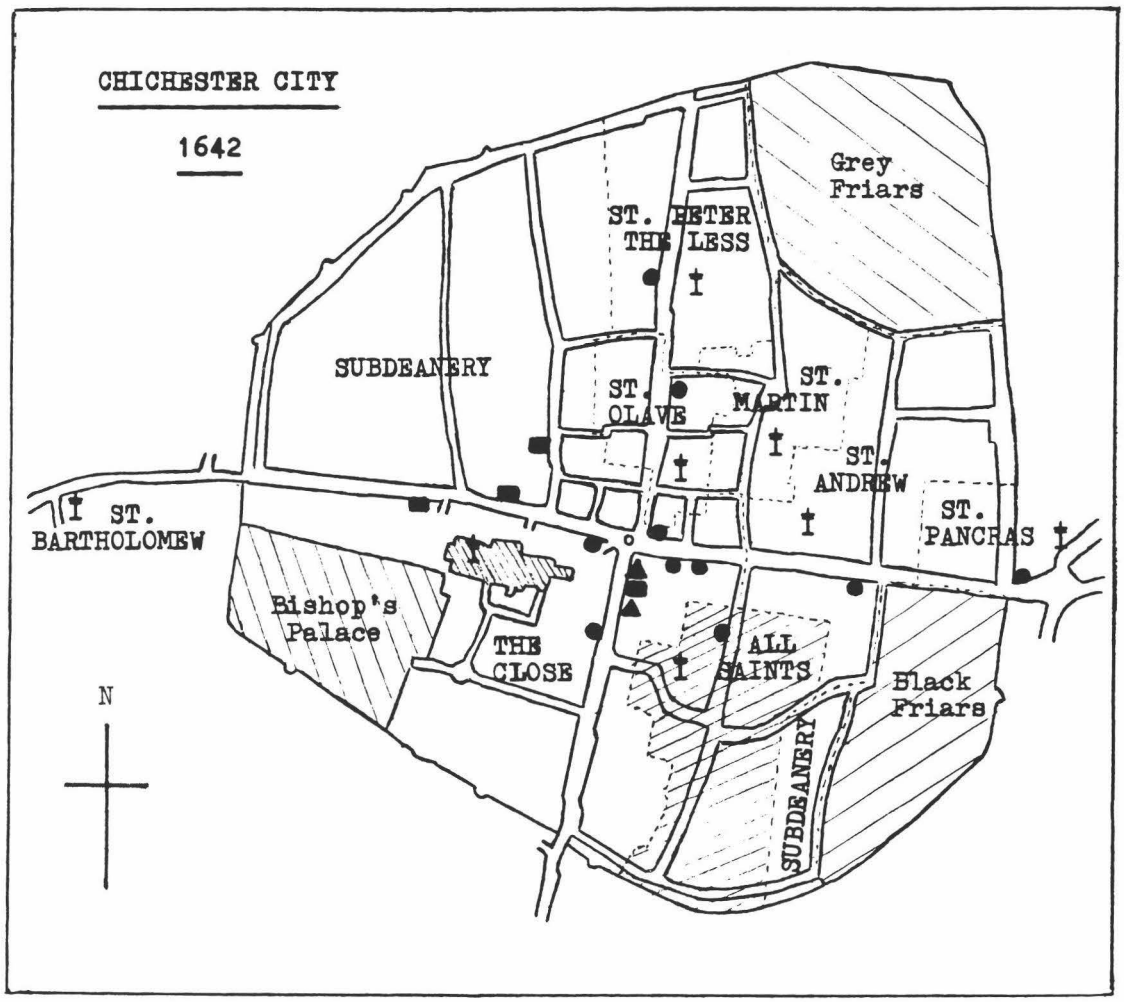

Fig. 2. Evidence of medical practice in the city of Chichester in 1642: plan

Physicians:	Crosfield Thomas		Subdeanery
■	De La Rosier John		Subdeanery
	Howse Anthony		St. Peter The Less
	Lewkenor Gregory	South Street	Subdeanery
Barbers or Surgeons:	Diggons Thomas	North Pallant	All Saints
●	Floyd William	East Street	Subdeanery
	Godman Richard	North Street	St. Peter The Less
	Harmwood Barnard	East Street	Subdeanery
	Parker William		St. Andrew
	Rose William	South Street	Cathedral Close
	Southcott Edmund	West Street	Subdeanery
	Stapler John	North Street	St. Olave
	Teeling Thomas	East Street	Subdeanery
	Tredcraft Henry	East Gate	St. Pancras
Apothecaries:	Little John	South Street	Subdeanery
▲	Peacock Thomas	South Street	Subdeanery

neighbourly and possibly free service. Some midwives deliberately refused to be licensed, perhaps because of the fees, but also perhaps because of the moral pressure imposed on them, such as the Felpham 'honest woman' who was 'not authorised and rather than she will be sworn she will not use it at all'.[10] It was probably the necessity for a midwife as a lay person to be authorised to baptise an infant at risk that first gave rise to the licensing of midwives, for there was little alternative unless a minister could be summoned quickly or a baby allowed to die unbaptised. Inhibitions appear to have been placed on lay baptism in 1577[11] but in 1579 two parishes recorded that the midwife 'meddles not with baptism' (Bury) or 'does not baptise infants' (Woolavington), whereas Aldingbourne, Westhampnett and Pulborough report that theirs did,[12] confirming that the practice continued, at least until then.

Although others were usually present at a birth, the midwife had the official duty of inquisitor on behalf of the Church to prevent foul play such as infanticide or the concealment of a birth, and she was also sworn to extract the name of the father of a bastard. The Elizabethan Poor Law of 1577 (18 Eliz. I c. 3) tightened control on this in order to prevent the encumbrance of destitute children on parish charity; consequently the number of indictments of Sussex mothers in bastard infanticide cases increased by 80% in the next 17 years compared to that of the 17 years prior to 1576.[13] The regulation of social behaviour under the growing Puritan influence was regarded as crucial to the establishment, thus immorality was constantly reported in the churchwardens' presentments betwen 1579 and 1642.[14] Bastardy or illicit pregnancy constituted normally well over 50% of prosecutions in comparative samples of the late 16th and early 17th centuries, but this figure rose to 78% in 1625.[15] When the Stuart Bastard Neonaticide Act of 1624 (21 James I c. 27) made the concealment of any infant death an offence, defining murder as opposed to social expendience, there resulted a fourfold increase in prosecutions,[16] although it is suggested that actual neonaticides numbered as many as two and a half times those recorded in criminal cases.[17] Certainly the Sussex Coroners' Inquests of the earlier period 1485 to 1558 record an unrealistically low number of findings of infanticide, only two in 243 cases, suggesting that compassionate neighbours and jurors were reluctant to aid a conviction.[18] Any person acting unofficially as a midwife was similarly subject to the jurisdiction of the church courts: thus Joan Leare of Westbourne was reported in 1623, not only for harbouring a woman during her presumably illegitimate delivery, but also because she 'suffered her to depart without penance'[19] and the following year Margaret Walker was also 'said to have delivered the bastard child of John Smith'.[20]

At some stage after 1579, the churchwardens' presentments changed their format, being no longer responses to formal questions, but merely accounts of events or misdemeanours considered important enough to report, causing midwife references to virtually disappear. Instead they occasionally surface on a list, such as the four midwives who were attested 'skilled and experienced' by twenty witnesses in response to an official report in 1616 that they (and a Widow Hooker who significantly does not reappear) were practising without authority.[21] Although moral impeachability was still essential to midwives, this seems to reflect popular acknowledgement of practical ability as well as support. Since there was no formal training available to midwives, they learned their trade from other midwives by observation: their status was consequently the lowest in the medical field and strictly speaking their skill had limited medical application. If a natural delivery proved impossible, a surgeon was required to remove the infant piecemeal or to rescue a live baby from a dead mother by Caesarian section. The greatest killer of birthing mothers was puerperal sepsis and since hygiene was not properly understood, mothers too poor to afford a midwife often suffered less risk by giving birth without one.[22] The burial registers of this period rarely recorded the cause or circumstances of death; nor can female burials be reliably linked to infant baptisms. However, the Horsham parish register[23] records six mother and infant burials within a fortnight of each other between 1560 and 1630 (excluding plague years) and only one 'mother with her child, dying in labour'[24] which suggests a relatively low figure. Perinatal deaths were common however,[25] for example Alexander Inge of Horsham lost a wife and unbaptised child in 1613, remarried a year later and lost four more such infants within three years.[26] Nor

did status confer immunity, for the Horsham 'gentleman' George Allyn also lost four newborn infants within three years between 1608 and 1611.[27] Although these infants are recorded as unbaptised, it is unclear whether they were still-born or if a midwife was present but not performing perfunctory baptism.

Occasionally a midwife strayed into another area of medical practice, such as the wife of an Arundel surgeon who appeared in the church courts in 1612 pleading that she was 'accustomed to administering physic to women with child or she hopes in these cases she may do without offence to the law' and the case was dismissed.[28] However, local evidence supports the view that the midwife-witch was largely a myth[29] since not one western Sussex midwife is recorded for involvement in witchcraft, reflecting a midwife's dependence upon public support. However, conformity to the Church of England was not always the case, for a Midhurst midwife was openly listed as 'Rosamund Nevill a papist'[30] indicative of the strength of Catholicism in the area; she may also have been related to William Nevill, Chancellor of Chichester Diocese until his replacement in 1640.[31]

Nevertheless black magic was recorded locally, for six persons appeared in the 1579 presentments for sorcery[32] when there was still popular support for the white magic of healing, despite the Church's hostility to both types.[33] The Chichester records include Agnes Hyberden 'who her neighbours suspect to be a witch' and 'there is a common fame that the wife of John Ditches is vehemently suspected to be a witch' etc., but another account has deeper significance. Agnes Gunnell of Westbourne had been accused in 1574 of using sorcery 'by and with Elizabeth Knight by the confession of the same Elizabeth' to terminate at least one illegitimate pregnancy.[34] The elimination of an unwanted foetus could be attributable to witchcraft, but the practice of abortion seems more likely, and although Agnes was excommunicated in 1580, she was absolved again in the same year, reflecting the punishment for a social offence rather than a serious crime. This contrasts with the account by the 1603 Bury churchwardens 'that Mother Scutt . . . is reported to be a witch and that she has taken upon her to cause young women not married being begotten unlawfully with child to be delivered ante temporem and so have destroyed the children and some of the mothers'.[35] The Church could also deal with 'cunning folk' or practitioners of white magic by prosecuting anyone purporting to cure ills without a licence, and there are two such local accounts. In 1603 the Widow Lickfold 'takes upon her to find things lost and deceives the people and being altogether ignorant practises physic and surgery in Horsham to the hurt and danger of many'.[36] The other, the Sompting butcher George Sowton, was bound over in 1605 for using 'the arts' yet was again reported in 1624 and 1625 for supplying 'a bottle of water and a paper with crosses and characters upon it to be hanged about the woman's neck' although it was Anthony Nashe and his wife of Yapton and their helpful neighbour John Walters of Felpham who were presented for the offence.[37] Sowton had been excommunicated 'these two or three years' by 1625, yet a George Sowton signed the Oath of Protestation in 1642 indicating eventual conformity at least of perhaps his son.

Apart from midwives, the barbers and surgeons were the most numerous of western Sussex medical personnel, reflecting the ratio found elsewhere.[38] Although by the Physicians Act of 1540 (32 Henry VIII c. 40) medicine was defined as comprehending surgery, physicians had virtually delegated all manual healing to them and they varied enormously as individuals as shown in the local records which include barbers, barber-surgeons, surgeons and chirurgeons.[39] Although surgeons could undertake major operations, barbers (from the Latin barba—a beard) were permitted only to let blood or carry out dentistry and minor surgery alongside hairdressing. They first expanded their services when the papal decree of 1163 forbade clerics to shed blood ('Ecclesia abhorret a sanguine') and since monks were required to undergo regular blood-letting as well as remain cleanshaven, the visiting barbers were granted the extra trade. The barbers and the surgeons were formally united in the London Company of Barber Surgeons of 1540 and were not separated again until 1745; meanwhile they could train in provincial craft guilds or companies or at the London Company. They were generally expected to be literate in English and to have grasped basic medical principles such as anatomy; after apprenticeship they were examined by four experts and licensed by the bishop.[40]

A few surgeons were licensed by universities abroad or occasionally in England, but these are not apparent in local records and such practitioners probably operated in more lucrative areas such as London. Although titles are ambiguous, almost all locally recorded barbers and barber-surgeons were resident in Chichester, perhaps because there was not enough trade among the dispersed rural population. Moreover the barber shop was from earliest times a centre for the dissemination of news, information and gossip, hence the ancient saying 'omnibus notum tonsoribus' (every barber knows that).[41] The gradual development of the barber's trade as perfumer and hairdresser is also evident in references such as to the Chichester barber Barnard Harmwood who leased a property in East Street in 1634 as a 'citizen and merchant'.[42] Barbers were perhaps during this period considered to be more tradesmen than medical practitioners, for in 1625 the Chichester barber John Stapler was presented for 'working at his trade on the Sabbath days' as well as sometimes missing the church service.[43] Family traditions also appear more common to barbers and surgeons than to other local practitioners: a long line of family barbers all called Richard Godman leased premises in North Street, Chichester from at least 1554 until 1642.[44] Also recorded are the Haslens of Petworth, the Pikes and Nappers of Horsham and the Durrants, Floyds and Roses of Chichester.

Of the 43 barbers or surgeons recorded in western Sussex between 1556 and 1642, only five are known to have been licensed, including John Westwood of Arundel who was licensed only for surgery although Raach includes him as a physician.[45] A sixth person, William Manestie, is presumed qualified for in 1611 he was recorded as an 'apothecary who practices chirurgy in Arundel. Shows papers from London. Case dismissed'.[46] Clearly his credentials as a surgeon were sufficiently documented although he may also have supplied drugs or allied goods.

More significant was the practice of physic by surgeons which was prohibited by an Act of 1543, although in 1601 the Nuthurst (later Horsham) surgeon John Miller was paid seven shillings 'for physic' ministered to John Bottinge 'in the time of his sickness' (although the patient died).[47] Such cases illustrate the lack of clear definition between types of medical practice and its acceptability to the general public, if not to the authorities.

Three barbers or surgeons are also known to have been guild members and two more are presumed so due to family association with a member, such as John Pickering with guild member Elizabeth,[48] so at least 25% of known western Sussex barbers or surgeons were practising by consent of the authorities.

Women manual healers were sometimes admitted, usually by apprenticeship or patrimony, but only Elizabeth Pickering who ran a barber shop with her husband or father John Pickering in North Street Chichester is as yet identified.[49] This lends support to the possibility that women may have been unable to pursue certain business activities in their own right[50] and a certain amount of physical strength was required even for some minor operations since no anaesthetics existed.

In order to assess the prosperity of medical practitioners, the valuation of their property at death offers a useful index. Wills were proved in the local courts unless a property was of great value or worth more than five pounds and spread across more than one diocese, in which case they were referred to the Prerogative Court of Canterbury. No wills for western Sussex barbers or surgeons are recorded in the P.C.C., not even that of the Midhurst surgeon William White whose medical books and equipment indicate that he too was probably involved in physic as well as surgery.[51] Inventories also appear to reflect the developing prosperity of surgeons and the less wealthy barbers relative to city practitioners and their less affluent rural counterparts. For example, the property of Chichester surgeon John Rose was valued at £76 in 1640 but that of his surgeon son William was worth £610 in 1663:[52] in comparison the Horsham barber Matthew Napper owned property worth £60 in 1648 whilst that of his barber son, also Matthew, was valued at £241 in 1672.[53] Since fees were not standardised, they could be determined by variable factors, including the wealth of the patient, the distance travelled and the status of the practitioner as well as the type of treatment administered. Examples of fees charged include 10*s*. by the Chichester surgeon William Rankin in 1604 'for surgery and letting blood'[54] and in 1632 an unnamed surgeon was paid 8*s*. for setting the arm of Elizabeth Smyth at Horsham.[55]

There is little evidence of recusancy within this medical group, but one of the two known

surgeons from Catholic-biased Midhurst, Henry Allen (d.1649) is not recorded on the 1642 Oath of Protestation and the other, William White, had died in 1632. However, the Chichester surgeon William Rose 'refused to take the Protestation according to the Order'.[56] Although the religious beliefs of a surgeon may have been considered less important than those of physicians who prescribed internal remedies based on the spiritual as well as the physical condition of a patient, nevertheless a surgeon had a Christian duty towards his patients, and one who fell short of this is recorded in an early account in the Sussex Coroners' Inquests. It concerned the death in 1547 of Thomas Edwards who was suffering from syphilis ('the great pox' or 'the French pox'). This Broadwater clerk was transported by the surgeon William Smythe to Ursula Picombe's house at Hardham where it appears he was given treatment by bathing. It is not recorded what kind of external remedy was used or even whether Smythe was a creditable surgeon, but the patient died in the bath after a fortnight. Smythe was vindicated from causing the patient's death, despite consigning the body to a hole dug in Picombe's croft without a Christian burial.[57]

Of all medical personnel, the western Sussex physicians enjoyed the highest social and economic status,[58] especially those in Chichester: compare the inventory of Henry Allen of Petworth totalling £42 in 1614 with that of George Bourgh of Chichester totalling £99 in 1620.[59] However, two of the six who died during this period were sufficiently wealthy for their wills to be sent to Canterbury for probate: William Eade of Rusper in 1614 and John De La Rosier of Chichester in 1642,[60] indicating perhaps that both city dwellers and the various gentry families scattered across the county were able to afford their services. None of the available records of fees during this period specify the treatment involved, for example in the 1600 probate account of Thomas Diggons, Vicar of Donnington, four payments were made ranging from 5*s*. to 22*s*. 3*d* itemised merely as 'for physic' for his children.[61] The physician named was Dr. Lewkenor who was linked to the small Catholic nucleus in Chichester where 27 people were convicted of reusancy in the assessment of the 1626 subsidy:[62] this group was headed by physician John Bullaker[63] until 1627 and subsequently supported by the Lewkenor and Peacock families. Although the maze of administrative divisions and special jurisdictions in the city of Chichester may have enabled recusants to avoid the authorities, physicians were perhaps conspicuous, for the physician Lewes was cited in 1630[64] and in 1639 De La Rosier was presented 'for not coming to his parish church for divine service'.[65] However, physicians as lower gentry generally had support or influence through patronage or local government. A prime example involves Midhurst, the seat of the Catholic aristocrat Viscount Montague, a trusted favourite of Elizabeth I. Here there was a discreet tolerance of recusants; there were 95 listed in the Archdeacon's Visitation Bills of 1625.[66] Frequently included was the physician John Phage who was also presented in 1623 'for practising physic without a licence, having taken no degree in the schools'. He finally took oaths in the church courts to remedy this and also headed the 35 of the 54 Midhurst inhabitants who at first refused to sign the Oath of Protestation but eventually capitulated.[67]

Education for the trained physician could consist of several years' study: a licence was then obtainable from Oxford or Cambridge Universities (or those abroad), from the Royal College of Physicians founded in 1518 or from a bishop after examination by four doctors of physic.[68] However, education even to the standard of M.D. mainly comprised the study of the archaic philosophy of Galen, Aristotle and Hippocrates, and although physicians became versed in Latin and Greek, they had virtually no practical training or clinical experience. Dispensations could also reduce the number of years required, letters of recommendation could be forged, and licences could be obtained by other means: even the Professor of Physic at Cambridge complained in 1635 that servants as well as apothecaries had been granted licences before his time.[69]

The educational revolution of this period is often held to include medicine, but there seems little evidence of this in western Sussex. Although 13 of the 27 physicians recorded locally are known to have been educated or licensed (50%), only three were M.D. (11%). Even among the seventeen persons in Raach's Directory identifiable in local records, apart from John Bullaker who obtained his M.D. at Caen University, only eight attended Oxford or Cambridge, and two of those qualified as

clerics, not physicians. Of the remaining six, three merely matriculated, one attained B.A. and two qualified as M.D.;[70] these figures do not corroborate Raach's conclusion that 67% of his listed practitioners at least matriculated (local figure 41%) and over 25% achieved M.D. (local figure 18%).[71] However, representative statistics on physicians are especially difficult to obtain since they could be recorded in an area in which they were educated or owned property, for example the M.D. Christopher Johnson leased 10 acres in Petworth in 1586 but was based and died in London.[72] Others may be recorded as practising in one area yet have their lack of credentials exposed in another, such as Edmund Langdon recorded by Raach as a 1610 physician of Battle in eastern Sussex but prohibited from practising in Arundel in 1611.[73]

Although according to Lawrence Stone 'there was a rise in status of the medical profession as a whole as its professional and educational standards improved[74] the university registers show only a steady increase in physicians during the 16th and early 17th centuries. Moreover the Church Canons of 1604 which tightened control on such people as schoolmasters, whose numbers were growing fast, included no reference to healers since there was no sudden swelling in their ranks nor hint of seditious activities. In any case medicine was subordinate to religion which was controlled by the monarch, so that anything novel in medicine which smacked of witchcraft delayed medical advancement until the religious tolerance of the Restoration under Charles II. And although the physicians were the closest to a professional body, they had at this time no sense of corporateness, no cohesive group practice except occasionally in a medical guild, and they had no agreed criteria or standards. The university educated physicians had more in common with the clerics with whom they studied than with other healers due to the similarity of academic skills required; graduates sometimes diversified, like the Buckingham clergyman Richard Napier who was also a practising licensed physician.[75] Medicine was also linked to theology since ministers competed with physicians at the bedside of a patient in a dual attempt to save body and soul.

There were four western Sussex clergymen recorded as practising medicine, but of the two listed by Raach, Samuel Dries was Rector of North Mundham until its sequestration in 1645 and only qualified in medicine at Leyden University in 1649.[76] The other was Thomas Sefton, master of the 'Domus' in the Chichester Hospice of St. James and Mary Magdalen 'for poor lepers' in 1625 and previously Rector of Bignor in 1604 and Selham in 1614,[77] but his was a spiritual and administrative office rather than a medical one. In contrast, the Vicar of Westhampnett Thomas Sutton was detected giving physic to those 'infected with the sickness',[78] but since the year was 1609 when the plague visited Sussex (the Horsham parish register bears witness), this appears to consititute a temporary act of charity. In fact the only example of a cleric consistently practising medicine was the Oxford-educated John Meredyth (B.A.)[79] who was vicar of Chichester's St. Peter the Great in 1617. It was noted that he 'has toleration' but he was instructed to stop when his current cures were completed. Clerics were encouraged to teach however, which could be more profitable spiritually to the Church than other occupations, such as the tailoring and weaving recorded as a necessary secondary employment in the Archdeaconry in 1585.[80] Only involvement with witchcraft seems to have occasioned dismissal, thus Edmund Curteis, Vicar of Cuckfield and brother of the Bishop of Chichester was accused of being 'a seeker to witches' at the height of the witch scare in 1579 and duly deprived of his living.[81] Yet astrology still played a legitimate role in medicine, such as in the selection of the most beneficial time to apply a remedy, and it was considered highly respectable in the hands of reputable physicians like Richard Napier and not to be confused with the unlearned sorcery of cunning folk like the Widow Lickfold and George Sowton. Local practitioners included the recusant Midhurst physician John Phage who in 1606 published his *Speculum Aegrotorum. The Sicke mans Glasse or, A plaine Introduction wherby one may giue a true and infallible judgement, of the life or death of a sick bodie. . .*[82]. The notorious London physician Simon Forman also stayed in eastern Sussex in 1591 and recorded that 'At All Hallows tide I entered the circle for necromantical spells'.[83] The 'magyk natureel' of Chaucer's Doctor of Phisik[84] remains rooted still in some medical terms, such as the 'influenza' which was originally attributed to the influence of the stars, or 'lunacy' supposedly occasioned by fluctuations of the moon etc.

Among physicians acceptability seems to have depended on being 'learned', and the 'unlearned' comprised all those who were not university educated, such as empirics. The Petworth licentiate in both physic and surgery, Edward Poeton,[85] is known for his literary works such as *The Chyrurgicus Closet of An Antidotaris Chyrurgiall*, but his work *Medical Treatises* includes 'The Winnowing of White Witchcraft'. In this, 'weak and unlearned women' head the list of the characteristics of white witches illustrating the impossibility of women becoming respected physicians. 'Weak' could not refer to physical frailty, since male physicians were often elderly or feeble: it can only imply weakness of character stemming from the original sin of Eve and reflecting the inferior status of women generally. Even women of 'gentle' birth were excluded from commercial practice by the simple barring of women from universities and thus official 'learning'. Even for the prolific midwives, there was no register nor were formal training schools established until the Midwives Act of 1902.

However, local evidence indicates that women were sometimes employed for nursing duties on an unofficial basis, for example in 1600 Joan Russell of Upwaltham 'took upon her to cure . . . Wm. Hamon's sore leg' whilst he was 'in care for the healing of his sore leg' with Mistress Bond, wife of the Parson of Petworth.[86] The probate of John Vincent of Midhurst who died in 1608 also includes payment 'in victuals . . . unto them that attended and kept the said Vincent in time of his sickness' and in fees to Joan Gander 'in consideration that she would enter into the house of the said Vincent being sick of the plague' on three occasions[87] It is unclear whether nursing or just housekeeping was involved here, whereas the probate account of Edward Pryklove of Pulborough dated 1588 itemises a payment of 10*s*. to the 'woman that tended him in his sickness'[88] and Joan Scringer of Eastbourne was paid sixpence in 1594 'for watching with . . . John Prat in the time of his sickness'.[89] Although such personnel, mainly women, were outside the recognised groups of medical practitioners and their numbers and precise duties difficult to estimate, their services as nurses, carers or attendants were probably generally available in most communities during this period.

Fewer physicians appear to have continued a family tradition than barbers and surgeons, perhaps because as scholars they had an alternative medium as Doctors of Divinity or Law, such as Poeton's son John who was Oxford-educated but became Rector of Ashbury, Berkshire in 1661.[90] However, the Lewkenors of Chichester and the Eades of Rusper both produced at least one family M.D.[91]

The greatest competition for the physicians came increasingly from the apothecaries who were less medical practitioners than purveyors of drugs, potions and medical merchandise. Although they were not officially healers, they served an appreticeship for seven years and were 'duly examined',[92] being necessarily literate, versed in Latin and able to evaluate the strengths and weaknesses of their stock. They sold direct to the public, but also to other medical practitioners and their trade was boosted by the New World traffic in new drugs and substances such as tobacco. Their use of central trading premises is reflected in the four recorded Chichester apothecaries who were probably small shopkeepers where the stock was not entirely medicinal. The mercers of the Norman era had dealt in drugs and spices weighed in very small quantities, perpetuated in the apothecaries' use of grains, simples and drachms, and because apothecaries often belonged to mercers' or grocers' guilds which were developing in Chichester and many other towns and cities from the 14th and 15th centuries,[93] many of them may be invisible in the records and consequently their numbers difficult to assess: it is likely that there were many more in western Sussex than are apparent. Even Hugh Morgan, Elizabeth I's apothecary was Master of the Grocers' Company[94] and it was not until 1617 that the London Apothecaries achieved their own Worshipful Society when James I split them from the grocers[95] and granted them sole rights to purchase and sell drugs. Apothecaries increasing gave medical advice or prescribed remedies themselves, thus trespassing on the livelihood of the physicians, but in a Star Chamber court case involving a qualified Exeter physician and an apothecary,[96] the verdict given in 1607 by Lord Coke was that an apothecary had the right to practise medicine. This set an important precedent, challenging the boundaries between healers and leading to the licensing of a host of apothecaries by Archbishop Laud in the 1630s.

The two rural apothecaries recorded in western Sussex appear to have been of high social status and from wealthy families, supporting similar evidence from Norwich and Cambridge.[97] William Roffey, ostensibly from Horsham, was probably a member of the prosperous family which took its name from the village of Roffey just outside the town: he matriculated at Cambridge in 1631 and appeared in the Protestation Returns as 'gent'.[98] Although Raach lists him as a physician, apothecaries were by now rising fast in the field of medicine to offset the lack of university trained physicians, and they also had a wealth of pharmaceutical knowledge and experience.[99] A possible second rural apothecary was Elizabeth Strudwick of Kirdford, probably a relative of the well-to-do Robert Strudwick of Crouchland[100] and therefore perhaps an example of the charitable service sometimes extended by a lady of the manor to friends, neighbours and employees. We do not know if she practised surgery and midwifery like Lady Margaret Hoby of Yorkshire,[101] but is possible in that rather remote part of western Sussex; the title apothecary may merely reflect her informal status as well as her stock of medical items. However, an Elizabeth, wife of William Strudwick of Kirdford was recorded between 1673 and 1675 as subscribing by mark (being illiterate) Articles prior to a licence to practise surgery.[102] Evidence suggests that the two Elizabeths were either related or possibly even one and the same person. Although little is known about the Chichester apothecaries, John Little signed a flesh-eating certificate[103] (allowing a patient to eat meat on fish days due to ill health) in 1662, indicating that by then an apothecary's medical note was as acceptable as a physician's.

In conclusion, there is a minimum of 155 persons recorded as involved in medical practice (excluding carers) in at least 61 locations in western Sussex between approximately 1579 and 1642. Despite the plethora of midwives recorded in 1579 surfacing mainly due to an 'island' of evidence, their wide availability probably reflects the general ratio, whereas the number of apothecaries recorded may be grossly unrepresentative. And since only 50% of physicians and 25% of barbers and surgeons recorded in the Chichester Archdeaconry are known to have practised with official consent, the remainder of unknown status recorded support the supposition that many more healers practised without appearing in the records to date. Although Raach sought to include only the 'well-trained doctors by their standards'[104] in his Directory, these would appear to represent only a fraction of the vast spectrum of provincial healers available at this time, and a lack of university education or official credentials does not appear to have impeded practitioners in employment. Even the enlightened Restoration physician Thomas Sydenham recorded as late as the 1660s that 'one might as well send a man to Oxford to learn shoemaking as practising physic'[105] for it was the public who chose from the medical market place, and selection depended upon the socio-economic and educational or literacy levels of the patient as much as on expectations. And as the contemporary Francis Bacon pointed out, a healer's credibility often depended on whether a patient died or recovered, which could mislead the public so that 'they will often prefer a mountebanke or witch before a learned physician'.[106]

The livelihood of the 'learned physican' prior to the Civil War was also being threatened on all sides, by apothecaries, by itinerant healers or quacks who had always existed, and by the new breed of empirics who were by now publishing their own medical literature.[107] However, they had nothing to fear from the unlicensed men and women who were permitted by an Act (34/35 Henry VIII c. 8) to treat certain conditions suffered by people too poor to afford medical fees: these included sores, whitlows, burns and scalds, swellings, scurf, agues and similar ailments.[108] Women also offered no threat to learned practitioners since they could not join their ranks and their services were generally free or at a nominal cost.

In order to assess the number of medical personnel per head of population, the Chichester figure can be used as a basis for speculation. A Cathedral city of Roman origin, the layout was essentially a simple grid of north, south, east and west streets where the wealthier inhabitants tended to reside, joined by the market cross with its twice-weekly market. A second residential area was that of the Pallants in the south eastern quarter of the city where a smaller version of the grid existed; there was also a lay residential element in the Precinct of the Cathedral Close. The Plan of Chichester displays those 16 medical practitioners known to be living or having premises in the city in

1642; they are generally confirmed by the Protestation Returns, except for apothecary Thomas Peacock who may have been omitted as a recusant or simply died just before taking the Oath. The four physicians, ten barbers and surgeons and two apothecaries are allocated to the correct street or parish wherever their exact address is unknown (evidence of city midwives is rare[109]). Taking the estimated 1625 population figure for Chichester at 2,500, at an estimated increase of 8% between 1626 and 1641[110] this can be projected to about 2,700 in 1642. This reflects the ration of one practitioner to 168 persons compared with the Norwich figure compiled in a parallel study of Norfolk and Suffolk of one practitioner to 220/250 persons *c.* 1575.[111] However, Norwich with a population of 17,000 (73 practitioners) was a much larger city than Chichester, although similarly maintaining expanses of fields and gardens within the city walls to offset the crowded parishes; also both were close to London and coastal trade, although Norwich may have been affected by its close proximity to Cambridge.

In western Sussex, the lack of evidence on medical personnel caused by the suspension of the church courts in 1642 is in marked contrast to the spate of references that appear following the Restoration, for there are nearly 70 practitioners recorded between 1660 and 1700. Perhaps only during that period would a detailed study reveal the first indications of a potential medical profession and the arrival of 'the Doctor'.[112]

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Notes

[1] R. Schofield and E. A. Wrigley *The Population History of England 1541–1871* (1981) 208–9.

[2] A. Fletcher *A County Community in Peace and War: Sussex 1600–1660* (1975) 8.

[3] Schofield and Wrigley op. cit. 53–4.

[4] For a full account see R. S. Roberts 'The Personnel and Practice of Medicine in Tudor and Stuart England, Part 1 The Provinces' in *Medical History* **VI** (1962) 363–82.

[5] All references have therefore been cross-matched where possible with J. H. Raach *A Directory of English Country Physicians (1603–1643)* (1962) and also with the Oxford and Cambridge registers of pupils in order to clarify titles or confirm medical status: J. and J. A. Venn *Alumni Cantabrigienses: from the earliest times until 1751* (Cambridge 1922); J. Foster *Alumni Oxonienses 1500–1714* (Oxford 1891).

[6] For this purpose the Oath of Protestation Returns signed by males over eighteen in each parish furnish an invaluable census (except for Arundel, the records for which are missing): *West Sussex Protestation Returns* 1641/2 in S(ussex) R(ecord) S(ociety) **5** ed. R. Garraway Rice. For unreliability see Timothy J. McCann 'Midhurst Catholics and the Protestation Returns of 1642' in *Recusant History* **16** (3) (1983) 319–23.

[7] W(est) S(ussex) R(ecord) O(ffice) Ep. I/23/5.

[8] Richard Burn *Ecclesiastical Law* (1767) **4** (2) 439–41.

[9] For a comprehensive account of midwives and their duties see J. Donnison *Midwives and Medical Men* (1977).

[10] W.S.R.O. Ep. I/23/5 f. 39v.

[11] D. Harley 'Historians as Demonologists: the Myth of the Midwife-witch' in *Social History of Medicine* **3** (1) (April 1990) 8. Also mentioned in L. M. Beier *Sufferers and Healers* (1987) 264 n. 34.

[12] W.S.R.O. Ep. I/23/5 ff. 33v, 23v, 14v, 17v, 45r.

[13] P. C. Hoffer and N. E. H. Hull *Murdering Mothers: Infanticide in England and New England 1558–1803* (1984) 7 and 19 (includes combined western and eastern Sussex data).

[14] W.S.R.O. Ep. I/23/5–8.

[15] M. Ingram *Church Courts, Sex and Marriage* (1987) 260, (includes statistics on the Archdeaconry of Chichester).

[16] Hoffer and Hull op. cit. 27 and 96.

[17] Keith Wrightson quoted in Hoffer and Hull op. cit. 21.

[18] *Sussex Coroners' Inquests 1485–1558* S.R.S. **74,** ed. R. F. Hunnisett (1985) xxxix.

[19] W.S.R.O. Ep. I/23/8 f. 25v.

[20] W.S.R.O. Ep. III/4/11 ff. 92r, 93r, 93v, 95v, 96r.

[21] W.S.R.O. Ep. III 6, Box 408, Folder 2, 53 and Ep. III/4/9 f. 32r.

[22] John Graunt who studied childbirth statistics *c.* 1662 agreed with several contemporaries on this but concluded from the 1662 London Bills of Mortality that no more than three in two hundred mothers (1.5%) died within one month of childbirth. (Quoted in Donnison op. cit. 12).

[23] W.S.R.O. Par. 106/1/1/1 (Burials 1541–1635) Elizabeth Tolpit 1560; Katherine Wales 1584; Ann Wood 1610/11; Elizabeth Inge 1613; Margaret Patching 1615; Mary Barr 1630.

[24] ibid. Catherine Steninge 1578.

[25] 25% of all children born failed to live until the age of ten, the heaviest mortality being in the first year: K. Wrightson *English Society* (1982) 105.

[26] W.S.R.O. Par. 106/1/1/1 June 1615, Dec 1616 (Twins) and March 1617/18.

[27] ibid. July 1608 (Twins), Aug. 1609 and Aug. 1611.

[28] W.S.R.O. Ep. I/17/14 f. 30v.

[29] Harley op. cit. 1–26 for a comprehensive assessment.

[30] W.S.R.O. MP. 977.

[31] Fletcher op. cit. 78.

[32] W.S.R.O. Ep. I/23/5 (includes John Marshall of Felpham, John Phillips of Graffham and Studman's wife of Stedham).

[33] Keith Thomas *Religion and the Decline of Magic* (1984) 535–569.
[34] W.S.R.O. Ep. I/23/4 f. 35v; Ep. I/17/3 ff. 3v, 13v, 23v, 35v.
[35] W.S.R.O. Cap. I/4/7/11; Ep. I/17/10 ff. 241v, 246v; Ep. I/17/11 ff. 24v, 36r 42r, 44r, 47r, 67v, 69v, 81r.
[36] W.S.R.O. Ep. I/17/10 f. 244v.
[37] W.S.R.O. Ep. I/23/5; Fletcher op. cit. 42 and 163; Protestation Returns 161.
[38] Beier op. cit. 12: M. Pelling and C. Webster 'Medical Practitioners' in *Health, medicine and mortality in the sixteenth century* ed. C. Webster (1979) 188 and 225.
[39] The word surgeon is merely a contraction of the older word 'chirurgeon' from the Greek meaning 'hand work'.
[40] Burn op. cit. **3**, 84.
[41] Horace I Satires vii, 3.
[42] W.S.R.O. Mast. Liz.; Chapter Acts 1545–1642 S.R.S. **58** (1959) nos. 1257 and 1266; Protestation Returns 54.
[43] W.S.R.O. Ep. I/23/8 f. 37r.
[44] W.S.R.O. Cap. I/27/2; Chapter Acts nos. 526, 561 and 686; Protestation Returns 57.
[45] W.S.R.O. STC. III/8 f. 40v (Schore); Ep. I/17/11 f. 243r (Walters); STC. III/E. f. 109v (Aldred); STC. III/F f. 62r and Raach 92 (Westwood); Ep. III/4/11 f. 162r (Williamson).
[46] W.S.R.O. Ep. I/17/13 f. 176r.
[47] W.S.R.O. Ep. I/33/1600.
[48] W.S.R.O. Chichester City Archives AH/8: William Cooper, John Rose and Elizabeth Pickering.
[49] W.S.R.O.STD/I/3 f. 90; also William Rose with guild member John Rose.
[50] Pelling and Webster op. cit. 222.
[51] W.S.R.O. STC. I/18 f. 134 and Ep. I/29/138/020; F. W. Steer 'The Possessions of a Sussex Surgeon' in *Medical History* **II** (2) (1958), 1–3; Fletcher op. cit. 41.
[52] W.S.R.O. STC./III/H f. 170 and STC./23 f. 164.
[53] W.S.R.O. STC.I/21 f. 256 and STC. I/25 f. 56.
[54] W.S.R.O. Ep. I/33/1604 under Thomas Diggons; STD.I/3 f. 121.
[55] W.S.R.O. Ep. I/33/1632 under Thomas Smyth.
[56] Protestation Returns 56.
[57] S.R.S. **74**, 40–41.
[58] Beier op. cit. 10; G. Holmes *Augustan England: Professions, state and society 1680–1730* (1982) 166.
[59] W.S.R.O. Orig. (will) M. Dean. 19 Ep. I/29/149/008 and Ep. I/29/541/014.
[60] W.S.R.O. P.C.C. Lawe 117 and P.C.C. Campbell 115.
[61] W.S.R.O. Ep. I/33/1604.
[62] PRO. E179/191/377a.
[63] Timothy J. McCann 'The Catholic Recusancy of Dr. John Bullaker of Chichester' in *Recusant History* **11** (2) (1972) 75–86; Fletcher op. cit. 99; Raach op. cit. 32.
[64] W.S.R.O. Ep. III/4/12 f. 4r, 6r and f. 42v; Ep. III/6 1629–1637.
[65] W.S.R.O. Ep. III/4/13 ff. 48, 50.
[66] S.R.S. **49**, 98.
[67] W.S.R.O. Ep. II/2/1 f. 91V; Fletcher op. cit. 99; Raach op.cit. 44; Protestation Returns 127.
[68] Burn op. cit. **3**, 83.
[69] Roberts op. cit. 364.
[70] Will. Eade, Thornberry and Roffey; Bourgh; Rob. Eade and George Lewkenor respectively (Edward Lightfoot M.D. is not recorded in Raach).
[71] Raach op. cit. 114.
[72] Lord Leconfield *Petworth Manor in the Sixteenth Century* OUP (1954) 114.
[73] W.S.R.O. Ep. I/17/13 f. 176v; Raach op. cit. 62.
[74] L. Stone 'Social Mobility in England 1500–1700' in *Society in An Age of Revolution* ed. P. S. Seaver (1976) 37.
[75] Beier op. cit. 11.
[76] R. W. Innes Smith *English-Speaking Students of Medicine at the University of Leyden* (1932); Raach op. cit. 42; Venn op. cit. 67; Protestation Returns 103.
[77] Raach op. cit. 80; Protestation Returns 29.
[78] W.S.R.O. Ep. I/17/12 f. 240v; Foster op. cit. 1001.
[79] W.S.R.O. Ep. I/17/16 f. 3r.
[80] Wrightson op. cit. 207.
[81] K. Thomas op. cit. 272.
[82] *Recusant History* **19** (4) (1989) 401 note 15.
[83] A. L. Rowse *Simon Forman: Sex and Society in Shakespeare's Age* (1974) 10 and 286.
[84] P. Hodgson (ed.) *Chaucer: The Central Prologue to the Canterbury Tales* (1969) 55.
[85] Beier op. cit. 46, 162, 299 and 269 note 134; Protestation Returns 136.
[86] W.S.R.O. Ep. I/33/1600.
[87] W.S.R.O. Ep. I/33/1607.
[88] W.S.R.O. Ep. I/33/1588.
[89] W.S.R.O. Ep. I/33/1594.
[90] Foster op. cit. 1175.
[91] Venn op. cit. 80; Foster op. cit. 911; Raach op. cit. 43 and 63.
[92] Burn op. cit. **1**, 367.
[93] T. D. Whittet 'The Apothecary in Provincial Gilds' in *Medical History* **VIII** (1963) (245–73) 246.
[94] A. L. Rowse *The Elizabethan Renaissance* (1972) 263.
[95] Whittet op. cit. 267.
[96] Roberts op. cit. 371–5.
[97] Pelling and Webster op. cit. 221.
[98] Venn op. cit. 478; Protestation Returns 100; Raach op. cit. 78.
[99] Holmes op. cit. 184.
[100] W.S.R.O. Ep. I/3/1 f. 25; Fletcher op. cit. 13.
[101] Beier op. cit. 28 and 172.
[102] W. D. Peckham Sussex Notes and Queries IV 245.
[103] W.S.R.O. Ep. III/6; Cap. I/27/4 p. 155.
[104] Raach op. cit. 14.
[105] Brian Inglis *Natural Medicine* (1980) 27.
[106] Francis Bacon *Advancement of Learning* Book II (1605).
[107] Beier traced at least 40 such publications between 1500 and 1700, 21 and 265 note 54.
[108] Burn op. cit. **3**, 85–6.
[109] Harley op. cit. 13.
[110] Schofield and Wrigley op. cit. 208–9.
[111] Pelling and Webster op. cit. 26.
[112] Holmes suggests the years between 1660 and 1740, op. cit. 167. References to Sussex medical personnel are collated in an index by Timothy and Alison McCann at the W.S.R.O.

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THE MAKING OF FRANCIS GROSE'S *ANTIQUITIES*: EVIDENCE FROM SUSSEX

by John H. Farrant

Francis Grose (1731–91) drew numerous ancient monuments throughout Great Britain and Ireland over 40 years. From these and other artists' pictures about 1,000 engravings were published, accompanied by carefully prepared explanatory text. Using material relating to the Sussex sections, this article provides insight into Grose's working methods, and publishes for the first time a plan of Brighton in 1761 probably intended for inclusion. The plan purports to show the layout of the old town beneath the cliff before it was inundated by the sea, but it cannot be relied upon.

Francis Grose's *The Antiquities of England and Wales* (6 vols, 1773–87), *of Scotland* (2 vols, 1789–91) and *of Ireland* (2 vols, 1791–94) were in their time the most ambitious project of their sort carried to completion. More in the form, in the present century, of the wartime Recording Britain scheme than Pevsner's *Buildings of England*, they comprised about one thousand engravings of antiquities accompanied by 'an historical account of its situation, when and by whom built, with every interesting circumstance relating thereto'. Writer, artist, antiquary and *bon vivant*, Grose was born in 1731 in Broad Street, City of London, son of a Swiss immigrant jeweller. From 1755 to 1763 he was Richmond Herald. He claimed to have seen military service from the age of 15. This is plausible as only serving or former soldiers could be appointed adjutants in the 'new militia', and in November 1759 he was commissioned as lieutenant and adjutant in the Surrey Militia; promoted to captain in 1765, he continued as adjutant until his death in Dublin in May 1791. As the militia was embodied only in 1759–62 and 1778–83 but the adjutant received full pay at all times, ample leisure remained for dissipating his salary and the property inherited from his father in 1769, on antiquarian pursuits and good living. His reputation today rests not only on the *Antiquities:* his *Military Antiquities* (1786–88) and *Treatise on Ancient Armour and Weapons* (1786–89) were pioneering; Eric Partridge hailed his *Classical Dictionary of the Vulgar Tongue* (1785) as 'one of the most valuable books in our language', while that and his *Provincial Glossary, with a Collection of Local Proverbs and Popular Superstitions* (1787) give him a place in the development of folklore. His achievement has not perhaps received its deserved recognition because he rarely signed his pictures and because the books and pictures in his possession at his death were dispersed by auction, probably to meet debts accumulated from mismanaging the regiment's finances.[1]

The Scottish volumes were compiled during three planned campaigns north of the border: a reconnoitre in 1788 and serious touring in 1789 and 1790, in the course of which 'he made a more thorough and knowledgeable inspection of the antiquarian remains of Scotland than any man before him'. Work on the Irish volumes (which were to be 'unprecedented in scope') was similarly planned, with a first visit in 1789 and touring in 1790 and 1791, and though Grose died in Dublin his servant Tom Cocking and his nephew Daniel Grose continued sketching monuments, while Edward Ledwich completed the text.[2]

The Antiquities of England and Wales, by contrast, had been much longer in preparation. The plates (nearly 600 in all) and descriptions were first issued in parts, not exactly in the order in which they were to be bound, which was by English counties in alphabetical order, followed by Welsh counties, the Channel Islands and the Isle of Man, through four volumes (1773–76) and then in a repeat sequence in a two-volume *Supplement* (1777–87). Thus some individual plates carry dates later than that on the title page of their volume or earlier than on that of the previous volume. Before the final volume of the 'large quarto' edition had been completed, the 'small' edition started to appear, probably in 1783, with plates and text on separate pages; in 168 parts, it was to be bound up as six volumes for England and the islands, one for Wales and a one-volume supplement, completed at the same time as, but with different contents from

the second volume of the original edition's supplement. Generally dates prior to 1783 on the original plates were updated; few new plates were added.[3]

Though the publishing history is complex, Grose's care in recording the artist who drew the view, and when, allows his own tours to be mapped and dated. He married into a Canterbury family and Kent is well represented amongst the few views dated to the 1750s. Of the 23 plates of Sussex antiquities bound at the end of volume 3 (dated 1775 on the title-page, with plates dated between February 1772 and April 1776), 17 are Grose's work, 16 of them taken from drawings made in 1760, 1761 and 1762 (one plate is attributed to Major Hayman Rooke, one to Theodore Forrest and four to William Green, discussed below). Several views survive only as originals. Grose's movements in these years were dominated (in Edward Gibbon's words) 'by the arbitrary and often capricious orders of the War Office', as the Surrey Militia marched to and fro across southern England. In 1760 the militia was in Surrey and west Kent, but he was evidently able to escape to sketch in Sussex (Winchelsea, Hastings, Pevensey, Bramber), Hampshire, Oxfordshire and Bedfordshire, in the latter two probably around the turn of the year. He is likely to have been with the detachment posted from Surrey to Hampshire in March 1761 and returning in June to Dover, allowing him to sketch in Sussex at Boxgrove, Bramber, Brighton, Lewes, Battle and Winchelsea. In October the whole regiment marched to Northampton, returned to Kent in April 1762 for two months and then moved to Lewes, Sussex, for six months, except for a week at Brighton to free its quarters during the Lewes races. The final march was to Surrey in December, to be disembodied. While at Lewes and Brighton, Grose sketched in both towns and made short excursions, taking in Hove, Laughton, Battle, Pevensey and Beachy Head.[4]

Few published engravings are dated to 1763–68, but from 1769 more extensive travels are evident with trips into east Anglia and north Wales; probably it was then that he conceived the plan for the *Antiquities*. The peak of activity in England and Wales was in 1774–77. Embodiment of the militia from March 1778 to February 1783 curtailed his travels, pictures of Kent, Hampshire and Dorset alone dating from those years.

The warm reception of the first four volumes meant that fellow antiquaries offered him drawings from which he made up the supplement. The Sussex section of the supplement, volume 2 (1787), contains 29 plates. The map of the county is a reissue of that by John Seller which first appeared in 1694.[5] Two plates are attributed to James More, two to Mr Kenyon, one to Mr Verner; three may be by Grose; the remaining 20 are by S. H. Grimm, by permission of Dr William Burrell (1732–97). These were selected from the numerous watercolours which Burrell commissioned of Grimm in the 1780s.[6] For ten of them, the watercolours from which the engraver worked have survived; they are among some 420 which remained in the publisher's hands and are now in the Library of the Society of Antiquaries of London. The great majority are from Grose's pen and brush, all at the size of the plate, in some cases reducing another artist's work.[7] But exceptionally Burrell had Grimm make the reduced copies which Grose required.

This is not the only evidence of active collaboration. Despite his family connections and intense interest in its history, Burrell did not live in Sussex; rather, as was Grose by 1773, he was a Surrey resident. In May 1777 they joined forces for an antiquarian excursion into Sussex. They met at Reigate and travelled to Crawley, Ifield, Cuckfield, Sheffield Park, Fletching, Lewes (where William Green joined them for a day), Southease, Tarring Neville, Denton, Bishopstone, East Blatchington, Seaford, East Dean, Friston, Westham, Pevensey, Bexhill, Bulverhythe, Hastings, Battle, Udimore, Winchelsea, Peasmarsh, Beckley, Northiam, Bodiam and Tunbridge Wells. Grose's diary for this tour and several drawings survive.[8] This extract gives a flavour of the mixture of the social and antiquarian. After staying with John Baker Holroyd,

> Went on Tuesday morning [20 May] to see Fletching Church in which is an ancient table monument with brass plates representing a knight and his lady, an ancient monument of the reign of James 1st and another brass plate of a glovemaker ornamented with a pair of gloves in brass. The church here remarkably damp. The parson upwards of 80. The church door very ancient. Wednesday about 11 set off for Lewes District about 12 miles arrived about one and went to dinner at Mr Jas. Mitchells. Dr Ducarrel dined with us. Slept at the Star. Walk'd after dinner to Southover church to see Gundreda's stone. On the steeple the mitre and initials of the last abbot . . . [25 May] Breakfasted at 8. Walk'd up the hill to see [Hastings] Castle, of which I made

two drawings. On the west side is a sally port of singular construction as under [*simple sketch plan follows; measurements were taken in the afternoon*]. No marks of the stair case now remain in the tower described by Mr Green.

Grose took a particular interest in sepulchral monuments and fonts, and ten years later, published drawings of eight of them; also from this tour came the engraving of Bodiam Castle and, probably, the bird's-eye view of Pevensey Castle.[9]

Harder work than touring and sketching, and collecting pictures from fellow antiquaries, may have been preparing the accompanying text. For Sussex Grose was unable to take advantage of a substantial history such as by the 1770s had appeared for many counties—but could benefit from the collaboration of so assiduous a researcher as William Burrell. Furthermore he was, in volume 3, using drawings made before he had conceived the *Antiquities* and without collecting as much information on the spot as he would do later. So Grose entered into correspondence with local antiquaries. Two examples of replies from Sussex contacts have been identified. The first was from the Reverend Robert Austen, vicar of St Anne's Lewes, and dated 22 July 1772; it has been published but without its context being established.[10] Austen was replying to at least six questions from Grose about Lewes Priory and the nearby St James' Hospital; most of the information he provided appeared in the text with the three relevant plates. A month later Grose promised Burrell to ask 'my friend Green' for an introduction to Austen, but lamented that he could not delay publication of the plate of St James' Chapel, Lewes, for much longer, though the historical information was still partial.[11]

The second letter, dated 31 May 1773, was from William Green. Four engravings in volume 3 (plan of Hastings Castle; view of the castle taken in 1759; and plans of Lewes Castle and St James' Hospital, Lewes) are attributed to William Green, of the Corps of Engineers. Three William Greens were associated with the Engineers at this period: our man was neither (as he became) General Sir William (1725–1811) nor the Reverend William, mathematical master at the Royal Military Academy, Woolwich.[12] Rather, our William Green (1734/5–1820) was commissioned as Practitioner Engineer in the establishment of the Office of Ordnance and as Ensign in the Army, in March 1759.[13] An early posting was as overseeing engineer of the battery constructed at Hastings in 1759–60.[14] There in early 1761 he was courting Jane, the 34 year-old daughter of the lately deceased John Collier, attorney, public official and the Duke of Newcastle's agent in eastern Sussex. The match was disapproved of by the family—only, so Jane said, because she was not marrying an estate. She and her mother were however soon reconciled. The same objection had been made (but also waived) in 1747 when another daughter proposed to marry Captain the Hon. James Murray. He rose to be Governor of Quebec, Governor of Minorca and a full general; he retired to Beauport Park near Battle, where Green was going to stay when the letter was written.[15]

After active service at Belleisle in June 1761, Green married Jane late in 1761 or early in 1762, and they were living in Brighton by the middle of the year. The following two winters were spent in Lewes, which became their normal residence. Although he was promoted to Sub-Engineer and Lieutenant in 1762 and to Engineer Extraordinary and Captain Lieutenant in 1771, and was superannuated in 1776, he may have had few military duties: in January 1762 he was a witness in support of a Rye Harbour Bill and between 1764 and 1774 supervised the works authorised. He was also involved with engineering works on the river Ouse and Newhaven harbour, 1766–90.[16] In 1767 Green offered his services in advancing the Duke of Newcastle's interest in Hastings parliamentary seats against the Treasury; but Newcastle's illness later that year prevented him from interfering in the 1768 election. Green himself stood as a radical Whig candidate for Lewes in the parliamentary election of 1796.[17] Helped by his wife's dowry, he augmented her estate at Hastings by considerable purchases in Lewes and Ringmer. At the age of 75, he fathered a bastard on his farm bailiff's daughter, an indiscretion for which he seems to have paid on his death bed.[18]

In a letter Green responded to Grose's request for information to accompany the plate, 'The Blockhouse at Brighthelmstone, Sussex', dated 10 September 1773 but drawn in 1761 (Fig. 1). Its significance lies in Green's inclusion of a plan of the town of Brighton, the earliest yet known containing any detail. The letter is addressed to 'Captn Grose at Wandsworth Surry' and reads:[19]

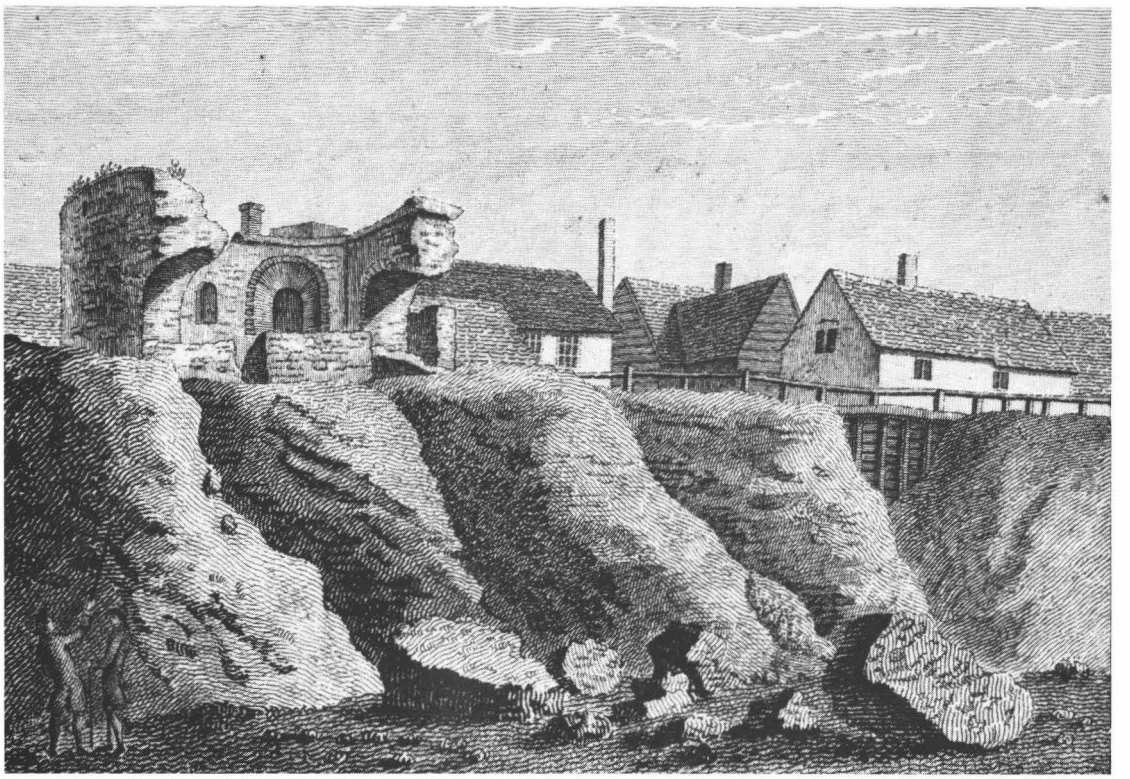

Fig. 1. 'The Blockhouse at Brighthelmstone, Sussex', drawn by Francis Grose in 1761 and engraved in 1773.

Lewes May 31st 1773

Dear Grose

I have been a long time in answering your last Letter, but as you are at present engaged in another way, suppose it will not signify. You have here as good a plan [reproduced in Fig. 2] as I can make from memory, and I believe it is pretty correct, how much of the Cliff is gone 'tis impossible to get any account of as it has been washed away at several times, and in small quantities; I can remember in some places about fifty yards of the Cliff gone, in others not so much. The Blockhouse is now tumbled down to make way for Carriages, and has not the least remains standing. [It wa]s built by Harry the Eighth out of the plunder of the Mon[ks &c.] who dignified themselves with the name of the Church; and when erected had some distance of ground before it, as marked red; but before thrown down half of it was fallen into the sea, as for the rest you will comprehend it by the plan. I am going tomorrow to the East of the County, when I will send you a correct plan of all that now remains of Hastings Castle, if you should want any thing in particular in the fortnight I am there, direct to me at the Honble Genl Murray Beauport near Battle. I am dr Grose

yours sincerely W. Green

Pertinent parts of the text accompanying the plate read:

> This small castle, called the Block-house, was built by Henry the Eighth, about the same time he erected so many others for the defence of the coast, namely, about the year 1539. When it was first built, it stood some distance from the edge of the cliff; but the continual encroachments of the sea having, by degrees, swallowed up the intermediate land, at length undermined its foundations, insomuch that part of the inner tower tumbled down, and in 1761 was lying under the cliff, as shewn in the view, since which the remainder has also been removed, in order to make a more convenient way for carriages . . . It is . . . said here was formerly a street of houses standing below the cliff, which have been washed away by the sea, but that their foundations are still visible under water; this may formerly have been true; at present no traces of them are to be seen. The sea has gained, upon this shore, at least fifty yards within the memory of several middle aged persons: the cliff here is of clay, and about twenty-five feet high.

As Green plotted in the northern half of the blockhouse and the battery built in 1759/60, Grose had presumably asked for a plan at the same date as

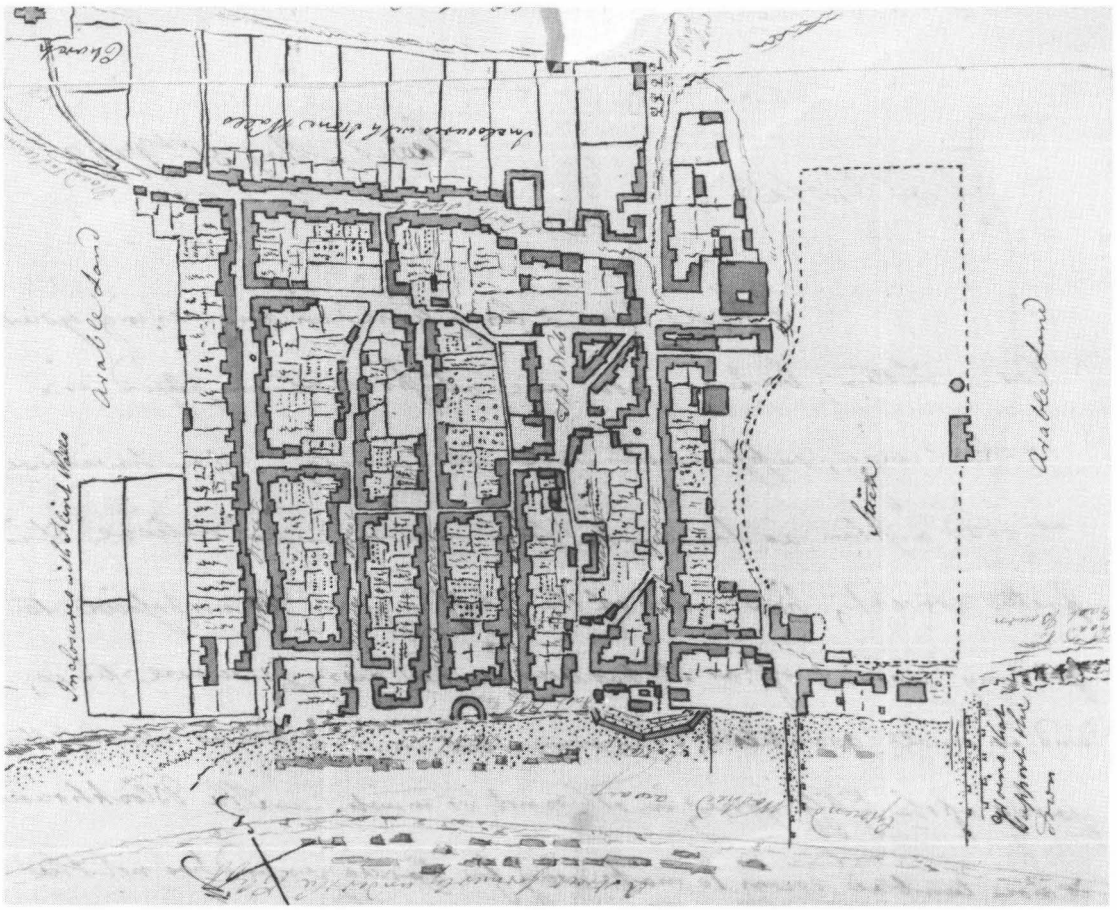

Fig. 2. Plan of Brighton *c.* 1761, drawn by William Green in 1773; from East Sussex Record Office, AMS 6279, by kind permission.

his drawing, 1761. Green probably intended the plan to be a draft for a published plate: three of his plans of Sussex antiquities were printed (that of Hastings Castle was promised in the letter). The plan is printed here with north at the top, but Green annotated it the other way round. The limits of the built-up area are the Steine to the east, North Street leading to the parish church, West Street and the cliff to the south. As military engineer, Green was trained to observe and record topographical details, and he may have been able to refresh his memory by consulting any plan of the town made when the battery was being designed. What is shown is broadly consistent with the first published map (by T. Yeakell and W. Gardner in 1779) and may be a useful guide to which street frontages had been built up since 1761; there are no obvious anachronisms of prominent buildings known to have been built between 1761 and 1773.[20]

Its greater interest, however, lies in showing the layout of lost buildings beneath the cliff which are marked in red on the original. A rental of 1665 listed 144 tenements beneath the cliff and a further 22 which had been lost to the sea; 59 of the former originated as grants from the waste made, where dated, between 1639 and 1658. These grants indicate a retreat up the beach—to the more northerly row on Green's plan. On the 1665 tenements stood 60 shops, 23 cottages and a salthouse, and in the Hearth Tax assessment of

1662, occupiers of 23 tenements 'under the Cliffe' were found liable: good evidence of a 'street'. But the last transaction in the manor court affecting an undercliff property was in 1704, and in 1723 John Warburton had found 'the beach almost covered with the walls of houses lying almost entire, the lime or cement being strong enough when thrown down to resist the violence of the waves'.[21] Sir Peter Thompson in 1760 reckoned that the sea had advanced by 30 yards since his visit in 1718. A map completed in 1723 recorded that the sea had advanced on the shore at Hove by 33 yards since 1699. The blockhouse was 50 feet in diameter and it started falling over the cliff in 1749, with half gone in 1761. These various dated estimates are roughly compatible if the rate of erosion was four feet a year from 1700 to 1725 (when the groynes of 1723 became effective) and halved to two feet a year afterwards. If the high tide was lapping the 'street formerly under the Cliff' in 1700, its remains may have been 50 to 60 yards below high tide by 1761. Grose's text suggests that he questioned Green further and that Green did not confirm that he had himself seen the remains, only that they were not now visible. Grose's attention to detail commands respect. Green's claim that 50 yards of the cliff (rather than beach and then cliff) had gone seems implausible, certainly over 12 years. Even if beach is included, the area where erosion seems to have continued longest was not lost so fast: the battery was being beaten by the waves even as it was being built, but did not collapse until 1786.[22] Unfortunately Green's plan cannot be relied on as mapping the lower town of Brighton. Perhaps it is fortunate that it was not published: it would have passed immutably into local legend.

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Notes

[1] This paragraph corrects the biographies in *Dictionary of National Biography*, **23** (1890), 272–3, and E. Partridge in his edition (1963) of *A Classical Dictionary*, 381–96 (quotation at p. viii), from International Genealogical Index (1992) (baptism, St Peter-le-Poer, 11 June 1731), Public Record Office, PROB 11/953 (father's will) and J. Davis, *Historical Records of the Second Royal Surrey or Eleventh Regiment of Militia* (1877), 87, 103, 333, 365, 440–58. V. Newall, 'Francis Grose, folklore's forerunner', *Royal Society of Arts Journal*, **140** (1991/92), 187–92. British Museum, Prints & Drawings, SC/A.1.33, for auction catalogues, 1791 and 1793 (the former reprinted in S. Piggott (ed.), *Sale Catalogues of Libraries of Eminent People, 10 Antiquaries* (1974), 463–514), and a letter of Dec. 1782 to the regiment's agent about his debts, on which also W. R. Perkins Library, Duke Univ., MS. 2226. D. F. Snelgrove's unpublished lecture notes (c. 1980, in the Society of Antiquaries Library) are the fullest but still insufficient appreciation of Grose's achievement. His collection of Grose's pictures has been broken up: Sotheby's London, *The Collection of the late Dudley Snelgrove*, 19 Nov. 1992. My annotated list of Grose's Sussex pictures and engravings is in the East and West Sussex Record Offices and the Sussex Archaeological Society's Library.

[2] J. Holloway, 'A travelling antiquarian. Francis Grose in 18th-century Scotland', *Country Life*, **171** (1982), 1084–5. R. Stalley, 'Ireland of old', *Country Life*, **185** (51), (19 Dec. 1991), 64–5; *Antiquities of Ireland*, **1** (1791), 8, indicates a visit in 1789.

au27sf2 Number of parts and descriptions of editions taken from publisher's advertisement in F. Grose. *A Provincial Glossary* (1787). References here are to the 'large quarto' edition.

[4] Davis, *Surrey Militia*, 402–13. D. M. Low (ed.), *Gibbon's Journal* (1929), cvi. Original drawings attributable to Grose are: British Library (hereafter B.L.), K Top XLII, 22h, monuments in St John-sub-Castro, Lewes; 221, Lewes Priory (2 Aug. 1762); 47a, Hove church (10 Aug. 1762); 51a, b, c, Laughton Place (see *Sussex Archaeological Collections*, **129** (1991), 152–61); 58f, Pevensey Castle (Aug. 1762); Brighton Art Gallery, 100675, Brighton from the west (11 Aug. 1762); Sussex Archaeological Society, picture collection, 93, Lewes Castle (28 Aug. 1762), 94, Mount Caburn (6 Nov. 1762); Sotheby's, *Snelgrove*, lot 252, Battle Abbey (28 July 1762), Beachy Head (21 Aug, 1762), Bramber Church (26 June 1761), Lewes Castle (27 Sept. 1762), 'near Rye'; also, perhaps, the engravings of the font in Brighton church, in *Antiquarian Repertory*, **3** (1780), 56, 254.

[5] D. Kingsley, *Printed Maps of Sussex 1575–1900*, Sussex Record Society, **72** (1980–81), 46–48.

[6] B.L., Add. MS. 5670–5, 5678; W. H. Godfrey & L. F. Salzman (eds.), *Sussex Views selected from the Burrell Collection*, Sussex Record Society Jubilee Volume (1951).

[7] Society of Antiquaries Library, collection of original drawings intended for Grose's *Antiquities*, on which see J. H. Hopkins, 'Francis Grose, F.S.A., and "The Antiquities of England and Wales" ', *Antiquaries' Journal*, **56** (1976), 253–5. Nos 250–265 relate to Sussex which is relatively poorly represented. All appeared in *Supplement*, **2** (1787), except for the bird's-eye view of Pevensey Castle which appeared only in the 'small' edition, **8** (1787). Brighton Art Gallery (100668, 100670–4) has six prepared for the engraver for vol. **3** (including the Blockhouse at Brighton, Fig. 1 above); Sotheby's, *Snelgrove*, lot 252, included three.

[8] B.L., Add. MS. 17,398, ff. 103–111; notes by Burrell are in Add. MS. 5697. B.L., K Top XLII, 41, 42, 43 and 49, and four views in Sotheby's, *Snelgrove*, lot 252, probably date from this tour. The album in Hastings Museum, 950.57, used in A. Guilmant, *Bygone Battle* (Chichester, 1983), fig. 134, cannot be attributed to Grose (e.g. it includes views of barracks built after his death).

[9] Holroyd's new-built 'Sheffield Place' duly appeared in *Antiquarian Repertory*, **2** (9), (1778), 304. Like Burrell, James Michell and Dr A. C. Ducarel, F.S.A., were lawyers. Bodleian Library, MS. Top. gen. e.70 and Douce c.1, contain drawings of 18 monuments, fittings, etc., in Sussex churches (all visited in 1777), most copied by other hands from Grose's and Burrell's originals, probably in preparation of the 'Addenda to the Preface', *Supplement*, **1** (1777 on title page), as eight appear in plates II, V, VIII, IX and X (where dated, 1787). Two more were engraved in *Antiquarian Repertory*, **3** (1780), 240; **4** (1784), 93.

[10] R. Gilbert, 'Lewes Priory in 1772', *Sussex Notes & Queries*, **16** (1963–67), 194–8, who suggests that Burrell's letter printed in M. A. Lower, *The Worthies of Sussex* (Lewes, 1865), 165, was to Grose. A more plausible recipient, asked to search parish registers in eastern Sussex for Burrell, is the Rev. William Hayley, rector of Brightling (1714/15–89), who is, I suggest, named twice in the third person as a literary conceit.

[11] B.L., Add. MS. 5706, f.2. The plate is dated 1 August 1772.

[12] *D.N.B.* N. Hans, *New Trends in Education in the 18th Century* (1951), 113.

[13] East Sussex Record Office (hereafter E.S.R.O.), PAR 461/1/5/1, 11 Mar. 1820; ACC 4113, William Green's estate papers (uncat.), military commissions.

[14] F. Kitchen, 'The building of the coastal towns' batteries', *Sussex Archaeological Society Newsletter*, **45** (1985), 417, and personal communication.

[15] C. L. Sayer (ed.), *The Correspondence of Mr John Collier*, **2** (1907), 299–300, 304, 308–310; 514, 516–22, 526, for Murray and Green. The MSS are now in E.S.R.O., SAY. R. H. Mahon, *Life of General the Hon. James Murray, a Builder of Canada* (1921), 40–49, 312–16.

[16] Sayer, 315–18, 351, 355–6, 361, 366, 387, 403. R. F. Edwards (ed.), *Roll of Officers of the Corps of Royal Engineers* (1898), 8. E.S.R.O., ACC 4113; KRA/1/1/1; RYE 101/1; RA/C/1/3; LH 189. *Journal of the House of Commons*, **29** (1761–4), 126. *Sussex Weekly Advertiser*, 13 Dec. 1790.

[17] B.L., Add. MS. 32,987, ff. 155–6. L. Namier & J. Brooke, *The House of Commons 1754–1790*, **1** (1964), 446–7. R. G. Thorne, *The House of Commons 1790–1820*, **2** (1986), 396.

[18] E.S.R.O., ACC 4113, draft wills; AMS 2513–2519, cheques paid to the bailiff in 1820.

[19] E.S.R.O., AMS 6279, purchased with help from the Friends of E.S.R.O. from Sotheby's *Snelgrove*, lot 255.

[20] The 1779 map is reprinted in H. Margary, *Two hundred and fifty years of map-making in the County of Sussex* (Chichester, 1970). S. Farrant, *Georgian Brighton 1740–1820* (Brighton, 1980), 15–19, for development of resort facilities in the 1760s.

[21] E.S.R.O., SAS/C1, Goodwyn's rental, 1665. Public Record Office, E179/258/15. E.S.R.O., SAS/BRI 53, 54. B.L., Lansdowne MS 916, f. 71. J. & S. Farrant, *Aspects of Brighton 1650–1800* (Brighton, 1978), 42–3.

[22] 'A Journey from Poole to Brighton in 1760', *Antiquarian Magazine and Bibliographer*, **7** (1885), 180. R. Budgen, *An Actual Survey of . . . Sussex* (1724), reproduced in Margary. B.L., Add. MS. 5683, f. 59. *Sussex Weekly Advertiser*, 20 Nov. 1786.

Sussex Archaeological Collections **131** (1993), 159–171

A THREE-HEADED CERBERUS: BRIGHTON AND THE HEALTH OF TOWNS BILL 1847

by Margaret Whittick

This article considers the reactions of the inhabitants of Brighton, particularly the Improvement Commissioners, to the 1847 Bill, which never reached the statute book. It compares these reactions with those of commissioners elsewhere, examines the causes of antipathy to the measure and looks at strategies employed to secure a more effective and representative local government.

THE BRIGHTON IMPROVEMENT COMMISSIONERS RESIST THE BILL

On 14 April 1847 a committee appointed by the Brighton Improvement Commissioners to consider the Health of Towns Bill resolved to convene a meeting of delegates from all over the country, placing advertisements in four London newspapers and putting themselves 'in communication with all the principal towns and populous districts in England' so as to give 'conjoint consideration' to the measure.[1] Only one week later 'a numerous meeting' was held at the London Tavern, attended by 150 people, deputations from 'some 30 or 40 towns', notwithstanding the similar gathering convened by the Marylebone Vestry two days earlier.[2] The delegates resolved:

> That in the opinion of this Meeting it is of the first importance to the community that an efficient system of Drainage and Sewerage should be secured in all Large Towns and Populous Districts; and that measures for Improving the Sanitary Condition of the People, are in the abstract worthy of the warmest support.
>
> That the interference with Local Management involved in the Bills in question, is in the opinion of this Meeting highly objectionable, and subversive of the rights hitherto enjoyed by the Rate-payers in the conduct of their affairs.
>
> That the most strenuous opposition should be given to the Health of Towns Bill, in its present shape, and that it is desirable that the various Towns and Districts affected thereby should invite their Representatives in Parliament to assist in effectually promoting such opposition.[3]

THE TOWN'S STATE OF HEALTH

According to one of the convenors, George Dempster, Brighton was acclaimed as 'one of the most patriotic towns in the country for taking the initiative' in calling the assembly.[4] But why was it that the town, pre-eminent among seaside resorts, was prepared to risk the loss of the confidence of its fashionable and valetudinarian visitors by taking the lead in opposing legislation which would have provided the powers to cleanse itself? For from the evidence of the two public health reports published during the 1840s the town had no cause for complacency. Between 1821 and 1831 it had experienced the fastest growth-rate of any town in the country: the population of 5,669 in 1794 had swelled tenfold to 58,950 by 1849.[5] The fashionable quarters of Kemptown and the seafront were grafted on to the cramped streets and narrow house-plots of the 18th-century seafaring settlement. These most 'ill-contrived, undrained, narrow, thronged and pent-up lanes, courts and alleys'[6] were supplemented during the 19th century by further terraces of mean houses, betraying their origins in the medieval strip system, to accommodate those who came to Brighton to serve its wealthy seasonal visitors. John K. Walton has pointed out Brighton's pre-eminent size among resorts: its population in 1851 was over twice that of its nearest rival, Great Yarmouth.[7] This did not, however, mean that it welcomed comparison with industrial towns which were its equals in numbers of inhabitants.

Dr G. S. Jenks's study of Brighton was one of the local reports appended to Edwin Chadwick's magisterial *Report on the sanitary condition of the labouring population* and, although in its methodology it was less rigorous than many contemporary writings on public health, it gave some sense of the seasonal overcrowding in the

town, the inadequacy of sewerage and drainage, the overflowing cesspools and the prevalence of disease. The report mentioned the practice of digging cesspools deep so that the underlying shingle was reached; thus while their users were spared the trouble of cleansing them, they and their neighbours were in danger from polluted drinking water from wells at a lower level. And Jenks referred to the open drains in the south west of the town which discharged direct on to the beach above high-water mark. By the time Edward Cresy prepared his report to the General Board of Health in 1849 things had become worse. Houses built on terraces up the valley sides would discharge the contents of their cesspools into the houses below and the streets were full of heaps of manure from the numerous stables in the town. Houses were badly built, damp and undrained and some were inaccessible to the ash-carts, so that rubbish had to be basketed for removal by hand. Certain streets and courts were notorious as the seat of epidemics. Common lodging-houses were grossly overcrowded, with 12 beds holding 40 lodgers in one case.[8] A meeting of the Brighton and Sussex Medico-Chirurgical Society held during the cholera outbreak the same year was told that the Guardians of the Poor asserted that if all the night soil wagons in the town were employed they would not be able to remove all the nuisances within the two-week period prescribed by nuisance removal legislation.[9]

THE BILL'S REMEDIES

The Health of Towns Bill was an acknowledgement that all large towns in the country were deficient in sanitation and that the remedies available through public health engineering were appropriate to them all. It was influenced by the writings of Edwin Chadwick, the great public health reformer, who believed that the health of the urban public would be improved, not primarily through medicine, but through works of drainage and sewerage, constant water supply, paving and attention to the construction of houses and roads. The Bill was introduced by George Howard, Lord Morpeth, Chief Commissioner of Woods and Forests in the Whig government of Lord John Russell. A previous Bill on the same subject, Lord Lincoln's Bill of 325 clauses, had failed partly because of its complexity and, because of the priority given by the Government to sanitary reform, Morpeth's Bill was designed to be simple. But its 52 clauses incorporated four other pieces of legislation: the whole of the Towns Improvement Clauses Act 1847 and the Commissioners' Clauses Act 1847 and parts of the Waterworks Clauses Act 1847 and the Companies Clauses Consolidation Act 1845 (this last incorporating another recent Act). Such Acts were a device of the 1840s to ease the drafting of local legislation by providing ready-made clauses which could be incorporated into town improvement Bills and from the point of view of the promoters of the Health of Towns Bill they achieved uniformity in practice and kept to the safe territory of provisions already sanctioned by Parliament. But at the same time the use of such a device laid Lord Morpeth open to criticism from opponents. Lord George Bentinck, the Tory MP for Lynn, complained that clause 21 involved 790 other clauses, of which 472 belonged to four Bills passed only that session; and the Brighton Commissioner, George Dempster, characterised the Bill as a three-headed Cerberus.[10]

The legislation, complex as it was, would put powers of drainage, sewerage, paving, nuisance removal and water supply within reach of towns which not only had none of these facilities but in many cases were unable, because of their constitutions, to effect them. It would allow the compulsory purchase of land for public works and make possible both compulsory house drainage and sanitation and the recovery of their costs as private improvement expenses. Most important of all, it would give the opportunity of borrowing sums of money greater than the annual rate income on its security so that comprehensive sewerage and water supply works could be undertaken. Thanks to such mortgages of the rates, the expenses of large projects would no longer fall only on the ratepayers for the time being, to be enjoyed by their successors for years to come. The Bill aimed to establish machinery to increase uniformity and efficiency and to reduce the potential both for local corruption and for the understandable predilection of the ruling elite to confine works of improvement to the better-class districts where they had their homes. If passed, it would have given powers which were not improved upon until the 1870s. It envisaged a central Commission of Public Health and Works, with the First Commissioner of Woods and Forests

as its chairman and two paid Commissioners. This central body was to be charged with supervising the local administration of the Act, having the power to appoint and dismiss local officers of health and to dismiss surveyors of drainage works who had been appointed by the local commissioners. The central Commission would employ inspectors who could enquire into the condition of any town or district and, after holding a public inquiry, might set up a body of local commissioners to implement the Act. To forestall opposition to the Bill the promoters decided to build on existing structures: municipal borough councils were to become commissions and in unincorporated towns the inspectors were charged to appoint a commission from among the existing town commissioners—to a maximum of 27 members. Thereafter two-thirds would be elected by the ratepayers and one-third nominated by the central Commission. The inspectors were to decide on the boundaries of each local administrative area and could combine two or more existing jurisdictions into a single district if appropriate. In introducing the Bill in the Commons on 30 March Lord Morpeth cited the large towns of Brighton and Cheltenham, devoid of municipal government, to illustrate how the legislation would work. By using these towns as an example Morpeth was offering to their inhabitants a promise not only of improved health but of improved local government.

THE BRIGHTON COMMISSIONERS MOBILISE NATIONAL OPPOSITION

It is clear that Morpeth misjudged the strength of the opposition from the two towns' rulers. Less than a week later John Cox, Clerk to the Cheltenham Commissioners, was writing:

> What do you intend to do with regard to the Health of Towns Bill introduced by Lord Morpeth? Lord Morpeth's object appears to be to force Cheltenham, Brighton and Leamington into petitioning for incorporation. The House of Commons cursed us with a Member some time ago, and now they want to put a further curse on us, a dispute for a Town Council and Mayor . . . I do not see why the Government should interfere in the nomination of commissioners and I object to a paid Commission.[11]

This letter may have been a spur to Brighton in its decision to mobilise opposition to the Bill. Its commission numbered 112 men (Cheltenham's only 50) and the 36 meetings held during 1847 were attended by an average of 33 commissioners, though only 13 were required for a quorum.[12] These figures suggest an active body dominated by a powerful elite reluctant to relinquish its authority either to a centrally-selected body of local health commissioners or to an elected borough council. By heading the opposition to the Bill the Brighton Commissioners allow us to examine not only their attitudes to it but also those of differently-situated local bodies throughout England, which may suggest some of the reasons for the measure's failure.

The bundle of correspondence which opens with the letter from Cheltenham contains responses to the invitation to the London Tavern meeting, which epitomise the attitudes to public health reform prevailing among improvement commissioners, as well as their attitudes to the proposed wider powers and to local government. Unfortunately the record is tantalisingly incomplete. The Clerk to the Improvement Commissioners, Lewis Slight, was instructed by the *ad hoc* committee to place advertisements in London newspapers and to write to the clerks to the boards (for sewers, paving, water and improvements) in the metropolitan districts, since they were likely to feel most aggrieved by the proposed legislation and to be most powerfully placed to oppose it.[13] The mailing-list does not survive but the bundle contains replies from 32 towns to a circular of much wider distribution.[14] This self-selected sample of views on the Bill consititutes a wide variety of opinions, drawn from southern spas as well as from the London districts and northern industrial towns which have been most studied by devotees of sanitary reform. The sample also includes towns and districts with a wide variety of local government arrangements.

Six of the respondents promised to attend the meeting. These were the commissioners for the boroughs of Peterborough, Chichester and King's Lynn, those for the unincorporated towns of Lewes and Cheltenham and for City Road in London. The clerks to the Commissioners of five further boroughs—Bath, Birmingham, Northampton, Truro and Worcester—declined to send a

deputation but stated their intention of opposing the Bill through their members of Parliament. The commissioners of the northern boroughs of Bradford (who 'do not feel they can with propriety interfere') and Wakefield and the Sheffield Highway Board pronounced themselves in favour of the proposed legislation, as did the commissioners for Chelsea and for Sculcoates near Hull.

The Sculcoates Commissioners rehearsed the administrative nightmare caused by overlapping and fragmented jurisdictions. The Borough of Hull had two sets of improvement commissioners, themselves and the Commissioners for the Lordship of Myton. The Myton body managed the drainage of the old town, while its lighting and cleansing were in the hands of a board of assessors under a local Act and its paving in the hands of the borough council. A further extensive portion of the borough was lit under the general Act but unregulated as to paving and cleansing: 'You will therefore readily see that our town council are very anxious to obtain the powers of a *generalising* system.' The authorities in Walcot and Heavitree whose situations were superficially similar—small jurisdictions abutting the incorporated towns of Bath and Exeter respectively—took a different view, both writing in opposition to the Bill. They clearly feared annexation by their neighbours and a consequent rise in the rates. The Heavitree Commissioners believed that the Corporation of Exeter was spendthrift and irresponsible and that their absorption into its jurisdiction under the Bill would be unconstitutional. They asserted unrealistically that adequate public health powers were available to them through a combination of the Highways Act, the poor law administration and the common law.

The clerks to the commissioners in seven towns—Colchester, Dover, Hastings, Hereford, Plymouth, Chatham and Whitby, all but the last two incorporated boroughs—complained that there was insufficient time to take soundings and appoint a delegation. The Hereford Clerk, indeed, could not summon a meeting without seven days' notice while the Chichester Commissioners, who promised to send a representative, had no powers to convene a special meeting at all. The irony of their situation apparently did not strike these clerks as they exposed in their letters the cumbrousness of their administrative machinery and their slow rate of response, both defects which the Bill would have remedied. Of the remaining six respondents, two (the Ramsgate Commissioners and the Westminster Paving Board) promised to consider the invitation at forthcoming meetings; one (Cambridge) felt that there was no point in participating because of its anomalous position as a university town; two (Cirencester and South Shields) asked to be supplied with further information, as did six of the towns which turned down the invitation, and one (Cowes) simply stated that 'the commissioners decline to give an opinion on the merits of the Bill with the knowledge they have at present'.

Two of the other clerks wrote at length on the Bill and its background. The Manchester Highway Board had faith in the town's existing public health arrangements: it had been incorporated in 1838; the Corporation had taken over the powers of the improvement commissioners by agreement and had promoted a pioneering Sanitary Improvement Act in 1845. The Clerk claimed that as a result Manchester was much cleaner than London 'and most that is healthy and wise in the Bill of Lord Morpeth . . . is even now included in the local acts of the town.' Richard Mace, the Clerk to the Worcester Commission, spoke in contrast of a 'drawn battle' between his body and the town council over the Bill. The Commissioners were opposed because of its expense and the opportunities it gave for the exercise of undue influence and arbitrary power. In the only letter to mention party politics Mace expressed his belief that most corporations since the Reform Bill were thoroughly Radical and were being manipulated by the Whigs through centralising legislation under the guise of humanity. The Bill promised to create 'superfluous agents, officers and dependants' who will 'augment to a fearful degree the patronage and influence of the Government'.

Between the convening of the London Tavern meeting and its taking place Lord Morpeth had decided to amend the Bill by removing all reference to London; this he hoped would ease its passage through Committee. Nevertheless representatives of London local authorities attended in force, one of them (Wilson, a Marylebone Commissioner) stating that while he rejoiced in the exemption of the metropolis from the Bill he did not want to buy that exemption at the cost of his neighbours. The

Brighton party, consisting of senior Commissioners from the special committee on the Bill, took the lead, supplying a chairman (James Cordy) and proposers and/or seconders (George Dempster, William Hallett and George Stonhouse Griffith) for each of the three motions at the beginning of this article. Lewis Slight, the Clerk, also addressed the meeting in favour of the resolutions. The *Morning Herald* and *Brighton Gazette* the following day reported seven Marylebone Commissioners speaking in favour of local self-government and against central control, while a Commissioner for St. George Southwark unsuccessfully proposed an adjournment on the grounds that the majority of the attenders knew nothing of the measure. Londoners also spoke against the resolutions. The Vestry Clerk of St. George Southwark complained that there were nuisances which could not be removed by his unelected and unaccountable local commission and the Medical Officer to Whitechapel Poor Law Union pointed to mortality rates of 1 in 36 in his district and 1 in 28 in some parts of well-managed Marylebone. Dr Guy expounded the difficulty of designing a comprehensive drainage system for a capital city whose local government was in the hands of so many bodies, as well as the waste of money caused by preventible sickness and death: the Bill contained, he said, 'the seeds of health, longevity and immense economy'. The theme of sickness as expense was touched on too by T. Beggs, a member of the committee of the Working Men's Association, who had recently given two lectures at the Brighton Athenaeum on the improvement of the health of towns and who maintained that the cost of sickness from want of ventilation, scavenging and drainage amounted to ten times the cost of carrying out the present measure.[15] Two other contributors to the debate are named but not identified with any district; it is interesting that neither newspaper report records speeches by representatives of towns other than London or Brighton and indeed a leader in the *Gazette* refers with regret to the opposition to the *principle* of the Bill by the 'Commissioners of Brighton and wiseacres of Marylebone', as if they were the only participants. The absence of comment from elsewhere reinforces the impression given in some of the letters that the complex machinery of the Bill was imperfectly understood and that many of the 150 representatives attended to gain information which would help them to form a view of the matters which it covered rather than to engage in debate.

THE COMMISSIONERS' COMMITTEE AND THE BRIGHTON VESTRY

While co-ordinating opposition at a national level the Commissioners did not neglect to mobilise the Bill's opponents in Brighton. The special committee of seven was appointed on 13 April to report on the legislation to a Vestry meeting of ratepayers (who numbered about 5,000) on the 22nd. This in itself was a controversial decision since even among the Commissioners there were those who felt that the report should rather be made to a town meeting, accessible to all the inhabitants. George Griffith pointed out that not only would the resolutions of a town meeting carry more weight with Parliament but that the poor who did not pay rates had a right to protection against bad sanitation, which affected their health in greater degree than the health of those who paid.[16] William Alger, a radical member of the Brighton Liberal Association,[17] complained that

> The Commissioners would have acted wiser and more in unison with the proper spirit of Brighton if they had called their townsmen together in the first instance (cheers) and said—now, gentlemen, here is a bill before parliament which will abolish the present body of Commissioners and we wish to take your opinion.[18]

The committee's first action was to take the initiative in convening the London Tavern meeting and it continued to campaign vigorously. While the announcement of the modified Bill might have conciliated the London boards and commissioners it was met with anger in the provinces. The dirt and disease of the metropolis were notorious but that of provincial towns could be ignored, particularly by their rulers who inhabited the better-class districts. A leading article in the *Brighton Guardian* of 21 April marvelled that the central board 'which will work wonders for every other great town is to leave London alone'. The special committee produced an abstract of the Bill and a commentary on it which were debated at the Vestry, in a meeting attended by

almost 200 people including the local M.P.s and lasting two-and-a-half hours.[19] This meeting appointed its own committee of nine to consider the comments and to report to a town meeting on 1 June. Interestingly four of the members of this committee were also members of the Commissioners' committee, notwithstanding the objection of Levi Emanuel Cohen, the publisher of the Liberal *Brighton Guardian*. It emerges from newspaper reports that one of these men, Griffith, was in favour of the Bill and three—Dempster, Hallett and Edward Cornford—were against.[20]

THE BILL FAILS

In the interval between the Vestry meeting and the town meeting the Government tried to secure parliamentary time for the committee stage of the Bill. With the approach of the end of the session and the increasing probability of a general election, the promoters became anxious and made further concessions to their critics. On 10 May Lord Morpeth announced that the legislation would apply to 1835 municipal corporations, though it could be applied in other towns and districts on the petition of 300 ratepayers. Despite cross-party support, further modifications were made during its slow progress through Committee (by early July four sittings had dealt with only 21 clauses), including the deletion of the power of central government to nominate a third of the local commissioners in unincorporated towns. Thus the Bill was largely rendered harmless as far as Brighton and Cheltenham were concerned and the tone of debates over opposition to the Bill—though not over the incorporation question—became less strident. Regardless of these concessions, however, it was clear that the Bill would not pass that session and the Government was forced to abandon it. Lord John Russell drily left members to decide whether it had failed because of its own weakness or because of 'vexatious opposition'.[21] But for the Tory *Brighton Gazette*, which had been consistent in its support for the principle of the Bill, its failure stemmed from the feebleness, timidity and infirmity of purpose of the Government: 'we are all fitly rewarded for the innocence which induced us to imagine that any thing good could proceed from Whiggery'.[22]

THE BRIGHTON PUBLIC HEALTH DEBATE

In Brighton the Vestry committee reported on 25 May that the most objectionable parts of the Bill had been removed by amendment: if it passed into law it would be beneficial to the towns where it was applied. Further they reported that if it became law it should be applied to Brighton. The three-hour town meeting of 1 June, attended by 300 people, ratified this report, resolving that it cordially approved the principles of the Bill as amended and leaving to the M.P.s the task of securing amendments of detail where necessary.[23] The two Members, George Pechell and Lord Alfred Hervey, took this duty seriously and wrote regularly to the Clerk to the Commissioners to report progress.[24]

The Vestry meeting and the town meeting on the Bill were reported in detail in the three local newspapers,[25] which also covered commissioners' meetings and devoted leading articles to the sanitary debate. The views reported from these meetings are more varied than those we have encountered hitherto, though there is a refrain of complaint about centralization, the erosion of local democracy and expense. What is lacking is much discussion on health and sanitation, in contrast to the reports of parliamentary debates in *Hansard*; though George Griffith was conscious that Parliament was bound to take 'a more enlarged view' of issues which were not peculiar to Brighton.[26] One of the strongest statements in the local debate in support of the Bill on public health grounds came from the M.P. Lord Alfred Hervey, notwithstanding his membership of the Tory opposition. He pointed out that there were portions of the Bill which a political opponent of the government could gain popularity by opposing but that the subject was of too great importance for him to be tempted and he promised the measure his steady support. He asserted that the average life expectancy of a gentleman in St. George's parish was 45 while that of a working man was only 27 and he mentioned the reduction in mortality in Manchester since the drains were laid.

In addition the Bill's supporters on the Vestry committee kept health issues before the public meeting. George Stonhouse Griffith, the proposer of the third London Tavern resolution which advocated 'the most strenuous opposition' to the Bill, had, six weeks later, come to see the benefits of a degree of centralization. He acknowledged that

some places in Brighton were 'a foul disgrace' and deplored the provision in the Improvement Act (a more common feature of local legislation than he realised) for fining those who connected their house-drains to an existing main drainage system. The meeting was given a demonstration of the inadequacy of this system by John Cordy Burrows, a surgeon and committee member: he produced a map on which drained areas of the town were coloured red and pointed out their small number. The sanitary state of the town, he felt, had not improved since Dr Jenks had reported and its condition was unknown to the majority of the inhabitants. This last statement was unwittingly borne out by Henry Faithfull, the chief denigrator of the Bill, who maintained that Brighton was a clean and healthy place and had improved more than any other town in the last 20 or 30 years. His partiality could perhaps be attributed to his position as solicitor to the waterworks company, vulnerable to takeover by a local board of health. Charles Sharood, another solicitor who later became Town Clerk, attacked Faithfull and his domination of the Commission of which Sharood himself was a member, saying that local bodies, having no sympathy with the good of the humbler classes, could not be trusted to carry out sanitary measures. As an illustration he cited the reliance of the Commissioners on the nuisance removal provisions of their own Act rather than on the more effective summary powers of the general Nuisances Removal Act of 1846, which was administered by the poor law authorities under the supervision of their central board.

Those who spoke in favour of sanitary reform in these debates were almost exclusively members of the middle class, in many cases professionals, who had an altruistic interest in improving the lot of working men and women. (Sometimes, as at the London Tavern meeting, altruism was tinged with a desire for economy, as in the contribution of Judah Isaac Abraham who gave the twin aims of sanitary improvement as the saving of lives and the saving of money: it was not lost on the Victorian merchant class that profits were affected by sickness.)[27] But two speeches are reported which seem to come from a lower stratum of society and the manner of their reporting suggests a middle-class surprise at the desire of working people to be involved in control over their environment. The *Herald* tells us:

> Two persons (names unknown) addressed the [town] meeting at great length and, in very strange terms, complaining loudly of the conduct of the local authorities and of their neglecting to drain, cleanse, or remove nuisances in some of the back streets.

The newspaper report conceded that though this was the wrong forum for such complaints yet they were justified. The same patronising tone was adopted by the *Guardian* in its report of the meeting:

> A person in the attire of a working man, who stated his name to be Lawrence,[28] remarked that the rich never cared for the sanitary condition of the poorer districts of towns unless the poor had got fever and the rich were afraid of getting it.

PUBLIC HEALTH REFORM AND LOCAL GOVERNMENT

The condescending tenor of these reports seems to bear witness to the complacency of the middle class over the disenfranchisement of the majority of their fellow-townsmen. Although the Commissioners' meetings, unlike those at Cheltenham, were reported in the press, the privilege of electing the 112 members of the Commission was limited to those who lived in houses rated at £20 a year or more. The Commission was so large that it could hardly be a cohesive body; indeed some of its vociferous critics, such as Sharood, were Commissioners themselves. The *Brighton Guardian* in a leader of 28 April significantly headed 'Our local government' remarked on the strong feeling against the body at the Vestry meeting, where reproach and contumely were cheered and every reference to incorporation applauded.

The impression created is of a small number of active Commissioners who, with their officers, wished to preserve the *status quo*. At the Vestry meeting William Alger, the Liberal, who felt that the local Act was good for nothing for practical purposes, announced to cheers that 'Our Commissioners have outlived their sphere of action';[29] he is reported by the *Gazette* of 24 April as saying that the inhabitants had outgrown their

present institutions as they had outgrown their streets: the streets could not be enlarged whereas the institutions could be. The people of Brighton seemed to feel that their present system of local government was ineffective and discredited. Like John Cox of Cheltenham they felt that they were being drawn into choosing between the much smaller but more effective board proposed by the Health of Towns Bill and incorporation as a borough under the Municipal Corporations Act 1835; but the Radical element of the population did not share Cox's distaste for the choice.

As we have seen, this choice was perceived by some of the Commissioners and their officers as a Whig conspiracy to radicalise local government and some of the cries for incorporation can be identified as those of radical Liberals. Since the original expression of fear of enforced incorporation came from Cox it is perhaps instructive to compare the situations of Brighton and Cheltenham. Under the Reform Act 1832 both towns had become parliamentary boroughs with two members. The two towns superficially had much in common: Brighton's population was almost 60,000 while Cheltenham's was 40,000 and they had both undergone rapid expansion, Brighton becoming 10 times and Cheltenham 11 times more populous during the first half of the century. Both were watering-places, dependent for their prosperity on their reputation with visitors and they shared strong Radical and Nonconformist traditions.[30] It was natural that they should be compared (Leamington, with which a comparison was drawn in Cox's letter, was less than half the size of Cheltenham and not really parallel) and that incorporation should be regarded as the logical next step for both.

In Brighton incorporation had been discussed most recently in 1844 when a proposal to form a borough of Brighton and Hove was rejected by the Vestry.[31] The debate on the Health of Towns Bill brought the subject inexorably to the fore but had, for the Bill's supporters, the unfortunate effect of splitting the vote for local government reform and of perpetuating the existing situation. The Municipal Corporations Act would widen the franchise to include all ratepayers and would create a smaller and more accountable ruling body. This body would have greater powers to govern the town than those exercised by the Commissioners but these powers were not dedicated to the improvement of the living conditions of the inhabitants as those in the Bill were.

THE POLITICAL DIMENSION

In both Brighton and Cheltenham there was a large Radical population in favour of incorporation:[32] Brighton had returned two Radical M.P.s after its conversion to a parliamentary borough and its Vestry minutes at the beginning of 1847 contain a petition in support of the Charter. In Brighton public health issues were to some extent subordinated to the debate on corporate status which they had revived.[33] But reactions to the choice between the Bill and the Act were not always predictable. The *Brighton Gazette*, as a Tory newspaper, was implacably opposed to incorporation but it supported the Whig proposals for health reform with enthusiasm, conceivably as a means of fighting off borough status. The *Brighton Herald*, on the other hand, though it was the more Radical of the two Liberal papers, was not certain that incorporation 'would not bring in far greater inflictions than any generated under Lord Morpeth's Bill' and even went so far as to prefer the *status quo*.[34] The Liberal *Guardian* was more consistently anti-Commission but felt that the central government was being pushed to take premature action on social matters by extremists: the Whig Ministers were accused of 'making themselves the tools of busy meddling adventurers' and forfeiting the respect of moderates.[35] Wilson, one of the Marylebone delegates to the London Tavern, felt similarly ambivalent. He conceded that he had always liked a Liberal government but that when he saw them attached to centralization he felt that they exhibited 'either a want of knowledge or, what was worse, a want [of] sincerity'.[36] In enacting the Reform Act and the Municipal Corporations Act the Liberals had seemed confident of the people's exercise of power but their proposals for central control of public health administration suggested a retreat from that confidence.

Unexpected reactions were exhibited too at national level. As we have remarked, the Tory M.P., Lord Alfred Hervey, made an impassioned speech in favour of public health reform to the Vestry meeting. Capt. George Pechell, however, the Liberal Member, was reported as passively

promising to carry out most faithfully whatever was the wish of the town.[37] But the Bill commanded cross-party support for its humanitarian objectives and there were large majorities at each stage of its parliamentary progress.

Members of Parliament and leaders of local opinion alike seemed anxious to foster a view of a local government untouched by party politics. Pechell, in his contribution to the parliamentary debate of 6 July, made reference to the many places where the election of a large number of commissioners 'was carried on without political excitement.'[38] Though this statement—at least as applied to his constituency—should not perhaps be taken at face value, it is paralleled by a claim made of Hastings a few years later, that party feeling was held in 'honorable abeyance' except at municipal election time.[39] The *Gazette's* objection to incorporation was ostensibly founded on a distaste for the annual elections which would plunge the town into 'local bickerings and quarrels'.[40] Though these assessments may be accurate it is likely that they arise from a fear of political extremism contending with an awareness of the need for improved local government.

THE COMMISSIONERS' INADEQUATE POWERS

If attitudes to the Bill were not indeed dictated by party allegiance what were the motives of the Commissioners who opposed it? And what evidence is there for their claim that the Bill was subversive of the rights hitherto enjoyed by ratepayers in the conduct of their affairs? And what grounds for the distrust of improvement commissions voiced so strongly in Brighton and elsewhere?

Commissioners were appointed under a variety of Acts, renewed only when funds allowed and when an enlargement of powers was needed. Brighton's Commissioners operated under an Act of 1825, passed at a time when the town was much smaller and less populous. They concentrated on widening streets and paving the better-class areas and on the construction of public buildings such as the town hall and market. Street-watering and refuse-removal were undertaken in the districts most frequented by visitors. The major capital projects of the 1830s, the town hall and Marine Parade wall, had left the Commission with a debt in 1849 of £140,000.[41] Although local Acts were imitative of each other and, as we have seen, local bodies had access in the 1840s to a variety of clauses consolidation Acts, there was no uniformity in local government and the bodies which ruled the expanding urban areas were not felt to be answerable to their communities. There might be high property qualifications for becoming a commissioner and for participating in elections (in Brighton there was a £50 qualification for commissioners and a £20 qualification for voters); and in some cases members of the commission were not elected but named in the Act and their successors nominated by the existing membership. Some, as in Cheltenham, met behind closed doors and, though they rated the richer inhabitants, published no proceedings or accounts.

As the debate at the town meeting showed, the ability of the Brighton Commissioners to undertake works of public health engineering was limited, both because of inadequate powers and because of lack of funds. It is true that the Brighton body did not suffer from fragmented and overlapping jurisdictions such as prevailed in Hull or in Cheltenham, where the Improvement Commission shared power under its local Act of 1821 with a private sewer company and a private water company and where the outlying estates of Lansdown, Pittville and Bayshill each had its own sewerage and highway arrangements.[42] Nevertheless Cresy found in Brighton in 1849 that the Commissioners and the Directors and Guardians of the Poor each had a nuisance removal committee and it was alleged that the jealousy between the two bodies led them to impede one another rather than to do their duties.[43] Impressed by the Health of Towns Bill and aware of the folly of draining a town the size of Brighton in annual small portions, William Hallett, who chaired the Commissioners' Drainage Committee, scrutinised the local Act to see if it allowed capital borrowing on the security of the rates; he found that the cost of drainage might only be recovered from owners and occupiers in proportion to the benefit derived from the works.[44]

By the mid 19th century local populations expected a more effectual and responsive form of local government than they had done fifty years earlier. Then improvement commissions had

provided an answer to many of the problems faced by communities in the course of rapid urbanisation but now they offered an expensive, partial system of government which in many cases was not subject to democratic control. It is difficult to resist Alger's conclusion that they had outlived their usefulness.

THE COMMISSIONERS' SPHERE OF INFLUENCE

Their tenacity in opposing change can be attributed in some degree to a fear of a loss of influence. A commission of 112 inevitably contained most of the principal tradesmen and contractors of the town. There were occasional charges of corruption but even discounting these the opportunities for mild forms of 'jobbery' must have been difficult for the local rulers to resist or even to avoid. This of course was why the Health of Towns Bill sought to introduce a central supervisory machinery. In many ways, the Commissioners' servants had more to lose from the demise of the Commission than its elected members. The *Guardian* leader of 28 April on the Vestry debate remarked on the strong feeling against the Commissioners:

> We have long warned that their tame submission to being snubbed, insulted and controlled by their servants would inevitably bring them into general contempt; and our words are verified to the letter.

The Clerk, Lewis Slight, seems to provide the most flagrant example of the exercise of influence. In 1825 he owned a shoe shop in North Street and was one of the new Commissioners to be nominated in the Improvement Act. He was active in opposing the payment of high salaries to officers and in 1826 stepped into the vacuum created by this policy to become Clerk to the Commissioners himself.[45] He held the office for twenty-six years, until incorporation in 1854, exercising tremendous influence and not apparently suffering from the reduced salary which he was voted. In 1851, when the application of the Public Health Act of 1848 to the town was under consideration, M. B. Tennant, a Commissioner, wrote to the General Board of Health of his worry that the Commission's plans to discharge sewage into the sea would bring about the failure of Brighton's reputation as a watering place:

> The affairs of the town are almost exclusively managed by a small party of tradesmen under the influence of Mr Slight who is a person of considerable talent and influence possessing a large fortune and of a persevering character whose measures are frequently of an injurious nature . . ., which the Commissioners as a body can scarcely control, although composed of 112 members of whom I have the honor to be one.[46]

The commercial interests of improvement commissioners have been remarked on in research into other towns but a high class resort such as Brighton, with its prominent Court patronage, might be expected to be exempt from this trend. To test this theory I attempted to identify from directories the occupations of the 46 Commissioners who attended the meeting of 21 April.[47] This was a particularly high attendance but the list may be assumed to contain many of those most involved with the Commission's affairs. It included seven builders, two painters, a stonemason and a timber, slate and coal merchant; four hoteliers or innkeepers, a lodging-house keeper, the owner of livery stables, a brewer and a wine and spirit merchant; two jewellers, a draper and a tailor, a furniture broker, a hairdresser and a riding master; two solicitors, two stationers and booksellers and an insurance agent; a shipowner and coal merchant and a butcher. One Commissioner could not be identified and for three others the trade sections of the directories contained two or more possible candidates of the same name. In addition there was a doctor of divinity and eight men who are described as gentlemen. The impression gained from this sample is of a body dominated by the more prosperous and respectable classes of tradesmen. Many were in commercial relationships with the Commission: two of the builders, Lambert and Cheesman, undertook large contracts and others regularly bought the town ashes for brickmaking. Others again are familiar from the minute books as suppliers of goods. Even those classified as 'gentlemen' can in some cases be found to have risen from trade backgrounds: there is Amon Wilds, the builder and developer, and George Cobb, the proprietor of the Theatre Royal, for instance. The committee on the Bill, presumably made up of trusted senior Commissioners, exhibited a similar

occupational composition except that it contained three solicitors (Faithfull, Dempster and Cornford) as well as a wine and spirit merchant (Cordy), a pawnbroker and jeweller (Folkard), an architect (Hallett) and a brewer (Griffith). It seems clear that such men might be closely allied to their Clerk both through a common background and through their need for the Commissioners' business and that Tennant's allegations of undue influence are at least plausible in the case of that officer.

Significantly, after his appointment as Clerk Slight continued to act as though he were himself still a Commissioner. It it tempting to think that the London Tavern meeting was called on his initiative and he certainly made a speech against the Bill there, as well as challenging the right to participate of a private inhabitant of the City.[48] In November 1849 he was regarded as heading the opposition of the Commissioners to the application of the Public Health Act 1848 to Brighton and a short time before he had vehemently rebutted the claim in *The Times* that Brighton had had nine cholera deaths, in the face of corroboration from the poor law medical officers.[49] In Cheltenham in the same year John Cox was challenging Edward Cresy's report of the sanitary state of that town[50] and asserting its healthiness but his challenge was mistrusted by some of his fellow-townsmen:

> You will see . . . what a nice affair the Commissioners' fact totum has made of it in order to contradict you he has taken his data from another statistical year.[51]

Those officers who believed that Whig Ministers aimed to politicise local government feared that they would be supplanted by Government placemen in whatever system of administration should be chosen. W. S. Goody, the Clerk to the Colchester Commissioners, felt that his reappointment to office under a Health of Towns Act would be dependent on a political body, a situation which he regarded as 'exceedingly hard and unfair—my appointment had nothing to do with politics.'[52]

Slight, though a Radical,[53] was obviously not confident that there would be a place for him in any new local authority. In November 1849 he wrote to the General Board of Health asking whether there was provision in the 1848 Act for compensation of officers of commissions which the legislation superseded; Cox wrote from Cheltenham with the same enquiry the following month.[54] The evidence of the replies to the London Tavern invitation from clerks such as Cox of Cheltenham, Goody of Colchester and Mace of Worcester suggests a cadre of determined officers, reluctant to relinquish their salaries and perquisites and perhaps even more reluctant to cede influence. Such men were well able to exploit the complexity and unfamiliarity of the new legislation and to play on the *amour propre* of the commissioners to safeguard their own positions. The original form of the Public Health Bill, which would have entrusted sanitary powers to borough councils but created new boards to administer them in unincorporated places, had already convinced improvement commissioners that the Government had no confidence in them. William Hallett claimed that the legislation aimed to introduce 'a complete system of *espionage*' via the central Commission.[55]

Some of the anxieties about the Bill seem to stem from its novelty. It was possible to believe—or to claim to believe—that the Government wanted to infiltrate local government with an unlimited number of surveyors and inspectors who would owe allegiance to the party in power but would be a charge on the local rates. In addition public health was an increasingly technical subject, involving branches of both medicine and engineering where much of the learning was controversial; moreover its solutions were expensive. It was a fairly simple matter to convince the tradesmen who composed the commissions of a conspiracy against them and to persuade them into drawing back from any decisive action on the grounds of insufficient knowledge.

THE ECLIPSE OF IMPROVEMENT COMMISSIONERS

The Commissioners' opposition to the Bill was conducted in the knowledge that the days of *ad hoc* commissions appointed under expensive local Acts were numbered and that the future lay with democratically elected corporations or boards of health with more uniform powers. It is perhaps significant that many of the bodies of commissioners whose constitutions precluded the rapid convening of meetings operated within municipal boroughs, where the lead in local

government affairs may already have been a matter for the town council. Henry Faithfull claimed that the superiority of commissions to corporations was proved by the fact that commissions, unlike corporations, had never shown themselves in need of reform but this argument is patently specious.[56] Even when it was virtually certain that the Bill would not reach the statute book in 1847 it was clear that there would be a successor in 1848. The 1847 Bill was itself a successor to a Bill promoted in 1846 by Lord Lincoln and three Bills on sanitary subjects introduced by Lord Normanby in 1841; they emanated from a series of reports on public health which left the Government no choice but to legislate as soon as it could find a formula acceptable to the localities. Even the Public Health Act 1848 was not passed without a struggle and much amendment but it was a more effective measure than the emasculated 1847 Bill: it was a comprehensive text not relying on clauses consolidation Acts; it had a central supervisory board; though a permissive Act, it allowed for the compulsory application of its powers to places where the death rate was high.

Studies of the sanitary movement have shown that success in achieving reforms, which were expensive and often showed no direct benefit to the ratepayer, was crucially dependent on propaganda.[57] Without constant local reminders of mortality rates or examples of disease-infested districts it was easy for ratepayers to ignore the evidence of the parliamentary reports and to believe in the healthiness of their localities. This was particularly true in Brighton, whose popularity with seekers after health increased year by year. In 1847, at a local level, speeches and letters from doctors and humanitarians and a programme of public lectures were no match for the concerted efforts of local rulers and their paid officers intent on defending their positions. In Brighton the revival of the incorporation issue created a diversion which led to a triumph of the desire for self-determination over the desire for health. In 1848, on the other hand, the drama was replayed against the backdrop of the inexorable approach of cholera from Europe, which tipped the balance in favour of legislation.

When the 1848 measure was on the statute book the ratepayers of both Brighton and Cheltenham petitioned for its application to their districts but in both cases the attempt failed owing to the forces which we have seen at work. Yet while the towns failed to achieve the cheap and effective system of sanitation and water supply promised by the General Board of Health, the process of scrutinising the proposed legislation led them to an appreciation of the need for improved government powers. In 1852 Cheltenham gained an improved local Act which centralized its conflicting jurisdictions and introduced an elective commission and in 1854 Brighton became a borough council.

ACKNOWLEDGEMENTS

My thanks are due to John Farrant, John Lowerson and Christopher Whittick, who read the text and offered constructive criticism.

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Notes

[1] E(ast) S(ussex) R(ecord) O(ffice), Commissioners' minute book, DB/B60/12.

[2] *Brighton Guardian*, 28 April 1847; *Brighton Gazette*, 22 April 1847.

[3] E.S.R.O., Commissioners' reports, 1847, DB/B71/8, 22 April 1847.

[4] *Brighton Herald*, 24 April 1847.

[5] A. Briggs, *Victorian Cities* (1963), 30.

[6] J. K. Walton, *The English seaside resort* (Leicester, 1983), 52.

[7] G. S. Jenks, report on Brighton appended to Edwin Chadwick's *Report on the sanitary condition of the labouring population*, British Parliamentary Papers (Lords) (1842).

[8] E. Cresy, *Report to the General Board of Health on a preliminary enquiry into the sewerage, drainage and supply of water and the sanitary condition of the inhabitants of the town of Brighton* (1849).

[9] Postgraduate Medical Centre Library Brighton, proceedings of the Society reporting Dr Verrall, 2 Aug. 1849.

[10] Hansard, *Parliamentary Debates*, 3rd series 94, Commons, 8 Jul. 1847; *Gazette*, 15 April 1847.

[11] E.S.R.O., Commissioners' letters and papers arranged by subject, DB/B73/77.

[12] E.S.R.O., report of attendances 1846–1848, DB/B73/84.

[13] E.S.R.O., DB/B60/12, 14 April 1847.

[14] E.S.R.O., DB/B73/77.

[15] E.S.R.O., DB/B73/76 lists these lectures, held on 31 March and 14 April.
[16] *Gazette*, 15 April 1847.
[17] A report of a meeting of the Brighton Liberal Association in the *Gazette* of 17 June 1847 has Alger taking the part of Coningham, the Radical candidate, against Pechell.
[18] *Guardian*, 28 April 1847.
[19] *Herald*, 24 April; *Guardian*, 28 April; *Gazette*, 29 April 1847.
[20] E.S.R.O., Vestry minute book, PAR 255/12/6.
[21] Hansard, *Parliamentary Debates*, 3rd series 94, Commons, 8 July 1847.
[22] 15 July 1847.
[23] E.S.R.O., PAR 255/12/6.
[24] E.S.R.O., Commissioners' in-letters, 1847, DB/B72/10.
[25] Reported in the *Guardian* 2 June, the *Gazette* 3 June and *Herald* 5 June 1847.
[26] *Gazette*, 15 April 1847.
[27] *Guardian*, 28 April 1847.
[28] Identified by the *Gazette* of 29 April as a cabinet-maker.
[29] *Herald*, 24 April 1847.
[30] See N. Gash, *Politics in the age of Peel* (1953), 384 and G. Hart *A history of Cheltenham* (Leicester, 1965), 373–92.
[31] E.S.R.O., PAR 255/12/6, 16 Dec. 1844.
[32] Briggs, *op. cit.*, discusses the Radical enthusiasm for municipal government as a natural development of the Reform Act, 382–83.
[33] The *Guardian* quotes Feist as saying that feelings were swinging in favour of incorporation and that there was now only a small majority against it, 28 April 1847.
[34] *Herald* leading articles of 17 April and 1 May 1847.
[35] *Guardian*, 14 April 1847.
[36] *Gazette*, 22 April 1847.
[37] As Court candidate Pechell had a reputation for disregarding the party whip, see Gash, *op. cit.*, 385–86.
[38] Hansard, *Parliamentary Debates*, 3rd series 93, Commons.
[39] *Hastings and St. Leonards News*, 8 Nov. 1850.
[40] *Gazette*, 29 April 1847.
[41] P(ublic) R(ecord) O(ffice), General Board of Health correspondence, MH13/33, Brighton: letter from Dr William Kebbell, 4 Dec. 1849.
[42] P.R.O., MH13/48, Cheltenham: letter from Cresy, 24 Sep. 1849; and compare the situation in Hastings as described in my 'The sanitary battle of Hastings', *Suss. Arch. Coll.* **125** (1987), 175–98.
[43] P.R.O., MH13/33 containing proceedings of Directors and Guardians, 2 Oct. 1849 and letter from Dr Kebbell, 4 Dec. 1849.
[44] *Gazette*, 10 June 1847.
[45] A. Dale, *Brighton town and Brighton people* (Chichester, 1976), 173–74.
[46] P.R.O., MH13/33, 23 July 1851.
[47] *Kelly's Directory* (1846); *Folthorp's Directory* (1848); E.S.R.O., DB/B60/12.
[48] *Gazette*, 22 April 1847.
[49] P.R.O., MH13/33, letter of Dr Kebbell, 21 Nov. and letter from Slight, 24 Sep. 1849.
[50] E. Cresy, *Report to the General Board of Health . . . on a preliminary enquiry into the sewerage, drainage and supply of water and the sanitary condition of the inhabitants of the town of Cheltenham* (1849).
[51] P.R.O., MH13/48, letter from Dr Thomas Wright, 23 Jan. 1850.
[52] E.S.R.O., DB/B73/77.
[53] Dale, *op. cit.*, 173.
[54] P.R.O., MH13/33 and MH13/48.
[55] *Gazette*, 15 April 1847.
[56] *Gazette*, 15 April 1847.
[57] R. A. Lewis, *Edwin Chadwick and the public health movement 1832–54* (1952): chap. V points out the lack of co-ordination between local propaganda efforts in favour of public health reform.

Sussex Archaeological Collections **131** (1993), 172–184

DOMESTIC SERVANTS IN A SUPERIOR SUBURB: BRUNSWICK TOWN, HOVE

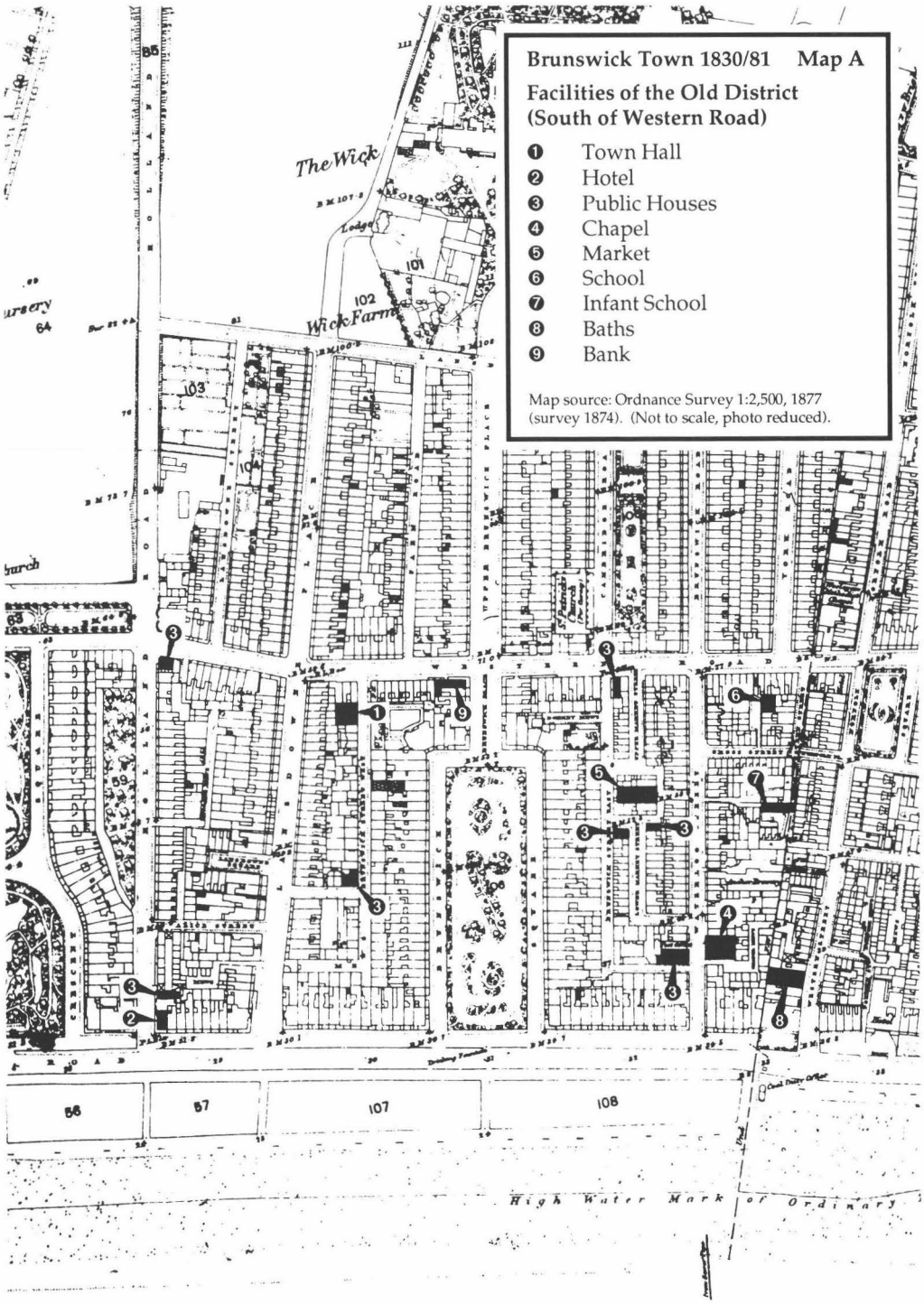
by Michael Ray

Brunswick Town was begun in 1824 as an extension of the built-up area of the booming Brighton, which had, by that time, reached the eastern boundary of the parish of Hove. Brighton had mushroomed because of a combination of royal patronage, the popular perception of the medical and social benefits of the seaside resort and the availability of finance and customers for an expanding settlement close to the capital, with which communications were improving.

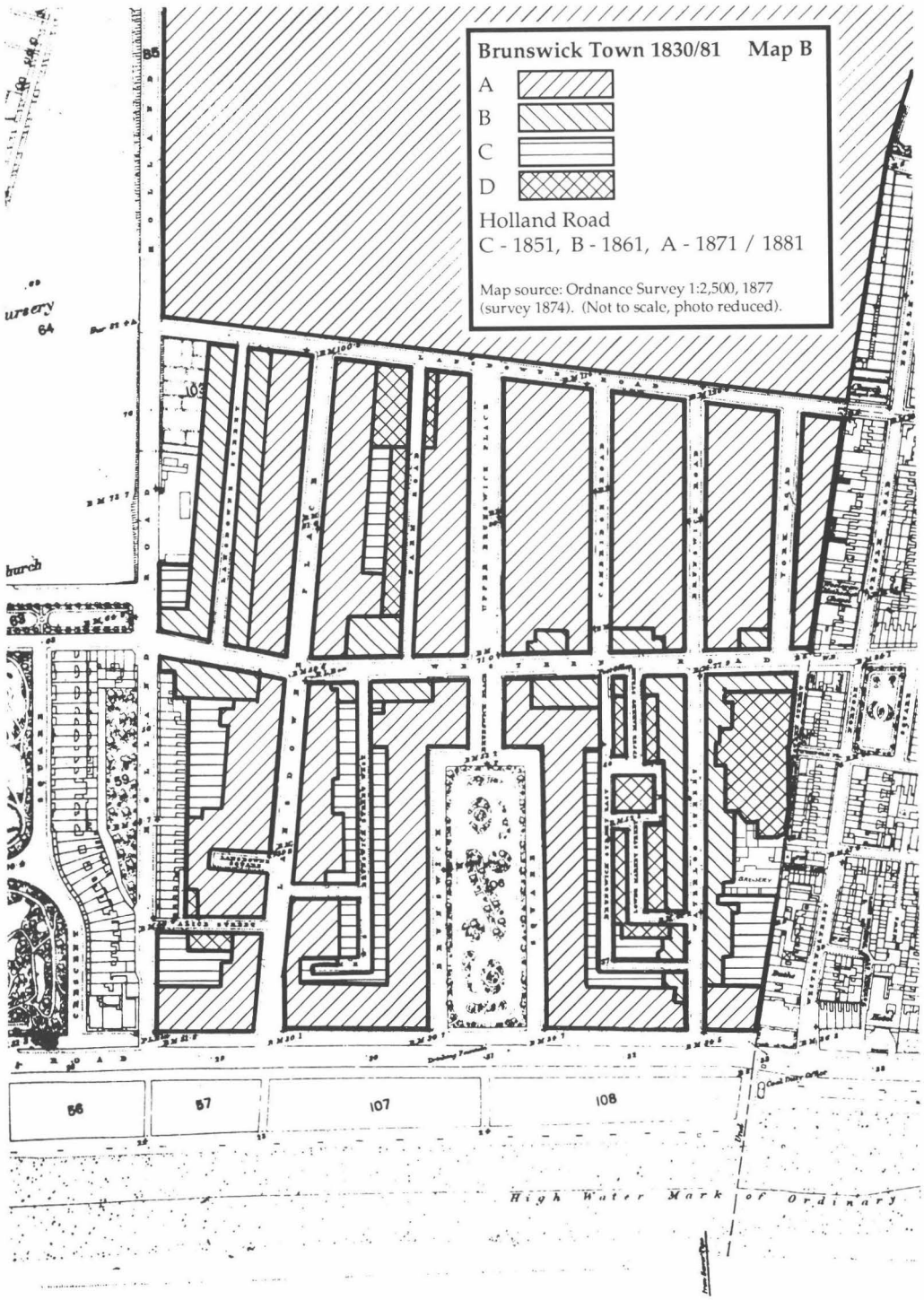
Brunswick Town, which is still largely intact, was planned as a superior estate along the principles of Georgian civic design with fine houses set around a square or fronting onto a seaside esplanade supported by other facilities including a covered market, an Anglican chapel, an hotel, a public house together with lesser streets for tradesmen and mews for horses, coaches and stable staff. The grand houses were planned particularly for households reliant on servants, with accommodation in the attics and basement for domestics, and the grand rooms sandwiched between. But other facilities were provided in Brighton (see Map A).[1] A reputation for fashion and gentility was maintained as the population grew from about 1,900 in 1841, when most of the area south of Western Road was complete, to a peak of 6,150 in 1871. Whilst there were still areas being developed there were signs of a decline in the next decade, with the population falling back to around 5,750[2] and an erosion of property prices, partly due to changing fashion but also competition from later development in Cliftonville and the West Brighton Estate further to the west.[3] The maintenance of gentility may have been due partly to the separate local government administration which conducted the affairs of the estate from 1830 to 1873. This administration, the Brunswick Town Commissioners, had a membership restricted by a high financial qualification which left it in the hands of the wealthy. Their power was also entrenched by a high financial property test for the franchise which was further biased by a system of plural voting with additional votes being available for the most wealthy.[4] One measure of the quality of the estate may be the fact that in 1851 nearly 20% of the heads of household in Brunswick Square and Terrace were titled.

An analysis of the Census returns for the period 1841–1881 shows that the estate was one which was predominantly the home of householders of independent means who were served by a considerable body of servants. If these 'independents' or 'rentiers' were compared with other occupations they formed between 9.8% and 11.6% of the total for the period. Domestic servants ranged from 52.5% to 63.6% of all occupations. For instance in 1841 'independents' plus the servants accounted for 75.2% of those with 'occupations'. However, even these figures were misleading because the professionals, who consisted of between 1.9% and 4.5% included many military officers or clergymen who must have been living on private means.[5] Comparisons with other towns give some idea of the quality of Brunswick Town. In 1841 it had at least 59 people of independent means per 1,000 inhabitants compared with 15 in Bradford, 21 in Leeds and 45 in York, whilst there were 323 domestic servants per 1,000 in Brunswick Town against 27, 37 and 88 in the same cities and towns.[6]

The mid-Victorian era saw an increase in the significance and importance of the domestic servant, especially as a support for the rising middle-class, family-based household. As more and more people were able to employ servants, they were increasingly likely to recruit women.[7] This was because men servants were more expensive and less flexible, avoiding domestic chores, and they were also subject to a special tax, not repealed until 1937. By 1861 there was a massive total of 1,200,000 female servants nationally (about 36% of the total female labour force).[8] Two thirds of them were the only servant in the house, often overworked and lonely.[9] The official Census may have underestimated the amount of servant labour available to a household, as it would be unlikely to record those, often married women and widows,



Map A. Brunswick Town 1830/81



Map B. Brunswick Town 1830/81

TABLE 1
Brunswick Town's residents by economic status, 1841–1881

Year	*Total Population*	*Independents*	*Dependants*	*Total Servants*	*Male Servants*	*Female Servants*	*Other Occupations*
1841	1898	116	932	614	145	469	236
1851	3224	191	1404	992	172	820	637
1861	5763	344	2861	1730	270	1460	828
1871	6154	347	2814	1859	295	1564	1134
1881	5754	317	2533	1668	207	1461	1236

Source: Census Returns 1841–1881. The 1881 figure is marginally reduced by lost enumeration sheets. Those employed in auxiliary activities such as laundrywork and charring are counted as servants, but the very few servants working in hotels are excluded.

who 'lent a hand' on a regular or temporary basis, that is, 'invisible servants'.[10] The work of Burnett, Davidoff, Ebery and Preston, Horn and Riley all provided useful comparisons and hypotheses in this detailed study of Brunswick Town's servants.[11] The significance of servants in the Brunswick community rose until 1871 and then fell, as is shown in Table 1 above.

The layout of the estate allows the streets to be classified into groups representing four social zones, which are shown on Map B.

Table 2 shows the differentiation for 1871 by zones or groups.

Group A consisted of the 'grandes rues' with their spectacular, large terraced houses, (Pl. 1) whilst Group B (Pl. 2) included the roads of mixed

Plate 1. Group A: Brunswick Square.

TABLE 2
Brunswick Town's residents by economic status and social zones, 1871

	Total Population	*Independents*	*Dependants*	*Total Servants*	*Male Servants*	*Female Servants*	*Other Occupations*
Group A	3869	279	1632	1539	233	1306	419
Group B	970	57	439	192	15	177	282
Group C	286	0	160	30	23	7	96
Group D	1029	11	583	98	24	74	337
Total	6154	347	2814	1859	295	1564	1134

Plate 2. Group B: Waterloo Street

Plate 3. Group C: Holland Mews

quality with smaller but still stylish houses. The mews were in Group C (Pl. 3) and finally in Group D (Pl. 4) were the lesser streets, small in scale and often overcrowded. It was not surprising that Groups A and B included the overwhelming majority of the households employing servants. These groups are a useful tool for separating the 'living-in' servants from the others. The results show that in 1851 just half of the inhabitants of these sub-areas were indoor servants compared with 27% for the whole estate population. In the servant households (Groups A and B) there were 275 servants per 100 households. By 1861 this figure had risen to 387. In 1871 the ratio had dropped to 377 but this compared with 176 at Hastings. The highest ratio in Ebery and Preston's study of twenty areas was 291 in rural Easthampstead near Reading.[12] By 1881 the Brunswick Town ratio had dropped to 220 but this may have been due to an increase in households arising from the sharing of properties; for instance in the 60 houses in York Road there were 58 households in 1871 but this had risen to 80 in 1881.

Another indication of Brunswick Town's high status was the ratio of indoor servants to inhabitants. Table 3 shows various comparisons.[13]

In 1851 the national ratio was 1 per 20 and in 1861, 1 per 16.[14] In Brighton's fashionable estate areas in 1851 there was an average of 2 servants per household with the highest figure being 3 per household in Vernon Terrace[15] whereas in Brunswick Square the average was 5.4.

Plate 4. Group D: Lower Market Street

TABLE 3
Ratio of indoor servants to inhabitants 1851, 1871 and 1881

	1851	*1871*	*1881*
Brunswick Town	3.2	3.3	3.7
Ramsgate	9.9	10.4	
London			15
Brighton			11
Bath			9
Lancashire			30
Durham			31

The ratio is expressed as 1 servant per × inhabitants

The trend towards domestic service being a more female occupation was clear in Brunswick Town (Table 1) but the proportion of male servants was still high in national terms. Thus, whilst female servants among all employers were twice the national average in Brunswick Town, male servants were five times the national rate. These statistics were another indicator of Brunswick Town's high social status. In 1851, when 36.2% of the Brunswick Town population were men, 17.4% of

TABLE 4A
Age structure of all servants (percentages)

	10/14	*15/19*	*20/24*	*25/29*	*30/34*	*35/39*	*40/44*	*45/49*	*50/54*	*55/59*	*60/64*	*65/69*	*70/74*	*75+*
1851	1.7	14.4	23.3	19.5	12.8	9.1	6.4	5.4	2.9	2.0	0.9	0.9	0.5	0.2
1861	2.0	16.7	22.9	20.9	11.7	7.1	5.7	4.7	3.4	2.7	1.1	0.6	0.6	0.4
1871	1.6	17.5	21.6	18.9	12.2	8.3	5.7	4.2	3.9	2.6	1.5	1.3	0.3	0.4
1881	2.8	18.8	24.0	14.9	10.1	7.8	5.3	5.1	3.6	3.1	2.1	1.4	0.7	0.3

TABLE 4B
Age structure of living-in servants (Groups A and B) (percentages)

	10/14	*15/19*	*20/24*	*25/29*	*30/34*	*35/39*	*40/44*	*45/49*	*50/54*	*55/59*	*60/64*	*65/69*	*70/74*	*75+*
1851	1.3	13.2	25.2	21.0	13.1	9.0	5.8	5.4	2.6	1.9	1.0	0.3	0.2	0
1861	1.8	17.1	24.3	21.3	11.8	7.0	5.7	4.0	2.9	2.2	0.9	0.4	0.4	0.2
1871	2.4	17.6	22.2	19.6	12.4	8.3	5.6	3.5	3.4	2.4	1.3	0.9	0.2	0.2
1881	2.7	19.1	25.1	15.9	10.1	7.8	5.1	5.0	3.3	2.8	1.4	1.0	0.5	0.2

the servants were male, but this fell to 12.5% in 1881. 25.8% of employed men in 1851 were servants, but by 1881 this was 19.2%. Nationally, 2.6% of employed men and 40.4% of employed women were servants and these figures rose to 3.75% and 45.4% respectively in 1881.

Male servants were more likely to be found in the best streets: 20% in Group A compared with 2% in Group B in 1851. This differential had narrowed by 1881 (13% compared with 5.6%). Male servants were also found in the lesser street but living in their own homes. It was also clear that the larger households in the better streets provided a greater opportunity for specialisation of servants' duties related to rank and status. For instance, in 1851, all of the 64 footmen and 28 out of the 29 butlers were found in Group A households. These patterns persisted throughout the period. Most lady's maids and housemaids were also in Group A but nurses, who may have included wet-nurses, were more widespread, some living at home. Laundry workers were found in all areas but those in Group A were employed in a commercial laundry at Wick Villa.

Tables 4A and 4B show the age structure of servants. The national trend was for a decline in very young servants as educational possibilities increased. They were always few in proportion in Brunswick Town (2.7% for the age group 10–14 for living-in servants in 1881) but they were actually rising in number possibly because of an increased use of young pages. In general there were more elderly living-in servants as the population of the estate aged; 1.5% were over 60 in 1851 but this had increased to 3.1% in 1881. Servants living in their own homes were more likely to be older: 8.5% above 60 in 1851 rising to 25% in 1881 (Group D). Young servants (15–19) were more prominent in small households: 14.6% in Group A compared with 32.5% in Group B in 1851. Overall young servants also increased in proportion: 14.5% of living-in servants under 20 in 1851 increased to 21.8% in 1881.

Auxiliary servants, especially charwomen and female laundry workers, were usually found in the small streets living at home. These were occupations available to the old and to those who were or had been married. In 1851 the four servants living in Farman Street were all over 45, widowed or married charwomen, and in 1871 most of the eight widows in Lower Market Street were engaged in laundry work. Whilst charwomen gradually increased in numbers, the laundry workers declined. This was surprising in view of the rising population, but it may have been a result of the establishment of commercial laundries further to the west in Hove, or because laundry workers in East Brighton were prepared to travel as far as Brunswick Town to collect and deliver washing.[16]

As the century progressed servants were less likely to be married. In Brunswick Town there were twice as many married women servants as widows in 1851 but, by 1881, widows outnumbered married

TABLE 5
Marital status of servants by social zones

	1851			*1861*			*1871*			*1881*		
	U %	*M* %	*W* %	*U* %	*M* %	*W* %	*U* %	*M* %	*W* %	*U* %	*M* %	*W* %
Group A:	85.9	10.0	4.1	87.1	8.4	4.5	88.7	6.8	4.5	87.2	6.8	6.0
Group B:	90.6	4.7	4.7	88.3	7.1	4.6	88.6	3.6	7.8	90.4	4.5	5.1
Group C:	54.5	40.9	4.6	53.4	33.3	13.3	30.0	63.3	6.7	60.0	20.0	20.0
Group D:	44.7	40.4	14.9	35.0	43.3	21.7	40.8	29.6	29.6	43.5	20.4	36.1
Total Area:	81.9	12.9	5.2	83.8	10.5	5.7	85.2	8.6	6.2	84.5	7.5	8.0

(U=unmarried, M=married, W=widowed)

women servants. In 1851, 81.9% of all servants were unmarried and, despite a fall after 1871, the proportion stood at 84.5% in 1881. In Ramsgate 94.7% of servants were unmarried in 1851 and 92.9% in 1871.[17] Table 5 shows differences in marital status by groups of streets.

It may be supposed that the large servant households would be least likely to have married (or encumbered) servants but it was the smaller households with appropriate incomes and an emphasis on one or more young girls that had the highest figures, 90.4% in the mixed streets (Group B) compared with 87.2% in the best area (Group A) in 1881. Married servants such as William Tayler, one of John Burnett's examples, may have had wives living locally. Several butlers' wives lived in Landsdowne Street.[18]

TABLE 6
Types of servants in Brunswick Town 1851–1881

	1851	*1861*	*1871*	*1881*
Butler/Steward	29	65	75	62
Footman	64	65	58	49
Lady's Maid	74	124	128	95
Nurse	38	110	109	72
Housekeeper	30	49	51	47
Governess	24	41	22	37
Female Cook	107	246	278	218
House Maid	140	239	258	241
Undifferentiated Maid	0	2	76	8
House Servant	268	204	0	1
General Servant	5	65	53	130
Domestic Servant	9	46	172	411
Outdoor Servant	23	45	53	31
Laundry Servant	53	42	24	16
Charwoman	18	26	10	22
Other Descriptions	110	361	492	228
Total:	992	1,730	1,859	1,668

Burnett has argued that 'domestic service was becoming increasingly differentiated' between 1851 and 1871.[19] Table 6 bears out this view, but even in 1871 there were large numbers given generic descriptions such as 'house', 'domestic' and 'general' servant. There were 282 servants so described in 1851 (24.8%) compared with 225 in 1871 (12.1%). But certain jobs did rise in numbers and significance; kitchen maids from 24 to 54 and parlour maids from 10 to 46. In 1871 there were 76 undifferentiated maids but this fell to 8 in 1881. In 1881 542 (37.8%) had generic descriptions. This may be owing to the new dwellings being smaller, where single servants were more usual, but it may reflect the way in which the enumerator carried out his task. No evidence was found of 'invisible servants', although it was probable that some of the few wives of servants who 'lived-in' with their husbands were expected to help out on occasions.

Another useful check on the quality of the area was to look at the proportion of butlers to other servants. In Brunswick Town the percentage was 3.3 in 1851 and 4.0 in 1871. These rates compare with 1.2% and 0.4% for Ramsgate in the same years. A similar exercise for footmen gave figures for Brunswick Town of 6.6% and 3.1% compared with Ramsgate's 1.6% and 1.1%.[20]

Servants tended to start their careers by finding a first position—a 'petty place'—near home in the houses of local tradespeople, school teachers or clergy. This enabled them to get initial training near their family, but it was often a first stop which could be followed by a move away from the locality, even to London.[21] Recruitment was by word of mouth and recommendation, but the use of advertisements and registry offices grew. In Brighton local newspaper advertisements placed an emphasis on

respectability, good character and, when men were involved, appearance particularly height. Even late in the century Edward Thomas, writing of suburban Balham, believed that 'servants were chosen half for their good looks and were therefore being continually changed.'[22] Good, plain cooks were usually required. By the 1850s it was usual for the advertisements to give a box number care of one of the shops in Western Road or Waterloo Street. By 1866 Burretts Royal Library at 4 Waterloo Street seemed to be a regular address both for prospective employers and employees. In 1856 John Amey at 1 Western Road (just east of the parish boundary) was running the East Brighton Registry of Male and Female Servants and Miss Warren ran one just for female servants from West Street, Brighton.[23] Advertisements became far more numerous in the 1860s and in some years it was clear that servants found it difficult to get a place. In 1866 a 38 year-old butler looking for a position in February appeared to be still out of work in November despite giving different addresses in his advertisements.[24]

The advertisements were usually silent on wages, either required or offered, although some offers described the pay as liberal. Local evidence for remuneration can be obtained from a servants' wages book kept by Mary Frances Hardcastle of 16 Adelaide Crescent from 1864 to 1929.[25] Adelaide Crescent was administered by the Brunswick Town Commissioners after 1851 but it has been excluded from the statistical analysis. In the years between 1864 and 1881 the cook was the highest paid servant, receiving between £22 and £26 per annum. Parlour maids' wages rose from £14 to £20 but then fell back. The under housemaid received between £9 and £10. One parlour maid also received 1*s* a week for beer! In 1866 and 1871 local advertisements offered a housemaid £14 a year but cooks could be obtained for as little as £14 to £16 in 1871. In 1861 Mrs Beeton had recommended that a housekeeper should be paid £18 to £40 per annum, a cook £12 to £26, an upper housemaid £10 to £17 and a maid of all work £7.10*s*. Butlers could expect £25 to £50, coachmen £20 to £35 and footmen £20 to £40.[26] The Brunswick Town wage rates seemed to be generally in line with rates found in London, Exeter, Berkshire and Northamptonshire[27] but the cook who was prepared to work for £14 a year must have been very much in need of work. When the family was not in residence the servant might be paid board wages to make up for the loss of the normal free food and drink. A parlourmaid of Mrs Hardcastle's received £7 4*s*. for board wages in 1878. Cuthbert Bede's Mrs Melladew, before deciding whether to take her servants to Brighton, 'drew up the most perplexed tables in which she balanced board wages and hired horses against increased Brighton expenses'.[28]

Servants could be fussy about their place. Some housemaids would specify that the household which wished to employ them should also have a man servant, presumably to ensure that they would be spared the heavy work. But employers' standards were also strict. Mrs Hardcastle dismissed two women as 'being unequal to the situation' and four left for 'lighter' work. Over 70% of her servants left within two years, although one married after 'seventeen years faithful service'. The average length of stay of a servant at Englefield House, Berkshire, was just under two years.[29]

Another test of the servants' length of service was carried out using the Censuses to see whether those families who stayed in the same house from one Census to another retained the same servants. From a study of Brunswick Square and Terrace, the results showed that, of 528 servants living in 100 households, 8.9% had spent more than 10 years with one family. 1.1% had been in their households for over 20 years and one was recorded as a servant of the family of Admiral Westphal for over 30 years. These estimates are all likely to be below the true figure as they will not take into account any temporary absences on Census day.

Relationships between servants and their masters and mistresses remain largely hidden. Rapid mobility may have suggested dissatisfaction but this was a national phenomenon. Mrs Hardcastle obviously had affection for some of her servants but a servant about to give birth in the house of George Ballard, a Commissioner, was ordered by his wife to the workhouse, where the child was found to be dead on arrival.[30] In 1861 the butler of another Commissioner, Bashford, was engaged in a fracas with the son of the house and his friend. He was awarded £10 damages by the Courts to compensate for broken ribs. In the same year an earlier butler had received six months in goal for stealing his master's port.[31] Was this ill luck or a poor household for servants? Other servants stole from their employers and came to blows with them;

Lady Broughton was fined £1 for assaulting her lady's maid in 1858.[32] Some servants fought amongst themselves. However, the Reverend Henry Venn Elliott's and Mrs Carpenter's (the mother of Edward Carpenter) servants were devoted to them.[33] Ann Richards, who died at 87 in 1866, had an annuity from another Commissioner, General St. John,[34] whilst Mrs O'Brien, the widow of another Commissioner, also left annuities to her servants.[35] But these examples illustrate only a very small minority of a vast servant workforce and it would be unsafe to draw too firm conclusions on this topic.

Assumptions can be made about the areas of servant recruitment by using birthplaces as indicators of the original residence of the subjects. This method has obvious weaknesses and it is less sound the older the servant was. It should also be remembered that many of the servants in the better areas would have been brought there in households whose permanent base was not in the Brighton area. However, the Census was not taken during the fashionable season when visitors were at their most prolific. Despite these reservations the birthplace analysis is the best evidence available.

Table 7 shows a trend towards more local recruitment which was reversed by 1881. This was surprising as the nearby population centres from which the servants could be recruited were rapidly growing. In 1871 there were 1,859 servants in Brunswick Town of whom only 223 were born in the present urban area of Brighton and Hove. This was an increase of 2% on the decade. Servants born in other Sussex parishes totalled 515 (30%) in 1861 but the percentage fell to 21.9% in 1871. A study of Brighton's fashionable areas for 1851 showed that 10% of servants were born in Brighton and 30% elsewhere in Sussex. The Brunswick figures shown above are similar.[36] In the adjoining parish of Preston, another area into which Brighton expanded, Sussex-born servants were about 55% of the total servants in 1871.[37] In Brunswick Town in 1881 only one-third of servants were born anywhere in the county of Sussex. In Ramsgate, Kent-born servants were 71.8% of the total in 1851 and 63.3% in 1871.[38] Bearing in mind that in 1831 the total population of Hove was 1,360, it was not surprising that only six servants were native to the parish in 1851 but the natives had only increased to nine in 1861. Even by 1881 there were only 17 Hove-born servants in Brunswick Town.

TABLE 7
Birthplace of servants 1851–1881

	1851 %	*1861* %	*1871* %	*1881* %
Hove	0.6	0.5	1.5	1.0
Brighton	8.0	8.8	9.7	10.1
Rest of Greater Brighton	1.4	0.9	0.8	1.3
Rest of Sussex	28.2	29.8	21.9	21.3
Greater London	14.6	13.2	11.5	12.2
Rest of England	41.3	39.8	45.3	45.0
Scotland	1.6	1.6	2.0	2.0
Ireland	1.0	1.3	1.1	2.0
Wales	1.5	1.2	1.8	1.4
Channel Islands	0	0.1	0.3	0.2
Colonies	0.1	0.2	0.1	0.5
Europe	1.4	1.8	3.0	2.5
Others	0.3	0.8	1.0	0.5
(Number=100%)	(992)	(1,730)	(1,859)	(1,668)

Notes: Greater Brighton=those parishes other than Brighton and Hove now in the Boroughs of Brighton and Hove viz. Portslade, Aldrington, Hangleton, West Blatchington, Patcham, Preston, Stanmer, Ovingdean and Rottingdean.
Greater London=the area formerly administered by the Greater London Council.

Natives of the parishes now engulfed by Greater London made up 14.6% of the Brunswick Town servant workforce in 1851. This proportion fell to 13.2% in 1861, 11.5% in 1871 and rose to 12.2% in 1881. In 1851 only 14 servants had been born in continental Europe, but, by 1871, this figure had risen to 3% of the total. Some were servants of foreign residents but others owed their employment to the fashion for Swiss, French and German maids. In the same year only one servant was recorded as being born in the colonies compared with 173 other residents. This suggested that servants were not usually imported; local 'native' labour may have been much cheaper.

Table 8 shows that local recruitment was less significant in Brunswick Town than even in other

TABLE 8
Birthplaces of domestic servants 1871[39]

Percentages	*Born in town*	*0–5 miles*	*5–10 miles*	*10–20 miles*	*Rest of UK*
1 Brunswick Town	12.0	13.0	5.3	10.0	56.8
2 Hastings	14.2	7.1	17.9	14.6	46.1
3 Lincoln	18.2	7.4	24.2	23.5	26.5
4 Reading	25.7	12.6	20.4	14.9	26.3
5 Coventry	28.1	17.8	25.9	11.1	14.8
6 Bolton	16.3	5.8	5.2	16.9	44.4
7 Bath	20.8	11.5	15.1	19.2	28.5

TABLE 9
Sussex born servants: distance analysis

Percentages	*Distance from Brunswick Town in miles* 0–5	5–10	10–15	15–20	20+	*Unknown*
All Servants						
1851	29.1	16.1	19.6	16.1	13.0	6.1
1861	29.3	18.2	19.6	17.9	9.5	5.5
1871	40.3	15.6	14.0	15.4	11.1	3.6
1881	43.1	12.0	18.4	12.4	10.2	3.9
Living-in Servants (Groups A and B)						
1851	26.3	17.9	19.2	16.2	14.0	6.4
1861	29.2	17.8	20.0	17.8	9.3	5.9
1871	38.8	16.2	14.2	15.5	11.5	3.8
1881	40.0	12.4	19.5	12.8	11.1	4.2

resort or spa towns such as Bath and Hastings, having half the normal catchment area in the sea! An analysis of all Sussex-born servants by birthplace distance bands is shown in Table 9, along with another analysis confined to the living-in servants of Groups A and B. The recruitment in the 10–15 mile band was generally greater than that for 5–10 miles. This offers some evidence for the theory that local servants were chosen from a distance which made it less easy for an unhappy girl to run back to her family.[40]

This paper ends with a cautionary note for samplers. The analysis has been based on an examination of every return in the Census; sampling has been avoided. Servants in Brunswick Town were most likely to be female, young, unmarried and born in Sussex or Greater London. But at 27 Brunswick Square in 1871 lived a Spanish Marquis who had thirteen servants. All were born on the continent, 10 were male and two were more than 90 years old. If this household had been included in a random sample the total results would have been very distorted.

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Notes

The maps were drawn by Steve Collins

[1] A. Dale, *Fashionable Brighton 1820–1860* (1947), 113–125.

[2] Based on Census Enumerator's Returns, 1841–1881 Public Record Office, HO107/1112, HO107/1647, RG9/605/86, RG10/1091, RG10/1095/78. These studies do not include Adelaide Crescent or Palmeira Square. See also: M. G. I. Ray, 'The Evolution of Brunswick Town, Hove', unpublished M.Phil. thesis, University of Sussex (1987) and M. G. I. Ray, 'Who were the Brunswick Town Commissioners? A Study of a Victorian Ruling Elite 1830–1873', *Suss. Arch. Coll.* **127** (1989) 211–28.

[3] H. Porter, *The History of Hove Ancient and Modern* (Hove, 1897), 31.

[4] Brunswick Square Brighton Improvement Act 1830 (11 Geo. IV c.xvi) and Brunswick Square Improvement Extension Act 1851 (15 and 16 Victoria c.cxl.).

[5] Census Enumerator's Returns.

[6] W. A. Armstrong, *Stability and Change in an English County Town: A Social Study of York 1801–1857* (Cambridge, 1974), 45.

[7] M. Ebery and B. Preston, *Domestic Service in late Victorian and Edwardian England 1871–1914*, Reading Geographical Paper **42**, Department of Geography, University of Reading (Reading, 1976), 1–6.

[8] P. Horn, *The Rise and Fall of the Victorian Servant* (New York, 1975), 7–13.

[9] Horn, 18–19.

[10] J. A. Gerrard, 'Invisible Servants: the Country House and the Local Community', *Bulletin of the Institute of Historical Research*, **57** (1984), 178–9.

[11] J. Burnett, *Useful Toil: Autobiographies of Working People from the 1820s to the 1920s* (Harmondsworth, 1974). L. Davidoff, 'Mastered for Life: Servant and Wife in Victorian and Edwardian England', *Journal of Social History*, **7**, 4 (1974), 408–9. M. Ebery and B. Preston, *op. cit.* P. Horn, *op. cit.* R. C. Riley, *The Houses and Inhabitants of Thomas Ellis Owen's Southsea* (Portsmouth, 1980).

[12] Ebery and Preston, 19.

[13] Horn, 27. R. S. Holmes, 'Continuity and Change in a Mid Victorian Resort 1851–1871', unpublished D.Phil. thesis, University of Kent (1977), 107.

[14] Holmes, 107.
[15] S. Farrant, *The Growth of Brighton and Hove, 1840–1939* CCE Occasional Paper **14**, University of Sussex (Brighton, 1981), 15.
[16] A. Paul, *Poverty—Hardship But Happiness—Those were the Days 1903–1917* (Brighton, 1974), 11–12, Albert Paul's mother fetched laundry by foot from as far west as Hove Town Hall, although she lived in Queen's Park, the other side of Brighton town centre.
[17] Holmes, 108.
[18] Burnett, 175.
[19] Burnett, 136–7.
[20] Holmes, 137.
[21] Horn, 32. F. Thompson, *Lark Rise to Candleford*, Penguin edition (Harmondsworth, 1973), 157.
[22] E. Thomas, *The Happy Go Lucky Morgans* (Woodbridge, 1983), 8. Maria, Marchioness of Ailesbury's 'only extravagance was engaging tall footmen—any man about six foot high who attracted her attention being promptly engaged, no matter what his character might be'. R. Nevill, *Leaves from the Note Books of Lady Dorothy Nevill* (1910), 37.
[23] *Brighton Gazette* (hereafter *B.G.*), 30 October 1856 and 3 January 1856.
[24] *B.G.*, beginning 1 February 1856—seven advertisements until 22 November 1856.
[25] East Sussex Record Office, AMS 5487.
[26] I. Beeton, *The Book of Household Management* (1861), 8, quoted in Burnett, 160.
[27] Ebery and Preston, 94.
[28] C. Bede, *Mattins and Muttons: the Beauty of Brighton* (1866), 100.
[29] Ebery and Preston, 101.
[30] *B.*G., 23 October 1851.
[31] *B.G.*, 5 December and 8 and 25 July 1861.
[32] *B.G.*, 2 September and 2 November 1876. Porter, 191.
[33] J. Bateman, *The Life of the Reverend Henry Venn Elliott M.A.*, 3rd edition (1872), 314. E. Carpenter, *My Days and Dreams*, 3rd edition (1921), 44.
[34] *B.G.*, 1 February 1866.
[35] H. Faulkner and J. Middleton, *St Patrick's Church, Hove* (Hove, 1981), 7.
[36] S. Farrant, *Changes in Brighton and Hove's Suburbs—Preston and Patcham 1841–1871* (Hove, 1985), 72.
[37] Farrant, *The Growth of Brighton and Hove*, 15.
[38] 38. Holmes, 204.
[39] Based on Ebery and Preston, Fig. 31, 77.

Sussex Archaeological Collections **131** (1993), 185–192

HOUSING THE AGRICULTURAL WORKER IN NINETEENTH-CENTURY SUSSEX: A CASE STUDY

by June A. Sheppard

Using tithe and census evidence, all dwellings occupied by working-class families in the parish of Chiddingly in 1821, 1841, 1851 and 1861 have been identified. These are then analysed by building type, extent of crowding and continuity of occupancy by the same family. In 1821 and 1841, sub-divided old farmhouses, small old houses and purpose-built cottages formed roughly equal proportions of the housing stock occupied; subsequently purpose-built cottages became the major type. There was some overcrowding during the first two decades but it became less common later. Many families remained in the same dwelling for long periods.

Despite the existence of some excellent general surveys, we know relatively little in detail about the housing conditions of rural working-class families in the 19th century.[1] The contemporary view was that in Sussex cottage accommodation was good: the Rev. Arthur Young in 1813 described Sussex cottages as 'in general warm and comfortable . . . the lower class of people are here in much more eligible circumstances than in many parts of England'; in 1823, William Cobbett noted that in the Singleton area 'there is an appearance of comfort about the dwellings of the labourers . . . the houses are good and warm'; and when Dr H. J. Hunter made his country-wide survey of rural working-class housing in 1864, he found little to criticise in Sussex.[2] But what were these 'good' cottages really like? how well-built, convenient and spacious were they? what variations in size and quality existed? was it usual for a family to live out its life in one cottage or were there frequent removals? In our present state of knowledge such questions cannot be answered for a whole county; we know something about certain cottages that happen to have survived or which figure in the literature, but do not know how typical they were.[3] There is no comprehensive 19th-century source, statistical or otherwise, to which we can turn for direct answers. An alternative is to bring together scattered and diverse types of evidence for a few sample localities, with the aim of building up a reasonably full picture for these places, and in this way to provide a glimpse of regional and local variations within Sussex. The parish survey that follows represents an initial step in such a county-wide investigation.

CHIDDINGLY 1821–61

Lying about 8 km. east of Lewes, the land of Chiddingly parish rises from the Weald clay plain in the south to Wealden sandstone hills in the north. An 'open' parish with about 100 landowners in 1839, its population grew rapidly from 673 in 1801 to 1085 in 1851, then declined to 808 in 1901. The inhabitants lived in hamlets and isolated dwellings scattered throughout the parish. The majority of adult males worked on the land, a small group were full-time tradesmen or craftsmen, and employment in brickmaking was available for a few. If woodland is excluded, about two-thirds of the farmland belonged to the 11 large farms (100–330 acres) that provided most of the employment for agricultural labourers; about one fifth was occupied by small farms (20–75 acres) which relied mainly on family labour; the remainder (16 per cent) was divided among over 100 smallholdings whose occupants supplemented their income from the land with a range of casual or part-time employment.[4] The dwellings discussed in this article are those occupied by families that the census returns show as largely dependent on wage-labour or pauper subventions, the majority of heads being described as agricultural labourers. Such dwellings formed rather more than half of the parish total.

SOURCES AND METHODOLOGY

Houses, cottages and gardens are identified and their owners and tenants named in the 1839 tithe survey, compiled by Chiddingly's surveyor-cum-schoolmaster Richard Lower; although the Tithe Commissioners considered that his surveying was

not of first-class accuracy, his detailed local knowledge ensured that in other respects his work was reliable.[5] Census enumerators' books were used to identify the households occupying cottages, starting with the 1841 census, when Richard Lower figured again as enumerator for the southern part of the parish.[6] It was a relatively straightforward task to reconstruct the routes the two enumerators took when collecting the census forms, and thus to link households with dwellings listed in the 1839 survey. Linkages were similarly made between the 1851 and 1861 census enumerators' records and the tithe survey, and although the longer time-gap resulted in certain problems of identification, most of these were ultimately resolved.[7] In addition, Chiddingly has the rare advantage of a detailed listing for the 1821 census, again partly the work of Richard Lower, and this too was successfully linked to the tithe record.[8] This basic stage of the analysis thus produced details of cottages and their occupants at four separate dates, in 1821, 1841, 1851 and 1861.

What was missing at this point was fuller information about each building, especially its size as indicated by the number of rooms. Since no comprehensive 19th-century source exists that describes all buildings, recourse was had to the Inland Revenue records for 1910–14 which list the rooms in most buildings, while the associated maps facilitate linkage with earlier data.[9] The half-century or more time-interval is a major limitation, providing ample time for some buildings to disappear and for survivors to be modified. Field observation, however, suggests that 19th-century modifications were few and modest in character, and that the early 20th-century building details provide an acceptable guide to the size and character of such early 19th-century cottages as survived.

The evidence from these principal sources was collated building by building, then supplementary details drawn from a range of sources were added. This corpus of evidence provides the data on which the analyses that follow are based.

BUILDING TYPES

The working-class population of the early 19th century was housed in three main types of building: large old houses, small old houses and purpose-built cottages.

Large old houses used to accommodate two or three working-class families are easily identified, though it is not always clear whether these families simply shared the space and facilities (tenements) or whether the building had been modified to provide independent dwellings (cottages). The right-hand building in Fig. 1 illustrates the latter type. The majority of the buildings so used in Chiddingly were 15th-, 16th- or 17th-century timber-framed farmhouses, though in many instances the timber frame had long before sub-division been hidden behind a skin of bricks and wall-tiles. All had between six and 10 good-sized rooms and gardens of around half an acre (0.2 ha.).

Twenty Chiddingly buildings fell into this category, but nine of these were used for working-class families at only one or two of the four census years under consideration. Fourteen were held by a large farmer, either as owner or as chief tenant of an absentee landowner; these were occupied mainly by the farmer's permanent employees, although the occasional listing of a journeyman craftsman suggests a readiness to rent to anyone with a steady income. Five belonged to small landowners living in Chiddingly or a neighbouring parish, while the remaining building was parish property, used until 1837 as Chiddingly's poorhouse.

Small old houses formed a more miscellaneous group, apart from the fact that they normally housed just one working-class family. Some had started life as the soundly-constructed homes of craftsmen, traders and small farmers (e.g. the middle building in Fig. 1), while others originated as hovels built by squatters on former common land, often improved or extended as the years passed.[10] Hence, at one extreme this category includes two-storey brick and tile houses with four or five rooms, and at the other flimsy structures of timber and mud with thatched roofs and probably only two rooms. An example of the latter was the cottage named Straw Castle (an ironical designation?) in 1821, described as 'a very inferior cottage in a delapidated state of repair' in 1836, and subsequently rebuilt.[11] It would have been advantageous if hovels could have been separately distinguished in this analysis, but there were too many ambiguous cases to make this feasible.[12] In common with large houses, however, all types of small houses had good-sized gardens.

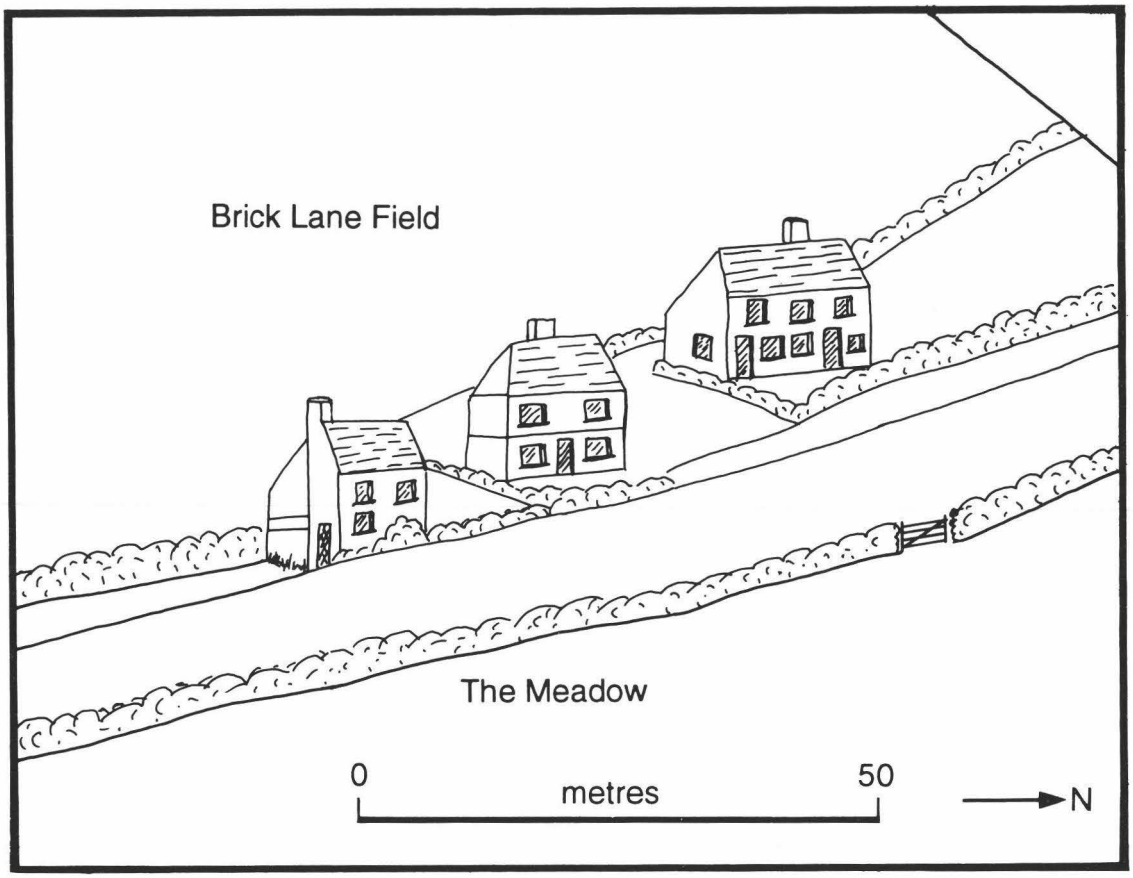

Fig. 1. Willetts, *alias* Rookery, near Muddles Green in Chiddingly parish, redrawn from a plan of the land of Edmund Elphick, 1817, by Richard Lower (E.S.R.O., RAF Box 74). In 1821, the census listing named the three dwellings shown (left to right) as Rookery small cottage, Rookery large cottage and Rookery House containing two dwellings.

Twenty-two buildings were allocated to this category, of which two recorded in 1821 had disappeared by 1839. At the latter date, six were occupied by either their owner or a close relative; the census evidence suggests that these people were all traditional dual-occupationists whose livelihood was derived from a craft or a trade as well as agricultural labouring. Of the remaining 14 buildings, six were owned by the parish, four by large farmers/landowners, one by a Chiddingly small farmer, one by a Chiddingly craftsman, and two by non-residents. An indication of how the parish acquired its cottages is provided by the vestry minutes for 1824, when it was agreed to purchase the dwelling belonging to William Savage, a 76 year-old agricultural labourer, for £20 and a weekly allowance of 3*s*. This cottage was sold and demolished when William died in 1827, but other cottages acquired in the same way were retained to house pauper parishioners.[13] In 1829/30, the vestry arranged for the demolition of one such cottage and its replacement with a terraced row of three tiny dwellings, each with a downstairs living-room and two small bedrooms above; the small size and the use of second-hand bricks kept down the cost of construction, and the row was mortgaged for only £100.[14] Under pressure from the Poor Law Commission, all parish houses were disposed of by sale or long lease during the late 1830s or the 1840s, mainly to local farmers. The four small houses that in 1839 belonged to large landowners were all subsequently demolished or rebuilt.

Purpose-built cottages can conveniently be subdivided according to their date of construction. Most of those already in existence by 1821 were built during the late 18th century, using local bricks and tiles. Whether detached or in pairs, the most common plan comprised a living-room and scullery downstairs and two bedrooms above. Gardens averaged about half a rood (0.125 acre or 0.05 ha.), smaller than those of the cottage types previously discussed but the size that contemporary writers recommended.[15] The left-hand cottage sketched on the 1817 plan of Willetts farm belonged to this group (Fig. 1).

Cottages built after 1821 were mainly in semi-detached pairs. Again, brick and tile were the usual materials, though in some instances the walls were cement-rendered, probably to waterproof poor quality bricks. There were also a number constructed with weather-boarded walls, at least some of which were the work of Jesse Funnell, a Chiddingly carpenter-builder.[16] In most cases, these cottages resembled those built in the 18th century in size and layout, but a few had an additional bedroom. Judging from the *c.* 1880 Ordnance Survey 1:2,500 maps, gardens were on average smaller than those provided earlier.

In 1839, 14 of the 24 pre-1821 purpose-built cottages were owned by large landowners and 10 by small or absentee landowners. Post-1821 building activity was shared in different proportions: by 1861, a further eight cottages had been added by large landowners and 33 by small (henceforth termed speculative) owners. Speculative cottages were mostly located towards the east of the parish and in the south along roads crossing the former Dicker Common, where an 1817 enclosure award had resulted in many small plots of land ideal for this type of development.[17]

Six buildings did not fit into any of the above categories. A pair of parish almshouses was taken down in the 1820s, the bricks being re-used for the 1830 terraced row mentioned above.[18] Dicker barn was occupied by two families in 1821, though whether the building had been altered to accommodate them is not known; by 1841 it had disappeared from the record. Three buildings on roadside plots appeared during the 1821–61 period but had gone before 1910, such short lives suggesting that these were home-made hovels. 'The Hut', occupied by a travelling family in 1851, was located towards the eastern side of Dicker Common.[19]

Fig. 2 shows the number of cottages or tenements of each type at the census years 1821, 1841, 1851 and 1861, together with parish population trends. In 1821, subdivided old houses, small old houses and purpose-built cottages each accommodated about one third of the working-class households. By 1841, Chiddingly's population had increased by 60 persons, but the total number of cottages or tenements had not changed, the six new purpose-built cottages merely replacing buildings demolished or converted to other uses. Subsequently there was a surge of new building and by 1861 more than half the cottages available in Chiddingly were purpose-built. Between 1841 and 1851, this growth in cottage numbers was paralleled by a growth of population, but decline followed after 1851 and by 1861 there were five unoccupied cottages, all of recent construction. A possible implication is that the supply of working-class accommodation was by then adequate, and that in these circumstances some of the newer speculative cottages were perceived as unattractive.

OCCUPANCY LEVELS AND CROWDING

Whilst 19th-century cottage buildings in Sussex were regarded by contemporaries as good by national standards, it was also recognised that they were often too crowded for comfort.[20] Crowding resulted both from the more rapid increase of households than of cottages, which engendered the sharing of accommodation, and from large families occupying small dwellings. Occupancy levels are normally expressed as the number of persons per room (children up to the age of 10 counting as half), and levels of 1.5 or more per room are taken to represent overcrowding.[21] This measure is not without its problems, such as the need to define what constitutes a room, and the disregard of room sizes.[22] For 19th-century Chiddingly there is also an additional problem resulting from the need to rely for room details on the early 20th-century Inland Revenue surveys. The figures in the tables below must therefore be regarded as approximate only.

Table 1, based on means for those cottages that were still standing in 1910, suggests a general

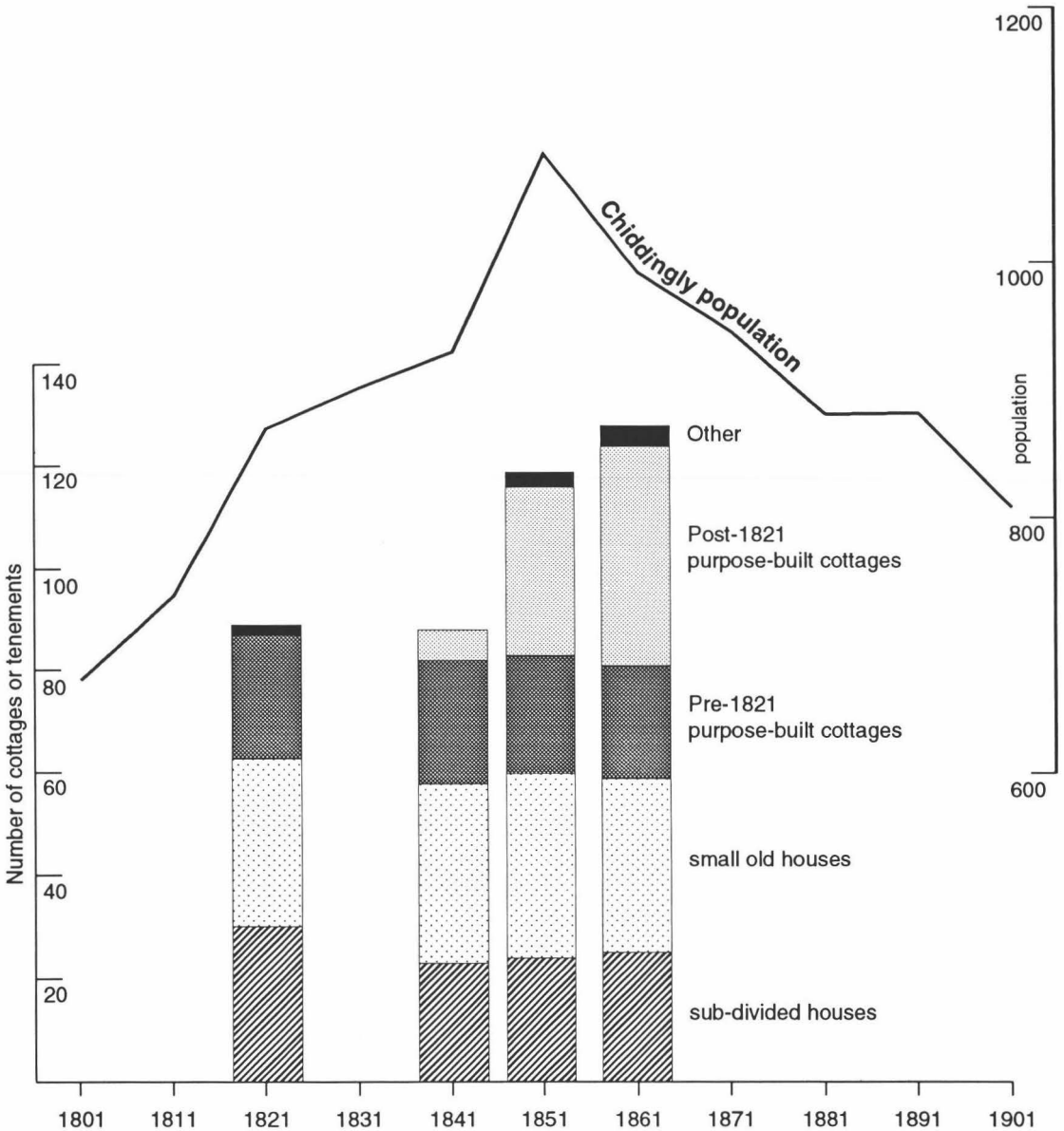

Fig. 2. Changes in cottage numbers and types, 1821–61.

downward trend in occupancy levels, especially after 1851, but with no major differences between the four types. The 1851–61 decline correlates with the evidence in Fig. 2 of reduced pressure on working-class accommodation at this time. Table 2 shows mean occupancy levels by type of owner, in order to test the hypothesis that parish and speculative owners may have been more ready than large landowners to condone crowding. A problem in the calculations for this table arose from the high proportion of owner-occupied and parish cottages that had been demolished or rebuilt before 1910, and for which information on rooms was therefore not available. In order to allow such cottages to be

TABLE 1
Mean number of persons per room by building type

	1821	*1841*	*1851*	*1861*
All types	1.04	0.97	0.98	0.86
Subdivided old houses	0.97	0.90	0.98	0.78
Small old houses	1.09	1.01	0.89	0.93
Purpose-built pre-1821	1.04	0.94	1.04	0.85
Purpose-built post-1821	–	1.06	0.98	0.86

TABLE 2
Mean number of persons per room by building ownership

	1821	*1841*	*1851*	*1861*
Owner-occupied	1.30	1.07	0.89	0.77
Parish	1.35	1.33	–	–
Large landowner	0.93	0.99	0.94	0.94
Speculative owner	0.98	1.15	0.95	0.89

included in the analysis, the generous estimate was made that all had four rooms; the resulting occupancy levels for owner-occupied and parish cottages are therefore best regarded as minima. The table shows that parish cottages almost certainly did experience above average levels of crowding; it also suggests that owner-occupied cottages started the period under the same pressure, though in this case there was a rapid subsequent decline. On the other hand, it was only in 1841 that the relatively reliable occupancy figures for speculative cottages were significantly higher than those for cottages belonging to large landowners, and Chiddingly speculative owners may be cleared of the charge of overcrowding their cottages in the interest of profit.

In order to examine variations around these means, Table 3 identifies all cottages with 1.5 or more persons per room (including estimates). The proportion that overcrowded cottages formed of the total fell during the 1840s, although their absolute numbers hardly changed, whilst the incidence switched from owner-occupied and parish cottages in the two earlier censuses to large landowner and speculative cottages in 1851 and 1861. There was no single factor to which overcrowding can be attributed; in some instances it was obviously a by-product of the stage reached in the family cycle, when there were many children in the home; in other cases, the household included an elderly parent and/or a sibling of the head; in yet others, several lodgers pushed up the occupancy level. The general reduction of occupancy levels did not remove the threat of overcrowding in particular circumstances.

TABLE 3
Number of cottages with 1.5 or more persons per room, by ownership

	1821	*1841*	*1851*	*1861*
Owner-occupied	4	1	0	0
Parish	2	4	–	–
Large landowner	1	1	3	5
Speculative owner	1	3	5	5
Total	8	12	8	10
% of all cottages	17	22	12	12

RESIDENTIAL MOBILITY

Because working-class families had few possessions, removal from one dwelling to another in the same locality was not a major upheaval. Urban working-class families moved house frequently during the 19th century, possible reasons being a desire to match dwelling size to changing household circumstances, and to obtain newly repaired and decorated accommodation.[23] There is little comparable information about the 19th-century residential mobility among rural working-class families. Full analysis requires the type of data provided by rate-books, which are rarely extant for rural areas. Census enumerators' books provide evidence at 10-year intervals only, but it can reasonably be assumed that where a family was recorded as living in the same dwelling at two successive censuses there had been no move during the interval. Such evidence can be used as a general guide to the extent of residential mobility.

TABLE 4
Residential persistence rates 1821–61

Year	*Number*	*10 years later*				*20 years later*			
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(b)*	*(c)*	*(d)*	*(e)*
1821	30	–	–	–	–	12	4	33	13
1841	46	33	15	45	33	28	6	21	13
1851	36	24	9	38	25	–	–	–	–

Notes: (a) Households with heads who were married men aged 35 or under
(b) Number of households still living in Chiddingly
(c) Number of households living in the same dwelling
(d) (c) as a percentage of (b)
(e) (c) as a percentage of (a)

TABLE 5
Residential persistence by cottage ownership 1841–61

Owner type	*Number of dwellings*[1]	*No persistence*	*10-year persistence*	*20-year persistence*	*Index*[2]
Owner-occupied	7	0	4 (57%)	3 (43%)	0.72
Large landowner (a)	31	7 (23%)	17 (55%)	7 (25%)	0.50
Large landowner (b)	4	3 (75%)	1 (25%)	0	0.25
Speculative owner	17	13 (76%)	4 (24%)	0	0.12

(a) Subdivided large houses and purpose-built cottages
(b) Small old houses
1. Cottages available at all three census dates
2. Each 20-year continuity was counted as 1.0, each 10-year continuity as 0.5; totals divided by the number of dwellings

Two analyses using census data were undertaken for Chiddingly. The first selected for consideration all working-class households with a head in 1821, 1841 and 1851 who was a married man aged up to 35; their place of residence in subsequent census years was then identified (Table 4). Roughly two-thirds of the 1841 and 1851 households were still in Chiddingly 10 years later, and of those 40% (over 25% of the total) were living in the same cottage. After 20 years, 33% of the 1821 households and 22% of the 1841 households still in Chiddingly were living in the same dwelling (13% of the original total in both cases). These figures suggest that there was less residential mobility among Chiddingly's working-class population than in urban working-class districts during the same period.[24]

The second analysis examined variations in residential persistence by cottage ownership, in order to test the hypothesis that workers living in tied cottages were less likely to move than those who rented privately. Table 5 shows that owner-occupied cottages experienced high levels of residential persistence, and this category provides a standard against which the figures for the other categories can be measured. Two types of large-landowner cottages are distinguished; subdivided old houses and purpose-built cottages had a relatively high index of persistence, whilst the tiny group of small old houses showed much lower levels. A probable explanation is that men recruited to the permanent workforce had to accept whatever cottage was available, but were allowed to move to a better cottage as soon as one became available.[25] Speculative dwellings had the lowest index, although even amongst these there were four cottages that were occupied by the same family at two successive censuses. It was amongst the speculative cottages that the quality of the building may have influenced the propensity to move; one wonders for instance what was wrong with the terrace of three weatherboarded cottages, probably built by Jesse Funnell in the 1840s, which in 1861 had only one bachelor tenant. There is little evidence to suggest that moves were made in order to match dwellings to family circumstances, no doubt because there was little variety of size and rent among the dwellings available, so that problems of overcrowding could rarely be solved by moving.

CONCLUSION

Using the sources and methods described, it has proved possible to answer for Chiddingly some of the questions posed at the beginning of this article, notably relating to the type and size of buildings, densities of occupation and residential mobility. On the other hand, there is little evidence to show how the occupants themselves evaluated their homes in terms of comfort and convenience.

Two findings are of special interest. First, the continued existence of hovel dwellings in Chiddingly largely escaped contemporary comment and only became evident as a result of comprehensive coverage. Secondly, the 1840s have emerged as the most significant decade of building activity and change in type and availability of cottages. Prior to *c.* 1840, even in this open parish most working-class accommodation was controlled by farmers or the parish vestry, and it was only

during the following decade that the speculative cottage became a significant element in the housing stock. The increase in number of cottages during the 1840s was paralleled by the growth in parish population; it was the subsequent fall in numbers that produced a decline in mean occupancy levels, an increase in the number of vacant cottages, and a slight rise in residential mobility. It seems that there was no longer a general deficiency of cottages, although there were still too few with three bedrooms.

What is not known at present is which of these features were peculiar to Chiddingly and which were local manifestations of district or country-wide characteristics. Only a series of comparable parish studies elsewhere in Sussex will allow this to be determined and reveal the full significance of the findings here presented.

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Notes

[1] Barry Reay, *The Last Rising of the Agricultural Labourer* (1990), 48. The principal general surveys are: G. E. Fussell, *The English Rural Labourer* (1949); John Woodforde, *The Truth about Cottages* (1969); Enid Gauldie, *Cruel Habitations: a history of working-class housing, 1780–1918* (1974); Pamela Horn, *Labouring Life in the Victorian Countryside* (1976); John Burnett, *A Social History of Housing in 1815–1970* (1978), Chs. 2 and 5; John Rule, *The Labouring Classes in Early Industrial England 1750–1850* (1986), Ch. 3.

[2] Rev. Arthur Young, *General View of the Agriculture of the County of Sussex* (1813, 1970 reprint), 22; William Cobbett, *Rural Rides* (Everyman edn, n.d.) **1**, 178, describing the estate villages of East Dean, West Dean and Singleton; Dr H. J. Hunter, 'Inquiry on the State of the Dwellings of Rural Labourers', in *Seventh Report of the Medical Officer of the Privy Council* (1865), **26**, Appendix 6, 273–5.

[3] e.g. Esther Meynell, *Sussex Cottage* (1936), 20–22.

[4] June A. Sheppard, 'Small farms in a Sussex Weald parish', *Agr. Hist. Rev.* **40** (1992), 127–141.

[5] E(ast) S(ussex) R(ecord) O(ffice), TD/E 105 (Chiddingly tithe map and award); E.S.R.O., PAR 292/12/2 (Chiddingly vestry minutes, April 16th 1840).

[6] P(ublic) R(ecord) O(ffice), HO 107/1118.

[7] 1851: P.R.O., HO 107/1638; 1861: P.R.O., RG 9/569.

[8] E.S.R.O., PAR 292/37/1 (Chiddingly census, 28th May 1821, taken by John Knight and Richard Lower).

[9] P.R.O., IR 58/29289; maps in Inland Revenue office in Eastbourne; for details of this source, see Brian Short, Mick Reed and William Cauldwell, 'The County of Sussex in 1910: sources for a new analysis', *Sussex Archaeol. Collect.* **125**, (1987), 199–224; and Brian Short, *The Geography of England and Wales in 1910: an evaluation of Lloyd George's Domesday of Landownership*, Historical Geography Research Series, No. 22 (1989).

[10] Peter Brandon, *The Sussex Landscape* (1974), 194–200; D. and B. Martin, *Historical Buildings in Eastern Sussex* **1**(i), Rape of Hastings Architectural Survey (1977), 6–12.

[11] P.R.O., MH 12/12931 (Hailsham Poor Law Union Papers, April 18th, 1836); Straw Castle was sold in 1840 and was probably modified or rebuilt during the following decade, for by 1851 its name had become 'Slab Castle'.

[12] A possible clue to the identification of some hovels in 1839 is a tithe schedule reference to a garden but no cottage, where in 1841 there is little doubt that the occupier of the garden was living; perhaps Richard Lower mapped and listed only what he saw as *permanent* dwellings?

[13] E.S.R.O., PAR 292/12/1 (Chiddingly vestry minutes, Dec. 1824 and Dec. 1827). The parish made a profit in this case, as they paid out around £40 and sold the cottage for £70.

[14] E.S.R.O., PAR 292/12/1 (Chiddingly vestry minutes, Oct. 1829).

[15] Rev. James Fraser recommended between 20 and 30 rods (0.125 and 0.188 acre), *1st Report of the Royal Commission on the Employment of Children, Young Persons and Women in Agriculture*, P.P (1867–8), **xvii**(1), Appendix (1), Reports of Assistant Commissioners, 40.

[16] E.S.R.O., A2327/11 and 12 (Court Books of Laughton Manor).

[17] E.S.R.O., A1/4/32 (Inclosure Award for Laughton Manor).

[18] E.S.R.O., PAR 292/12 (Chiddingly vestry minutes, Feb. 1824).

[19] P.R.O., HO 107/1638. The census enumerator's book shows the husband as a chair bottomer born in Germany, and the wife as a hawker.

[20] Edward Smith, *The Peasant's Home 1760–1875* (1876), 93: 'In the counties of Kent, Surrey and Sussex, the principal obstacle to the proper housing of the labourer would seem to be overcrowding.'

[21] Burnett, *Social History of Housing*, 304–5.

[22] Interdepartmental Committee of Social and Economic Research, *Guides to Official Sources No. 2, Census Reports of Great Britain 1801–1931* (1951), 66; Edward Higgs, *Making sense of the Census*, (1989), P.R.O. Handbooks No. 23, 56.

[23] M. J. Daunton, *House and Home in the Victorian City: working-class housing 1850–1914* (1983), 146–7; R. Dennis, 'People and Housing in Industrial Society', in *Historical Geography: progress and prospect*, ed. Michael Pacione (1987), 202.

[24] R. Dennis, *English Industrial Cities of the Nineteenth Century—a social geography* (1984), 256. The contrast would have been greater if all working-class households in Chiddingly had been included, for the under-35s were more likely to move than older householders.

[25] A case in point was David Smith, who was living in a low four-roomed cottage belonging to his employer Thomas Guy in 1851 (when he was 40 and had five children), but by 1861 was occupying a six-roomed cottage owned by Thomas Guy's son.

This section of the *Collections* is devoted to short notes on recent archaeological discoveries, reports on small finds, definitive reports on small scale excavations, etc. Those without previous experience in writing up such material for publications should not be deterred from contributing; the editor and members of the editorial board will be happy to assist in the preparation of reports and illustrations.

A *Ficron* Handaxe from Walberton, West Sussex: Its Geological and Prehistoric Context

Location

The handaxe or biface was found by Mr E. Stockdale in a small stream which runs through back gardens at the north end of West Walberton Lane (SU 958065), near its junction with the A27. The site is located on the 25 metre contour, and almost certainly on the remnant of the Aldingbourne Raised Beach. The stream is bedded with beach pebbles, within whose matrix the biface was discovered although it may derive from sand/clay layers underlying the gravel. These deposits are overlain with garden soil, and it appears that the gardens were levelled down by around 1 metre when the houses were constructed.

Description

This Lower Palaeolithic artefact has clearly come from an *in situ* context. Its edges are fresh and the tip very fine, precluding any water rolling or other movement, suggesting that it does indeed derive from a sand/clay layer rather than from gravel. The artefact is only slightly stained, the glossy surface of the flint having a slightly yellowish tinge, but this patination is in no way similar to that found on artefacts from the nearby Slindon quarry sites. One small scar on the edge may have been caused during recovery of the artefact.

The biface is clearly of the *ficron* type, with a concave sided profile and cortex retained on the butt (Figs. 1a., 1b). Typologically (if this is at all informative), it conforms to Wymer's (1968) type MM and (in the British context) falls into the same group as bifaces from New Hythe (Kent), Toots Farm Pit (Caversham, Berks). It appears very similar to the ficron from Furze Platt (Maidenhead) illustrated in Roe (1981, Fig. 5:25 No. 2).

However, this artefact is distinctive in respect of a void in the flint, which emerges from one edge and one face (Fig. 1b). Given that three flakes have been removed from the butt of the biface, but nowhere else in the cortex covered area, it is possible that the knapper gave up on the artefact once the extent of the void became apparent. Nevertheless, it is clear that the tapered point has been finely finished and, given the nature of the flake scars, this was almost certainly accomplished by a soft hammer technique.

Geological context

The northern part of Walberton lies on what has become known as the Aldingbourne raised beach (Fowler, 1932: Shephard-Thorn, *et al*, 1982; Woodcock, 1981). This feature runs from Tangmere in the west to Tortington in the east at around 25–27 metres O.D.. Although variable along its length, the feature generally consists of a shingle beach or bank overlying chalk bed rock, sometimes separated by a relatively thin sand layer. In places, part of the shingle is itself sealed by coombe rock deposits (Woodcock, 1981).

The Walberton shingle deposits have been known since the 1930s when Fowler (1932) reported "beach cobbles 6ft from the surface" at the north end of Copse Lane (SU 965068). Fowler also hints at similar deposits further to the east, just north of Binsted. No artefacts have previously been recorded from Walberton (although see below). If Woodcock's (1981) interpretation is correct, the Aldingbourne Raised Beach consists of a shingle "storm beach" overlying a wave cut platform in the chalk. This biface, then, derives from this shingle beach or possibly a thin sand layer between the shingle and the chalk platform.[1]

Archaeological context

The literature (Calkin, 1934; Fowler, 1932; Woodcock, 1981) records no other Lower Palaeolithic artefacts from Walberton itself. However, Littlehampton Museum possesses a "hammerstone" donated by Fowler in December 1930, recorded as originating from "Little Daws", Walberton. Whether this is a palaeolithic implement is hard to say, and efforts to locate "Little Daws" have so far been unsuccessful.

Other parts of the Aldingbourne beach have yielded more definite archaeological deposits. Calkin (1934) reports more than 60 implements from Aldingbourne Park Pit, Pear Tree Knapp (Tangmere) and East Hampnett. Unfortunately, only one is illustrated and the whereabouts of these artefacts are unknown (Woodcock, 1981). However, it appears that almost all were large flakes with heavy abrasion, and the illustrated example (Calkin, 1934, 338, Fig. 3) has no sign of retouch. Calkin (*ibid.*, 335) also reports a biface from Pear Tree Knapp, which was *in situ* and unabraded. Again, the whereabouts of this artefact are unknown.[2]

The only extant collection of Aldingbourne beach material derives from Crockerhill (SU 92150690, Chichester Museum collection). With one exception this collection consists of heavily abraded, patinated and unretouched flakes similar to those described by Calkin. The one exception is a relatively fresh, angular piece with a very clear point of percussion. This may possibly be a waste flake from a handaxe roughout or it may be intrusive.

Discussion

From this very brief survey it appears that the biface described here is unique, being the only extant "finished" artefact from the Aldingbourne Shingle Beach deposits. One may tentatively conclude that this deposit holds two distinct assemblages; i) redeposited and abraded flakes, as represented by the Crockerhill material and that reported by Calkin. ii) *In situ* material including the biface described by Calkin, the single flake from Crockerhill, and the Walberton biface.

Dating

Woodcock (1981, Fig. 32), places the Aldingbourne Shingle beach in the Middle Hoxnian phase. However, since the excavations at Ameys Eartham Pit, Boxgrove (Roberts, 1986), it has become clear that the Slindon raised beach is much earlier than had previously been believed. It seems probable that the Aldingbourne Beach is considerably later than Boxgrove/Slindon, and may still fall into the Hoxnian phase of marine transgression.

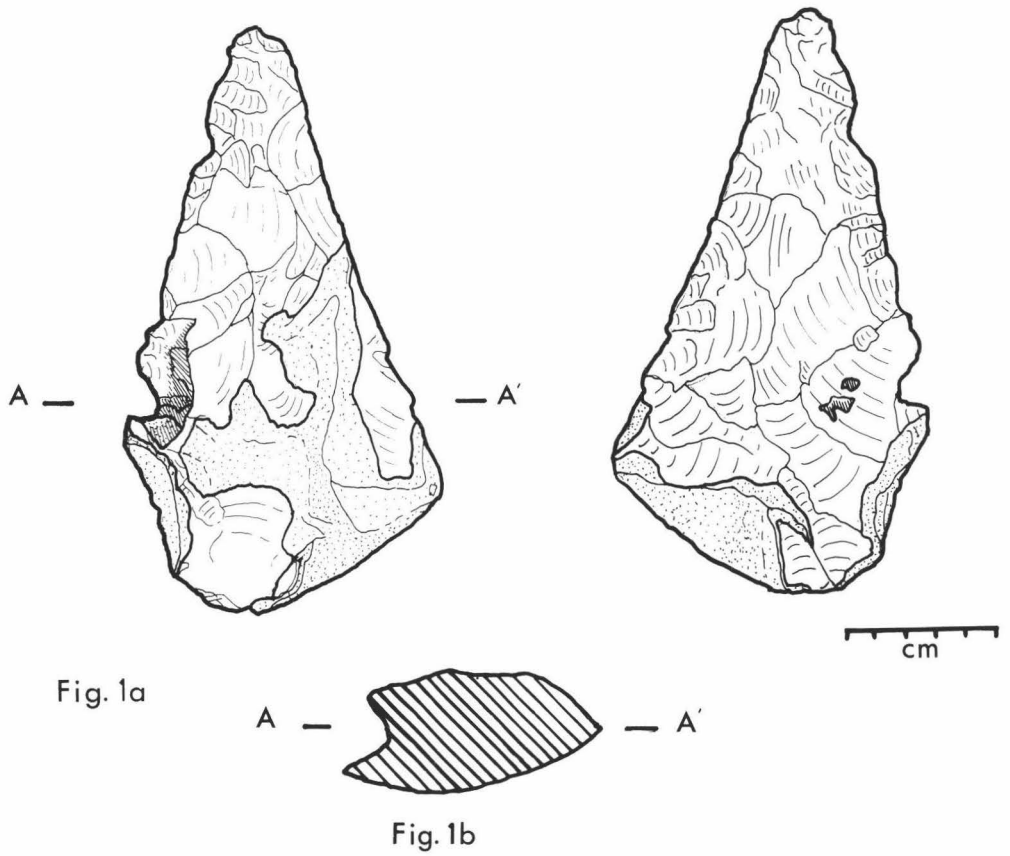

Fig. 1. Ficron axe from Walberton

Certainly, on typological grounds, the Walberton biface does not resemble any other artefacts from the area. But there is little or no evidence to imply that pointed or ficron handaxes are any later than the ovate tradition which appears to dominate other West Sussex assemblages.

Acknowledgements
I would like to thank Mr and Mrs Stockdale for loaning this artefact to Littlehampton Museum. I would also like to thank Anne Bone of Chichester Museum for giving me access to the Crockerhill material and Mark Roberts for some discussions on this paper.

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Notes

[1] It is interesting in this context to note that this deposit also produced an echinoid fossil similar to those found on the modern shingle beaches of West Sussex.

[2] Woodcock notes that some of these artefacts are "recorded as being in Littlehampton Museum". However, the museum has no record of them.

A Mesolithic Site at Angmering Decoy, West Sussex

Fieldwalking in 1991 and 1992 revealed a substantial scatter of lithic material in fields to the south of Angmering Decoy (TQ 057050). The Decoy, as the name suggests, is an 18th-century duck decoy with associated ponds fed by artesian springs. It is situated at the base of the Downs on the West Sussex Coastal Plain at an elevation of 5 metres O.D.

Although systematic exploration of the site has not been possible so far, six relatively limited field walking episodes produced some 209 pieces of worked flint. In our view systematic walking or test pitting of the site would reveal substantial occupation, possibly spanning several periods.

Mesolithic material has been recorded on the coastal plain (Lewis, 1960; Pitts, 1981), but little of it comes from the area east of the river Arun. On the whole, the impression has been that most Mesolithic activity was centered on areas to the north of the Downs (Drewett, Rudling & Gardiner, 1988; Jacobi, 1978). However, in the Angmering area there are now several known sites including Seven Acres Field (Lewis, 1960; TQ 666055) and the Hammerpot (TQ 066058), both of which were originally located by one of the authors (PH) in the late 1950s.

Given the proximity to artesian springs, Mesolithic finds in this area are not at all surprising. As Jacobi (1978, 15) points out 'Very clearly the largest sites, or clusters of sites, centre on permanent springs'. Ecologically, the Decoy is conveniently situated on the ecotone between the Downs and the Coastal Plain. The elevation (5 metres O.D.) is that generally found to be the centre of occupation on this part of the Coastal Plain throughout most prehistoric periods. Clearly the early post-glacial period would have seen a much larger and probably drier Coastal Plain that later periods. But in the transition to the Neolithic we might expect the wetter Atlantic climate to lead to the inundation which has probably characterised much of the Coastal Zone in subsequent times.

FINDS

Although the majority of finds are clearly Mesolithic in date, some diagnostically Neolithic material is present, and it seems probable that this site represents a palimpsest of lithic material, perhaps extending into the Early Bronze Age. With perhaps one exception, the raw material is local flint. Analysis of product groups (primary, secondary, tertiary flakes; retouched and retouched through patina), gives 10 primary flakes, 83 semi-cortical flakes or cores and 73 flakes or blades with no cortex. This pattern suggests that most stages of the knapping process were carried out on site using relatively small nodules of flint from the locality. It is notable that a significant proportion of the material is fairly low quality, grainy fossil bearing flint, rather than the finer translucent material which one tends to obtain from larger nodules. Moreover, many of the retouched pieces bear at least some cortex.

The total assemblage of 209 pieces includes the following:

Microliths:	12
Burins:	3
Microburins:	3
Complete flakes:	82
Blades:	31
Cores:	16
Scrapers:	21
Other retouched pieces:	5
Waste:	21

The assemblage has been deposited with Littlehampton Museum. Accession Numbers: A1441; A1463; A1599; A1610; A1683; A1693

Retouched tools

The site has produced several interesting retouched pieces. Fig. 2a is a fairly crude 'Thames Pick'-like implement. The tip has been sharpened with a tranchet flake. This object is very similar to Lewis's Fig. 1 No. 2 (1960, Worthing Museum Collection), although slightly more crude. Fig. 2c appears to be some form of fabricator, perhaps similar to those described from Iping common (Keef, Wymer & Dimbleby, 1965—Fig. 3 Nos. 36 & 37). Unfortunately these could not be compared as they were not among the collection in Chichester Museum. Note that Fig. 2c also has a small tranchet flake across its tip.

Fig. 2b is a fragment of a small Neolithic Axe, broken at both ends, and made on a distinctive white flint. Although this material is atypical of local flint, it is probably of local origin.

Fig. 2g appears to be a small borer. Note that it, like Fig. 2 c, d, i & j and Fig. 3d, has some cortex on its dorsal surface.

Fig. 2h is something of a mystery. Just about all the surfaces have been retouced, and one might regard this item as some form of double ended scraper or perhaps a reused fragment of a larger tool. Notably, this object has a distinctive orangy colour which might be due to ochreous staining—all the finds from the Seven Acres Site (which is no more than 200 metres distant) have a similar staining, in many cases of a very dark almost crimsom colour—perhaps this suggests some connection between the two.

Also illustrated in Fig. 2 are; (d)—one of the more finished scrapers; (i)—one of three burins and (j)—what appears to be an axe sharpening flake. Fig. 3 illustrates six of the microliths (a–f) and the three microburins (g–i).

Microliths

The assemblage includes 12 microlithic blades or blade fragments, two of which are clearly bladelets with the bulbar end removed. We have, as yet, found no geometric microliths. A more systematic programme of fieldwalking, or sample sieving is probably required.

Cores

Of the 16 cores in the assemblage, five were prismatic microcores as in Fig. 2e & f; there were also three single platform cores, two platforms cores, two disc cores and four irregular cores. The cores are, as can be seen in the illustration, fairly typical of the later Mesolithic.

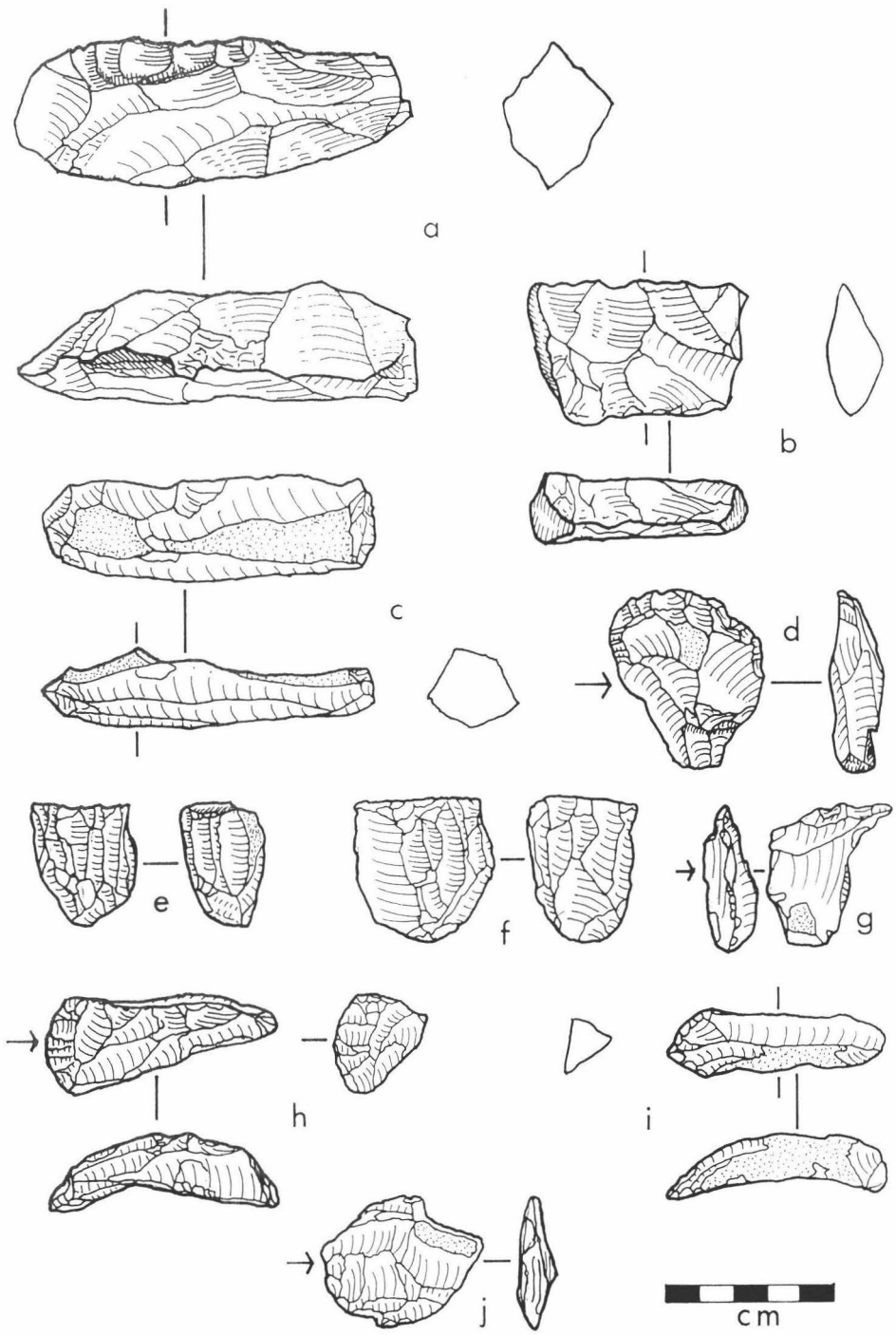

Fig. 2. (a) 'Thames Pick', (b) Fragment of Neolithic axe, (c) Fabricator, (d) Scraper, (e) & (f) Microcores, (g) Borer, (h) Thing of purpose!?, (i) Burin, (j) Possible axe sharpening flake.

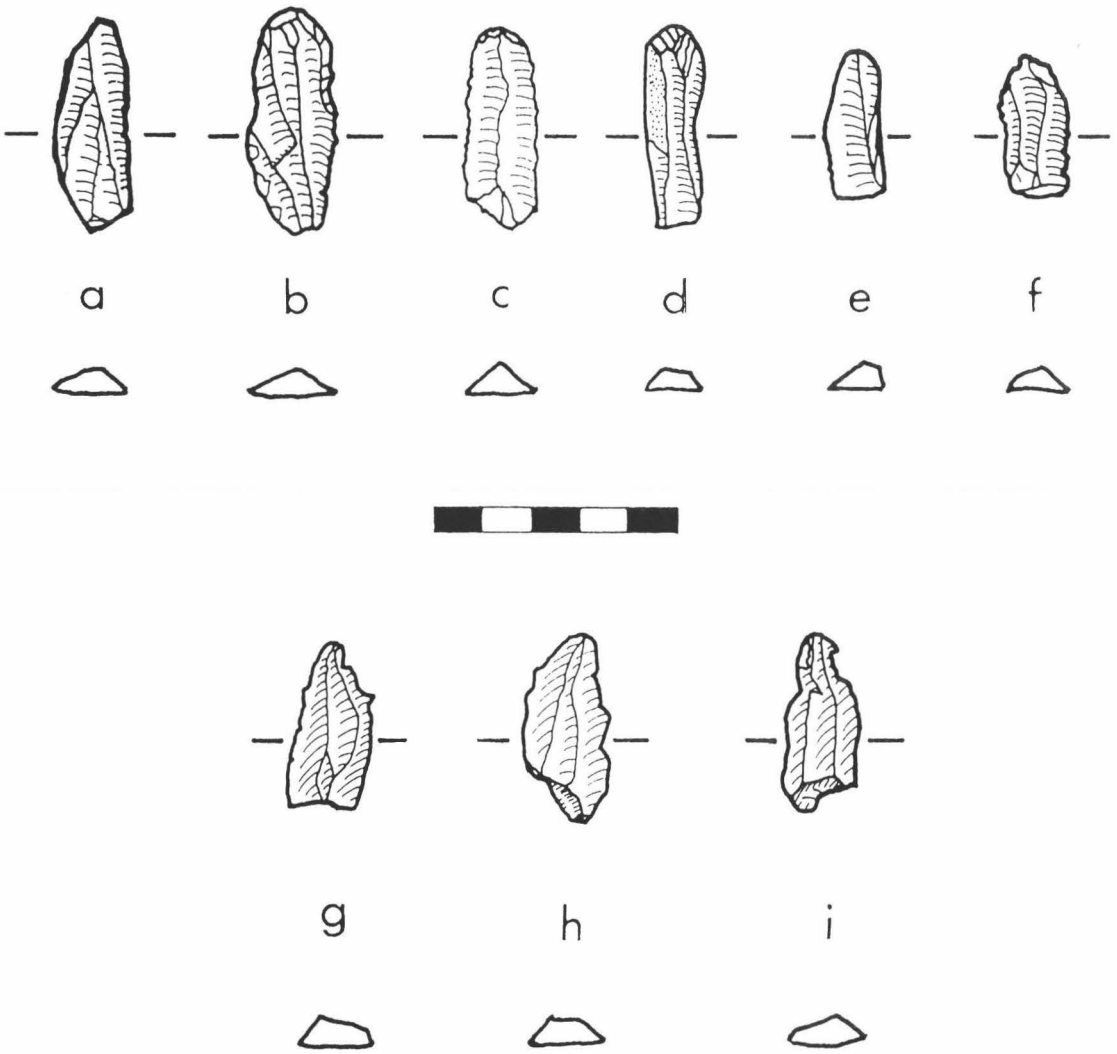

Fig. 3. (a)–(f) Microliths, (g)–(i) Microburins.

DISCUSSION

This site represents one of a cluster of Mesolithic locations which seem to surround the south and east sides of Angmering Decoy and Steyne Wood. Field walking further south has not revealed material beyond about 30–40 metres from the Décoy, and likewise fieldwalking to the west and north of the ponds around New Place Farm has not revealed corresponding assemblages. Indeed these areas are devoid of lithic material.

Given the nature of the assemblage we suggest a late Mesolithic date, with some possibility of occupation in the Neolithic indicated by the broken flint axe. Clearly many of the other flakes and scrapers could equally be of Neolithic or Early Bronze Age date.

ACKNOWLEDGEMENTS

We would like to thank the landowners for permission to walk the area. Also Dr Sally White of Worthing Museum and Anne Bone of Chichester Museum for their help in gaining access to their collections.

Authors: **Dr Paul Graves, formerly of Littlehampton Museum; Mr Peter Hammond, Littlehampton Museum, Manor House, Church Street, Littlehampton, West Sussex. BN17 5EP.**

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Some Flint Implements from South Heighton, East Sussex

Following the demolition of a barn and two cottages opposite the Post Office/General store (TQ 451027) in South Heighton, East Sussex in 1964, three flint implements were found by Mr F. A. Gunn. The small adze/pick illustrated (Fig. 4) is probably mesolithic in date, and appears to have been hafted. It was found, together with two similar pieces (smaller, poorly flaked and less well finished), within 150 metres of one another and at depth of between 24 and 30 mm. whilst digging footing trenches for garages. All pieces were a white/grey colour, typical of downland flint, and all abraded. Other flint implements have been found at South Heighton from time to time, including two neolithic axes on display in Brighton Museum. A local farmer also informed Mr Gunn that flint artefacts were turned up by the plough in a field 100–200 metres east of the building site.

I would like to thank Freddie Gunn for showing me the adze/pick and allowing me to illustrate it, and providing all of the above information which enabled me to prepare this note. The three flint implements remain in the possession of Mr Gunn.

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A Bronze Age Awl from Southerham Farm, Lewes in the Ashmolean Museum, Oxford

In 1991 Mr D M Andrews of the Cliffe, Lewes found an awl at Southerham Farm, Lewes (approx. TQ428096) using a metal detector. This was presented to the Ashmolean Museum in Oxford (Accesssion Number 1991.206) The awl is of an

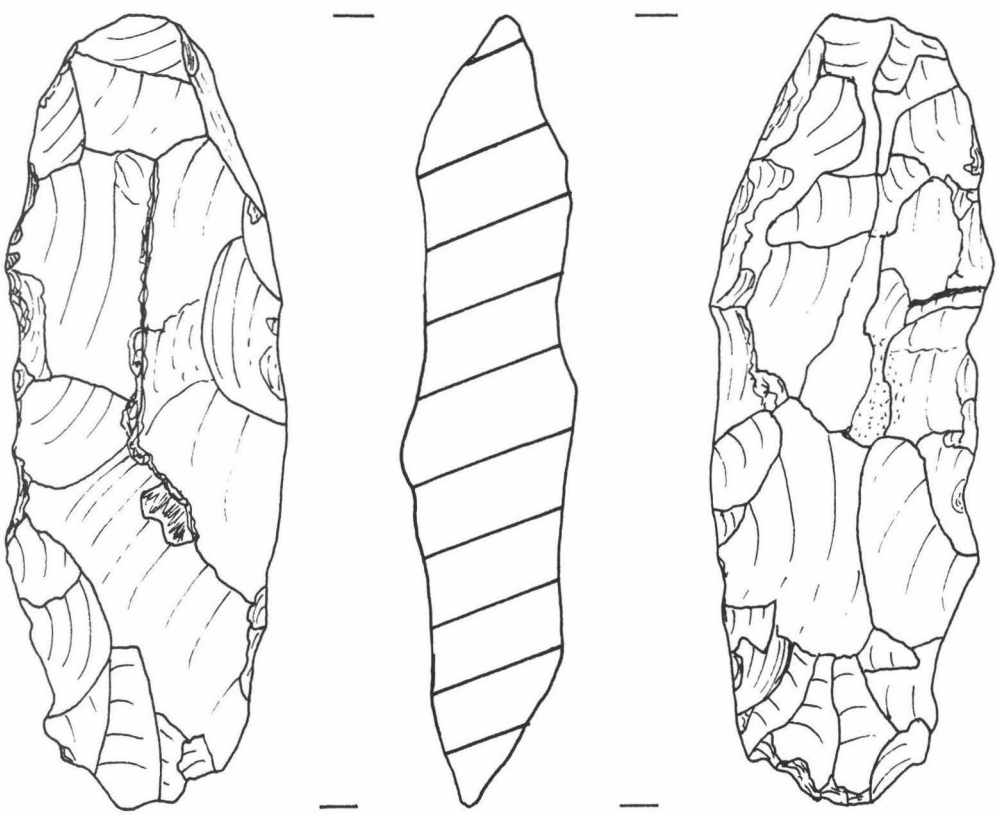

Fig. 4. Adze/pick from South Heighton.

unusual type of which only three others are known to have been found in Britain.

The awl is 94 mm. in total length, the tang 50 mm. long and the width of the 'stop' is 9 mm.. The tang is rectangular in section and the point is octagonal. The tip of the point has been bent, probably in antiquity.

There are three other awls of this type from this country; two have the same octagonal section point and one is round. The awl with the round sectioned point from Brough-on-Humber is the only one of the awls to have any associated finds. These include a number of socketed axes, two axe moulds, a spearhead, and a socketed chisel (Briggs et al 1987). This hoard is dated to Burgess' Ewart Park phase of Late Bronze Age 2. The other awls are from Tarrant Hinton, Dorset and Chelsea (Briggs et al 1987, 24).

These awls belong to a group of tools with collar stops. These stops can be found on a number of tools including the tanged 'chisel' (or leather working knife) and the tanged gouge. Although the tanged 'chisels' are relatively commen their use is uncertain. Some would probably not have been strong enough for wood working and it has been suggested that they were used for leather working (Roth 1974 and Thomas 1984). There is one example of a tanged gouge, that from Carlton Rode in Norfolk (Evans 1881).

The awl from Lewes and the others like it were probably used (like the 'chisels') for leather working. Although it is possible with frequent annealing awls such as these would be strong enough for use on harder materials such as wood, bone or even copper alloys. There is no evidence of how they were hafted, but it is possible they had a handle of wood, horn or bone.

The analysis of the awl shows the alloy to be a tin bronze with approximately 15% tin—an alloy that could originate in the Middle Bronze Age.

The full analysis, carried out with X-ray fluorescence, is as follows: Cu 85.20%, Sn 14.04%,Pb 0.41%, As 0.16%, S 0.08%, Fe 0.05%, Ni 0.02%, Co 0.01%, Bi 0.01%, Sb trace, Ag trace, Zn and Au not detected.

ACKNOWLEDGEMENTS

I would like to thank A G Sherratt, A MacGregor, P J Woodward and R Holgate for their assistance, J P Northover for this analysis and K Bennett for his drawing.

Author: **Jonathan Wallis, Oxfordshire Archaeological Unit, Oxfordshire County Council, Woodstock.**

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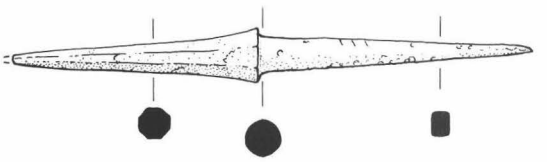

Fig. 5 A Bronze Age Awl from Southern Farm, Lewes (1:1)

This section of the *Collections* is devoted to short notes on aspects of local history. Those without previous experience in writing up such material for publications should not be deterred from contributing; the editor and members of the editorial board will be happy to assist in the preparation of reports and illustrations.

The Dedication of St Anne's Church, Lewes

In 1911, Frank Bentham Stevens broached, but did not solve, the question of when and why St Mary, the original dedication of the parish church of the Lewes suburb of Westout, had been superseded by that of St Anne. He noted a reference to the parish by the name of St Anne in a letter written to Thomas Cromwell

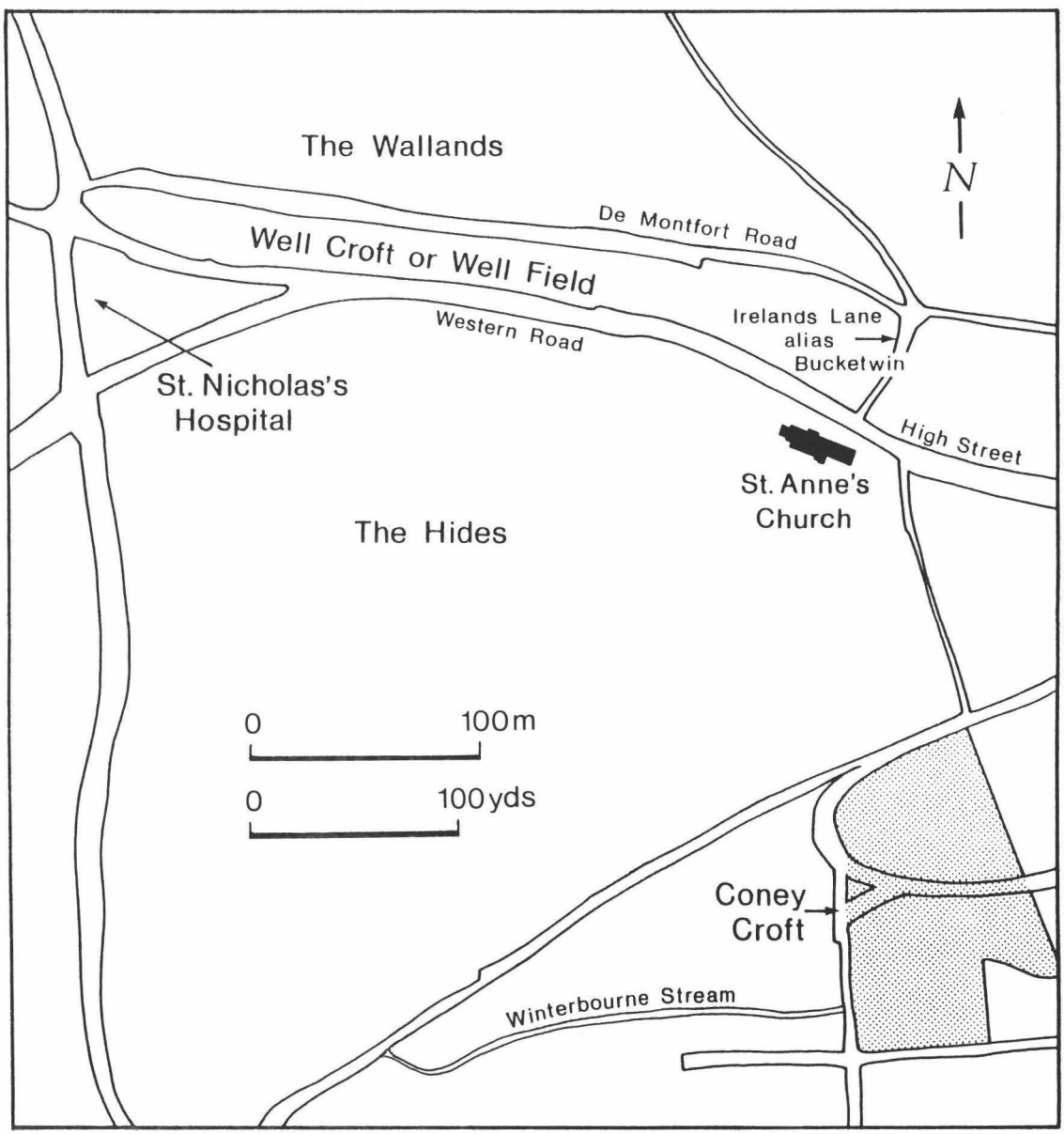

Fig. 1.

by William Cholmeley in 1537. With little optimism, Stevens appealed for information.[1]

Such information has recently been noticed among the records of the court of the archdeacon of Lewes preserved at Chichester.[2] Depositions were made in 1588 in a cause brought by Thomas Underdown, the rector of Westout, against Robert Saxpes, probably then resident at the present Anne of Cleves House in Southover.[3] The dispute turned on the liability of Coney Croft, a pasture between Rotten Row and the Winterbourne Stream, to pay tithes to Underdown, whose church, according to John Coby the elder, was known as St Anne's because *there was an image called St Anne standing in the said church whereunto there was much offering*. William Lane the younger added that St Anne's *is no parish but hath that name by offering to an idol in times past*. Coby was a reliable witness, having lived in Southover for all but three of his 78 years; Lane had lived in Lewes since 1563.[4]

But why did a cult of St Anne emerge locally, vigorous enough to overlay in the popular mind the veneration due to St Mary, the most potent saint in Christendom? In England, St Anne's association with healing springs and wells, and with the cure of barrenness in women, would have been reinforced by the capture of Jerusalem in 1099 during the first crusade. The reputed house there of Saint Anne, venerated as the mother of the virgin, was believed to have stood near Bethesda, a sheep-pool a little to the north of the temple enclosure, which St John's gospel notes as crowded with sick people, waiting for the moving of its water.[5] A local example of her cult is supplied by St Anne's Well at Wick in Hove, a downland spring commended in the 18th century by shepherds because of the fecundity of the sheep which drank there. Richard Russell, the Lewes physician, enclosed the water with a basin, and later a pump-room was built—destroyed by Hove Corporation in 1935.[6]

Is it possible to associate the image of St Anne in the parish church of Westout with a local well? In the 18th century the long slip of pasture opposite St Anne's church, between the present Western and De Montfort Roads and Irelands Lane, was called Well Croft (1712) or Well Field (1770).[7] Until 1624 at least, Irelands Lane itself had the alternative name of *Bukettwin*, which Richard Coates has interpreted as a narrow lane associated with a bucket—which presumably suggests proximity to a well, *and* one of more than domestic significance.[8] Moreover Wellcroft, part of the manor of Houndean, was *formerly part of the lands of possessions belonging to the dissolved priory of St Pancras in Southover.*[9]

The priory also possessed the advowson of St Mary Westout and administered a hospital, dedicated to St Nicholas, which lay opposite the west end of Wellcroft; indeed the hospital's income was drawn from the priory's own revenues. Might not the priory have developed an existing well, supplying a sheep-pool, as a healing centre under the patronage of St Anne, and associated it with its own neighbouring parish church? The parallel with Bethesda, on the outskirts of Jerusalem to the north of the temple enclosure, was perhaps an alluring one. St Mary Westout, which boasted an anchoress in 1253, must have been a welcome resort for travellers and pilgrims traversing the empty miles along the scarp betwen Lewes and Bramber Bridge.[10]

A final point. In 1533 or 1534, just before its dissolution, the priory's grange account records payment to three labourers for three days' work *pro 1 le damme versus le Walends faciendo*. The field still called The Wallands falls away steeply to the north of Well Croft and the entry could refer to the construction or repair of a retaining wall for a pool or basin fed from the well.[11]

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We are grateful to John Blair, John Bleach and Christopher Whittick for their helpful comments on drafts of this text, and to Mark Gardiner for drawing the map.

[1] *Suss. Arch. Coll.* **54** (1911), 265–70.
[2] *Underdown* c *Saxpes*—W(est) S(ussex) R(ecord) O(ffice) Ep II/5/4 ff. 21–212, Ep II/5/5 ff. 20–97 (interspersed), Ep II/5/6 ff. 282–5, especially at Ep II/5/5 ff. 38r; 97r; the spellings have been modernised.
[3] W.S.R.O. Ep II/5/4, f. 65.
[4] W.S.R.O. Ep II/5/4 f. 21 (Coby), f. 62 (Lane).
[5] Richard Morris, *Churches in the Landscape* (1989), chapter 2 'A Voice from the Well', esp. at p. 90.
[6] E. W. Gilbert, *Brighton, Old Ocean's Bauble* (1954), 60.
[7] E(ast) S(ussex) R(ecord) O(ffice), SAS/HC 302, SAS/A 506.
[8] Recorded in 1624: *The Book of John Rowe*, ed. W. H. Godfrey (Suss. Rec. Soc. **34**), 122, and Richard Coates, 'The lost street-name Bukettwin, Lewes', *Suss. Arch. Coll.* **129** (1991), 252–3.
[9] E.S.R.O. AMS 5954 and deeds in private hands.
[10] *The Victoria History of the County of Sussex* (L. F. Salzman ed.), **7** (1940), 41; **2** (1907), 104; **7** (1940) 40.
[11] Public Record Office SC6/H8/3510.

The Meaning of some Latin Prepositions in Manorial Records

In an article in these *Collections* in 1989, John Houghton described a series of ministers' accounts for the manor of Lewes Burgus and pointed out the useful topographical information which they contain.[1]

Commenting on the occurrence of the word *below*, Mr Houghton suggests that its use often seems jurisdictional rather than locational.

Michael Leppard has pointed out to me that the word *infra*, which certainly in its bibliographical usage indicates *below*, can often be found with a similar meaning; he cites what he now regards as his mistranslation of the word in these *Collections* in 1971, when he suggested that the *infra dictum burgagium* of the 1549 East Grinstead chantry certificate might mean 'below the said burgage', but was more likely a mistake for 'infra dictum *burgum*'—within the said borough.[2]

I hope it will be useful to the increasing number of people using Latin manorial documents to set out what I regard as the meanings of these words—I use the plural advisedly, since three different words are involved.

The Latin original of the document edited by Salzman and discussed by John Houghton uses *subtus* and *sub* rather than *infra*;[3] Salzman translates both as *below*.[4] Subtus is more frequently used before *ecclesiam*—church— and *sub* together with *muro*—wall. The first is generally followed by the accusative case and the second by the ablative, although medieval authors tended to avoid the decision by the use of a suspension.

I see no need to interpret any of these usages as jurisdictional. What is surely meant is below the church or under the wall, and that the buildings in question use the stone wall of an established structure for their major support. Most such buildings were cleared away from English churches by 19th-

century restorers, but many churches in the rest of Europe are still encumbered by such secular lean-tos, and of course buildings erected on former town ditches, such as the houses which used to stand on the site of Lewes's Westgate carpark, regularly relied on the town wall for their rear support or boundary.

To return to Michael Leppard's point, his alternative translation of *infra* as *within* is the correct one, but he has been misled by the assumption that a burgage is the equivalent of a house. Like the word *messuage, burgage* in fact refers to the entire plot of land held by burgage tenure, which may quite easily contain a house, a couple of cottages, a barn and other buildings. So his reference to two cottages *infra dictum burgagium* makes perfect sense.

Author: **Christopher Whittick, East Sussex Record Office.**

[1] *Suss. Arch. Coll.* **127** (1989), 256–7.
[2] Michael Leppard's letter to me of 16 August 1990, citing *Suss. Arch. Coll.* **109** (1971), 24–36.
[3] Public Record Office SC 6/H7/1474
[4] *Suss. N. & Q.* **5** (1934), 65–70, 97–101.

Thomas Paine and the Shocking Death of William Weston

At Lewes on 9 October 1773 a letter, very distinctive in style and subject-matter, was penned to William Lee, the printer of the *Lewes Journal*,[1] a resident in St Michael's parish:

> If to endanger a sick man's life (which I fear is but too often the case, to save a trifling expence) in removing him a distance from the parish in which he sickened, though he had *not* gained a legal settlement there, is consistent with the laws of the Realm, I am sure it is acting in direct opposition to the laws of *God* and *Nature*; and shall ever insist upon it, that when such an instance happens, and the removed object dies on his journey, or immediately after, the person instrumental to his removal, is guilty of *Murder*, and ought not to escape with impunity, even though it were the act of an unfeeling, CIVIL TYRANT. Sometimes in a case of this kind, it may justly be alleged, that the greatest care imaginable was taken of the deceased, during the course of his journey, What then? It may extenuate, but cannot exculpate. The above may appear presumptuous from an individual, but the assertion is hazarded.
>
> I was led to this Reflection, Mr. Printer, by seeing a poor, dying man (whose name I shall forbear mentioning) brought to your parish on Wednesday evening last, in a small, open cart, having nothing to shelter him from the inclement weather, but a little straw, lightly strewed over him, and in which shameful manner it appeared, he had been passed, on the Vagrant Act, from a parish in Yorkshire, where he was taken ill, to the parish of St. Michael, Lewes, Sussex; an act of cruelty, at the bare thought of which, human nature shudders with Abhorrence! Such an act can admit of no palliation; then to the eternal disgrace of the *Authors* of such *barbarous cruelty* be it published, how every person present at the removal of the straw, was struck with horror and amazement, when the shocking spectacle was displayed to their view, emaciated, and unable to move himself, with little other covering than what nature had giving (recte *given*) him, except (if I may be allowed the expression) a coat of *Vermin*, which were eagerly *devouring* him *alive*. 'Tis horrid to relate, and a melancholy fact that cannot be controverted. In such a state of torment had this poor miserable creature lain thirty-six days, as appears by the date of his DEATH-WARRANT. Good God! How could he survive it? 'Twas sure a peculiar act of thy all-ruling providence, to bring him, in his last hour, to excite compassion in his *friends*, that they might raise the Iron Hand of JUSTICE to avenge the *untimely* blow; for he had not been long conveyed to a comfortable apartment, when death snatched him from his miseries and the world; and he was on Friday last interred, without the *Coroner's Inquest* setting (recte *sitting*) on his body: But I hope the relation of so melancholy a fact, will stimulate some humane person, in whose power it is, to make *Inquisition* into this more than brutal transaction; when I fear it will appear too plain to admit a doubt, that the inexpressible sufferings of the above unfortunate young man, was the consequence of timely assistance being denied him by—What name can we find suitable to them? Or what do they deserve?—*Hanging* of *Men* I was ever averse to, but could exult in seeing that punishment hourly inflicted in ridding the world of MONSTERS.
>
> HUMANUS.

The dead man, William Weston, aged 35, was buried at St Michael's on 8 October.[2] Possibly he was the whitesmith William Western, whose wife Hannah had been removed to the parish in April 1770, via Charmouth in Dorset, by the order of the Devon Quarter Sessions.[3]

But who was the eloquent and liberal-hearted *HUMANUS?* Obviously a Lewesian, and well acquainted with the affairs of the parish concerned. Just such a one was William Lee's fellow-parishioner Thomas Paine, who constantly attended St Michael's vestry and the borough's Town Meetings, in the record of which his signature follows that of Lee in March 1771 and July 1772.[4]

If he was its author, the letter marks a very early contribution by Paine to a debate on civil liberty and social justice which was to make him a household name in America and Europe.

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Notes
[1] *Sussex Weekly Advertiser or Lewes Journal*, 11 Oct. 1773.
[2] E(ast) S(ussex) R(ecord) O(ffice) PAR 414 1/1/3.
[3] E.S.R.O. PAR 414 32/3/12.
[4] E.S.R.O. PAR 414 12/1; *The Town Book of Lewes*, ed. Verena Smith, (Suss. Rec. Soc. **69**), 57–62.

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