EAST ANGLIAN ARCHAEOLOGY

Frontispiece:
Reconstruction painting by Roger Massey-Ryan, of the manorial complex at Southchurch Hall around 1400, based on excavated and documentary evidence (compare Figs 104 and 105, Plate 6). The layout depicted here is described on pp143–5. This picture gives a good idea of the scale of the manorial complex and its relationship with the Thames estuary and marshes which can be seen in the background. The outer gate is modelled on one which formerly stood at Moat House North Shoebury, the barn court to the left of the painting is dominated by the great barn. The Hall, moat and excavated foundations of the inner gatehouses and associated buildings still survive; most of the rest of the area is now covered by housing developments of the 1920s and 30s.

to the memory of Leonard Helliwell, Eric Hills and John Jackson

A Medieval Moated Manor by the Thames Estuary: Excavations at Southchurch Hall, Southend, Essex

by N.R. Brown

with contributions from
D.D. Andrews, D. Gaimster, D.A. Higgins,
G. Hutchinson, J. Jackson, H. Major, Q. Mould,
P. Ryan, D.F. Stenning and I. Tyers

illustrations by
D.D. Andrews, Iain Bell, D.A. Higgins,
J. Jackson, R. Massey-Ryan and N. Nethercoat

East Anglian Archaeology
Report No. 115, 2006

Historic Environment
Essex County Council

EAST ANGLIAN ARCHAEOLOGY
REPORT NO. 115

Published by
Essex County Council
Historic Environment
Planning Division
County Hall
Chelmsford CM1 1QH

in conjunction with
ALGAO East
http://www.algao.org.uk/cttees/Regions

Editor: Owen Bedwin
EAA Managing Editor: Jenny Glazebrook

Set in Times Roman by Jenny Glazebrook using ™Corel Ventura Publisher
Printed by Henry Ling Limited, The Dorset Press

ISBN 978 1 85281 238 6

For details of *East Anglian Archaeology* see last page

This volume was published with the aid of a grant from English Heritage

East Anglian Archaeology was established in 1975 by the Scole Committee for Archaeology in East Anglia. The scope of the series expanded to include all six eastern counties and responsibility for publication was transferred in 2002 to the Association of Local Government Archaeological Officers, East of England (ALGAO East).

Cover illustration:
Southchurch Hall prior to restoration, painted by Wilfred R. Woolcot in 1928, looking north-west across the east moat
Reproduced by permission of Southend Museums Service

Contents

List of Plates

List of Figures

List of Tables

List of Contributors

David Andrews
Essex County Council Historic Buildings Team

Nigel Brown
Essex County Council Historic Environment Branch

David Gaimster
Society of Antiquaries

David Higgins
David Higgins Associates Archaeological Services

Gillian Hutchinson
National Maritime Museum

the late John Jackson

Hilary Major
East Street, Braintree

Quita Mould
East Moor Manor, Oxborough, Kings Lynn

Pat Ryan
Maldon Rd, Danbury, Chelmsford

Dave Stenning
Formerly Essex County Council Historic Buildings Team

Ian Tyers
University of Sheffield

Acknowledgements

Particular thanks are due to the principle excavators the late John Jackson and the late Eric Hills for all their help and advice on the excavations, and for their patience whilst this report was prepared. As ever, Ken Crowe and the staff of Southend Museums Service were most helpful in providing advice, assistance and access to the finds and records at the Central Museum and at Southchurch Hall. David Gaimster wishes to thank Helen Walker, Eric and Eve Hills, John Jackson, Carol Cunningham, John Cotter and John G. Hurst for help and advice on the pottery. David Higgins is most grateful to Peter Hammond of Nottingham for sending details of William Prebble from his as yet unpublished work on the London pipemaking industry and to Susie White of the University of Liverpool for comment. The illustrations are by Iain Bell, John Jackson, Nick Nethercoat, Roger Massey Ryan, David Andrews and David Higgins.

Summary

Southchurch Hall, a Scheduled Monument, is a moated manor house surrounded by earthworks. The hall and earthworks are open to the public and lie less than 1km north of the present shore of the Thames estuary close to the centre of Southend. In the medieval period the manor belonged to Christ Church Canterbury, and many of its tenants were prominent in local and national politics.

In 1922 Southchurch Hall was still operating as a farm but under serious threat of destruction from the rapid expansion of Southend. Fortunately, a group of prominent individuals linked by membership of the Southend-on-Sea and District Antiquarian and Historical Society and/or of the Society of Antiquaries, actively sought to preserve the threatened building and its earthworks. The work of this group attracted C.R. Peers to examine the standing structure and Mortimer Wheeler the surrounding earthworks. Supported by their reports H.A. Dowsett purchased the hall and earthworks and presented them to Southend Borough Council. The hall was extensively but sensitively restored in the late 1920s and opened to the public as a branch library in 1931 with the earthworks forming part of a public park.

By the early 1970s the hall was being prepared to become a branch of Southend Museums. It was intended to equip the hall as a furnished medieval manor. In pursuance of a policy previously agreed by Southend Borough Council, excavations were begun to provide artefacts for the museum and to locate remains of the numerous manorial buildings known from documentary sources. In part the work was threat led, taking opportunities for investigation resulting from, in particular, the devastating effects of elm disease which meant that a number of large trees had to be removed from the edges of the north moat. However, most of the areas examined were chosen specifically to address questions, some originally suggested by Wheeler in the 1920s, regarding the development of the moat, mound, structures and their relationship to the documentary resources. The excavations were carried out between 1972 and 1989 by members of Southend-on-Sea and District Antiquarian and Historical Society, led by the late John Jackson and the late Eric Hills under the general direction of the late Leonard Helliwell and Donald McLeod of Southend Museum.

This report describes and interprets the results of the excavations which revealed details of the moat, mound, three phases of timber bridge, an early wooden revetment to the moat, and foundations of a stone built gatehouse, garderobes and other structures. Large assemblages of artefacts were recovered, notably pottery, metal objects, leather work and glass. The material reflects widespread contacts facilitated both by the site's geographical location at the mouth of the Thames estuary, and by the social prominence of its occupants. A full survey of the timber-framed hall which dates from the early 14th century was carried out, and a selective analysis of the extensive documentary sources relating to the site. These are used together with the excavated evidence to provide an integrated account of the site and its setting.

Résumé

Southchurch Hall est un manoir fossoyé entouré par des ouvrages en terre. Il est en voie de classement au titre des monuments historiques (Scheduled Monument). Le hall et les ouvrages en terre sont ouverts au public et se trouvent près du centre de Southend, à moins d'un kilomètre du Thames estuary. A l'époque médiévale, le manoir appartenait au Christ Church Canterbury et beaucoup de ses occupants jouaient un rôle politique important sur le plan local et national.

En 1922, Southchurch Hall servait encore de ferme mais était sérieusement menacé de destruction en raison de l'expansion rapide de Southend. Par chance, il s'est trouvé qu'un groupe de personnalités éminentes, membres de la Southend-on-Sea and District Antiquarian and Historical Society et/ou de la Society of Antiquaries, a fait preuve d'un grand dynamisme pour préserver le bâtiment menacé et ses ouvrages de terre. Le travail de ce groupe a conduit C.R. Peers à examiner la structure du bâtiment tandis que Mortimer Wheeler s'intéressait aux ouvrages de terre. S'appuyant sur leurs rapports, H.A. Dowsett fit l'acquisition du hall et des ouvrages de terre et les présenta au Southend Borough Council. A la fin des années 1920, le

hall fut l'objet d'une restauration importante qui ne manqua pas toutefois de finesse, et il ouvrit au public comme bibliothèque annexe en 1931, les ouvrages de terre étant intégrés à un jardin public.

Au début des années 1970, des dispositions furent prises pour que le hall devienne une annexe des Southend Museums. Il était prévu de transformer le hall en un manoir médiéval meublé, et des fouilles furent entreprises pour fournir des artefacts au musée et localiser les vestiges d'un grand nombre de manoirs connus d'après des sources documentaires. Les travaux se déroulèrent en partie sous la menace et permirent de réaliser des recherches liées en particulier aux effets dévastateurs d'une maladie de l'orme qui entraîna l'abattage d'un certain nombre de grands arbres aux abords du fossé nord. Toutefois, la plupart des zones examinées furent choisies pour répondre à des questions spécifiques dont certaines avaient été à l'origine suggérées par Wheeler dans les années 1920. Elles concernaient le développement de structures en relation avec les ressources documentaires. Les fouilles furent effectuées entre 1972 et 1989 par des membres de la Southend-on-Sea and District Antiquarian and Historical Society conduits par John Jackson et Eric Hills sous la direction générale de Leonard Helliwell et de Donald McLeod du Southend Museum.

Les résultats des fouilles sont exposés et interprétés dans le présent rapport qui contient la description détaillée de plusieurs éléments parmi lesquels on trouve le fossé, doté d'un revêtement en bois datant des débuts, le monticule, un pont en bois de construction, des latrines et les fondations d'une maison de gardien construite en pierres. Un grand nombre d'artefacts fut récupéré, en particulier de la poterie, des objets en métal, des éléments en cuir et du verre. Les matériaux collectés prouvent l'existence de contacts étendus qui étaient facilités à la fois par l'emplacement géographique du site à l'embouchure du Thames estuary et par l'importance sociale de ses occupants. Le hall, qui possède une structure en bois et date du début du quatorzième siècle, a été l'objet d'une étude complète. De même, une analyse sélective des abondantes sources documentaires concernant le site a été menée. Ces différentes données ont été associées aux matériaux mis à jour afin d'obtenir un compte rendu exhaustif du site et de son environnement.

(Traduction: Didier Don)

Zusammenfassung

Southchurch Hall, das als »Scheduled Monument« zur Liste der britischen Kulturdenkmäler zählt, ist ein von Erdwerken und einem Wassergraben umgebenes Herrenhaus. Das für Besucher zugängliche Gebäude und seine Erdwerke sind nicht weit vom Zentrum von Southend entfernt, das weniger als 1 km nördlich der Themse-Mündung liegt. Im Mittelalter gehörte das Herrenhaus zu Christ Church Canterbury; viele seiner Pächter waren bekannte Persönlichkeiten in der Lokal- und Landespolitik.

1922 war das noch immer landwirtschaftlich genutzte Anwesen Southchurch Hall durch die rapide Ausbreitung von Southend ernsthaft bedroht. Glücklicherweise existierte eine Gruppe angesehener Bürger, die alle Mitglied in der Southend-on-Sea and District Antiquarian and Historical Society bzw. der Society of Antiquaries waren und sich aktiv für die Erhaltung des bedrohten Gebäudes und seiner Erdwerke einsetzten. Die Arbeit dieser Gruppe veranlasste C.R. Peers zur Untersuchung des Gebäudes und Mortimer Wheeler zum Studium der umliegenden Erdwerke. Auf ihre Berichte hin erwarb H.A. Dowsett das Gebäude und die Erdwerke und übergab den gesamten Komplex an den Southend Borough Council. Das Gebäude wurde Ende der 1920er Jahre umfassend und mit viel Feingefühl restauriert und 1931 als Bibliothekszweigstelle für die Allgemeinheit geöffnet. Die Erdwerke bildeten Teil eines öffentlichen Parks.

Anfang der 1970er Jahre wurde das Gebäude auf die Überführung in den Bestand der Southend Museums vorbereitet. Es war geplant, das Gebäude als mittelalterliches Herrenhaus einzurichten, weshalb mit Ausgrabungen begonnen wurde, um Artefakte für das Museum sicherzustellen und Überreste der zahlreichen mittelalterlichen Gebäude aufzuspüren, die aus dokumentarischen Quellen bekannt waren. Hintergrund der Arbeiten waren zum Teil besondere Gefährdungen, die zu speziellen Erkundungen führten, insbesondere zu den verheerenden Auswirkungen der Ulmenkrankheit, was die Beseitigung einer Reihe großer Bäume am Rand des nördlichen Burggrabens erforderte. Die meisten Untersuchungsgebiete wurden jedoch ausgewählt, um Fragen über die Entwicklung der Strukturen und ihre Beziehung zu den dokumentarischen Quellen zu beantworten, die zum Teil schon von Wheeler in den 1920er Jahren aufgeworfen wurden. Die Ausgrabungen wurden zwischen 1972 und 1989 von Mitgliedern der Southend-on-Sea and District Antiquarian and Historical Society durchgeführt und unter der Generalaufsicht von Leonard Helliwell und Donald McLeod vom Southend Museum von John Jackson und Eric Hills geleitet.

Der Bericht beschreibt und interpretiert die Ergebnisse der Ausgrabungen, die Einzelheiten zum Burggraben, zum Erdwall, zu einer Holzbrücke, einer frühen hölzernen Futtermauer für den Burggraben, den Fundamenten eines steinernen Torhauses sowie zu Aborterkern und anderen Elementen zutage förderten. Es wurden große Fundkomplexe sichergestellt, darunter vor allem Tonware, Metallobjekte, Ledergegenstände und Glas. Das Material weist auf ausgedehnte Kontakte hin, die durch die geografische Lage der Stätte am Ausgang der Themse-Mündung sowie durch die soziale Stellung ihrer Bewohner ermöglicht wurden. Es wurde eine vollständige Übersicht über das Fachwerkgebäude aus dem frühen 14. Jh. erstellt und eine selektive Analyse des ausführlichen dokumentarischen Materials zu der Stätte durchgeführt, die gemeinsam mit den Ausgrabungsbefunden zu einem integrierten Bericht über den Ort und seine Lage zusammengeführt wurden.

(Übersetzung: Gerlinde Krug)

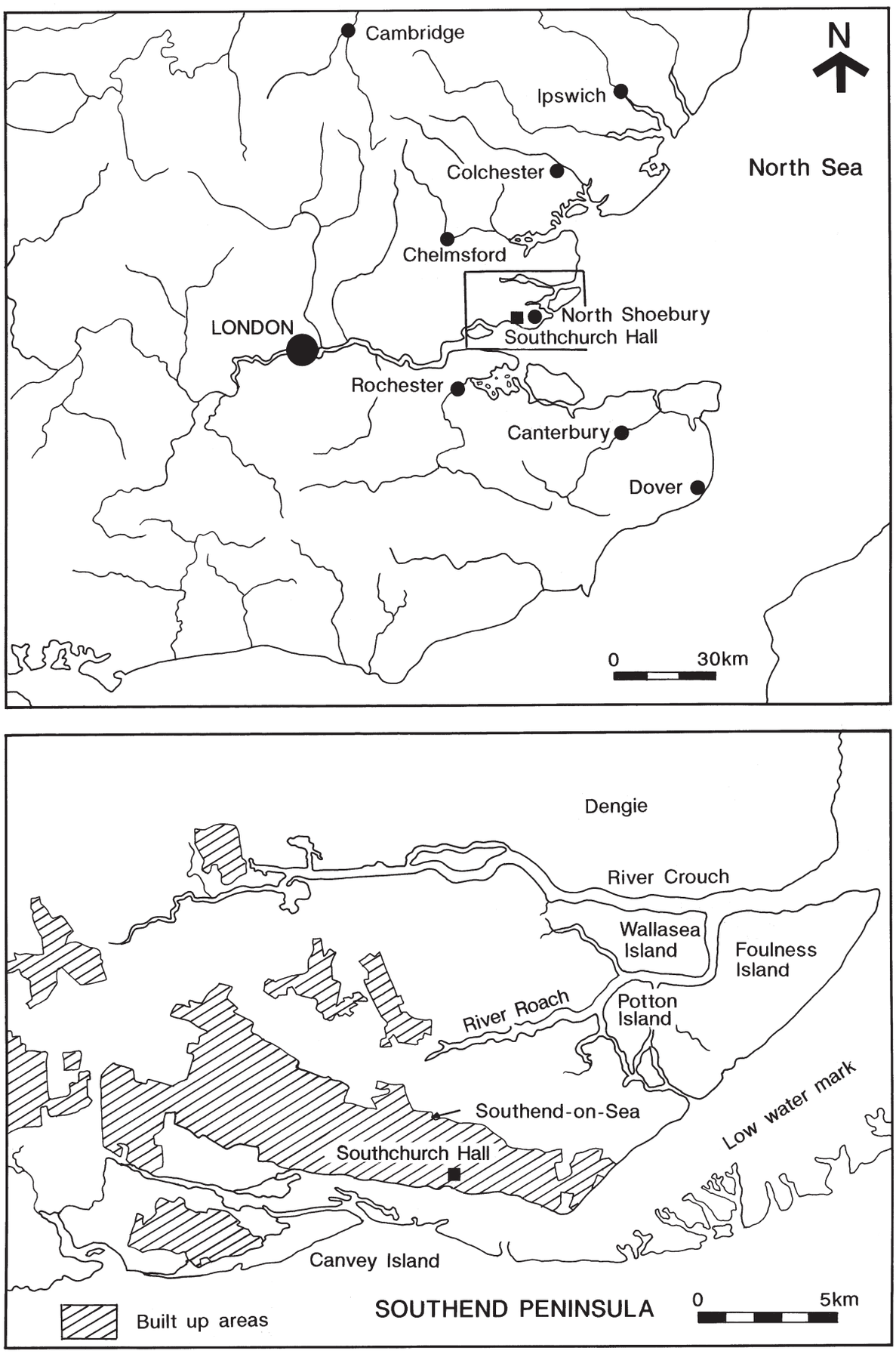

Figure 1 Location plan

1. Introduction

I. Background

There has been a long and commendable history of both amateur and professional archaeological work in south-east Essex, focused at Southend Museum, and involving a variety of individuals, societies and institutions. Foremost amongst the amateur groups was the Southend-on-Sea and District Antiquarian and Historical Society (Chessher 1971) founded in 1920 and wound up in 1996. The members of this group had a profound impact on the archaeology of the area, in particular they formed the labour force which worked at a number of local sites, including the major multi-period site at North Shoebury (Wymer and Brown 1995). Between 1972 and 1989 the group excavated at the medieval moated site of Southchurch Hall.

This report presents the results of their work at that site. The original records, and all the finds are held by Southend Museums. The surviving timber-framed hall at Southchurch is now a branch of Southend Museums and contains a display of finds from the site. The moat and earthworks surrounding the hall, together with the stone-built foundations revealed by excavation can also be seen, set within attractive gardens.

II. Location and topography

Southchurch Hall, a Scheduled Monument, is a moated manor house surrounded by earthworks, situated on the Southend peninsula which lies between the estuaries of the Thames to the south and Roach to the north. The parish of Southchurch was absorbed by the rapid eastward expansion of Southend in the first half of the 20th century, and is now covered by housing estates of the 1920s and 1930s, making the earlier topography difficult to appreciate. The hall lies to the east of Southend town centre, about 200m south of Southend East Station, 500m north of the present shore of the Thames Estuary (Fig.1), and about 1km south-west of the parish church of Holy Trinity. The oldest part of the present standing structure of this church dates from the 12th century (RCHM 1923).

The Southend peninsula is covered by a complex sequence of Thames/Medway terraces (Bridgland 1994). Southchurch Hall lies between the 10 and 15m contour lines and is situated at the boundary of the Southchurch Gravel, and a very mixed sandy clay head deposit (Bridgland 1994, fig. 5.5; Jermyn 1974). The moated site occupies a hollow sheltered to the north by rising ground and open to the south. This hollow appears to have been formed by two springs which rise within the present Southchurch Hall Park. These springs feed the moat, and originally appear to have discharged as a stream which flowed south into an extensive area of marshland (Helliwell unpublished). This marshland was an important feature of local topography until finally drained and partly built over in the 1920s and 1930s. A substantial part remains as open ground in the form of Southchurch Park, the adjacent sports ground, and Thorpe Hall Golf Course. As drainage of the marshland and construction work proceeded a variety of Bronze Age, Iron Age, Roman and Medieval ceramics were recovered, together with wooden remains of uncertain purpose but interpreted by Francis (1931) as of prehistoric origin. Part of the marshland is shown on the Chapman and Andre map of 1777 (Fig. 2), but it seems its full extent was not mapped, as the marsh ends abruptly at the edge of one of the map sheets, and does not continue onto the adjacent sheet. Following the discoveries of the 1920s, Francis (1925; 1931) made considerable efforts to reconstruct the extent of the marshland. Its general area may be indicated by the area of alluvium shown on the geological map (Wessex Archaeology 1996). It appears that at least part of this area was a tidal creek fringed by salt marsh in the early medieval period (Francis 1925, 25).

III. The archaeology of south-east Essex

There is considerable evidence of Mesolithic and Neolithic occupation in south-east Essex, and since at least the Middle Bronze Age settlement has been relatively dense (Wymer and Brown 1995). The area has produced the largest concentration of later Bronze Age metalwork in Essex (Couchman 1980, figs 16 and 17) and indications of later Bronze Age settlement are widespread throughout the Southchurch and Shoebury areas, to the north and east of Southchurch Hall. The area was similarly densely occupied in the Iron Age and Roman period. The valleys of small streams seem to have been particularly favoured; a stream at Fox Hall provided a focus for settlement (Ecclestone 1995), as did Southchurch Marsh (Francis 1931). Roman sites show a particular concentration along the Prittle Brook which flows north into the Roach (Wymer and Brown 1995, figs 97 and 98). The same area has similarly important Saxon sites including a major 6th/7th-century cemetery (Pollitt 1923; Tyler 1988) where a royal burial has recently been revealed. This lay 600m north of St Mary's Church, Prittlewell which itself contains a Saxon arch probably of 7th-century date (Taylor and Taylor 1965, 499–500). To the east and north-east of Southchurch prehistoric, Roman and Saxon occupation is concentrated on the fertile loess deposits at Shoebury and Wakering (Wymer and Brown 1995).

Medieval settlement in south-east Essex, in common with much of east Essex was dispersed. A small market town, Rochford, whose market charter dates from 1247, lay at the point where the Roach widens into its estuary. Between the Roach and the Thames the only nucleated villages were Prittlewell, and the street village of Great Wakering, the latter possibly a planned settlement of later Saxon date (Medlycott 2003). With these exceptions, settlement consisted of church/hall complexes, individual farms and small hamlets. This settlement pattern (Fig.2) survived to the end of the 19th century, though increasingly affected by the expansion of Southend, and was only destroyed by the rapid urbanisation of the 20th century. Much of the older pattern still survives between the Roach and Crouch and immediately south of the Roach.

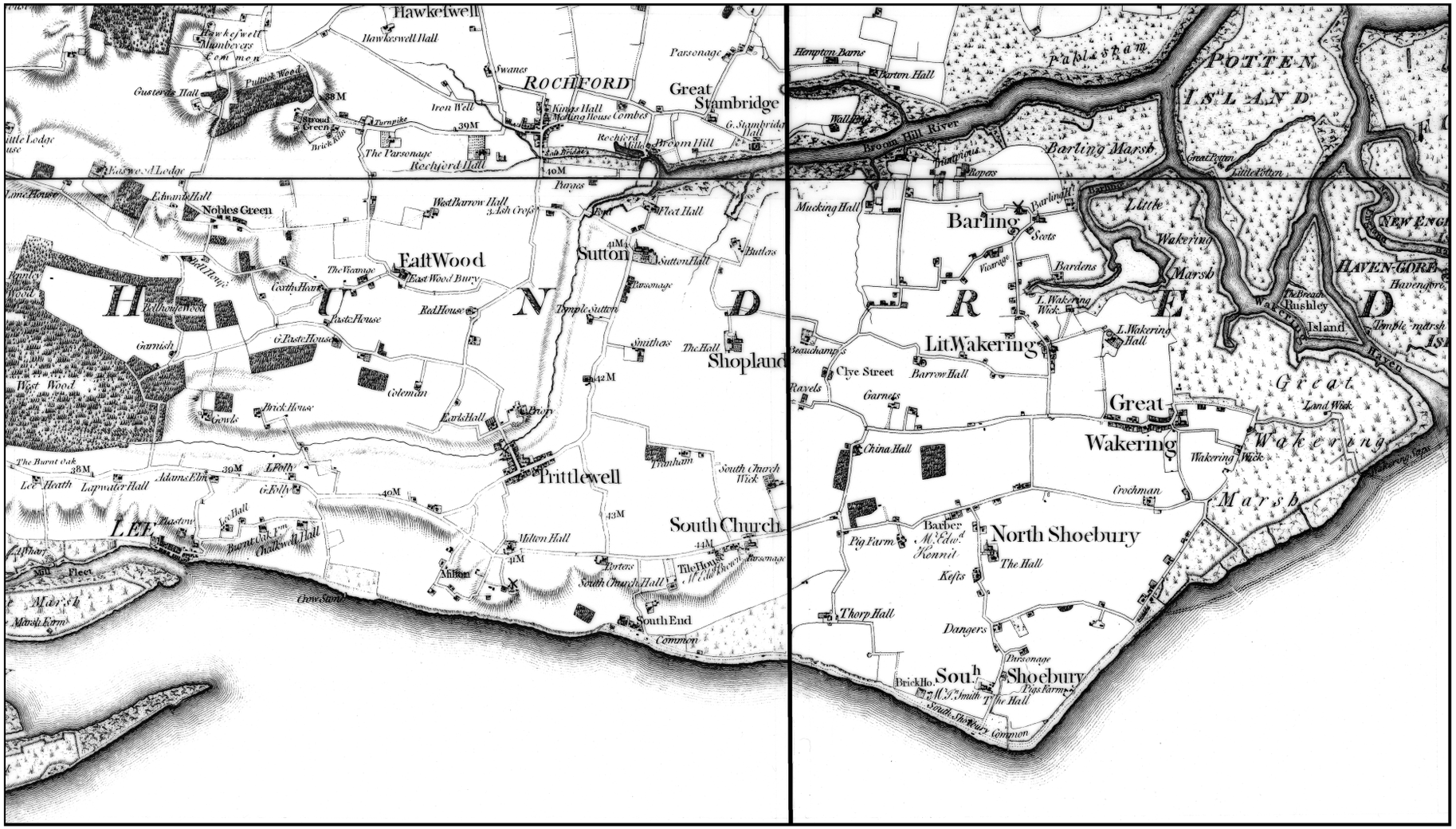

Figure 2 Extract from Chapman and Andre map of 1777, showing Southchurch Hall and environs

Plate 1 Southchurch Hall before restoration about 1920

IV. Acquisition of the hall by Southend Borough and restoration

At the beginning of 1922 Southchurch Hall (Plate 1) was still operating as a farm occupied by Mr Wiffen who had been tenant since 1908. However, during the course of 1922, the hall and its surrounding earthworks came under serious threat; a proposed new development would extend York Road eastward and develop major new housing estates, north and south of this axial route. The extension of York Road would have passed through the earthworks surrounding the hall destroying them, and it seemed probable that the hall itself would be destroyed by the new housing development (Pollitt 1949). Fortunately, J.W. Burrows, a local politician, prominent member of the Southend-on-Sea Antiquarian and Historical Society and Fellow of the Society of Antiquaries, actively sought to preserve the threatened building and its earthworks. Over the next few years, a small group of individuals all linked by membership of the Southend Antiquarian Society, the Society of Antiquaries and/or involvement in local politics, worked to preserve Southchurch Hall.

Some of the same people, and Burrows in particular, had been instrumental in the acquisition and restoration of Prittlewell Priory and Leigh Rectory by Southend Borough. A key figure was H.A. Dowsett (Alderman and member of Southend Antiquarian Society) who acquired Southchurch Hall. With the help of W. Pollitt, the Borough Librarian and Curator (Fellow of the Society of Antiquaries, member of the Southend Antiquarian Society) Burrows set about establishing the importance of the hall and presenting it as an asset for the town. C.R. Peers (Fellow of the Society of Antiquaries) then Chief Inspector of Ancient Monuments to H M Office of Works and later president of the Society of Antiquaries, was invited to give his opinion of the site. Peers' report established the importance of the standing structure and the necessity of preserving its relationship to the surrounding earthworks. He suggested a date in the second quarter of the 14th century for the hall; this accords remarkably well with the recently obtained dendrochronological dating (below, p.35), and concluded that, suitably restored, Southchurch Hall would form 'a fitting pendant to Prittlewell Priory'.

Supported by this report, in 1925 Dowsett offered the property to Southend Borough Council, on condition that; great care be taken in preserving the earthworks and moat, the historical interest of the hall be preserved, and the building be used as a library, reading room or museum. The Council accepted this offer in January 1926 and in May 1927 asked Mr P.M. Johnston (member of the Southend Antiquarian Society, Fellow of the Society of Antiquaries), who had previously undertaken the restoration of Prittlewell Priory, to report on the preservation and restoration of the building, and Mortimer Wheeler (Fellow of the Society of Antiquaries), then keeper of the London Museum, to report on the condition and preservation of the earthworks (Pollitt 1949). Their reports were received later that year. Two sketch plans from Wheeler's report are reproduced here (Fig. 3): one shows the earthworks of the moat as they were in 1927, the other Wheeler's suggested alterations intended to facilitate the long-term preservation of the earthworks and their incorporation into a public park. It is clear that Wheeler's views had a considerable influence on the way the Southchurch Hall earthworks were restored for display. Restoration of the hall was carried out by Johnston in 1930. At about this time J.F. Nichols (Member of the Southend Antiquarian Society, Fellow of the Society of Antiquaries) prepared a history of Southchurch Hall from the extensive documentary records (Nichols 1932). The hall opened as a branch Library and the grounds as public gardens in 1931.

Wheeler's report on the earthworks suggested that part of the moat be excavated to establish its original profile and recover an artefact sequence. In addition, he

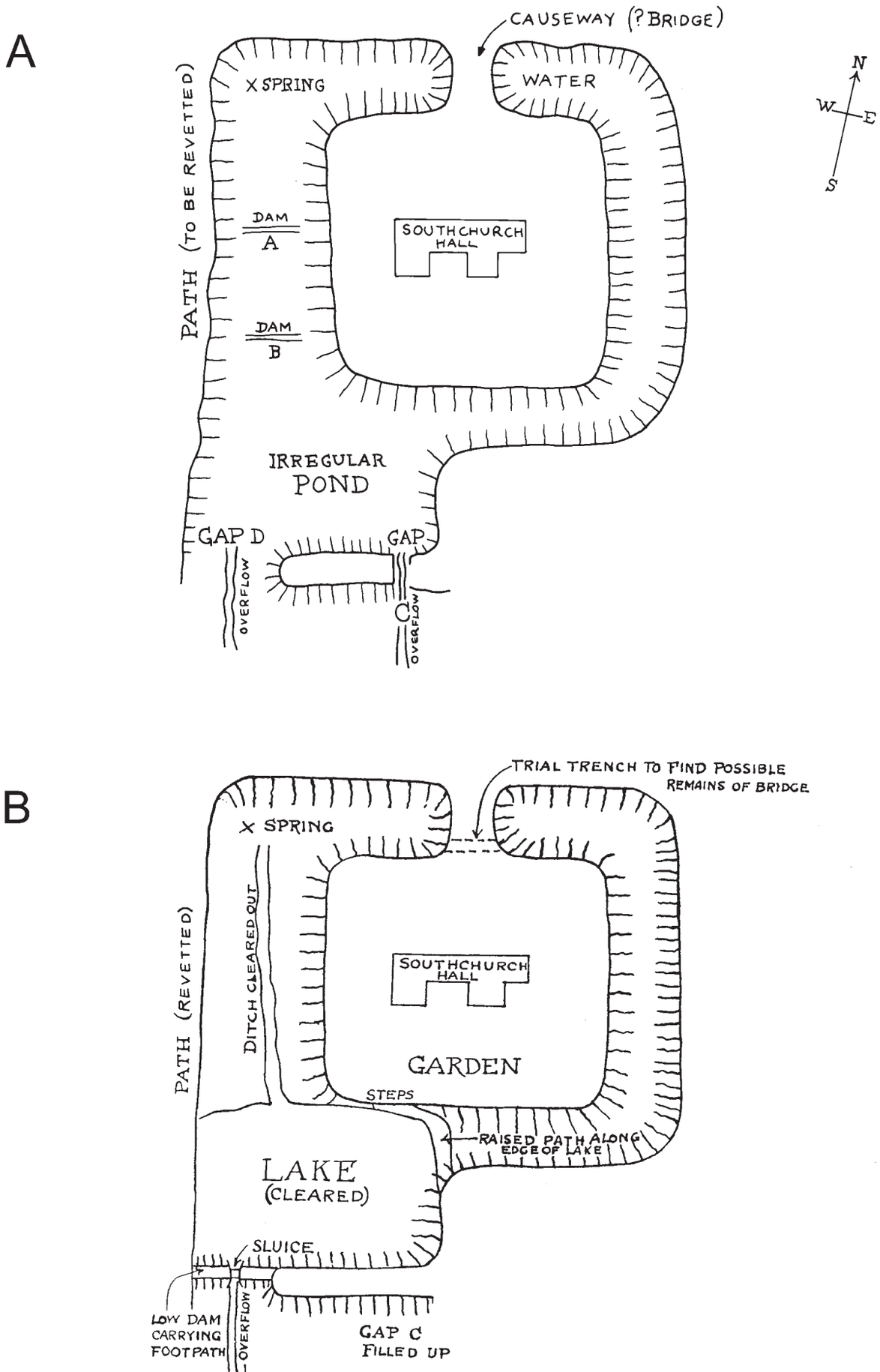

Figure 3 Sketches from Wheeler's 1927 report: (upper) moat as existing in 1927 (lower) suggestions for restoration

Plate 2 Hall following excavation, consolidation of excavated walls and provision of new bridge. The foundations of the gatehouse (structure III), garderobe (structure V), retaining wall of structure IV with the second garderobe (structure VI) behind, can all be seen on the bank of the moat

suggested that trial trenching the entrance causeway would be advisable to investigate the presence and nature of any medieval bridge remains. This work was not carried out. However, restoration of the hall revealed a small number of artefacts and traces of chalk foundations beneath the walls and floors of the existing structure (Nichols 1932). At the time these foundations were considered to be Saxon, but in the light of the more recent excavations are more likely to be of early medieval date. No further archaeological work was carried out at Southchurch Hall for over 40 years until the early 1970s when the prolonged campaign of excavation began, the results of which are presented in this volume.

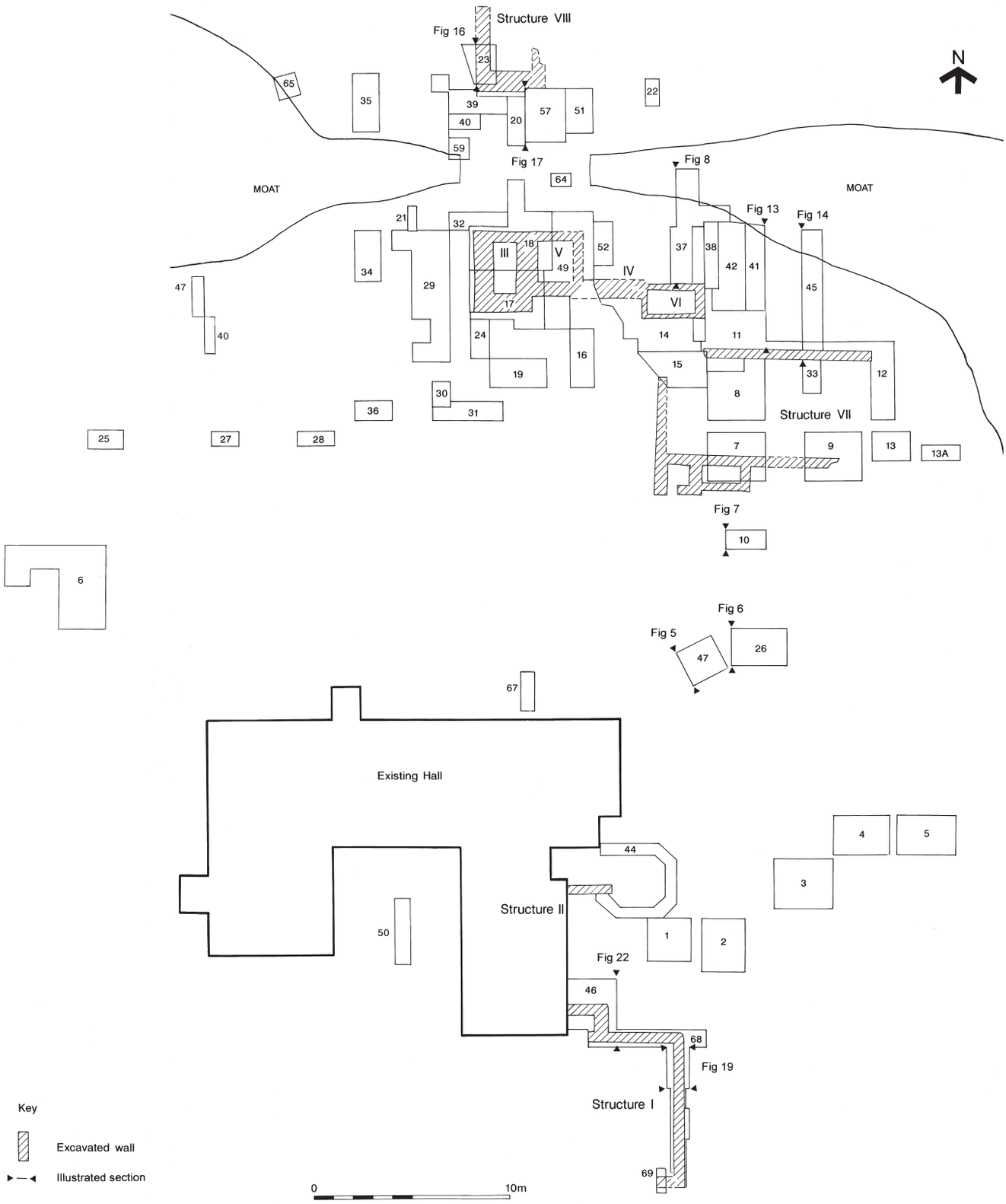

Figure 4 Location plan of excavated trenches, with sections illustrated in this report indicated.
Trench numbers 53 and 54 were allocated to areas outside trenches 41 and 45, trenches 55, 56, 58–63 were allocated to areas outside trenches 52 and 37 and between these trenches and the gatehouse and north bridge abutment

2. The Excavations

I. Introduction

Following its restoration Southchurch Hall served as a branch library for forty years. However, by the early 1970s a new branch library had been built elsewhere in Southchurch and the hall was being prepared to become a branch of Southend Museums. It was intended to equip the hall as a furnished medieval manor. In pursuance of a policy previously agreed by Southend Borough Council (Jackson 1987), excavations were begun to provide artefacts for the museum and to locate remains of the numerous manorial buildings known from documentary sources. The excavations revealed details of the moat, mound, three phases of timber bridge, an early wooden revetment to the moat, and foundations of a stone-built gatehouse, garderobes and other structures (Plate 2).

II. Methodology

The excavations were carried out by members of the Southend-on-Sea and District Antiquarian and Historical Society supervised by John Jackson supported by Eric Hills, under the general direction of initially D.G. Macleod and then L. Helliwell, both of Southend Museum. In part the work was threat led, taking opportunities for investigation resulting from the provision of new services, access and, in particular, the devastating effects of elm disease which meant that a number of large trees had to be removed from the edges of the north moat (Jackson 1987, 34; Youngs *et al*. 1983, 176). However, most of the areas examined were chosen specifically to address questions regarding the development of the moat, mound, structures and their relationship to the documentary resources. Indeed it is clear from Helliwell's notes and letters preserved in the site archive that these issues were constantly being considered and reconsidered as work progressed, and influenced the location and extension of the various excavation trenches.

Work was normally only carried out one day (Saturday) a week, in relatively small trenches. These trenches might be extended one or more times to address specific points such as the relationship between particular deposits or the extent of a wall. Trench extensions sometimes took place soon after the excavation of the original trench but often weeks, months and occasionally years might elapse between the original excavation of a trench and its final extension. In some places baulks or more substantial areas between trenches were excavated and these were also allocated trench numbers, giving a total of 69 trenches in all. This resulted in a complex system of interconnecting trenches and trench extensions (Fig. 4). The apparently large excavation area around the gatehouse structure (Jackson 1987, fig. 2), was in fact a complex of individual trenches only a small part of which was open and being worked on at any one time. Working in this area was further complicated by the necessity for adequate shoring and pumping in trenches whose lower levels were up to 2m below the contemporary water level in the moat. Whilst this trench system had a number of practical advantages at the time of excavation, particularly in dealing with the moat, it was by no means the ideal way of appreciating the archaeology of such a site (*cf.* Rahtz 1969, 15).

Recording was carried out through sections, plans and notebooks, no context numbers were given to any of the features and deposits. In order to facilitate description and discussion of the excavations, features and deposits mentioned in this report have been assigned a number from 1 to 134. The section drawings were usually the most detailed record of a trench, describing the various layers and features. These descriptions were augmented in some cases by plans and/or notes in the site notebooks. The photographic record was somewhat *ad hoc* with various individuals taking photographs, partly dependent on who brought their camera on a particular day. Consequently the photographic record of the excavations is not extensive and is held in the private collections of a variety of individuals.

Some small environmental samples were taken, but no large scale sampling for waterlogged or carbonised plant remains took place. Only larger fragments of bone were collected and retained. All finds were allocated a bag number which could be related through the trench number, feature/deposit description and level OD to a particular layer. During post-excavation a concordance between finds, deposits and trenches was prepared, and the deposits grouped into a series of broad 'layers' largely the work of the late Eric Hills. This forms the core of the site archive and was used by the various finds specialists in preparing their reports. A concordance between this sequence and the phases used in the description and discussion of the excavations in this report is set out in below in Table 1.

Annual summaries of the excavations were published in *Essex Archaeology and History* and *Medieval Archaeology.* In the late 1980s an interim report was published (Jackson 1987), and preparation for full publication began, co-ordinated by David Gaimster then of the British Museum, with the assistance of David Andrews of Essex County Council. This work was supported by a grant from English Heritage to fund cataloguing and illustration of the pottery. Substantial efforts were made by the principal excavators John Jackson and Eric Hills, together with David Gaimster, David Andrews and various other finds specialists. The British Museum carried out conservation, radiography and illustration of the metal objects and some of the other finds. A publication synopsis was agreed by the editorial board of *East Anglian Archaeology* in 1995. Unfortunately, mounting pressure of other work prevented much progress during 1995 and 1996. At this point it seemed sensible to transfer the lead role in preparing the publication to the then Essex County Council Archaeology Section. The Section approached English Heritage for funding for an assessment of the work needed to complete a publication report. This was agreed and the assessment

carried out in November/December 1997. A programme of work to complete the publication report was prepared and a revised synopsis submitted to *East Anglian Archaeology*. Supported by English Heritage funding, work on the preparation of the present report was undertaken largely during 1998/9, with further work at various times during 2000–3, co-ordinated by Nigel Brown.

III. The site sequence

(Table 1)

Period I pre-medieval occupation

This is represented by prehistoric and Roman pottery residual in later contexts. The precise character of this occupation at Southchurch Hall is uncertain. However, it clearly formed part of the dense later prehistoric and Roman settlement pattern known to have existed in south-east Essex (above, p.1), with a local focus at Southchurch marsh (Francis 1925; 1931).

Period II AD 1100–AD 1200 medieval occupation prior to construction of the moat

The trenches excavated on the platform revealed a broadly similar sequence throughout. The natural deposits were revealed at the bottom of a number of the trenches or in sondages dug at the bottom some of the trenches (*e.g.*47 Fig.5; 26 Fig.6), and comprised natural gravel overlain by 0.75–1m of rather variable clays. On top of this was a sequence of clays and sandy clays *c.*0.5m thick (*e.g.* Figs 5–7) which included fragments of bone, mussel and oyster shell, and early medieval pottery together with residual prehistoric and Roman sherds. A very dark layer with frequent medieval pottery occurred either at the top (*e.g.* Trenches 47, 10 Fig.5) or within (*e.g.* Trench 26 Fig. 6), these deposits. At the time of the excavation this was described as an 'occupation' or 'habitation' layer. At the base of this sequence in trenches 47 and 26 (Figs 5,6) a small post hole and pair of shallow parallel gullies running north-south were cut into the natural clay. The fills of the latter also contained fragments of early medieval ceramics. Similar shallow features were recorded in trenches 7 and 8 to the north. This whole sequence of deposits including the cut features represent early medieval occupation prior to the digging of the moat and raising of the mound.

Period III 1200–1300 establishment of moated enclosure, wooden bridge and moat revetment

Phase III.1

Only the northern moat was extensively investigated and even here the bottom of the moat was only reached in one trench (37) and at the entrance around the sole plates of the earliest bridge structure (below, p.12). The full width of the moat was not examined and investigations were concentrated on the south bank, except in the vicinity of the entrance (Fig. 4). The original cut, as revealed in trench 37 (Fig.8), showed the moat to have been flat based with a steeply sloping southern edge. The lowest fills consisted of rather variable clay silts (17). Recutting/ cleaning (14, Fig. 8) of the ditch appears to have removed much of this early silt, but the profile of the ditch was maintained albeit at a slightly higher level (Fig. 8). Following this recut, a deposit of black/brown sticky silt accumulated (11).

Three phases of timber bridge (Figs 9,10) were revealed in trenches 39, 40, 20, 57, 59, 32, 18 and their extensions. No complete sections of the moat were obtained and the bottom of the moat was only revealed in some small areas. The timbers of the first phase bridge, where revealed, comprised longitudinal and transverse sole plates set into the natural clay at the base of the moat. Vertical posts and angled shores which originally supported the bridge superstructure were mortised into the sole plates. A timber from this first phase bridge yielded a radiocarbon date of AD 1170–AD 1400 at two σ (HAR-9277). This bridge is presumably contemporary with the original excavation of the moat and appears to have continued in use when a timber revetment (III.2 below, p.12) was constructed.

The period II occupation deposits were sealed by *c.* 1m of gravel and clays which included very occasional artefacts. This material represents dumped deposits, presumably derived from the digging of the moat, used to

Period	*Description*	*Eric Hills' Phase*
I	Pre-medieval occupation	/
II	1100–1200 Early medieval pre-mound occupation surfaces	MD9–6
III	1200–1300	MD3–5, MT8–9
III.1	Digging of moat and raising of mound followed by initial silting/cleaning of moat. First phase bridge	
III.2	Recutting of moat construction of wooden revetment	
IV	1300–1500	?MD2c, MT7, SGR5, GR5, GH5
IV.1	Construction of gatehouse, retaining walls, garderobes, structures I, VII and VIII and second phase bridge	
IV.2	Construction of present Hall , third phase bridge and cleaning of moat	
IV.3	Accumulating moatfills. Last use of garderobes	
V	1500–1900	?MD2, MT2–6, GH3–4, GR3–4, SGR3–4
V.1	Backfill and partial demolition of garderobes and gatehouse	
V.2	18th/19th century farm	MD2, MD3A,B
V.3	20th century acquisition by Southend Borough landscaping restoration and excavation	MD1, MT1

Table 1 Concordance between phasing used in this report and Eric Hills' phases used by all the specialists in the preparation of their reports

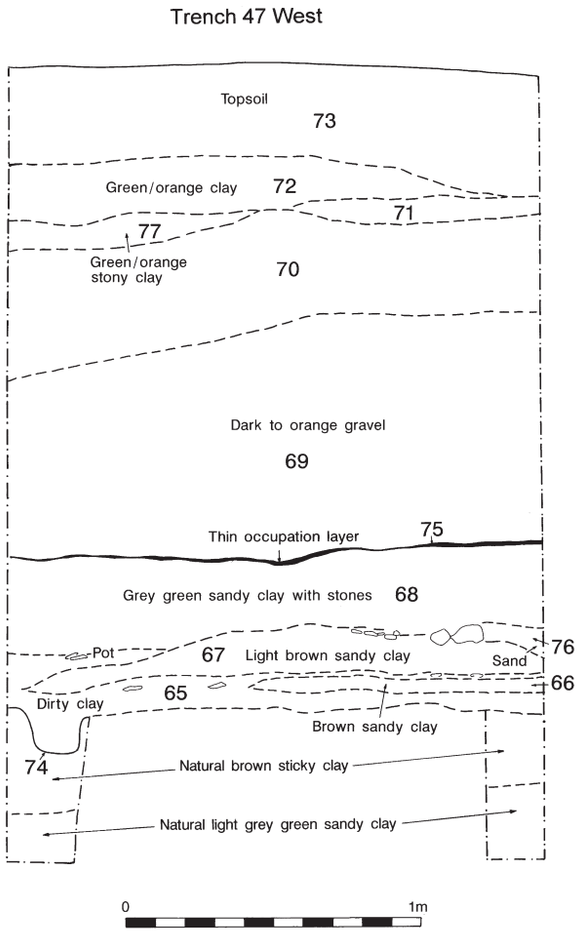

Figure 5 Section trench 47, showing section through mound and earliest medieval deposits

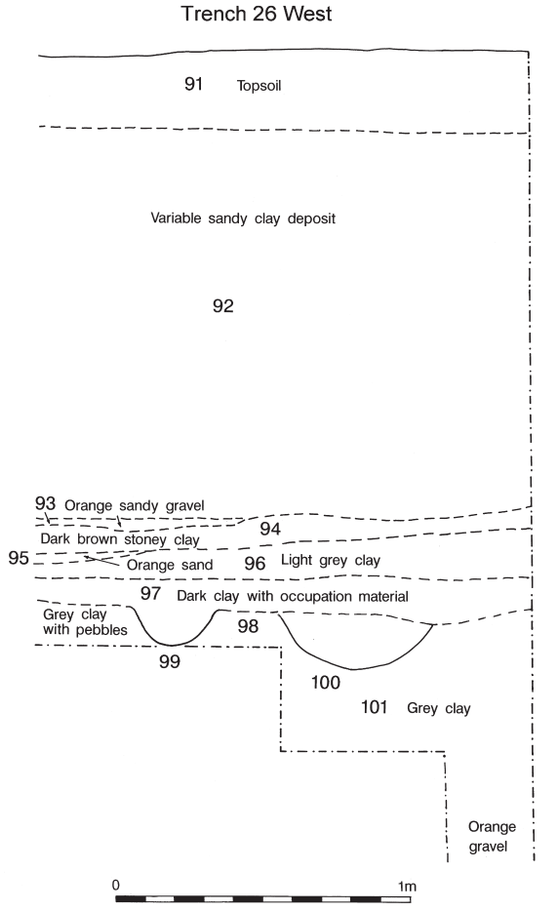

Figure 6 Section trench 26, showing section through mound and earliest medieval deposits

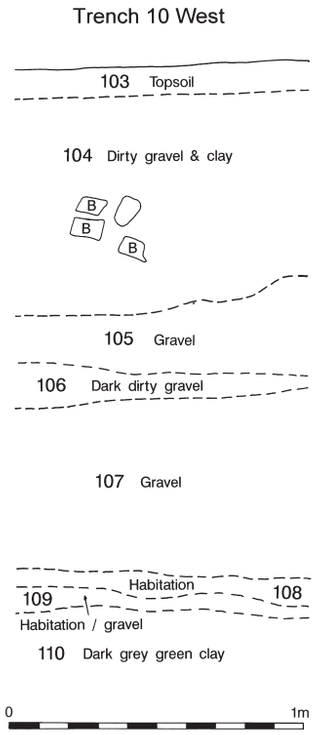

Figure 7 Section trench 10, showing section through mound and earliest medieval deposits

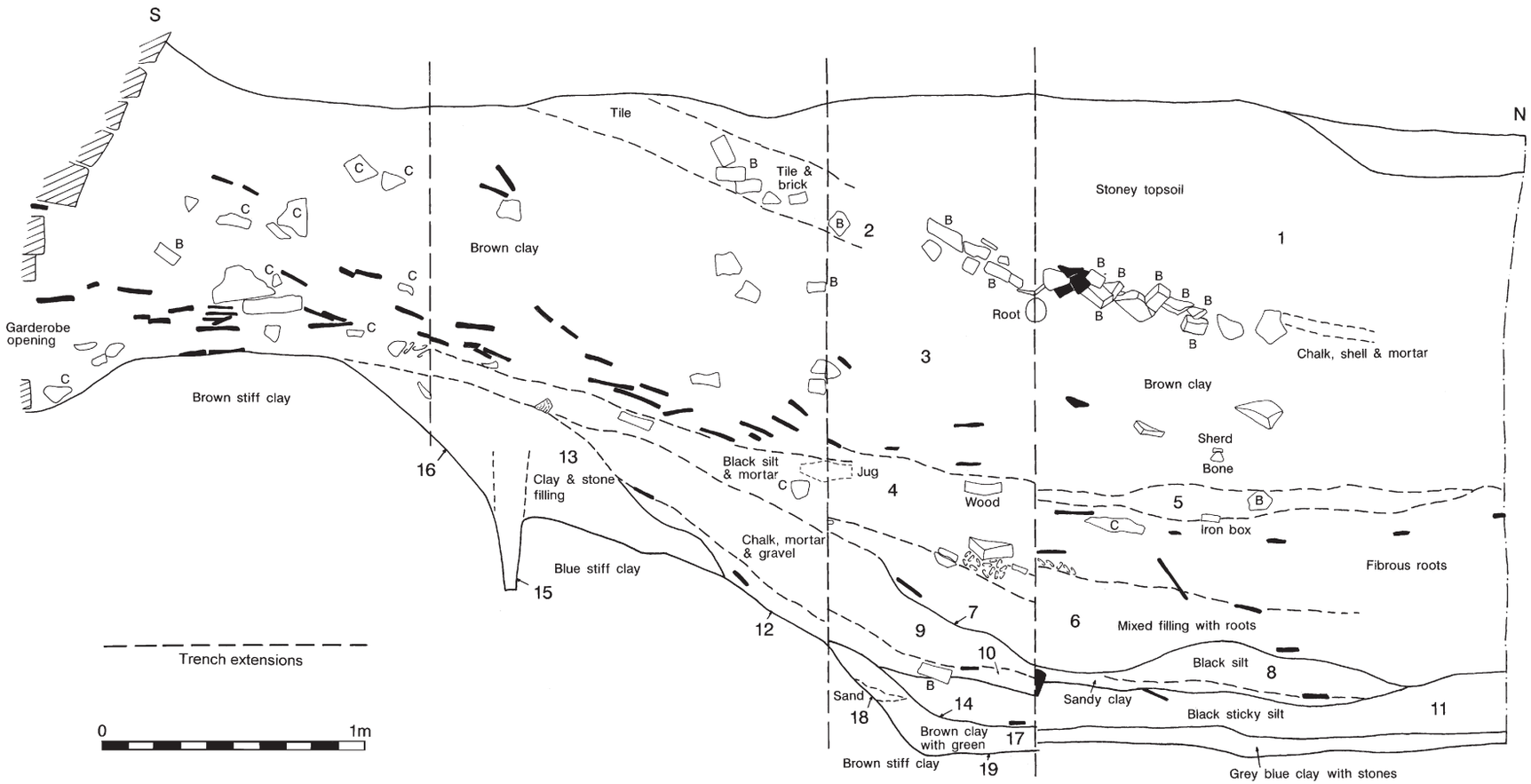

Figure 8 Section of trench 37, showing deposits from northern edge of structure VI into the moat

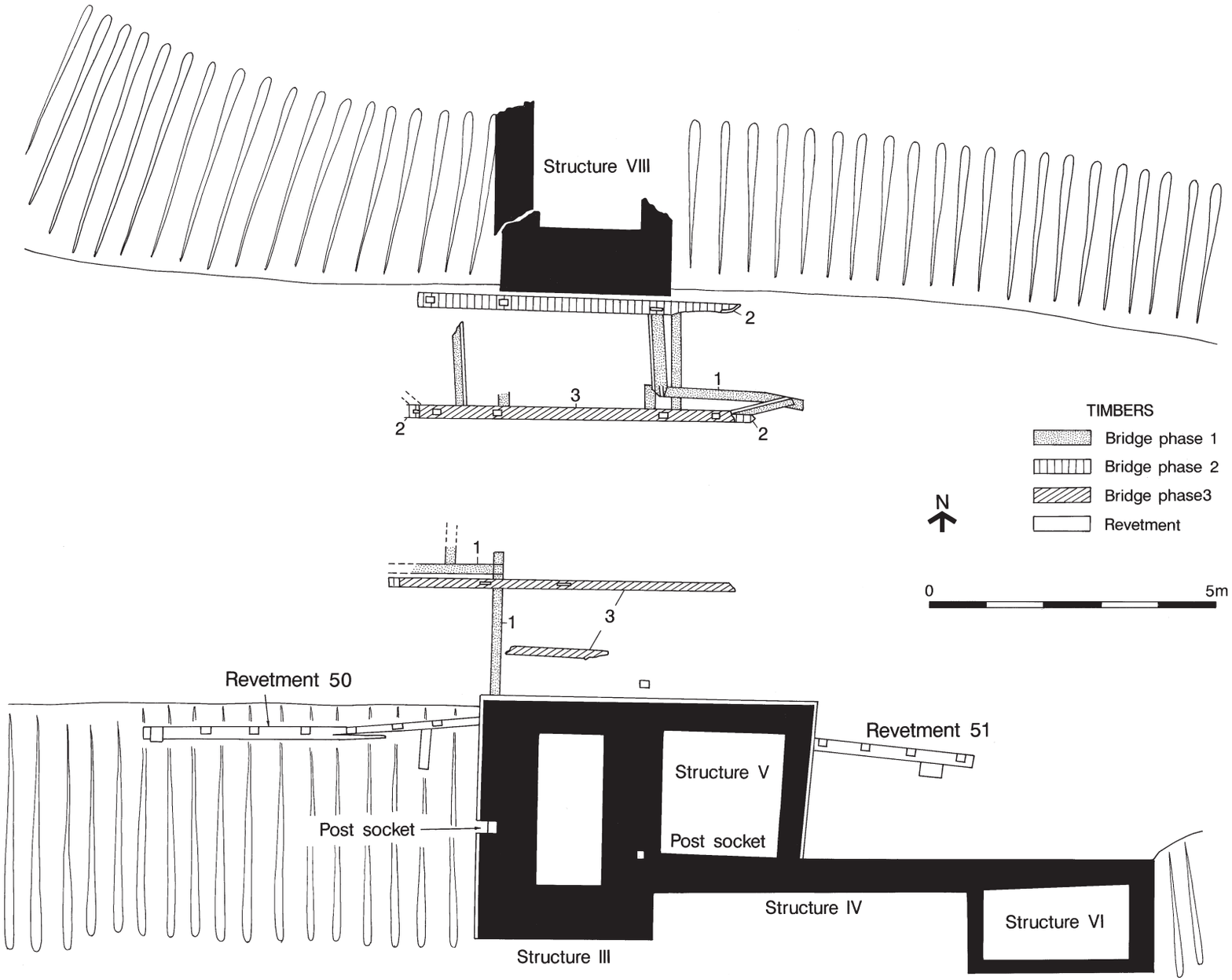

Figure 9 Structures around entrance, including bridge timbers and timber revetment

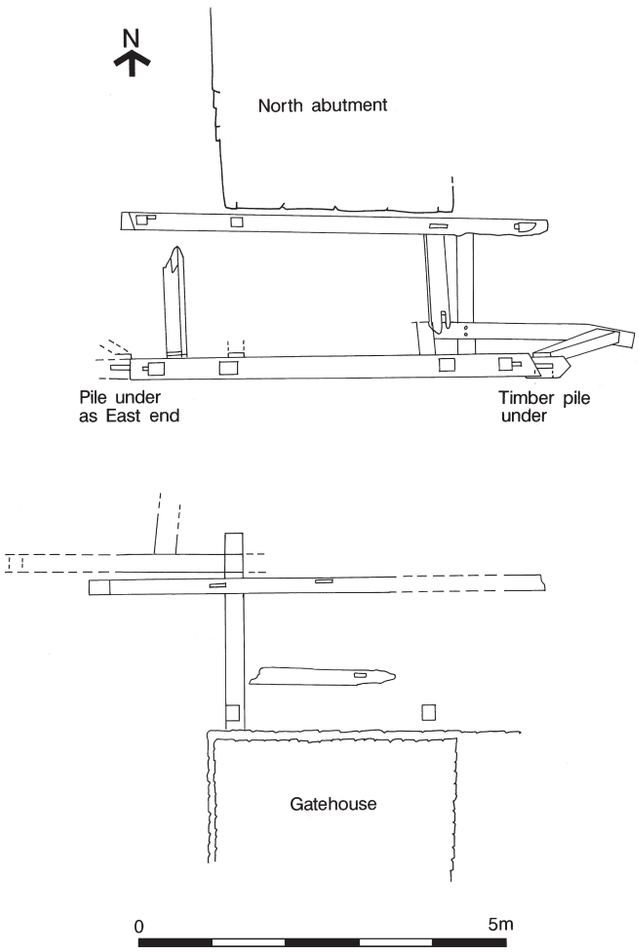

Figure 10 Plan of bridge timbers

raise and level a mound or platform. Modern topsoil generally rested on top of these mound deposits. During the restoration of the hall in 1930 up to about 0.2m of material was removed from the area north and, to a lesser extent east of the hall to create a level forecourt (Helliwell unpublished). This appears to have removed medieval and post-medieval occupation deposits on top of the mound, in much of the area examined by the excavations, though better survival was encountered in trenches south-east of the hall (below, p.17).

Phase III.2

Much of the sticky silt (11) which accumulated at the bottom of the moat during III.1 (above) appears to have been removed during a major phase of recutting, which extensively remodelled the south bank of the moat. In trench 37, the bank was cut back to a shallow slope (12) and a substantial timber post (15) inserted (Fig. 8). Behind this post, the bank was cut back (16) to a much steeper slope and the post packed around with stone and clay. Post 15 is roughly in line with a timber revetment which was built along the south side of the moat in the vicinity of the entrance.

The timber revetment (50, 51 Figs 11 and 12) comprised a substantial sole plate (*c.* 0.25m square), which in two places rested on wooden bearers placed at right angles to it. Upright posts (approximately 0.25m x 0.18m) were set into the sole plate secured by tenons and wooden pegs at intervals of about 0.85m (Fig. 12). The revetment ran for a total length of just under 15m. The majority of the uprights had carpenters' marks numbering the posts from I to XVI from east to west, with posts V–X missing having been removed by the later insertion of a stone-built gatehouse and garderobe (IV.I below, p.15). The most complete surviving stretch of the revetment was

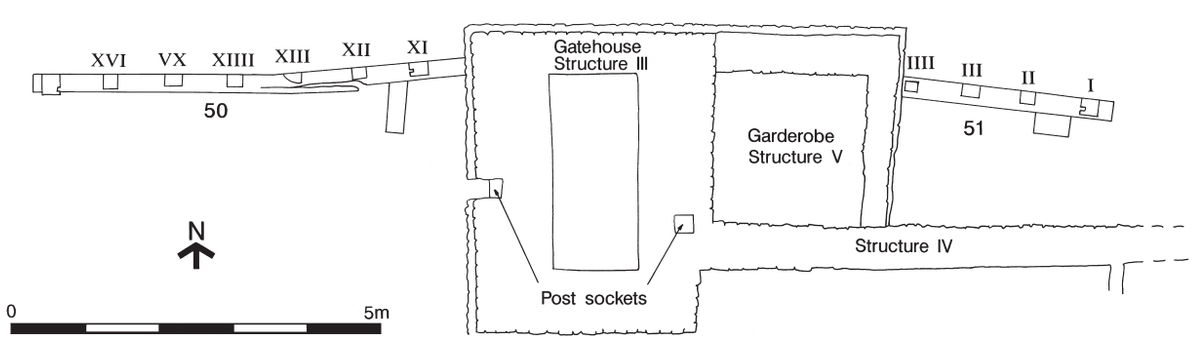

Figure 11 Plan of gatehouse, associated garderobe and earlier timber revetment. Roman numerals are the original numbers carved into the revetment timbers

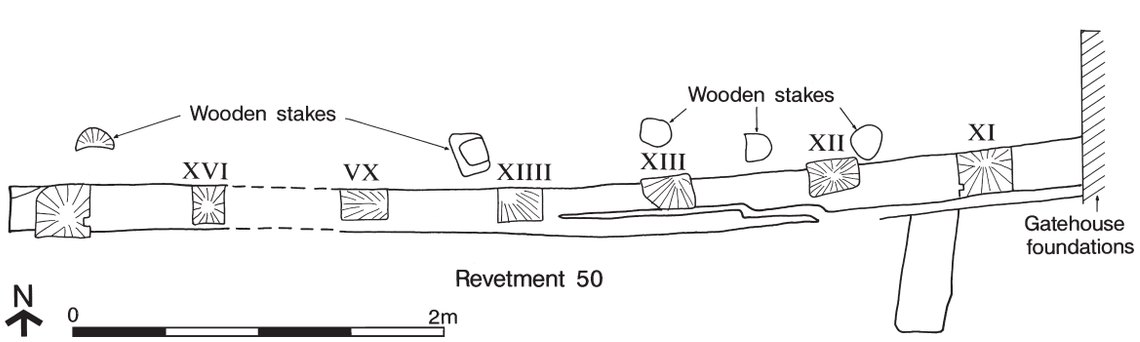

Figure 12 Detailed plan of west side of timber revetment. Roman numerals are the original numbers carved into the revetment timbers

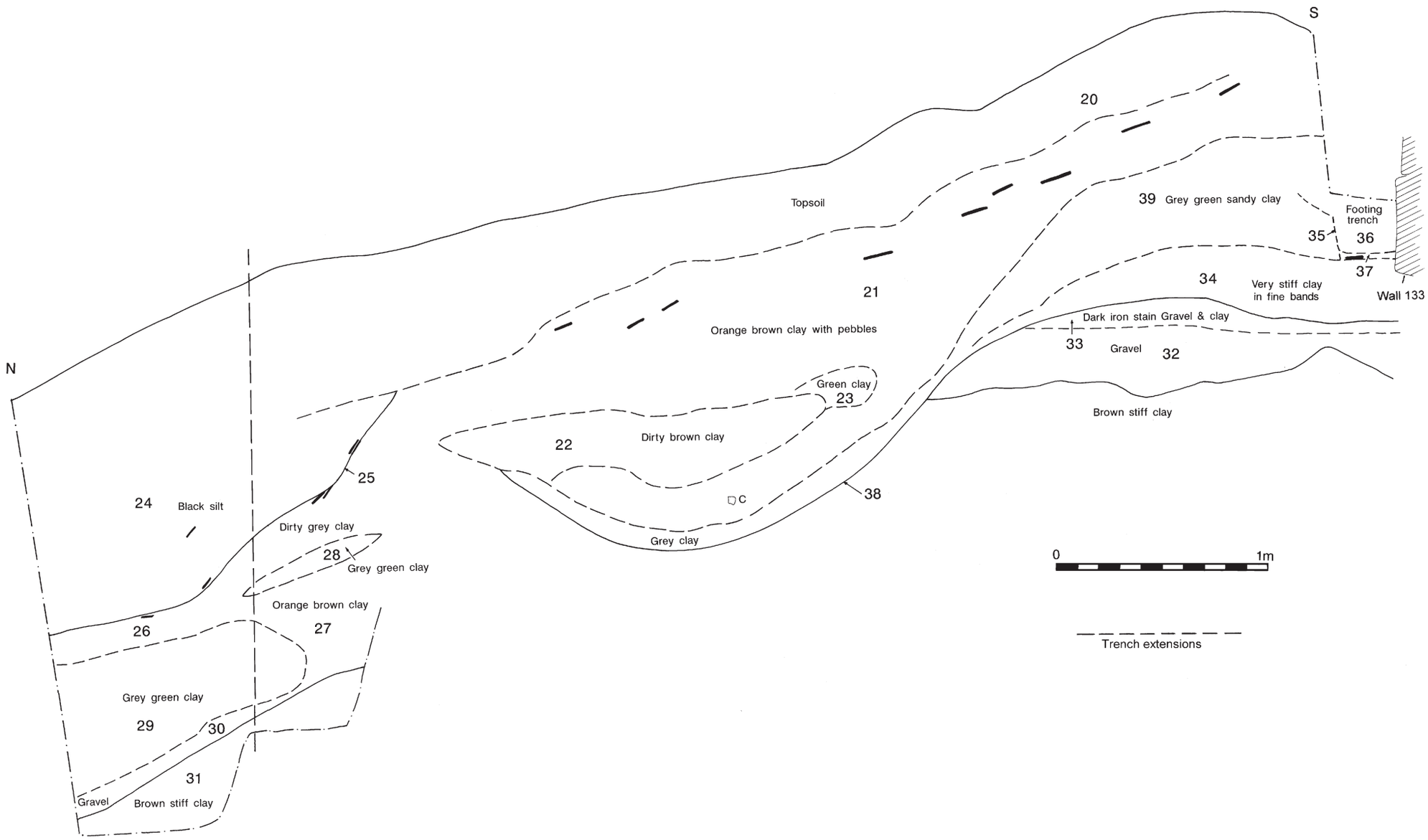

Figure 13 Section of trench 42 showing deposits in the moat from northern edge of wall 133

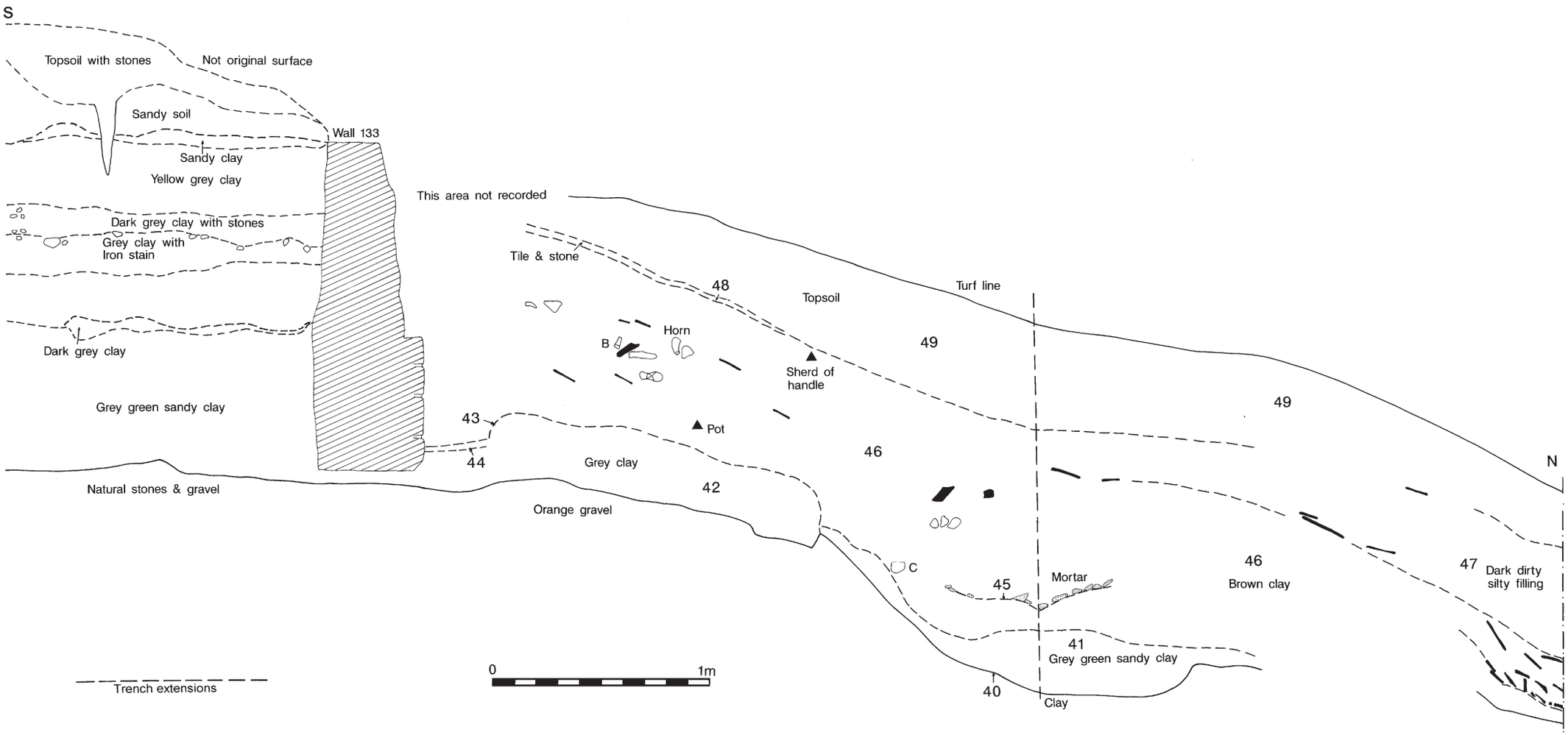

Figure 14 Section of trench 45 showing deposits in the moat from northern edge of wall 133

that west of the later gatehouse (50 Fig.12). The post (XI) nearest the west wall of the gatehouse was significantly wider than the other uprights and provided with a west facing slot. This was matched by the unnumbered post (Fig.12) at the west end of the sole plate which was also wider than the other uprights and provided with a west facing slot. The end post on the east side (Post I, Fig.11) was similarly wider than the other uprights and provided with a west facing slot. This arrangement seems designed to accommodate planking fitting into the slots and resting against the backs of the other uprights. The numbering and even spacing of the uprights indicate that the eastern stretch (51, Fig.11) of the revetment would originally have extended for about another 2.5m to the west ending somewhere around the junction of the later gatehouse and garderobe walls (Fig.11). This would leave a gap 3–4m wide between the two lengths of revetment, presumably to accommodate a gateway. Some difficulty seems to have been experienced with stability of the revetment, presumably due to erosion by the waters of the moat in front and pressure of the mound material from behind. Rough stakes were driven in outside the revetment adjacent to upright I, and at various points along the length of 50 (Fig.12), clustering in front of a crack in the sole plate running between upright XIII to XII.

Timber from the revetment yielded a radiocarbon date of AD 1230–AD 1405 at two σ (HAR – 9276); it seems likely that its construction and the remodelling of the moat revealed in trench 37 were contemporary.

Further east, the excavated trenches did not extend so far to the north into the moat nor reveal its lower fills. In trench 41 (Fig. 13) a dump of stiff laminated clay (34) at the edge of the moat may represent the initial raising of the mound (III.1 above, p.8). This clay deposit was sealed by a substantial dump of grey-green clay (39) apparently derived from a shallow cut on the edge of the moat (38). A similar deposit of grey clay and shallow cut was recorded in trench 45 (42, 40 Fig. 14).

It seems likely that these clay deposits may be contemporary with the timber revetment at the entrance and its extension east in trench 37 as a clay and stone facing to the moat incorporating wooden posts (13, 15 Fig.8). These wooden posts ran through trench 37 to at least the western part of trench 41 (Fig.15), from there the moat was faced with clay behind a ditch (represented by cuts 38 and 40 in trenches 41 and 45) at the lip of the moat. The initial fills of this ditch seem to represent clay eroded from the material dumped further up the mound. The moat revetment would thus have become progressively less formal away from the entrance, planking supported by a substantial wooden frame, giving way to posts packed around with stone and clay, with furthest from the entrance a simple clay dump.

The recutting of the moat and revetting of the south bank/mound was followed by a period of stability which allowed a black fibrous layer (10, Fig. 8) to accumulate on the side of the moat in trench 37, this is possibly the remains of vegetation growing at the edge of the moat.

Period IV 1300–1500

Phase IV.1

This period of stability was followed by another major change, at the entrance the timber revetment was partly destroyed by the erection of a stone-built gatehouse and garderobe. To the east the post and clay facing of the moat was replaced by a retaining stone wall and second smaller garderobe (Fig. 9), with further to the east a second retaining stone wall (133, Fig.28). In trenches 41 and 45 the foundation trench (35, Fig. 13; 43, Fig.14) of retaining wall 133 cut the clay moat facing. In trench 37 the construction of the smaller garderobe resulted in a substantial deposit into the moat of chalk, mortar and gravel (9, Fig.8), which tailed off into a thin layer of sandy clay (Fig.8). A somewhat similar deposit in trench 57 (58,

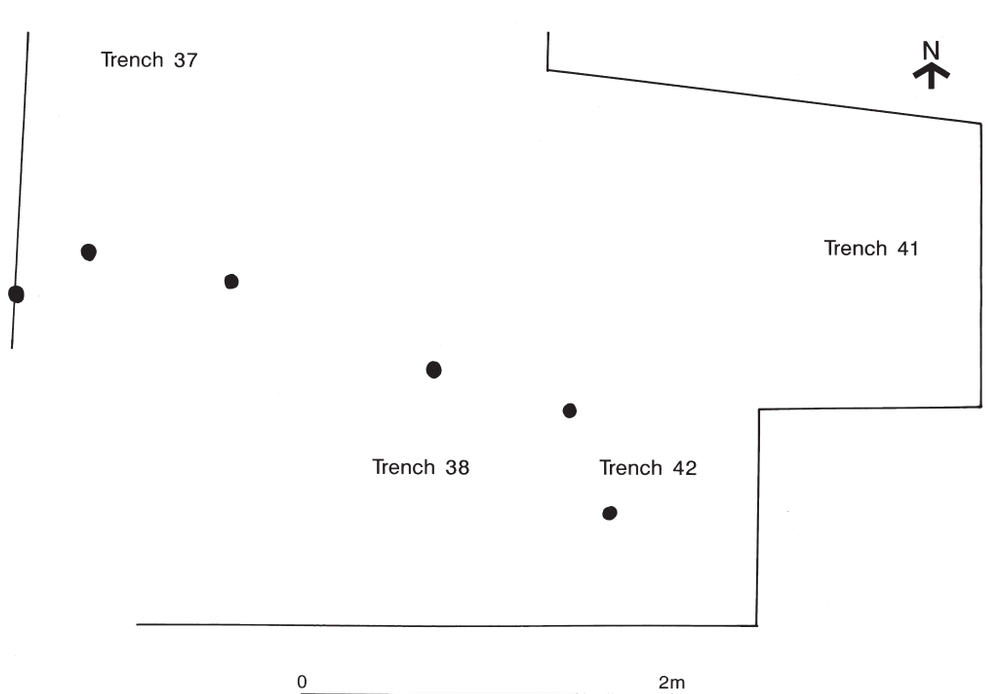

Figure 15 Plan of postholes in trenches 37, 38, 41 and 42

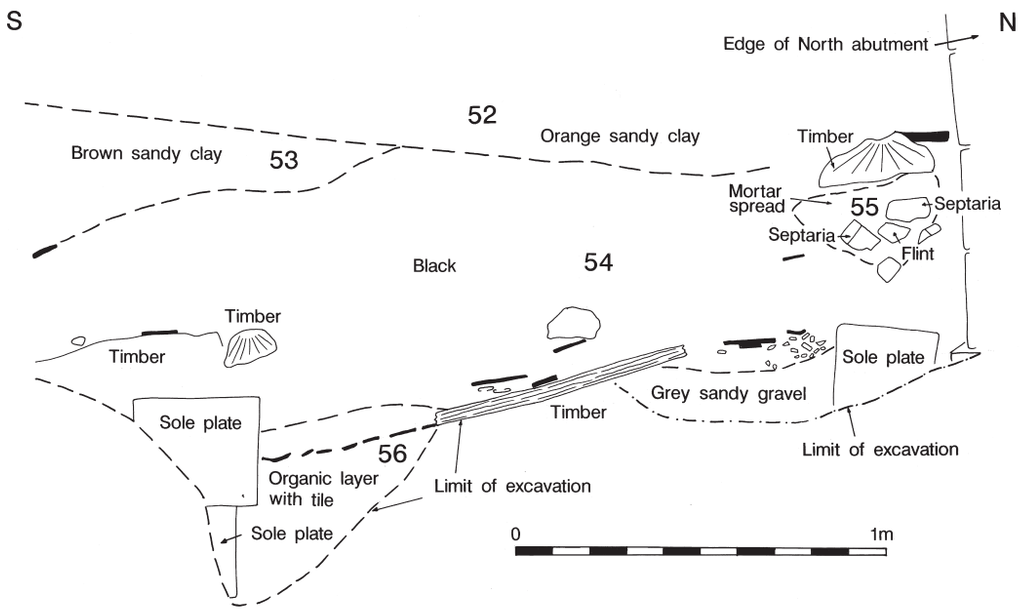

Figure 16 Section showing bridge timbers in moat fill in front of north bridge abutment

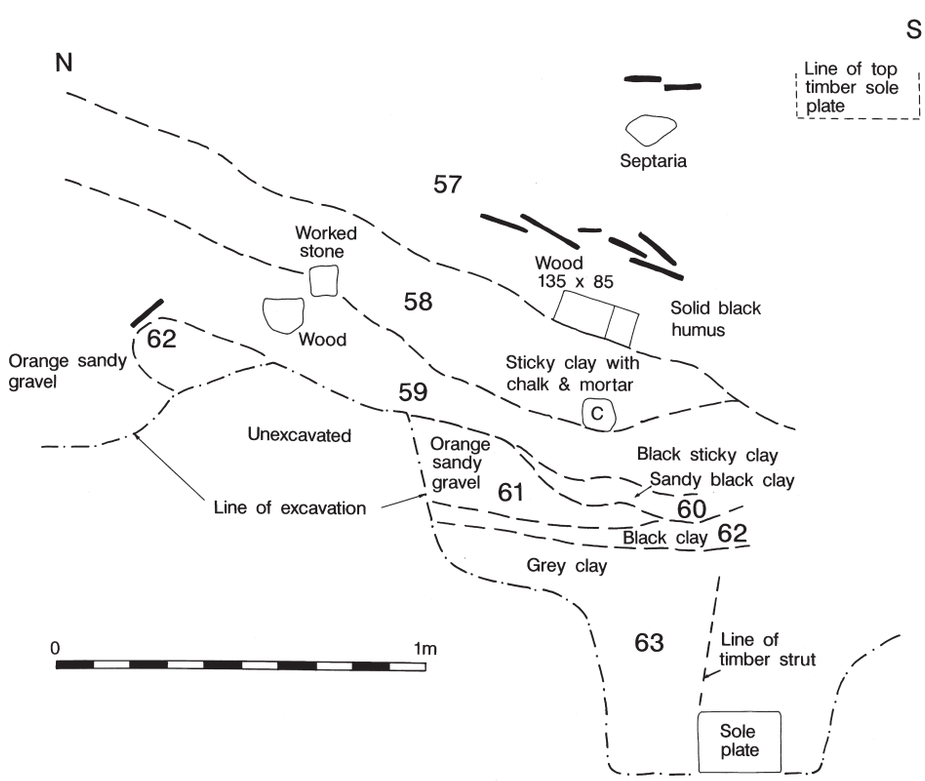

Figure 17 Section through moat fill in trench 57, with position of timbers indicated

Fig.17) may result from the construction of a bridge abutment on the north side of the moat.

Between 1.25 and 1.6m above the sole plates of the first bridge, a second phase of transverse sole plates was placed, partly supported by the posts and shores of the earlier bridge. This rebuilding of the bridge may be contemporary with the construction of the stone-built gatehouse. The construction of this phase bridge was much more substantial at the north end, where the sole plates were about twice as thick as those of the south (Fig. 23). In addition to resting on the structure of the first phase bridge, the east and west ends of one of the new sole plates were supported by timber piles. A timber from this second phase bridge yielded a radiocarbon date of AD 1290–AD 1486 at two σ (HAR – 9278).

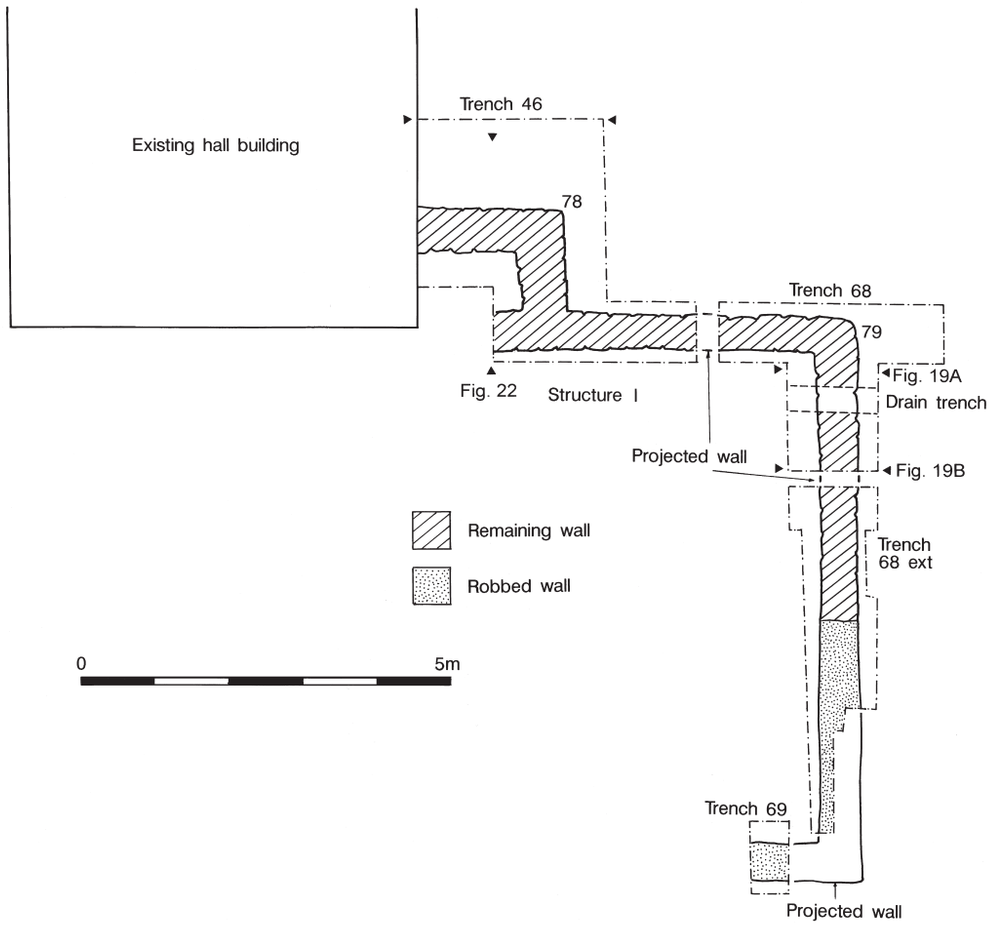

Figure 18 General plan of structure I

On the mound a series of foundations were revealed in the trenches along the northern moat and further foundations were recorded adjacent to and running under the existing hall (Fig.4).

Structure I

This structure comprised chalk and stone foundations (79) incorporating some tile 0.59m wide and surviving to a maximum height of 0.55m (Figs 18 and 19). These foundations were revealed in trenches 46, 68, the northern part of the extension to trench 68, and could be traced as a robbed out line in the southern part of trench 68 extension (Fig.18). They represent the remains of the east end of a substantial building apparently aligned east-west. The full length of the east wall was 7.7m long. The north wall was recorded for a length of about 6m and clearly continued west beneath the existing 19th-century extension at the rear of the hall building. Attached to the north wall and in the same chalk and stone rubble build as the main wall, but capped with brick, were the foundations of a small rectangular annex (78, Figs 18 and 21). The north wall was traced for a length of 2m and clearly continued beneath the existing hall building. The width of the annex was 1.5m, and its foundations were the same width as the main wall of structure I, but only 0.35m deep. The purpose of the annex is uncertain but it may represent the foundation of a chimney stack.

The foundations of structure I were sealed by a layer of ash and charcoal (87, Fig. 22), cut through a layer of gravelly clay and a thin black 'occupation' layer (85, 90 Fig.22), and rested on the gravel dumped to raise the mound. The section of trench 46 (Fig. 22) shows a clear difference between the inside of structure 1, where a black layer with tile (84) is shown and the gravelly clay (85) on the outside.

Structure II

This was a single wall foundation surviving to a height of 0.5m and 0.4m wide, built of chalk and ragstone rubble incorporating some tile. This wall was aligned east-west and was chopped through during the restoration of 1930 and by the foundation trench for a more recent toilet block, it was traced for a length of 2m, but had clearly once extended further west.

Structures III, IV, V and VI: Gatehouse, retaining wall and two garderobes

This group of structures, a gatehouse (III), retaining wall (IV) and two garderobes (V, VI), were constructed partly over and replacing the earlier wooden revetment. The gatehouse was constructed on a foundation of timber piles with walls of chalk rubble faced with ragstone and septaria, with patches of rendering surviving on part of both the internal and external surfaces. The gatehouse had external dimensions of about 4 x 3.2m. The surviving walls were up to 1m thick, and survived to a height of 4m, with around 2.5m above the present water level in the moat. The floor at the base of the gatehouse was of rammed chalk. A floor about 1.5m above this was indicated by joist holes (0.1m x 0.13m) in the east and

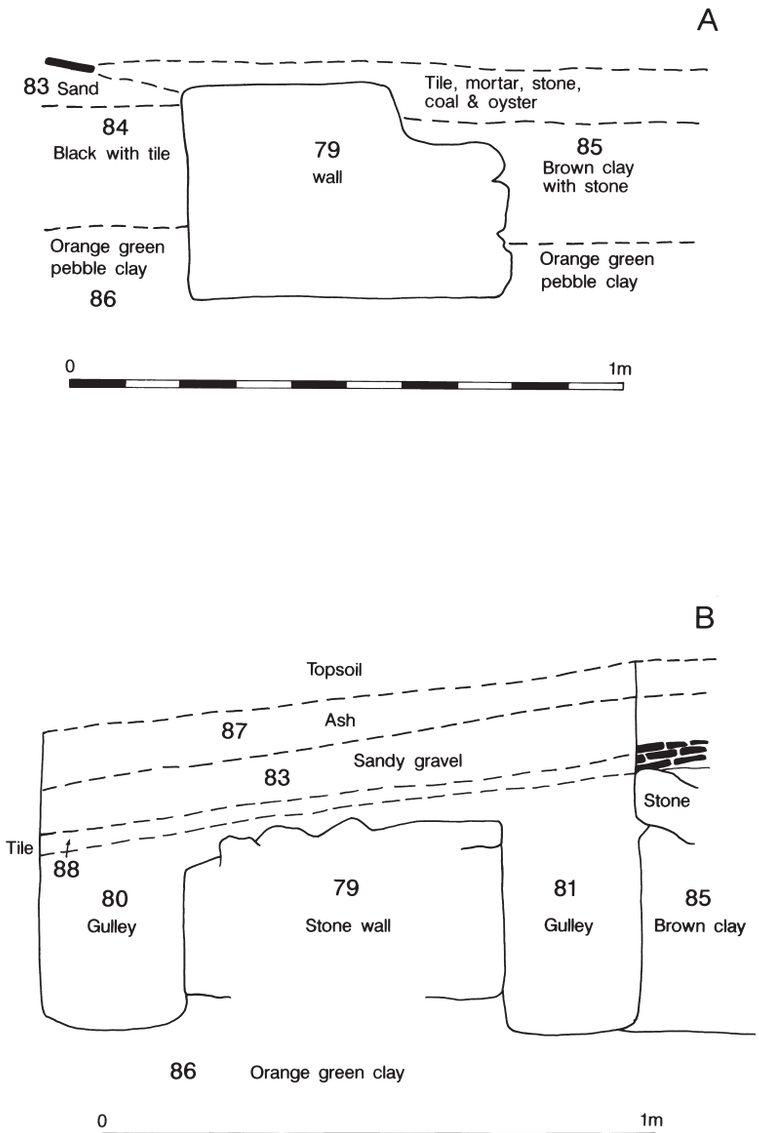

Figure 19 Sections of structure I

west walls. These joist sockets were slightly further apart at the centre (Fig.23) apparently to allow the timbers of a cross brace to pass through the wooden floor. The bottom of the cross brace timbers were set in angled sockets (0.42m x 0.17m) within the walls of the gatehouse 0.55m above the chalk floor. These sockets were slightly offset, to allow timbers rising from them to pass, but be tightly adjacent to each other (Fig. 26). Two substantial sockets for upright posts were also built into the walls of the gatehouse, one 0.25m square within the body of the gatehouse wall where it joins structures IV and V (Fig. 11), the other 0.4m x 0.25m set into the exterior of the west wall. The upright timbers housed in these sockets may have been part of the same structure as the cross brace. The stone-built foundations of the gatehouse at Low Hall also incorporate integral sockets for upright timbers (Blair 2002, 200)

To the east of the gatehouse, the bank of the moat was cut back substantially from the wooden revetment 51 and a substantial retaining wall (structure IV, Fig. 9) constructed. This was built of chalk rubble faced with ragstone and bonded into the gatehouse. The wall was 0.6m thick and ran for a length of 8.8m from the east wall of the gatehouse. At its eastern end structure IV formed the northern wall of a garderobe (structure VI, Fig. 9). This structure, built of ragstone bonded into the retaining wall IV incorporated a number of Flemish type bricks of early 14th-century date (below, p.75; Ryan 1996). These bricks were used in particular for the arch and reveals of an opening into the moat in the north wall. The garderobe was about 3.4m long by 2m wide, with a floor paved with greenish sandstone slabs.

A second garderobe 2.5 x 3.5m (V) was constructed in the angle between the east wall of the gatehouse (III) and the retaining wall (IV Fig.11), and like the gatehouse had a foundation of timber piles. The walls of this garderobe were butted against rather than bonded into the gatehouse and retaining wall, indicating that the garderobe was a later addition. However the structure of garderobe V was very similar to garderobe VI, with Flemish brick used in the walls and particularly round the arch and reveals of an

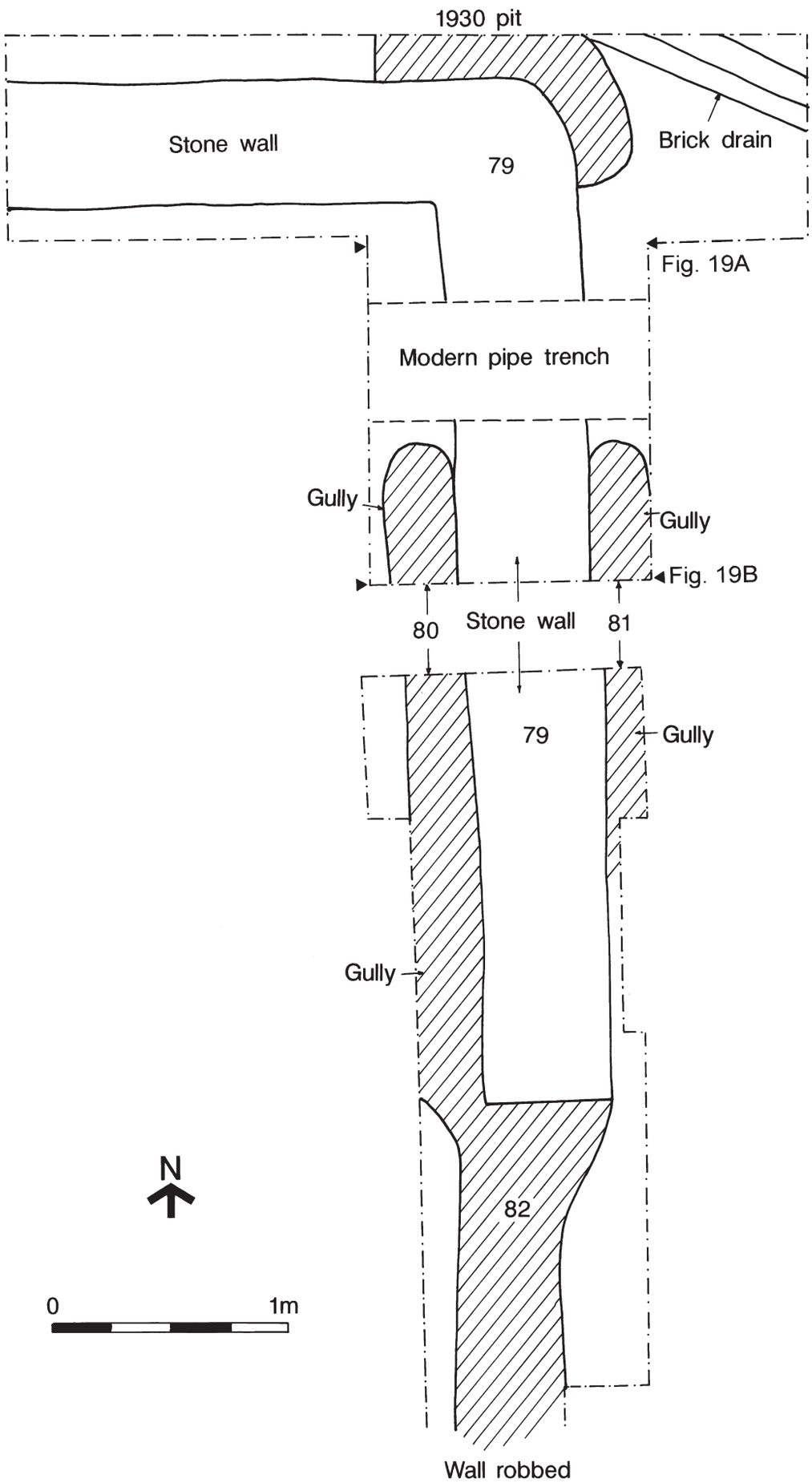

Figure 20 Detail plan of structure I in trench 68

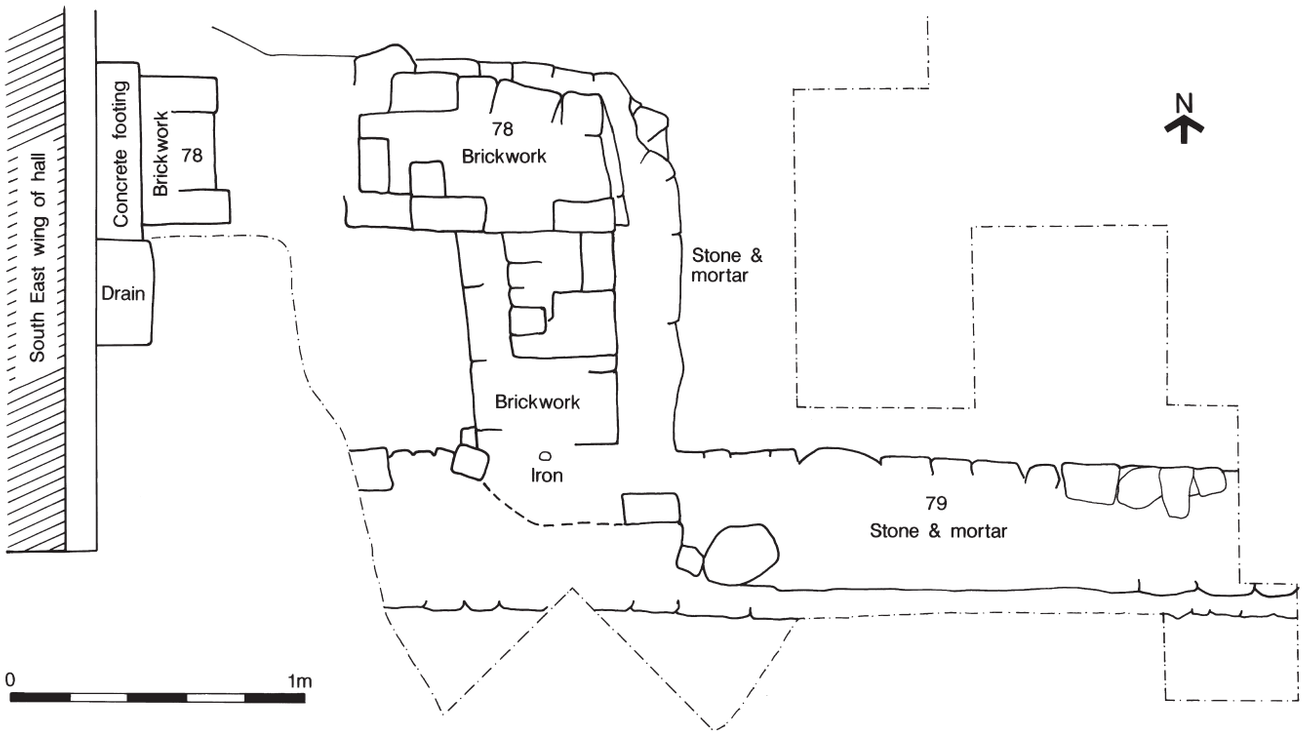

Figure 21 Detail plan of structure I in trench 46

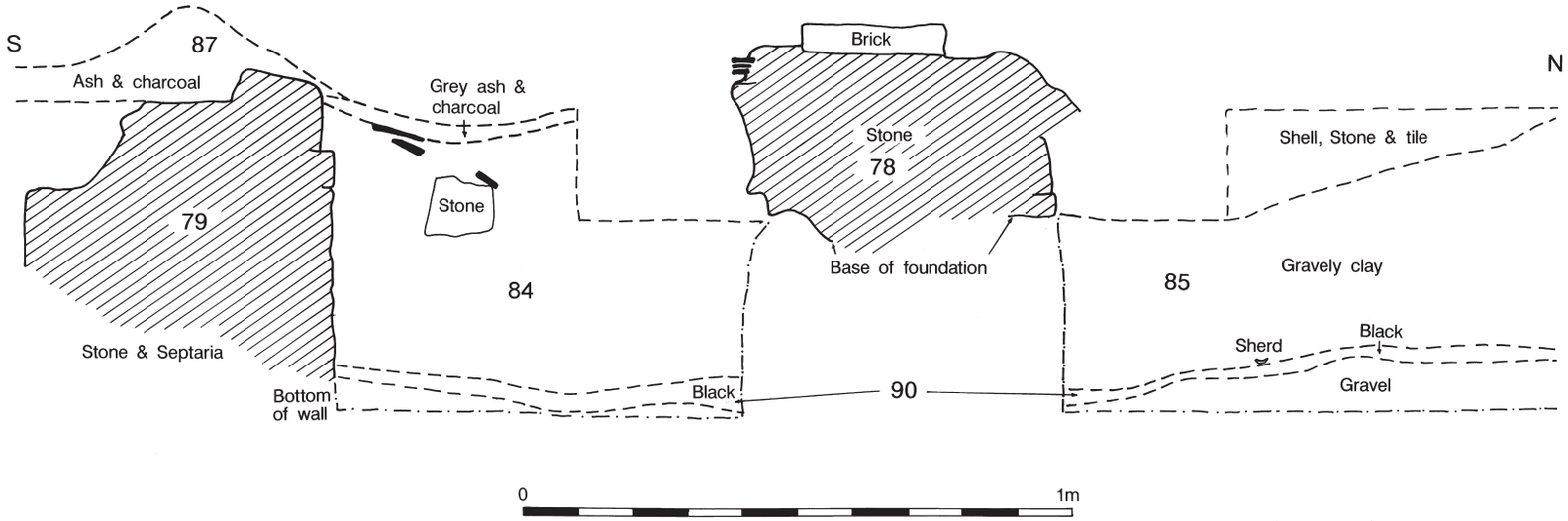

Figure 22 Section of structure I in trench 46

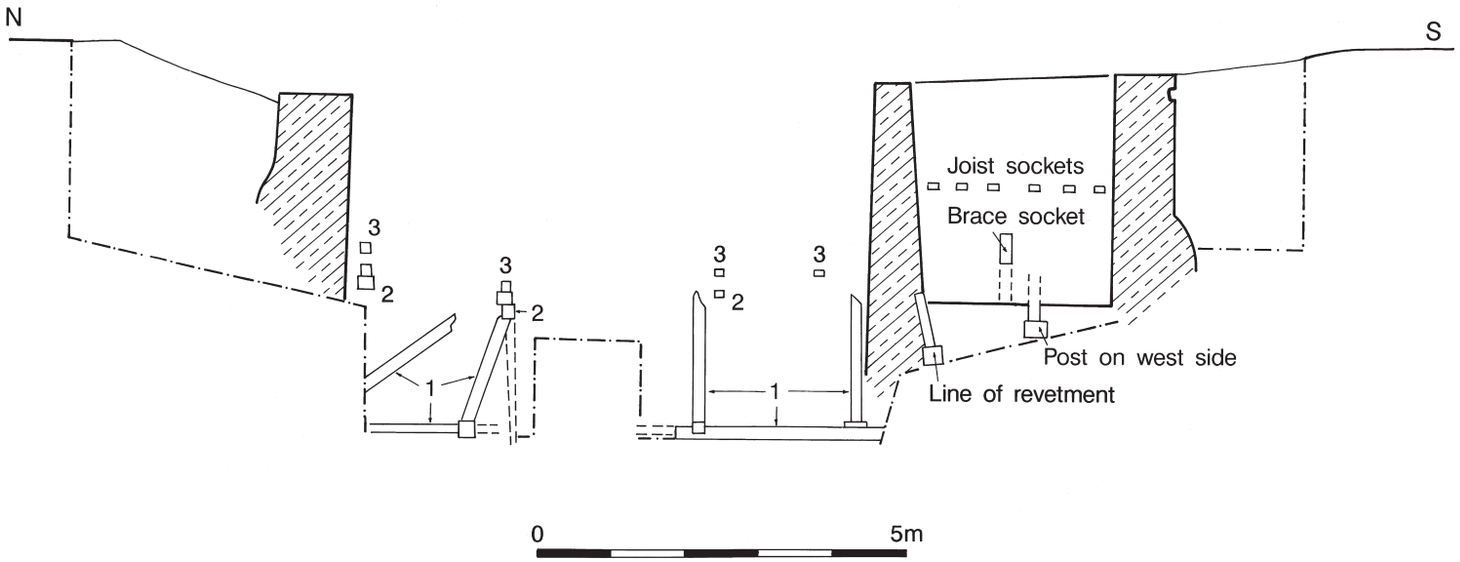

Figure 23 Cross-section of gatehouse and north bridge abutment showing relationship to timber bridge and revetment

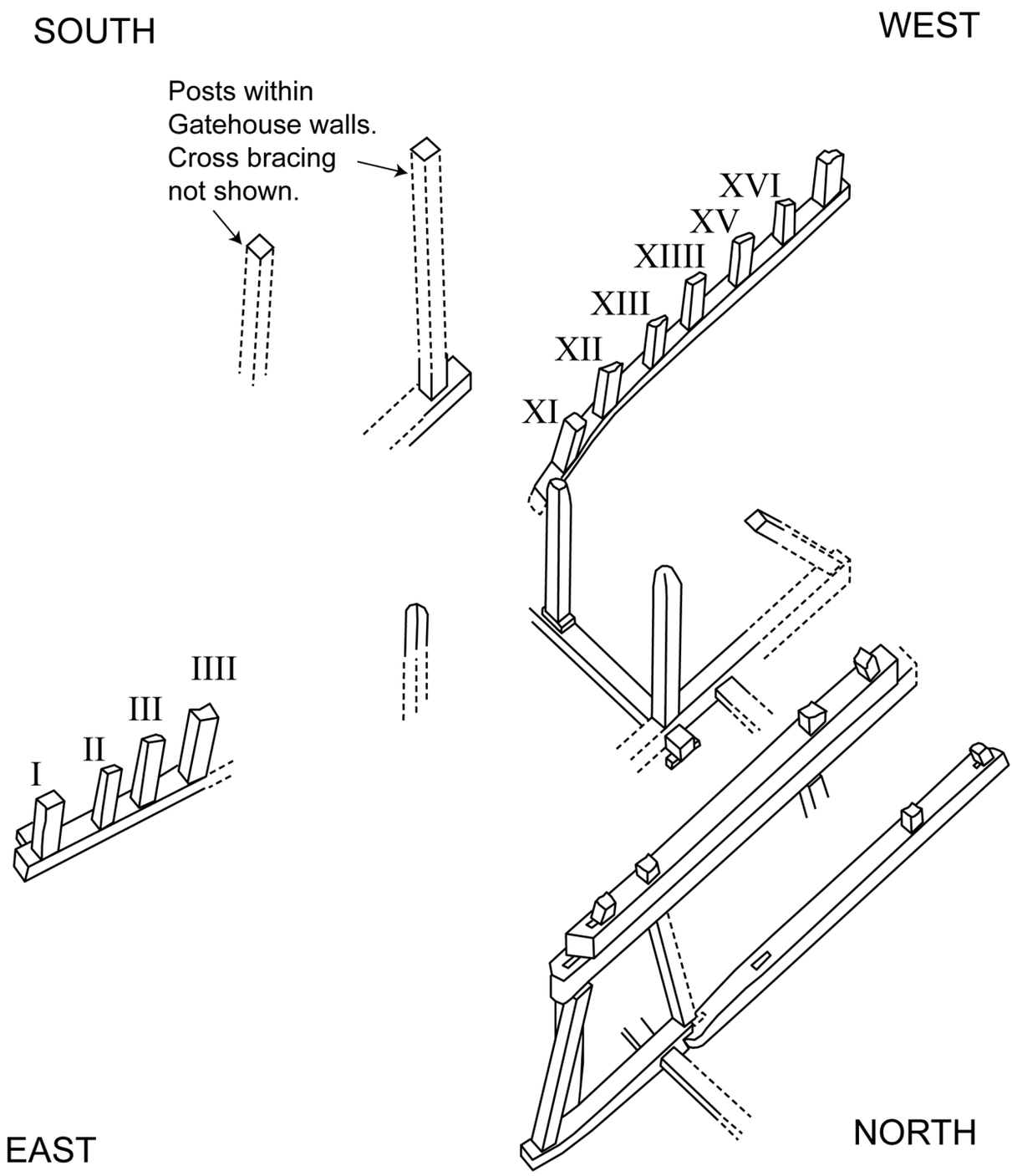

Figure 24 Isometric drawing of bridge and revetment timbers. Roman numerals are the original numbers carved onto the revetment timbers

opening (in this case in the east facing wall) into the moat, and a floor paved with greenish sandstone slabs. In addition the floors and openings of both garderobes were at the same level, all of which may suggest a construction date for garderobe V not much later than garderobe VI.

Structure VII

A rectilinear structure aligned roughly east-west about 11m long and about 6m wide was recorded in trenches 7, 8, 9, 11, 12, 15 and 33 (Fig. 28). The southern and western walls were represented by shallow chalk rubble foundations up to 0.5m thick and surviving to a height of 0.2m. Most of the eastern end of structure VII had been removed by erosion and landscaping of the east moat. The entire north west corner of structure VII had been removed by recent disturbance (Fig. 28). The south wall and part of the west wall were traced beyond the limits of the excavated trenches (Fig. 28). At the south-west corner were the foundations of a small annexe about 1.5m square with a 0.5m wide opening to the south. Adjacent to this was a rectilinear annexe 2.5 x 1.5m very similar to the annexe attached to the north wall of structure I (above, Fig. 18). It seems possible that these features represent a chimney perhaps adjacent to a porch or entrance structure.

The north wall (133, Figs 29 and 30) was of quite different character and seems to have served the dual

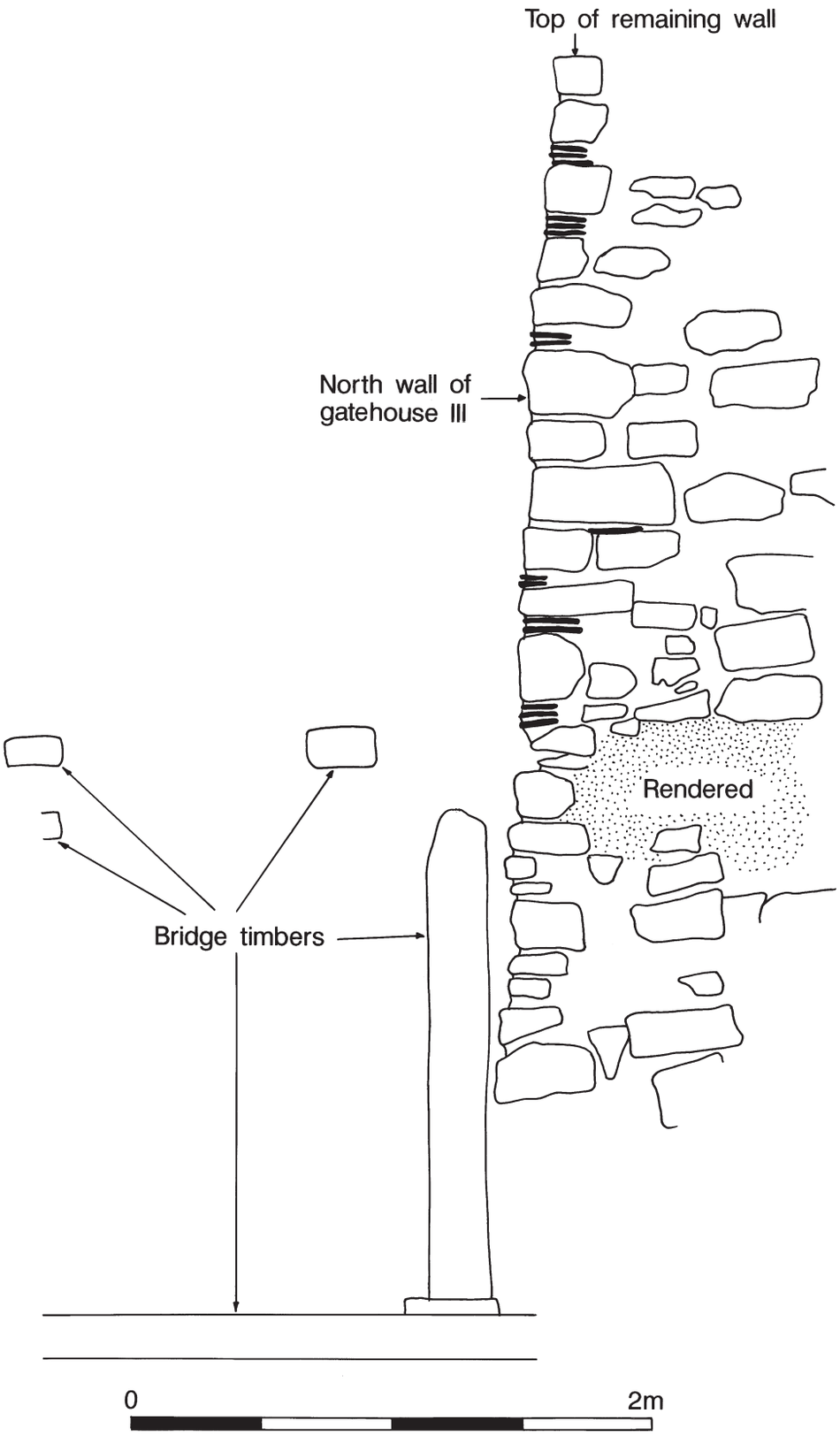

Figure 25 North wall of gatehouse in relation to bridge timbers

purpose of revetting the moat and forming the north wall of structure VII. It was built of Ragstone, although a number of Flemish type bricks recovered from the upper fills of the moat immediately in front of the wall, may have originally been part of it. Wall 133 survived to a maximum height of 1.5m at its western end, being reduced to a height of about 1m at its eastern end by landscaping of a slope toward the eastern moat (Fig.29). Traces of a construction trench survived on the exterior. The interior seems to have been built flush against the cut back face of the mound

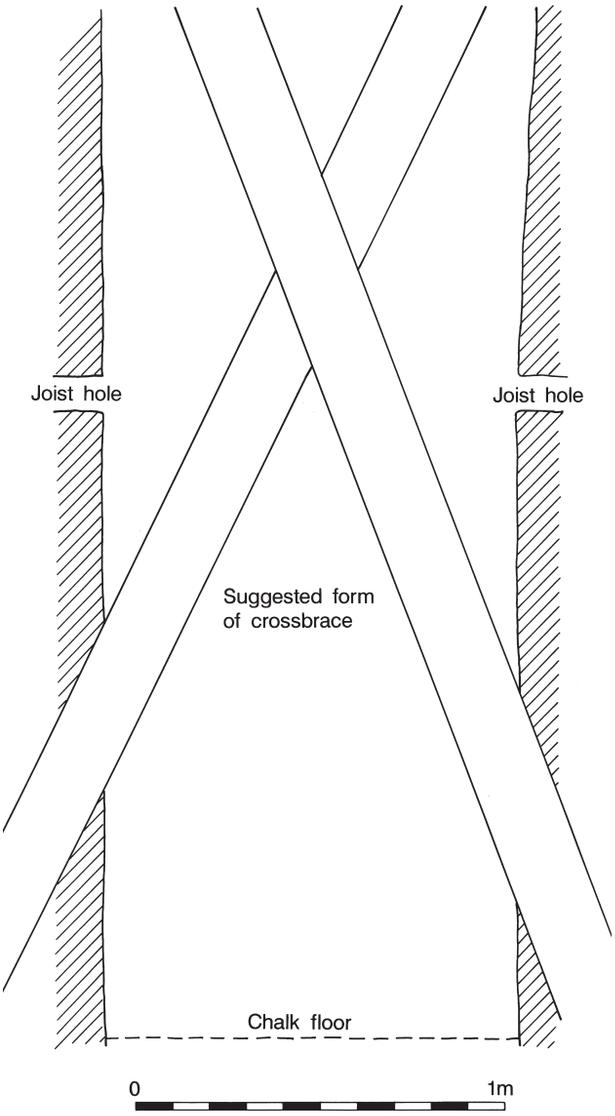

Figure 26 Suggested reconstruction of internal cross brace inside gatehouse

material (Fig. 14). The wall was provided with a substantial foundation which on the outside at its western end protruded 0.05m to the north beyond the thickness of the upper wall (Fig. 30). This foundation progressively thickened to the east so that at the eastern end of wall 133 it protruded 0.5m to the north and 1m to the east (Fig. 30) beyond the thickness of the upper wall. The north-east corner of structure VII was thus provided with a very substantial foundation at the junction of the north and east moats.

Structure VIII: Northern bridge abutment

This structure lay 7m north of the north face of the gatehouse (structure III) and was rectangular, measuring about 3.4 x 4m. Much of the east wall had been destroyed by a service trench at the time of the 1929/30 restoration. The west and east walls were 0.65m thick, the south wall being much more substantial, about 1.1m thick. No trace of a north wall was found and it is possible none existed. The walls have an offset on the lower part of the interior creating a foundation much thicker than the upper walls (Fig. 23). The interior of the structure appears to have been

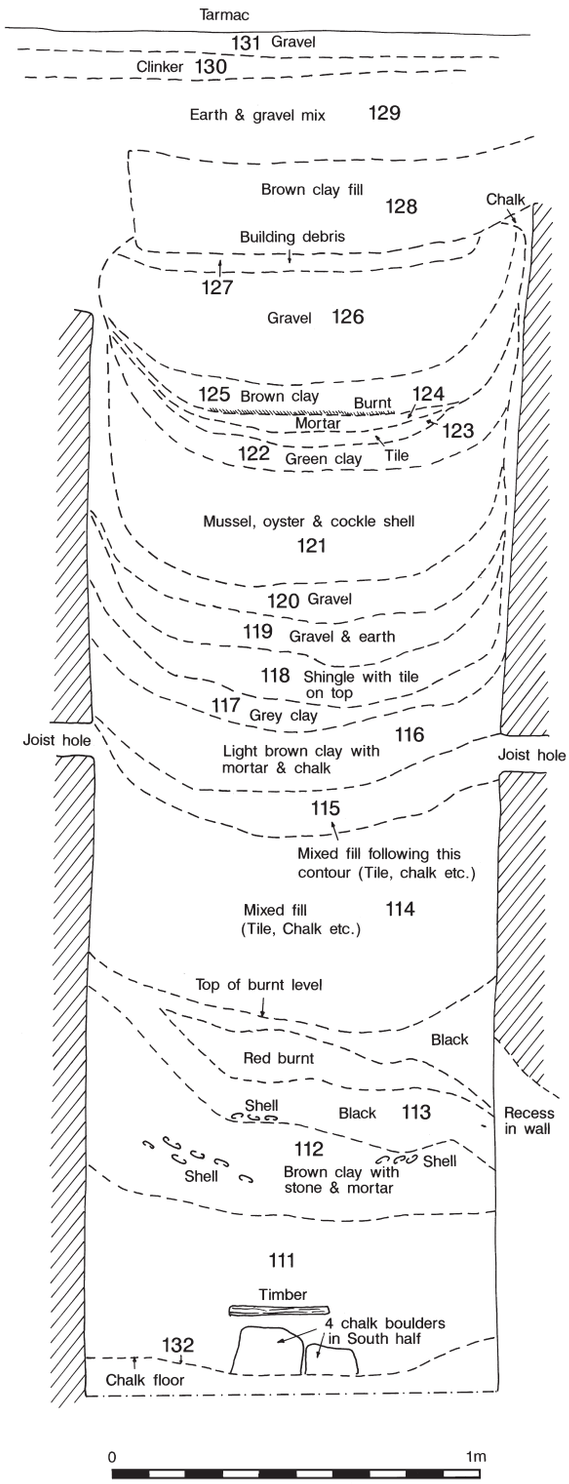

Figure 27 Section of interior of gatehouse

filled in as it was built. The southern end was built out into the moat on a foundation of wooden piles barely uncovered at the lowest level reached by the excavation, but nonetheless clearly visible. The walls were of chalk, ragstone, flint and septaria, with the exception of the south wall and part of the west wall which were faced with substantial ashlar blocks of ragstone 0.2m thick and up to 1m in length. This masonry is quite unlike any other on the

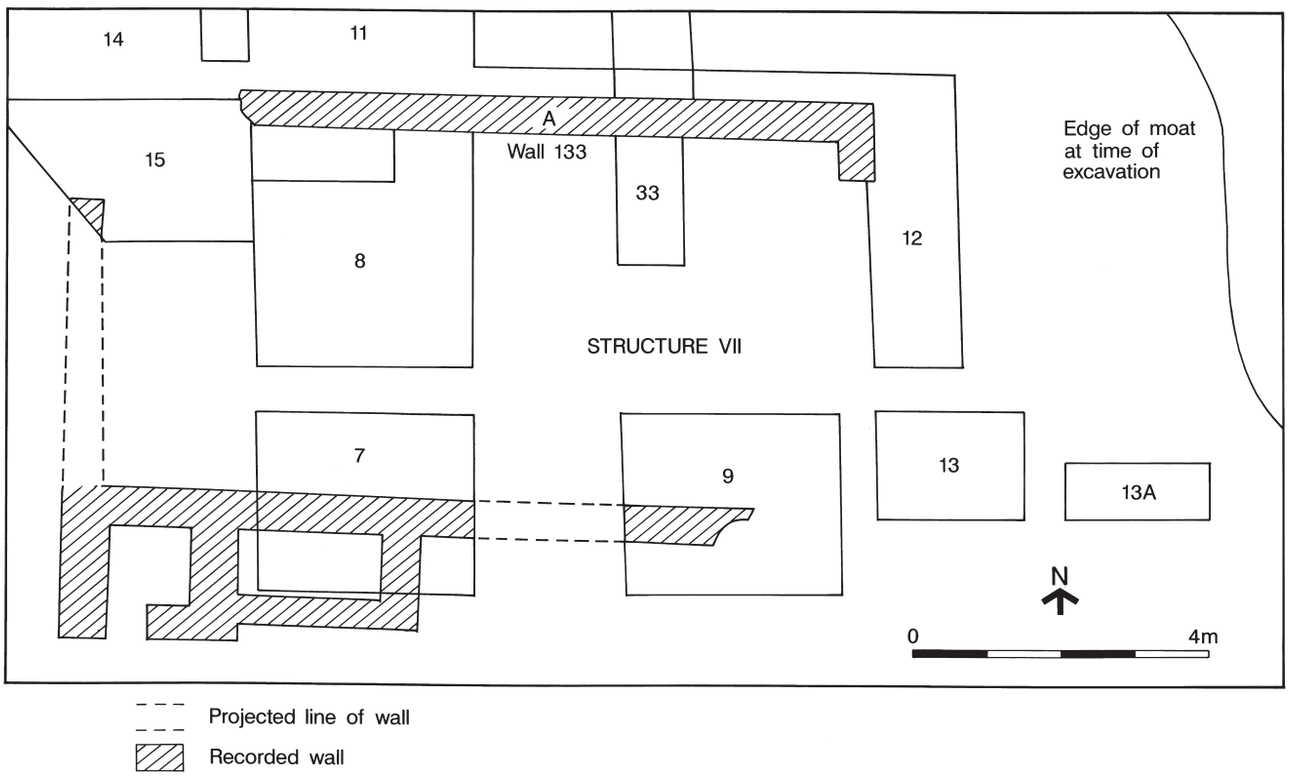

Figure 28 Plan of structure VII

site. The unfaced northern part of the west wall and possibly the east wall may have been hidden beneath the earth bank of the moat. Subsidence has caused the west wall to slump westwards and break away from the south wall, which has itself slipped forward toward the moat (Fig. 31).

Structure VIII would have formed a strong northern abutment for the bridge and possibly the foundation for an outer gatehouse on the north side of the bridge, as indicated by documentary evidence (Nichols 1932, 109). Large squared and dressed flints, probably from a flushwork facing, were recovered from the moat fills in front of structure VIII and might derive from its demolished upper levels.

Phase IV.2

Following construction of the gatehouse and associated structures, a further period of stability in the moat ensued and a substantial deposit of black silt (8, Fig. 8) accumulated. The mound-like appearance of this deposit, its undulating surface and the step-like upper edge (7, Fig. 8) of layer 9 are indicative of periodic cleaning of the moat.

A third rebuild of the bridge was represented by the remains of another set of transverse sole plates above those of the second phase. Again, the construction of the bridge at the north end appears to have been more substantial than to the south. To the north the timbers were much thicker than to the south (Fig. 23) and one of the sole plates was placed directly on top of the sole plate of the second phase which had been supported by upright piles (Fig. 23). This would seem to indicate that extra strength and stability were thought necessary at this point. This desire for a very strong northern end to the bridge may also be reflected in the very substantial construction of the north abutment. The position of the mortises and the angles of the upright preserved within the sole plates of this phase bridge indicate a form for these trestles of Rigold's type II (Rigold 1975, 56).

Phase IV.3

A period of accumulating moat fills incorporating much domestic debris (4, 6, 5 Fig. 8) without obvious signs of recutting or cleaning then ensued, resulting in a considerable depth (*c.* 0.7m) of deposits in trench 37. The upper levels of these deposits would have begun to block the opening in the north wall of garderobe VI.

The lowest fills of both garderobes presumably reflecting the last use of these structures produced finds of broadly 15th/16th-century date.

Period V 1500–1900

Decay and disuse of the gatehouse is represented by the lowest fill in the interior which consisted of a deep (*c.* 0.5m) deposit of black silt (111 Fig.27). This incorporated fragments of wooden boards and one floor joist found resting on the chalk floor, presumably representing collapse of the wooden floor. This silt was sealed by a deposit of brown clay with some stone, mortar and mussel shell (112), above which was a thick deposit of burnt material (113).

In the moat a deposit of tile and stone at the bottom of layer 3 in trench 37 (Fig.8) blocked the garderobe opening and may reflect partial demolition/change of use of the structures adjacent to the moat. Both the gatehouse and associated garderobes were infilled with deposits which contained finds of the 16th century and later. The upper levels within the gatehouse comprised a succession of

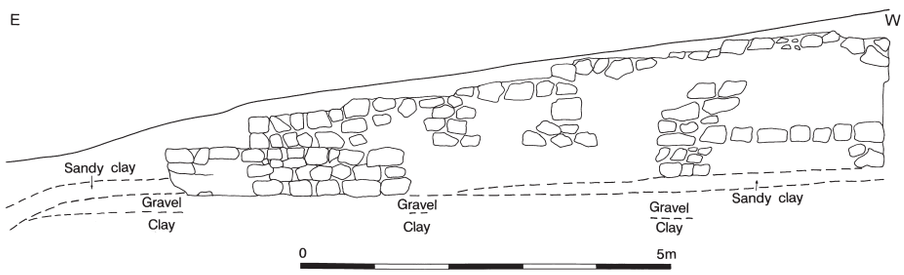

Figure 29 East end of wall 133

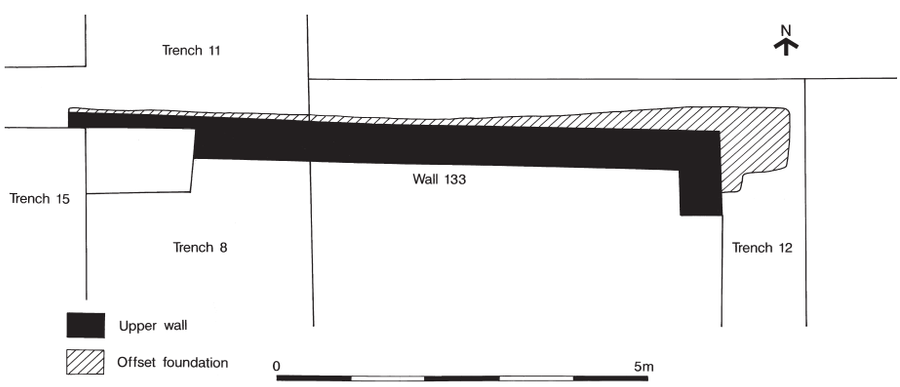

Figure 30 Plan of wall 133 showing offset foundations

concave dumps (114–125, Fig.27) of material tipped into the gatehouse at the time of the construction of an entrance causeway, capped by substantial deposits of gravel (126, Fig.27) and clay to level up the hollow at the top of the sequence. This was sealed by layers of earth/gravel and clinker (129–131) used to create a level surface at the time of the 1929/30 restoration.

On top of the rubble layer within the moat, a deep (0.7–0.9m) uniform deposit of brown clay (3) accumulated in trench 37 (Fig. 8) sealed by a sloping layer of tile, brick and stone. To the east in trenches 41 and 45 a substantial deposit of brown clay accumulated (0.35 – 0.8m deep, 21 Fig. 13; 46 Fig. 14), probably equivalent to layer 3 in trench 37.

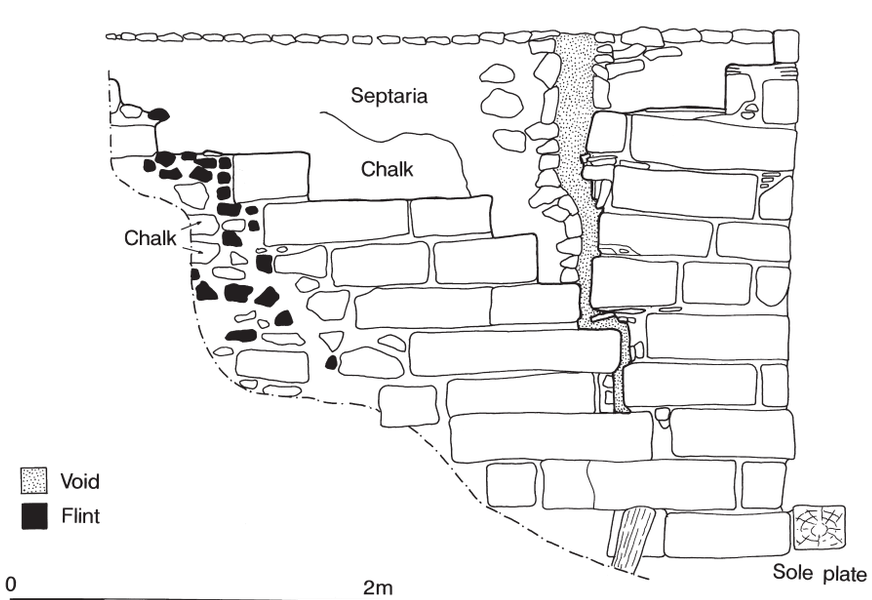

Figure 31 West side of north bridge abutment, showing large crack caused by slumping into the moat

3. Documentary History

by Pat Ryan

I. The owners and occupiers of Southchurch Hall

The church at Southchurch and the manor of Southchurch Hall were given to Christ Church, Canterbury, on or before AD 824 (Morant 1768 I, 298). According to the Domesday Survey, Christ Church, Canterbury, held it as a manor and four hides. In 1086, the population of the manor included fourteen villeins, five bordars and one slave; there were two ploughs on the desmesne and six more belonged to the men. Pasture for two hundred sheep and woodland for forty swine, two fisheries, four horses, eight cattle, thirteen pigs, one hundred and fifty sheep and sixteen goats were also listed in the entry, and the manor was worth £7. Southchurch continued to be held by the prior and convent of Canterbury until their suppression in 1539.

Members of the de Southchurch family were the hereditary tenants from the late 12th to the mid 14th century. Sir Richard de Southchurch, who inherited the manor in 1234 when he was still a minor, was the most noteworthy member of this family (Nichols 1932, 103–106). He was knighted and served as sheriff of Essex and Hertfordshire from 1265 to 1267. During this period it is recorded that when he was engaged in keeping the peace, he often rode with fifteen to forty mounted men and a similar number of men on foot (Cal Liberate Rolls VI 1267–1272, 169). Later, he was accused of attempting to profit from his official position by arresting and extorting money from innocent people, demanding excessive fines, seizing livestock, food, equipment *etc*. in the name of the king, which he then appropriated for his own use. Having claimed payment from the Exchequer, it is said that he did not pay those from whom he had taken the supplies in the first place (Nichols 1932, 104–5). Sir Richard died in 1294 when his Southchurch estate consisted of 'one messuage, 640 acres of arable, 5 acres of meadow, two marshes, 30 acres of wood, a windmill and £41 6s rent with the work of the customary tenants' (Morant 1768 I, 298).

Sir Peter de Southchurch, son of Sir Richard, was the last male tenant bearing the name of de Southchurch to hold the hall. He died in 1309, leaving his widow, Joan, and two daughters, aged seven and three years old respectively (Cal IPM VII Edw III no. 245, 2011). Alice, the elder daughter, married Jolin de Newyntone. Their son, John, inherited the tenancy on his father's death in 1342 (Cal IPM VIII Edw III, 245).

Southchurch was taken back into the hands of the prior and convent of Christ Church in about 1354. From then until 1391 it was the responsibility of a serjeant, a lay official who managed the manor on behalf of the prior and convent (DCc Bedels Rolls 1–6). John Priterwell was serjeant from at least 1362 to at least 1378. Thomas Olyve passed on the property to Thomas Broun, the incoming serjeant, in 1385. From 1391 it was leased on short term 'stock and land' leases (DCc Bedels Rolls 7–18, MA 133, 134, 136, 138, 142, 144, 145, 149, 150, 153, 156, 158, 164, 169, RE 133).

After the dissolution of the monasteries, the lands and revenues of the prior and convent passed into the king's hands. Henry VIII granted the greater part of the lands, including the manor of Southchurch, to the newly established foundation of dean and chapter of Christ Church, Canterbury. Shortly afterwards, as a result of a bargain between the king and the dean and chapter, Southchurch was returned to the king, who granted it to Sir Richard Riche in 1545. After the deaths of Charles, Earl of Warwick, last male heir of the Riche family, in 1673 and his wife in 1678, their estates were divided amongst his sisters and nieces. Southchurch became the property of a niece, Essex, and her husband, the Earl of Nottingham.

The 16th- and early 17th-century tenants appear to have been relatively wealthy men. Thomas Harryson who paid by far the largest proportion of Southchurch's contribution to the Lay Subsidy of 1524, £9 4s 6d, was probably the tenant at that time. Thomas Rawlings of Little Wakering leased 'the manor of Southchurch Hall, the scite and lands' from Lord Riche in 1567 for an annual rent of £40, one dozen capons and two dozen chickens. He was connected by marriage to the Harris family of Creeksea Place (ERO D/DU 560/45/3; Emmison 1998, 215).

It is not certain what type of transaction took place in 1568 between Robert and William Lawson alias Edmondes and Robert, the second Lord Riche, in connection with 'the manor of Southchurch Hall and ten messuages, two dovecotes, two gardens, 600 acres of arable, 700 acres of pasture, 60 acres of wood, 200 acres of marsh and £8 rent in Southchurch, Leigh, Prittlewell and Hadleigh'. Only the resulting foot of fine survives in which Sir Robert, the deforciant, quitclaimed to the plaintiffs, Robert and William Lawson alias Edmondes, and for this the plaintiffs granted the manor, *etc.* to Robert Rich (Fitch and Emmison 1991 V, 137). Robert Lawson may have held some position of responsibility in the Riche family's household and the fine may have been to do with a lease, for in his will, Robert Rich referred to the fact that some of his menservants had had 'advancement by leases' (Emmison 1978, 12 and 13). In 1577, Robert Lawson alias Edmondes, described as 'gentleman of Prittlewell', left bequests to 'the right honorable and my singular good lady, the Lady Penelope Riche', first wife of Sir Robert Rich, twenty angels in gold and to her mother-in-law, Lady Elizabeth Rich, widow of the first Lord Rich, 'my very good lady and mistress, £20 out of such debts as her honour oweth me' (Emmison 1978, 224–226). The items in his will suggest he was a man of considerable wealth.

In 1620, the Earl of Warwick leased 'the scite of the manor of Southchurch Hall and lands' to Sir Thomas Cheke for sixteen years 'for a certain consideration and an annual rent of 2s 10d' (ERO D/DU 560/45/4). The lease recited an earlier one, dated 1616, in which Thomas Hobson, gentleman, agreed to pay a rent of £260 per year for twenty-one years. This agreement was to continue but

the rent was to be paid to Sir Thomas Cheke. Essex, Thomas Cheke's second wife, was the earl's sister and it is possible this transaction may have had some connection with her marriage portion. Thomas Hobson, gentleman, the sitting tenant in 1620, died at Shenfield in 1642, and left bequests of silver bowls and spoons to a number of relatives and quite substantial legacies to his grand-children (ERO D/AER 20/131).

Rents paid by the later 17th- and 18th-century tenants were considerably lower than that paid by Thomas Hobson. John Buxton of Milton Hall paid £100 per year for 'Southchurch Hall Farm and 276 acres' in 1683 (ERO D/DU 560/45/5). He was probably the John Buxton who was assessed on four hearths in the Southchurch Hearth Tax Return of 1662 (ERO Q/RTh 1).

George Asser purchased Southchurch Hall from the Earl of Nottingham in 1702 for £4,700, and made it his main residence. He was described as 'of Southchurch Hall' in documents connected with West Hall, North Shoebury, in 1722 (ERO D/DMq T2/23, 24 and 26). Shortly after George Asser was succeeded by his grand-daughter, Elizabeth Asser Davies. In 1738, John White, butcher of Rochford, leased 'the capital messuage or mansion house called Southchurch Hall and lands (276 acres)' for £120 per annum (ERO D/DU 560/45/6). In 1754 a lease for twenty-one years from Thomas Drew of Fitzwalters in Essex, husband of Elizabeth Davies, to John White, now described as 'gent. of Southchurch', included the condition that at the end of the term two disinterested persons were to value 'two stone chimney pieces lately affixed and a leaden pump to be affixed and two rooms to be built to the said premises by the said John White' (ERO D/DU 560/71/7). In 1774, Barnaby Shorey was the tenant for twenty-one years at £210 per annum (ERO D/DU 560/46/4). His lease was renewed for a similar term but at an increased annual rent of £220 in 1795 (ERO D/DU 560/46/5). He, or his son, continued as tenant until about 1819 (ERO Q/RPl 777). Thomas Kilworth was the tenant in 1822 (ERO Q/RPl 780). The Kilworth family was still leasing the farm at the time of the 1871 census, but by the next census William Keyes, farmer, was the occupier of the hall.

II. The buildings at Southchurch Hall

It is possible to gather some idea of the buildings at Southchuch Hall as they were in the late 14th and 15th centuries from a series of documents held by Canterbury Cathedral Archives, Lambeth Palace Library and the Essex Record Office.

Three detailed inventories of the live and dead stock at Southchurch Hall, dated 1385, 1391 and 1489, have survived. The inventory attached to a lease dated 1391 names some of the buildings on the manorial site at that time. The hall, principal chamber, chamber over the inner gate (*i.e.* inner gatehouse) and adjoining chamber, chapel and kitchen are mentioned. In addition to the usual facilities of brewhouse, stables, cow-shed, barn and granary, the outbuildings also included a press house and a wool-store. The furnishings listed in the hall included three tables and three pairs of trestles, a cupboard, and an iron plate with an andiron for a hearth. In the principal chamber, there was a hollow bowl for the barber, a long table with a pair of trestles, a Flemish folding table with a cover, a chair and a joined stool, a standing table for the press (cupboard), and a silver cup and cover which were kept for the use of the monk-warden when he came to Southchurch on his twice-yearly inspection visits from Canterbury. Three closed beds and a bench were in the chamber over the inner gate and the adjoining chamber. Six candelabra of iron called 'Flemish plate' supplied lighting in the chambers. The contents of the chapel included a missal, two vestments, one corporal, a chalice with gilt paten, a superaltar, two silk frontals, two cruets, two tin candlesticks, a casket, a bell, two benches, a tin vessel for the Holy water, a statue of alabaster and two bells. The kitchen was well equipped with pots and pans, a kettle, a tripod and andiron, a bucket, pestle and mortar, a kneading trough, a salting trough and a 'tap trough', a moulding board and five boards with a dresser. It had a fixed lead cistern with a 16-gallon capacity. In the brewhouse there was a cloth for drying malt of 30 ells, two new hurdles for doors, three half tuns for the brew and a 'ring' or large measure for fetching water. An apple mill with a press stood in the 'press house' and also various tubs of assorted sizes. The wool chamber had a door with hinges and hooks and five boards on which to place the wool, possibly some form of hoist. In the granary there were bins, sacks and measures, winnowing fans and harvest forks. The farming stock included stated quantities of wheat, barley, drage, beans, vetches and oats, four cart horses, eight plough beasts, nine rams and two hundred ewes on Southchurch Marsh, and ten rams and three hundred ewes on Canvey Island, two sows, four pigs and fourteen piglets, two ganders, four geese, a rooster and six hens. Amongst the farming implements were a cart with iron-bound wheels, an oak wagon, harness for the carts and ploughs and three pairs of harrows (ERO T/A 262/20/1 and 2 — transcript and translation by Nichols of Lambeth MS Court Roll, no. 1438).

The inventory attached to the serjeant's roll of 1384/5 differs in only one or two respects (DCc Bedels Rolls Southchurch 5). The wool chamber is not mentioned but 'the door with hinges and five boards for placing wool on' was found in the esquire's chamber *(cameram armiger)*. Some of the furnishings are also different.

There are more differences between the 1391 inventory and the one in the lease of 1489 (ERO D/DU 560/45/1). In the latter, only one chamber is mentioned. It contained a long table and trestles, a little bench and three closed beds. The brewhouse, presshouse and wool chamber are also omitted. A few items were listed as being in the chapel but it was no longer being used for religious services for only two little benches and an old chest are mentioned.

The bedels' accounts and farmers' views include payments for building repairs and some new construction work. Some buildings which are not listed in the inventories, for example the freed serfs' house *(dom' colebaris),* 'le northe chambre' and the dairy, are named in these documents (DCc Bedels Rolls 7, 10, 12, 13). In 1399–1400 three 'haches' were purchased for 'le Stonhalle' and one man was employed for eleven days removing old tiles from the same building whilst a tiler and his boy replaced the old tiles with new ones (DCc Bedels Roll Southchurch 10). Another account, written in French and dated 1408–09, records that two carpenters were paid for work on the 'Scytherhouse', 'le Dofhouse', a stable and 'le great gathouse now le pylery' (SB B 229). In 1436/7 straw was purchased for thatching the stable within the manor site and 2,000 lathnails and a barrel of lime for 'the chamber above or over *(ultra)* the bridge' [possibly a gatehouse]

(ERO T/A 262/4 — Nichols' transcript of Lambeth MSS Court Rolls 72 and 73).

Information connected with the construction of two new buildings occurs in these documents. In 1362/63 a new stable was erected and in 1404–5 one of the old barns was pulled down and a new barn was built. Instead of being thatched like the old one, the new barn was tiled, for thirty thousand tiles, sufficient to tile approximately 435 square metres of roof, were bought from Kent (DCc Bedels Roll Southchurch 15). New work was often done by contract, but the cost of any additional work not covered by the agreement, was included in the serjeant or farmer's annual account.

It is possible to make various deductions regarding some of the buildings. The great barn and the small barn stood near each other, as did the dovehouse and the warden's *(custod')* stable for in 1390/91 the walls between *(inter)* these pairs of buildings were repaired (DCc Bedels Roll Southchurch 7). The great barn lay east-west, for repairs to the thatching were always on the north or south sides *(ex parte boreahs* or *australis).* A carpenter and a tiler were employed the same year to mend the old walls within the moat, and a plumber to mend 'le gutter' between the hall and the principal chamber. The tiler was also paid for tiling the gate next to *(versus)* the barn and the granary. The following year the gate between the outer court and the court next to *(versus)* the barns was repaired and payment was made for making three perches of earth wall (DCc Bedels Roll Southchurch 8). The apple press was still being used in 1406–7 for it was repaired that year (DCc Bedels Roll Southchurch 17).

Some of the buildings were thatched like the great and little barns, cider house, dovehouse and hay barn; others like the hall, principal chamber, kitchen, gate next the barns, granary, new barn and 'le Stonhalle' were tiled (DCc Bedels Rolls Southchurch 6, 7, 8, 9, 10, 11). In 1429–30 part of the sheephouse, originally thatched, was tiled when 5,000 tiles were bought for the job from Thundersley. In 1429–30 a plumber repaired two gutters, presumably made of lead, over the outer gate of the manor (MA 133).

III. Discussion

When documentary evidence is used to reconstruct a site, it is important to take into account the limitations of certain types of document. In inventories attached to leases only buildings or rooms that contained the live or dead stock which was being leased with the property are named. The fact that some of the places listed in the earlier inventories are not named in the later ones does not necessarily mean they no longer existed. Change of use is likely to result in a new name for a building or room, sooner or later. Furniture and equipment is moved from one place to another. The contraption which was possibly some form of hoist for lifting wool was in the esquire's chamber in 1385 but in the wool chamber in 1391. The question is, whether it was in the same room, the use and name of which had been changed, or had it been moved to another room. The medieval practice of abbreviating Latin words can lead to incorrect assumptions. The three closed beds were in the chamber over the gate and the chamber next to it in 1391, but appear to have been shifted into the only chamber which is mentioned in the 1489 inventory. It is possible that 'chambers' should be read instead of 'chamber' in this last instance. One thing is certain from the 1489 inventory, the quality of some of the furnishings seems to have degenerated and a number of the items, especially the more expensive ones, are missing, a possible indication that the standard of living of the tenant had declined.

Unfortunately no documents have been found which give any information about the rebuilding of the manor house in the 14th century. The de Southchurch family's hereditary lease required them to pay an annual rent of £20 and to maintain the property, including the buildings. They were permitted to take timber from Southchurch Wood for this purpose (ERO T/A 262 quoting Lambeth MS 1212, 344). If they were responsible for rebuilding the hall during the latter part of their tenancy their costs would not have appeared in the Christ Church documents. If the prior and convent rebuilt the hall after they had resumed responsibility for maintenance of the buildings, the work would probably have been done by contract and only work additional to the agreement would have been recorded in the serjeant's accounts, of which only a limited number survive. The recovery of the manor by Christ Church in about 1354 and its direct management for a period thereafter may have been the occasion when the hall was rebuilt, and certainly falls within the tree-ring date of 1324–61 for the existing building.

References

Calendar Inquisitions Post Mortem Vol III Edw I
Calendar Inquisitions Post Mortem Vol V Edw II
Calendar Inquisitions Post Mortem Vol VII Edw III
Calendar Inquisitions Post Mortem Vol VIII Edw III
Calendar Liberate Rolls Vol VI 1267–1272

Abbreviations

Cal — Calendar
ERO — Essex Record Office
Lambeth — Lambeth Palace Library
All other references relate to documents in the Canterbury Cathedral Archives.

4.The Existing Timber-Framed Hall

by D.F. Stenning and D.D. Andrews with a contribution by I. Tyers

I. Introduction

Southchurch Hall is one of the very few timber-framed houses in Essex that is open to the public. The fact that it is the seat of one the ancient manors that were the precursors of the modern borough, and its evocative moated setting, influenced its acquisition and preservation by Southend Borough (Part 1 above, p.3). The hall is an interesting and rather rare example of a manor house building of *c*.1321–1363. Aspects of its importance have been highlighted by Hewett (1969, 65; 1980, 134). It is a medium-sized hall house, which incorporates some exceptional features, such as the cusped bracing to the tie-beam over the hall, the window mullions and the cruck-like posts in the east wall. The proportions of the building may be compared to the raised aisle hall at Lodge Farm, Denton, Norfolk (Heywood 1998, fig. 60).

The hall was restored for the Borough by Philip Mainwaring Johnston, an architect who specialised in churches and historic buildings. He had been articled to John Belcher, architect of Colchester town hall, and also restored Prittlewell Priory for Southend Borough (above, p.3). His records seem to have disappeared, though photographs show the building to have been in a very dilapidated state. He set about a thorough and, by the standards of the time, sensitive restoration, which has left the building in excellent condition and exposed what was left of its original frame. However, a consequence of such an extensive restoration is that it is no longer clear what the building was like when Johnston found it, and much evidence for its evolution from the 14th to the 20th century has been removed. A survey of the hall made before the restoration, probably by Johnston, is useful in that it gives some indication of the work carried out, but does not contain detailed information on the repairs or what was found. It is clear that the hall was stripped back to its frame. Many of the timbers were judged too rotten to retain, but where possible original timbers were lovingly preserved, new oak being spliced in to preserve their integrity. It is presumed that original timbers were left *in situ* though close examination of the frame suggests that some may have been moved around. The fragmentary remains of the medieval fabric were interpreted to restore the building to what was believed to be its original appearance.

The building (Plate 3) comprises a hall of two unequal bays aligned east-west, with in-line service rooms at the east end and a cross-wing at the high end to the west. The restoration revealed the end walls of the hall, the imposing doorways of the cross-passage made of solid pieces of oak or durns, a tie-beam with soffit cusping supporting a handsome crown post, and remains of the large hall windows. If the hall was found to be relatively intact, the original form of the two ends is more problematic, as will be seen.

Today the frame rests on a cill wall built mainly of chalk and Kentish Rag with levelling courses of peg tile. Although these materials are probably original, the walls must have been entirely rebuilt at the time of the restoration when the sole plates were extensively replaced, doubtless not for the first time. Today the cill wall is 430mm high internally. This is exceptionally high and probably occurred because the replacement of the sole plate has caused it to rise in height, and because the floor was dug out and a heating duct built below it, doubtless causing considerable damage to any surviving archaeological deposits. Foundations were exposed by Johnston (Pollitt 1949, 26) but seem to have gone unrecorded.

II. The timbers

The timber in the hall has been assessed by Rackham (1986, 43–44). He estimated that 280 oaks were needed to build it, two-thirds of them of 6–9 inches in diameter, and the rest about 11 inches in diameter. He remarked that the hall is 'remarkable for the large number of very crooked and waney timbers with big knots'. Some of these were relatively short trees, and some were top lengths, the bases of which he argues were used for laths and battens. He concluded that 'The building ... shows many signs of economy and of using the fewest trees possible'.

Further observations were made on the timbers when cores were taken for tree-ring dating. Contrary to what one expects in a medieval building, two of the storey posts on the north side seem to have been made of quartered trees. The tie-beam of the main truss in the hall is made of a half tree. Possibly the other half was used for the tie-beam of the spere truss flanking the cross-passage, which was replaced or renewed at the time of the restoration. The use of half trees would have simplified the task of obtaining identical beams with a pronounced camber and a distinctive central low-arched cut-out. It is also noteworthy that many of the surfaces of the timbers in the hall are sawn, whereas in the ends they are rough and waney. It looks as if the better sawn sides of the timbers were used in the hall and the scappled waney ones were made to face into the ends. The floor joists of the cross-wing are dramatically twisty and waney (perhaps halved?) and inferior to the quality one would expect in a manor house.

III. The hall

(Figs 32–34)

The hall is 6.47m (21ft 3ins) wide. Its roof has been replaced, as has much of the side walls. The only original elements of the roof are a tie-beam, a crown post, and a few pairs of smoke-blackened rafters. As reconstructed today, the roof is lower than its original pitch as the collars have not been reinstated above the collar purlin.

The studs in the side walls of the hall, and the service end, are relatively widely spaced, at intervals of 600–700mm. The spere truss has been lost completely, though a pair of old peg holes, just detectable where a new

Plate 3 Hall looking east, jettied cross-wing in foreground

brace has been inserted in the post on the west side of the north door, may be for a girt that formed part of this truss. The lack of other Essex examples of spere trusses in unaisled buildings makes it difficult to reconstruct. The durn doors at the ends of the passage and the pair leading off it (as well as those in the cross-wing) are an interesting survival, similar to those at no. 60/62 High Street, Brentwood and Normans Farm, Wakes Colne (Stenning 1997, 242). It is noteworthy that even the massive cross-passage doors lack any hint of decoration such as blind tracery in the spandrels.

Mortises in the sides of the posts indicate the position of four-light windows in the north and south walls in the low-end bay and six-light windows in the high-end bay. These windows would probably have occupied almost the full height of the walls, with mullions above and below the girt and not just above it as has been done in the reconstruction. The mullions have been made in imitation of one or two surviving ones which have stop-chamfered tops and bulbous bases.

The central tie-beam is carried on curved arched braces The central part of the beam is curved so that with the braces it forms a continuous rounded arch, the soffit of which has open-spandrelled cusps. The cusping is almost entirely restored. Today it is partly carved out of the solid (as it was originally) and partly attached. When Hewett first reported on Southchurch Hall (1969, 65–66), he observed that the soffit-cusps were the only example of their kind he had seen on a domestic building. Another Essex example is now known from Heybridge Hall, a manor in the possession of St Paul's (Andrews and Stenning 1998), whilst the extraordinary down-braces to the crown post behind the chancel arch at Ashdon church are an ecclesiastical parallel. Foiled and cusped decoration also occurs in the pierced spandrels of the hall at Tiptofts, Wimbish. In the north top plate, at a point corresponding with the spere position, there is a through splayed scarf joint (Hewett 1980, 134). The tying dovetail joint between the tie-beam and the top plate is also illustrated by Hewett (1969, fig. 97).

The tie-beam supports a fine octagonal crown post with moulded capitals and a square broach-stopped base (Hewett 1969, fig. 120). Broach stops also occur on a crown post at the so-called granary at Grange Farm, Little Dunmow (Hewett 1969, fig. 122) and on an arcade post at Fyfield Hall datable to 1397–1416 (Walker 1998, fig. 3; Bridge 1998). The crown post carries four-way bracing and is double-jowled to clasp the collar purlin. These jowls, together with those of the truss at the low end, have concave and stepped profiles, similar to the more or less contemporary raised aisled hall at Wymondley Bury in Hertfordshire. They are also reminiscent of the brackets on the jetties of some York houses.

The partition between the high end and the cross-wing has arch bracing of that interesting period when the old framing patterns had begun to break down. (A good parallel is the west flank of the old cross-wing at the Woolpack public house, Coggeshall). Here, one of the braces between the girt and sole plate rises not from the corner post but from the first stud in from the south end of the wall. The parlour door in this truss has a pair of half arches rather than being of the durn type found elsewhere in the building.

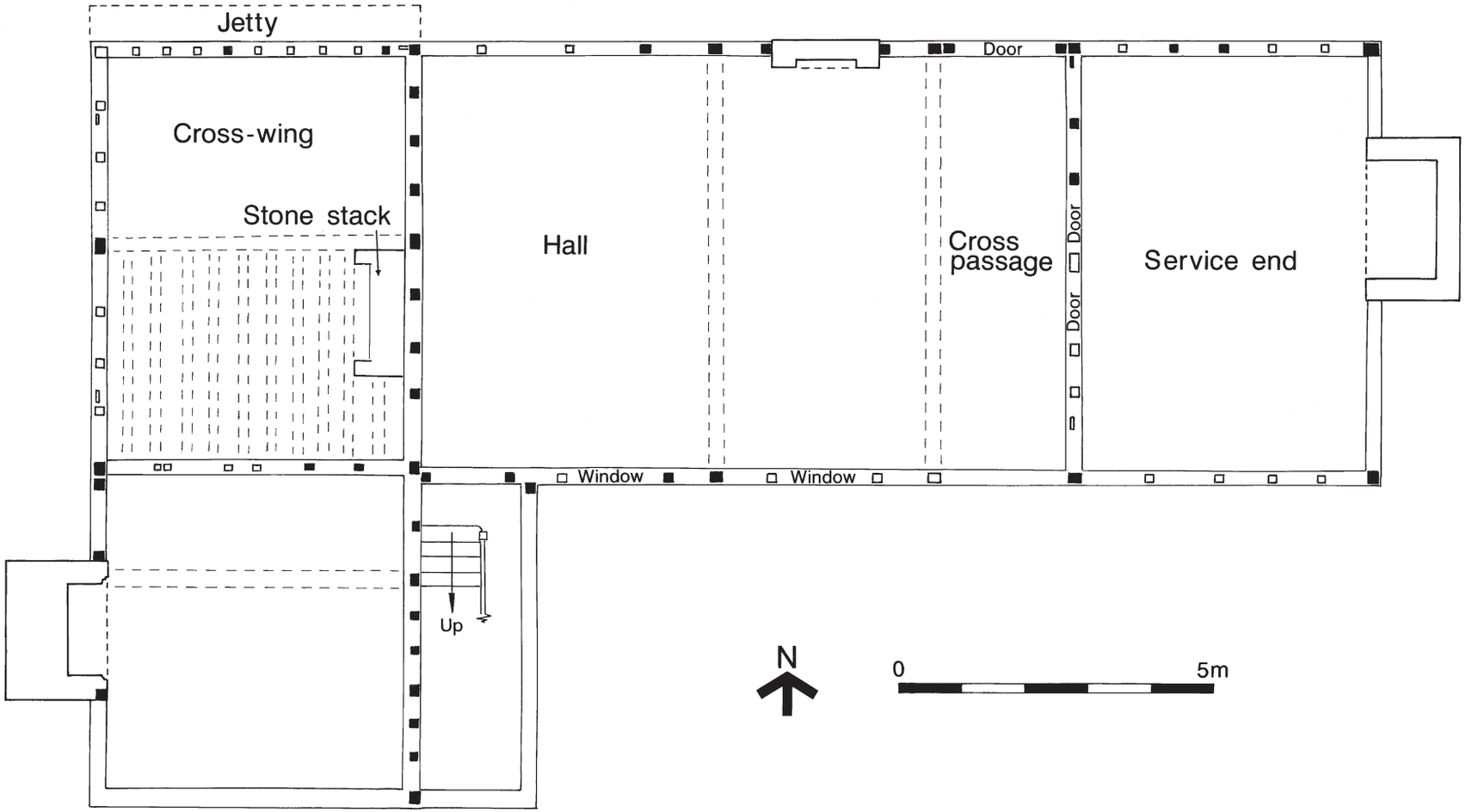

Figure 32 Reconstruction of hall plan

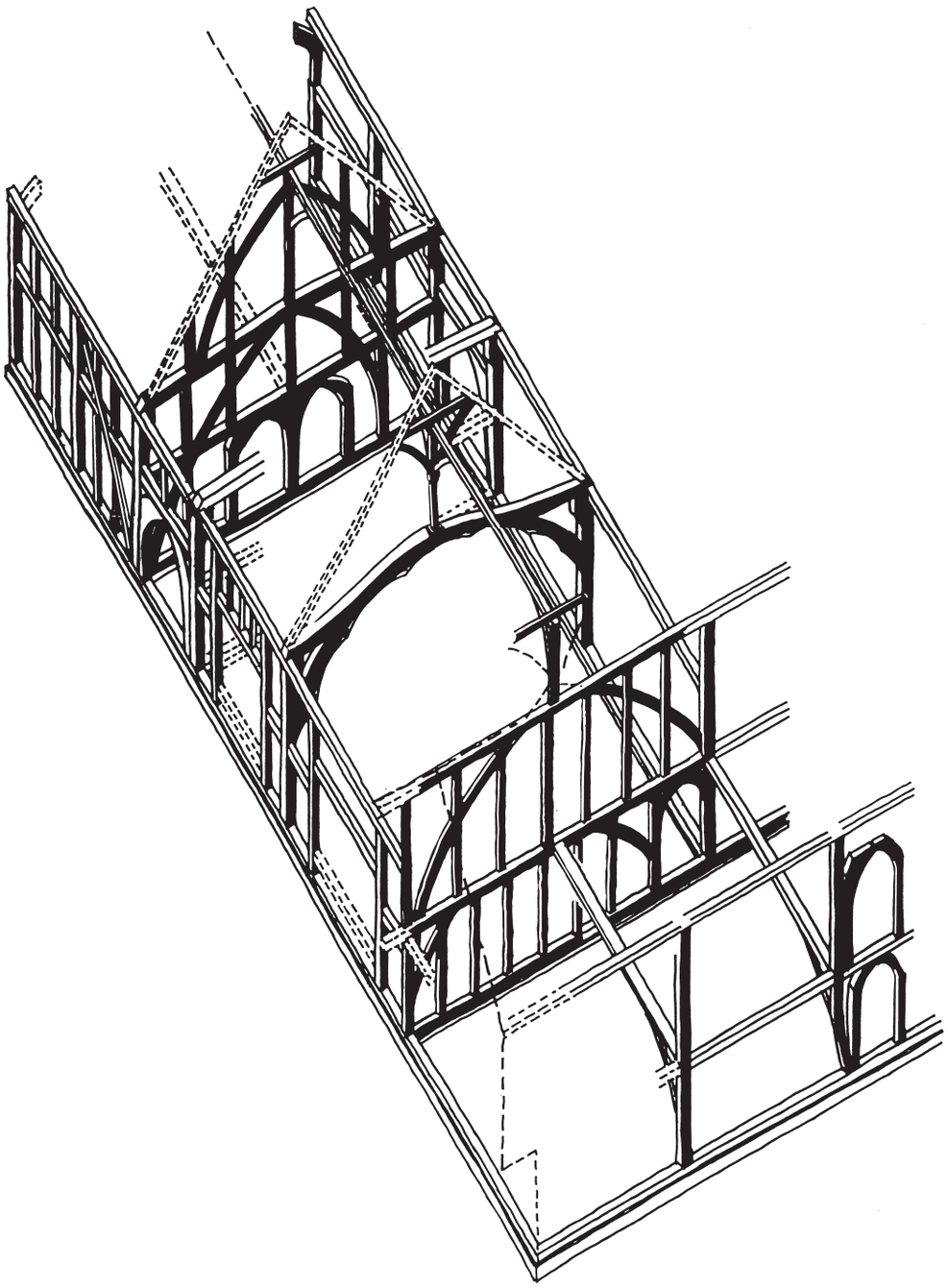

Figure 33 Axonometric drawing of timber frame

IV. The service end

The framing of the wall separating this end from the service passage has a pair of curved passing braces rising to the soffit of the tie-beam. They are reminiscent of an aisled hall, and were likened by Hewett (1969, 67) to braces in the wings of Priory Place, Little Dunmow. A pair of durn doors connect this end with the cross-passage. A mortise in the side of the rail in this wall was for an east-west joist carrying the beams of the upper floor. There would have been a partition beneath this joist dividing the end into two rooms. At the south end of the wall, there is a deeply cut step-stopped chamfer marking the position of a third door which must have given access to a staircase.

In the north and south walls are large arched braces, probably accurately reconstructed on the basis of evidence which seems to survive in the south side. Two storey posts in the sides of this end apparently divide it into two bays although at 4.55m it does not seem long enough for this to have been necessary. No tie-beam connects them today, but the top of one is roughly cut back suggesting that a jowl has been removed which, if correct, indicates that there was a tie-beam unless the jowl were of extended type to support a rafter without a tie-beam.

The top of the south-east corner post can be seen to rise obliquely for a few feet before terminating. There was a counterpart for this cruck-like blade at the north-west corner: although the top is not curved, the twisted grain visible externally shows convincingly that it was similar. With the single exception of Ladylands, Good Easter, these appear to be the only cruck-like features on the end wall of any Essex buildings. Eaves blades, either with rafters fixed to their backs or extended up, to carry an end collar, are to be found in Kent, Suffolk and Surrey. It remains possible that these represent a later alteration or extension of the service block. In Kent, recent research indicates that cruck-like ends of this type are generally secondary features (Pearson 1994, 82). At Southchurch Hall this cannot be the case as the south-east post has been shown by tree-ring dating to be the same date as the rest of the building. A further problem is that the surviving post indicates too slack a pitch to act as an eaves blade.

These curious timbers must be related to the low potential headroom in the service end. The height from the mid rail to the tie-beam is only about 5ft, which makes it unlikely there was ever a tie-beam between the two apparent storey posts. For this reason, the existence of extended jowls on these posts supporting an 'A' frame truss, as suggested above, seems probable. Similarly, the cruck-like blades may have been related to some sort of interrupted tie-beam and half-hip roof arrangement which would have helped create extra headroom.

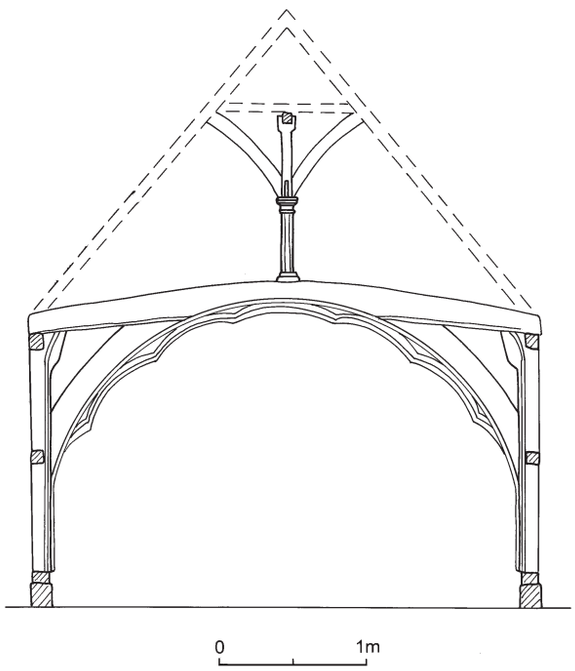

Figure 34 The open truss in the hall with a reconstruction of the roof

V. The cross-wing

As it is today, the western end of the building comprises what is technically a four-bay cross-wing, jettied to the front or north. It comprises two rooms divided by a partition in line with the south side of the hall. This arrangement dates from the 16th or 17th century when the rear or southern room was added. Originally there seems to have been a two-bay room corresponding to the width of the hall, with a half bay to the rear accommodating a staircase.

The wall between the hall and cross-wing has arched bracing above and below the rail. The upper pair of braces rise above the top plate and are tenoned into the crown post which is unusually short because the top plate of the cross-wing is about 4ft higher than that of the hall. Although many of these timbers have been renewed, this arrangement seems to be original. The parlour door in this truss has a pair of half arches rather than being of the durn door type found elsewhere in the building. At the north end of this wall, there is not a storey post: instead there are two posts above and below the rail which continued northwards for a jetty as has been reconstructed by Johnston. For this reason, it is concluded that the hall was built from the first with a cross-wing. The jetty was later removed to create a flat-fronted farmhouse, with the consequence that Johnston had to rebuild it entirely, planting it on to the front of the building.

In the northern room the floor construction is largely original. The binding joists have soffit jowls and the common joists, which are made from very inferior and quite extraordinarily twisty trees, have centre tenons. On the north side of the northern binding joist, there is a series of old mortises, just to one side of which are set the existing joists. These have been moved to one side so that their mortises do not correspond with those of the other bay, probably an expedient adopted by Johnston to overcome weakness in the timber caused by the opposed mortises which have been enlarged by rot and beetle action.

The binding joist on a line with the south side of the hall has no evidence in its soffit for a partition, though one was subsequently inserted probably in the late 16th or 17th century. This open end seems to have given access to a short rear bay 5ft wide which must have accommodated a staircase. The evidence for this is a storey post on the east side of the rear of the cross-wing which may mark its original south-east corner. On the west flank of this rear bay, there are two durn doors, one at the ground floor and the other immediately above it, which presumably led to the staircase. A mortise in the external face of the northern storey post in the west side implies the building continued or was extended in this direction, in which case these doors were or became internal. A puzzling feature is the very curved base of the post adjacent to the durn doors, which makes it look like the bottom of a cruck blade, though it is probably just another example of the indifferent quality of the timber in the hall.

This assessment of the cross-wing may be over-simplified, and there are problems which it does not really take into account. The existence of a late 16th or 17th-century floor in the bay beyond the staircase bay implies the cross-wing has been extended southwards. However, the construction of this 'later' bay includes medieval-looking timbers which contrast with those of the floor, notably a storey post in the east side and another at the south-east corner, both with jowls at about first floor level. The studs in the east wall and the inserted partition are also widely spaced, not closely set as would be expected in work of this period. The east wall still has old wattle and daub, evidence that not all the walls were dismantled at the time of the restoration. It may have preserved its original infill because it was protected from the weather by store rooms later built on this side.

VI. Later and post-medieval alterations

Detailed evidence for later alterations to the hall have largely been erased by the restoration, but the following events may be noted:

1. the ground and first-floor rooms in the cross-wing have fireplaces in a rather narrow stone stack. The fireplaces have depressed arches which look Tudor. However, they also have chamfers with bulbous stops like those found on the original mullions of the hall windows. This factor, combined with the unusually small dimensions of the stack, suggests that it is 14th-century and if not original to the cross-wing, then inserted not long after its construction.

2. insertion of a brick stack into the hall. This was of an early type, probably late 15th-century, set to one side and incorporated in the external wall, where its outer face was decorated with diaper patterning in overburnt headers. Only its flank survives; in it is an arched recess.

3. the construction, as postulated above, of an extension to the rear of the cross-wing. A partition was inserted beneath the binding joist on a line with the south side of the hall, and the short staircase bay became now or eventually incorporated into the new rear room. This has an east-west binding joist with lamb's tongue chamfers which puts its date in the later 16th or 17th century. This extension was provided with a chimney with two diamond-set stacks with broaches where they join the rectangular base and a crow-stepped parapet, features indicating a later 16th- to 17th-century date.

4. the construction of a chimney at the east end of the building for a kitchen. This stack is substantial and possibly 16th-century, though the base is repaired and includes 19th-century brickwork.

5. the insertion of a floor in the hall, probably in the 17th century. No trace of this survives today, but it is recorded on Johnston's survey. Since paintings of the hall before it was restored show that it had dormer windows, the first floor was an attic storey and the level of the top plate was not raised.

6. storerooms were built on the east side of the parlour at the rear of the cross-wing. They incorporate remnants of a dragon-beam floor of possibly 17th-century date which is difficult of interpretation.

7. an extension was built on the back by the kitchen to serve as dining room, probably in the 18th or early 19th century. This room has been intepreted in the past as a stair tower. This notion is rejected. It is excessively large for such a function and as Johnston seems to have been consistent in respecting all the medieval timber in the hall, it is therefore unlikely that he would have dismantled this part of it unless he had regarded it as 18th-century or later.

8. the front door was moved and enclosed by a porch.

VII. Timbers not original to Southchurch Hall

An ogee door head with carved spandrels, now set over a door in the rear wall of the hall, and a deeply moulded wall plate and a pair of Decorated traceried windows now on display in the museum, appear to be reused from another building. Dovetail joints for joists of some sort at intervals of 5ft in the top surface of the wall plate show that this timber could not have been part of the fabric of the hall, unless it were for some free-standing structure. The plate and windows were removed from the porch on the north side of the building which was taken down during the restoration. According to Pollitt (1949, 29), the distinguished local antiquary H.W. King believed these timbers to have come from the rood screen in Southchurch Holy Trinity. However, the plate with dovetail joints and the tracery is more consistent with the construction of a porch than a screen. It is probable that the porch to the hall came from elsewhere, perhaps the parish church or even the chapel on the site.

VIII. Tree-ring dating

by I. Tyers

Nine cores were taken, of which four proved suitable for analysis, with 64–124 rings. Three of these cross-matched to form a 127 year chronology dated AD1185–1311. Since all of these end at the heart/sap boundary and the end-dates are 1308, 1309 and 1311 respectively, they clearly indicate felling between 1321 and 1363. The dated timbers were the north post from the open truss in the hall, the tie-beam in the truss between the hall and the cross-wing, and the cruck-like blade at the south-east corner of the service end. No material from the cross-wing was datable since none had more than 50 annual rings. Visual inspection indicated that the cross-wing was built of significantly faster grown and younger trees (Tyers 1995).

IX. Discussion

The suggestion that Southchurch Hall had been built by Richard, the most successful and notorious of the de Southchurch family, who died in 1294, or else by his son Peter, the last male heir of the family who died in 1309, has been shown by the tree-ring dating to be fallacious, illustrating the hazards of the simplistic association of buildings with historical evidence. Instead, a date of *c*.1321–1364 has been obtained for the building. This helps explain the discrepancy, emphasised in particular by Rackham, between the apparent wealth and status of Richard de Southchurch and the relatively modest character of the hall and the timber of which it is built. Nevertheless, aspects of the hall were designed for show and to impress. The hall offers a maximum of space unobstructed by aisles, something achieved by simply using long tie-beams. It is only a little less wide than Heybridge Hall, a 14th-century manor house, which was similarly built with cusped braces to the tie-beam and measured about 7.2m. The central open truss at Southchurch is in the shape of a round arch which is rather low (about 4m to the soffit of the tie-beam) and not as imposing as the pointed arches of some base-cruck and raised-aisle halls (*cf.* Stenning 1998).

The carpentry of the hall is consistent with this date, though in the past, of course, it was seen to fit the earlier dating proposed for the building. Scarf joints in the hall are of the simple splayed and tabled type (Hewett 1980, 134), comparable with those of the Cressing Wheat Barn built *c*.1257–80, but also found in later buildings such as Clavering Bury (1304) and Turners, Belchamp St Paul (1328/29, Walker *et al*. 1997, 231). However, notched-lap joints, which are a feature of these buildings and a characteristic of the archaic carpentry of the 13th and early

14th centuries, are not present in the hall. This could be interpreted to indicate a construction date around the middle of the century, by which time notched-lap joints seem to have gone out of use. The stud spacing is relatively wide as would be expected in a building of this date. The consistent use of arched bracing throughout the building is notable.

Other significant features are the soffit cusping in the hall, the double-jowled crown posts and the soffit jowls of the girts in the cross-wing. These are features which seem to be of national rather than vernacular usage during the early 14th century, but had a longer period of popularity outside south-east England. Similarly the problematic end truss of the service end with its cruck-like blades also seems to have more Kentish and Surrey than Essex parallels. Essex buildings with examples of these features generally have wealthy or prestigious owners, and at Southchurch Hall they must reflect the influence of Christ Church Canterbury.

5. The Finds

I. The small finds

by H. Major with contributions by D. Gaimster

Introduction

The great majority of the small finds were metal, with a few objects of bone and stone. These are presented in the catalogue by functional category, broadly following the categories defined by Nina Crummy for the medieval and post-medieval finds from Colchester (Crummy 1988). Building stone and quernstones are presented separately at the end.

There was a large amount of metalwork from Southchurch Hall, the bulk of it post-medieval, and the absence of any coin, token or jetton is remarkable. The ironwork had not been stored in optimal conditions and much of it was in poor condition, some completely disintegrated. Some items which might have been worthy of illustration could be described, but were too fragmentary to draw. During initial recording by the excavators, lists of all excavated metalwork were prepared, which formed the basis for the assessment report. Some of the material had been discarded after minimal recording, prior to the present writer's involvement in the project, much of it from modern contexts, but some apparently from medieval layers. This material has not been considered in the report. In addition, some of the ironwork seems to have been lost at a later stage, and has also been disregarded, although detailed descriptions of some pieces are available in the archive.

X-ray and conservation of selected objects, and preliminary cataloguing of the assemblage was undertaken by staff and students at the British Museum.

Medieval metalwork

There were relatively few metal finds from medieval contexts, and some of these were clearly of a later date, and thus intrusive (*e.g.* a 'dressmaker's' pin from layer MD6). The metalwork thus adds very little to our understanding of activities at Southchurch Hall prior to *c.* 1500.

The seven copper alloy objects include only one that is identifiable, a small barrel padlock case (layer MD8). The ironwork is rather more informative. Excluding the objects of uncertain function (39% of the total of 66 objects) and nails, the largest groups are tools (twelve objects) and equestrian fittings. The latter (six horseshoes and three spurs) are all from the gatehouse/garderobe area, suggesting that there may have been stabling in this area. Surprisingly, there were only six horseshoe nails from medieval contexts, half from the mound trenches rather than the gatehouse. Collection of nails appears to have been good, so the scarcity of horseshoe nails may be genuine.

The tools are a disparate group, and include two rare items, a gimlet and a small bench knife. Agricultural activities are represented only by a sickle blade and a probable billhook. Domestic and personal items are almost absent, being represented by a pair of scissors, an unusual fire rake (possibly not domestic) and a single buckle.

The lead found was predominantly scraps and offcuts from leadworking, probably in connection with the roof; one piece of sheet from SGR5 is probably flashing. The single piece of lead window came found in a medieval context was a post-medieval type and therefore intrusive, and the cames from post-medieval contexts included none of medieval form. This lack of evidence does not preclude leaded windows having been present, since lead is so easily reusable.

The scarcity of domestic or personal items is very marked on this site. Rural medieval sites in general tend to produce rather small metalwork assemblages, the material culture being poor compared to, say, the Roman period. The medieval farm at Stebbingford, for example, produced only four copper alloy objects; all, however, were objects of personal adornment (Major 1996, 151). The higher status site at Southchurch Hall should surely have produced a richer assemblage than Stebbingford, but various circumstances may have conspired to reduce the chances of retrieving medieval small finds. Only a small area of the medieval layers within the moat was investigated; the gatehouse and other buildings may have been kept reasonably clear of rubbish during their lifetime; and most domestic rubbish may have been disposed of outside the excavated areas.

Post-medieval metalwork

The value of the large post-medieval assemblage was tempered somewhat by the fact that the stratigraphy was not particularly good. This was particularly relevant to the ironwork, much of which was not intrinsically datable. In addition, the post-medieval material was the most likely to have been discarded during the preliminary recording, and quantitative analysis is therefore not necessarily accurate, although unlikely to be totally misleading.

The post-medieval material is catalogued below in some detail, even much of the 19th-century material, as it was considered important to present the entire range of finds. Despite the problems of lost and discarded material, and the stratigraphical uncertainties, this remains a particularly large and informative assemblage.

The assemblage was dominated by tools, fittings and horse equipment, much of which is likely to be 18th- or 19th-century in date, although none of the horseshoes were necessarily later than the 17th century, and, as with the earlier material, there were few horseshoe nails.

The proportions of objects within each function category were calculated, and are shown in Table 2, together with comparative figures from three other sites excavated by Essex County Council (bulked finds from various trenches at Cressing Temple, Major unpublished; Maldon Friary, Major 1999; Chelmsford, site CF16, Major unpublished). Cressing Temple is a medieval moated site which was a working farm until the 1980s. The Maldon and Chelmsford sites are included as examples of urban sites, which might be expected to

	Southchurch Hall	*Cressing Temple*	*Maldon Friary*	*ChelmsfordCF16*
Personal items	3	15	43	35
Toilet implements	0	1	0	0
Objects associated with textile working	1	34	15	33
Household utensils	7	1	9	2
Weights and measures	1	1	0	0
Objects associated with books	0.4	0	2	0
Horse equipment	28	8	0	6
Structural metalwork	1	2	0	0
Tools	15	3	9	12
Fasteners and fittings	28	15	19	12
Locks and keys	5	2	4	2
Objects associated with farming/horticulture	9	8	0	0
Weapons	2	9	0	0
Total no. objects	**282**	**220**	**47**	**52**

Table 2 Percentage of the copper alloy/iron assemblage from each function category (excluding nails and unidentifed objects), with comparative figures for the post-medieval assemblages from Cressing Temple, Maldon Friary and Chelmsford (site CF16, Moulsham Street)

provide a contrast to the two rural sites. In particular, it is evident that personal items form a much higher proportion of the finds from the urban sites, and objects to do with horses and farming are virtually absent.

It can be seen that for most categories, the proportions of objects at Southchurch Hall and Cressing Temple are not very similar. The large amount of material connected with textiles from Cressing consists almost entirely of dressmakers' pins, most of which came from one area of the site (the Walled Garden), and there is even less domestic material from Cressing than there is from Southchurch Hall. There is, however, a greater proportion of personal items, though not approaching that found at either of the urban sites.

Objects associated with agriculture or horticulture are perhaps rarer than might be expected on a site that was a working farm until 1922, less than 10%, although items associated specifically with horses form a far larger proportion of the assemblage. The low proportion of agricultural equipment is paralleled at Cressing Temple. The present writer asked Mr R. Martin, who worked on the farm for many years, what he thought might have influenced the relative lack of agricultural material. He identified a number of contributory factors: the farm was kept very tidy; any broken iron implements were sold to a scrap dealer, and were not kept on site; and the frugality of farmers in recycling material where possible. Domestic rubbish was disposed of away from the immediate area of the farm, and where material was disposed of through burning, this was also carried out away from the farmyard. These are all factors that may have applied to Southchurch Hall as well.

Two-thirds of the post-medieval iron and copper alloy came from the moat as opposed to the mound. In most function categories, a similar spatial distribution was observed, the principal exceptions being horse equipment (80% from the moat), household utensils (half from the mound), and fasteners and fittings (46% from the mound). The latter figure possibly reflects an origin for some of these objects in the farmhouse rather than the farm buildings. Within this category, however, there was no strong suggestion that any particular type of fitting was being discarded on the mound rather than in the moat, with the possible exception of staples. Two thirds of the scrap lead, which may have largely derived from work on lead fittings to the main buildings, came from the mound, although less than a quarter of the window cames did. The horse equipment from the moat was presumably being discarded from the stables known to have been located to the north of the moat.

Catalogue of small finds

Items of personal equipment
(Fig. 35)
There were surpisingly few items of personal equipment from the site. Most are post-medieval finds from the moat. The following objects are copper alloy unless otherwise specified.

Roman

1. (Not ill.) A Colchester brooch (Hull type 90; Crummy 1983, 12) in poor condition, pin and catchplate missing. The head is fairly sharply angled, with a short chord hook, and there is possibly knurling down the centre of the bow. Early to mid 1st century AD. Bag 159, Tr. 8, MD3

Medieval

2. (Not ill.) Iron fragment, probably a D-shaped buckle with a tongue. The full width is not present. L. 29mm, L. of pin 33mm. Bag 382, Tr. 18, GR5.

Post-medieval

3. (Not ill.) Safety pin with central wire hook attached. The maker's name is stamped on the back of the pin, but is now illegible. L. 45mm. C19/20. Bag 670, Tr. 42, MT2

4. (Not ill.) Button, with white metal coating. Slightly rounded top, bevelled edge and flat back, back loop missing. The type is late 18th to 19th century. Diam. 19mm. Bag 843, Tr. 48, MT4
(Fig. 35)

5. Simple strap end, possibly gilded, made from a strip with two rivet holes at either end, folded in half. One arm has now been bent back. Bag 1169, Tr. 59, MT6

6. (Not ill.) Small D-shaped buckle with traces of white metal coating. Probably fairly modern. L. 23mm, W. 18mm. Bag 874, Tr. 50, MT2

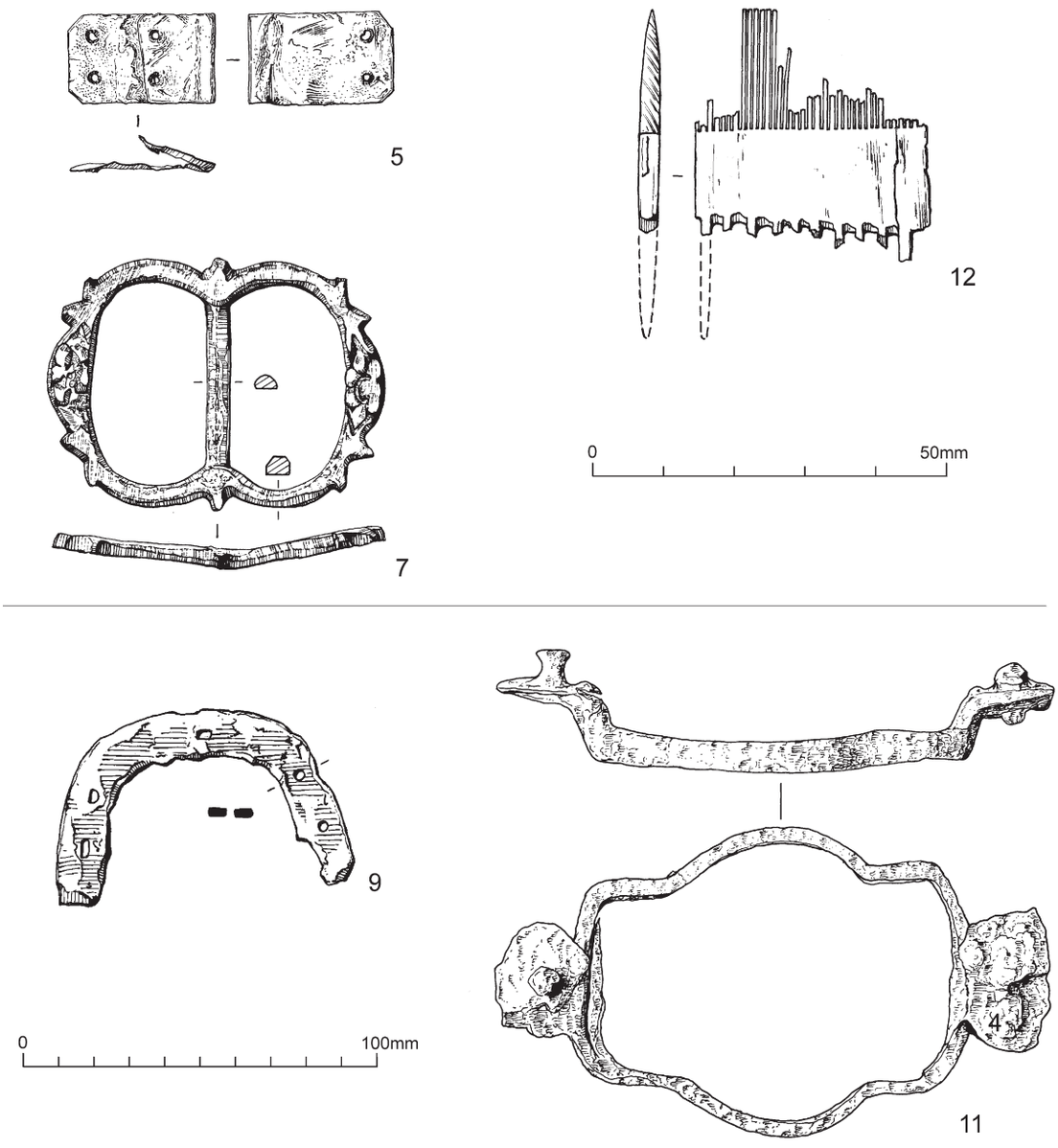

Figure 35 Small finds — personal equipment

7. Spectacle buckle with concave profile. Each end has a rosette, flanked by mouldings, a common motif on 16th/17th-century buckles. Similar buckles, though without the flanking mouldings, came from Chelmsford (Cunningham and Drury 1985, 43, nos 11–12), one from a context dated *c.* 1550–90, Colchester (Crummy 1988, 16, no. 1758), and Norwich (Margeson 1993, 28, no. 174), from an early 17th-century context. Bag 490, Tr. 11B, MT2

8. (Not ill.) A quite delicate iron double buckle, from clothing rather than harness. It has an offset crossbar, with the remains of the tongue. The ends were shaped, one as a double curve, the other probably single, and the top surface may have had moulding, but the condition is now too poor to see the details. L. 38mm, W. 33mm. Bag 200, Tr. 11, MT2

9. Iron boot iron, nearly complete. Slightly squared U-shape with five nail holes, two on each side and one at the toe. 18th century or later. Bag 209, Wall, MT2

10. (Not ill.) Curved bar fragment in poor condition, probably with nails through it. This is probably a boot heel iron, and therefore probably intrusive in its context, which is 13th to 14th century. L. 67mm. Bag 98, Tr. 3, MD3.

11. Iron patten ring with crinkled edge, the rivets still surviving in the terminals. The type is 17th/early 18th century (Goodall 1993, 60). Another possible patten fragment was recorded in the trench book as coming from the same layer, but was not located during cataloguing. Bag 818, Tr. 49, MT2

Bone comb, by D. Gaimster

12. Double-sided comb with fine and coarse teeth, broken off along length. Flat section, surviving edge faceted. L. 34 mm. Bag 874, T50 The straight, faceted edge is more in keeping with late medieval combs, than post-medieval examples (see Galloway 1990, 670).

Objects associated with textile manufacture and working (Fig. 36)

The following objects are copper alloy unless otherwise specified. The ‘dressmakers’ pins’ have been included here, though they were also used for fastening clothing and headgear.

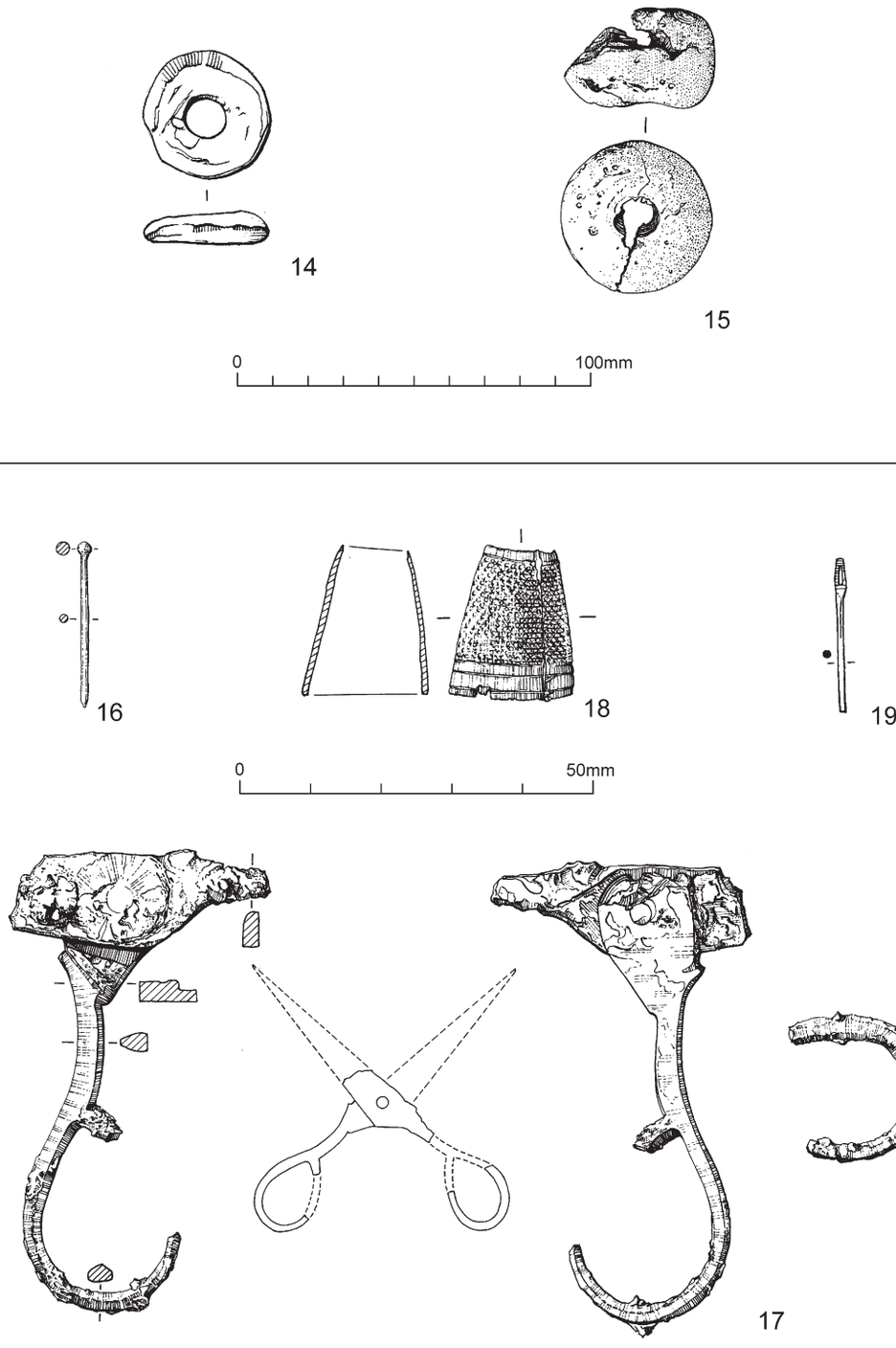

Figure 36 Small finds — associated with textile working

Medieval

13. (Not illustrated) Dressmaker's pin, with a small disc head, diam. 1.8mm. L. 25mm. The disc head, very similar to modern pins, suggests that this is intrusive, as medieval and early post-medieval 'dressmakers' pins' normally have wound wire or globular heads. Small objects such as this type of pin can easily fall down cracks in the ground and become falsely stratified. There is, however, a similar though larger pin from a 16th- to 17th-century context in Norwich (Margeson 1993, 13, no. 45), so it is not necessarily a particularly modern intrusion. Bag 295, Tr. 17, MD6

(Fig. 36)

14. Discoid spindle whorl made of hard chalk, surface somewhat eroded. Hard chalk was a material commonly used for medieval spindle whorls. Wt. 13g. Bag 58, Tr. 1, MD6

15. Cylindrical spindle whorl in baked clay, *c.* 75% present. The fabric is brown and well fired, with fairly sparse sand, and well finished surfaces. Wt. 44g. Bag 175, Tr. 9, MD3

Post-medieval

16. Dressmaker's pin with small ball head, diam. 1mm. L 23mm. Bag 306, Tr. 18, MT2. A similar pin came from Tr. 11B, MT2

17. Fragment from a small pair of scissors with a looped handle, part of the blade and a detached fragment of the second loop. This size of scissor was likely to be used for an activity such as needlework. Bag 81 (1), Tr. 4, MD2

18. Thimble, made from sheet metal, joined at the side, with machined pits. The top, which would have been separate, is missing, and the base has circumferential lines. This is a Dutch type 1 thimble, datable to *c.* 1620–50, a fairly rare type (Holmes 1988). Bag 1039, Tr. 57, MT6

19. Iron needle, point missing. The head is slightly broader than the shaft. Bag 922, Tr. 53, MT2

Items of household equipment (Figs 37–39)

Medieval

The chafing dish rim (no. 33) may be late medieval, but is more likely to be early post-medieval, as are the vessel feet (nos 35–36, below).

(Fig. 37)

20. Iron rake, well preserved, probably for use in an oven or fireplace of some sort. It is possibly not a piece of domestic equipment, but could have an industrial use. It has a long, rectangular-sectioned shaft with a damaged pyramidal finial decorated with incised cross-hatching. The blade is rectangular with curved shoulders. Bag 1169, Tr. 59, MT7

21. Scissors; iron with traces of white metal plating.The blades are triangular with pointed tips and a sub-D-shaped section. The handles are square in section with circular loops centred over the arms. The pivot has a washer on one side, probably copper alloy. They are very similar in shape to a late 14th-century example from London (Cowgill *et al*. 1987, fig. 75, no. 370). Bag 382, Tr. 18, GR5

Post-medieval

Iron

22. (Not ill.) Bar fragment, with a hook on the side. The bar probably continues past the hook. This is probably part of a small fire hook, a smaller version of Goodall 1993, 87, no. 557. L. 103mm, L. of hook 32mm. Bag 481, Tr. 14B, MD2

23. (Not ill.) Bow type corkscrew, with an oval loop handle, circular sectioned stem, thicker at the top, and a broken screw. This simple type of corkscrew is late 17th-century or later; it is very similar to an undated corkscrew illustrated by Perry (1995, 13). Surviving L. 98mm, handle loop 75x43mm. Bag 814, Tr. 48, MT2

24. (Not ill.) Meat skewer of modern type. L. 179mm. Bag 68, Tr. 3, MD2

25. (Not ill.) Part of a small pair of scissors. The blade tips are missing, and the base of the handles obscured by the coating. Part of one loop survives. L. 71mm. Bag 488, Tr. 29WX, MD2

26. (Not ill.) Ring, with a slender profile, possibly a furniture handle. Diam. 39mm. Bag 1069A, U/S

27. Well preserved fragment of a cast iron cauldron, with one angular lug handle, circular in section, remaining. Deep, slightly everted rim and globular body with vertical and horizontal ribbing. The use of cast iron marks it as post-medieval, possibly 18th-century. A fragment from a similar cauldron was recovered from a 19th-century context at Maldon Friary (Major 1999, 119, no. 14). U/S

Copper alloy and silver

Brass candle-sconce, by D. Gaimster

28. Conjoining fragments of repoussé sheet brass forming the backplate of a candle-sconce or bracket. Rectangular form with semi-circular top. Reconstruction in the British Museum produced an overall length of 320mm and width of 53mm. Bag 1151, Tr. 62, MT6

X-ray fluorescence Analysis in the Department of Scientific Research at the British Museum identified a zinc content of between 15 to 20 % which is consistent with brass artefacts of the 17th to 18th centuries. No traces of silvering were detected.

The backplate is divided into two zones, a highly decorated upper and a plain lower compartment acting as a reflector. The rim of the backplate is decorated with a band of Baroque-style gadrooned ornament. The upper zone is hammered out with a central fan-light radiating from a central boss, the junction between each flute surmounted by a trefoil-leaf ornament. The edge of the zone is stamped with a line of quatrefoil rosettes. The upper zone is separated from the lower compartment by a horizontal band of geometric jewelled ornament. The lower zone is undecorated save for a line of trefoil-leaf stamps around the edge. Three circular voids near the base of the scone show where the tray which supported the candle-nozzles was attached.

The form and decoration of the backplate is typical of brass or silver candle-sconces made in the Netherlands during the late 17th to early 18th centuries. They were imported into southern Britain in increasing numbers from the Restoration period onwards and became an important feature of lighting equipment in the public rooms of important and fashionable houses. For similar examples see Gentle and Feild 1975; Schiffer and Schiffer 1978, 129–130.

29. Candlestick, base missing. The socket has low circumferential mouldings, and there are two mouldings on the stem. Without the base, a close date is difficult, but an almost identical top came from a 17th-century context in Southampton (Harvey 1975, 268, no. 1882). Bag 200, Tr. 11, MT2

(Fig. 38)

30. Part of the blade and box of a candle snuffer. The triangular box has very crisply moulded decoration, with a head in a roundel at the base, and a stylised ?tree above. Bag 762, Tr. 46A, MD2

31. Part of the blade and rectangular box of a candle snuffer, with a simple low, longitudinal moulding on the top. Bag 81(4), Tr. 4, MD2

32. (Not ill.) Cap, stamped SAFETY EGG BOILER, and a cock and hen, together with part of a distorted sheet object, possibly the rest of the object. It looks roughly crown shaped, with elaborate cut-outs on one side and machine cut line decoration. 19th/20th century. Bag 673, Tr. 42, MT2

33. Chafing dish rim fragment. There are two copper alloy rivets through the side, perhaps for a separate foot, or to hold repair patches. Diam. *c*. 210mm. The date is late medieval or post-medieval. A rim from a similar (unstratified) dish was found at Betchworth, East Surrey (Williams 1996, 184, no. 137). The form is also found in pottery, occurring at Chelmsford as Form X1A (Cunningham 1985, 71), present from the 15th century, with a *floruit* from 1560–1630. The rim is bagged with five pieces of copper alloy sheet, two of which join, and which are irregular in shape except for one, which is square. All have punched holes, and two pieces have copper alloy rivets. They are likely to be vessel repair patches rather than original parts of a vessel, but it is uncertain whether they are from the chafing dish. Bag 238, Tr. 14A, MD2

34. (Not ill.) Sheet fragment with a curved, slightly thickened edge and two holes near the edge, possibly crudely punched rivet holes. This is probably a vessel rim, now very distorted, and likely to have been intended for reuse as scrap metal. The original diameter would have been *c.* 300mm. Bag 1143, Tr. 62, MT6

35. Vessel foot, damaged and probably distorted by heat. L. 74mm. Bag 44, Tr. 2, MD2C

36. Vessel foot. A fairly well modelled object, with a moulding between the leg and foot. Similar examples came from 16th- to 18th-century contexts in Norwich (Margeson 1993, 93 nos 568–9). L. 70mm. Bag 6, Tr. 1, MD2

Silver spoon with baluster knop, by D. Gaimster

(Fig. 39)

37. Silver spoon with quadrangular stem and baluster knop finial. Crowned leopard mark for London on the bowl, and three hallmarks along the underside of stem. Additional scratched marks along the upper and underside of the stem. Hallmarks: lion passant guardant mark for London; the distinctive date letter 'R' for 1554; and makers's mark (anonymous), a mullet within a crescent. Moat (unstrat.)

The maker's mark, a mullet within a crescent, was used by specialist London spoonmakers from c.1551 and continued until the 1620s (see Jackson 1922, 97–116 tables; How 1957, vol. III, pls 7–9). The baluster-knop is a rare type of finial which followed on from the Wrythen and Ball knops of the late 15th to early 16th centuries. They were made in increasing numbers from the mid 16th century, but do not appear to have survived in London after the first few years of the reign of Elizabeth I (see How 1957, vol. I, chapter II, pls 1–3 of section VI). It is possible that the spoon was originally part of a set of twelve given as a christening gift as was customary in the Tudor period. The rarity of so few complete sets of christening spoons from the period testifies to the common practice of dividing them between beneficiaries at death.

38. (Not ill.) Corroded dessert spoon, probably silver plated. Marked Mappin and Webb, which dates it as post-1858, when the joint company was formed. Bag 854, Tr. 50, MT2

39. (Not ill.) Tea spoon, silver plated, with nasty yellow corrosion present. The only parts of the legend on the back of the handle which are legible are SILVER and H in a lozenge. 19th/20th century. Bag 891, Tr. 51, MT1

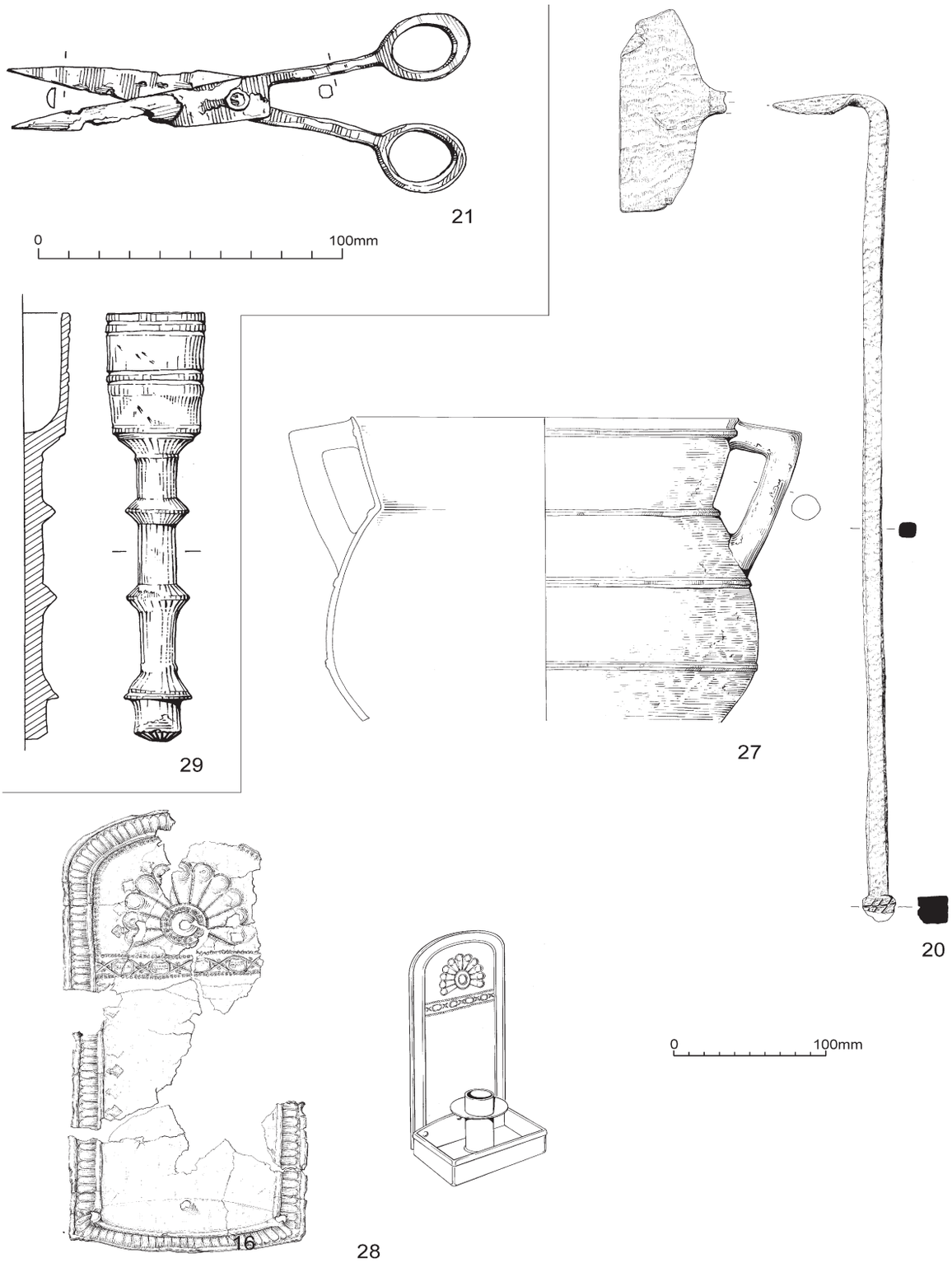

Figure 37 Small finds — household equipment

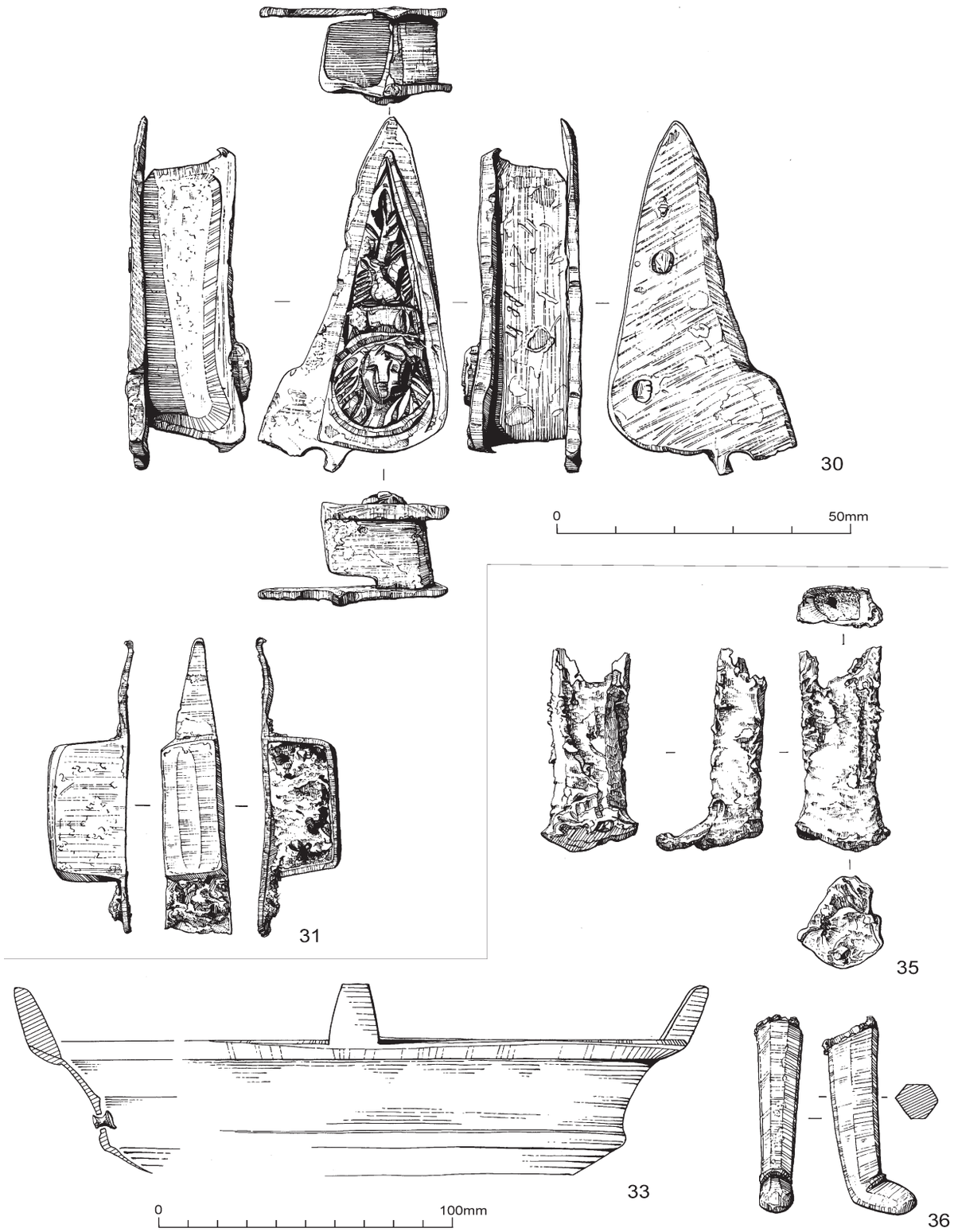

Figure 38 Small finds — household equipment

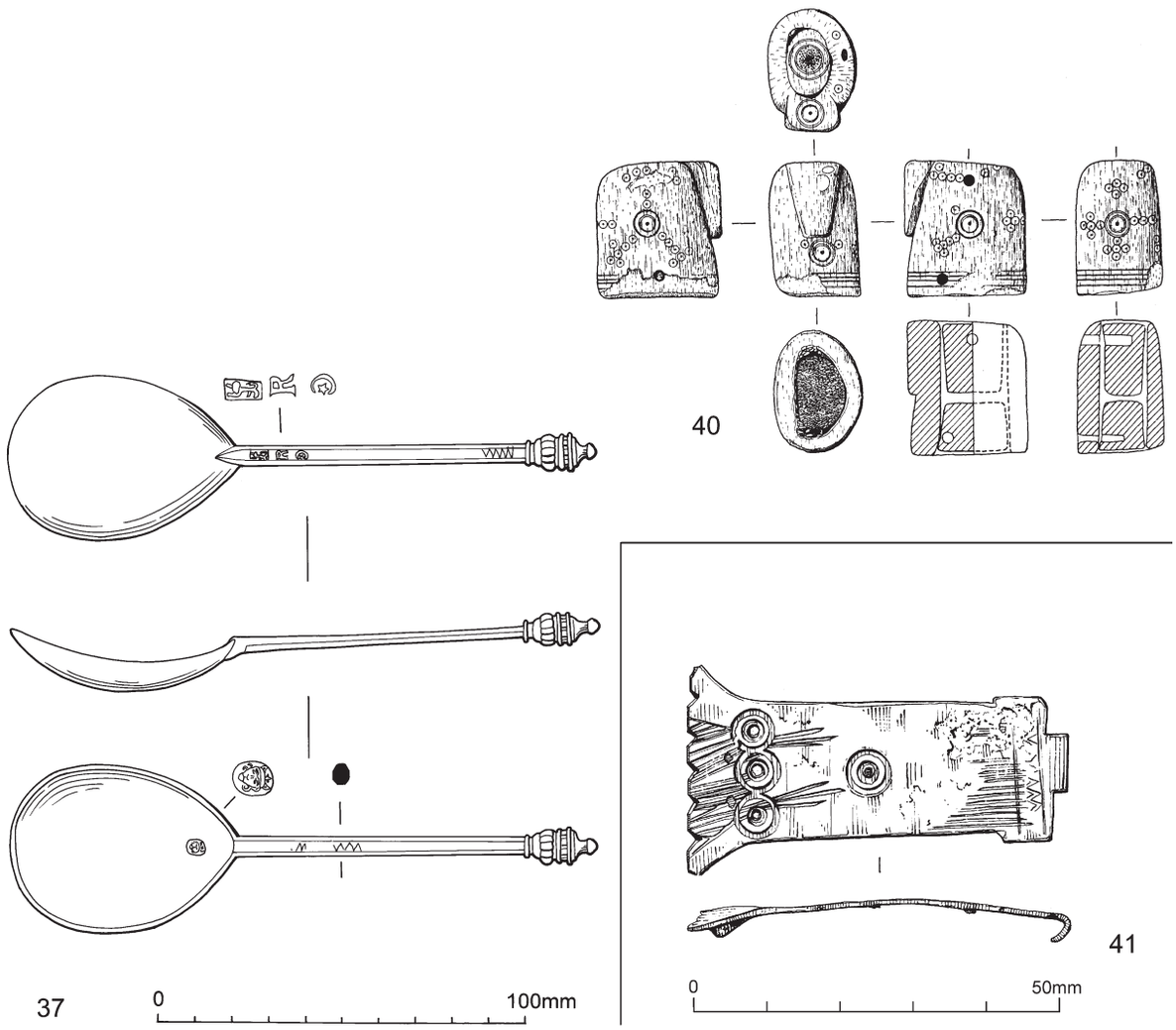

Figure 39 Small finds — household equipment

Bone

Chess-piece, by D. Gaimster
(Plate 4, Fig. 39)

40. Bone chess-piece in the form of a knight, sub-rectangular in section and slightly flattened on one side indicating the use of a cattle or horse metacarpal bone. The object is carved with a projecting stylized zoomorphic head projecting from the upper edge. The sides and upper surfaces are incised with ring-and-dot decoration. The chess-piece is made using a composite technique of removing the cancellous material from the core of a long bone and replacing it with plugs of solid bone at the top and at the base (see diagram). There are two horizontal holes, circa 2.5mm in diameter, at the top and bottom on one side of the object which both pierce the outer wall of the chess-piece and continue into the centre of the plugs. The holes were probably made for bone pins designed to keep the plugs in place. Ht. 37mm; W. 34mm by 24mm. Bag 623 T.27

Analysis by FIIR spectroscopy in the British Museum Department of Organics Conservation detected a dark brown porous material between the core and the plugs, probably the clay used in the packing of the plugs within the core.

The form of the chess-piece and the ring-and-dot decoration is repeated on other surviving examples of the mid 11th to 13th centuries, the game of chess being introduced into England at some point at the beginning of this period (MacGregor 1985, 137–139).

Plate 4 Bone chess-piece, scale in centimetres

Objects connected with reading and writing
(Fig. 39)

41. Book clasp. The shape and design are standard for the type, with 'feathers' at the flared end, and a combination of ring-and-dots and transverse zigzags. There were three rivets; the back plate is missing. This belongs to a group of clasps of very similar appearance, which may have been produced by a single workshop in the later 16th or early 17th century. All securely dated examples known to the author are post-1600. They occur widely in Britain, though may be particularly common in eastern England, and there are also examples from Europe (*e.g.* from Amsterdam; Baart 1977, 402, no. 751). Other examples from Essex include two from Colchester (Crummy 1988, 68), one from Maldon (Major 1999, 119, no. 23), one from Chelmsford (Cunningham and Drury 1985, 45) and one from Helions Bumpstead (Major 2001). Bag 761, Tr. 45, MD2 (15th/16th cent. +)

Locks and keys
(Figs 40–41)
The following are iron unless otherwise specified.

Medieval
Locks and keys form one of the more prolific categories within the medieval assemblage from the site. This is not unexpected, as locks and keys are amongst the commonest finds from medieval sites, and security would have been of some importance at this relatively wealthy establishment.
(Fig. 40)

42. Copper alloy; small, cast, barrel padlock case fragment, of Goodall's type C (Goodall 1990, 1011), decorated with a punched wavy line. There is a close, but unprovenanced, parallel from Essex (Wickenden 1993, 222, fig. 8.17). The date is likely to be 13th to 14th century. Bag 181, Tr. 9, MD8

43. A probable padlock key, of Winchester type C, with the bit set in line with the stem (Goodall 1990, 1022). It is a corroded flat strip, broken at one end and with an oval plate with a simple keyhole-shaped cut-out at the other. The handle is slightly thicker than the plate. If it is a padlock key, it must be residual in its context, as the type is medieval. Bag 887, Tr. 50, MT2

44. (Not ill) Hasp from a rectangular padlock, loop broken and the other end rather distorted. A similar hasp can be seen still in place in a 14th-century padlock from London (Egan 1998, 109, no. 285). Bag 374, Tr. 18, GR4

45. Very corroded mounted lock in a dished case with a flange; most of the mechanism survives. The keyhole and a rectangular hole for the hasp are present. The back plate is fragmented, and was fastened to the front with domed-headed rivets. A metal strip strengthens one edge of back plate. The key to this lock would have had at least a partly hollow shank. The type is a common medieval one; it is similar to an early 12th-century lock from Winchester (Goodall 1990, 1017, no. 3687), and roughly similar locks can be found from a later 16th-century context at Chelmsford (Goodall 1985, fig. 33, no. 55), Oxford Castle (Goodall 1976, fig. 28, no. 59), and London (Egan 1998, 109, no. 285). Bag 704, Tr. 37Ex2, MT7

46. Badly corroded key, with a fragmented oval bow and a moulded stem, hollow at the tip. The bit has a reversed "S" section and stops flush with the bottom of the stem. Bag 373, Tr. 18, GR4

47. Well preserved key with an oval or lobed bow and a solid stem, quadrangular in section. The top of stem is thicker, with flat sides bearing incised 'X's. The stem is stepped over the bit, and has three incised lines on the back, probably originally all the way round. The bit is asymmetrical, but incomplete. There are possible traces of white metal coating. Bag 373, Tr. 18, GR4

Post-medieval

48. (Not ill.) Padlock of modern type, with a D-shaped case and movable keyhole cover. Hasp missing. Probably 19th century. W. 95mm, ht. 82mm, depth 27mm. Bag 819, Tr. 49, MT2

49. Corroded rectangular lock plate fragment. There are remains of nails or rivets in three corners, and traces of a hole in the fourth. Bag 1022, Tr. 57, MT6

50. (Not ill.) Lock fragment? A strip, folded transversely in the middle to form a T-shape, with a triangular sectioned latch at one end. L. 281mm, section 19x4mm. Bag 590, Tr. 40, MT6

51. Possible lock bolt fragment, in poor condition, comprising a strap broken off at both ends with traces of a hole near the centre, with plate fragments perpendicular to the strip towards one end. Bag 200, Tr. 11, MT2
(Fig. 41)

52. Probable lock bolt, very corroded. One end is thickened, and there are two projecting pieces forming a notch on one side. Bag 1047, Tr. 60, MT2

53. (Not ill.) Rim lock; three pieces from the same lock, with a sheet iron case, now very holey. Most of the mechanism is missing. The front box has an oval copper alloy (brass?) keyhole surround and back guard. There are traces of possible moulded decoration surviving on the flange, and ?non-ferrous rivets. Part of the hole for the handle is present, with a small notch at the bottom. The flat back plate has a similar keyhole surround, back guard, and handle hole. The side plate retains the copper alloy bolt in a locked position. The edge is damaged and the latch missing. Front box 150x100mm, back plate 138x76mm; side plate; L. 109mm, W. 37mm; bolt L. 100mm. Post-medieval. Bag 489, Tr. 14B, MD2

54. (Not ill.) Fragmentary small rectangular ?mounted lock, comprising an open box with a flange. Part of the internal mechanism (or the key?, although there is no keyhole visible) is present. Possibly residual in its context. 65x60x18mm. Bag 792, Tr. 46B, MD2.

55. Badly corroded key, with an oval bow and a circular-sectioned stem with baluster moulding. There is a collar at the top of the incomplete bit, which has channels on both faces. The stem extends beyond the bit. Post-medieval. Bag 81, Tr. 4, MD2

56. Key with a kidney shaped bow (almost heart-shaped) with a solid shank, octagonal in section, and with two incised lines around the circumference of the stem under the bow. A similar line is at the top of the bit. The bit is symmetrical and the stem ends flush with it. This is an unusual feature, as the stem normally projects beyond the bit with this type of key. A 15th/16th-century date would be acceptable. Bag 470, Tr. 32, MT6

57. Corroded key. Oval bow, probably originally a closed loop, with a quadrangular sectioned stem stepped over the bit, and projecting beyond it. The bit is almost complete and roughly symmetrical. Bag 1170, Tr. 56, MT2

58. Key with kidney shaped bow and quadrangular sectioned stem, stepped over the bit and finishing in a small knob. There is a line round the middle of the stem. The bit is broken, but was probably symmetrical. A similar knobbed terminal is seen on a 16th-century key from Norwich (Goodall 1993, 162, no. 1294). Bag 631, Tr. 41, MT6

59. Well preserved key with a kidney shaped bow and circular-sectioned stem with a collar above the bit. The projecting tip of the stem has two shallow circumferential lines, now mostly flaked off. Most of the bit is missing. Bag 763A, Tr. NWC, U/S

60. (Not ill.) Badly corroded key fragment, bow missing, and with a collar below the bow. The hollow shank has a circular section, and ends flush with the bit, which is roughly symmetrical. The clefs are very shallow. Possibly medieval in date. Remaining L. 85mm. Bag 1021, Tr. 57, MT6

61. Copper alloy key, with a lozenge-shaped loop and an inverted conical moulding at the top of the circular-sectioned stem. The bit appears to have been melted, as it is now an irregular lump (this is not just an effect of corrosion), and the end of the stem is damaged. Bag 891, Tr. 51, MT1

Weights
(Fig. 41)

Medieval

62. Lead. Roughly finished square, flat, with bevelled edges. Wt. 227g. Bag 556, Tr. 37, MT7

Post-medieval

63. Lead. Cylinder with central hole, made from rolled sheet. Wt. 240g. Bag 928, Tr. 52, MT6

64. Lead. Cylindrical, quite well finished. Wt. 231g. Bag 242, Tr. 14A, MD2

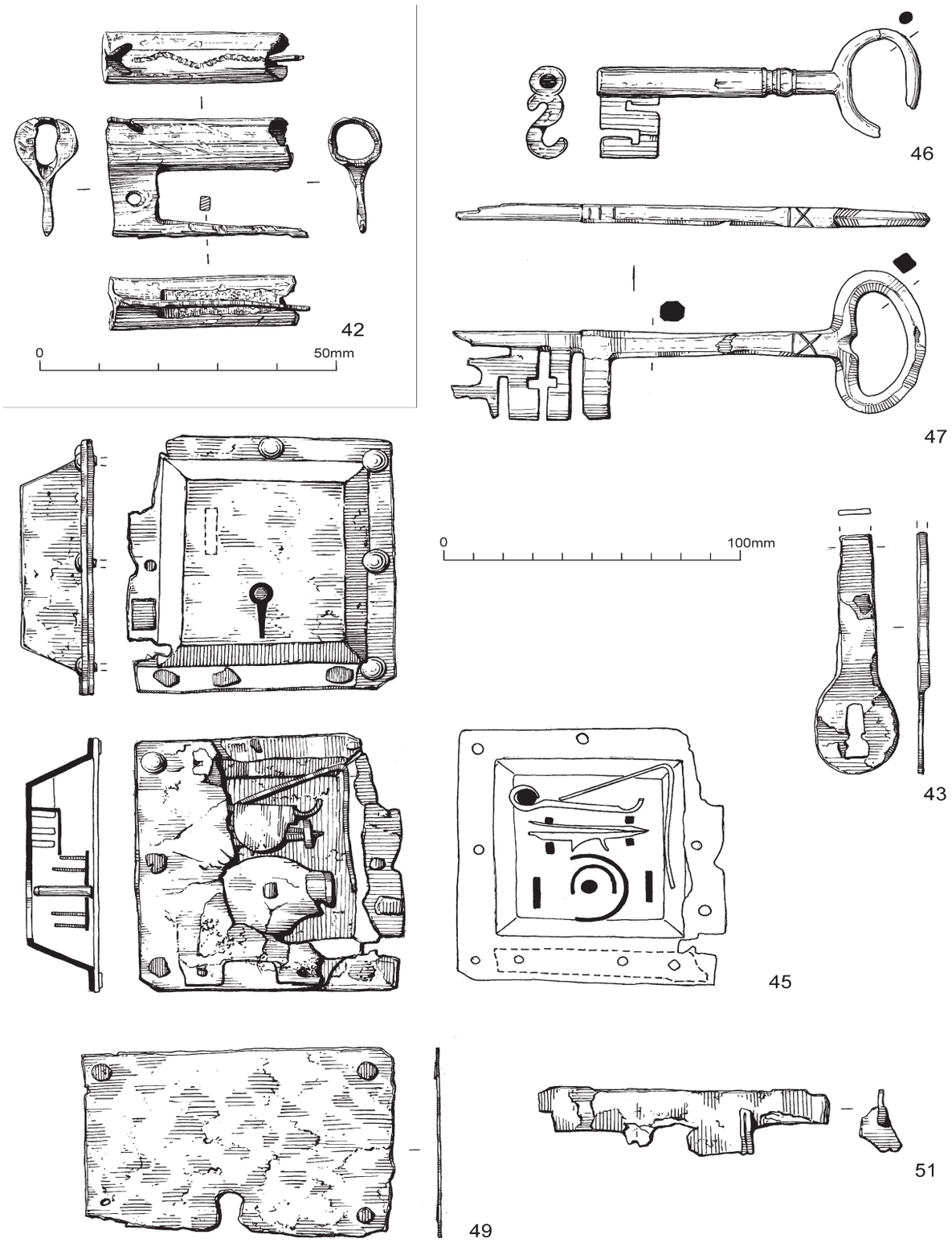

Figure 40 Small finds — household equipment

65. (Not ill.) Rectangular iron block in poor condition, possibly a weight. One end has slightly chamfered corners. 94x50x15mm. Wt. 306g. Bag 613, Tr. 41, MT6

66. (Not ill.) Triangular iron block of constant thickness, in the shape of an isosceles triangle, possibly a weight. L. 81mm, base L. 51mm, T. 21mm. Wt. 396g. Bag 764, Tr. 46B, MD2

Objects connected with horses and horse riding
(Figs 42–47)

Horse bits

All the horse bits are made of iron, and are from post-medieval contexts, although it is possible that some of the simpler forms are residual.

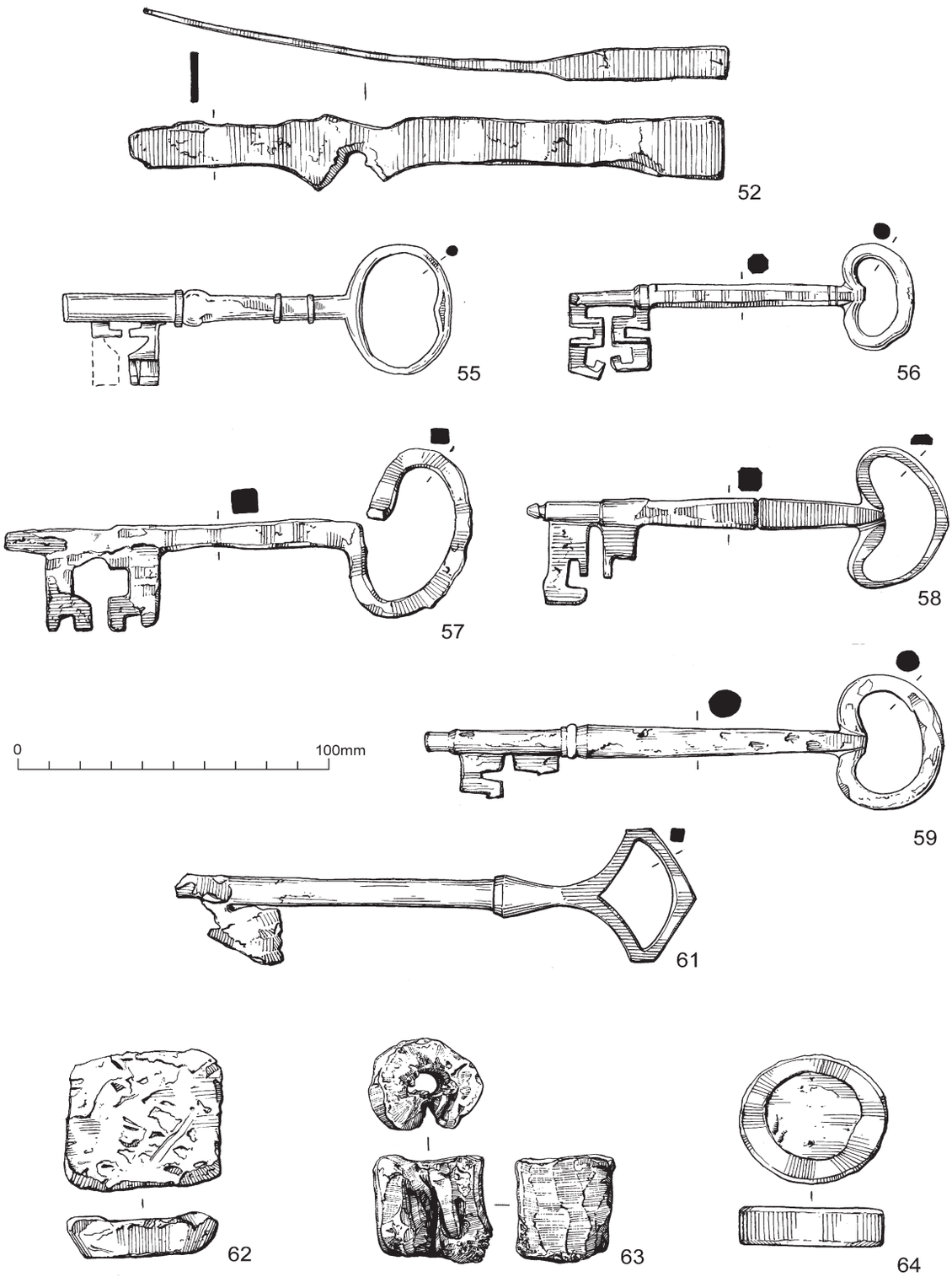

Figure 41 Small finds — household equipment

Post-medieval
(Fig. 42)

67. Conical mouthpiece from a snaffle bit, with a side ring attached; damaged, with the loop broken. The type is generally post-medieval, but can be a rare medieval find (see Clark *et al.* 1995, 47, for one from a late 13th- to14th-century context in London). There is an example from Basing House, attached to a curb bit of early 17th-century type (Moorhouse 1971, 47, no. 89), and one from Sandal Castle (Goodall 1983, 251, no. 244) from a context dated to 1645. Bag 674, Tr. 42, MT6

68. Horse bit cheekpiece and mouthpiece, in good condition. This is an example of an early type of jointed Pelham bit or curb bit for use with double reins. The mouthpiece is roughly quadrangular in section, possibly made from a rolled bar, and has a groove along the back. The top loop of the cheekpiece has a twisted or swivel hook; directly below the loop are two incised lines, and the back is hollowed below the loop. Just above the

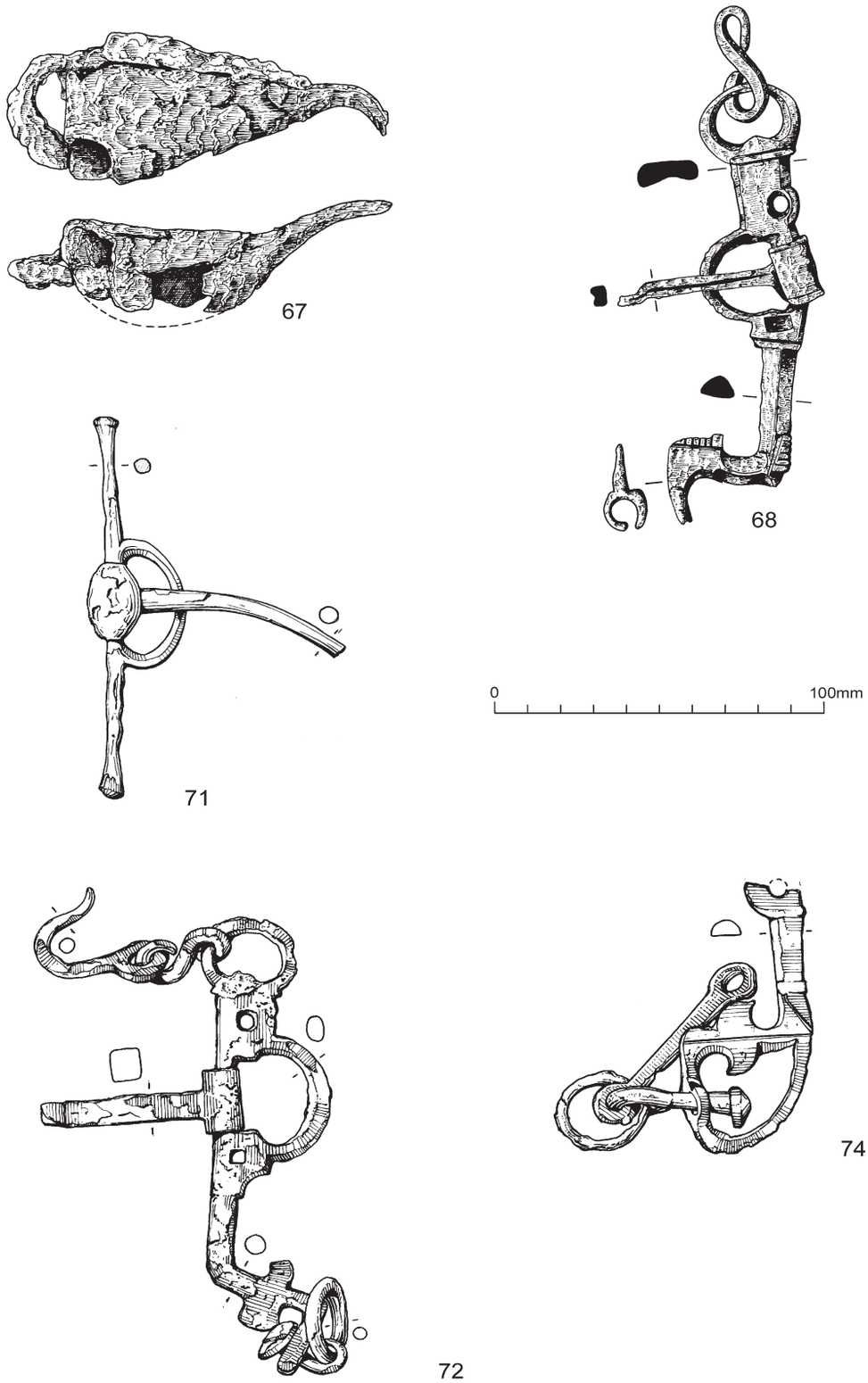

Figure 42 Small finds — horse equipment

centre loop is a punched hole; beneath is an oblong indentation with an incised line beneath that. The bottom hook has ridged decoration on top.

This bit has similarities with a bit from Battle Abbey (Geddes 1985, 171, no. 47). Both have linear decoration, a groove along the back of the mouthpiece, a slightly kidney shaped top loop with a hollow on the back below the loop, and similar round and oblong holes (the latter apparently non-perforating in the Southchurch Hall example, but obscured by the coating). The form of the bottom loop is somewhat different. The Battle Abbey example is from an early 19th-century context, but a similar sidepiece is cited from an illustration in Diderot's 18th-century Encyclopédie. Bag 1005, Tr. 57, MT6

69. (Not ill.) Fragment from the cheekpiece of a curb or Pelham bit, with part of the curb chain. In poor condition. Bag 1137, Tr. 62, MT5

70. (Not ill.) Fragment, possibly part of a curb or Pelham bit, but now almost entirely disintegrated. Bag 1137, Tr. 62, MT5

71. Snaffle bit side piece in good condition, full cheek with an oval ring. The ends of the cheek bars are flared. The mouthpiece is fixed to the cheekpiece by an ovoid loop, and the other end is missing. The type is Ward Perkins Type C (1940, 80), which he claims as a common medieval type, citing continental parallels. However, the type is very long lived, with similar bits still in use (see, for example, Britton 1995, 120), and it is possibly more common in the post-medieval period. Clark (1995) illustrates none of this type from medieval London, and where they are found elsewhere, they are frequently from the topsoil, suggesting a post-medieval date (*e.g.* at Lyveden (Steane and Bryant 1975, 127, no. 105)). More local parallels come from Waltham Abbey (Goodall 1978, 158, no. 23) and Angel Yard, Colchester (Crummy 1996, fig. 36.1), the former from topsoil, and the latter from a 14th- to 18th-century context. Bag 1136, Tr. 62, MT4

72. Side piece from a Pelham bit, now in rather poor condition with most of the surface missing. The upper loop retains an S-loop, with a hook attached. The bottom of the loop is hollowed on the back. The bottom loop has a ring attached to the bit by a round-headed nail, which has been passed through the loop and the point bent over. This is presumably a repair. There are traces of an incised transverse line below the central D-loop; any other decoration has been lost. The date is probably similar to that of the other two Pelham bits from the site, 18th- to 19th-century. Bag 908, Tr. 54, MT4

73. (Not ill.) Bar fragment, tapering slightly at each end, and slightly bowed. Probably a horse bit link with the loops missing. L. 103mm. Bag 938, Tr. 51, MT2

74. Horse bit; the bottom half of a curb bit side piece. The large bottom loop has a moulded wave-like top very similar to the bit from Battle Abbey cited for bag 1005 (No. 68, above), although this example is not so well executed. There is also incised line decoration and an indistinct moulding on the side piece. Attached to the bottom loop is a swivel hook linked to a plain ring and a bar with ring terminals. The wave-like motif used on the bottom loop of curb bits has a long history, similar motifs being illustrated in Blundeville's *The Fower Cheifest Offyces of Horsemanship*, published in 1565 (Dent 1987, 94–5). Bag 757, Tr. 45, MD2

75. (Not ill.) Part of the side piece of a Pelham bit, ends curved and broken, with a perforated semi-circular projection on one side. L. 100mm. Bag 5, Tr. 2, MD2

76. (Not ill.) Horse bit mouthpiece link. Slightly bowed rod with circular section. One end has a broken flat loop, the other is obscured by corrosion. Ward Perkins type II or III (1940, 82). L. 65mm. Bag 756, Tr. 45, MD1

Harness buckles

Most of the iron buckles from the site are probably from harness. They are mostly sturdy single buckles, with offset crossbars to facilitate the passage of the thick leather straps, and sheet rollers. Copper alloy buckles of similar form are included below.

The following buckles are iron unless otherwise specified.

Medieval

77. (Not ill.) Fragment from a trapezoidal or rectangular buckle, with a sheet roller. L. 57mm, no full width. Bag 637, Tr. 37, MT7

78. (Not ill.) Trapezoidal or rectangular buckle fragment, very similar to No. 77, bag 637. Both have a slight swelling on the side. They could even be non-joining parts of the same buckle (roller accounts for No. 77 being longer). L. 53mm, no full width. Bag 661, Tr. 37 ext, MT7

79. (Not ill.) Fragment from rectangular or trapezoidal buckle. Strip tongue with spear point. L. 52mm, W. 40mm. Bag 892, Tr. 45, MD6.

Post-medieval
(Fig. 43)

80. Rectangular double buckle in copper alloy, with an offset crossbar and an iron tongue, now heavily corroded. Bag 957, Tr. 53, MT1

81. Rectangular single buckle, copper alloy, with offset bar and notched tongue rest. Probably from harness. A solid buckle which looks fairly modern. Bag 207, Tr. 11, MT ?2

82. D-shaped single buckle, copper alloy, with offset bar. There are traces of corrosion from the missing iron tongue, and a notched tongue rest. Bag 968, Tr. 54, MT1

83. (Not ill.) Single buckle, gilt copper alloy. Rectangular, with the remains of the iron pin attached to the offset crossbar. 50x38mm. Bag 763, Tr. 45, MT6

Other harness accoutrements

Various pieces of chain and rings have been included in this category, although they are not all definitely from harness. Rings and chains can have a number of domestic and agricultural uses, but those included here most resemble the chains and links still attached to the definite items of horse equipment.

The following are iron unless otherwise specified.

Post-medieval

84. Hook, circular eye, with one broken S-link attached. Bag 589, Tr. 20, MT6

85. (Not ill.) Chain of two oval links, an S-link, and a hook. The links are roughly circular in section. The hook is roughly square in section, and has an eye and a T-bar across the point. Possibly from horse harness. Total L. 275mm. Bag 208, Wall, MT2

86. (Not ill.) Links and hook, probably from harness (the trench book implies this was found with the bit, bag 1005), comprising an S-link with a small swivel link at each end, and a broken ?S-link attached at right angles to the central link. L. 79mm. Bag 1005, Tr. 57, MT6

87. (Not ill.) Rectangular frame with an internal projection on one side, probably broken. Probably a strap slider from harness. 50x42mm. Bag 1224, Tr. 68

88. Copper alloy fitting, probably from harness, comprising a D-shaped loop attached to a parallel straight bar by two short crossbars. The loop has worn very thin. Bag 656, Tr. 42, MT2

89. (Not ill.) Rectangular copper alloy plate with bevelled edge, corners cut off. There were eight integral rivets on the back, now broken, and two letters stamped on the back, probably E and D. 78x65mm. An almost identical plate came from the same layer in trench 46B (bag 764). This is probably a decorative plate from heavy horse harness; similar plates may be seen on harness on display at the Wagon and Horses Public House in Braintree. Bag 253, Tr. 14, MD2

90. (Not ill.) D-shaped ring, probably from harness. W. 90mm, L. 76mm. Bag 202, Tr.11, MT2

91. (Not ill.) Copper alloy D-ring from harness. In very good condition, probably modern. W. 88mm, L. 81mm. Bag 200, Tr. 11, MT2

Cast copper alloy rumbler bells

92. Complete with iron pea. The top of the loop is faceted. The body is decorated with loops top and bottom, with a cross in a shield on one side of the slit only, a motif directly paralleled on a bell from Widford, Herts. (Poulton 1989). Bag 981, Tr. 51, MT3

93. A fragment from the lower half, with loops, and o W o in a semi-circle against the slit. This could be the product of one of two makers, with the initials WG and RW. Both can occur with circles either side of the letters. RW was Robert Wells of Aldbourne, Wiltshire (Brears 1981, 114), working *c.* 1760–1826, although in Brears' illustrated example, the circles have central dots, which are lacking on this bell. However, an RW bell from Virginia lacks the dots (Noel Hume 1970, 58), as does an example from Widford Rectory, Essex (collection of H. Young). WG with circles is found on a bell from Aveley, Essex (Doyle 1967, 19). At Williamsburg, Virginia, an example of WG (*sans* circles) occurs in a context dated pre-1735 (Noel Hume 1973, 11). Rumbler bells marked WG are relatively common in Essex; the writer knows of six examples, as opposed to one RW. There appear to have been two makers wuth the initials WG, one being William Gwynne of Aldbourne, born 1749 (Butler 2000, 27). The Williamsburg bell dates from before his birth, and must have been made by an earlier founder. The best we can say about rumbler bells marked WG is that they are 18th-century in date. Bag 267, Tr. 17, MD2

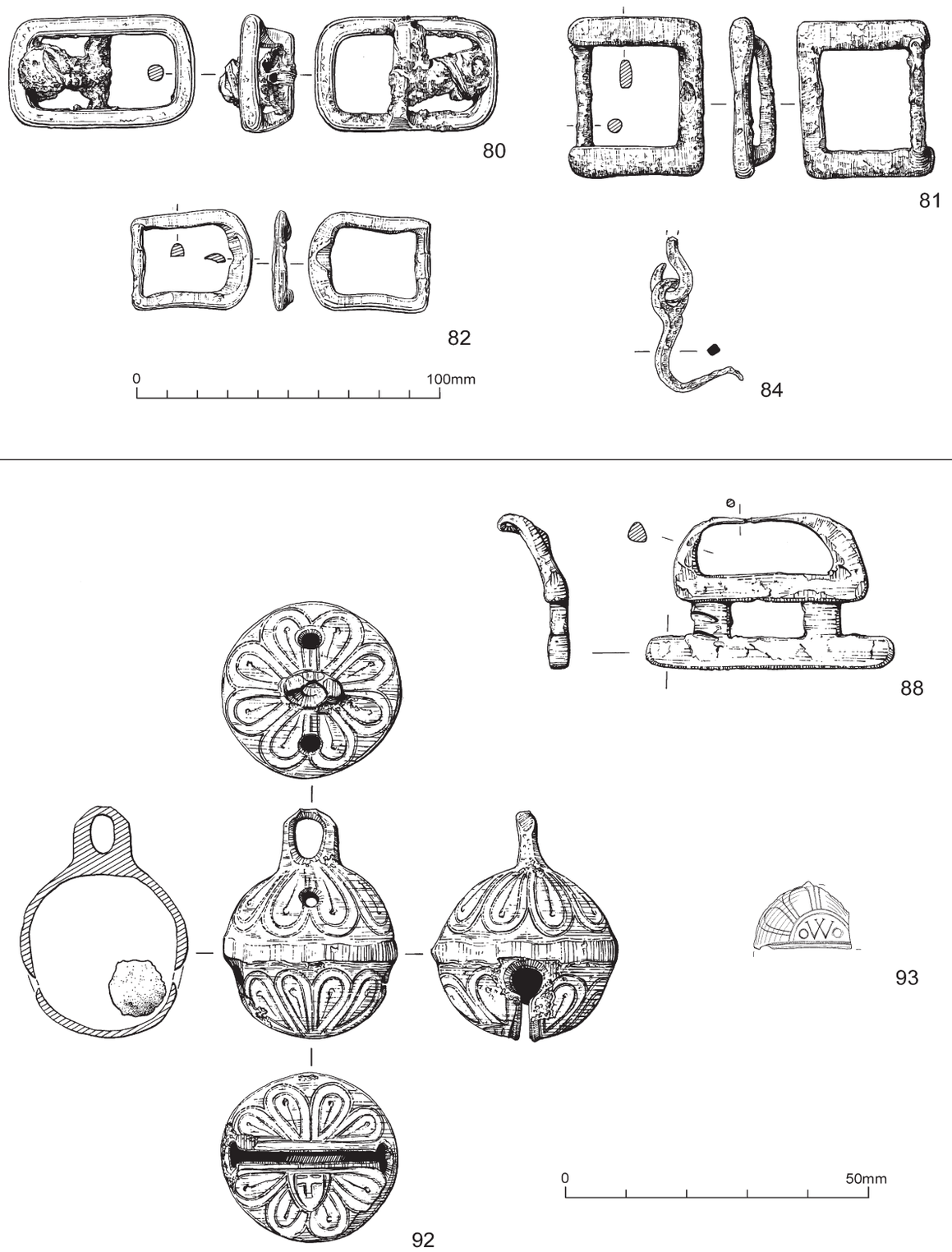

Figure 43 Small finds — horse equipment

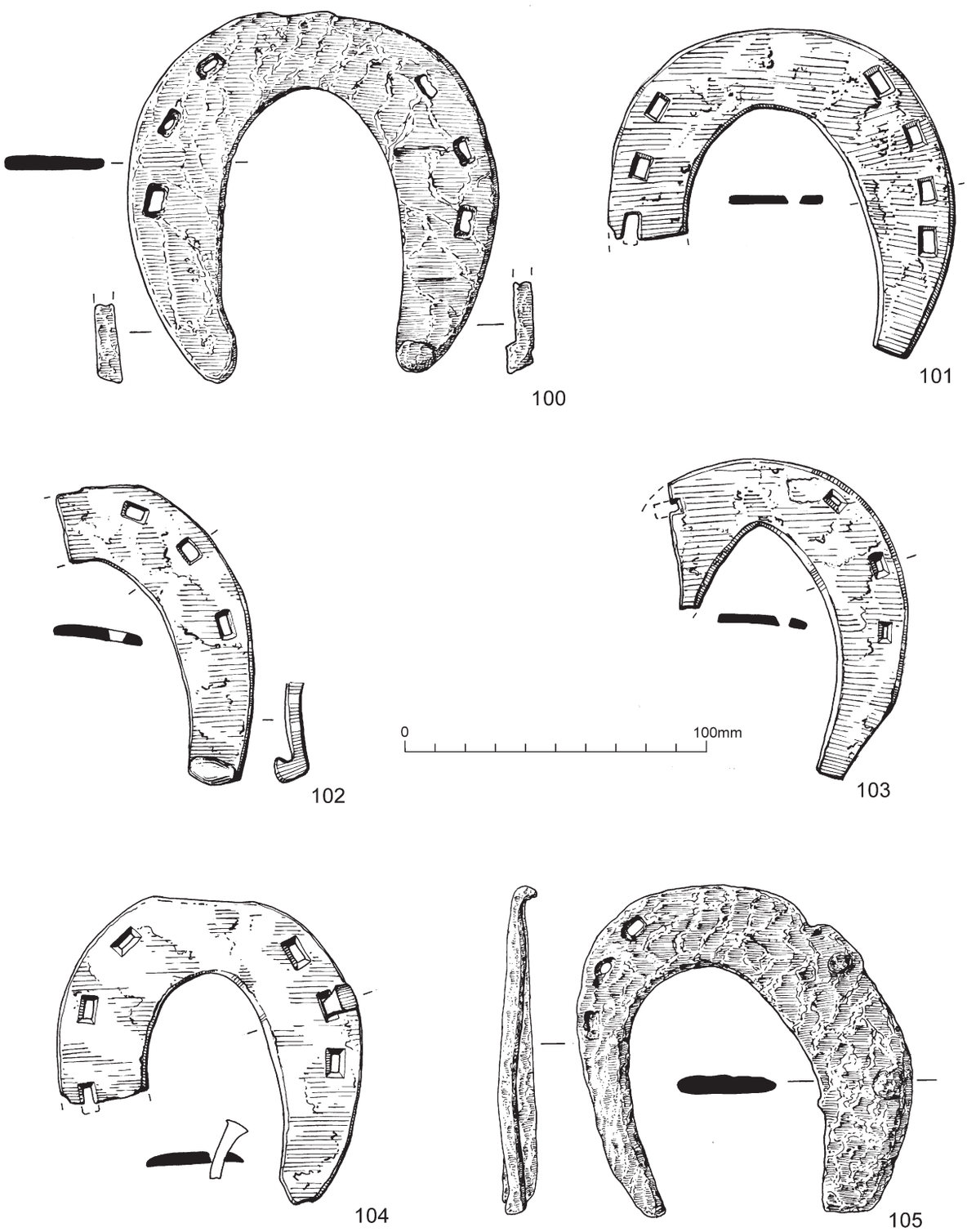

Figure 44 Small finds — horse equipment

Horseshoes

On the whole, the horseshoes are in very poor condition, with little detail surviving. Calkins, where present, generally take the form of a thickened heel rather than a distinctly fashioned calkin, although there are a few examples of L-shaped calkins present. Inner edges are rounded, bar one example with a pointed arched inner edge. Distinctively post-medieval forms are absent; there are no horseshoes with fullered grooves, and only one horseshoe has a possible key-hole shaped inner profile. Toe clips may have been present on some shoes, but the toes are now damaged. Earlier medieval forms with countersunk slots round the nail holes are also absent. All of the group could fit quite happily into London type 4 (Clark 1995, 88ff), a late medieval type probably continuing at least into the 17th century.

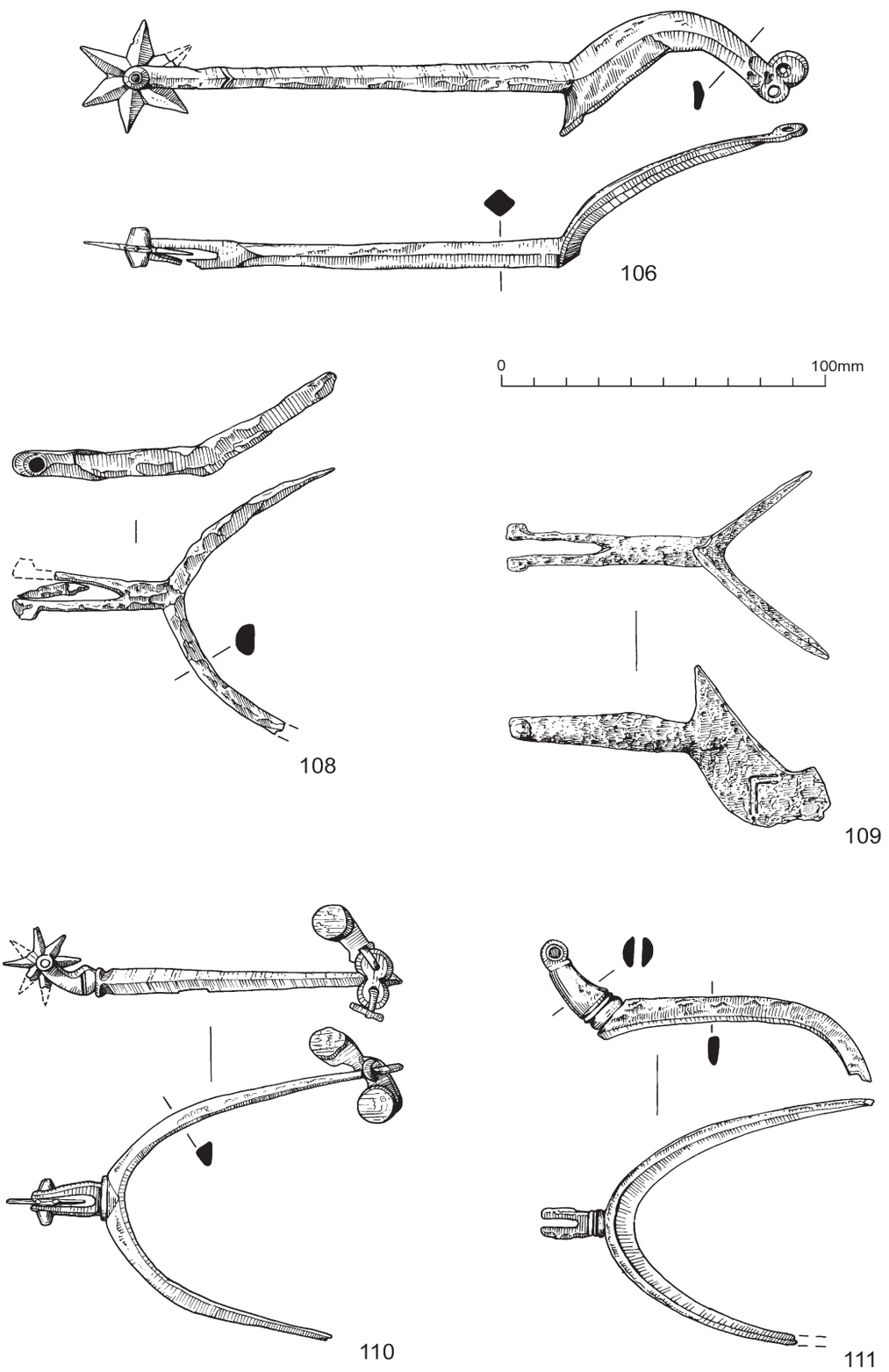

Figure 45 Small finds — horse equipment

Medieval
(not illustrated)

94. Horseshoe fragment, very corroded, with traces of three nail holes remaining, and nails present, probably fiddle-key, and thus probably late medieval. Bag 540, Spoil over SGR

95. Horseshoe toe fragment, very corroded. Possibly four nail holes. Max. W. of web 34mm. Bag 545, Tr. SGR, SGR3

96. Horseshoe, half plus fragments with four surviving nail holes, possibly round. The heel is thickened. Original L. *c.* 103mm, max. W. of web 29mm. Bag 373, Tr. 18, GR4

97. Horseshoe, heel fragment with one clear rectangular nail hole. Bag 299, Tr. 18, GH3

98. Horseshoe, toe fragment with traces of four rectangular nail holes. Max. W. of web 35mm. Bag 299, Tr. 18, GH3

99. Strip fragment, curved, with no surviving surface. Probably a horseshoe fragment; the 'toe' is slightly thickened, and there are two nails through the strip suitably positioned for horseshoe nails. L 99mm, max. W. 22mm. Bag 382, Tr. 18, GR5

Post-medieval
(Fig. 44)

100. Complete, 3/3 rectangular holes. One heel has a low calkin, and the toe has slight damage. Bag 580, Tr. 39, MT6

101. Fairly well preserved, and nearly complete. Remains of seven rectangular nail holes (3/4). Heels fairly narrow, with no calkins. Bag 1098, Tr. 57ext2, MT6

102. Half, in good condition, with three rectangular nail holes. The heel has an L-shaped calkin. Bag 1130, Tr. 59, MT6

103. Half, in fairly good condition, with angled inner profile. Four rectangular nail holes remain (1/3). The heel is narrow, with no calkin. Bag 1141, Tr. 62, MT6

104. Well preserved and nearly complete, with three rectangular nail holes on each branch, and one nail surviving, with an inverted pyramidal head. Bag 1143, Tr. 62, MT6

105. Well preserved and complete, with traces of six nail holes (3/3). One heel is flattened out, while the other is thick (9mm), and quadrangular in section. The ground surface may be rounded. There is a trace of a possible toe-clip. This shoe is almost identical to a 15th-century shoe illustrated by Sparkes (1976, 13), which is cited as a possible surgical shoe. Bag 202, Tr. 11, MT2

Not illustrated: four from MD2; four from MT2, one from MT3, three from MT4, two from MT5, seven from MT6, one U/S.

Spurs

The spurs are iron unless otherwise specified.

Medieval rowel spurs
(Fig. 45)

106. Complete half of long necked spur in fairly good condition, with traces of white metal plating. The side is very short and wide with a flattened D-shape section, curving under the ankle and tapering towards the figure-of-eight terminal. The neck is rectangular in section with a chevron in relief on each side near the rowel case. The large rowel has five remaining points of the original six, and there are projecting rowel bosses. The very elongated neck and curved sides of this spur mark it as 15th-century in date; it may be compared with a spur dated to the second half of the 15th century from Oxford Castle (Ellis 1976, 300, no. 102). U/S

107. (Not ill.) Disintegrated fragment, possibly a rowel box and rowel. Bag 382, Tr. 18, GR5

108. In poor condition, with half the sides missing and most of the rowel. The sides curve under the ankle, and may have had a D-shaped section. A short neck at the back continues into a large rowel case, with a prominent boss either side. The probable context is 14th-century, which would fit the date for the form of the rowel case, although it lacks the pointed back more typical of 14th- to 15th-century spurs. It could be as late as 16th-century by comparison with a similar spur from Winchester (Ellis 1990, 1041, no. 3868). Probably bag 382, Tr. 18, GR5

109. Corroded fragment, missing half of sides to terminals and rowel. The sides are broad and flat and curve steeply under the ankle. One side has traces of an incised double chevron pointing to the back. The back rises steeply up the heel, well above the neck, which is oval in section. Rivet heads remain on either side of the rowel case. It is similar in shape to a spur from London dated to the mid 15th century (Ward Perkins 1940, fig. 35, no. 5). Bag 463, Tr. 20, MT6

Post-medieval

110. Somewhat corroded, with traces of non-ferrous plating, and one terminal missing; similar to the spur from bag 559 (No. 112). The straight sides taper towards the terminals and have a D-shaped section, slightly angular on the outside edge. The figure-of-eight terminal retains the leather attachments, and is similar in shape to an 18th-century spur from Battle Abbey (Geddes 1985, 173, no. 52), with a small pointed projection in the middle. The neck is very short, with a hexagonal collar, and a short, curved rowel case with incised line decoration. Five points remain on the rowel. Bag 739, U/S

111. Fragment, rowel and both terminals missing; the sides are curved under the ankle and are D-shaped in section. The short neck has a moulding round it, and the rowel case is curved. There are traces of non-ferrous plating. The curved sides suggest a possible 16th-century date, although it is noted in the Battle Abbey report that curved sides were still favoured by some 18th-century riders (Geddes 1985, 171). Bag 702, Tr. 3Ex2, MT6.

(Fig. 46)

112. Fragment, very corroded, with traces of non-ferrous plating. The sides are straight and taper towards the ends, where one of the figure-of-eight terminals remains. The sides may be D-shaped in section and have an incised line running along the length, with a moulded transverse line at the terminal end, and probably a similar moulding at the rowel end. The neck is very short, with a low moulded collar, and the rowel case is curved. An 18th-century date is likely. Bag 559, Tr. 11B, MT2

113. The side is straight and slender with a round section tapering to the terminal, which retains a corroded stud. A star shaped rowel, originally with nine or ten points, is in the short straight rowel case. The terminal is possibly a single loop, which would be unusual on a spur of this date, although the X-ray is not very clear on this point and it may simply be broken. Bag 1180, Tr. 64, MT6

114. Heavily corroded, with the rowel and one terminal missing. It has straight sides, D-shaped in section, tapering towards the terminals. The surviving terminal, which is probably incomplete, is very unusual in form, with a single loop on the edge of the side of the spur, retaining a stud for fastening the lower leathers. The side of the spur continues beyond the loop. The straight rowel case probably has a moulding at the base. Bag 1044, Tr. 57, MT6

115. (Not ill.) Fragment in poor condition, with no trace of plating. It probably had curved sides, and has a short neck with a rowel box with a small boss either side. Bag 1212, Tr. 68

116. Copper alloy rowel spur. The rowel box is damaged, and has a short, slightly curving neck. The sides are straight, with moulded transverse bars between the sides and the heart-shaped attachment loops. An iron rivet survives in one of the holes. The type is 17th-century or later; similar spurs occurred in iron at Winchester (Ellis 1990). Bag 847, Tr. 48, MT4

117. Side of a copper alloy spur, with the attachment loop obscured by iron corrosion. There is a transverse bar across the top of the loop. Bag 898, Tr. 52, MT6

Stirrups

(Figs 46–47)

Three stirrups were found, all post-medieval in form, although only one was from a stratified post-medieval context.

118. Distorted but largely intact. The attachment for the leathers is a swivel loop set in a flat oval plate; the sheet sides taper to the top. The foot rest, now separated from the body, is composed of three thin, twisted bars running straight across. U/S, Lab no. 297

119. Well preserved, but with part of one side missing. The attachment for the leathers is a swivel loop set in a flat oval plate; the top of the loop is missing. The sides are branched, with a line down the middle, and the foot rest is similar to that on No. 118. 19th century? U/S, Lab. no. 266

(Fig. 47)

120. Stirrup foot rest with fragments of side loop attached on both sides. There is a similar footrest on a stirrup of 17th-century form from Basing House (Moorhouse 1971, 47, no. 82). Bag 231, Tr. 14, MD1

Curry-combs

Post-medieval

121. Curry-comb handle; iron stem with two branches curving off into round terminals, with traces of rivets. The stem has part of the wooden handle surviving, with one nail or rivet hole visible. Bag 1146, Tr. 62, MT6

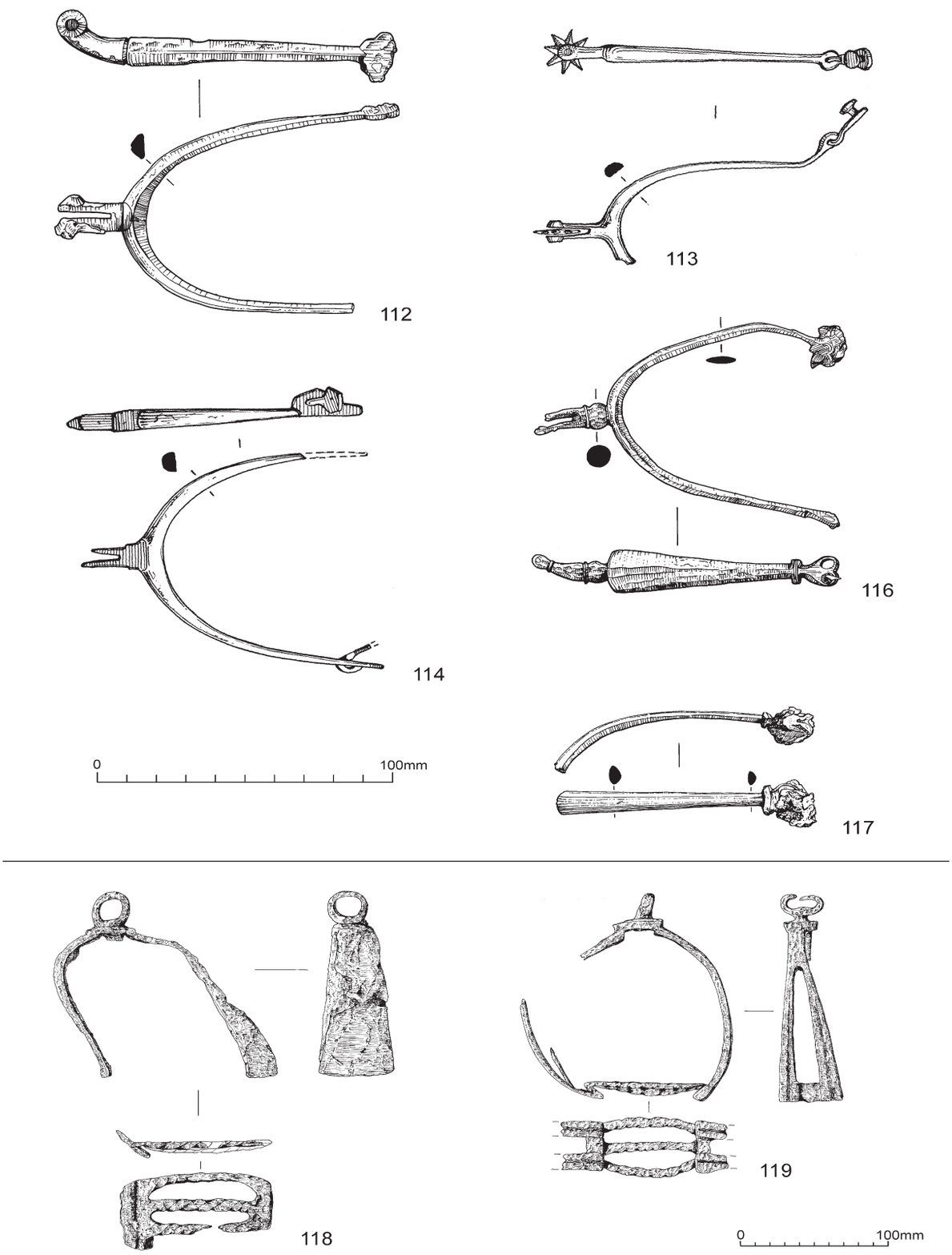

Figure 46 Small finds — horse equipment

122. (Not ill.) Curry-comb handle, in poor condition. The tang has the end bent over, and the other end is trifurcated. The central arm has a ?circular lobe. One of the end arms is broken off, and the other extends as a rectangular strip along the top of the comb, and is fastened by two rivets. L. 153mm, surviving W. 120mm, original L. of comb >180mm. U/S

123. (Not ill.) Curry-comb, in very poor condition. It has a tanged, bifurcated stem with disc terminals. The comb edges do not survive. Stem L. 182mm, W. across terminals 122mm, W. of comb 195mm. Bag 1148, Tr. 61, MT6

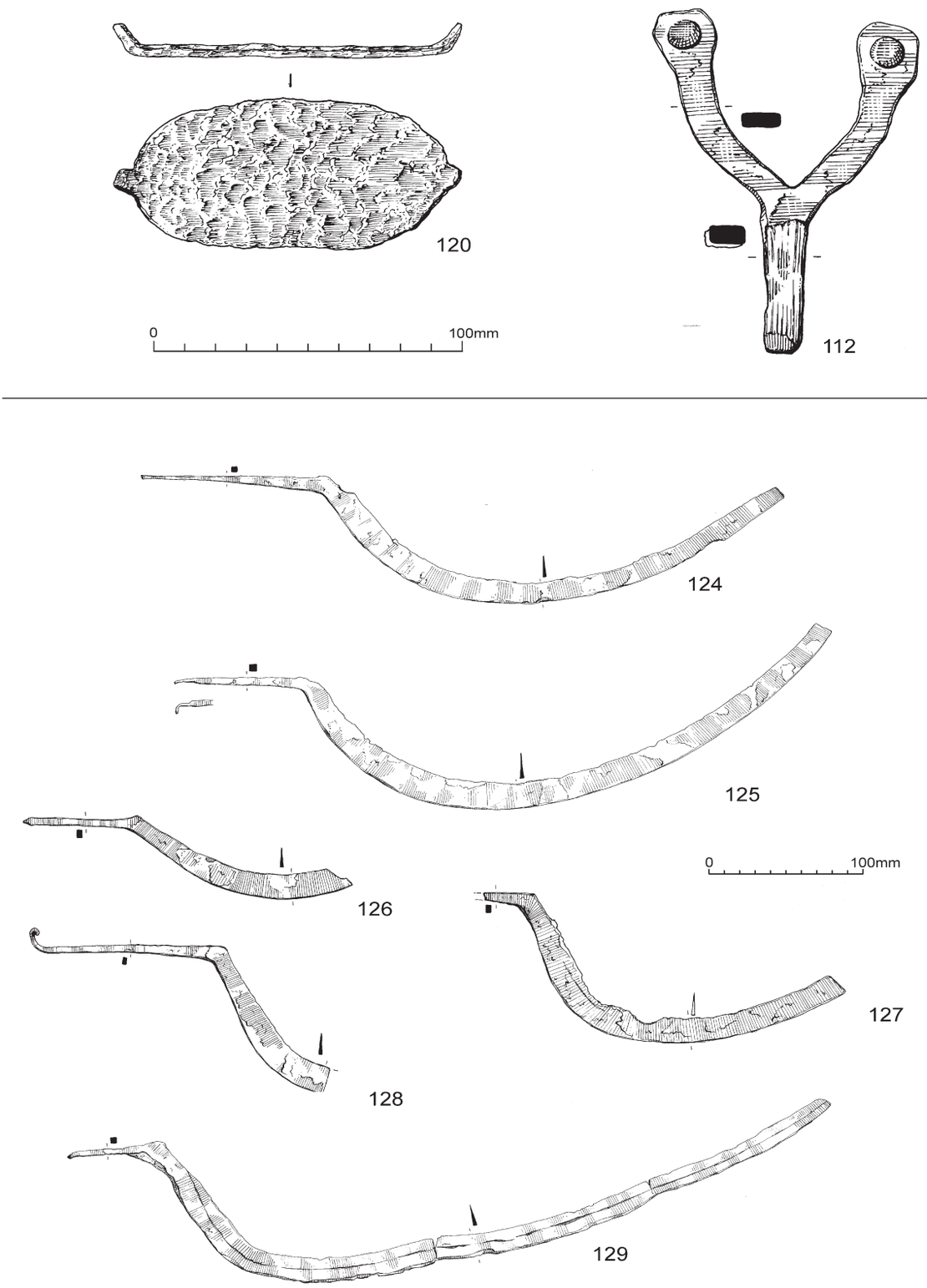

Figure 47 Small finds — horse equipment (upper), agricultural equipment (lower)

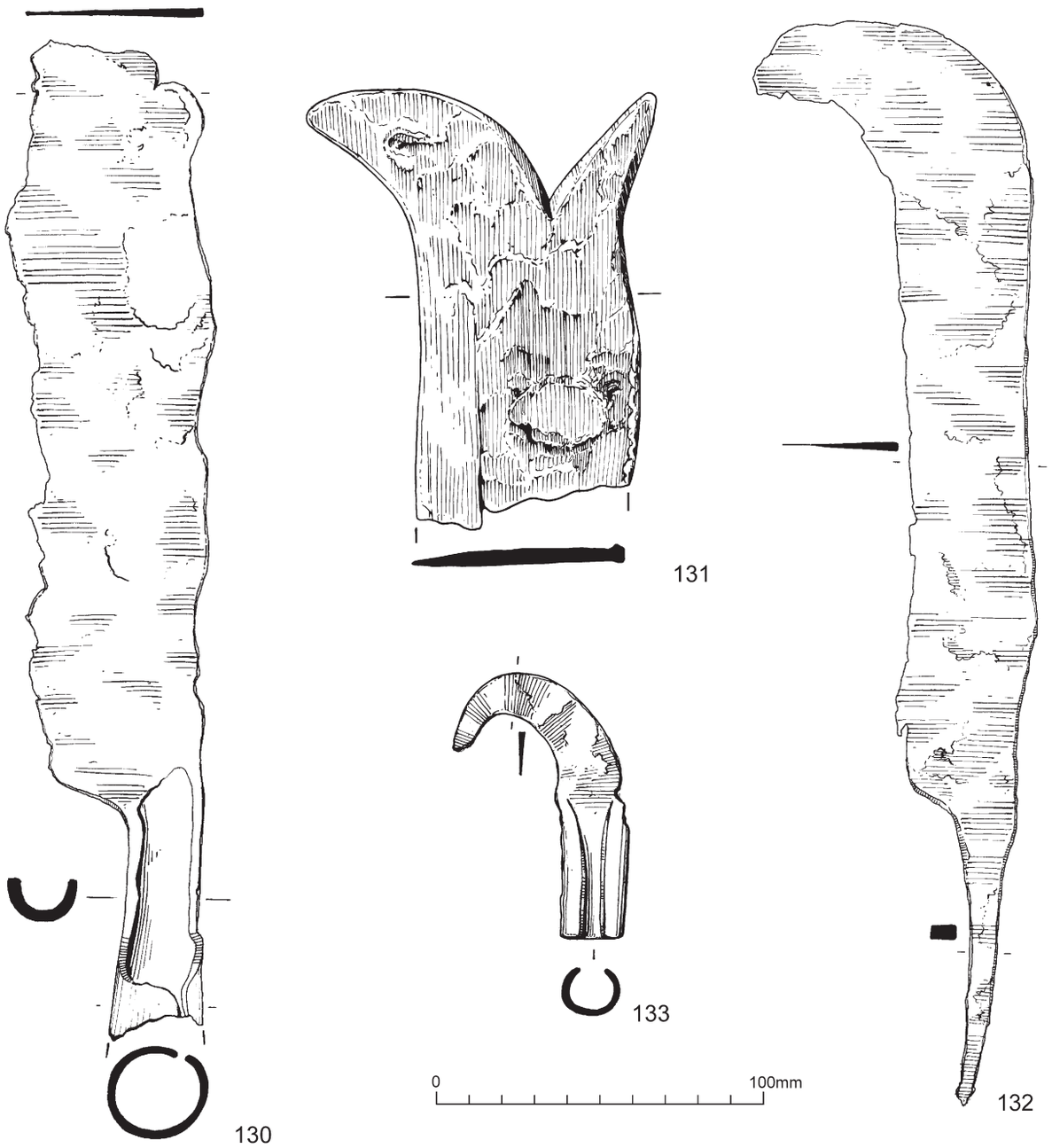

Figure 48 Small finds — agricultural equipment

Agricultural tools and objects
(Figs 47–49)

Virtually all the agricultural tools were from post-medieval contexts, the exceptions being two sickle fragments and two possible billhooks, one of which was not located by the writer. Given that there was a working farm at Southchurch Hall until relatively recently, the number of agricultural tools recovered seems rather low, a total of only twenty-nine objects, although some of the items listed under the general heading of 'tools' could have had agricultural uses, such as the shears, or some of the knives. Nevertheless, the arable aspects of the farm are poorly represented compared to the component to do with horses (eighty-one objects).

The agricultural tools are all iron.

Sickles

There were eleven sickles from the site, one of which was not located. Nine were from post-medieval contexts, and all except one were found in the moat.

124. Fragment with complete tang. Triangular sectioned blade, rectangular sectioned tang. Bag 869, Tr. 50, MT2

125. Nearly complete blade, very corroded. Triangular sectioned blade, rectangular sectioned tang with slightly bent terminal. Bag 671, Tr. 37ext, MT2

126. Tang and blade incomplete, very corroded and bent. Triangular sectioned blade and rectangular sectioned tang. Bag 908, Tr. 54, MT4

127. Very corroded, with little of the tang remaining. The blade has a triangular section. Bag 840, Tr. 48, MT4

128. Fragment of corroded blade with entire tang remaining. The blade has a triangular section and the tang is quadrilateral in section with a hooked terminal. Bag 666, Tr. 37ext, MT6

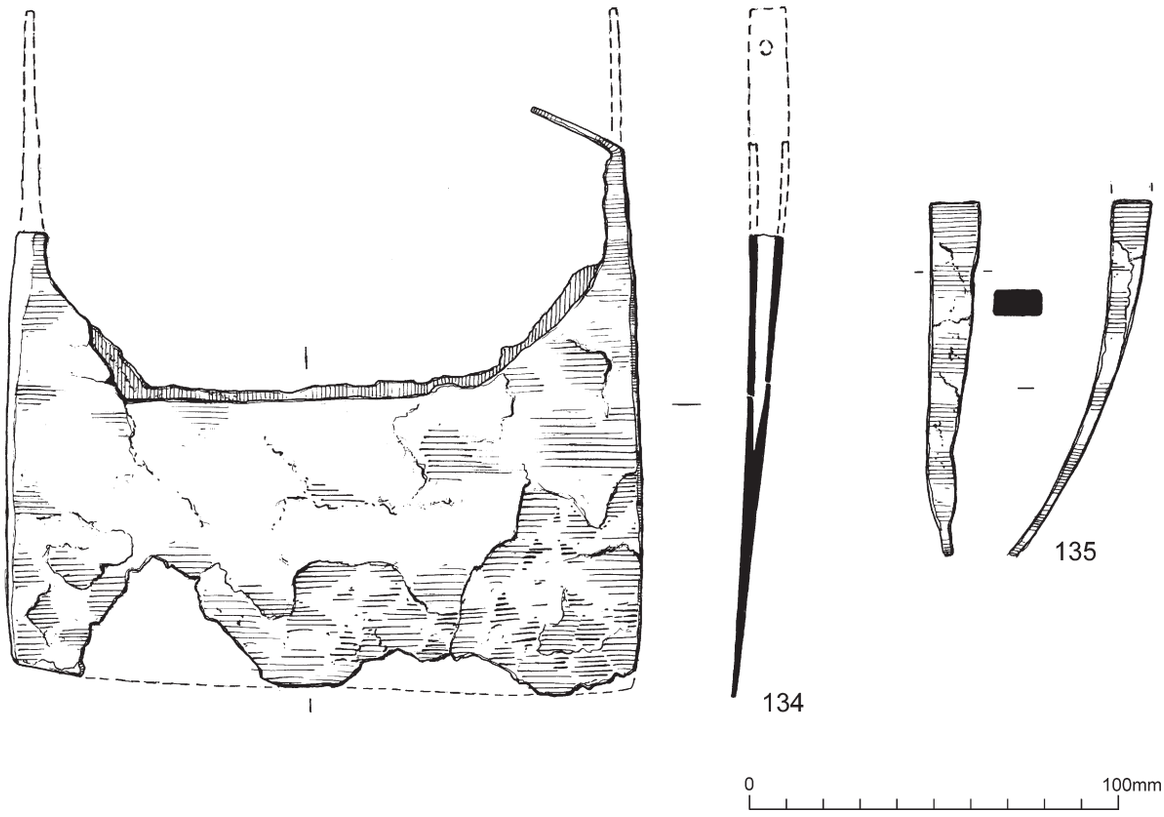

Figure 49 Small finds — agricultural implements

129. Nearly complete blade and tang, very corroded. The blade is cracked in two places and is now distorted. It has an incised line running down the middle of the blade, visible on the X-ray. Bag 569, Tr. 37, MT6

Not illustrated: fragments from MD2, MT4, MT6 and MT7

Other farm implements

(Fig. 48)

130. Socketed blade, probably a billhook. The socket is open, with flanges at the end formed into a collar with no visible nail holes. The blade back and edge are damaged, and there is no surviving spike. A similar socket occurs on a medieval billhook from Boreham (Major 2003a). Another possible billhook with a surviving, backward pointing spike, was recorded as coming from trench 18, GR4, but was not located. Bag 377, Tr. 18, GR3

131. Billhook point. The point is curved, with a spur at an angle to the back of the blade. Bag 443, Tr. 18, MT6

132. Hedging knife, nearly complete, with square sectioned tang. The end of the blade curves slightly. Bag 1182, Tr. SWL, MT6

133. Small socketed pruning hook. Tr. 18, 32 or 37, U/S

(Fig. 49)

134. Spade shoe, somewhat damaged. The side straps are incomplete, and would probably would have had nail holes. This is similar to examples found at Sandal Castle (Goodall 1983, fig. 5, no. 51) and Basing House (Moorhouse 1971, fig. 19, no. 55). Bag 1013, Tr. 57, MT6

Not illustrated: incomplete small shovel blade, MD4; spade fragment, MT2

Other agricultural objects

Five probable prongs from rakes or harrows were found, one of which is illustrated. All were unstratified, or from post- medieval contexts. The other unpublished material is all 19th- or 20th-century, and mainly consists of fragments from machinery. Some of this came from trenches quite close to the present house, and could be from, for example, lawn mowers, and not connected with agriculture as such.

135. Probable tooth or tine from a rake or harrow. Bag 631, Tr. 41, MT6

136. (Not ill.) Oxshoe. Fragment with four square holes visible. Bag 574, Tr. 39, MT6

Tools

(Figs 50–53)

The following tools are iron unless otherwise specified.

Knives

Medieval

(Fig. 50)

137. Nearly complete, with a whittle tang, very corroded. The back of the blade is slightly concave and the tip is pointed. A similar knife (No. 159, not illustrated) came from trench 4, MD1. Bag 374, Tr. 18, GR4

138. Very corroded incomplete large knife blade with whittle tang; the blade back curves up from the tang, and the tip is missing. Bag 381, Tr. 18, GR4

139. Very well preserved, with a whittle tang, one-piece bone handle and gilt copper alloy terminal cap. The shoulder plates are probably iron, and are attached with a white metal solder. There is a cutler's mark on the blade, a six pointed star. The blade is narrow and straight, with the tip missing. Bag 1169, Tr. 59, MT7

140. Nearly complete, with a scale tang with four rivet holes, well preserved. The blade is straight backed with a pointed tip. A 15th-century date would be appropriate; *cf.* Cowgill *et al.* 1987, 102, no. 269. L. of blade 137mm, L of tang, 85mm. Bag 1132, Tr. 59, MT6

Not illustrated: probable knife point, SGR3; probable scale tang from knife with wooden handle, GH4.

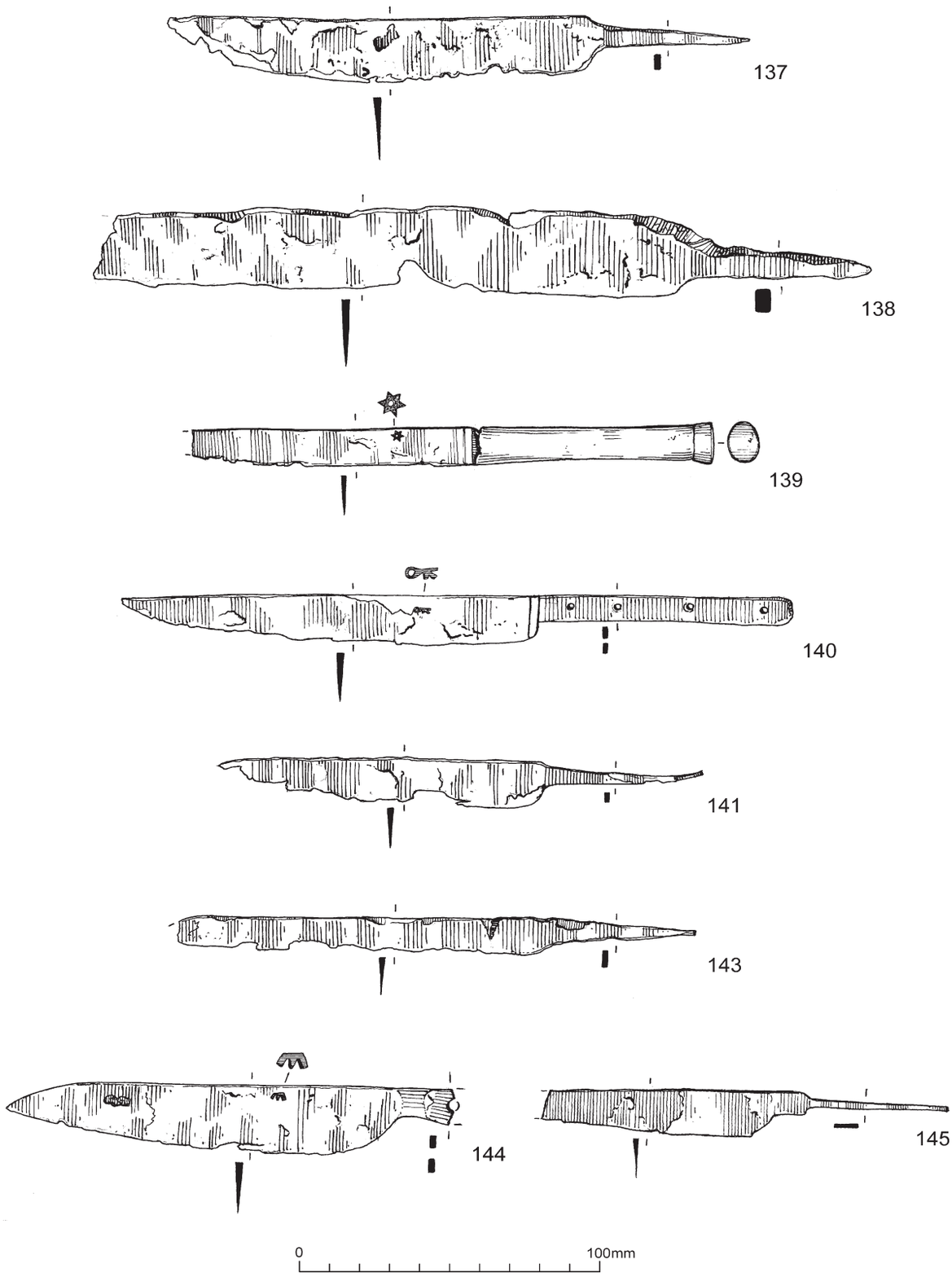

Figure 50 Small finds — knife blades

Post-medieval

The knives are listed in roughly stratigraphic order, with the earliest levels first.

141. Very corroded blade fragment with a complete rounded whittle tang. The cutting edge of the blade is damaged. Bag 638A, Tr. 41, MT6

142. (Not ill.) Fragment of a whittle tang with a tapering blade. There are traces of a bone handle. Surviving L. of blade 35mm, max. W. 23mm; tang L. 16mm. Bag 455, Tr. 18, MT6

143. Nearly complete straight-backed blade with a whittle tang. The tip is missing. Bag 600, Tr. 20, MT6

144. Nearly complete corroded blade with a short solid bolster and a broken scale tang with one rivet hole. There is a maker's mark, possibly an 'E'. Bag 1015, Tr. 57, MT6145.

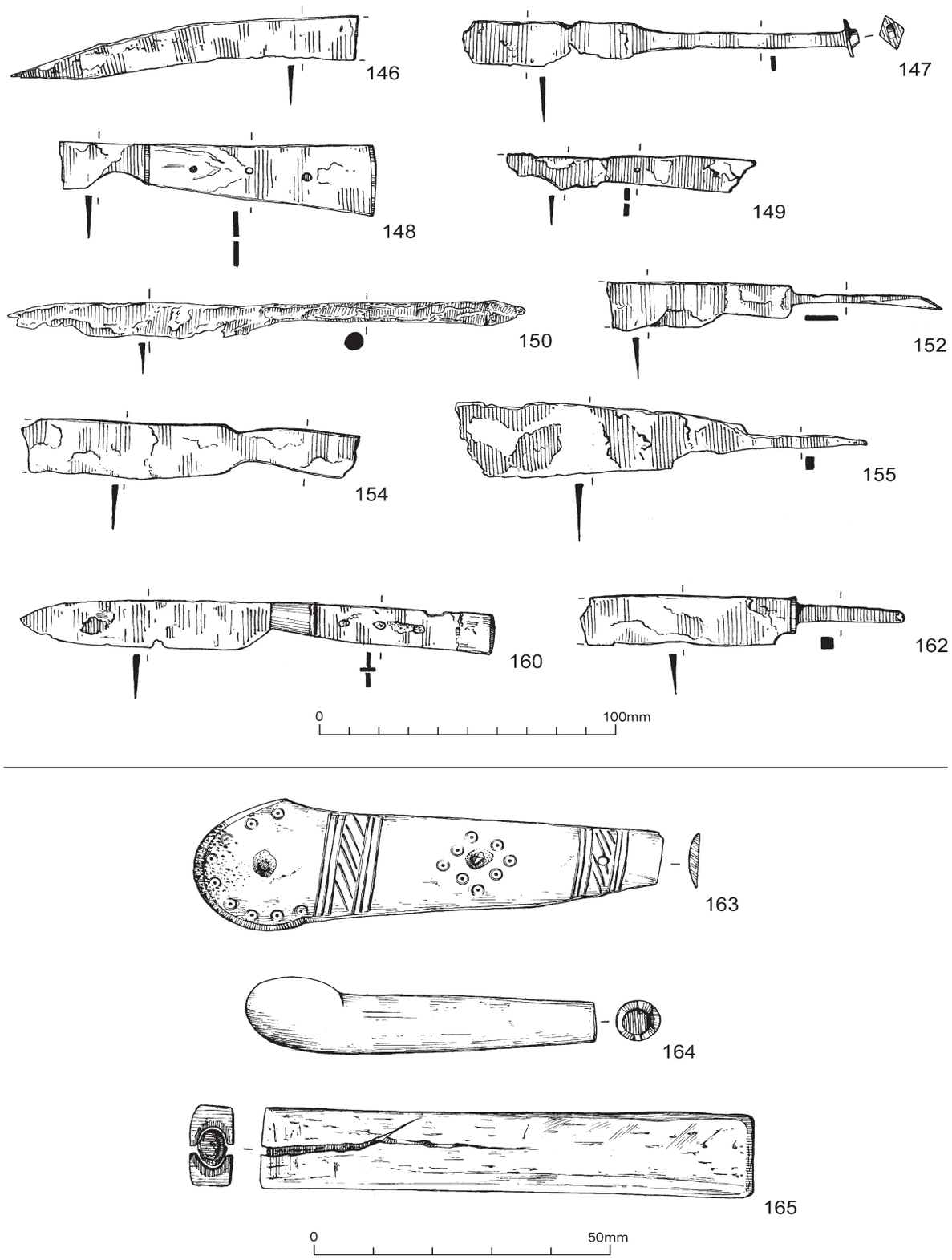

Figure 51 Small finds — knife blades and handles

Very corroded straight-backed blade fragment with a short solid bolster and a narrow scale tang perpendicular to the plane of the blade. There are three rivet holes present, *cf.* bag 1137 from MT5. The form of the tang is unusual, but is paralleled on a single knife from Norwich (Goodall 1993, 133, no. 893) from a context dated 1650–1700. Bag 1098, Tr. 57ext2, MT6

(Fig. 51)

146. Badly corroded blade fragment with a very pointed tip. There is a blue-green deposit on the blade due to the burial conditions. Bag 1158, Tr. 59, MT6

147. Very corroded incomplete blade and complete whittle tang, with a diamond-shaped iron handle cap. Bag 1145, Tr. 62, MT6

148. Solid bolster, with a tapering scale tang with three iron rivets, traces of a wooden handle, and an oval wooden end cap. It is

similar to a knife from Norwich, from a context dated 1600–1650 (Goodall 1993, 133, no. 890). Bag 1143, Tr. 62, MT6

149. Fragment of a blade with a scale tang, one rivet hole surviving. It has a very short solid bolster, just a swelling at the end of the tang. Bag 565, Tr. 38, MT6

150. Nearly complete blade with a solid, tapering handle, circular in section, with a beaded terminal. This is a delicate knife, very similar to one from Norwich, from a context dated 1650–1700 (Goodall 1993, 133, no. 894). Bag 1121, Tr. 39ext, MT6

151. (Not ill.) Knife blade fragment, probably whittle tanged. Straight back, tapering to a slightly rounded point. L. 86mm, max. W. 16mm. Bag 730, Tr. NWC, MT6

152. Extremely corroded fragment of blade with a bolster, probably rectangular in section, and a scale tang perpendicular to the plane of the blade, with two surviving rivet holes. It is somewhat similar to the knife from bag 1098 (No. 145, above). Bag 1137, Tr. 62, MT5

153. (Not ill.) Knife fragment, in poor condition. Straight backed blade, probably with a solid bolster. L. 76mm, max. W. of blade 15mm. Bag 847, Tr. 48, MT4

154. Complete blade, with an incomplete scale tang with no sign of rivet holes. The rounded tip suggests that this was a table knife (tip not shown in the drawing). Complete L. of blade 116mm, Bag 912, Tr. 54, MT4

155. Very corroded fragment with the remains of a short solid bolster and a complete short whittle tang. The cutting edge is damaged at the junction with the bolster, and the tip is missing. Bag 873, Tr. 50, MT3

156. (Not ill.) Fragment. Straight backed blade, whittle tang with a solid bolster. Surviving blade L. 30mm, max. W. 15mm; bolster L. 20mm; surviving tang L. 45mm. Bag 931, Tr. 51, MT2

157. (Not ill.) Badly damaged blade, possibly originally triangular, with a tang which follows the line of the back. The blade has two transverse moulded lines on the shoulder, which may be copper alloy plates, but are obscured by the coating. Surviving L. of blade 102mm, max. W. 18mm. Bag 484, Tr. 29N, MT2

158. (Not ill.) Incomplete whittle tanged blade with a short solid bolster. Bag 398, Tr. 29N, MD2

159. (Not ill.) Knife, surface missing; tanged, with a straight back and slightly tapering blade, point missing. Similar to bag 374 (No. 137). L. 138mm, tang L. 48mm, max. W. 15mm. Bag 67, Tr. 4, MD1

160. Nearly complete blade with a bolster, a scale tang with three rivets in place, and an integral end stop, now damaged. There is a possible maker's mark in the shape of a U. The back of the blade curves to the tip, and the cutting edge curves sharply from the bolster. There are traces of wooden handle plates. Tr.18, 32 or 37, U/S

161. (Not ill.) Knife fragment, comprising a short portion of blade, a short solid bolster with a squared section, and part of a scale tang. Post-medieval type. L. 60mm. Tr.18, 32 or 37, U/S

162. Parallel-sided blade fragment, tip missing, with whittle tang and disc-shaped bolster. The choil is sharply angled. Probably a fairly modern table knife. U/S

Not illustrated: fragments from MT6, four U/S fragments.

Bone knife handles, by D. Gaimster
(Fig. 51)

163. Bone scale with convex section; the outline tapering towards the blade, the butt end with a wider, hemispherical terminal. The scale was fixed to the iron tang of the knife by three iron rivets, two of which survive. The scale is scored with a band of ring-and-dot ornament around the butt end and a lozenge of ring-and-dot around the central rivet. Two diagonal bands of geometric incised ornament separate the ring-and-dot arrangement. L. 78mm; max. W. 25mm. Bag 874, Tr.50, U/S
A bone scale of very similar form and decoration, including the identical incised geometric banding, was found at Chelmsford, Essex, in a context of the second half of the 18th century (Cunningham 1985, 58, no.7).

164. Bone whittle-tang handle, hollow 'pistol-grip' form. L. 60mm; max. W. 15mm. Typologically, the 'pistol-grip' handle dates from the second quarter of the 18th to the late 18th century. Bag 326, Tr.47.

165. Bone whittle tang handle, hollow rectangular-profile grip. L. 85mm; max. W. 14mm. 19th century. Bag 877, Tr.50

Other tools

Medieval
(Fig. 52)

166. Nail-like object, with a rather irregular, solid mushroom head with a flat top. The point is bifurcated. Possibly a small tack-lifter, although one might expect this to have an angled head. *cf.* Bag 163 (No. 167). Bag 374, Tr. 18, GR4

167. (Not ill.) An object similar to bag 374 (No. 166), but with the head missing. The points are damaged, but one is slightly bent. L. 90mm, max. section 15x13mm. Bag 163, Tr. 8, MD3

168. Small bench knife with a straight back, and a blade of constant width, edge damaged. The end of the blade is hooked, and possibly incomplete. Bag 374, Tr. 18, GR4

169. (Not ill.) Gimlet with broken screw thread tip, in poor condition. The section is variable, square to round, and the tang is missing. L. 88mm. Bag 382, Tr. 18, GR5
Not illustrated: blade point, GR4; probable tanged blade fragment, GH3.

Post-medieval

Shears

170. Half a pair of shears, with the top of the wide blade nearly at right angles to arm. The arm has a D-shaped section. Bag 1125?, Tr. 61, MT2?

171. Half a pair of shears, tip broken. The arm is slightly convex in section, and tapers fairly evenly from the top of the bow to the blade. This is not a feature of any of the medieval shears illustrated by Cowgill *et al.* (1987), and a post-medieval date is likely. Bag 398, Tr. 29N, MD2

172. (Not ill.) Heavily corroded fragment of shears arm and blade. L. 134mm, remaining L. of arm, 84mm, remaining W. of blade, 45mm. Bag 984, Tr. 55, MT4

Blades

173. Corroded fragment of a blade and tang, probably a cleaver, although it could be a tanged billhook. The blade is rectangular, with a tapering flat tang. Cleavers are rather rare finds; there is a tanged example from Northampton, dated to *c.* 1760–1825 (Goodall 1984, mf 53, no. 8), and one from Sandal Castle with a solid handle, with a 15th/16th-century date (Goodall 1983, 246, no. 86). Bag 817, Tr. 48, MT2

174. Blade, with scale tang, flanged in the middle, and with the end curved over. The blade is short, with a broken edge. The original shape is uncertain. It may be a small pruning hook, with a blade at right angles to the handle, although it could be a specialised knife for some other purpose. Bag 906, Tr. 52, MT4

175. (Not ill.) Scale tang fragment with bone handle plates with a D-shaped section, fastened by two copper alloy rivets. L. 78mm, W. 17mm. Bag 440, Tr. 32

Other Tools

176. (Not ill.) Small shell auger bit or gouge, tang broken and obscured by corrosion. Bag 481, Tr. 14B, MD2

177. (Not ill.) Probable twist drill bit, or twist auger. Although the surface is in poor condition, some of the twist is visible. Both ends are damaged, and it is difficult telling which was the tang end. The twist is not very pronounced, and if this is a drill bit, it is likely to be old for the type, *i.e.* 18th- or early 19th-century, and perhaps made by a smith rather than factory made. It is almost certainly intrusive in its context, which is 14th/15th-century. L. 180mm. Bag 381, Tr. 18, GR4

(Fig. 53)

178. A small reamer with a Y-shaped handle with thickened terminals and a hole at the top of the shaft. The spoon bit tapers towards the point, which is broken. The handle shape is very unusual, but paralleled in wood on an example illustrated by Salaman (1975, 33, fig. 30a), and the hole was presumably for fixing a wooden handle to the object. It is somewhat reminiscent of the T-shaped handle of a larger auger from Chelmsford, of later 16th-century date, also with a hole at the top of the shaft (Goodall 1985, 51, no.2). Bag 631A, Tr. 41, MT6

179. Probably a corroded chisel with a flattened terminal and square-sectioned shank. It is somewhat similar to an example

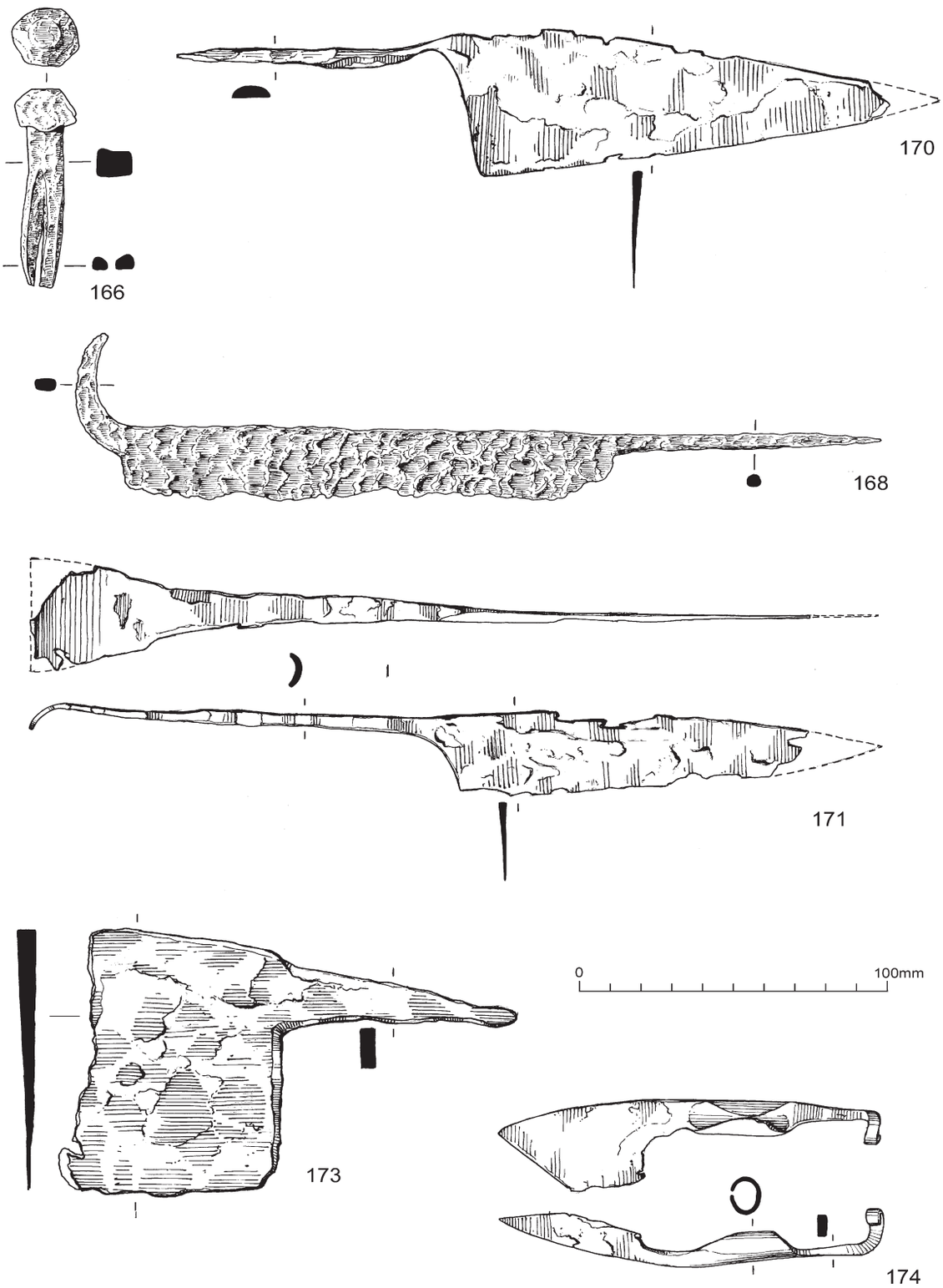

Figure 52 Small finds — blades, shears and other tools

from Sandal Castle (Goodall 1983, fig. 4, no. 43), although much smaller. Bag 757, Tr. 45, MD2

180. Adze, blade damaged, with a circular socket. Bag 803, Tr. 48, MT2

181. Saw blade, curved, and in two pieces. One end has a short projection at right angles. The teeth are not raked or set. Salaman (1975) illustrates no post-medieval curved saw blades, and this is probably a distorted straight blade from a small bow saw, possibly a home-made example. Bag 869, Tr. 50, MT2

182. (Not ill.) Tanged tool with a disc-shaped stop between the square-sectioned tang and a circular sectioned rod. The point is missing, which makes it difficult to be certain what this is, but it could be a chisel (see Salaman 1975, 137 fig. 205 for examples with similar stops) or a drill bit. L. 139mm, rod diam. 7mm. U/S

183. (Not ill.) Foot from a small cast iron shoe last. Probably 19th century. L. 113mm. Bag 1224, Tr. 68

184. (Not ill.) Bar file, tanged, with a triangular section. Small patches of the surface survive, with oblique grooves on two sides (single cut). L. 330mm. Bag 69, Tr. 3, MD2

185. (Not ill.) Trowel fragment, in poor condition. Cranked tang, rectangular in section, probably with a spade-shaped blade. It is similar to examples from Sandal Castle (Goodall 1983, fig. 5, nos 44–45) dating from the 15th and 17th centuries, although this example could be more recent. Remaining L. 128mm, original blade W. 144mm. Bag 756, Tr. 45, MD1
Not illustrated: factory-made screwdriver shank and blade, MT2.

Structural metalwork
(not illustrated)

Iron

186. Curved cast iron fragment, probably part of guttering. There are small fragments of lead wire in the corrosion. W. 77mm, diam. 34mm. Bag, 1210, Tr. 68

187. Pipe, broken across a screw thread at one end. Slightly bent. Diam. 21mm, L. 230mm. Bag 72, Tr. 3, MD2

188. Collar or pipe end, with external screw thread. 19th to 20th century. L. 12mm, diam. 32mm. Bag 66, Tr. 3, MD1

Lead

There were a number of pieces of window came. All of it was milled, and therefore post-medieval. There were two basic sizes present, the most common with a flange width of 4–6mm and a web 3–5mm thick, made in an untoothed mill. Several of these pieces were from small lights, and may have come from earlier post-medieval windows, although found in 18th-century or later contexts. There were three pieces with a much wider flange, 11mm, all with marks from a toothed mill, which are likely to be later in date, 18th/early 19th-century. One piece of window came (No. 190) was from a medieval context (GR4, bag 374, 14th/15th-century context). It did not appear to be significantly different to the later cames, and must be intrusive.

Irregular sheet No. 189 from SGR5 (14th-century context) may have been employed as flashing.

Medieval

189. Irregular sheet with cut edges. The back has the imprint of the ?mould, apparently wood, in the form of angled striations. There is a nail-hole punched through from this side, and the faint imprint of the nail head, diam. 16mm. Although rather bent, it seems that this irregular strip was probably flashing (or had been cut down from flashing) for a right-angled, or slightly obtuse angled junction. L. *c.* 195mm, max. W. 60mm. Bag 562, Tr. SGR, SGR5

190. Window came; squashed. Web W. 5mm. Bag 374, Tr. 18, GR4

Post-medieval

191. Part of window came, milled, no milling marks. Flange W. 5mm, web W. 4mm. Bag 981, Tr. 51, MT3

192. Two pieces of window came, straight, milled, web not visible, edges crimped. For thin glass. Bag 814, Tr. 48, MT2

193. Two pieces of window came: a) straight, milled, but no milling marks visible. Flange W. 5mm. b) with a three way join, for glass of thickness *c.* 3mm. Bag 209, Wall, MT2

194. Two pieces of window came; flattened, with crimped edges. Milling marks on inside of flange, web not visible. Flange W. 11mm. This is probably 18th/19th-century, but the toothmarks present suggest it is pre-late Victorian. Bag 730, Tr. NWC, MT6

195. Window came, with milling marks, web not visible. Crimped edge, flange W. 12mm. Bag 72, Tr. 3, MD2

196. Window came; from the junction of two lights. In good condition. Flange W. 6mm, web W. 4mm. Bag 922, Tr. 53, MT2

197. Window came; H-shaped piece, for a piece of glass 19mm wide. Flange W. 4–5mm, web W. 3mm. Bag 916, Tr. 54, MT4

Fasteners and fittings
(Figs 53–55)

It was sometimes difficult deciding which items should belong to which parts of this category, in particular with regard to links, chains and rings. The large amount of horse equipment from the site as a whole suggested that most such pieces were parts of harness or cart fittings, and some have been included in that category, but other uses around a working farm can easily be envisaged, or use in domestic equipment such as pot hangers. Indeed, many of the fittings can be multi-purpose; staples, for example, can be used as parts of hinges, as loops to suspend handles, rings and chains from, or as rings for holding latches, to name but a few uses. In this catalogue, therefore, little attempt has been made to interpret the objects. Dating is almost impossible in most cases, as the form of these utilitarian objects has changed little over the years, and objects such as staples may remain *in situ* for centuries before being discarded.

The fittings are iron unless otherwise specified.

Medieval

198. (Not ill.) U-shaped staple. L. 61mm, W. 51mm. Bag 268, Tr. 17, GR3

199. (Not ill.) Carpenter's dog fragment? L-shaped, with an incomplete flat plate and a broken shank at right angles. Plate 38x12mm, shank L. 34mm. Bag 704, Tr.3ext2, MT7

200. Spike, with rectangular section and asymmetric point. The head end is bifurcated, with one arm curving out at an angle; both arms are probably broken, and this end may have been looped originally. Bent at right angles in the middle (not shown on drawing). Bag 478, Tr. 17, GH3

201. (Not ill.) Spike, head half rounded and burred. L. 175mm. Bag 379, Tr. 18, GR3

202. (Not ill.) Spike, slightly curved, point broken. Sub-rectangular section. L. 108mm, max section 7x5mm. Bag 426A, Tr. 29N, MD5

203. (Not ill.) Very corroded flat strapping with remains of three wrought nails. Surviving L. 154mm, W. 21mm. Bag 382, Tr. 18, GR5

204. (Not ill.) Strapping, made from a strip of constant width, with no surviving surface. The ends are bent almost at right angles (this is original), ends broken. There is a nailhole in the middle, and one at the end of each arm. W. 22mm, L. of top 105mm, L. of arms *c.* 45mm. Bag 560, Tr. SGR, SGR4

205. (Not ill.) Ring, rather robust, with a square section. A square sectioned projection at right angles to the plane of the ring has broken off. Possibly intrusive. Diam. 72mm, section 12x13mm. Bag 543, Tr. SGR, SGR3

206. (Not ill.) Oval link, broken at one end, and worn very thin at the other. Variable rectangular section. L. 102mm, W. 39mm. Max. section 8x4mm. Possibly a strap junction rather than a chain link. Bag 426A, Tr. 29N, MD5

207. Clench bolt with ?faceted head and an incomplete rectangular rove. Bag 557, Tr. SGR, SGR4. Another clench bolt came from GR5

Not illustrated: Possible chain link fragment and possible staple (GR5); Ring (SGR4); possible ring fragment (SGR3)

Post-medieval

Rings

Rings of various sizes are common finds from sites of all periods, and can have a number of uses, such as handles, parts of chain assemblies, tethering rings or in horse harness. It is not often possible to surmise the original use. The ten rings from post-medieval contexts on this site vary in diameter from 25mm to 103mm.

208. (Not ill.) Copper alloy, very solidly made, possibly from horse harness. External diam. 67mm, made from a rod, diam. 7mm. Bag 207, Tr. 11, MT ?2

209. (Not ill.) Copper alloy; oval link, in good condition, made from a circular sectioned rod with butted, brazed ends. This may be

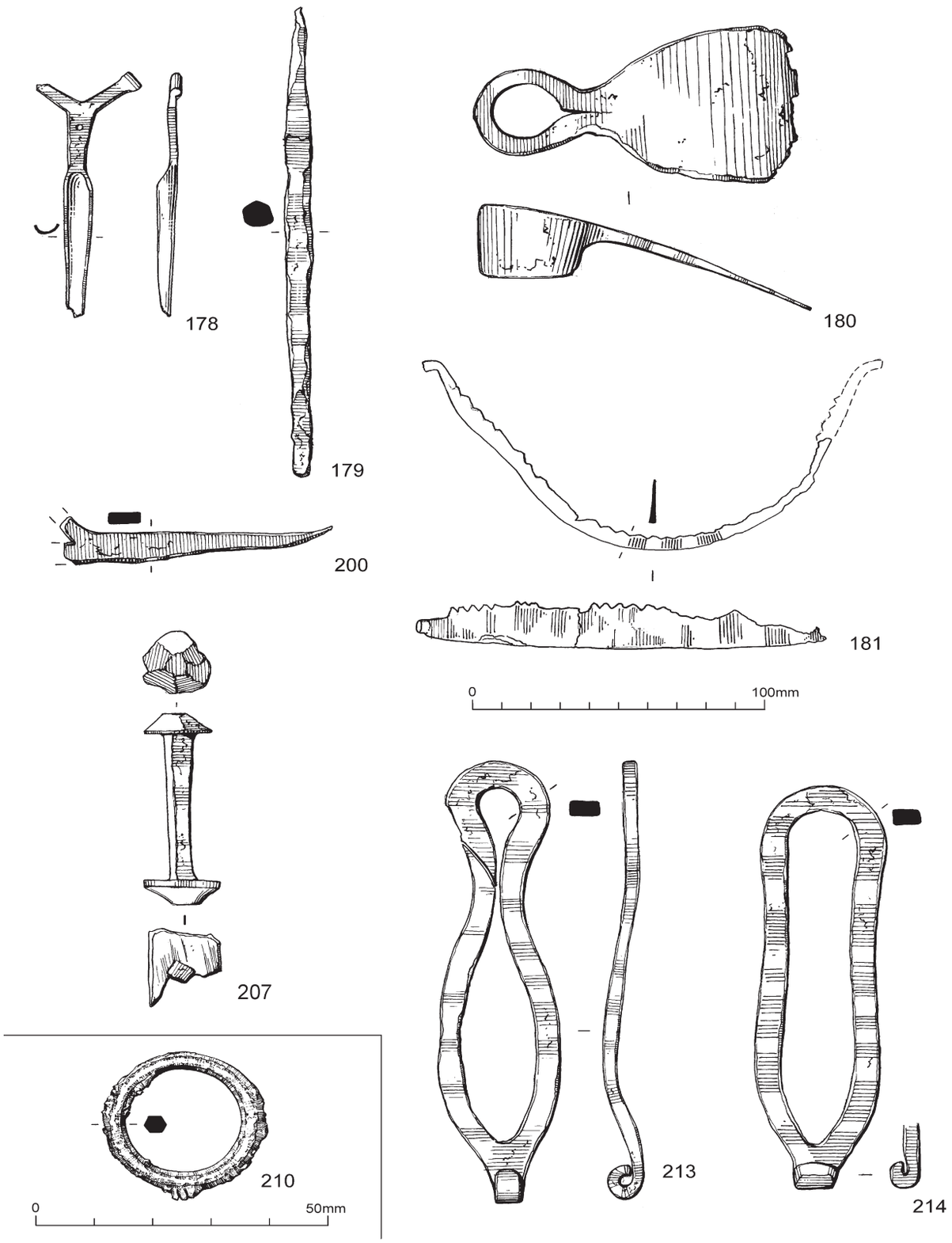

Figure 53 Small finds — other tools and fastenings

quite modern. External dim. 57x18mm, diam. of rod 4mm. Bag 100 (2), Tr. 5, MD2

210. Copper alloy ring, possibly a small handle, with iron staining on one side, probably from an iron attachment. The other side of the ring probably had a decorative beaded edging, now worn and obscured by mud. Sub-hexagonal section. Bag 885, Tr. 50, MT5

Chains

Given the relative lack of domestic material from the excavated parts of the site, the chain fragments are more likely to be from horse harness or agricultural fittings than domestic items such as cauldron chains.

211. (Not ill.) Chain, comprising six oval links, varying in length from 63mm to 76mm, with a slight constriction in the middle of each. Total L. of chain 317mm. Bag 733, Tr. NWC, MT6

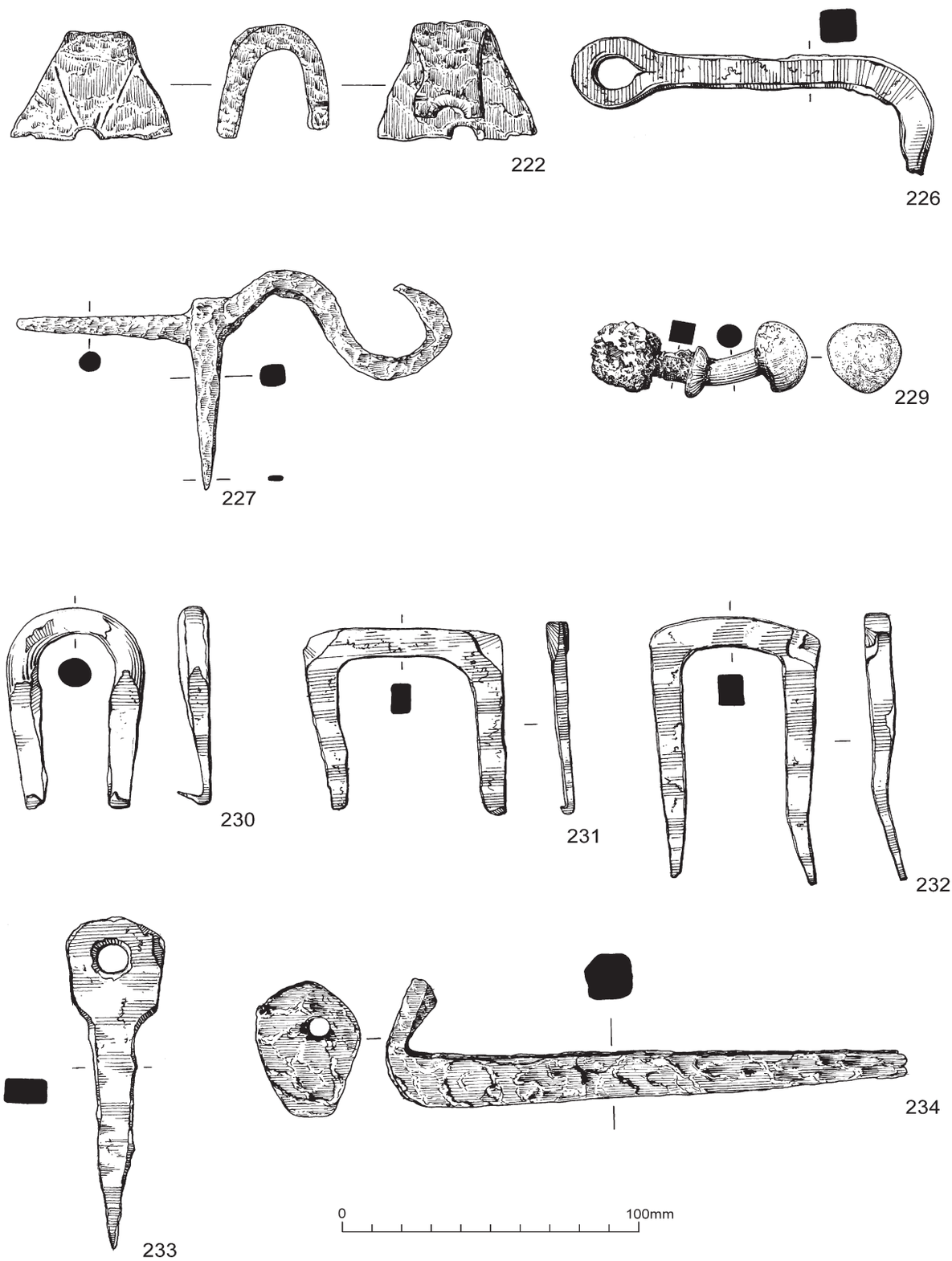

Figure 54 Small finds — hooks and staples

212. (Not ill.) Oval ring with a smaller oval link through it, fairly corroded, both with roughly circular sections. This type of chain may, for example, have been used to support cooking utensils over a fire, as illustrated by a surviving chain on a medieval vessel from London (Egan 1998, 179, fig. 146). Ring: 77x84mm, Th. 9mm.. Link: 33x54mm, Th. 7mm. Bag 239, Tr. 14A, MD2

Hasps

213. Complete but very corroded elongated figure-of-eight hasp with rectangular sectioned arms and hooked terminal. The type is common and long-lived and occurs throughout the middle ages; *cf.* examples from Castle Acre Castle (late 12th century; Goodall 1982, 230, no 106), Perth (mid to late 14th century; Ford 1987, 138 no. 104) and Norwich (16th-century context; Goodall 1993, 163, no. 1310). Bag 898, Tr. 52, MT6

214. Corroded elongated oval hasp, slightly waisted, with part of the hooked terminal. This type of hasp is not as common as the figure-of-eight, although it also has a wide date range. This example may be medieval, although unlikely to be as early as a similar Late Saxon hasp from Winchester (Goodall 1990, 977 no. 3488). L. 155mm; W. 39mm. Bag 1171, Tr. 61, MT2

215. (Not ill.) Hasp, consisting of a loop hinged onto a rectangular plate. From a chest or door. Plate 50x40mm, hasp L. 83mm. Bag 68, Tr. 3, MD2

216. (Not ill.) Object, in poor condition. This is probably the D-shaped hasp from a box padlock, with part of the case corroded on, but it could be a chest hasp. 59x45mm. Bag 757, Tr. 45, MD2

Hinges

217. (Not ill.) Hinge, with rectangular plates, one incomplete, with their long sides parallel. Each has three countersunk holes, one containing a 1-inch screw. Each hinge plate is 75x24mm (3x1inch). Modern. Bag 231, Tr. 14, MD1

218. (Not ill.) Hinge strap, tapering, with 2 nail holes. L. 176mm, max. W. 21mm. Bag 69, Tr. 3, MD2

219. (Not ill.) Nailed strap hinge in good condition, but broken. The pivot loop tapers then widens into a leaf-like terminal. There is an inscribed line down the centre of the loop. One of the terminal nail holes still has a nail in it, and there are two more nail holes on the strap. The type is similar to Goodall 1993, 150, no. 1167, which is from an early 16th-century context. Remaining L. 255mm, W. 30–35mm, Th. 2mm. Bag 162, Tr. 10, MD2

220. (Not ill.) Nailed strap hinge in poor condition. The leaf-shaped terminal has a single nail hole. The tapering strap has two nail holes, and is incomplete. L. 180mm, W. 25–38mm. Bag 1135, Tr. 62, MT4

221. (Not ill.) Pinned hinge; two tapering strips, both incomplete. One has two nailheads visible under the coating. The more complete strip is 93mm long and 15–32mm wide. Bag 434, Tr. 32, MT6

(Fig. 54)

222. Nailed strap hinge, loop only, with both arms are broken across the nail holes. The terminal is broader than the strap and was probably sub-circular or leaf-shaped. There are traces of linear decoration, with two oblique lines running from the nail hole on the terminal, possible lines along the margins, and possibly a line below the nail hole on the strap. The decoration suggests that this was from a piece of furniture rather than a door. Bag 1050, Tr. 60, MT6

223. (Not ill.) Strap hinge made from a regularly tapering strip. The narrow end is bent. There are three nail holes visible, two with nails in. The nails are flattened against the back of the strap, suggesting that the hinge had been removed from the box or door before discard, and the nails knocked down. L.190mm, max. W. 41mm, int. diam. of loop 18mm. Bag 1186, Tr. 61, MT6

224. (Not ill.) Hinge pivot with a square-sectioned tang and cylindrical pivot, very corroded. L. 155mm, pin L. 45mm. Bag 817, Tr. 48, MT2

Strapping

This category of object is almost certainly under-represented in the catalogue. Many of the strip fragments from the site could be from strapping, but few pieces were complete enough to assign a function to with any confidence.

225. (Not ill.) Strapping, made from a strip 42mm wide. It is in the shape of a flat-topped U, with one arm incomplete. There are two nails in the complete arm, a nail through the top, one through the incomplete arm, and an empty nail hole at the bend. W. 123mm, L. of complete arm 85mm. Bag 778, Tr. 46B, MD2

Hooks

226. Complete, corroded hook with a circular eye, point damaged. It is similar to a find from Chelmsford (Cunningham and Drury 1985, fig. 33, no. 51), interpreted as a latch hook. While this is a reasonable identification, there are a number of other uses which could be envisaged for such a hook on a farm. Bag 947, Tr. 51, MT2

227. Hook, with a spiked end, and a second spike at right angles. This arrangement of spikes is presumably so that it could be used in a variety of positions. It is similar to a spike from Oxford Castle (Goodall 1976, fig. 28, no. 80). Bag 803, Tr. 48, MT2

228. (Not ill.) Badly corroded S-shaped hook with tapering ends and circular section. Possibly part of fireplace cooking equipment, or from horse harness. L. 111mm. Bag 659, Tr. 42, MT2

229. Copper alloy hook, with a sub-spherical head and a circular shaft with a plano-convex collar at the bottom. Below the collar there is a short length of square-sectioned shank with a screw thread below that, covered in iron corrosion. Bag 659, Tr. 42, MT2

Staples

230. U-shaped staple, complete but slightly corroded, with a variable section. The pointed ends are bent over. It is comparable to a staple from Sandal Castle (Goodall 1983, fig. 6, no. 100). Bag 670, Tr. 42, MT2. A very similar staple with the points missing came from Tr. 11, MT2

231. Very corroded square staple, nearly complete, similar to one from Sandal Castle (Goodall 1983, fig. 6, no. 96). Bag 908, Tr. 54, MT4

232. Complete, somewhat corroded square staple, closely resembling a staple from Basing House (Moorhouse 1971, fig. 22, no. 114). Bag 954, Tr. 52, MT6

Spikes

233. Looped spike, no surviving surface. It has a sub-rectangular head with a circular hole. Bag 848, Tr. 48, MT2

234. Spike, with offset sub-circular pierced head. L. 173mm, head 40x34mm. Bag 914, Tr. 52, MT6

235. (Not ill.) Large spike with an offset, leaf-shaped head, bent parallel to the spike. The head is probably perforated. L 200mm, head W. 40mm, L. 75mm. Tethering stake? A similar, but incomplete, spike came from MD2. Bag 2, Tr. 2, MD1

236. (Not ill.) Eyed spike with twisted square sectioned stem. L. 158mm. Bag 200, Tr. 11, MT2

Bolts

(Fig. 55)

237. Large square-headed bolt with a screw threaded end, a square nut, and a circular washer. Bag 202, Tr. 11, MT2

238. Bolt, end missing, possibly originally with screw thread. Bag 202, Tr. 11, MT2

Clench Bolts

There were sixteen clench bolts from post-medieval contexts; three from MD2, one from MT2, two from MT4, eight from MT6, one from MT6A, and two from Tr. 69. Most had diamond-shaped roves.

239. Clench bolt, head damaged, with diamond-shaped rove. Bag 611, Tr. 29, MT6

Washers

240. (Not ill.) Very corroded flat washer, similar to an example from Sandal Castle (Goodall 1983, fig. 8, nos 155–156). Ext. diam. 48mm, inner diam. 24mm. Bag 764, Tr. 46B, MD2

241. (Not ill.) Washer. External diam. 48mm, internal diam. 20mm. Bag 72, Tr. 3, MD2

242. (Not ill.) Small coiled ring, slightly oval, possibly a spring washer. 17x15mm. Bag 902, Tr. 54, MT1

Other fittings

243. A corroded flat strip with the remains of a thickened end on one surface and a thin handle with a flange jutting out perpendicular to the other side. Possibly the remains of a draw bolt. Bag 317, Tr. 14, MD2

244. (Not ill.) Probable door handle in the form of a curved strap, possibly D-sectioned in the middle, with flat, rectangular terminals, both with two nail holes. Probably 19th/20th century. L. 184mm, W. 20mm. Bag 891, Tr. 51, MT1A

245. (Not ill.) Ring, attached to an incomplete eyed spike. Possibly a door or chest handle, or perhaps a tethering ring. Ring; external diam. 72mm, internal diam. 58mm; spike L. 52mm. Bag 489, Tr.14B, MD2

246. (Not ill.) Draw bolt guide bracket, made from a bar 38mm wide, with a hole at each end. L. 154mm, central guide 32x18mm. Bag 1216, Tr. 68

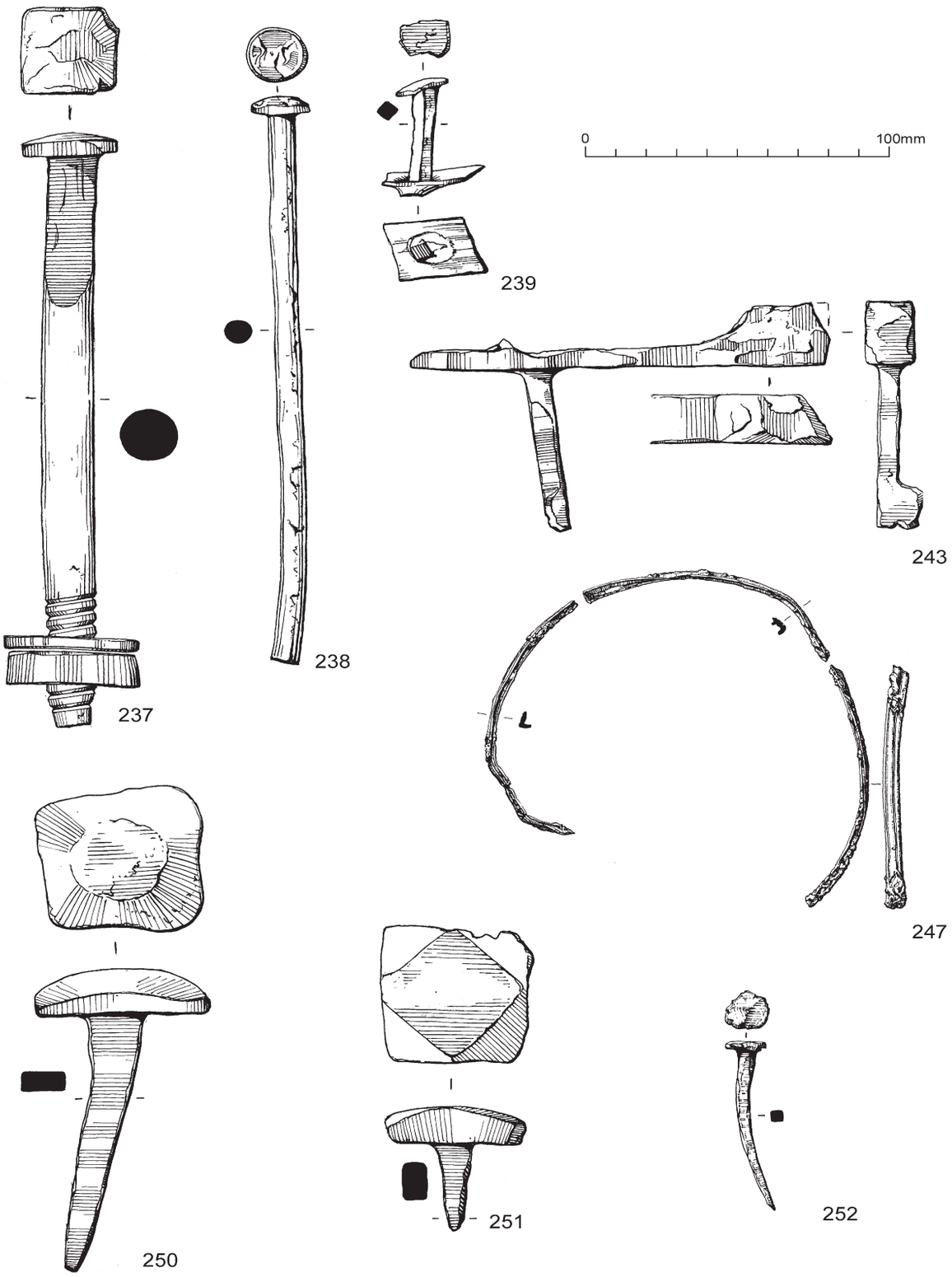

Figure 55 Small finds — bolts and nails and binding strip

247. Three joining fragments of copper alloy binding strip with an L-shaped section. The outer face has two circumferential lines. The inner face is corrugated, and has at least three very small integral rivets. The strip is now distorted, and it is difficult to determine how much is missing, but it would have formed the edge binding for an object at least 86mm diam. probably around 105mm. Bag 81(3), Tr. 4, MD2

248. (Not ill.) Copper alloy ring handle comprising a disc with a central boss, with a ring passing through it. There is a short hollow tube on the back. Probably a furniture handle. Diam. of disc 47mm, ring diam. 27mm. Bag 71, Tr. 3, MD2 (‘1928 heating? chamber soil’)

249. (Not ill.) Cast copper alloy double-ended rivet with circular sectioned shank, and round heads. L. 21mm, head diams. 13mm and 15mm. Bag 200, Tr. 11, MT2

Layer	*Cut*	*Wire*	***Total***	*% of total no. of nails from layer*
GH3	0	1	**1**	25
MD1	1	2	**3**	30
0MD2	25	1	**26**	22
MT2	3	1	**4**	5
MT3	0	1	**1**	20
MT4	2	0	**2**	7
MT6	2	0	**2**	2
'Modern'	9	1	**10**	23
U/S	3	0	**3**	10
Total	**45**	**7**	**52**	

Table 3 Numbers of cut nails and wire nails

Nails
(Fig. 55)

A grouped type series of the iron nails from the site was prepared prior to the present author's involvement in the project, representatives of each type drawn, and most of the bulk nails sorted as to type. By the time of this report, the condition of the nails had deteriorated considerably, and many of them had disintegrated. The original descriptions of the thirty-eight groups were not available, and for some groups it was not clear on what basis the type had been distinguished. In addition, some nails had been discarded during the initial processing of the finds, and others had gone missing. Given the state of the material, it was not considered worthwhile re-cataloguing all the nails, and they were therefore recorded using a combination of the original type series and the standard ECC nail type series. Analysis was therefore undertaken on a very limited basis, concentrating on those types where a specific use could be inferred (*e.g.* horseshoe nails), or which were potentially datable (*e.g.* wire nails). Nails are notoriously difficult to date; Roman nails can be indistinguishable from post-medieval wrought nails. In addition, nails can enter the archaeological record centuries after their initial use; medieval and later nails may still be found *in situ* in standing buildings today.

625 nails were recorded, of which 135 came from medieval contexts. There were two types of nail which occurred in medieval, but not post-medieval, contexts, both represented by only single examples; one was a fiddle-key horseshoe nail, the other a nail with a rectangular-sectioned shaft and a fairly large, flat round head.

Cut nails and wire nails

These two types of nails can be considered to be modern; the first nail-cutting machine was set up in 1811 (Bodey 1983, 21), followed by machines for making wire nails. Hand-cut brads can be earlier, but are probably not present on this site.

From Table 3 it can be seen that modern-type nails occurred in the moat as far down as layer MT6, though not in any quantity, and in MD1 and MD2. The wire nail from GH3 could be intrusive; certainly, there is nothing else in the metalwork to suggest that the layer is later than its suggested 15th/16th-century date. The original numbers of wire and cut nails may well have been higher; the obviously modern nails such as these may have been selected for discard at an early stage of processing. The figures for the wire and cut nails as a percentage of the total for a layer should therefore be regarded only as a pointer.

Large-headed nails

These nails were designated as Group 36 in the original typology. They are large nails with rectangular shafts, sometimes with a spear point, and large thick square or rectangular heads with slightly bowed sides. The tops are mostly slightly rounded, and at least one has chamfered corners. The length of the shaft is variable, from 47mm to 127mm, but the heads are all roughly the same size, about 50–60mm square. One has a bifurcated tip, with the points turned in opposing directions. The shorter examples may be primarily decorative, used as studding on doors, for example.

There were sixteen examples found, all except five from the moat, with half of the total coming from MT6. All were post-medieval, apart from one from a medieval layer (GR3).

250. Large-headed nail. Bag 1098, Tr. 757 ext., MT6

251. Large-headed nail. Bag 1012, Tr. 57, MT6

Copper alloy nails

Two copper alloy nails were recovered. These are quite rare finds on medieval and later sites, as they were normally used for special purposes only, principally where a decorative effect was desired (furniture *etc.*), or on nautical fittings, in particular, because they were less prone to corrosion in wet conditions.

252. Copper alloy nail, in very good condition but bent. Irregular head with three low facets on top. Bag 472, Tr. 32, MT6

253. (Not illus.) Copper alloy; small, bent nail. Round head, diam. 8mm, L. 19mm. Tr. 68

Objects associated with weapons
(Fig. 56)

Shotgun cartridges came from layers MD2 and MT2, and an unfired rifle cartridge from MT1.

254. Powder flask nozzle. Copper alloy with white metal coating over part of the underside. Bag 730, Tr. NWC, MT6

Objects of unknown use
(Figs 56–57)

Copper alloy

Medieval

255. Ferrule? A sheet object, now flattened, but possibly originally a cylinder. One end is slightly crimped, the other has cut serrations. A similar, though shorter, object from Bramber Castle is described as a belt or strap slide (Barton and Holden 1977, 59, no. 13). Bag 379, Tr. 18, GR3

256. (Not ill.) Sheet fragment with repousse beaded rings and a row of punched dots. The object has been reused; the original rivet hole is empty, and a small iron rivet or nail has been punched through part of the pattern. 34x15mm. 'On greensand floor'. Bag 382, Tr. 18, GR5

257. (Not ill.) Strip fragment, damaged and bent, and with a large cut hole in it. L. 100mm, W. 30mm. Bag 382, Tr. 18, GR5

258. (Not ill.) Strip fragment, with a squared end with two rivet holes. 34x27mm. Bag 382, Tr. 18, GR5

259. (Not ill.) Strip fragment, with one straight edge, the opposite edge turned over. There are eight small holes, some punched from one side of the strip, some from the other. W. 25mm, L. 27mm. Bag 283, Tr. 17, GH4

Post-medieval

260. Openwork fitting, with three curved sides. Two apices have attachment holes, while the third is moulded and perforated, perhaps for attaching a ring. Possibly a furniture fitting. Bag 81(6), Tr. 4, MD2

261. Decorative cast openwork plate, with a flat back. The straight side has two projecting male screw fittings, perhaps for the attachment of knobs or other decorative finials. The opposite, curved side has a central hole, probably a nail hole. One arm is broken, and the other has an integral ring. Furniture fitting? Bag 253, Tr. 14, MD2

262. Sheet object, possibly a vessel repair. A semi-circular piece of sheet, slightly convex, with the straight edge turned over, and six holes round the edge, one with a rivet in it. There is a semi-circular notch out of the bottom of the curve. Bag 570, Tr. 37, MT6

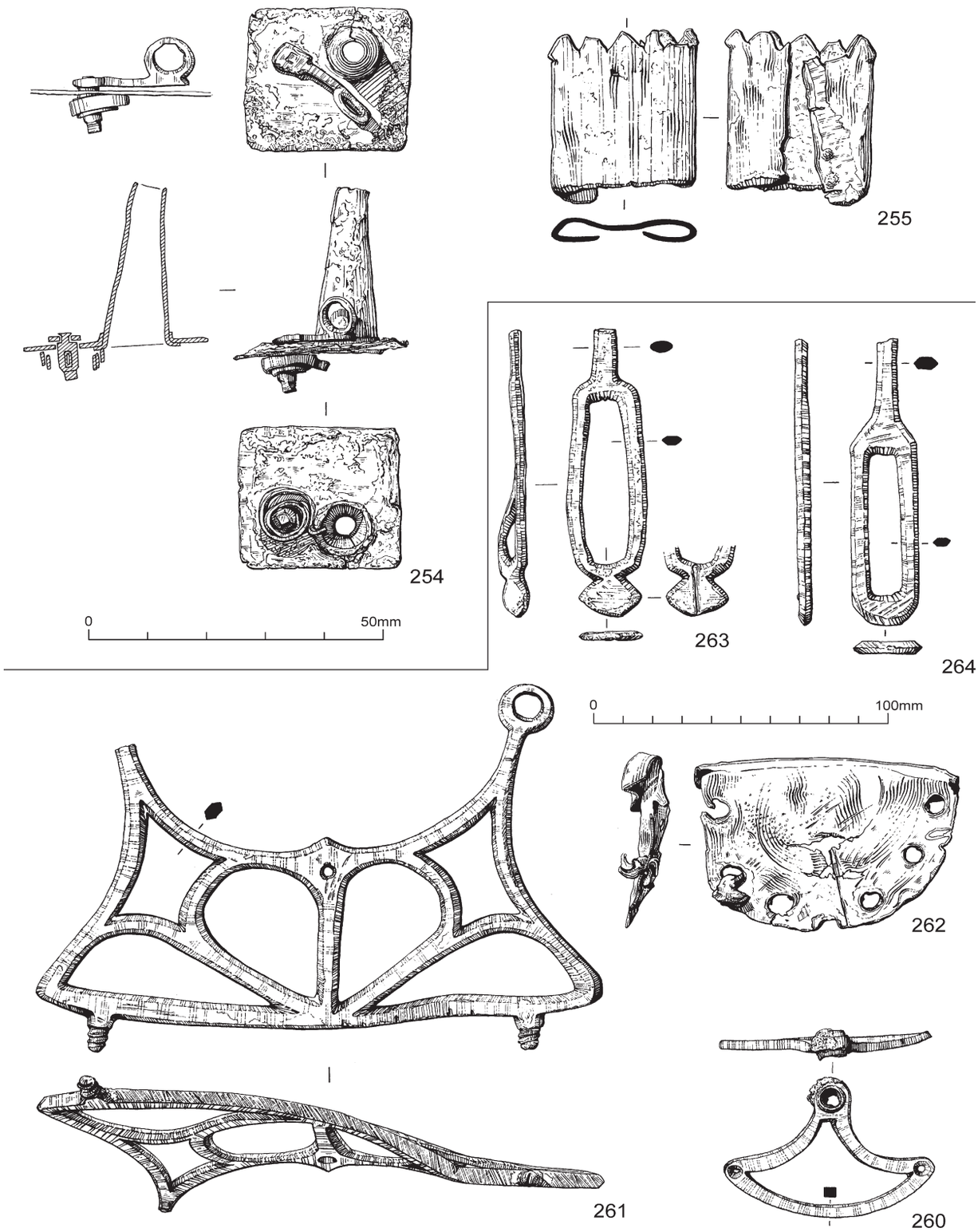

Figure 56 Small finds — miscellaneous

263. Bar terminal in the form of an elongated loop, with a lozenge shaped projection at the end marked by a central line. The surface patina is very dark. There is a similar terminal on an unidentified object from Chelmsford (A.R. Goodall 1985, 47, no. 64). On the latter piece, the bar turns at right angles just beyond the terminal, and is at least 110mm long. The two examples from Southchurch Hall probably had similar right-angled bends, as are both broken at this point. Bag 1159, Tr. 56, MT2

264. Bar terminal in the form of an elongated loop, similar to the last, but without the projection. Bag 375, Tr. 18, GR4?

265. (Not ill.) Two pieces of gilded copper alloy wire, probably original one piece, now very distorted. Only one end is complete. Original L. *c.* 85mm and *c.* 110mm. Diam. 1mm. Bag 1158, Tr. 59, MT6

266. (Not ill.) Tapering, curved strip with two crudely punched, irregularly spaced holes at one end. One of the long edges is scalloped. This appears to have been cut down from another object. L. 80mm, W. 23–29mm. Bag 75, Tr. 4, MD2

Lead and lead alloy

Medieval
(Fig. 57)

267. Lead alloy. Decorative fitting, possibly from furniture. Pelta-shaped, with a flat back and moulded front. Central rectangular hole, beaded edge. Bag 374, Tr. 18, GR4

268. (Not ill.) Piece of sheet, rolled up and flattened. Possibly a rolled weight. L. 47mm, W. 28mm. Wt. 115g. Bag 382, Tr. 18, GR5

Post-medieval

269. (Not ill.) Rod with circular section, bent, with a blunt point at one end, and a small depression in the other end. Possibly a writing lead. L. 93mm, diam. 6mm. Bag 310, Tr. 18, MT3

270. (Not ill.) Rod, with circular section. One end is pointed and slightly bent. L. 67mm, diam. 5mm Bag 766, Tr. 46B, MD2

271. (Not ill.) Sheet object, probably originally a tube, in poor condition and broken both ends. L. 62mm, diam. 12mm. Bag 227, Tr. 14

272. (Not ill.) Sheet, folded into a rough square, with a hole punched through the middle. Possibly a crude weight. 67x72x14mm. The original sheet was *c.* 70x250mm. Bag 606, Tr. 39, MT6

Iron

Medieval

273. Corroded fragment of a hooked object, broken at both ends. One end has a circular section that curves into a wide, flat hook. Bag 379, Tr. 18, GR3

274. (Not ill.) Pivot? A circular-sectioned rod, changing to a tapering square section, probably coming to a point. Both ends are probably incomplete L. 75mm, max. diam. 17mm. Bag 374, Tr. 18, GR4

275. (Not ill.) Bar fragment in poor condition. It may be a nail shaft, but is possibly a small piercing tool, as it appears to be pointed at one end and flattened at the other. L. 72mm. Bag 379, Tr. 18, GR3

276. (Not ill.) Tube fragment, made from sheet with the edges overlapped. Possible trace of red paint. L. 36mm, diam. 13mm. Bag 299, Tr. 18, GH3

Post-medieval

277. An object resembling a pair of pliers, with broad flat blades, curved in the same direction. The handles are sub-rectangular in section, and one has a rounded moulding at the end; the other is too corroded for any moulding to survive. The two halves are held with a rivet. These are of unknown use. The apparent lack of ridging on the blades suggests that they are not pliers as such. They are possibly candle douters (*cf.* Eveleigh 1985, 15), or, less likely, shoe lifts (Salaman 1986, 174), used in shoe making. Bag 673, Tr. 42, MT2

278. Curved bar with a D-shaped section of variable thickness, probably broken at both ends. At the thinner end there is a small rectangular hole near the outer edge, and 43mm away from this is a ?nail projecting from the bar. Presumably this perforates, but is masked by the coating applied during conservation. The 'nail' has had its thin shank formed into a spiral and the end is turned over. There may be another hole towards the other end of the bar. Bag 145, Tr. 8, MD2B

279. Object, possibly the arm of a pair of dividers, although the rivet appears to be in the wrong plane. The top has a slight knob, with a rivet through, and the point has a D-shaped section. Bag 218, Recess south, MD2

280. Sheet disc with white metal coating on both sides, and a central hole. One side has incised concentric circles at irregular intervals. The hole seems rather crudely punched for this relatively decorative object. Bag 480, Tr. 32, MT6

281. Thin, curved bar fragment, with an offset bar at right angles at the bottom. Possibly a stirrup; a thin bar at the base of the stirrup is not unknown, *cf.* an example from Basing House (Moorhouse 1971, 47, no. 81), but in that case the sides of the stirrup had holes for a pivoting footplate which would have rested on the bar. No such arrangement could have existed in the present case, and this object may have a different function. Bag 254, Tr. 14, MD2

282. (Not ill.) Bar with sub-rectangular section, one end apparently complete, the other twisted, and probably broken forcibly, with a short, broken, length of bar at right angles. At the junction of the two bars is a moulded sub-spherical knop. Each side has a central knob and eight radial ribs. This is clearly decorative, and may be from some sort of grille. Bag 200, Tr. 11, MT2

283. Decorative fitting. It has a flat back and a moulded top, roughly in the shape of a dagger, with a flat circular 'pommel' a short handle, a 'hilt guard' with moulded transverse lines and a leaf-shaped 'blade'. The back of the blade is split, but this may be the result of corrosion rather than an original feature (it is somewhat masked by the coating). There are no obvious traces of attachment, and no rivet holes. Possibly a toy dagger. Bag 673, Tr. 42, MT2

284. (Not ill.) Stand or base made from thick, stamped sheet. A circle with three internal arms, possibly a hole in the centre, and three feet, one now missing. Diam. 71mm, Ht. 25mm. This may have been the base of an object such as a wax-jack, which often had open-work tripod bases (see Gentle and Feild 1994, 220–21). Bag 81, Tr. 4, MD2

285. (Not ill.) U-shaped object, no surface surviving, probably with flattened terminals. Probably a handle. W. 99mm, L. 54mm. Bag 81, Tr. 4, MD2

286. (Not ill.) Tapering rod, with little surface surviving. There are traces of quite ornate mouldings, and it may have had a knobbed terminal. L. 112mm, max diam. 7mm. Bag 426A, Tr. 29N, MD5

287. (Not ill.) Bar, incomplete. One end tapers, possibly to a point. The other end tapers slightly, and is probably incomplete and damaged. One face has two transverse incised lines at this end. L. 136mm, max. section 9x5mm. Bag 207, Tr. 11, MT2

288. (Not ill.) Object, comprising a narrow, cut strip, stepped along one edge, with a short part of the narrower end turned over. The other end curves back on itself to form a wider plate, which is now broken. Both sides of the plate are rough, in contrast to the strip, and have what appears to be remains of solder. There are two small pin holes, one in the strip, and one in the terminal. Possibly part of a lock or a gun mechanism? L. 80mm, W. of strip 2–6mm, terminal 26x24mm. Bag 559, Tr. 11B, MT2

289. (Not ill.) Bar fragment in poor condition, with a rectangular section, curved and tapering at one end and curving to a shallow hook at other end. Possibly a fragment from an iron pot hanger, similar to an example from Norwich (Atkin *et al.* 1985, 61, no. 60). Remaining L. 186mm, W. 10mm, T. 7mm. Bag 559, Tr. 11B, MT2

290. (Not ill.) Strip with D-shaped section, slightly tapering, with a squared notch in the centre. It is slightly bent at one end; this is possibly not original. L. 155mm, max. W. 19mm, notch 9x5mm. Bag 207, Tr. 11, MT2

291. (Not ill.) Two pieces of tube, made from sheet with overlapped edges. The ends are irregular, possibly broken. One piece has mineralised wood inside. Diam. *c.* 24mm, L. 74mm and 69mm. Bag 443, Tr. 18, MT6

Bone
by David Gaimster
(Fig. 57)

292. Half of narrow bone ring with D-section profile. Probably 19th century. Diam. 29mm. Tr. 48, U/S

Stone

293. Black, shiny stone, probably shale. Plano-convex object with a central perforation, slightly damaged, and cracked. The curved surface is well finished, but the flat surface poorly finished, and this surface may have flaked off. Although it resembles a spindle whorl, the central hole seems too small for such a use, and it is possible that this was originally a ball. Bag 370, Tr. 18, GR3

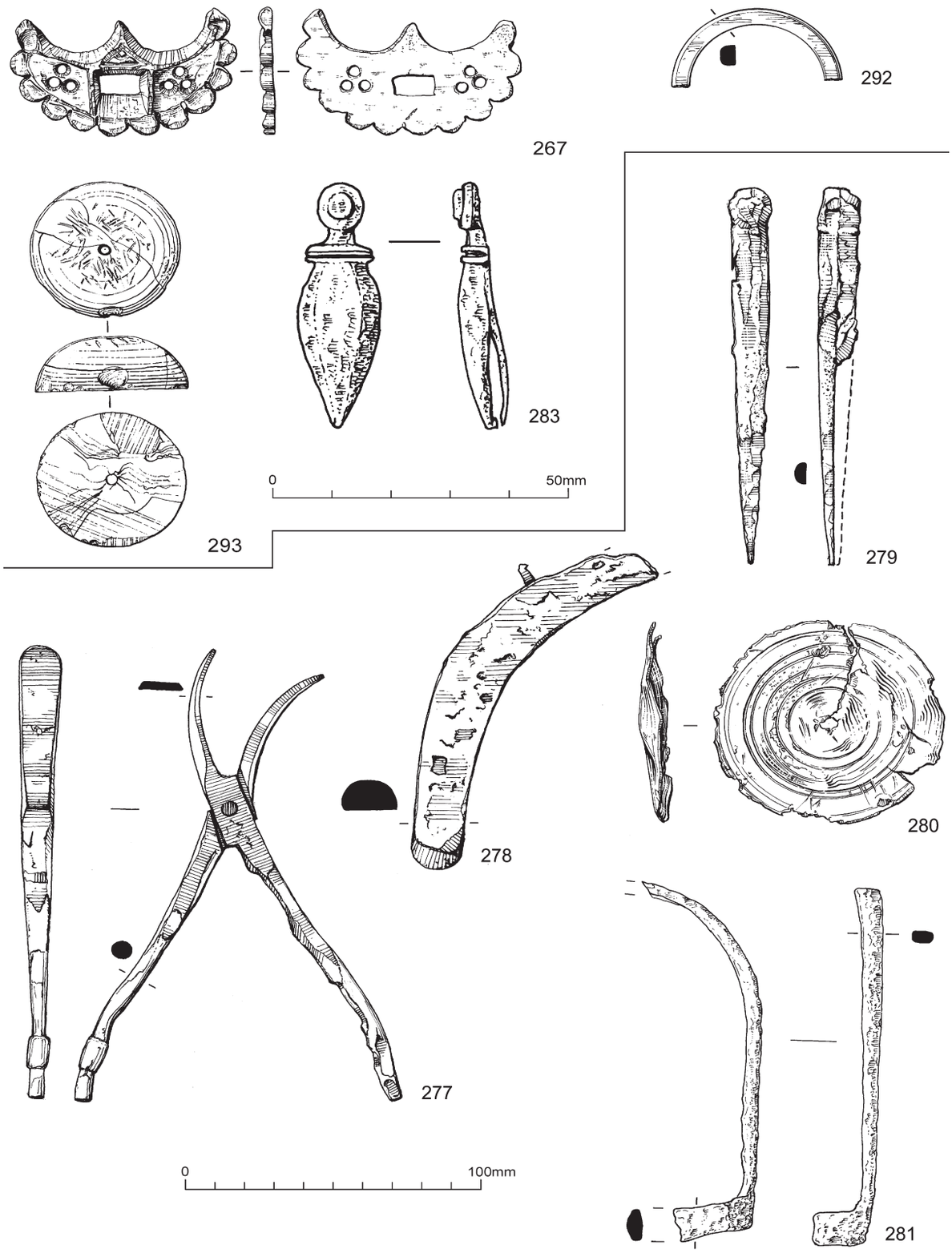

Figure 57 Small finds — miscellaneous

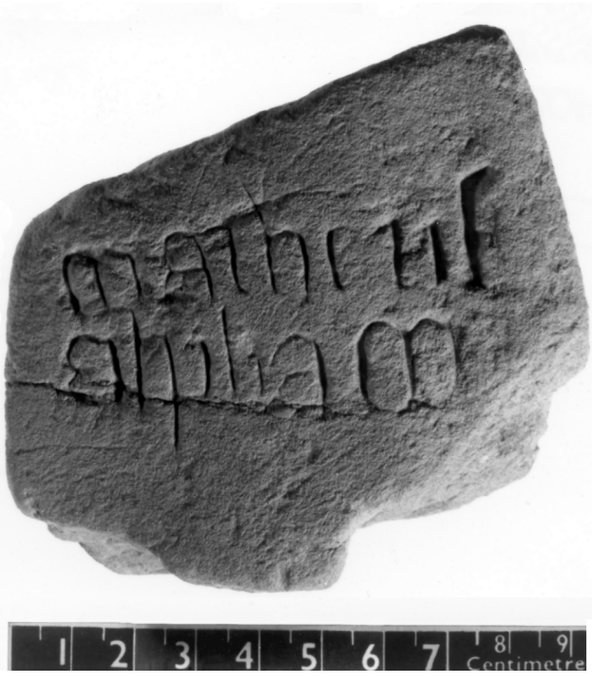

Plate 5 Stone with graffiti, scale in centimeters

Stone fragment with graffiti, by David Gaimster
(Plate 5)

294. Small stone fragment, probably limestone, inscribed with graffiti, two words stacked with the name: 'Mathew alpham'. Probably graffiti, perhaps the result of an individual practising the writing of their name. The 'Blackletter' style of the inscription places the object in a wide date bracket spanning the period *c.*1400–1575. Ht. of fragment 878mm; W. 92mm. Bag 374, Tr. 18

Possible stone stoup, by David Gaimster
(Fig. 58)

295. Stone vessel, probably limestone, sub-rectangular in form with shallow hemispherical well in the centre, the front corners cut away diagonally to form a projecting profile with one straight edge and two opposite slightly concave sides. Shaped to fit into a niche, possibly for holding holy water, perhaps even in the chapel building postulated for the site. Probably 14th to early 16th century. Ht. 130mm; W. 170mm; depth 64mm. Bag 451/453, Tr. 18

Building stone

by John Jackson

The recovery of a number of fragments of building stone (Table 4) from the excavations, reinforces the evidence provided by the excavated stone foundations and documentary references for the quite extensive use of stone in the buildings of the manorial complex. The fragments include a number of moulded fragments and window mullion, perhaps from the chapel or upper levels of the gatehouse and its associated structures. This together with the recovery of flints squared and trimmed for use in flushwork or other decorative effect are indicative of the use of stone for architectural embellishment. A fragment of stair centre built into the gatehouse wall may have been brought to the site from elsewhere, or might be derived from an earlier stone-built structure at Southchurch Hall.

The lava querns

(Fig. 59)

Until recent years, few groups of medieval querns had been found in excavations in Essex, and relatively little attention had been given to this class of artefact. The situation has been slowly changing; in 1987, Amer was only able to list ten sites in Essex with medieval querns, whereas there are now forty-two known to the present writer. Quern assemblages of reasonable size have been

Context	*Stone*	*Comment*
T18 Bag 2774	Centre of circular stairs. 2 pcs. 150 tex. broken at 140 long built into east wall of gatehouse	
No mark	Stair winder 200 long with 150 m centre as above broken at 130 long (joins to above now 40 long)	
T20 Bag 326	2 pcs. ½ of 160 dea stone 120 long laths 60 mm eg. hole in centre	Grindstone
T48 bag 802	3 pcs forming ¾ of 220 dea stone with 60mm eg. hole in centre 150 long fluked sides one pc matted, other not	Grindstone
T18 bag 377	Fragment of corner (90 x 60 x 100) squared & chamfered	
T29 Ext bag 495	Six fragments stuck together to form ½ circle 90mm dea 150 long	
T29 Ext bag 495	Rough fragment (120 x 120 x 60)	
T29 West Ext Bag 501	Rough fragment (130 x 150 x 80)	
Sm garderobe Bag 515	Squared 2 faces (130 x 160 x 100) incised lines on one large face. Burnt faces	
Sm garderobe Bag 560	Squared chamfered 3 faces of rebated (200 x 200 x 130 high) top of bottom worked parallel	
T28 Bag 618	Block squared (500 x 280 x 200)	
T48 Bag 804	Fragment with double moulding (100 x 60 x 60)	
T49 Bag 822	Squared, chamfered & slotted (170 x 210 x 120 thick)	
T51 Bag 976	Fragment with one flat face with deep incised line (130 x 80 x 80)	
T44 or 57 Bag 741	Ashlar block – broken at 400 long worked on face (210 x 210)	
T59 Bag 1158	2 pcs stuck together 210 sq x 60 thick tool marked on 2 sides	
T59 Bag 1164	Blocks with 2 parallel faces 3 face worn one burnt face (130 x 120 x 100)	
No mark	Mullions shape (130 x 170 x 160 long). Stop moulded	
No mark	Square splayed (140 x 160 x 150 long)	

Table 4 Catalogue of building stone, all dimensions in mm

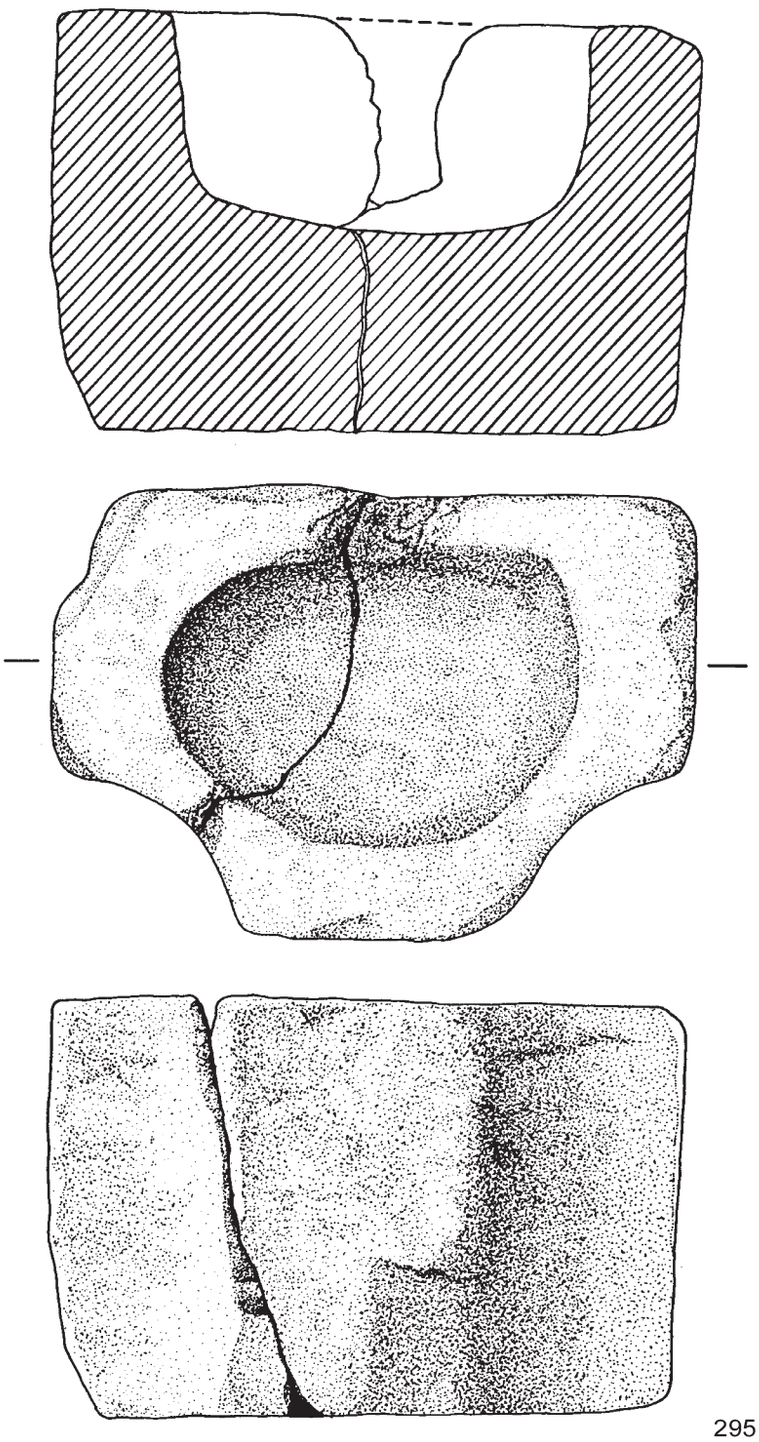

Figure 58 Stone stoup

recovered from a number of sites, most still unpublished at the time of writing but with archive reports in existence. The principal sites concerned are Chelmsford, Marks and Spencer (Buckley and Major in prep.), Horndon-on-the-Hill Village Hall (Major unpublished), Stebbingford Farm, Felsted (Major 1996), Boreham Airfield (Major 2003b.) and Cressing Temple (Major unpublished). These five sites, together with Southchurch Hall, provide an interesting glimpse at the range of sites utilising querns in the middle ages, being respectively an urban bakery, an urban ?domestic site, a lower status farmstead, an early windmill, a Templar manorial establishment and a lay manor house.

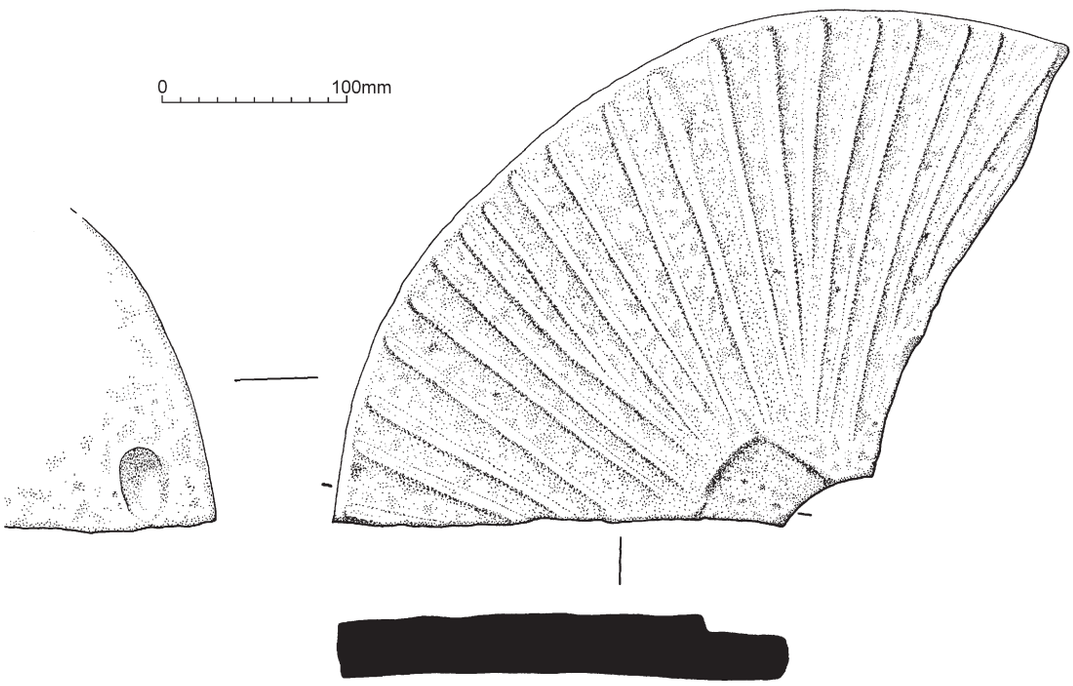

Figure 59 Millstone

There are some general remarks which can be made about the querns from these sites. The condition of the lava is usually good (as it is at Southchurch Hall), in contrast to the normal condition of Roman lava querns which tend to be crumbly and fragmented. This may simply be due to the Roman querns having been buried longer, but could indicate that the medieval querns come from a different quarry which was producing a lava of slightly different composition and rather more durable under archaeological conditions. The stone used in both periods, however, was probably all from the Mayen/Niedermendig quarries in the Cologne area.

The number of fragments recovered is never large: there were thirty-eight pieces from Horndon-on-the-Hill, for example, only one with a measurable diameter. Thus, although we can now appreciate that medieval querns were in more widespread use than was once thought, they were not as common as querns were in Roman times (there are nearly twice as many sites with Roman lava querns known in Essex), and on any single site there would probably have been fewer querns in use at any one time. This is no doubt principally due to flour being predominantly produced at windmills or watermills (although it should be noted that fragments of querns, as well as millstones, were found at the Boreham windmill site). There is, however, clear documentary evidence for querns being used to process foodstuffs other than corn, in particular malt and mustard, and medieval querns were probably principally used in this way. At present, nothing known about medieval querns suggests that malt querns and mustard querns were typologically different, although by the 16th or 17th century this situation may have changed, with the introduction of a distinctive miniature form of lava quern (Major 1988). There were two basic forms of medieval querns. Firstly, there was the flat quern, which had very similar upper and lower stones, with a diameter up to about 700mm (average diameter 511mm), and an average thickness (for the county) of 36mm. Secondly, there was the pot quern, with a cylindrical upper stone, smaller and thicker on average than a flat quern upper stone, which sat in a basin-shaped lower stone, with an opening in the side to allow the ground material to escape.

There were twenty-one quern fragments from Southchurch Hall. All were probably from flat querns, except for a fragment from a 14th/15th-century layer, which may have been from a pot quern upper stone, and a reused fragment which may have been from a millstone. The latter piece may have had an original diameter of over 1000mm. Some of the lava came from post-medieval contexts, and may have derived from post-medieval querns, but it is difficult dating small fragments, and this material could simply be residual.

Three types of grinding surface dressing were present. At least one piece had fairly close-set grooves, probably radial, while five pieces have pecked surfaces, these two dressing techniques being generally the most common. There are also three, possibly four, pieces with a distinctly unusual form of dressing, consisting of rather widely spaced narrow ridges (Fig. 59). The two stratified fragments with this surface treatment are both from the upper levels of the moat, and it is possible that they are post-medieval. However, the only comparable dressing from Essex known to the writer is on a stone from a medieval windmill site at Sturrick Farm, Great Bentley, found in a 13th-century context (Major 2002). This type of dressing was evidently rarely employed, and must have been relatively time consuming to produce compared to the normal grooved patterns. The fragments from Southchurch Hall are certainly not all from the same quern, but may have been dressed by the same millwright, given the rarity of the technique.

Other features present on the Southchurch Hall stones include holes in the top of the stone for the handle, and on

the illustrated quern, a slot in the grinding surface for the rynd. This feature is rarely seen on medieval querns, and it is likely that the rynd was normally just jammed across the central hole. One of the lower stone fragments may have had a small slot cut in the edge of the central hole (unfortunately damaged), and this may have been a guide slot for locating the fitting for the spindle.

Several of the pieces had clearly been reused as coarse building stone, as they had traces of mortar, and several had been deliberately re-shaped. One fragment had been cut into a square block, possibly for use as a paving stone or post-pad, and another fragment may also have been used in paving.

(Fig. 59)

296. *c.* 30% of an upper stone. The grinding surface has radial dressing, consisting of rather widely spaced narrow ridges with far less pronounced grooves between them. The dressing may have originally been a more standard groove pattern, and the ridges may represent a re-dressing of the stone. The edge and top are fairly smooth, and there is a single oval, non-perforating, handle hole surviving. The stone has broken across a rectangular key in the grinding surface, for the rynd, which would have been 50mm wide. Wt. 5350g, T. at edge *c.* 37mm, max. T. 41mm. Diam. 542mm, diam. of central hole 72mm. U/S

(Not illustrated)

Fragment, with the edge of the central hole present. The grinding surface has fairly widely spaced ridges; the other surface was originally pecked, and has post-breakage wear suggestive of use as a flagstone. There is an iron stain on the top, probably fortuitous. Wt. 1960g, T. 44mm. U/S

Fragment from the centre of a ?lower stone. The grinding surface is worn, and probably had grooves originally. The other surface is irregular. Wt. 380g, T. *c*.32mm. Diam. of central hole *c*.45mm. U/S

Large fragment from a millstone?, probably the lower stone. It has been reshaped into a slightly tapering arc, and has traces of mortar on the edge. The grinding surface is pecked and somewhat worn. The other surface is bumpy, with large, fairly regularly spaced holes. If the outer edge of the curve was the original edge (and at least some of it appears to have been trimmed), then the diameter would have been in excess of 1000mm. Wt. 6120g, T. 30–55mm. U/S

Fragment, shaped into a block 200x50x64mm, possibly from the same quern as bag 265 (below). Both pieces have been shaped into blocks about the same width, with similar marks on one edge, made by the cutting tool. On this fragment the grinding surface is pecked, but there is a small, very worn area. The edge has traces of vertical dressing; this may not be the original edge, as the tool marks may be from the secondary shaping. The other surface is irregular. Wt. 850g, T. 64mm. If the edge is original, then the diameter is *c*. 700mm. U/S

Fragment with a very worn grinding surface, possibly originally pecked. The other surface is irregular. It has been re-shaped into a block, 120x45x54mm, and may be from the same quern as one of the unstratified pieces. Wt. 490g, T. 54mm. Bag 265, Tr. 16, MD2.

Edge fragment with no fill thickness; damaged. The grinding surface is polished by wear towards the edge, and the edge itself may be polished, suggesting that this could be a pot quern upper stone. It is thicker than average for a flat quern. Wt. 200g, T. >50mm. Bag 374, Tr. 18, GR4.

Fragment, possibly from a lower stone, with the edge of the central hole present. There is worn radial dressing on the grinding surface, possibly the 'ridge' type dressing present on the two large upper stone fragments. The other face is irregular. The edge of the central hole is damaged, but may have had a narrow, shallow slot cut into its vertical face. The (?) slot was cut from the underside of the stone and does not reach the grinding surface. This may be a notch for locating a fitting. Wt. 700g, T. 29mm. Bag 651, Tr. 37 ext., MT4

Two joining pieces, forming *c*. 20% of an upper stone. The central hole is not present. The dressing of the grinding surface is very similar to the illustrated upper stone, so much so that the same millwright could have dressed both. On this stone too, this could represent re-dressing. The diameter is slightly different, as is the treatment of the top of the stone, and it is unlikely that they are part of the same stone. The top on this one is pecked, with some flaking. There is an oval handle hole in the top, 23x18mm. Wt. 2950g, T. at edge 35mm, max. T.41mm. Diam. 580mm. Bags 802/1156, Tr. 48 and 63, MT2.

Fragment with a worn grinding surface, probably originally with wide-spaced ridged dressing. The other surface is irregular. Wt. 110g, T. 22mm. Bag 807, Tr. 48, MT2.

A piece of lava, no doubt cut down from a quern, neatly fashioned into a square. One face is fairly smooth, and possibly worn; the other is irregular. The wear could be from use as a floor tile. Wt. 440g, T *c*. 35mm *c*. 82x83mm. Tr. 57, MT7.

Fragment from an upper stone, with a small part of the edge present. The grinding surface has narrowly spaced radial grooves. The top is rather irregular, and damaged, and there is possibly a trace of a handle hole 30mm in from the edge. The grinding surface is not flat, but slightly concave towards the edge. Traces of mortar on the stone show that it was reused as building stone. Wt. 1510g, T. at edge 52mm, mm. T. 40mm. Bag 1161, Tr. 59, MT6.

II. Brick

by J. Jackson

The bricks found in the excavation can be divided into eight groups as in Table 5, classifications of surface treatment and hardness are given in Tables 6 and 7. Harley's typology (1974) has been used to record the bricks. Sizes given as Length, Breadth, Thickness (LBT).

A	Great brick, one only isolated within layer MD5, trench 30/31
B	Small yellow medieval. Sample of 28 examined, 6 described, many more left *in situ* when walls rebuilt in 1982
C	Red bricks from drain, trench 68, layer MD2 WV
D	Well headers, 16 in number, red, shaped
E	Red bricks, mostly from brick and tile level, MT4
F	Floor bricks, 10 in number
G	Brick reservoir
H	Conduit bricks, yellow stock, sample of 5

Table 5 Brick classification

11	Presence of grass/straw on LB face
12	Presence of grass/straw on LT face
14	Slight edge thickening
16	Horizontal drag marks on one LB face
17	Diagonal banding on LT face
22	Surface irregular or lumpy
23	Mortar adhered to surface

Table 6 Brick classification of surface treatment

4	Scratched deeply with iron nail
5	Just marked with iron nail
6	Glass hard

Table 7 Brick classification of hardness

Ref	*Size*	*Surface treatment*	*Weight kg*	*Hardness*	*Remarks*
T30/31	335,145,035	14,16	2.8	5	see below

Table 8 Great brick

Ref	*Size*	*Surface treatment*	*Weight kg*	*Hardness*	*Remarks*
50/872	177,093,045	11,14,16,23	1.15	4	Thin one, corner
51/973	182,096,045	11,23	1.25	4	Fire black-end
52/900	210,100,048	11,14,17,23	1.57	6	Part green glazed
18/319	213,105,050	16,22,23	1.55	5	Splay cut one end
37/545	215,111,042	22,23	-	4	One cut corner
Display	213,103,050	11,17,23	1.70	4	Well shaped

Table 9 Small yellow bricks

A. Great brick

The colour is light orange red, a grey core with flow lines indicating frame manufacture. Pristine condition, sharp arris, fine even sandy surface, one long edge partly rounded. Top slightly concave, smooth with strike marks.

The Great Brick was found in conjunction with septaria, possibly post-hole filling. There is no explanation for this brick being at Southchurch Hall, or even in the Rochford Hundred, however, there could be more within the unexcavated part of the site. Harley (1974) dates similar bricks, *i.e.* Waltham Abbey and Little Coggeshall, to about 1170.

B. Small yellow

The small yellow bricks were found in the following areas:-

1. Built into the large garderobe in the external east face walling, and in particular the internal arch and reveals to the opening into the moat.
2. A few were included with the Kentish Ragstone of the small garderobe, and again, in particular, the arch and reveals of the opening of the moat.
3. A few were found within the overspill in front of the retaining wall 'a'.
4. Others were found in the moat silt adjacent to both garderobes — assumed from the collapse of walls.

The twenty-eight whole yellow bricks examined are all rectangular and appear to have been made by the frame method. They range in colour from light chrome yellow through naples yellow to light yellow ochre. Well marked clay flow lines were noted in all bricks. Most bricks clearly show a frame mark, *e.g.* slight indentation around edge on top surface. Very similar bricks have been noted at Dengie, Lawford, and Purleigh churches in Essex, and at The Chapel, Horne's Place, Kent (built 1366). Table 9 lists individual characteristics.

C. Brick drain

A sample of fourteen red bricks was taken from the drain in the north east corner of trench 68, the depth from ground level to top of brick being 650mm.

The bricks (Table 10) are all rectangular and clearly show frame marks. They range in colour from dark rose to pale orange red and most show flow lines. The bricks had been lain dry, but all showed remains of cockleshell mortar and had therefore been reused.

D. Well headers

A total of sixteen medium red tapered bricks, probably of mid to late Tudor date, were found mostly in the brick and tile layer MT4 in conjunction with pottery which dates from early medieval to modern, and also in the causeway hardcore, a post-medieval deposit likely to be 18th-century or later.

As these bricks were found in four separate trenches it is assumed that they were scattered when the mound was reduced in 1930, and had formed part of a well in an area not covered by the excavation.

Eight of these bricks were water worn on one LB face and it is likely that they formed the top course of a well 1143mm internal diameter. For other characteristics see Table 11.

Ref	*Size*	*Surface treatment*	*Weight kg*	*Hardness*	*Remarks*
1	220,110,055	11,16,17	2.5	4	
2	220,106,055	11,14,16	2.2	4	
3	230,113,052	11,14,16,22	2.35	4	Large pebble LB1
4	230,115,053	14,16,22	2.10	4-6	Sand glazed 1LT
5	235,104,055	11,14,16	2.4	4	Small stones in fabric
6	220,106,052	11,16,17	2.00	4	
7	220,105,055	16,22	2.15	4	
8	223,105,053	16,22	2.05	4	
9	225,104,052	11,14,16,22	2.10	4	Stones in fabric
10	000,115,055	12,14,16	—	4	Cut to length
11	235,115,055	11,12,16,22	2.35	4–6	Sand glazed 1LT
12	227,114,055	14,16,22	2.30	4	Stones in fabric
13	000,115,053	11,14,16,22	—	4	Cut to length
14	210,105,050	16,22	2.15	6	Overfired and misshapen

Table 10 Bricks from the drain, all dimensions in mm

Ref	*Size*	*Surface treatment*	*Weight kg*	*Hardness*	*Remarks*
14B/503	185, 100-80 45 thick (tapered)	16, 17	1.4	4	Moulded tapered

Table 11 Brick well headers, all dimensions in mm

Ref	*Size*	*Surface treatment*	*Hardness*	*Remarks*
14B/500	208,102,38	Worn 1LB	6	Used as floor bricks
49/831	240,115,60	LB 1 cut	4	Shaped for unknown purpose
52/900	230,115,55	Cut LB BT	4	Double chamfered

Table 12 Red bricks, all dimensions in mm

E. Red bricks
(Table 12)
A sample was kept of bricks found in each trench, all used within backfilling at various times. These have been examined and listed into four groups.

1. Whole bricks
The two bricks from trenches 49 and 52 were of the Tudor period, had been shaped after moulding and possibly used in connection with window or door openings.

2. Small brick pieces
Eleven bricks originally between 55 and 60mm thick, and orange red colour, used as brick edge. Two pieces showed definite signs of being used as rubbers and possibly all have been as they were all 'hand' size, and showed no sign mortar. They were all found together in trench 24 in a layer of backfill following the construction of the conduit (see H below).

3. Floor bricks
Twenty-seven bats worn in such a way as to suggest use as floor bricks.

4. Various
A sample of fifty various bats of which at least eighteen were Tudor, others being 18th- and 19th-century. Some were overfired and part glazed, and a few cut to shape i.e. chamfered and round. Three were soot marked.

F. Floor bricks
Ten broken pieces with maximum 215mm straight side and maximum 53mm, thick worn to 25mm, all with rounded edges and mortor on LB2 and half way up the sides, i.e. bedded only. All were pale Tudor bricks and all found with pottery dated from early medieval to modern in layers derived from levelling the mound during the restoration c.1930.

G. Reservoir (trench 65)
A brick built reservoir on the north bank of the moat 1.2m square internally, 1.1m deep with a chalk floor. Built of good quality red bricks size 220–225mm long 110mm wide and 60–62mm thick, laid dry, basically English bond one brick thick. The conduit (see H below) entered the reservoir about half way up on the south-east corner the reservoir being kept full from a natural spring. The reservoir appears to be of 19th-century date.

H. Conduit bricks
A sample of five bricks were taken from the water conduit west of the reservoir. They are 228x105x65mm, light yellow ochre-orange pink with shallow frog 160x45mm with diamond shaped mark indented 30x15mm, and 19th-century in date. The conduit was constructed two bricks high, laid dry on elm board with a brick cover. The conduit ran from the reservoir (see G above) on the north bank of the then dry moat, the full length was not traced but it may have terminated at another reservoir fitted with a pump, possibly at the hall.

III. Glass
by D.D. Andrews

Most of the glass was recovered from the vicinity of the moat. With the exception of the older window glass which may date from the 15th or even the 14th century, it ranges in date from the 16th to the 20th century. It is a large and interesting collection, approximately 1618 fragments: it is unfortunate the contextual information does not allow it to be ordered into chronological sequences. Much of the glass was stabilised with Frigilene, a cellulose based product; this has been reasonably successful in stabilising the glass but has had the effect that it is often difficult to accurately assess the colour of the fragments.

The vessel glass
This accounted for about two-thirds (or 1154 fragments) of the finds. It has been divided into the following groups: *facon de Venise* glass; 16th, 17th and 18th-century glass; wine bottles; and 19th and 20th-century glass.

Facon de Venise glass
(Fig. 60)
By this is intended glass made either in Italy or Northern Europe in imitation of Venetian glass known as *cristallo* because of its resemblance to rock crystal. When dealing with fragments, and for that matter intact vessels, it is generally difficult to distinguish objects of Italian manufacture from those made in the Low Countries by the middle of the 16th century, and in England from the 1570s. The glass is recognizable from its quality, being soda glass and therefore well preserved (in contrast with potash glass which is usually in a bad condition when found on excavations); by being lustrous and colourless, or else of a yellowish, brownish or smoky hue; and by a well known repertoire of forms.

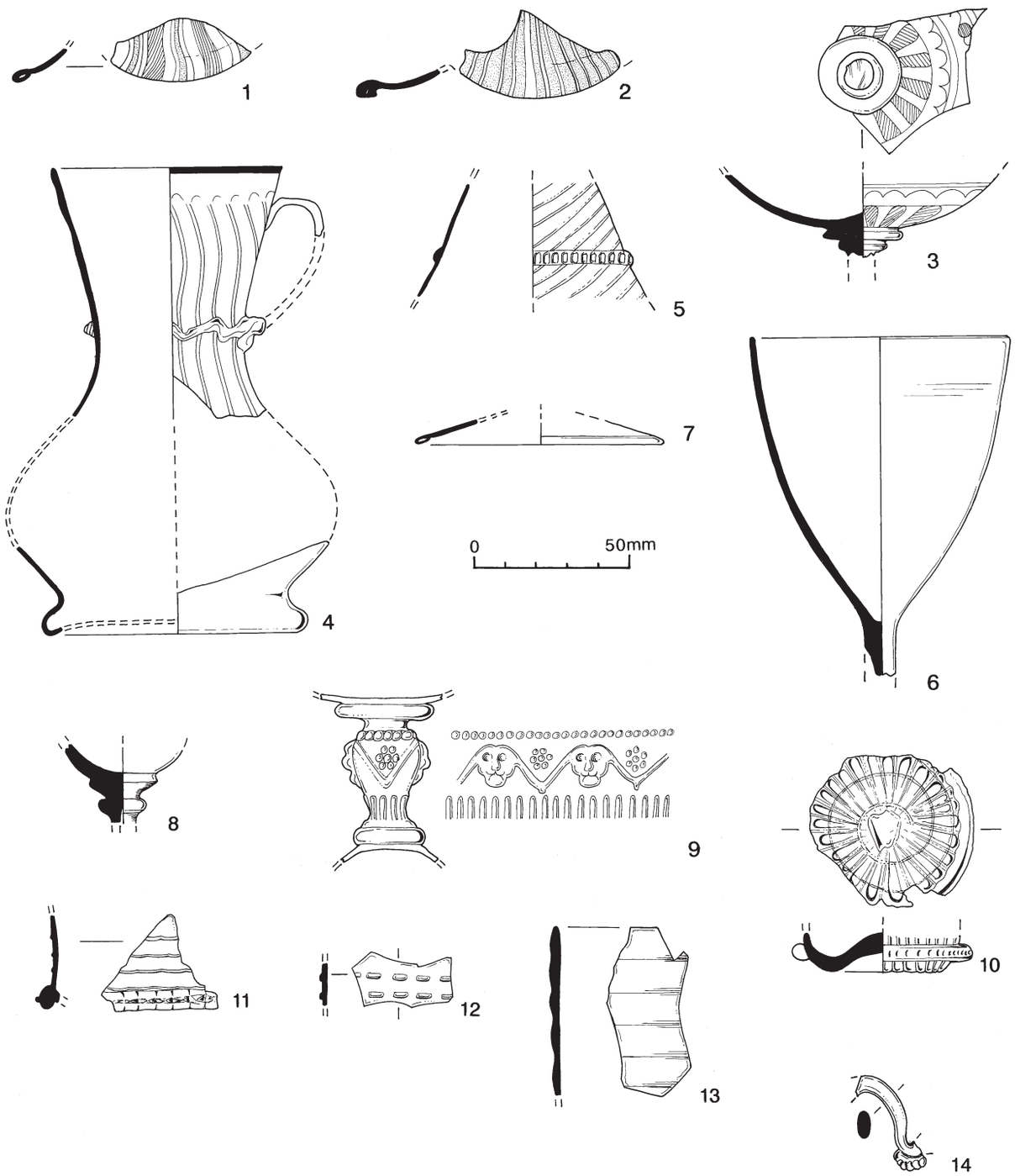

Figure 60 Vessel glass

Approximately sixty-eight such fragments were identified amongst the glass finds. It is possible that this is an underestimate, as isolated and fragmentary pieces of this type of glass can be difficult to identify if they occur amongst more modern material. In the absence of proof to the contrary, it has to be assumed that many of the items discussed here were made in the Low Countries or England. Only rarely can suggestions be made as to provenance. Chemical analysis has begun to shed a little light on this problem. Two qualities of Venetian glass have been distinguished, *cristallo* and *vitrum blanchum*, the former containing more soda. *Vitrum blanchum* type glass has also been identified at London and Amsterdam, but with a significantly higher potash content. A programme of analysis of *facon de Venise* glass found at Antwerp suggested that about half of it was imported from Venice, and that the other half was made locally. Chemical similarities between some of the locally made glass and pieces found in London and Amsterdam raises the possibility that the latter were imported from Antwerp (De Raedt *et al*. 1999). The distinction between *cristallo* and *vitrum blanchum* is important, but so far there seem to be no established criteria for distinguishing them visually.

The most distinctive amongst this glass is the *vetro a filigrana* or filigree glass, of which six pieces were found at Southchurch. This technique involves incorporating threads or rods of *lattimo* or opaque white glass into the gather, often weaving them in patterns of elaborate complexity. It was developed probably at the end of the 15th century and is still in vogue today. It is interesting that filigree glass was present amongst the three groups of *vitrum blanchum* identified chemically as having been made at Antwerp (De Raedt *et al*. 1999). This luxury glass, which must have been in high demand amongst consumers, is relatively ubiquitous and of visually variable quality, no doubt the result of its production by less skilled craftsmen or by craftsmen working in less than ideal circumstances.

The most elaborate example found is a base with a hollow folded edge probably from a goblet (bag 578, Fig. 60.1). It presents the following sequence of striped patterning: colourless, a plain *lattimo* thread, colourless, a green thread, a rod with twisted *lattimo* threads giving a reticulate pattern, a green thread, *etc.* The use of green, in this case a rather unattractive shade thereof, is unusual but can be paralleled in glass of this type made in the Low Countries (Henkes 1994, 177).

The other examples comprise two flattish bases with hollow fold edges, probably from goblets; and two body fragments, also fairly flat, perhaps from similar bases or else from *tazze*, wide goblets with shallow bowls. These are all similar inasmuch as the decoration comprises no more than wide threads or bands of lattimo worked into them, rising vertically in the bases (bag 379, Fig. 60.2) or spiralling in the body fragments. The simplicity of these pieces, and their less than perfect condition, suggest local or North European manufacture. Their similarity raises the possibility that they belonged to a set of goblets. The two bases and one of the body fragments were found in trench 18, suggesting that they were from the fill of the gatehouse or adjacent garderobe.

Of greater rarity than the filigree glass are two fragments of diamond engraved glass, from the same or similar vessels, that is, a wide shallow goblet or *tazza*. The larger piece (bag 1046, Tr.59; Fig. 60. 3) includes the base of the bowl and top of the stem, a junction achieved with a merese or flat disc of glass beneath which is a solid moulded knop. This piece is excellently preserved and of a greenish-brown hue. A lobed motif radiates from the base, whilst a horizontal band of decoration encircles the upper part of the bowl. The larger motifs are infilled with hatching. These pieces invite comparison with vessels with engraved decoration believed to have been made by Giacomo Verzelini's London workshop in the last quarter of the 16th century (Charleston 1984, 53 seq.; Battie and Cottle 1991, 76; Liefkes 1997, fig. 101). The basal lobed motif occurs on a goblet with a funnel-shaped bowl and lion stem recovered from the wreck of a ship which sank near Biograd on the Dalmatian coast in about 1583 (Barovier Mentasti *et al*. 1982, fig. 199). Very little engraved glass seems to have been found on excavations in England. An exception is a tiny fragment from Moulsham Street in Chelmsford (Cunningham and Drury 1985, fig. 38, no. 4) which is, in contrast, wheel cut and probably 17th- or 18th-century in date.

Two handsome items of *facon de Venise* glass were recovered from the fill of the small garderobe. One is a relatively complete jug (bag 562a; Fig. 60.4) made of colourless bubbly glass which survives in good condition, though slightly iridescent. It has mould-blown ribs, and is waisted with an applied undulating collar just below the narrowest part. A fine thread of blue glass is applied to the rim. The base is of pedestal form obtained through a hollow fold which, unusually, does not form a tube. Vessels of this type normally have a spout (*cf.* Barovier Mentasti *et al*. 1982, fig. 204, 205, 219, 225; Henkes 1994, 223) but two in filigree glass without spouts are illustrated by Henkes (1994, 177). A fragment from trench 62 a little to the north of the small garderobe may belong to a similar form, being from a waisted vessel with a crimped collar (bag 1139, Tr. 62; Fig. 60.5). It is of excellent quality straw-coloured glass with a mould-blown spiralling pattern or ribbing. A fragmentary handle or decorative feature with an applied floral boss, also in straw-coloured glass, could be from a similar vessel (Fig. 60.14).

The other piece from the small garderobe is a fragmentary portion of a funnel-shaped bowl from a goblet. It is in good condition, bubbly, with a green-brownish hue, and has slight reeding below the rim. A more complete goblet bowl of very similar profile, and also with reeding below the rim, was found in trench 55 just to the north of the small garderobe (bag 990, Tr. 55; Fig. 60.6). It is unusual in having a solid stem, apparently made of one piece with the bowl, giving it a somewhat utilitarian aspect though there might have been decoration lower down the stem. It is made of straw-coloured or yellow-brown glass in excellent condition.

Goblets are the most numerous form present amongst the *facon de Venise* glass. As well as the examples previously mentioned, there are three small fragments of bases with hollow fold edges (bag 1136; Fig. 60.7), and the top (bag 846, Tr. 48; Fig. 60.8) and bottom of two different stems. The only intact stem is one with the familiar mould-blown lion mask motif (bag 783, Tr. 46; Fig. 60.9; *cf.* Willmott 1997/98). These fragments can be assigned a date from the late 16th century to *c*.1650.

Three bases with applied foot-rings are probably from beakers, the most robust part of a form which being typically made of thin glass does not survive well on archaeological sites. Italian beakers were often made with just a pushed-in base, and indeed beakers of this sort, of varying sizes, for beer, claret and sack, are shown in the well known drawings which accompany John Greene's order for glass from Venice in 1667–72 (*cf.* Tait 1979, figs 6 and 7). However it is beakers with foot-ring or pedestal bases which seem to be most commonly known from English excavations.

A base in well preserved dark greenish brown glass has mould-blown ribs and a somewhat inaccurately applied foot-ring (bag 666, Tr. 38; Fig. 60.10). Another, in straw-coloured slightly iridescent glass, has mould-blown vertical ribs intersected by horizontal self-colour threads giving a chequer-work pattern, and a crimped or rigaree foot-ring (bag 847, Tr. 48; Fig. 60.11). The third example is very small; it is of colourless slightly iridescent glass with a crimped foot-ring.

A number of small fragments with mould-blown decoration, including several with plain rims, could be from beakers or goblets. Amongst them is a straw-coloured piece with a horizontal rouletted pattern (bag 964, Tr. 51; Fig. 60.12), and a rim in similar glass with horizontal ribs (bag 843, Tr. 48; Fig. 60.13). This horizontal or sometimes chequered patterning seems

typical of Low Countries products of *c*.1550–1650 (*cf.* Henkes 1994, 132), but uncharacteristic of Italian glass. Beakers with this decoration have been found at Norwich (Haslam 1993, 106), no doubt imported from the Low Countries.

16th, 17th and 18th-century glass
(Fig. 61)
Glass of English manufacture was traditionally potash-lime forest glass green in colour, with the result that excavated pieces are now usually badly devitrified. This glass improved in quality under the influence of the Frenchman Jean Carre who had a licence for glassmaking from 1567. His business passed after his death to the Italian Giacomo Verzelini who in 1574 obtained a monopoly of the manufacture of *cristallo*. The glass industry underwent major reorganisation in 1615 when the use of wood as a fuel was prohibited in favour of coal, and Sir William Mansell obtained a new monopoly. The products of the local industry from the time of Carre and Verzelini could be of excellent quality and execution, and glass of *cristallo* type continued to be made in the 17th century. At the same time, green glass was also being made: this could be of good quality and is represented by relatively well preserved excavated fragments. Much commoner, it seems, was green glass which in an archaeological context is badly devitrified, and which is most familiar from the late 17th- and 18th-century wine bottles frequently found on excavations. These were the most numerous type of glass find at Southchurch Hall and are considered separately below.

A pedestal base made by folding could be from a large tall beaker or from a bottle (bag 446, Tr. 32; Fig. 61.15). It is of greenish glass, now quite strongly iridescent. A second base of this type was also found; the glass is badly devitrified and now a golden brown colour (bag 757, Tr.45; Fig. 61.16). The tall drinking beakers of this type sometimes had mould-blown decoration. Two small fragments in iridescent greenish glass with this decoration may be from such vessels.

A long neck with a slightly everted rim is from a bottle (bag 702, Tr.37; Fig. 61.17). The glass is badly devitrified; it was probably greenish in colour. A neck in dark olive green glass with a plain rim snapped off from the blowing iron is probably from a bottle or flask, but might be a tube from a distilling or chemical apparatus (bag 70, Tr.3; Fig. 61.18). A fragmentary handle (bag 126, Tr.6; Fig. 61.19) in similar glass may be from a large jug (*cf.* Haslam 1993, fig. 75; Battie and Cottle 1991, 104) or a tankard.

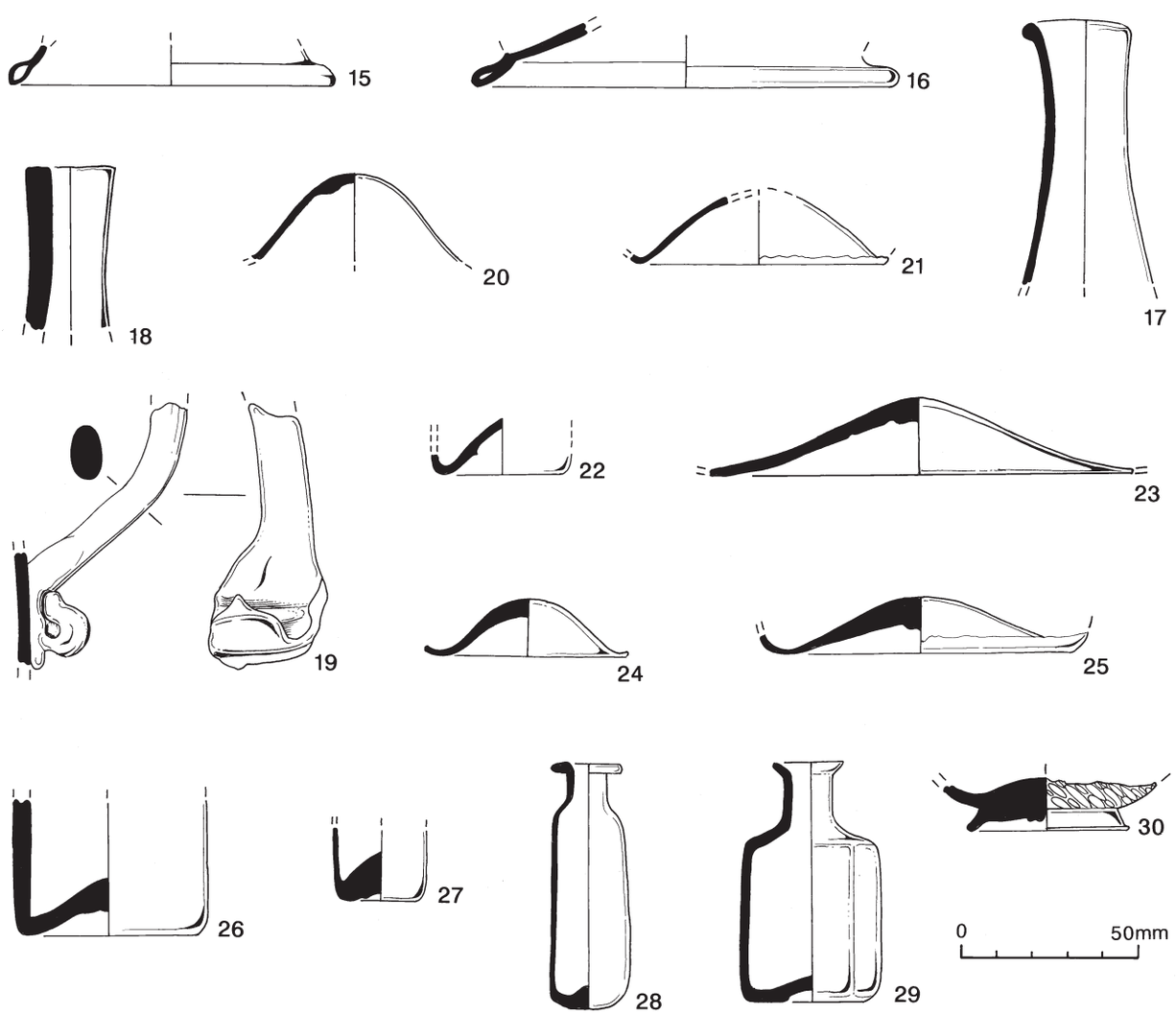

Figure 61 Bottle glass

Thirteen bases with a low to medium kick and a pontil scar are from relatively thin-walled vessels that range in diameter from 60–120mm (bag 818, Tr.49; bag 964, Tr.51; bag 1156, Tr.63; bag 557; Fig. 61.20–23). These are too incomplete to be certain what form they represent, but they are mainly from small bottles or possibly jars. Most are in olive green glass, now iridescent or devitrified. The metal mostly resembles that of 17th- to 18th-century wine bottles, with which they are often associated and seem to be contemporary. One, however, is in blue-green glass, now devitrified, whilst two of the smaller examples (Nos 21 and 22) are in well preserved green glass.

Some, if not many, fragments of the above material are from case bottles, square-section vessels typically used for spirits and designed for storage in a box (*cf.* Charleston 1984, 91; Huggins 1976, fig. 31). Six examples were identified, all relatively small, ranging in width from 60–95mm, and in olive green glass in fair to poor condition (bag 379, Tr.18; bag 862, Tr.48; bag 764, Tr.46; Fig. 61.24–26). Compared to the wine bottles of the period (see below), they are relatively thin-walled and have bases with low kicks.

The phial or small specialised bottle probably put mainly to medicinal use is also a better documented class of find, since being stoutly made it often survives reasonably intact. Four examples about an inch (25mm) in diameter were found. With the exception of one in straw-coloured glass, they were made of fairly well preserved green glass (bag 541, Tr.14; bag 819, Tr.49; Fig. 61.27–28). The intact example from trench 49 was accompanied by an identical but fragmentary piece and lacked a pontil scar, being apparently mould-blown. Two slightly larger bottles were also found. One was the rim and shoulder of a straw-coloured bottle in good condition two inches (50mm) in diameter. The other was an intact hexagonal bottle in devitrified olive green glass (bag 757, Tr.45; Fig. 61.29) which is closely paralleled by pieces from Norwich (Haslam 1993, fig.67 no. 629) and Waltham Abbey and London (Huggins 1976, 88, fig. 31).

As well as this relatively utilitarian green glass, there were also two objects of higher quality glass of English origin. Although decorated with opaque white glass, they are not *facon de Venise* but instead are related to the Nailsea-type products of the later 18th and early 19th centuries. One is a body fragment in well preserved dark reddish brown glass, into which have been marvered opaque white threads which form combed decoration. The other is a base in not such good condition, but probably also reddish glass. It is made in two pieces, a pad (with a pontil scar) being attached to the bottom of the vessel. The glass is flecked with pieces of bluish white glass (bag 66, Tr.3; Fig. 61.30 *cf.* Liefkes 1997, fig. 105). It is probably from a bottle, jug or decanter. A similar base in plain dark blue glass, and associated with pottery dated *c*.1750, was found in 1998 in the Boyes Croft malting at Great Dunmow, Essex.

Wine bottles

(Figs 62–63)

Bottles for serving and storing wine were made from about the mid 17th century onwards, initially onion or mallet-shaped, and becoming progressively more cylindrical and modern in form from the mid 18th century. Early examples tend to have relatively flat bases with a wide angle between the base and the body wall. In later ones there is usually a higher kick and the body wall/base angle is tighter. Initially the glass string which served as a tie-down for sealing the bottle was set well below the rim. During the 18th century the string moved up closer to the top of the rim and by the end of that century or the early 19th century had evolved into a collared rim of a type still familiar today. The olive green metal of which these bottles were made is typically in poor condition and badly devitrified. Those manufactured by the end of the 18th or early 19th century, however, tend to be better preserved, being only cloudy or iridescent, whilst the bottle glass of the first half of the 19th century or later is well preserved and of brilliant appearance. It also tends to be a darker olive green, almost black, in colour. Often it has a dimpled or orange-peel like surface, the result of being made with the assistance of a mould. The best account of the development of the wine bottle remains that of Noel Hume (1961).

The wine bottles from Southchurch Hall constitute a large collection, over 600 fragments or about 60% of the total glass finds. Of these about 400 are of poorer quality metal or are of recognisably early forms which can be attributed to the period *c*.1650–1775. A simple estimate using the number of bases present indicates that the remains of over 40 bottles were recovered. However, the absence of good stratigraphic sequences, and also of intact profiles, means that these finds have a limited potential for study. Of the two early examples illustrated (bag 1138, Tr.61; bag 988, Tr.51; Fig. 62.31–32) No. 31 was one of six similar short conical necks with V-shaped strings datable to *c*. 1700 . The other illustrated examples (bag 1156, Tr.63; bag 569, Tr.37; bag 69, Tr.3; and bag 70, Tr.3; Figs 62.33–63.36) comprise rims and bases which are from the same bag or trench and probably associated, and which are from later bottles increasingly cylindrical in shape. Somewhat unusual is a base from a moulded octagonal section bottle in olive green slightly cloudy and iridescent glass (bag 685, Tr.37; Fig. 63.37; *cf.* Noel Hume 1961, fig. 4, no. 17). It probably dates from the end of the 18th century.

One wine bottle seal was found (bag 494, Tr. 29; Fig. 63.38): it bears the name of T. Dorman and the date 1743. Thomas Dorman was one of the witnesses of the will made by George Asser in 1738 (ERO DD Ge. 471). The Asser family and their descendants/successors at Southchurch Hall drank a fair quantity of wine, though from the absence of other seals they may not have taken its consumption as seriously as Thomas Dorman.

19th- and 20th-century glass

(Fig. 64)

Goblets or drinking glasses of 18th-century type were not recognised amongst the finds. However, a handful of 19th-century examples were found. A well preserved example, of which two were found, has a stem with bladed knop and a faceted bowl (bag 81, Tr. 4; Fig. 64.40). The decanter is a form which now appears (or becomes recognisable). Three rims and necks with heavy collars typical of the first half of the 19th century were found (bag 100, Tr. 5; Fig.64.39). The removal of the duty on glass in 1845, and the successful development of bottle making machinery in the second half of the century, opened the way for the use of glass as a container for many different types of products. Such glass vessels are sometimes found in large numbers. At Southchurch Hall, however, they

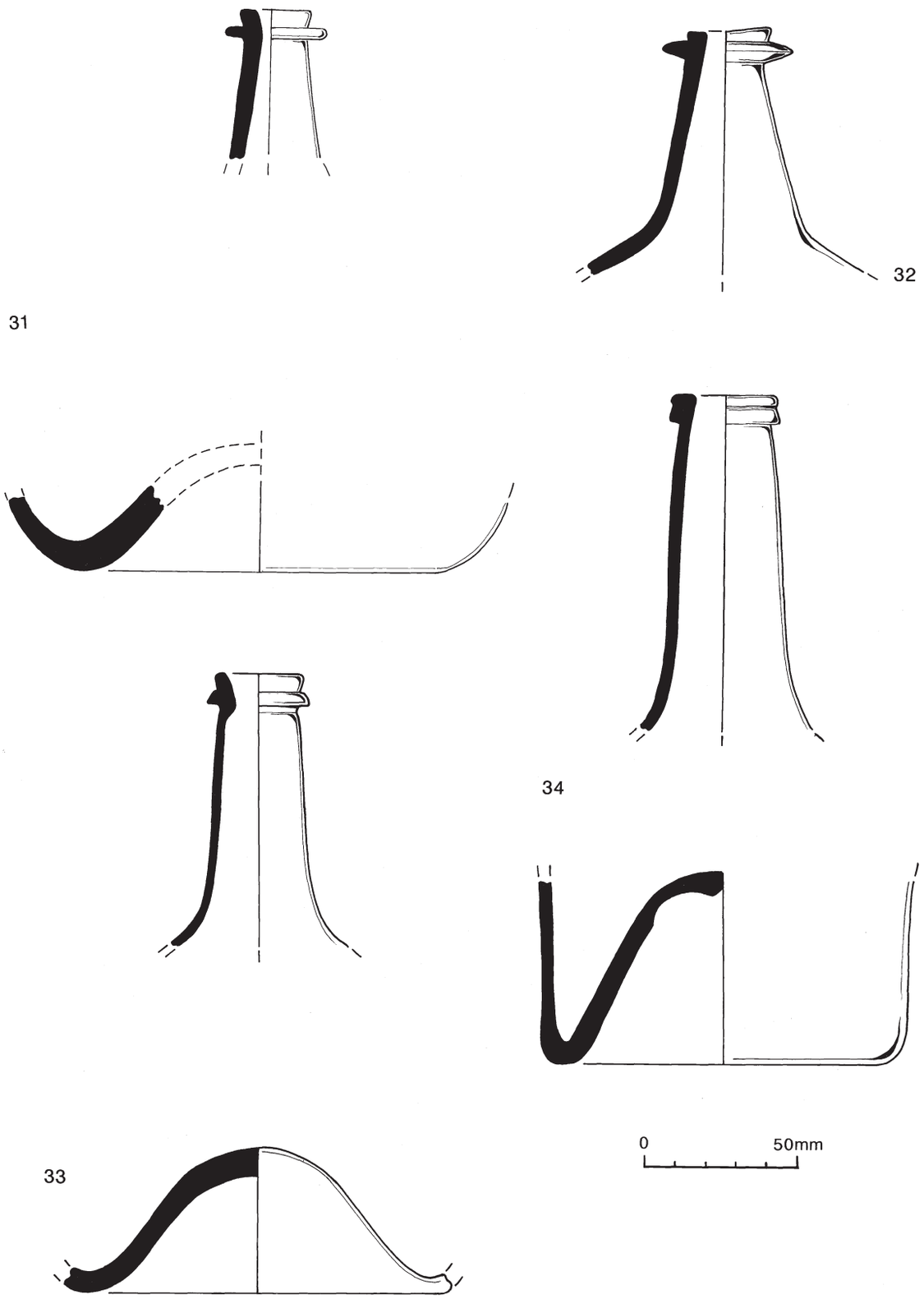

Figure 62 Bottle glass

were not especially numerous, though many different types are present amongst the finds. There are many fragments of well preserved colourless or pale green bottle glass, but only a very few recognisable Codd bottles, Hamiltons, or spirits bottles. The most common identifiable type of bottle was a pale blue rectangular section medicine bottle, sometimes graduated on the back, of which about twelve examples were found. Other objects found included fragments of lampshades, two lenses, a cut glass paste jewel, a cut glass bottle from a dressing table set or jewellery box, an ink bottle, some marbles, a few pieces of pressed glass, a Boots pill bottle, several screw top jars, and Lea and Perrins and Mason's *OK Sauce* bottles.

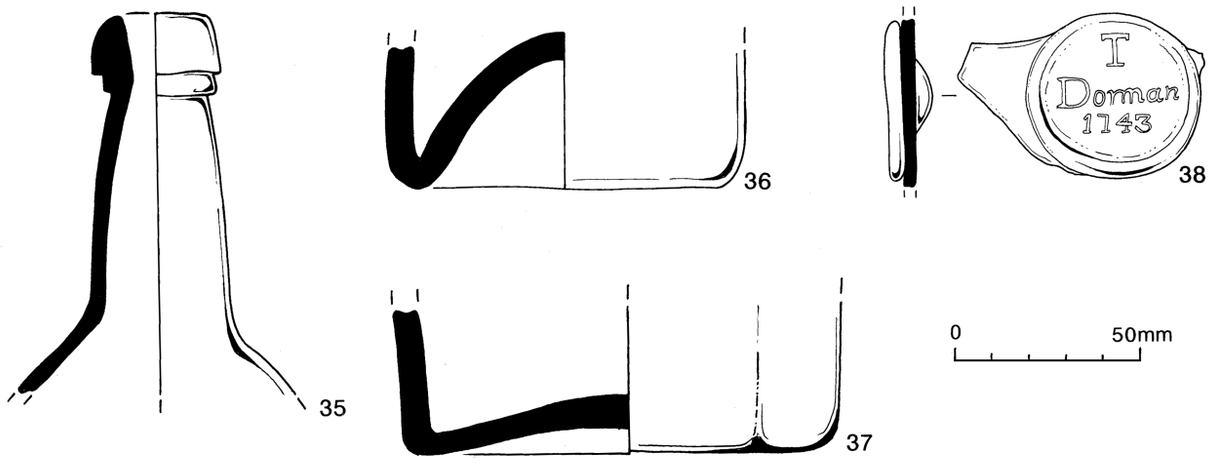

Figure 63 Bottle glass

Window glass
(Fig. 64)
Before the development of industrialised production methods, window glass was either broad glass made by blowing, cutting and flattening a cylinder of glass, or crown glass obtained by spinning a gather of glass on a pontil rod until it flattened out into a circular disc. In the late Middle Ages, the English industry was influenced by Norman craftsmen who made crown glass. In the 16th century, however, broad glass was made by immigrant glassworking families from Lorraine. Crown glass has a brilliant fire-polished finish which led to it being preferred over the duller broad glass, and in the later 17th century and the18th century, most window glass was of this type. From the 1830s, broad glass began to supersede crown as a result of improved manufacturing techniques. These saw the development of patent plate, broad glass which could be polished in the way used for cast plate glass. Plate glass had always been expensive, but a new method of rolling it and making it thinner made it economical enough for glazing. Machines for automatically blowing cylinders of glass and mechanically drawing out flat sheets of glass were invented at the beginning of the 20th century and completed the industrialisation of window glass manufacture.

When dealing with small pieces of glass in poor condition, the manufacturing technique is rarely evident and cannot serve as a criterion for their analysis. Instead, the 464 fragments from Southchurch Hall can be divided on the basis of their general appearance and condition into the following main types: late medieval or 16th-century glass identifiable principally by its advanced state of devitrification; green glass in better condition, probably mainly 17th- and 18th-century; blue-greenish glass of somewhat better quality and similar date; and a relatively small amount of miscellaneous 19th- and 20th-century glass.

The early glass is mostly devitrified, now a dark opaque brown colour, but there are also better preserved fragments with a degree of translucency. It ranges in thickness from 1–4mm, though the majority of the pieces are between 1mm and 2mm thick. So far as it is possible to tell, the pieces were all green, though one may have been red. This glass includes a few fragments from quarries, and four rectangular border pieces approximately one (25mm) or two (50mm) inches wide. One of these is interesting as it has one edge which is both grozed and rounded (bag 760, Tr.45; Fig. 64.42). Rounded edges are thought to represent the top or bottom of broad glass cylinders which have become fire rounded as the cylinder is worked. Equally, they could be the edge of a table of crown glass, or where broad or crown glass has been cut with a hot iron. This piece, being fairly thin (1.5mm), looks as if it might have been crown glass, the edge of which had to be straightened for fitting in the lead cames. That the border pieces may have been associated with a more elaborate glazing scheme than quarries is suggested by a single fragment from a hexagonal pane (bag 379, Tr.18; Fig. 64.41).

Amongst the early glass, there are about 40 fragments with painted decoration. These show a similarly wide range of condition and thickness. The painting is in red, apart from one piece on which white also occurs (Fig. 64.43). The poor condition of the fragments makes it difficult to assess the painting, but on four pieces it seems to be foliate in style. Two of these have grozed edges cut to a trefoil shape (bags 210a, 223; Fig. 64.43–44). Two fragments are from quarries, one of which has its border outlined in red (bag 759, Tr.45; Fig. 64.45), whilst another is a border piece.

The early glass was concentrated in trenches 45, 53 and 54, which were located adjacent to each other north of the moat-edge building to the east of the small garderobe. They produced about 100 fragments, 34 of them painted. The general similarity of the glass and the style of painting, together with its distribution, suggest that it all came from the same building. It is difficult to resist the conclusion that that building was the closest to which it was found, and that the painted glass indicates that it was the chapel. The date of the early glass cannot be defined with precision, but a range from the late 15th to the early 17th century can be suggested for it. Wine bottle fragments were often associated with this glass, indicating that the windows were broken up, and the buildings demolished, in the 18th century.

Most of the rest of the window glass is green glass, variable in hue and quality but usually pale green with a slight yellowish tint. It is mostly 1–2mm thick, and

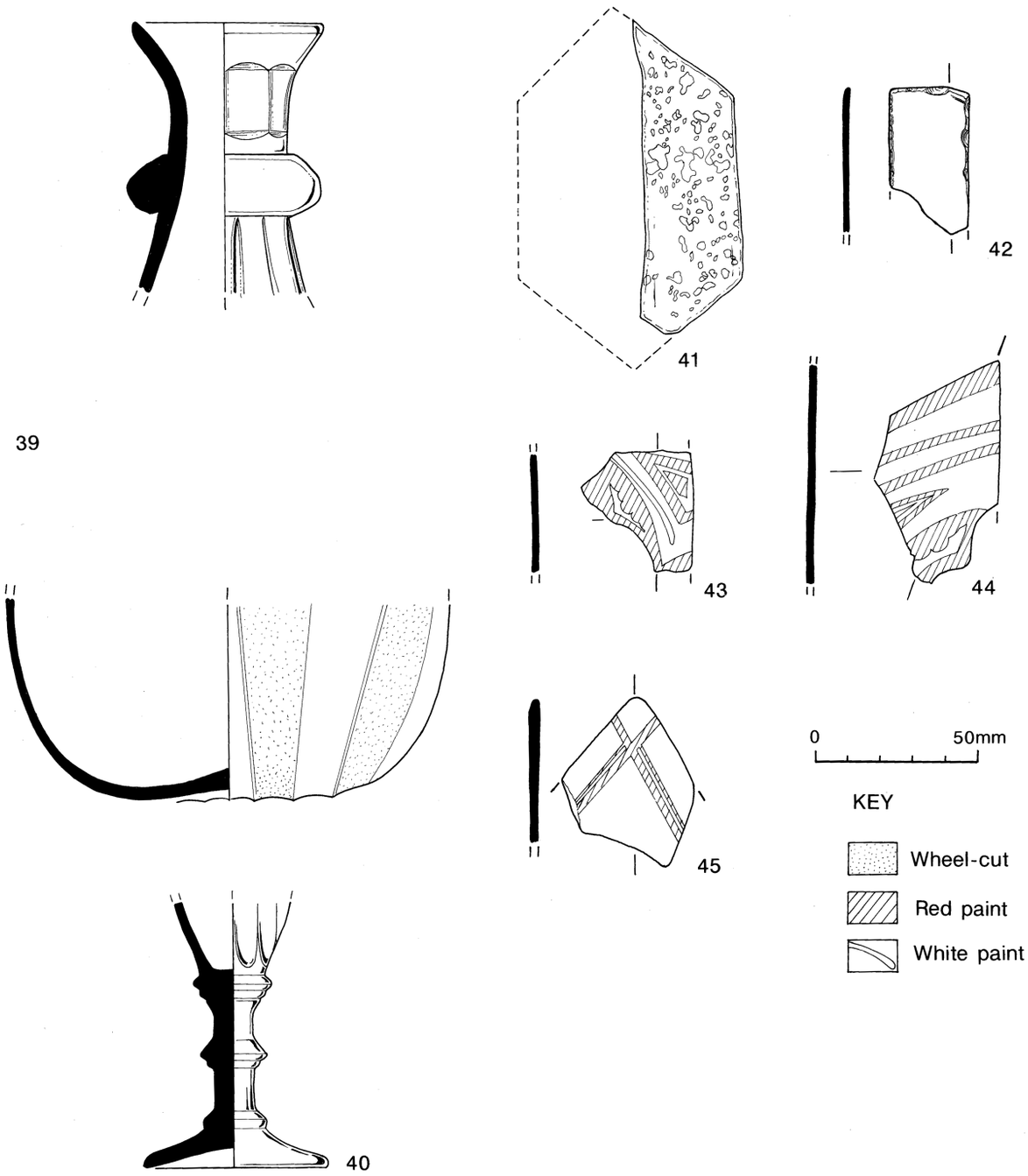

Figure 64 Vessel and window glass

generally iridescent, sometimes with a surface that has begun to laminate. It is probable that this is mainly crown glass, though two pieces with rounded edges could represent broad glass. The fragments are small, but a few are recognisably from quarries with cut edges, whilst a smaller quantity seem to be from rectangular panes.

Distinctive amongst the window glass is a group from trench 46 of about 82 fragments of blue-greenish glass, mostly good quality but nevertheless strongly iridescent with often a slightly flaking surface, and about 1mm thick. Sufficiently large pieces survive for it to be possible to say that they are from panes at least 3 inches (75mm) across with cut edges. The thinness and good quality of the glass suggest it is crown. Neve writing in the early 18th century described the varieties of glass available in the London area, the best being Ratcliffe glass (from Stepney) which he said was a 'light Sky-blew Colour' (Neve 1726, 145). Glass of this type has also been found on the sites of the late Tudor mansions at Copped Hall, Epping (Andrews 1986), and the Carmelite Friary, Maldon, in contexts broadly datable to the 17th and 18th centuries.

A few sporadic fragments do occur elsewhere at Southchurch Hall, but this concentration in trench 46 is indicative of a dump associated with the refurbishment or demolition of a building. It is natural to link it to the east-west building south of the hall, the foundations of which were found in trench 46. If this was the case, it implies that it had windows with good quality 17th- or 18th-century glass, and therefore was not demolished till the 18th century.

IV. The pottery

by David Gaimster

Introduction

This report discusses the medieval to early modern pottery sequence recovered from the site between 1972 and 1989. Despite the keyhole nature of much of these investigations, the site produced a substantial assemblage of ceramics numbering over 10,600 individual sherds. However, due to the high fragmentation rate and residual character of the assemblages, particularly the medieval material, it was not possible to make an estimate of the minimum number of vessels represented. Normally any pottery report is structured according to the questions posed of the material. In this case, the organisation and scope of the report has been determined largely by the nature and limitations of the excavation strategy used on the site. In view of the excavation policy of digging individual box trenches in sequence, it has been impossible to get much of an idea of horizontal stratigraphy and the distribution of ceramics on different parts of the site. Thus the contribution of the ceramic finds to questions of intra-site function was limited. Within any continuously occupied residential site of this nature the proportion of residual material found within each context is bound to be high. The pottery from Southchurch Hall proved to be no exception and the quantification data must be treated with the utmost caution. The physical disturbance and poor condition of the pottery assemblages and the high levels of redeposition across the site has precluded all but the most descriptive of pottery reports followed by a brief commentary on the nature of the pottery supply to the site between the 12th and early 20th centuries. Despite the difficulties of reuniting object with original context, it is clear that the excavations have almost uniquely for south-east England revealed both the complexity of the regional ceramic market and extent of commercial and cultural contacts with the Continent enjoyed by moated residential sites in the region over the course of the late medieval to industrial period.

Methodology

Initially most of the Southchurch Hall ceramic assemblage was processed at Prittlewell Priory between late 1986 and 1987. The author — then a curator at the British Museum — assisted by the late Eric Hills and his wife Eve, along with the late John Jackson, worked on the definition of the fabric series, the sorting and quantification of the assemblage, and on the selection of identifiable forms for illustration. The sherds were classified according to the now well established Essex fabric series introduced by Cunningham (1982; 1985a) and subsequently developed by Walker (*e.g.* 1990a; 1995) and Cotter (2000). The fabric codes used in this report are those used by the Essex system. The wares have been divided into indigenous products and imports in order to assist discussion of the pottery supply to the site. In view of the high fragmentation rate, weighing the pottery was considered to be invalid. Sherd count, although only giving an impression of the vertical and horizontal distributions of the ceramics recovered from the site, provides at least an indication of the relative frequencies of wares over time. The sherd counts are recorded in a series of tables for the main areas of the site investigated by excavation: the mound, moat, gatehouse and garderobes (see Tables 13–17).

Selection for illustration was based on differences in shape, size, manufacturing technique and ornament. In view of the size and range of the assemblage it was felt necessary to illustrate as much of the surviving diagnostic typology as possible. For the sake of simplicity, the pottery illustrations are mounted as far as possible within context (*i.e.* layer numbers within excavation areas) accompanied by individual fabric codes, bag numbers and trench numbers (see excavation/recording methods). This approach aims to provide the reader with an immediate visual snapshot of the composition of the vertical layers which run across the main features of the site. Although the emphasis here is on the vertical sequence of pottery deposition, an impression of the horizontal distribution of wares is given by the trench numbers in each case.

The pottery is lodged with the site archive in Southend Museum. A type series of all the major fabrics is also available for study at the British Museum, Department of Prehistory and Europe (National Medieval Pottery Reference Collection).

Essex fabric series

The pottery has been classified using Cunningham's typology for Essex post-Roman pottery (Cunningham 1982, 1985a) and developed by Walker (1990a, 1995) and Cotter (2000). Characterization of the type series also relies heavily on Drury's classification of Essex cooking-pot rims (Fabrics 12, 13, 20, 21, 22 and 35; Drury 1993). The Essex type series fabric numbers are repeated here. Occasionally additional references, particularly for the non-local wares, are given.

Indigenous wares

Fabric 12A/B. *Sandy Shelly Ware* is a finely-crushed shell-tempered ware. The Southchurch Hall finds are characterised by the addition of sand tempering, giving a harsh texture. Typologically the form spectrum is narrow, with cooking pots and storage vessels predominating (Nos 162–179 Figs 71–72, Nos 196–209 Figs 72–73), although the mound has produced the odd special form, such as the socketed bowl (No. 199 Fig. 72). Sandy Shelly Ware covers one of the the most common ceramic products in use in south Essex between the late 11th and 13th centuries. Many shelly cooking pots have developed 13th-century-type rims and appear to be similar to those found at nearby North Shoebury (Walker 1995, figs 75–77).

Fabric 13. *Early Medieval Sandy Ware* is a hand-made fabric with coarse sand tempering. Typically it has a grey core with red-brown oxidised surfaces. Cooking pots and storage vessels make up the majority of products (Nos 210–217 Fig. 73), while bowls account for the one special form (Nos 184, 240 Figs 72 and 74). The suggested date for this ware in Essex is the 11th century to *c.*1200.

Fabric 20. *Medieval Sandy Grey Ware* is a hard, coarse, sand-tempered fabric which fires to a consistent grey colour. Produced between the 12th and 14th centuries, the reduced body is ideally suited to use as a cooking pot (No. 13 Fig. 65). Jugs are also common (Nos 14, Fig. 65; 396, 397 Fig. 80). It is completely outnumbered by the Sandy Shelly Wares and Early Medieval Sandy Wares at Southchurch.

Fabric 20C. *Mill Green Coarse Ware* is a micaceous sandy fabric which fires to a red-brown colour. This is the coarse cooking pottery produced by the Mill Green industry. It is thought to date from the late 13th to mid 14th centuries (Pearce *et al.* 1982, 289–295).

Fabric 21. *Medieval Sandy Orange Ware* is the characteristically hard, oxidised and sand-tempered coarse ware. It probably has a very local origin. Glazed and usually decorated jugs are the most common medieval form (Nos 19, Fig. 65; 256, Fig. 74; 557, Fig. 88), kitchen wares becoming more common in the late medieval period. Although beginning in the 13th century, Cunningham (1985a) suggests the ware continued to be made until the 16th century. The cistern bunghole (No. 591; Fig. 91) confirms this extended chronology.

Fabric 22. *Hedingham Ware* is a fine, soft, very micaceous fabric, which fires to an orange-brown or pinky buff colour. It contains abundant quartz sand grains and usually has a mottled deep green glaze. Jugs

account for the main form and they are often highly decorated (Nos 187, Fig. 72; 218–222, Fig. 73). Hedingham Ware was produced between the mid 12th to late 13th centuries.

Fabric 23 D. *Kingston-type Ware* is one of the principal Surrey Whiteware products which penetrated the entire Thames estuary region. It is a white-firing sandy earthenware with a crazed and often pitted green glaze, dominated by jugs forms. The earliest Surrey Whitewares in the London area are dated to *c.*1250 and are similar in fabric to pottery from the a late medieval kiln excavated at Eden Street, Kingston-upon-Thames, although a group of whiteware waste found at Bankside appears indistinguishable in form and fabric (Pearce & Vince 1988). The ware continues in production until the mid 14th century.

Fabric 23F. *Coarse Border Ware* has its origin in the Surrey-Hampshire borders around Farnborough, Farnham and Ash. It is a coarse off-white to buff earthenware with abundant, illsorted quartz sand inclusions. Occasionally with a thick and glossy to thin and pitted green glaze. There is a strong bias towards plain vessels, principally for the preparation of food. Cooking pots, pitchers and jugs are the most common forms (Pearce & Vince 1988). Coarse Border Ware appears in the London waterfront sequence by the late 13th century and continues in importance during the 14th to mid 15th centuries.

Fabric 35B. *Mill Green-type Ware* originates at Mill Green, near Ingatestone, and was characterized first by Pearce *et al.* (1982). Mill Green-type Ware accounts for the most common medieval jug form found at Southchurch (Nos 226, Fig. 73; 242, 257, Fig. 74). There is a possibility that some of the Southchurch finds were made down the road at Rayleigh where a production site was first investigated at the beginning of the century (Reader 1913) and between 1958 and 1974 (Walker 1990b). A further production site has recently been identified at Havering. Rayleigh produced an identical fabric and comparable forms, although production here seems to have lasted until the 15th century. Mill Green-type Ware has a fine micaceous fabric and fires to a brick red with a grey core. Jugs, the dominant form, are frequently painted with a white slip and combed underneath a green glaze (29–31, Fig. 65; 592, Fig. 91), although cooking pots were also produced (No. 32, Fig. 65). The London waterfront chronology for Mill Green Wares span the late 13th to mid 14th century, although there is some evidence now that the ware was circulating earlier in Essex than in London. Excavations at King John's Hunting Lodge, Writtle, for instance, indicate that Mill Green-type Ware was present by the mid 13th century (Rahtz 1969). At North Shoebury the ware was found in association with London-type ware sherds of the early to mid 13th century (Walker 1995, 114).

Fabric 36. *London-type ware* made in the central London area covers several variations on a fine redware body with a well-sorted sand matrix (Pearce *et al.* 1985). Jugs account for the principal form (No. 33, Fig. 65). The highly decorated slip and glaze repertoire follows contemporary North French prototypes. Production covers the early/mid 12th to early 14th centuries, but is concentrated in the mid 12th to mid 13th centuries.

Fabric 40. *Post-medieval red earthenwares* cover a wide range of Essex pottery production. The range is described in detail by Cunningham in her report on the Chelmsford sequence (Cunningham and Drury 1985, 1–2). First appearing in the later 15th century the ware continues in production throughout the post-medieval period. It probably represents a continuation of sandy orange ware Fabric 21. As at all other late medieval to early modern settlements in Essex and Thames estuary area, the category forms the single largest group of ceramics recovered from Southchurch. Dishes, including bowls (*e.g.* Nos 41–42, Fig. 66; 72, Fig. 67; 426, Fig. 81), are the most common form, followed by cisterns (Nos 34, 49, Fig.66; 425, Fig. 81; 558, Fig. 88), storage jars (Nos 418, Fig. 81; 432, Fig. 82), jugs (Nos 430, 437, Fig. 82; 554, Fig. 88) and drinking cups (Nos 431, 442, 443, Fig. 82). Slip painting is the most common form of decoration, particularly on the jugs and cisterns.

Fabric 40A. *Metropolitan Slipware*, made principally at Harlow and other Essex centres such as Stock and Loughton, is the decorated version of regional redware pottery, distinguishable by its narrow trailed white slip patterns under a thick transparent lead glaze. Most fragments at Southchurch represent dishes or bowls decorated on the interior and on the rim (Nos 59–62, Fig. 67; 269–274, 276–277, Fig. 75). Jugs and jars appear less frequently, the decoration applied to the exterior. Metropolitan Ware tends to date to the 17th century, more commonly the first half (Gaimster 1997b; Nenk 1999).

Fabric 40bl. *Black-glazed redware* falls under the general umbrella of Fabric 40 but has a thick iron-rich black glaze which is characteristic of the redwares produced at Harlow and Stock, near Chelmsford, during the 17th and 18th centuries. Part of Essex post-medieval redware production, the ware was not given a separate code by Cunningham (1985b).

Fabric 40C. *Cistercian Wares*, so-called after their discovery on excavations of Cistercian monasteries, enjoyed a widespread distribution across England between the mid 15th and early 16th centuries, with a concentration in the North and West Midlands. The highly fired, dark redware body was often applied with white slip in zones or as a coating on the surface. The form spectrum is limited to fine hollow wares designed for table use in the shape of mugs (No. 278; Fig. 75), cups, bottles, jugs, salts *etc.* (Barker 1986).

Fabric 40E. *Sussex Inlaid Wares* derive from the East Grinstead area of Sussex where lead-glazed redwares with inlaid white slip inscriptions were made during the 19th century, the texts formed by the use of printers' type.

Fabric 42. *Surrey / Hampshire Border Ware* covers a large category of white and red-firing fine bodied earthenware made on the Surrey-Hampshire border between the 16th and 18th centuries (Pearce 1992). The industry dominated the domestic pottery market of London over this period. The form spectrum is expansive and covers all areas of domestic kitchen activity, tableware, storage, heating and lighting. Layer 6 of the moat produced a representative assemblage of 16th- to 17th-century jugs, skillets, dishes, bowls and tankards (Nos 467–478, Fig. 84).

Fabric 45. *English Brown Stoneware* is an umbrella term for a wide range of stoneware products made in England between the late 17th and late 19th centuries, Fulham in London being the earliest and most prolific industry (Green 1999). In addition to the Fulham products, Southchurch was undoubtedly drawing stoneware from around the country (see Hildyard 1985 for overview of regional types). Typologically the range is limited to jugs, bottles and storage vessels (Nos 94–115, Fig. 69).

Fabric 46A. *English Tin-Glazed Earthenware* primarily covers the London metropolitan production of painted tin-glazed bodies. The individual wares are described in detail by Britton (1987) and by Stephenson (1999). The workshops which cluster along the Thames at Southwark, Lambeth, Rotherhithe and Wapping operated from the early 17th to late 18th centuries. Southchurch finds range from dishes and bowls to tankards and pharmacy jars and their stoppers (Nos 122–133, Fig. 70).

Fabric 47. *Staffordshire-type white stoneware* was first developed in the 1720s and continued in production until the 1770s by which time it was also being made in Derbyshire, Yorkshire and Liverpool. The calcined ground flint used in the fabric instead of sand made the vessels very strong and light, ideal for the growing fashion for teaware. Southchurch has produced an assemblage containing bowls (No. 310, Fig. 76), tankards (Nos 311–313, Fig. 76), dishes (Nos 314, Fig. 76; 365, Fig. 78) and example of a saucer. (No. 134, Fig. 70).

Fabric 48B. *English Blue-and-White Porcelain* was first produced at Chelsea in London by 1745, and the London Bow factory, Derby, Worcester, Lowestoft and several small factories in Liverpool were established during the 1750s. Most of these made soft-paste porcelain while true hard-paste was made at Plymouth and Bristol. Underglaze blue printing was developed in England during the 1760s. The Southchurch spectrum of forms is limited to a handful of sherds of teaware.

Fabric 48C. *Staffordshire-type Creamware*, the fine white earthenware body being one of the most successful ceramic products to be made in England, was first developed alongside coloured glazes during the1750s. Creamware was made in many places other than Staffordshire, Leeds being the largest centre. The smooth surface of the ware made it very suitable for transfer printing and enamelling. The form spectrum is wide with dining ware and teaware the most common survivals (No. 137, Fig. 70).

Fabric 48 / 48D / 48X. *Staffordshire miscellaneous earthenwares* covers a range of 18th/19th-century factory-produced earthenwares made in Staffordshire and the north of England. They include some of the Staffordshire finewares, such as Agate ware, red earthenware, Mocha Wares and transfer-printed and ironstone wares (Nos 139–142, 144, Fig. 70).

Fabric 48P. *Pearlware,* a blue-toned earthenware body with its 'China glaze', replaced plain creamware as the mainstay of the Staffordshire pottery industry after *c.*1779. It soon proved a popular substitute for delftware and the cheaper grade of Chinese export porcelain. Southchurch produced an unusual bell-shaped vessel (No. 143, Fig. 70).

Fabric 50. The *Staffordshire Slipware* group comprises a range of slip-trailed and press-moulded flatware dishes of the second half of the 17th century and joggled, feathered and combed slip flatware from the early to late 18th century (No. 145, Fig. 70). The wares appear to have had a virtually national distribution pattern.

	12a/12b	*13*	*20*	*20c*	*21*	*22*	*23d*	*23f*	*35b*	*36*	*40*	*40a*	*40bl*	*40c*	*42*	*45*	*46a*	*47*	*48*	*48b*	*48c*	*48p*	*48x*	*50*	*51a*	*50c*	*55*
md1	1	1	-	-	1	-	-	-	3	-	40	-	4		1	11	6	1	59	-	-	3	57	19	9	1	-
md2	15	19	11	15	13	4		3	27	4	595	5	29	1	38	80	80	-	532	-	3	45	370	98	55	-	9
md2B		-	-	-	14	-	-	-	-	-	8	-	-	-	-	10	-	-	-	-	-	1	4	-	-	-	-
md2C	1	40	22	-	4	2	-	2	22	2	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
md2W (I)	-	4	4	-	-	-	-	-	2	2	414	-	4	4	11	9	9	-	54	-	-	17	130	55	13	-	-
md2W (II)	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-
md2W (III)	-	-	-	-	-	-	-	-	1	-	29	-	3	1	-	12	-	-	20	3	-	-	19	4	4	-	-
md2W (IV)	-	-	1	-	-	-	-	-	-	-	35	-	-	-	1	32	2	-	7	2	-	-	19	3	4	-	-
md2W (V)	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
md3	4	13	12	2	2	10	-	1	19	40	40	-	-	-	-	8	4	-	15	-	-	1	6	-	-	-	-
md3A	-	-	-	-	-	-	-	7	-	-	9	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
md3B	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
md4	1	-	-	-	-	-	2	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
md5	289	52	16	-	-	8	-	-	7	12	17	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
md5A	5	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
md6	301	170	22	-	2	43	-	4	34	53	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
md6A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
md6B	26	18	8	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
md7	9	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
md7A	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
md8	126	18	7	-	-	4	-	-	6	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
md9	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
totals	**786**	**338**	**104**	**17**	**36**	**79**	**2**	**17**	**121**	**115**	**1257**	**5**	**41**	**6**	**52**	**164**	**101**	**1**	**688**	**5**	**3**	**67**	**605**	**179**	**86**	**1**	**9**

Table 13 Pottery quantification by Eric Hills' phases: Mound

	12a/ 12b	*13*	*20/ 20c*	*21*	*22*	*23f*	*35b*	*36*	*40*	*40a*	*40bl*	*40c*	*40e*	*42*	*45*	*46A*	*47*	*48*	*48b*	*48p*	*48x*	*50*	*51a*	*55*	*27*	*30*	*39*	*43*	*45B*	*45C/45D 45F/46E 48A/57 imports*	***totals***
mt1	-	1	-	1	-	1	-	-	36	-	2	2	1	1	4	4	-	136	1	2	80	1	13	-	-	-	-	-	-	2	**288**
mt1a	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1**
mt2	6	6	4	8	1	-	7	3	763	13	32	15	-	80	74	143	42	206	4	5	83	63	26	2	2	-	-	-	-	5	**1645**
mt3	-	-	-	-	-	-	-	-	30	-	6	2	-	6	1	11	-	-	-	-	-	13	-	-	-	-	-	-1	-	12	**82**
mt4	3	1	3	14	-	-	3	-	271	3	12	-	-	37	13	76	32	9	-	-	6	17	1	3	-	-	-	2	3	19	**528**
mt5	1	-	1	4	-	-	-	-	99	1	10	1	-	13	5	21	1	1	-	-	-	3	-	1	-	-	-	-	-	13	**175**
mt6	2	18	25	19	1	20	6	2	1393	-	29	-	-	93	77	35	2	109	1	7	36	28	16	41	-	1	3	151	3	78	**2196**
mt6a	-	2	2	-	-	-	-	-	8	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**16**
mt6b	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1**
mt7	-	2	3	6	-	85	-	1	77	-	1	-	-	3	-	-	-	-	-	-	-	-	-	2	-	-	-	-	1	3	**184**
mt8	1	-	-	2	-	2	2	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	**21**
mt9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
totals	**13**	**30**	**38**	**54**	**2**	**108**	**18**	**6**	**2691**	**18**	**92**	**24**	**1**	**233**	**174**	**290**	**77**	**461**	**6**	**14**	**205**	**125**	**56**	**47**	**2**	**1**	**3**	**154**	**6**	**185**	**5137**

Table 14 Pottery quantification by Eric Hills' phases: Moat

	12A/ 12B	*13*	*20*	*21*	*23F*	*35B*	*36*	*40*	*40BL*	*40C*	*42*	*45*	*48X*	*50*	*55*	*31*	*45B*	*45C*	*45D*	*45F*	**total s**
GH3	1	-	-	2	-	2	2	37	-	-	3	-	-	-	5	-	-	-	-	-	**52**
GH4	-	1	1	-	1	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	**12**
total s	**1**	**1**	**1**	**2**	**1**	**2**	**2**	**46**	**-**	**-**	**3**	**-**	**-**	**-**	**5**	**-**	**-**	**-**	**-**	**-**	**64**

Table 15 Pottery quantification by Eric Hills' phases: Gatehouse

	12A/ 12B	*13*	*20*	*21*	*23F*	*35B*	*36*	*40*	*40BL*	*40C*	*42*	*45*	*48X*	*50*	*55*	*31*	*45B*	*45C*	*45D*	*45F*	**totals**
GR3	-	-	-	-	-	-	-	166	3	2	3	4	1	1	22	1	-	1	2	-	**206**
GR4	-	1	9	2	8	2	7	190	-	1	9	-	-	-	1	-	-	3	1	-	**233**
GR5	-	-	-	-	-	1	1	4	-	2	2	-	-	-	-	-	-	-	-	-	**10**
totals	**-**	**1**	**9**	**2**	**8**	**3**	**8**	**360**	**3**	**5**	**14**	**4**	**1**	**1**	**23**	**1**	**-**	**4**	**3**	**-**	**449**

Table 16 Pottery quantification by Eric Hills' phases: Garderobe

Fabric 50C. *Staffordshire Butterpot* is a special class of red stoneware storage vessel made in the North Midlands from the early to late 17th century. Production had certainly ceased by *c.*1720. Kiln waste is known from a kiln site in Hanley, Stoke-on-Trent, dating to *c.*1690–1714 (Egan 1992).

Fabric 51A. *Slipped kitchen earthenware.* This iron-streaked earthenware was made in Staffordshire and the North Midlands during the 19th century using refined clays. The interior surface of the flatwares is covered in a white slip beneath a transparent lead glaze (Nos 147–148, Fig. 70).

Fabric 55. *Guy's-type Ware* refers to the post-medieval redware industry operating in the London area between the late 15th to early 16th centuries and the 17th century (Nenk 1999). The name 'Guy's Ware' derives from an early type-site in South London. The key production sites identified to date include Woolwich (excavated 1974), Deptford (excavated 1996–97) and Lambeth (excavated 1963). These coarse sand-tempered redwares often appear with a coating of white slip under a transparent lead glaze and may feature *sgraffito* (incised) decoration. A high proportion of vessels were made for utilitarian, domestic purposes, primarily in the kitchen or storeroom. The Southchurch assemblages, notably from layers 2 and 6 of the moat, are typical of many in London and the South-East of 16th- to 17th-century date, with dishes, pancheons, skillets, storage jars, and bowls (with incised decoration) well represented (Nos 323–342, Fig. 76).

Imported Wares

Fabric 14B. *Rhenish Proto-Stoneware* derives mainly from Siegburg, near Bonn. Fired to a temperature of *c.*1000–1100°C, these wares have a porosity value of around 5%. Jugs and drinking cups in this virtually impervious material began to transform the European pottery market between *c.*1250 and 1300. Rhenish proto-stoneware jugs with a brown, pimply surface and ash glaze first appear in the London waterfront deposits from *c.*1250 (Vince 1985, 54). The Southchurch sherds may reflect an early link to the metropolitan pottery market.

Fabric 27. *Saintonge Ware* from western / central France represents the most common ceramic import into London during the late 13th to early 14th centuries, the most popular product being tall jugs with parrot beaks, either glazed in mottled green or painted in polychrome colours (Vince 1985, fig.22).

Fabric 30. *Beauvais Earthenwares* are characterised by a fine white body with monochrome glazes. Made between the late 15th and 16th century, the ware is vastly superior in quality to contemporary finewares made elsewhere in north-west Europe. The form spectrum is dominated by dishes, bowls, chafing dishes, *albarelli* and drinking jugs / mugs.

Fabric 31. *Dutch red earthenwares* are well represented at Southchurch Hall. Their distribution across the site reflects the continuing need amongst its community for high quality kitchen and utility ware throughout the 15th to 17th centuries. The ware is equally represented in the towns of East Anglia where a thriving Low Countries artisan population lived. Forms recovered from the moat at Southchurch include larger vessels with characteristic pulled feet, jars, cisterns, cauldrons, chafing dishes and bottles (Nos 26–27, Fig. 65; 408–414, Fig. 80).

Fabric 31A. *North Holland Slipware* probably represents a continuity in the production of high quality decorated redware in the Low Countries, primarily, in this case, for table use (Hurst *et al.* 1986, 154). The British import phase for these polychrome slipwares tends to coincide with the 17th to early 18th centuries. Typical products include handled bowls (No. 28, Fig. 65), dishes, cups, cauldrons and pipkins.

Fabric 32. *Low Countries Greyware* represents the mass-produced, reduced, unglazed version of the lead-glazed redwares made across the same region. Probably intended for the home market, such products frequently found their way across the Channel.

Fabric 39. *North Italian Marbled Slipware* comprises a hard, fine redware body with a polychrome marbled slip surface. The predominant forms are dishes and small bowls along with characteristic standing costrels with four lion-headed suspension loops. Probably made in the region around Pisa during the first half of the 17th century (Hurst *et al.* 1986, 33–37). Hurst includes the Southchurch Hall finds in his survey of imported Italian pottery in Britain and Ireland (Hurst 1991, table 1).

Fabric 43. *Martincamp Flasks*. A grey-buff stoneware body made in the area between Dieppe and Beauvais. The flasks are typically globular with long tapering necks (Nos 479–480, Fig. 84). The Southchurch Hall finds all belong to Hurst's Type II stoneware fabric and date to the 16th century (Hurst *et al.* 1986, 102–104).

Fabric 45A. *Langerwehe Stoneware*. Fully fused stoneware body produced at Langerwehe between Aachen and Cologne on the northern edge of the Eifel. Imported into Britain in large quantities during the 14th century (Gaimster 1997a, 186–188).

Fabric 45B. *Siegburg Stoneware*. Siegburg, situated on the river Sieg, a tributary of the Rhine, was the leading Rhenish stoneware production centre from the 13th to 16th centuries (Gaimster 1997a, 163–167). The Siegburg stoneware body is a consistent creamy white colour, the surface often characterised by patches of ash deposit from the kiln. Tall drinking jugs (*Jacobakannen*) form the main export from this centre during the late Middle Ages (No. 492, Fig. 85).

Fabric 45C. *Raeren Stoneware*. A fully fused, reduced stoneware body from Raeren situated some 12km to the south-west of Aachen. Raeren stonewares, particularly drinking cups or mugs, were imported into Britain in large numbers during the late 15th to mid 16th centuries (Gaimster 1997a, 224–226). Southchurch proves no exception to the rule (Nos 289, Fig. 76; 493–495, 497 Fig. 85). An exception is provided by the costrel (No. 496, Fig. 85).

Fabric 45D. *Frechen Stoneware*. A long-lived brown stoneware industry situated about 10km south-west of Cologne. Responsible for the large numbers of drinking jugs(Nos 117–119, Fig. 69; 290–292, Fig. 76; 345, Fig. 78) and bottles (Nos 293–294, Fig. 76) coming through English east coast ports between the mid 16th and late 17th centuries. Applied portrait medallions in the Antique style form the most popular decorative motif (Nos 498–501, Fig. 85).

Fabric 45F. *Westerwald Stoneware* is a consistent grey-bodied fabric with painted cobalt blue or manganese purple decoration. The colours emphasise the relief of the applied moulded ornament. Made in the Westerwald region of the Middle Rhineland. The principal period of production and distribution for international export coincides with the

	12A/ 12B	*13*	*20*	*21*	*23F*	*35B*	*36*	*40*	*40BL*	*40C*	*42*	*45*	*48X*	*50*	*55*	*31*	*45B*	*45C*	*45D*	*45F*	**totals**
SGR3	-	3	-	4	-	-	-	56	-	-	1	-	-	-	3	-	-	-	-	1	**68**
SGR4	-	3	-	1	-	-	-	3	-	-	1	-	-	-	1	-	1	-	-	-	**10**
SGR5	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	**2**
totals	**-**	**6**	**-**	**5**	**-**	**-**	**-**	**59**	**-**	**-**	**4**	**-**	**-**	**-**	**4**	**-**	**1**	**-**	**-**	**1**	**80**

Table 17 Pottery quantification by Eric Hills' phases: Small Garderobe

late 16th to early 18th centuries (Gaimster 1997a, 251–253). Tankards account for the most common import in this ware type (Nos 295–300, Fig. 76; 120–121, Fig. 69; 502–503, Fig. 85).

Fabric 45S. Stoneware *Mineralwater bottles* were made in the Middle Rhine area, including the Westerwald, between the 17th and early 19th centuries (Gaimster 1997a, cat.135).

Fabric 46E. *Italian Montelupo maiolica* was made for export during the 16th century and achieved a near monopoly of the trade in Mediterranean maiolica. A highly decorated polychrome maiolica, the form spectrum was limited to dishes, bowls and tazza (Hurst *et al.* 1986, 12–23). The tazza found at Southchurch is a substantial one (No. 364, Fig. 78). Hurst has included the Southchurch 'late polychrome' Montelupo finds in his survey of imported Italian pottery in Great Britain and Ireland (Hurst 1991, table 1)

Fabric 46F. *Ligurian maiolica*. Liguria was responsible for the supply of high-quality maiolica fineware characterised by a light or dark blue tin glaze on both exterior and interior surfaces with contrasting painted decoration, usually in the form of birds, landscapes and botanical subjects. Forms include flanged dishes and small bowls with foot rings (Hurst *et al.* 1986, 26–30).

Fabric 48A. *Chinese export porcelain* was first brought in numbers into western and northern Europe during the period around 1600. It formed the mainstay of the European table- and teaware market until it was superseded by the European factory wares during the late 18th century. The Southchurch assemblage consists primarily of teaware (Nos 135–136, Fig. 70; 316–320, Fig. 76).

Fabric 57. *Merida-type Ware*. A distinctive type of red micaceous earthenware, the most common form being the standing costrel (No. 551, Fig. 88). These products derive from Portugal and usually date to the period *c.*1575–1625 (Hurst *et al.* 1986, 69–73).

Pottery groups

Generally speaking the degree of artefact residuality on moated sites has been greatly underestimated in the past. Usually the extent of continuous disturbance over many centuries can only be properly assessed on sites where a large area has been examined. This was not the case at Southchurch where small box trenches were dug in sequence, few of which were open at the same time. Consequently the identification of homogeneous groups of material was treated with the utmost caution and associations with the features on the site generally avoided. In the case of Southchurch Hall discussion is restricted in the main to an assessment of the pottery supply to the site and its value to pottery studies in south-east Essex and the Thames estuary.

Period II (MD layers 9–6)

The lower levels of the moated site (6–9) relate to the pre-mound occupation phase. The layers are dominated by local Fabrics 12A/B (Sandy Shelly Ware), 13 (Early Medieval Sandy Ware, 22 (Hedingham Ware), 35B (Mill Green-type Ware) and 36 (London-type Ware) which account for over 75% of the assemblage. In the main these wares date to the 12th to mid 13th centuries. The composition of the assemblage bears a striking resemblance to the finds from the enclosure/ditch at North Shoebury (Walker 1995, 106–9, figs 75.11–77, and 83.55). Level MD6 produced the most coherent group in this phase (664 sherds), with Sandy Shelly Ware and Early Medieval Ware cooking pots dominant (Nos 194–227, Figs 72–3). Most of the cooking pot rims are of the developed type. Several correspond to Cunningham's sub-form H1 which was current throughout the 13th century (MD6 Nos 196, Fig. 72; 212, 215 Fig. 73), while other types are datable at Rivenhall (see Drury 1993, 81–4) to the first half of the 13th century (sub-forms H2, D2) (*i.e.* MD6 Nos 200, 201, 203, 216, Fig. 73). The significant numbers of Medieval Grey Ware, Hedingham Ware, Mill Green Ware and London-type Ware (109 sherds) indicate that the phase lasted at least until the mid 13th century. The 40 sherds of post-medieval redware in this level are the result of redeposition.

Period III (MD layers 3–5; MT8–9)

Period III relates to the establishment of the mound enclosure and the construction of the wooden bridge and moat revetment. The mound levels 3–5 produced a wide-ranging assemblage of 13th-century pottery, with level 3 containing a representative range of Sandy Shelly Wares (Fabric 12A/B), Early Medieval Sandy Ware (13), Medieval Sandy Grey Ware (20), Hedingham ware (22), Mill Green-type Ware (35B) and London-type Ware (36), in addition to a few sherds of Mill Green Coarse Ware (20C) and Medieval Sandy Orange Ware (21). Level 3 of the mound also produced significant quantities of intrusive post-medieval redware (Fabric 40). Level 5 of the mound contained the largest individual assemblage of Sandy Shelly Ware (Fabric 12A/B), with a sherd count of 289. The lowest fills of the moat (MT8–9) produced very little pottery, most of which — apart from a few sherds of Medieval Sandy Orange Ware (Fabric 21) and Mill Green-type Ware (35B) — was intrusive in date (Fabric 40).

Period IV (MD layers 2c/2W(i), MT7, GH5, GR5, SGR5)

These deposits in the mound and moat relate to the late medieval phase of occupation on the site when the gatehouse, retaining walls and garderobes were first constructed. The period *c.*1300–1500 also accounts for the construction of the present hall, second and third phase bridges as well as the cleaning out of the moat and subsequent moat fills.

Strictly speaking, on the mound relatively little of the recovered material relates directly to the late medieval period. The disturbed state of the deposits is reflected in high levels of residual and intrusive material. This was an intensive period of occupation with continuous rebuilding activity. The 15th century sees introduction of the Fabric 40 redwares made in the regional tradition which continue into the 18th century, and the first significant groups of Continental imports, notably Rhenish stoneware jugs and drinking cups (Fabrics 45B and 45C) along with Dutch redware cooking ceramics (Fabric 31). Otherwise these layers produced overwhelming quantities of residual Early Medieval Sandy Ware and Medieval Grey Ware *etc*. and intrusive factory wares from the North Midlands (Fabrics 48, 48P, 48x, 50, 50A). The moat fill (MT7) looks to contain a more representative assemblage dating to the immediate pre-1500 period with large quantities of Coarse Border Ware and Border Ware from Surrey (Fabrics 23F/42) and regional coarse redware ceramics (Fabric 40). The one fragment of a neck from a Siegburg drinking jug (*Jacobakanne*) (Fabric 45B, No. 548, Fig. 88), and the virtually complete profile of a Merida-type costrel (Fabric 57, No. 551, Fig. 88) help to secure this layer in the early to mid 15th century. The lower levels of the garderobes (GR5 and SGR5) and the gatehouse (GH4) produced little pottery other than a small assemblage of regional redware vessels (Fabric 40) and imports from the Surrey-Hampshire Border area (Fabric 42).

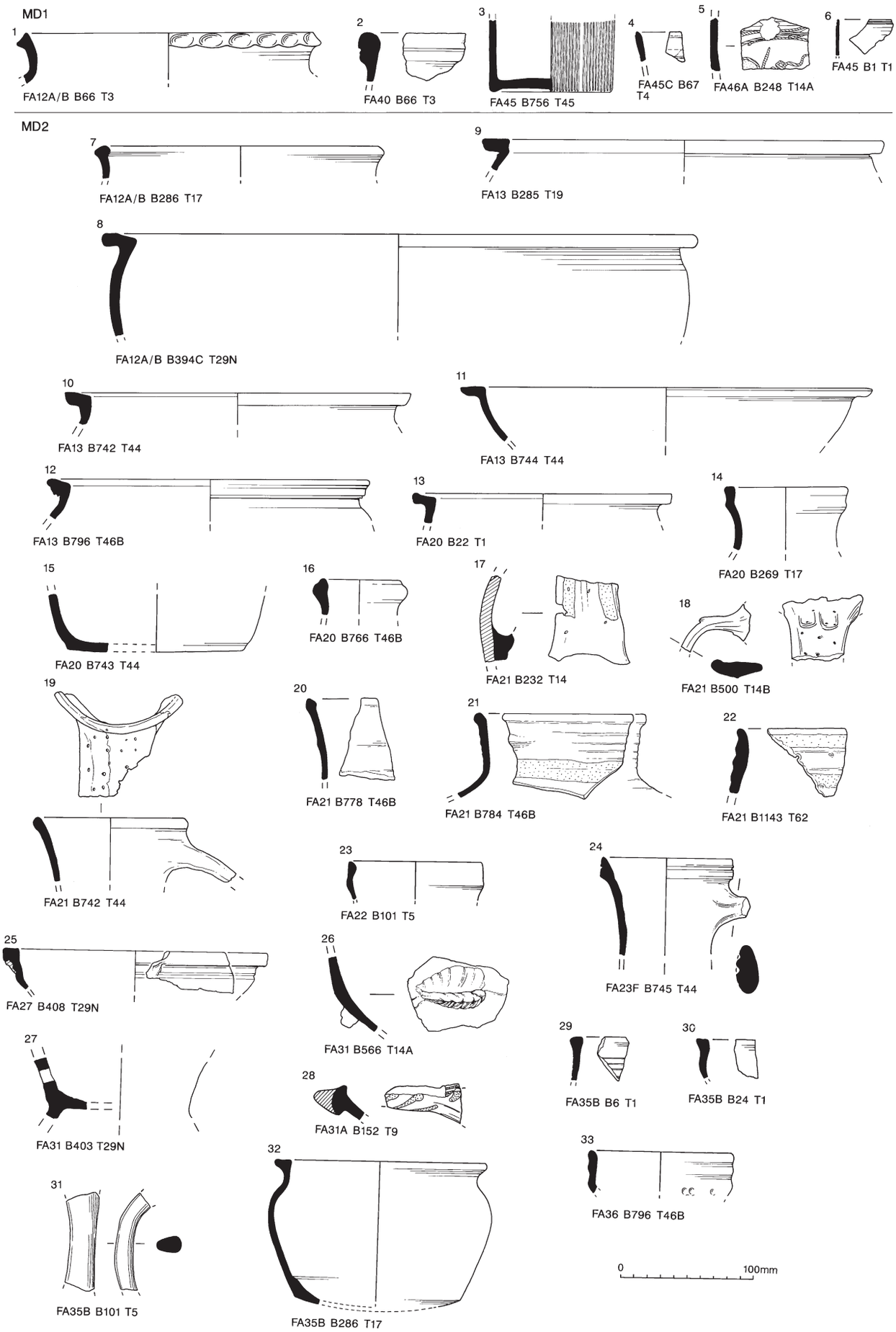

Figure 65 Pottery MD1, MD2

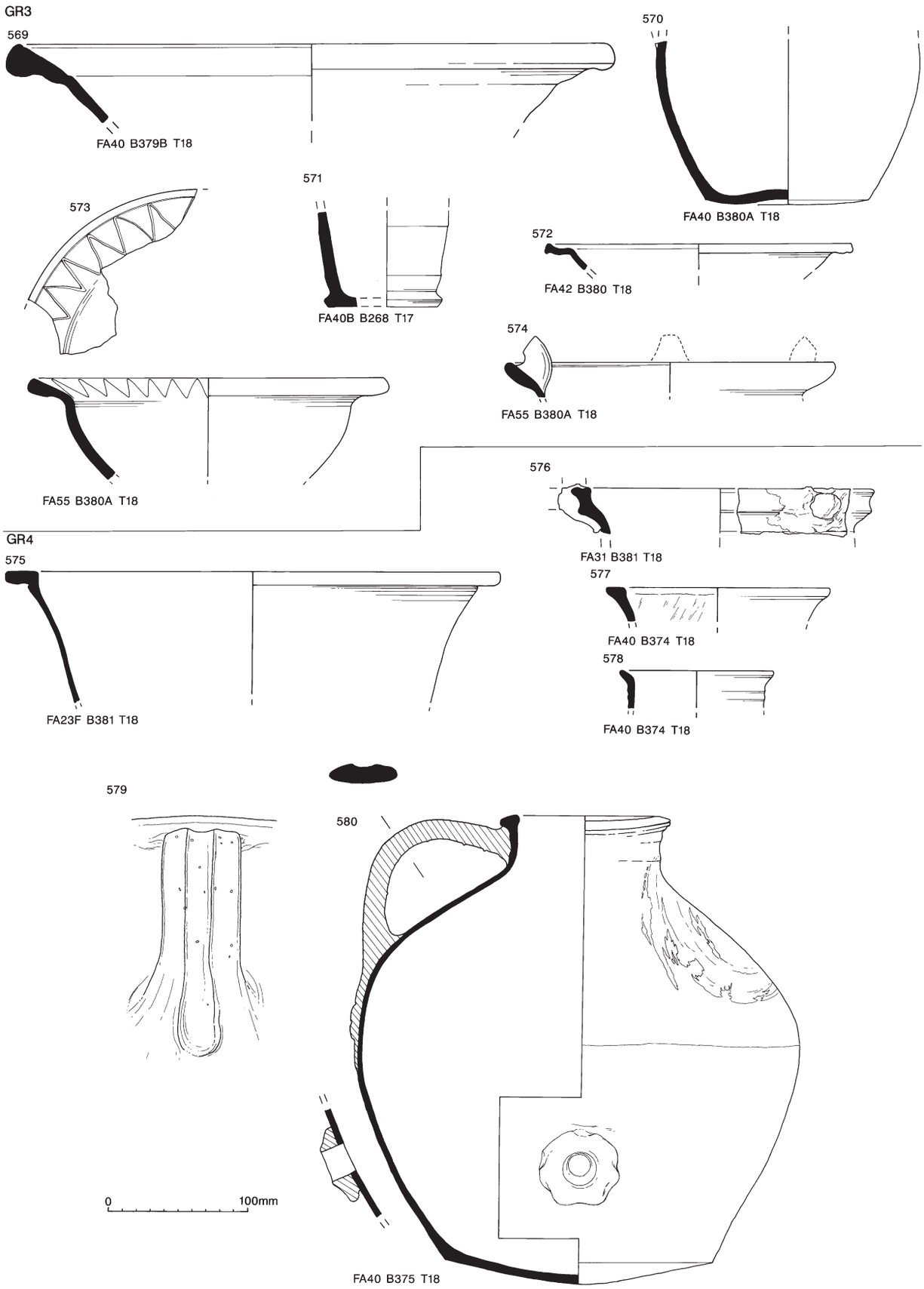

Figure 66 Pottery GR3, GR4

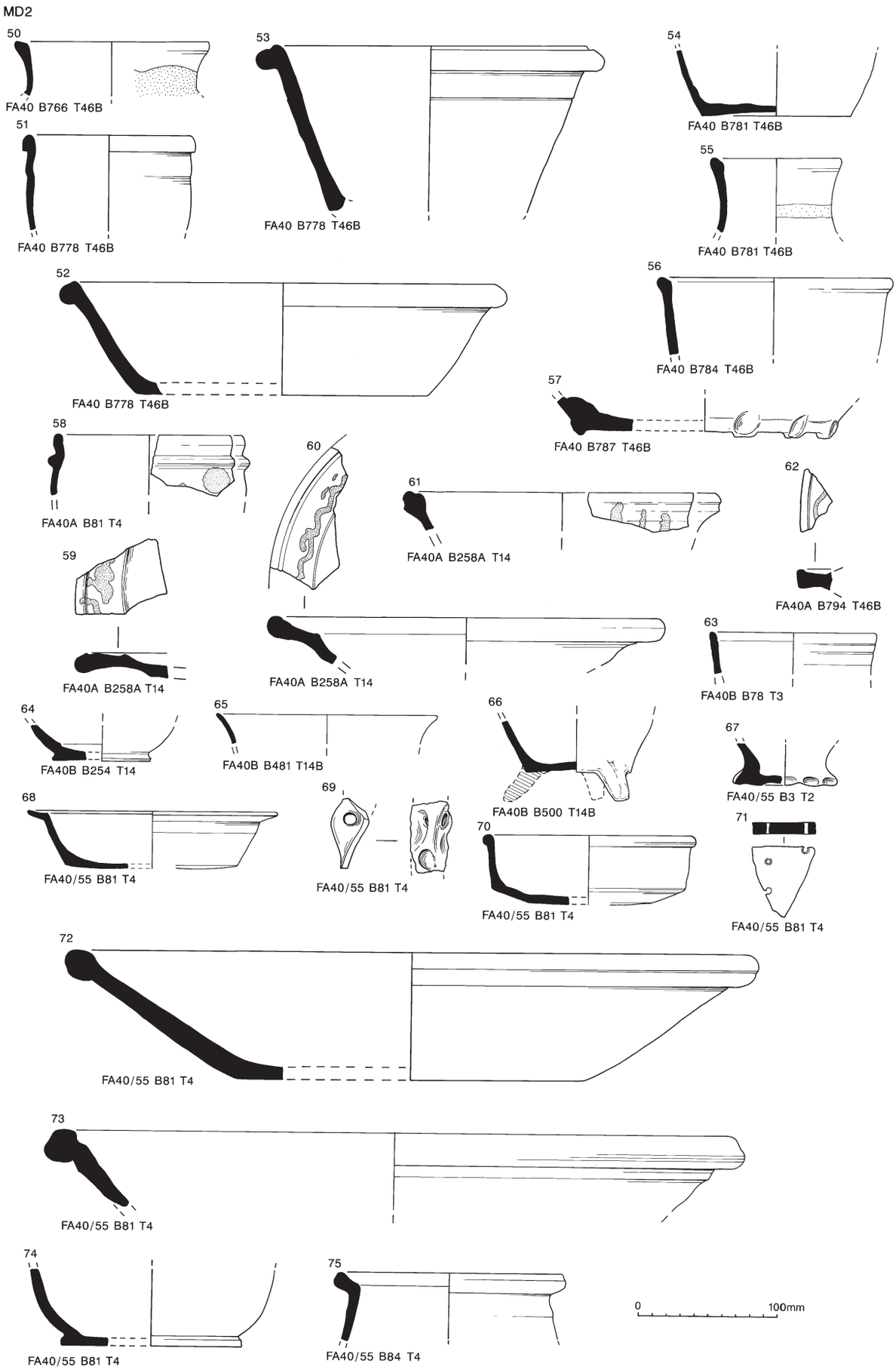

Figure 67 Pottery MD2

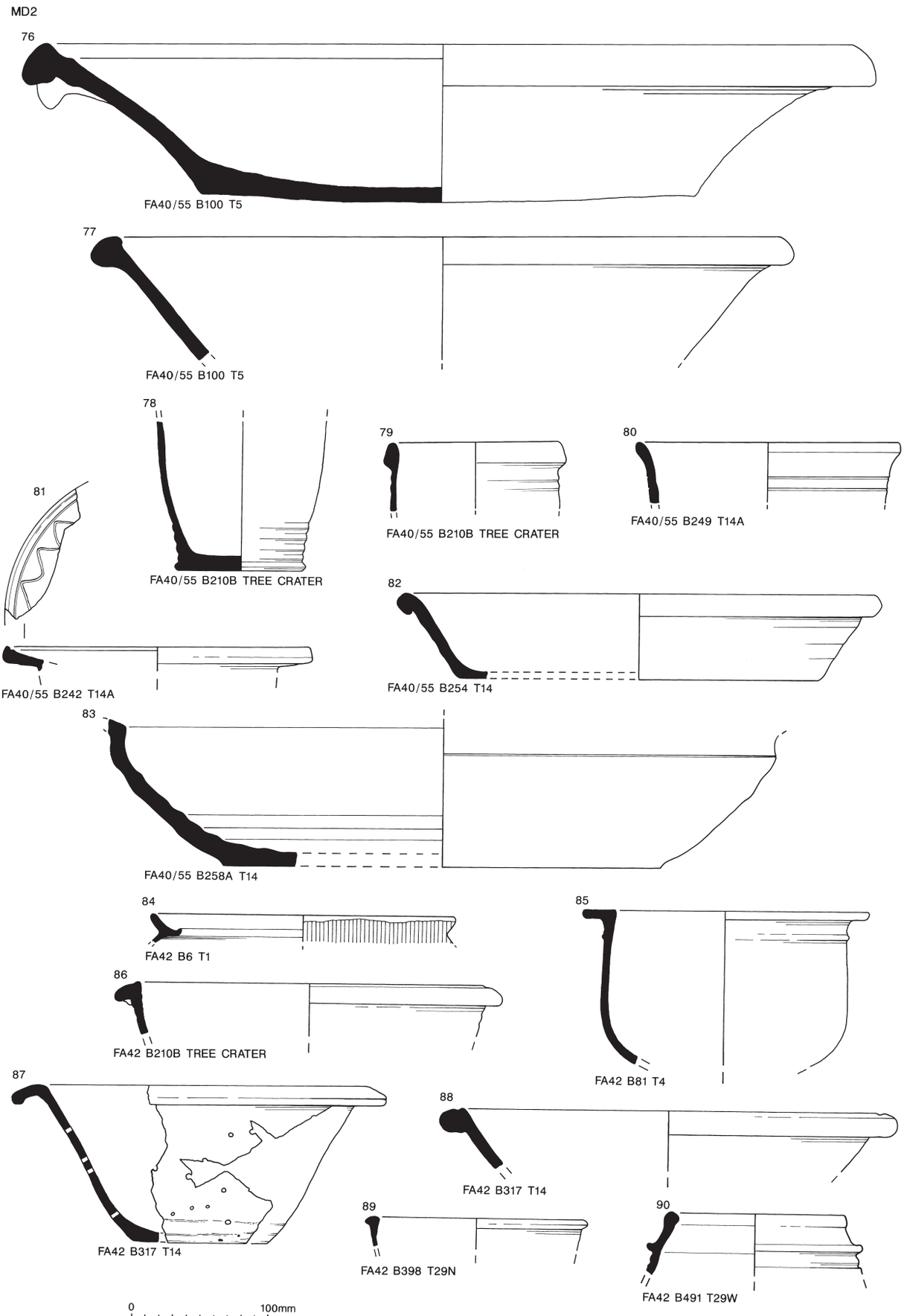

Figure 68 Pottery MD2

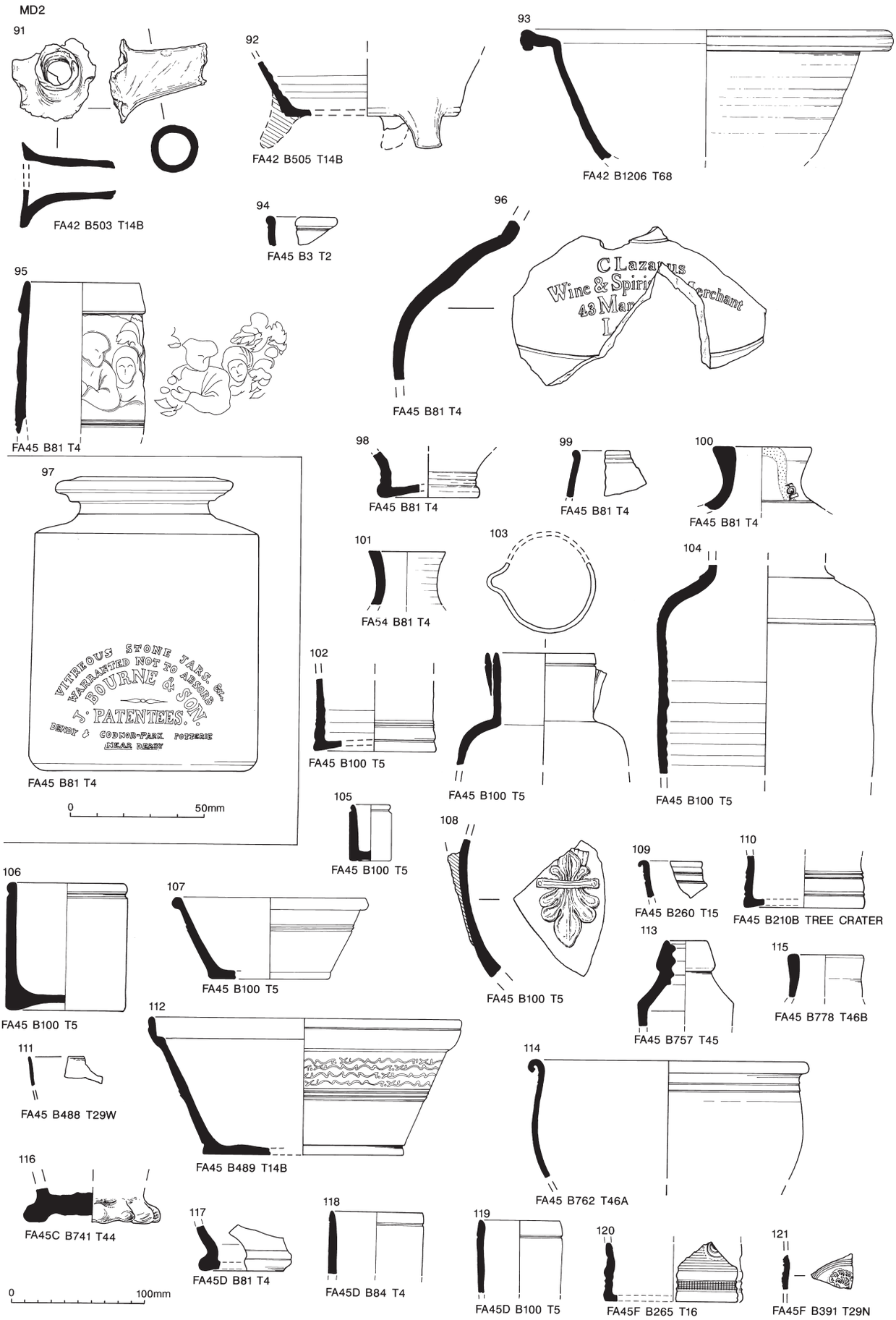

Figure 69 Pottery MD2

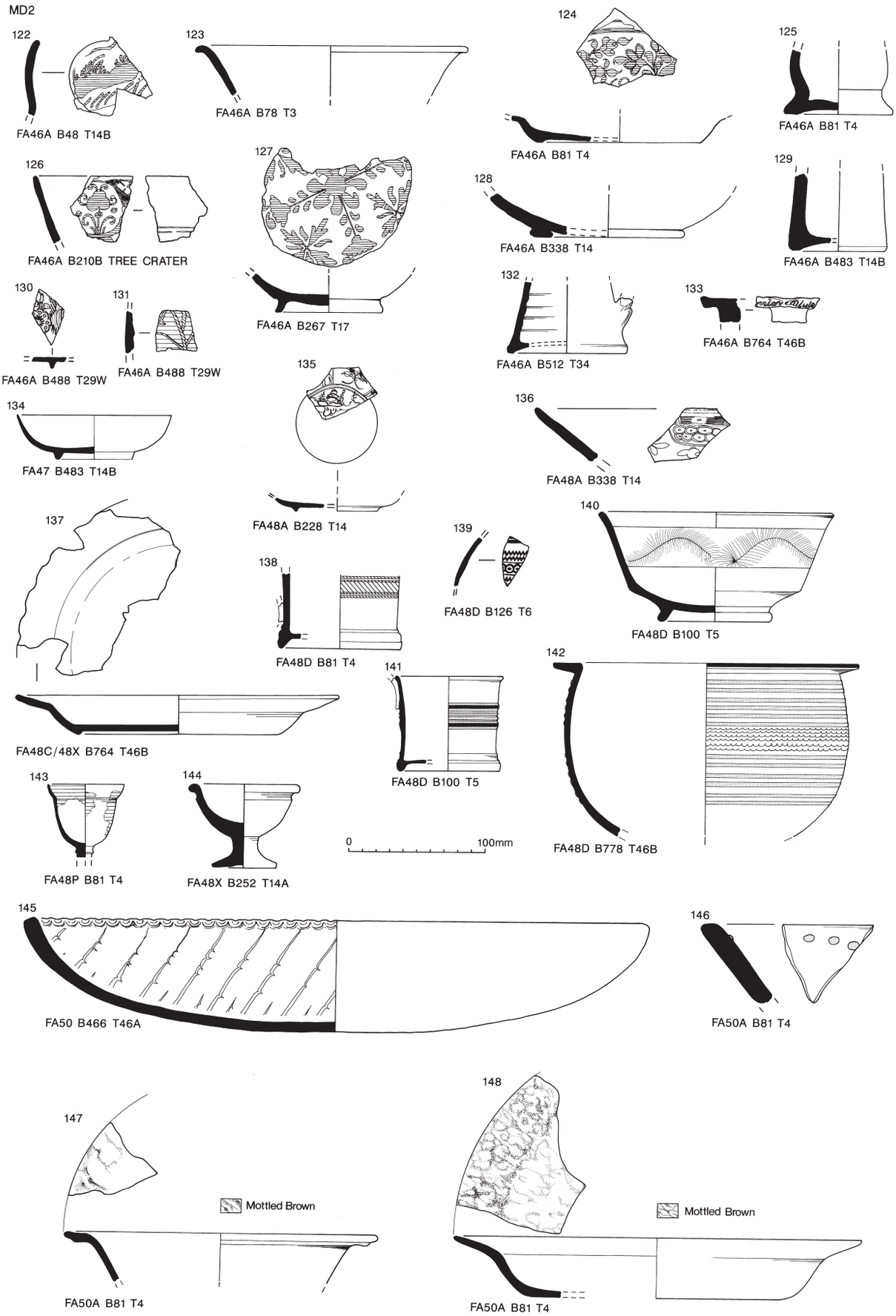

Figure 70 Pottery MD2

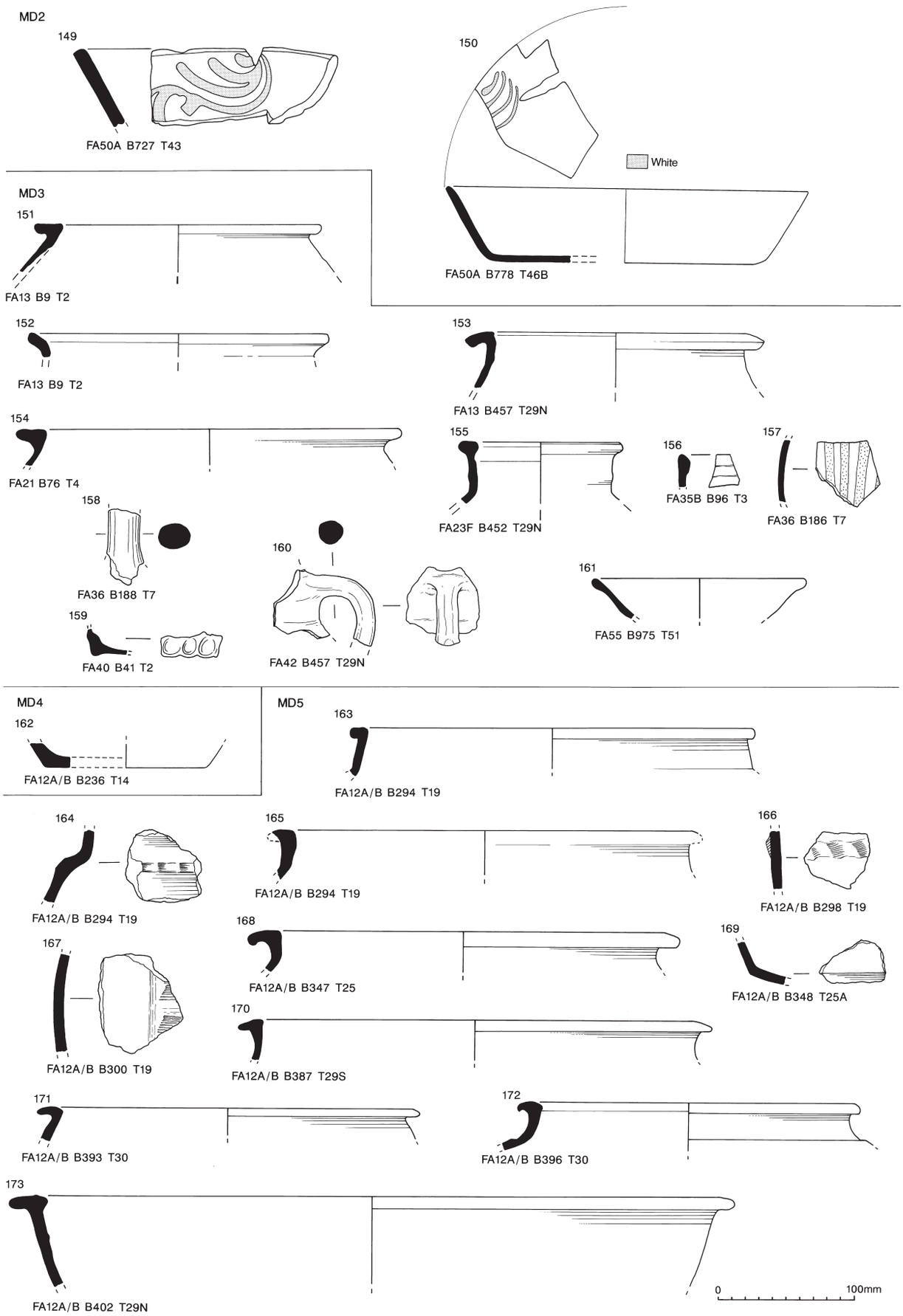

Figure 71 Pottery MD2, MD3, MD4, MD5

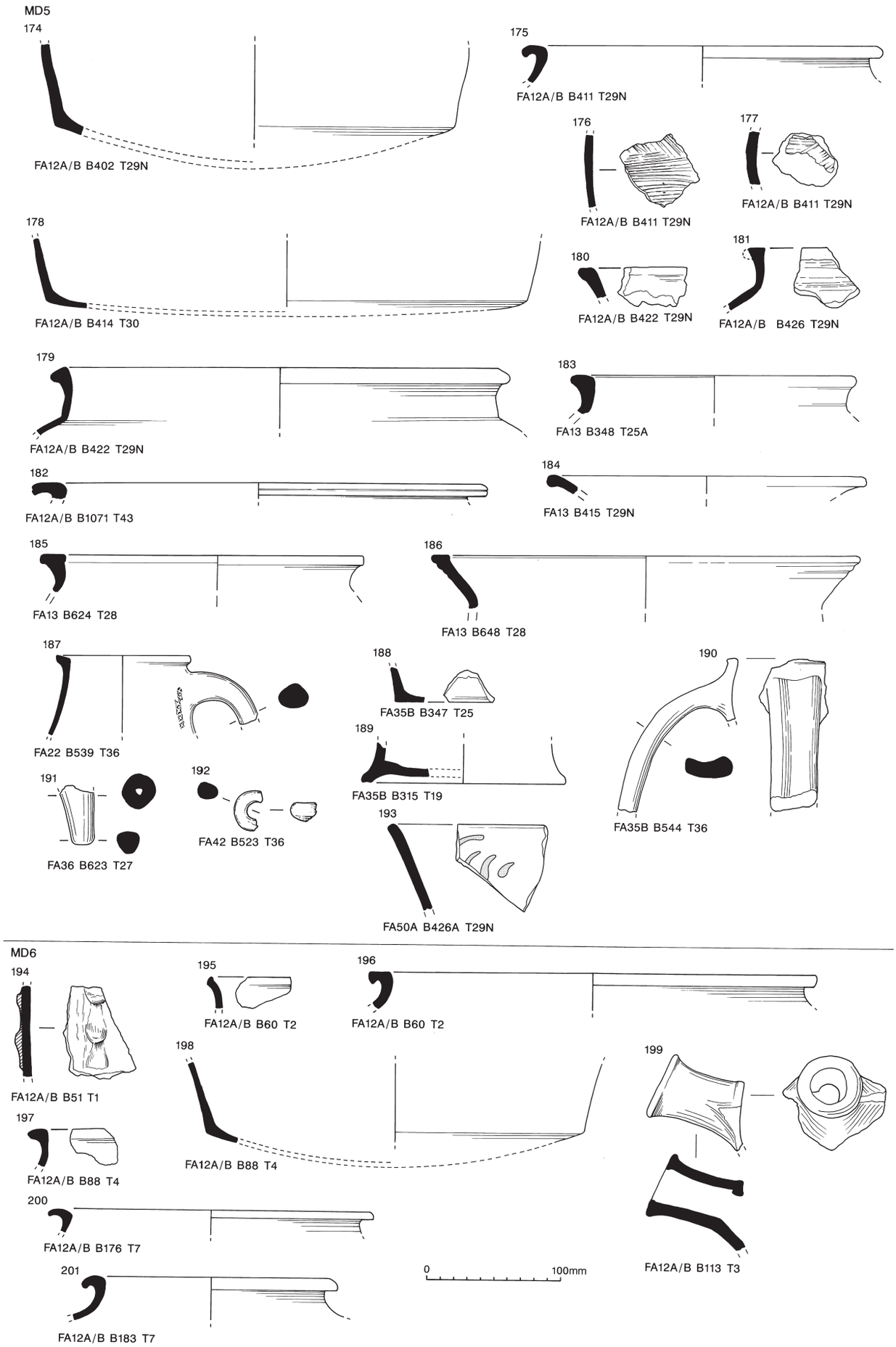

Figure 72 Pottery MD5, MD6

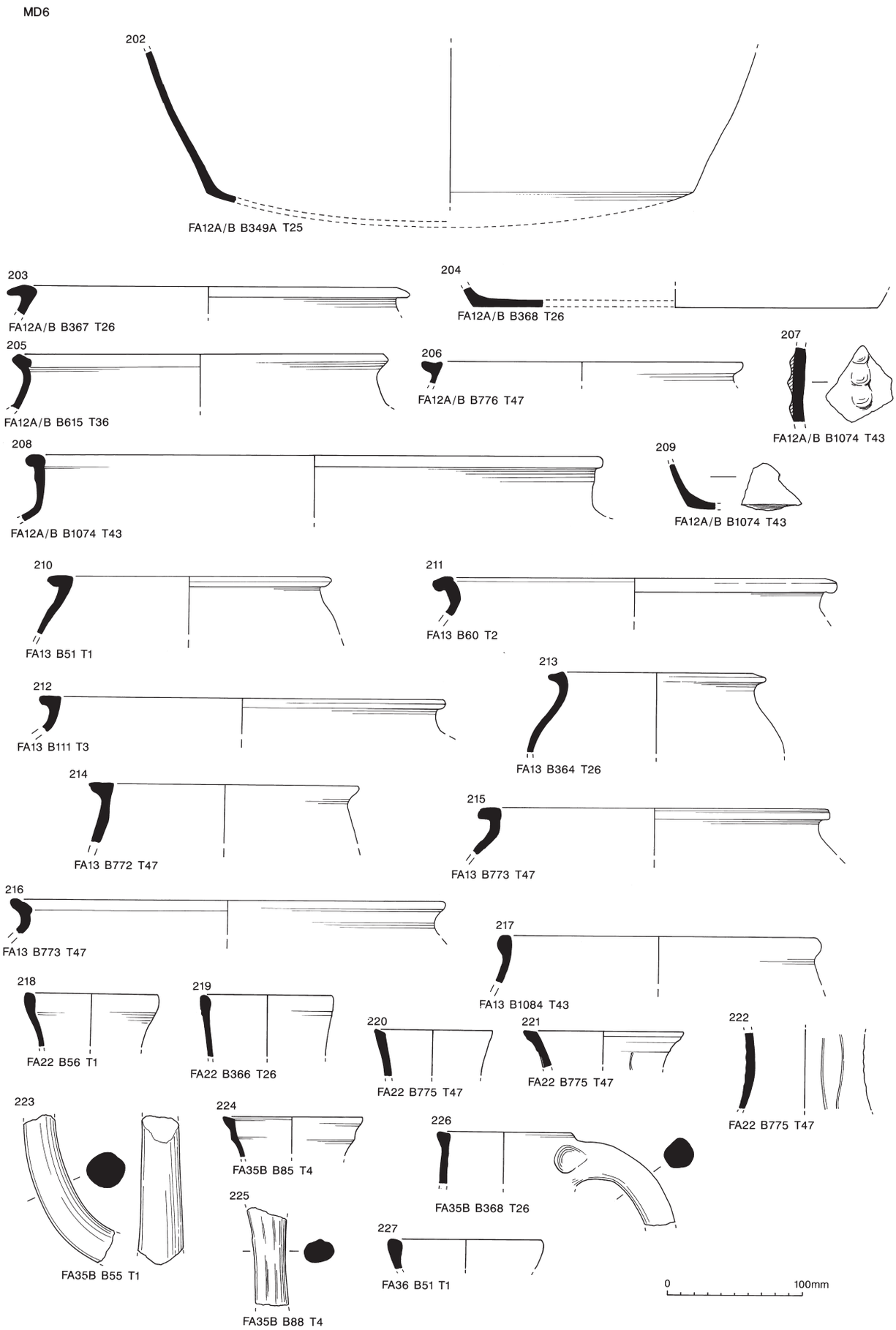

Figure 73 Pottery MD6

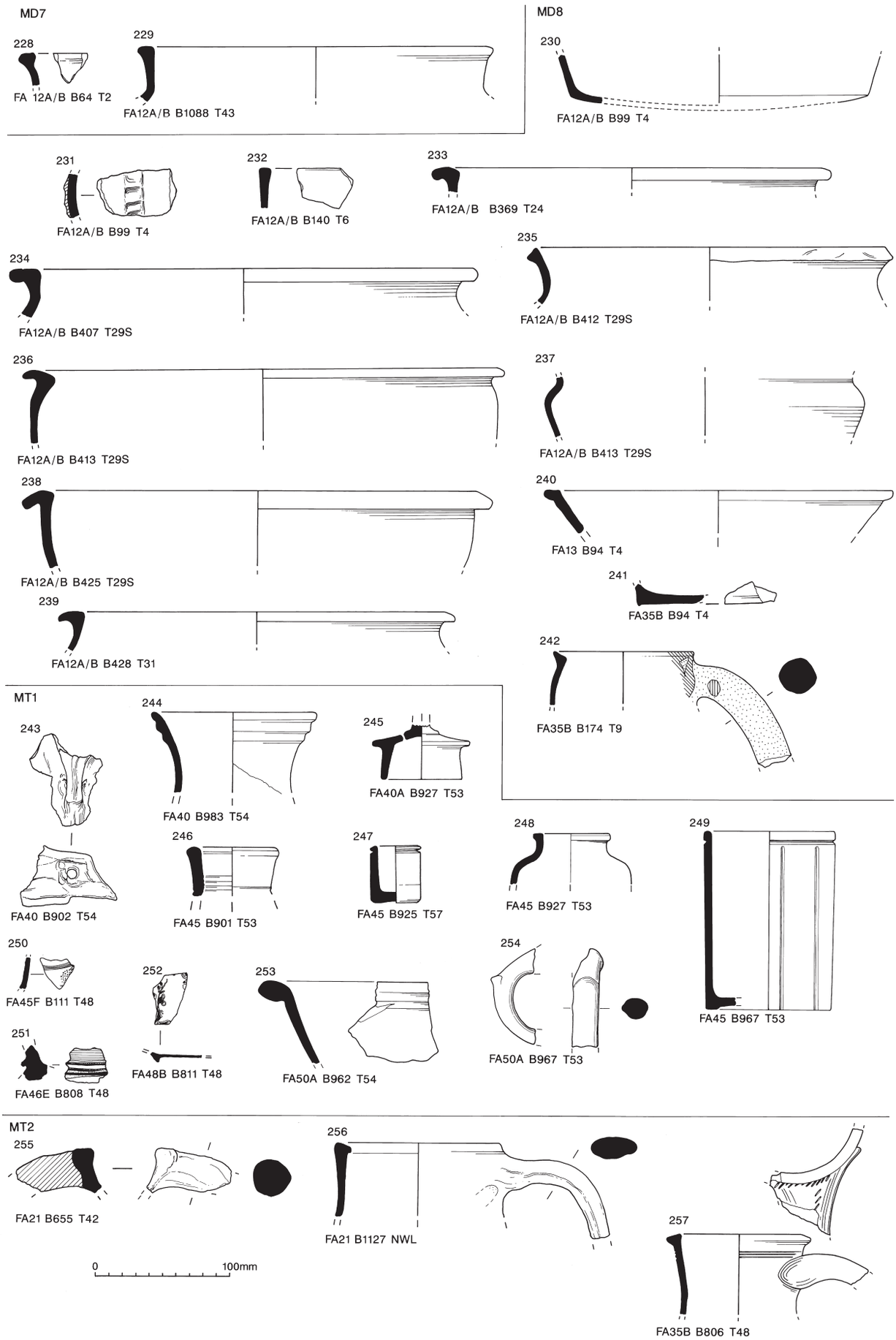

Figure 74 Pottery MD7, MD8, MT1, MT2

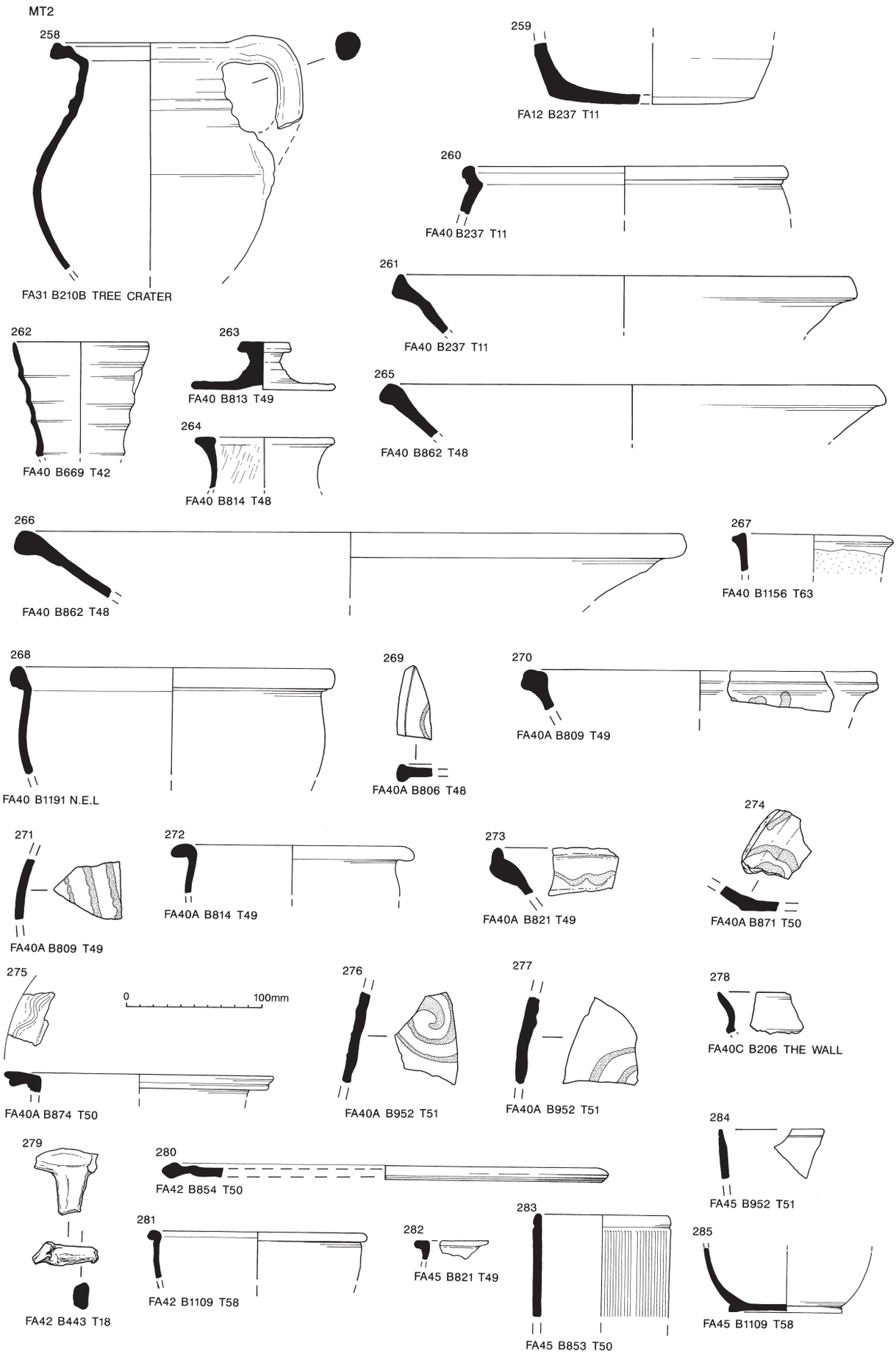

Figure 75 Pottery MT2

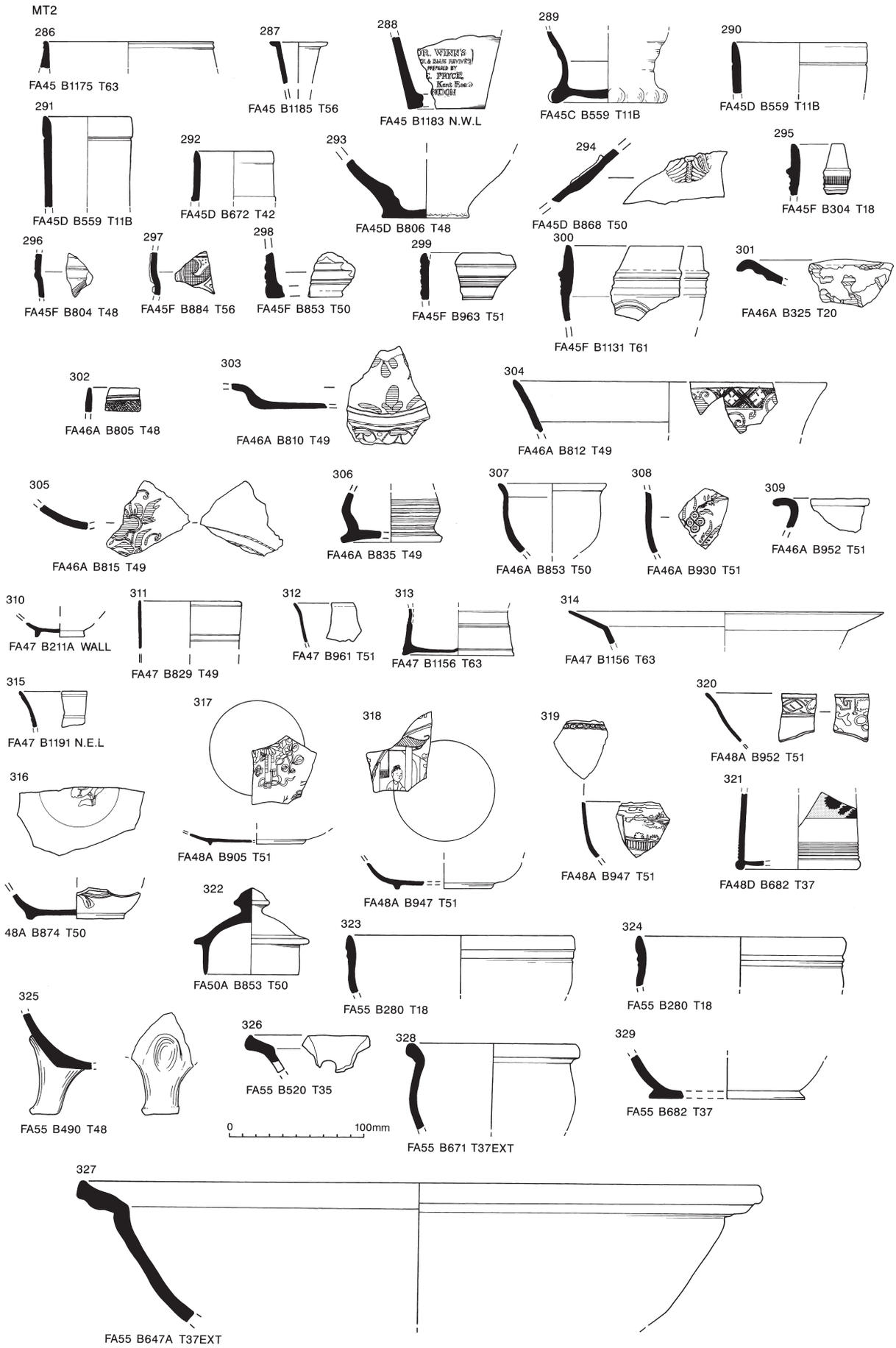

Figure 76 Pottery MT2

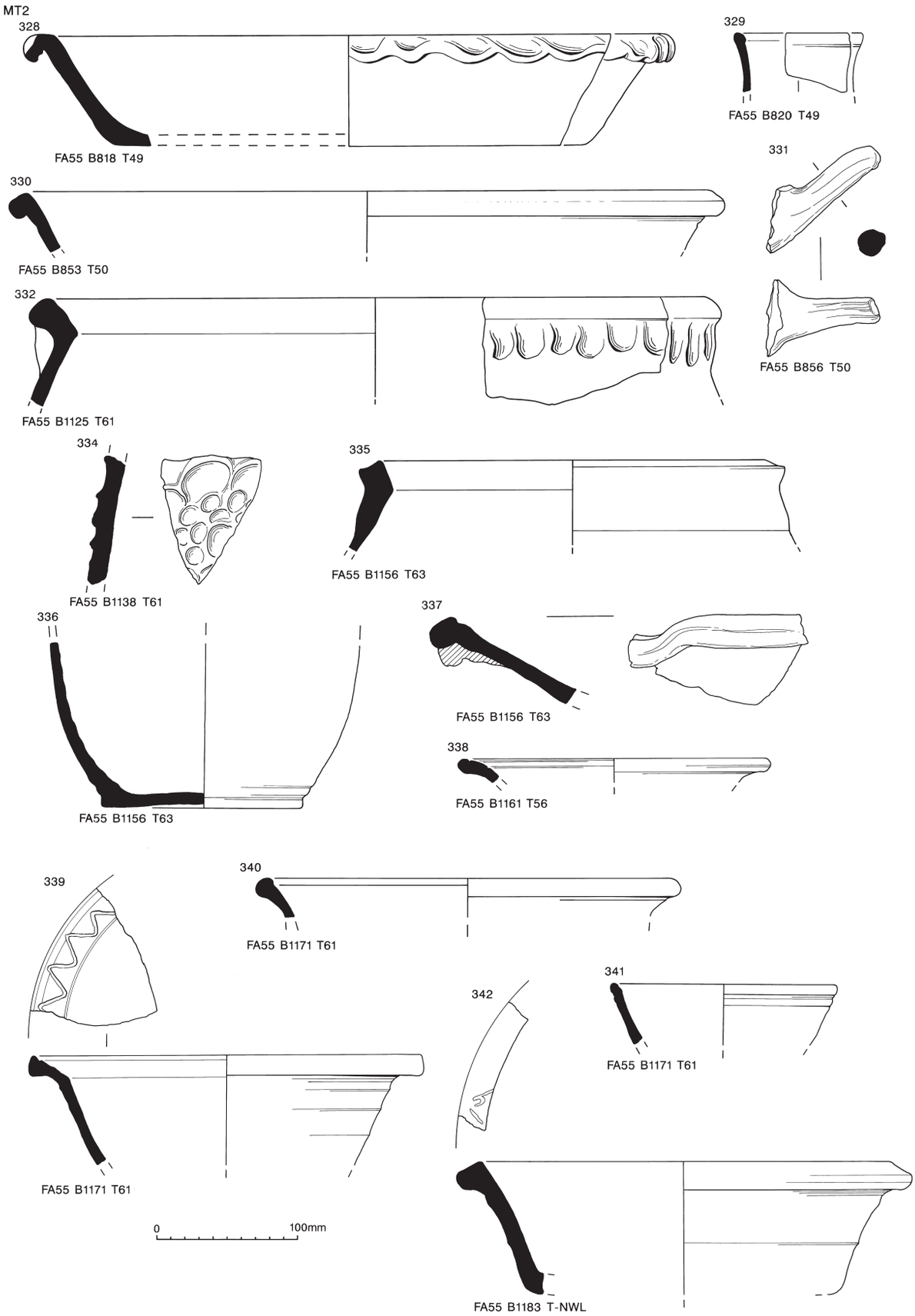

Figure 77 Pottery MT2

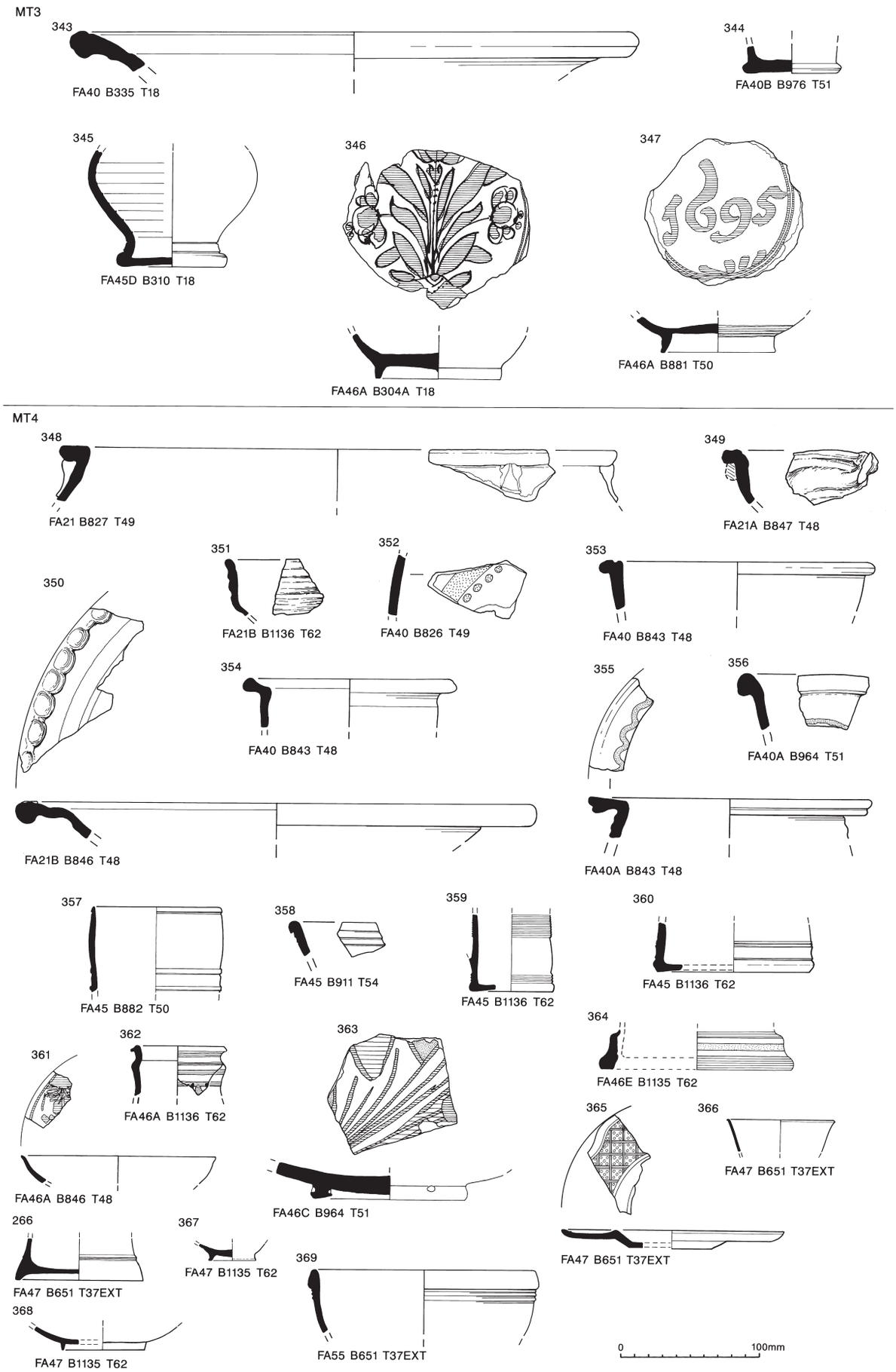

Figure 78 Pottery MT3, MT4

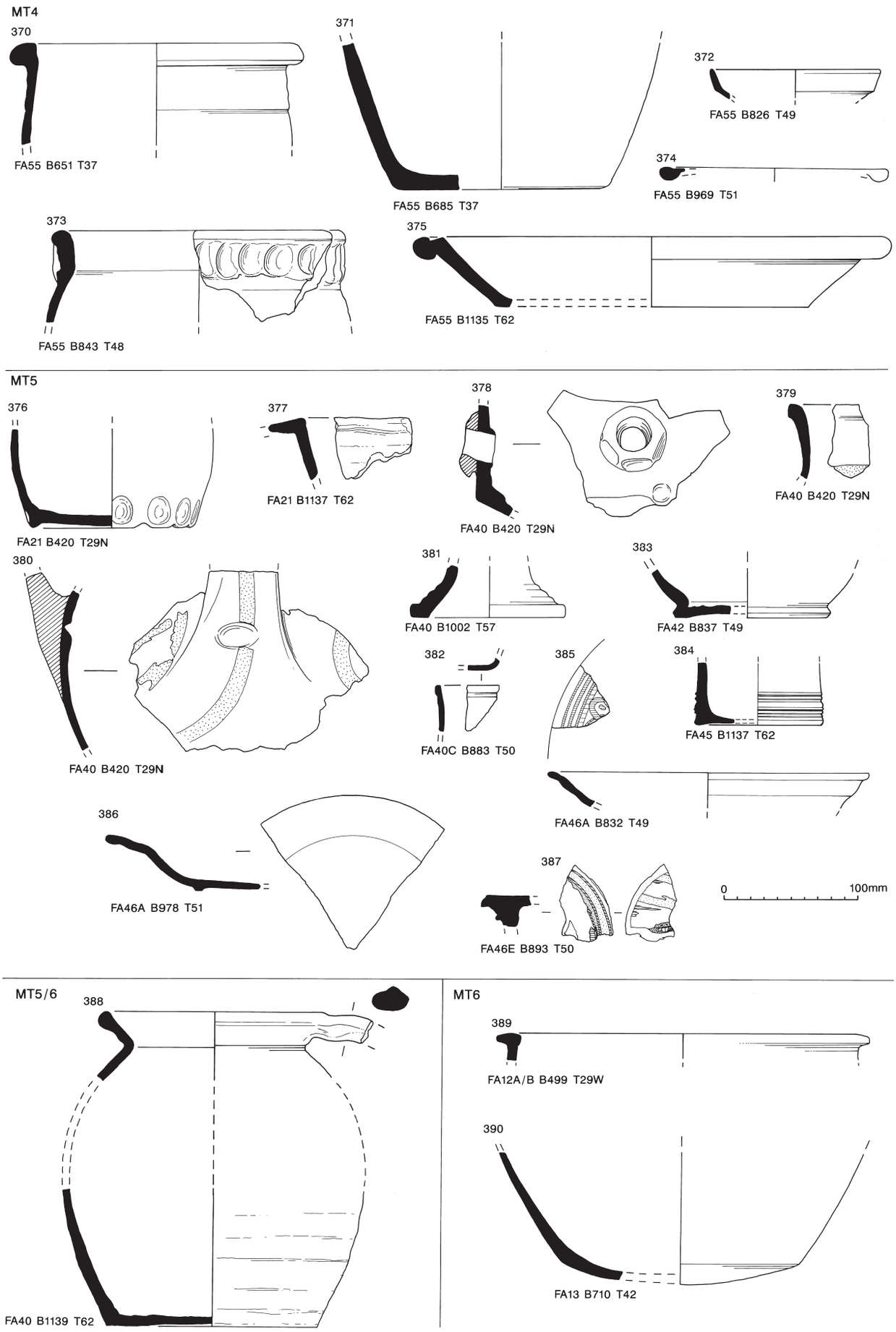

Figure 79 Pottery MT4, MT5, MT6

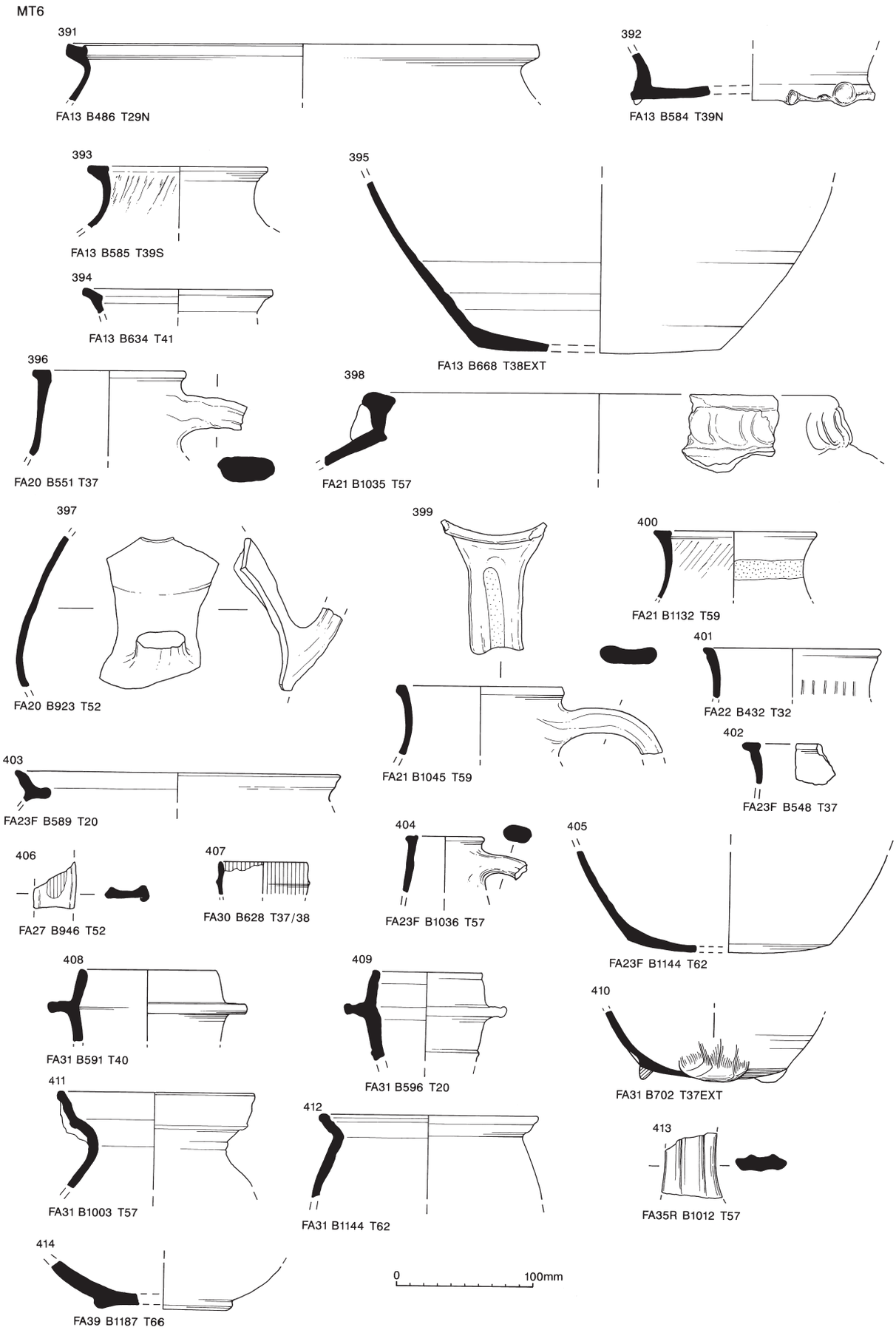

Figure 80 Pottery MT6

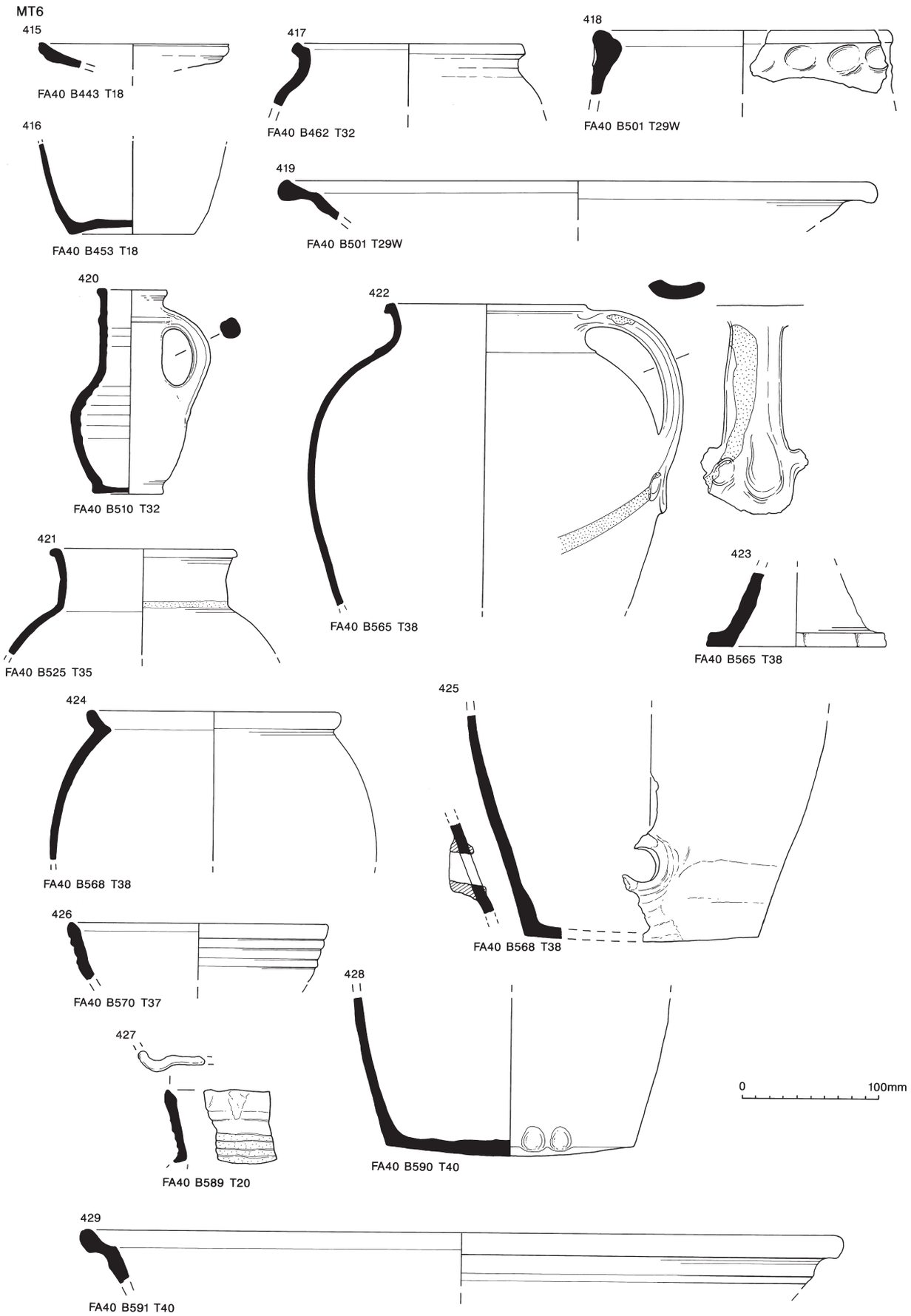

Figure 81 Pottery MT6

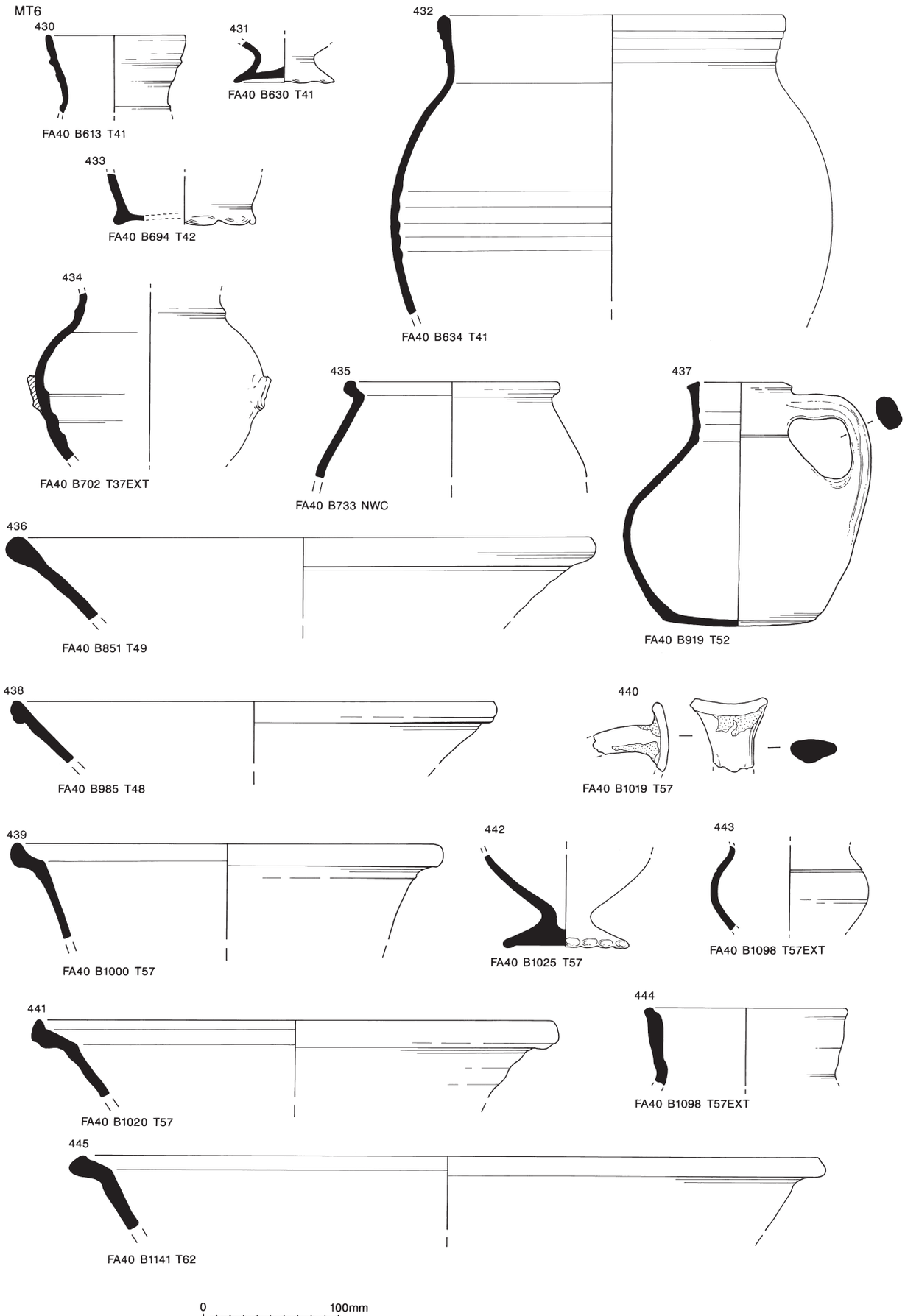

Figure 82 Pottery MT6

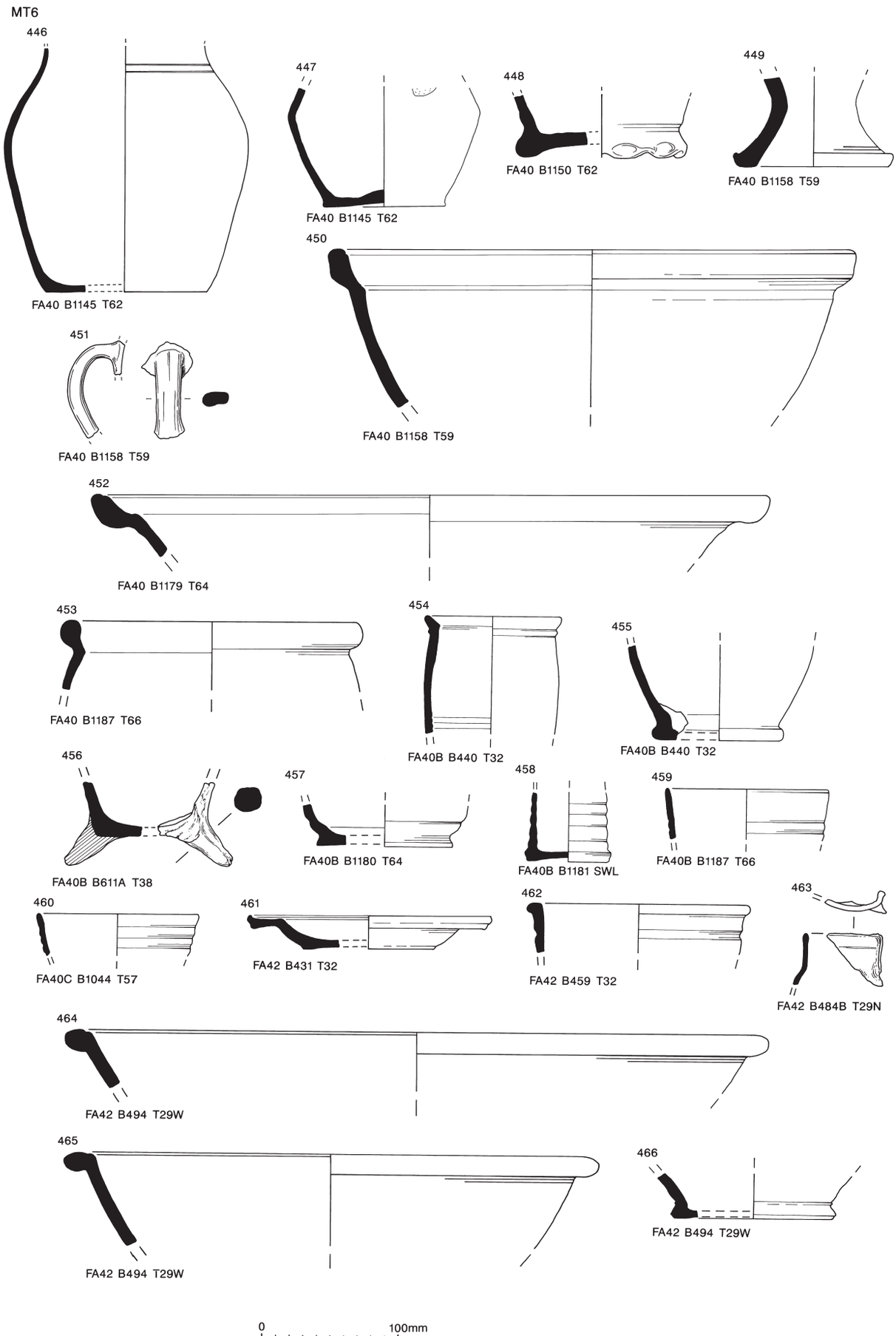

Figure 83 Pottery MT6

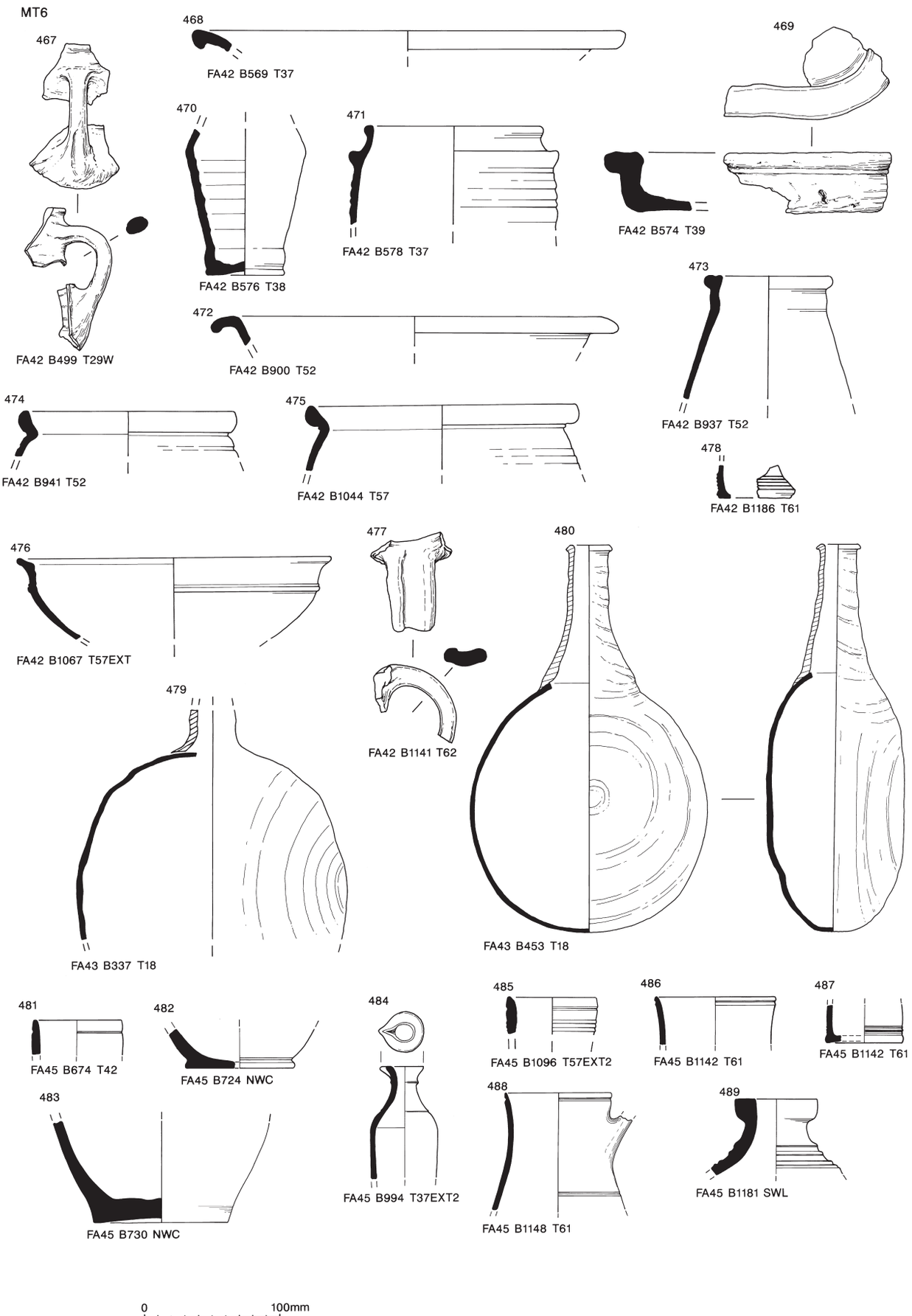

Figure 84 Pottery MT6

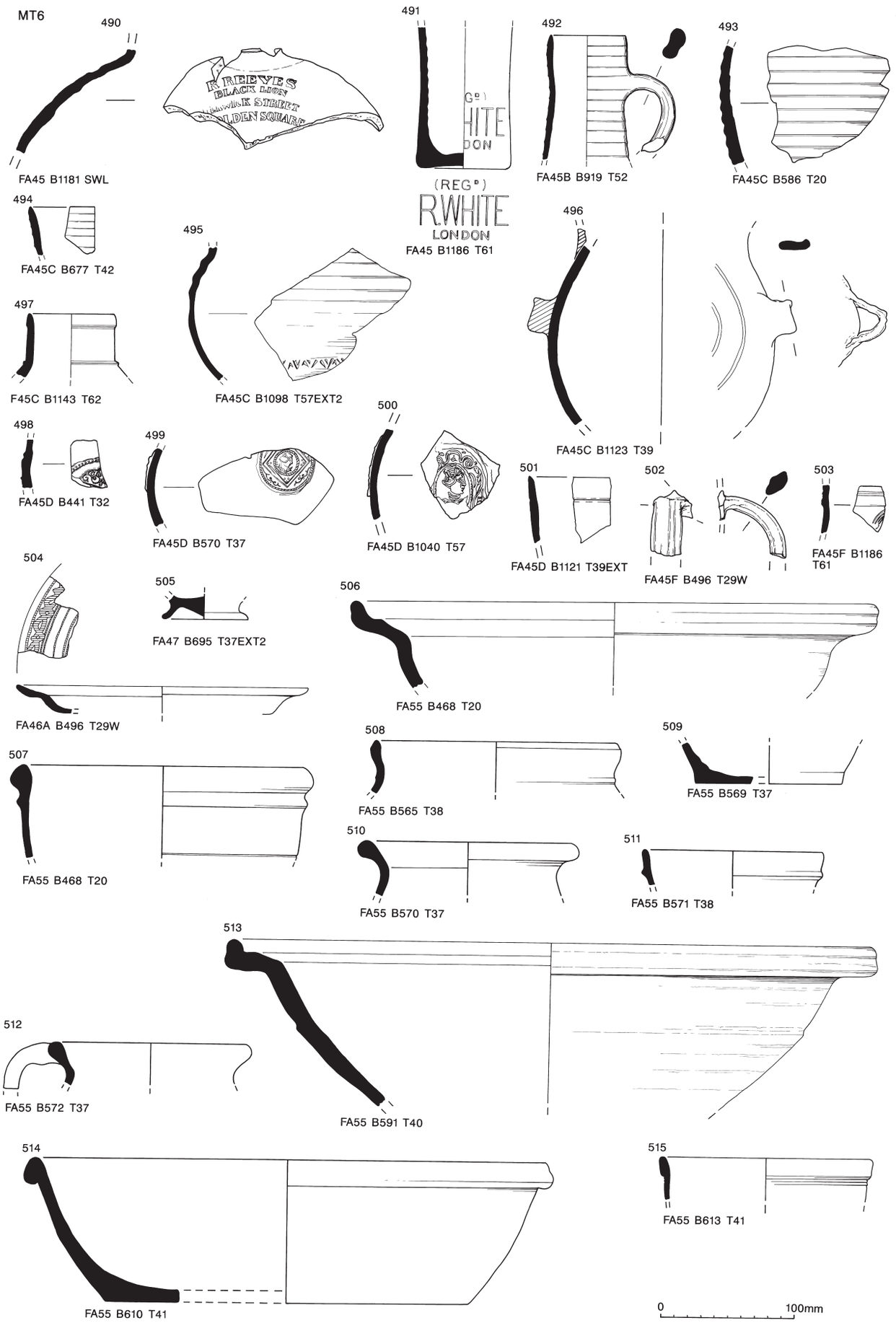

Figure 85 Pottery MT6

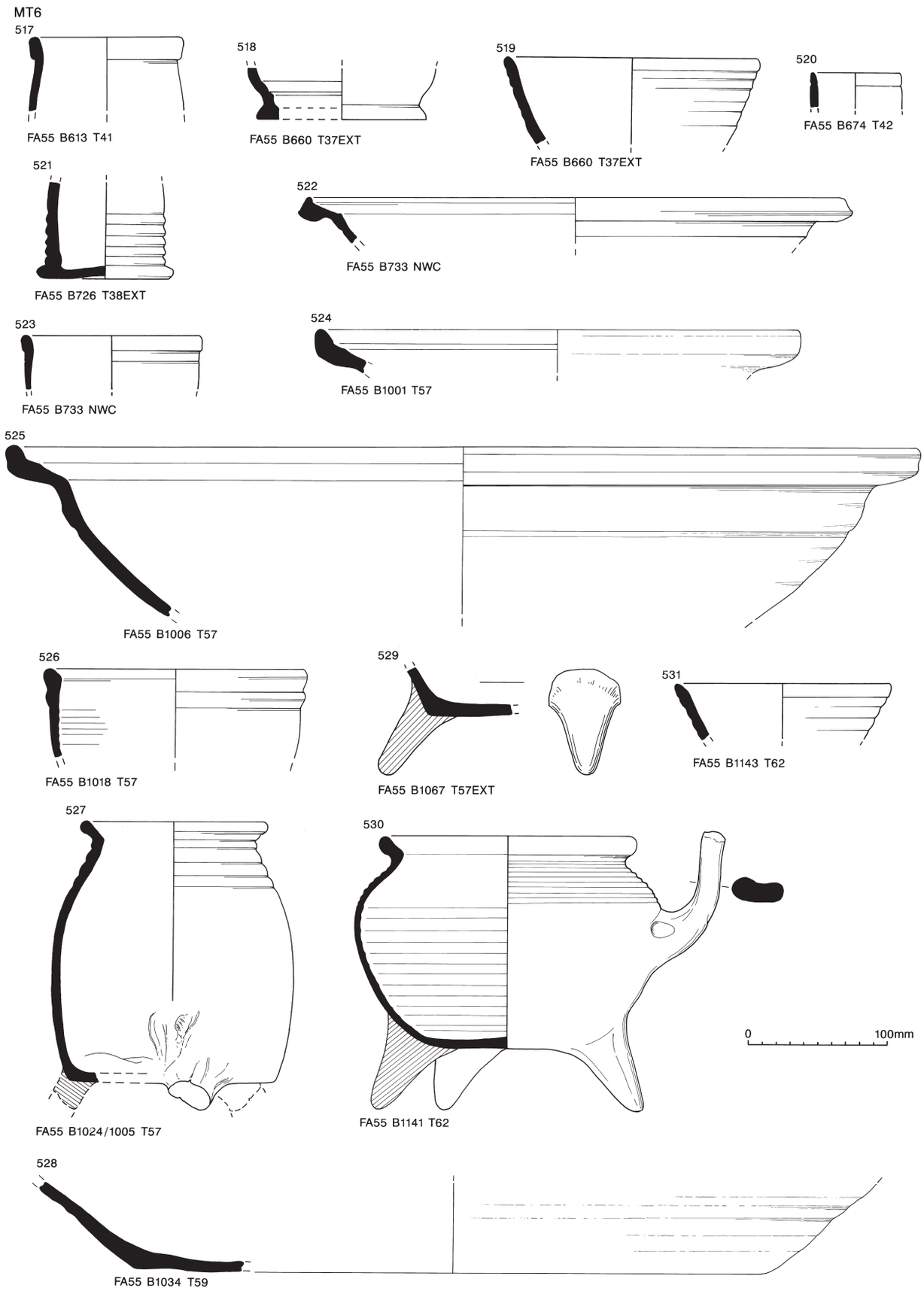

Figure 86 Pottery MT6

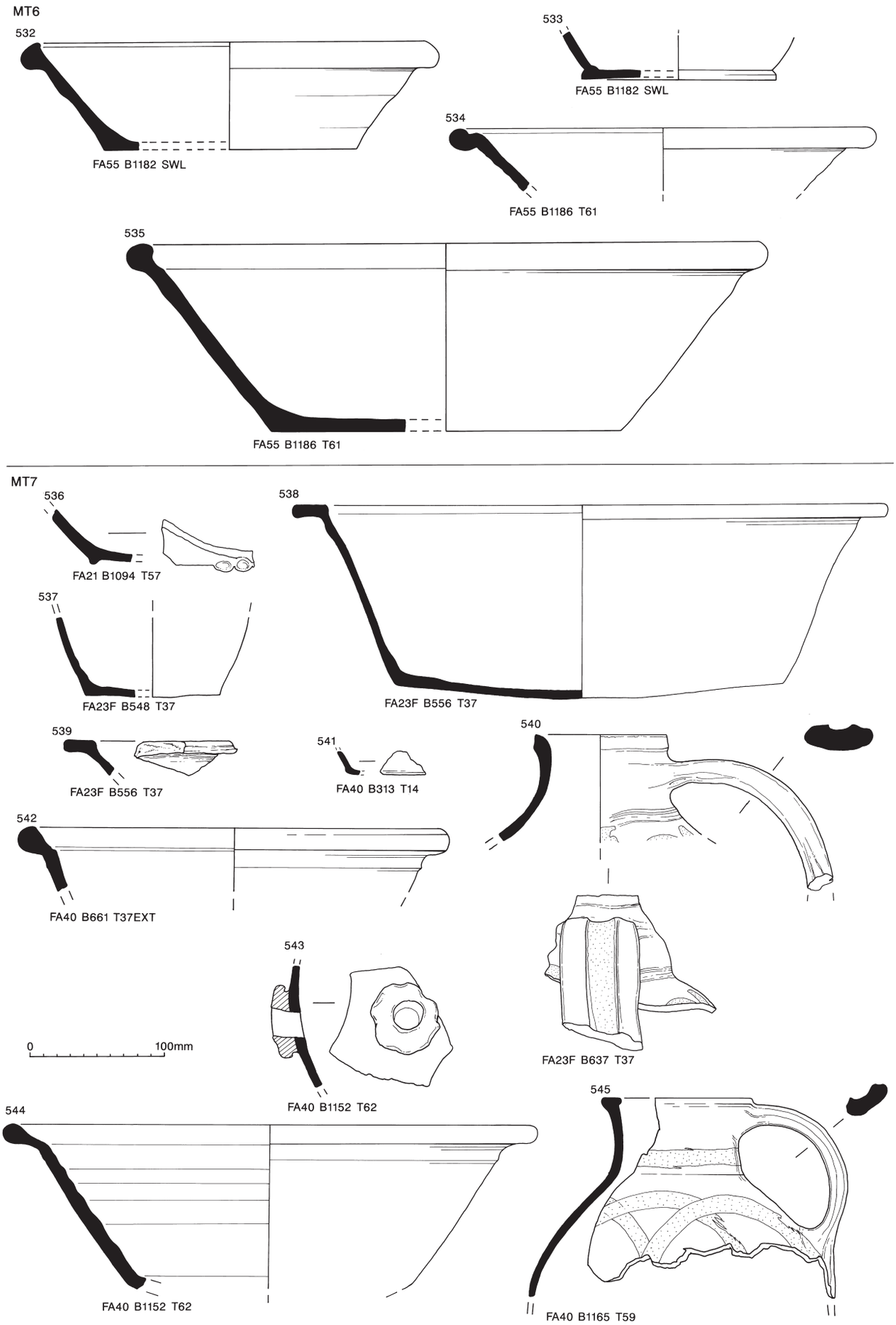

Figure 87 Pottery MT6, MT7

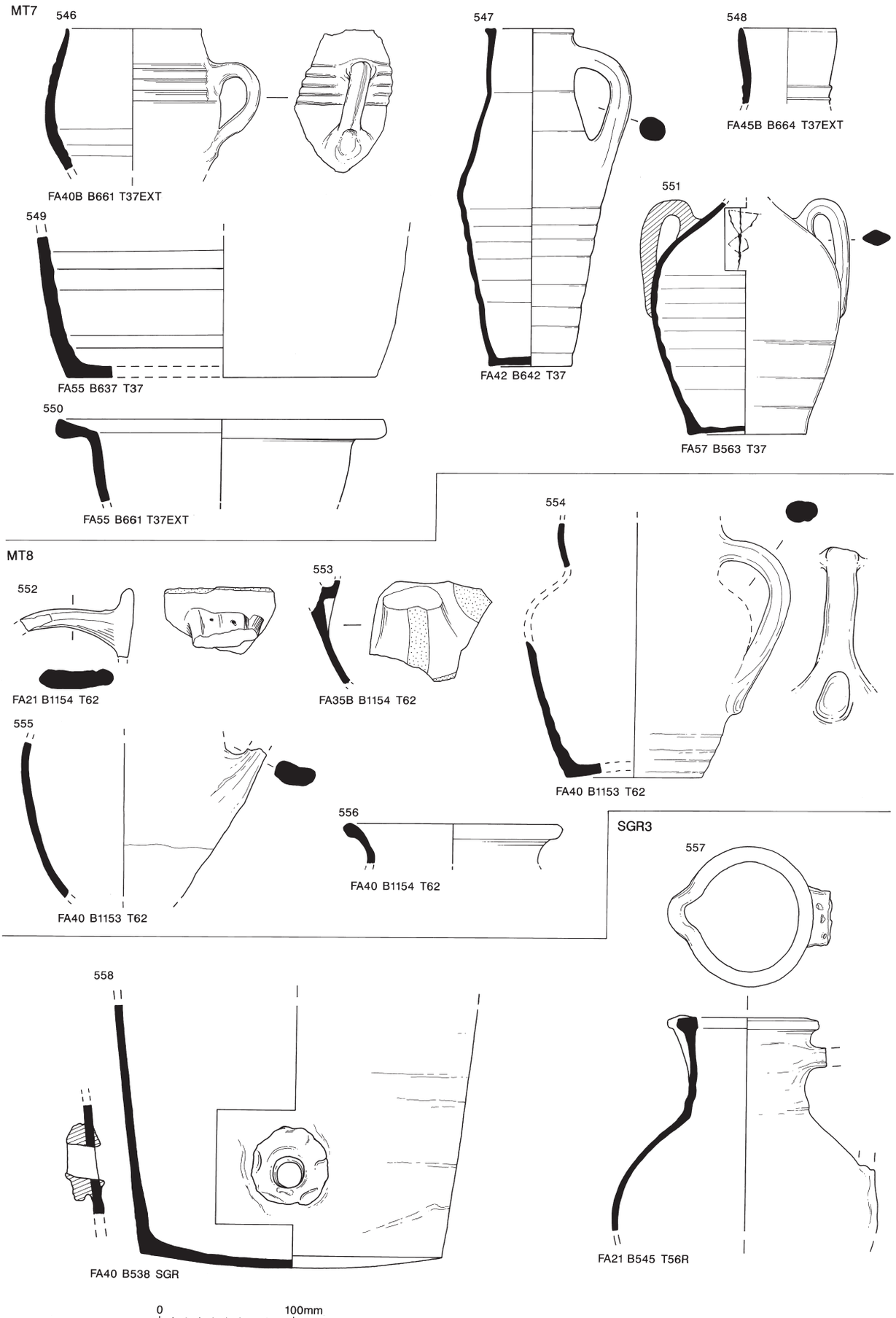

Figure 88 Pottery MT7, MT8, SGR3

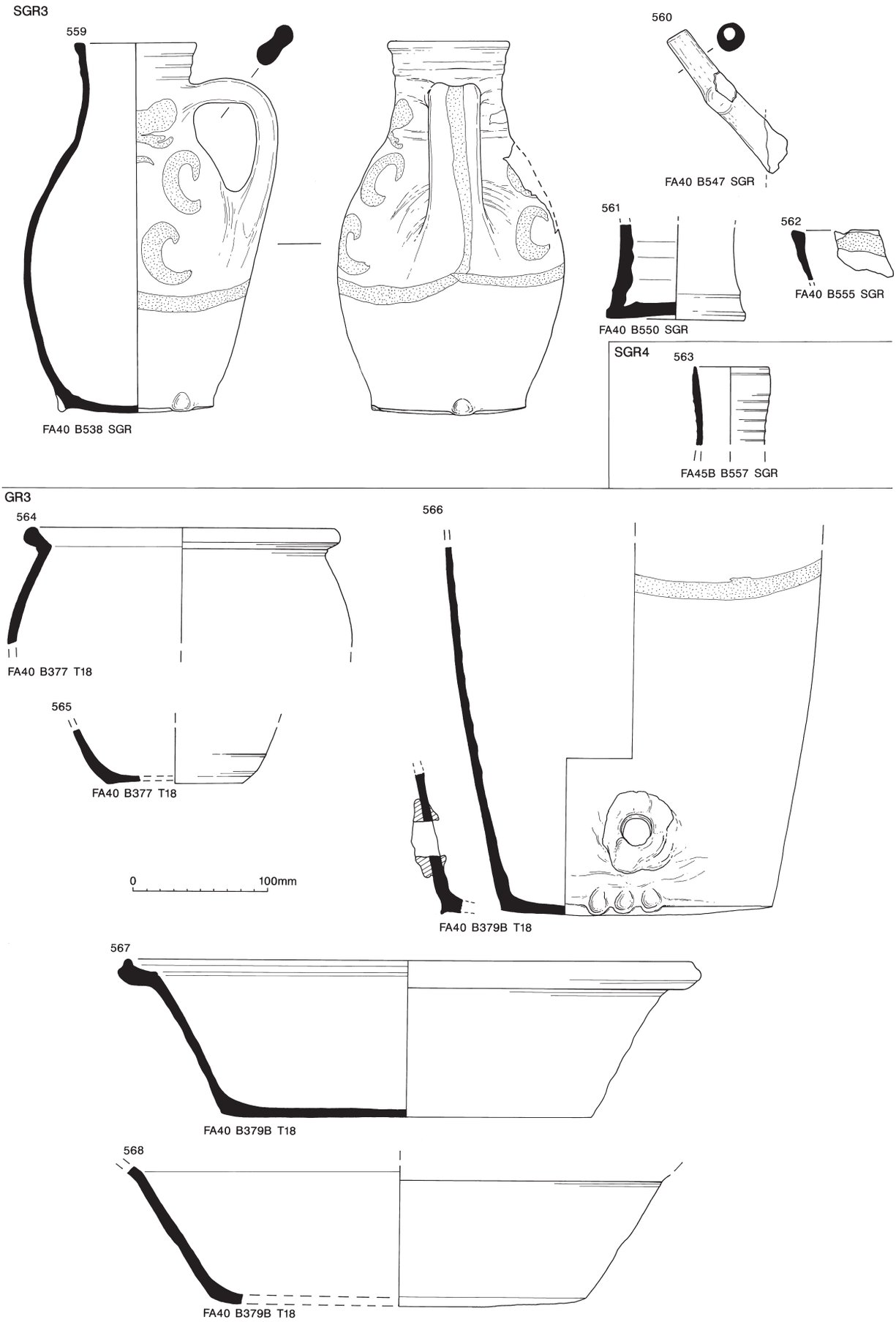

Figure 89 Pottery SGR3, SGR4, GR3

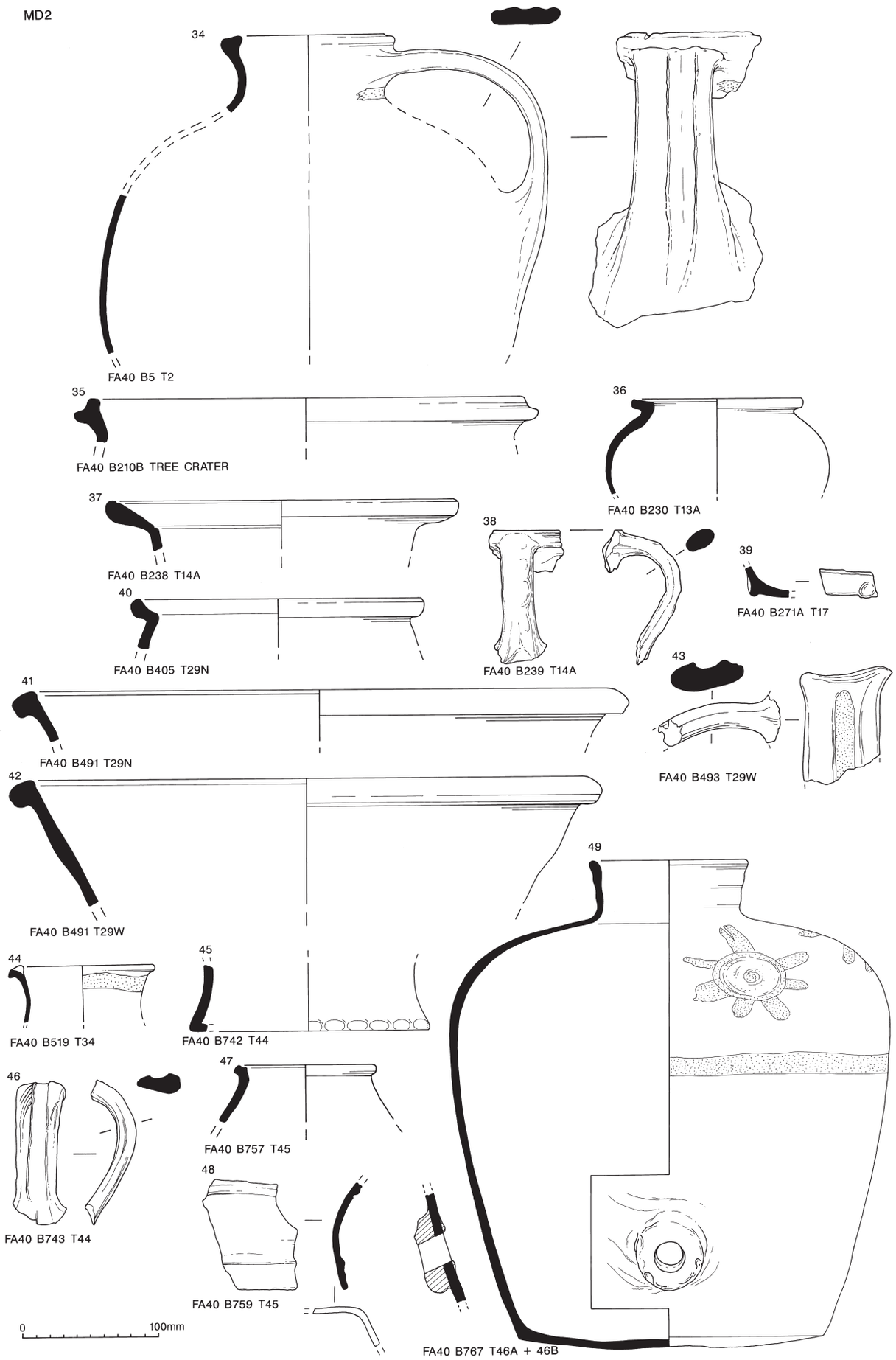

Figure 90 Pottery MD2

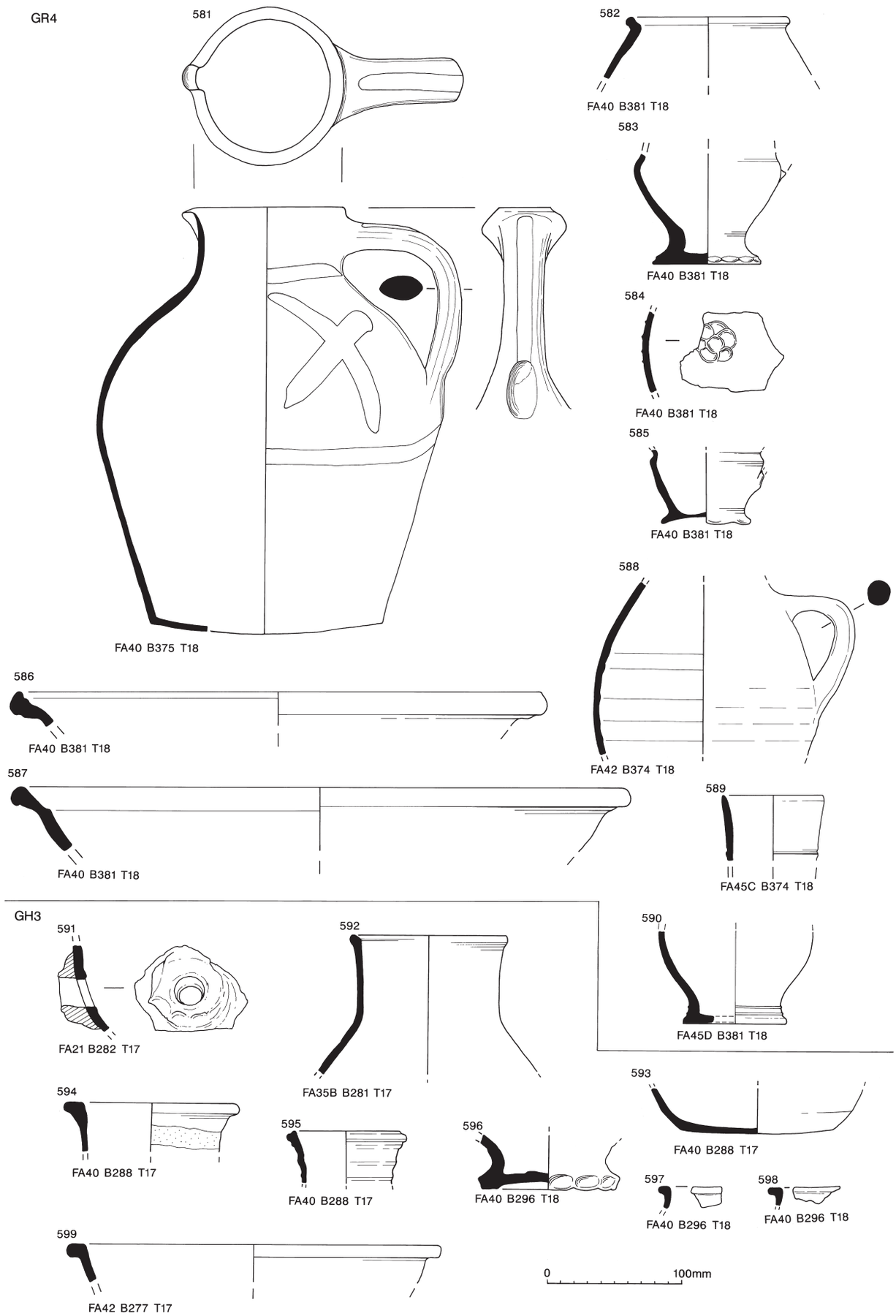

Figure 91 Pottery GR4, GH3

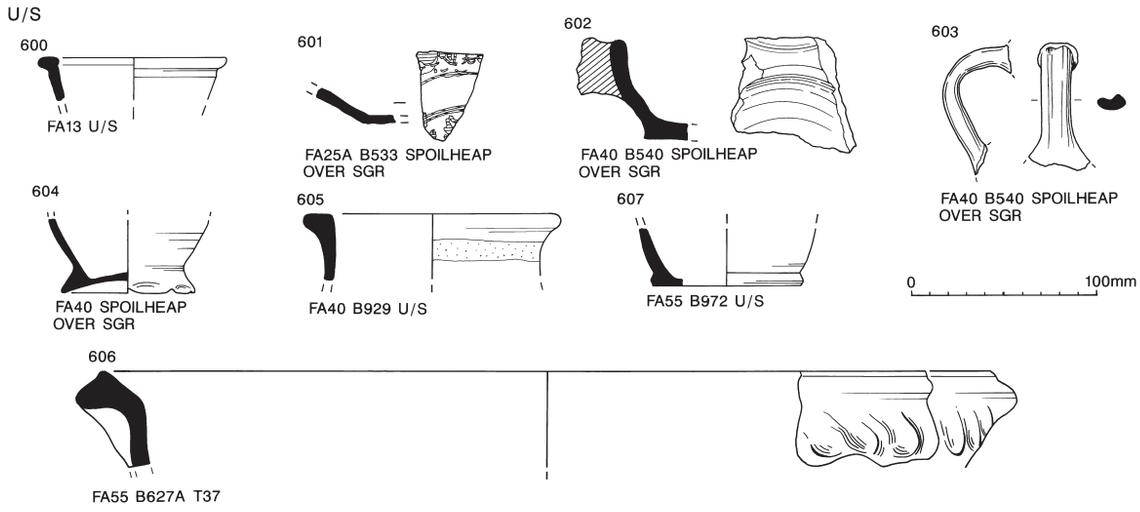

Figure 92 Pottery U/S

Period V (MD2 cont., MT2–6, GH3–4, GR3–4, SGR3–4)
These deposits in the mound, moat, gatehouse and garderobes correspond to the 16th- to 18th-century occupation of the site which saw the backfill and partial demolition of the garderobes and gatehouse along with the construction of the causeway.

This long phase of occupation are dominated by the regional redware products (Fabric 40) for which the site has produced one of the most representative collections in south-east Essex and the Thames estuary. In addition to the substantial quantities of regional post-medieval redware and Surrey-Hampshire Border Ware, both the mound (MD2) and the moat (MT2–6) contained the largest assemblage of Continental ceramic imports from the site. Moat fill 6 produced a substantial group of early post-medieval redwares from the central London area (Fabric 55, Nos 517–528, Fig. 86). Stonewares from Raeren (Fabric 45C), Frechen (45D) and the Westerwald (45F) dominate the Rhenish imports, while a significant assemblage of Martincamp flasks (Fabric 43, Nos 479–480, Fig. 84) was also recovered from moat fill 6, which appears to represent one of the chronologically most coherent assemblages on the site. The relative poverty of the garderobe and gatehouse deposits reflects the gradual abandonment of these facilities. Once again regional redwares (Fabric 40) dominate the assemblage.

Period VI (MD1, MT1)
This horizon relates to the late 19th/early 20th-century phase immediately preceding the acquisition of the site by Southend Borough Council. The ceramic assemblage of these upper mound and moat layers is dominated by modern factory wares and contains much redeposited material from earlier phases of occupation.

The pottery supply to Southchurch
Excavations at Southchurch Hall have generated one of the most important study collections of ceramics in Essex and the Thames estuary region. The range of wares and forms provides an index of pottery production, trade and consumption both within the immediate region and beyond. In particular, the high numbers of regional early modern redware found on the site provide a vital point of reference for the study of local coarseware production and distribution. Although low in number overall, the diverse range of wares imported from the Continent from the 13th to 17th centuries reveals something of the long-standing position of the hall's occupants within international economic and cultural networks. Comparable assemblages of pottery from high status manorial sites and aristocratic residences are few in the region and there is little available of direct comparability, both in terms of such a prolonged and continuous chronology and certainly not in terms of the overall size of the assemblage or quantities of imports involved. Excavations at Pleshey Castle, for instance, produced fragments of only 10 vessels of the period around 1500 (Hurst 1977), while Hadleigh Castle produced only a handful of Rhenish stoneware drinking jugs of the late 15th to mid 16th centuries (Drewitt 1975, especially groups S and T). The comparability of assemblages is made complicated by the lack of a standard fabric terminology in reports published prior to 1982.

In terms of their diversity and quality, they set Southchurch within the general pattern of metropolitan ceramic consumption. The range of wares, particularly those of 15th- to 16th-century date, corresponds closely to contemporary elite consumer patterns in London. The spectrum of Rhenish stoneware and north Italian maiolica can be compared to that of royal and mercantile residential sites in the centre of London (Gaimster and Nenk 1997).

Typical of the large manorial household, is the large assemblage of Transitional-period redware (Fabric 40) found on the site. Most of it was clearly used in the kitchen area and cellar, although Southchurch has also produced a fine range of replica stoneware drinking cups and mugs in redware for the table (Nos 442–443, Fig. 82; 448, 449, Fig. 83; 583 and 596, Fig. 91). Despite these and the presence of the ceramic imports, the overall impression is that ceramics designed for the table may have played only a supporting role, with the imported *facon de Venise* glass, and possibly also metalwork, performing this vital function.

A further significance of the Southchurch Hall ceramic sequence can be found in the continuity of occupation from the 12th to late 19th/early 20th centuries. This is indeed unusual for a non-urban site and the assemblages will doubtless form an important point of reference for study of the regional ceramic market and consumer trends in a manorial context.

V. Clay tobacco pipes

by D. A. Higgins (report prepared 1998)

Introduction

Excavations at Southchurch Hall during the 1970s and 80s produced a total of 724 fragments of pipe, consisting of 116 pieces of bowl, 598 pieces of stem and 10 mouthpieces. These were recovered using a trench and bag numbering system with a final layer number subsequently being allocated to each bag. When the pipes were examined for this report they were found to have been divided for storage in a number of different ways, the three principal ones being: a series of bags containing individual diagnostic pieces for which record drawings had been made; groups of fragments still stored in their original bags and collections of fragments sorted by type (bowls; stems; *etc.*) but containing mixed material from different bag/trench numbers.

The site recording system used meant that the pipes needed to be considered in a number of different ways, for example, by bag number, trench number or by context group. In order to make this possible the pipes were individually examined and catalogued using a format based on the draft recording system developed at the University of Liverpool (Higgins & Davey 1994). Bowl forms were identified using the 1969 London typology (Atkinson and Oswald 1969), with a 'v' for 'variant' being added where a form was similar but not identical to the type example. All the information relating to each piece was entered directly onto an Excel database which allowed the information to be sorted and accessed in a variety of ways, as required. A copy of the draft recording system and database has been deposited as part of the site archive.

In this report the various elements of the pipe assemblage are considered in a series of clearly defined sections. Each section starts with a description of the relevant study material and concludes with a short discussion. Figures 93–95 show the different types of bowl forms, marks and decoration which are represented in the Southchurch assemblage. The illustrated pipes are described in a catalogue and cross-referenced in the text as appropriate.

Background

Although there have been a number of notes written on pipes from Essex the majority of these relate to work in Colchester (Atkin 1989). There has been very little work on pipes from the south-west of the county, nor has there been any recent assessment of pipes from Essex as a whole. There are about 30 pipemakers who are known to have worked in Essex (Oswald 1975), but most of these were either based around the outskirts of London or in Colchester. It is not known whether there were any pipemakers working in the south-east of the county.

The site at Southchurch Hall has been occupied since the late 12th century (Jackson 1987) and for much of this time it has played an important part in the social and economic life of the area. The excavated pipes date from the period of transition from medieval manor to post-medieval farm and can be used to help date and interpret this process. The pipes also provide a valuable indication of the production and consumption patterns in an area which has hitherto been little studied.

Dating

Southchurch Hall is situated on the north side of the Thames estuary, some 37 miles to the east of London. The pipe fragments recovered from the site range from the early 17th through to the early 20th century in date. Within this span there appears to be three main phases of activity which are represented by differing levels of pipe deposition on the site.

The first phase dates from *c.*1610–1660. During this period only a very small number of fragments accumulated within the excavated deposits. This does not necessarily mean that there was no activity taking place on the site since the number of finds recovered is affected by a range of factors. The most important factors are the degree to which pipes were used on the site (it may have been a non-smoking household); the cleanliness and waste disposal patterns of the site (a 'high status' site may well have been kept clean and tidy) and the nature of the deposits which have been excavated (internal floor surfaces are unlikely to produce pipes while midden areas are likely to produce large numbers).

The second phase dates from *c.*1660–1820. The majority of the finds recovered date from this period and appear to be fairly evenly distributed within it. This suggests both that pipes were in regular use at this time and that the excavated deposits contain a reasonable sample of them.

The third phase dates from *c.*1820–1920. As with the first group, very few pipes dating from this period were recovered. This suggests that some sort of change in the consumption/deposition pattern of pipes took place on the site around 1820. As a result, only a sketchy idea of the styles in use during this period can be gleaned. After *c.*1920 changes in waste disposal patterns combined with a rapid decline in the popularity of clay pipes means that they do not form a significant element of the typical archaeological assemblage.

The pipes provide evidence for three broad phases of activity at the hall and the bags of pipes can be related to the 'layer' numbers developed during the post-excavation phase. These layers appear to represent broad divisions, encompassing large groups of material of mixed date. This makes it impossible to discuss either the site stratigraphy or the evolution of pipe styles and usage from the contextual evidence in any meaningful way. It is still possible, however, to consider the artefactual evidence provided by the pipes themselves.

The bowl forms

As the capital, London set the fashion for many types of goods and pipes were no exception. London pipe styles were quite closely followed throughout the home counties and south-east and they often influenced the styles found in other parts of the country as well. As would be expected, the majority of the bowl forms from Southchurch are of London types (Atkinson and Oswald 1969). In some cases this is because they are actual London products but in other cases they may have been local copies of London styles (see the marked pipes below). Many of the early pipes are unmarked and, even when the later pipes are marked, it is often impossible to attribute them to a particular maker with any certainty. This makes it very difficult to assess the extent to which the pipes at Southchurch were traded from London and the extent to which they were produced locally.

In broad terms, the Southchurch pipes seem to follow the London fashions fairly closely. There do, however, seem to be a lot of London type 18/22 forms (Fig. 93.9–16) during the period *c*.1660–1710 and a lack of other transitional forms (London types 19–21) which might otherwise have been expected. In the same way, although there are a number of typical 18th-century heel forms (London types 22/28) there seem to be rather more spur types (London type 26) than is typical of groups from London itself. From an isolated example such as this it is impossible to assess whether these slight differences are a result of consumer preference on site or actual differences in the locally available supply.

Internal bowl crosses

Four pipes with internal bowl crosses were recovered. These are marks made on the internal base of the bowl cavity by the stopper which forms the bowl during the manufacturing process. The most common form is a simple cross arranged as a '+' in relation to the smoker. All the Southchurch examples are of this type. They all occur on London type 25 bowls dating from *c*.1700–70. Two of these have makers' marks on them (Fig. 94.20 and 23) and two are plain (for example, Fig. 94.25).

Abraded stems

Six stems were recovered from the excavations with highly abraded surfaces, including completely rounded ends. These pieces appear to have been naturally abraded through water action. They all came from different bag numbers and appear to date originally from the 18th and 19th centuries. From the appearance of these pieces it is likely that they would have formed in a relatively high-energy water environment such as a stream bed or beach. The hall is situated on the 10m terrace (Jackson 1987, 34) some distance from the shore line. This seems too far and high above the sea for flooding to provide a mechanism for their deposition. This being the case, these pieces must have been collected in an abraded state and deliberately brought to the site before being lost. They may, for example, have been souvenirs collected by children on the beach and then lost or discarded on the site. These pieces can be readily identified by their highly abraded nature; if they were not abraded their intrusive nature would not be apparent. They serve as a pertinent reminder of the complexity and range of site formation processes which produce the archaeological record.

The marked pipes

Fifty-five of the Southchurch pipes have maker's marks or slogans on them. These can be divided into two classes; stamped marks which have been impressed into the pipe after it has been moulded but while it is still soft and moulded marks which are formed by the shape of the mould in which the clay is pressed. These two classes are discussed separately below.

Stamped marks

There are eleven pipe fragments with stamped marks from Southchurch representing four different manufacturers. Two of these are 17th-century heel stamps, one is an 18th-century stem stamp and one a 19th-century bowl stamp. The marks are described in alphabetical order below.

?T:COATS (Fig. 94.34)

This mark occurs as a central band within a broad decorative stem stamp. At least six examples and another two possible fragments of this type were recovered from the excavations. In the most complete surviving example the border has been placed at least 78mm from the bowl (Fig. 94.34). The mark is inverted in relation to the smoker — a characteristic shared by all the other examples from the site where it is possible to determine the stem taper. Unfortunately, none of the bowl fragments recovered can be related to this stem mark. The stems from these pipes are quite distinctive in that they are rather squat and oval in section, but with the short axis being top to bottom, rather than side to side, as is usually the case.

The rolling of the stamp around the stem has invariably obscured the maker's Christian name initial, although it appears most likely to have been a T. This unusual mark is very distinctive and it can clearly be matched by published examples from the Tyneside area (Edwards 1988, 32). In his study Edwards attributes these marks to Hugh Coates, a Gateshead maker documented between 1792 and 1810. When he made this attribution Edwards was not able to read the Christian name initial from his examples and the Southchurch evidence has now shown that these marks were in fact probably produced by another maker. While it is clear that these marks are normally found in the Tyneside area where the Coats family are known to have lived, their usual dating of *c*.1790–1820 is based on an erroneous attribution to Hugh Coates. In most areas the use of stem borders had died out by the end of the 18th century and so it is now postulated that these marks represent a slightly earlier but as yet undocumented Tyneside maker, perhaps Hugh's father.

In terms of their distribution, the presence of these marks in Essex is highly unusual. Most pipes did not travel more than a few miles from their place of manufacture and, if they did travel, they are usually found as isolated examples. The presence of so many identical examples at Southchurch clearly suggests that they represent a batch of pipes which were brought to and consumed on the site. The mechanism for transporting the pipes is easily explained in terms of the extensive coastal trade which was taking place, particularly in coal. The less easily answered question is why the pipes were traded. There is no evidence of an organised coastal trade in Tyneside pipes and only a small number of individual examples are known from the London waterfront, where they could have been personal items discarded from moored ships.

The final point of interest in relation to this mark is the quality of the impressions. In all the Southchurch examples the stamp detail is rather 'soft' and faint and the stamps appear slightly blurred. In drawing the die detail (Fig.94.34) the Southchurch pipes were compared with an impression of a Coats stamp from Chester-le-Street in County Durham. Although this was clearly of the same design, the Chester-le-Street impression was much crisper and more clearly defined. Either the Southchurch examples were made much later, when the die had become very worn, or they were made using another copy of the same mark. Until recently it had been assumed that all pipe stamps were 'one off' dies like seals or signet rings. But the recent discovery of a second 17th-century pipemaker's stamp made of clay casts doubt on this. Both of the 17th-century pipemaker's stamps have been 'mass produced' by taking an impression from a master with soft pipe clay and then firing that to use as the working stamp. If Coats used this method then he may have had a number of superficially identical stamps, one of which could have produced the poor impressions seen at Southchurch. The study of pipemaking technology and workshop practice is clearly an area where more work is needed.

IG (Fig. 93.3)

One damaged bowl of *c*.1650–70 with the stamped mark IG was recovered from the excavations. This bowl is of a London form but this particular mark does not appear to have been recorded from there and it could just as well be a provincial product. Oswald (1975, 137) lists a John Griffin of Whitechapel who was married in 1642 and a John Griffin who was working at Finsbury Place in 1665 either of whom could have made this pipe in London. There are no known provincial makers in Essex or Kent with these initials.

PREBBLE / ROMFORD (Fig. 95.38)

One example of a plain bowl with an incuse bowl stamp reading PREBBLE / ROMFORD was recovered. This mark does not appear to have been previously recorded although a considerable amount is known about the maker himself (Hammond, *in litt*. 15.12.98). William Prebble was born in Maidstone, Kent, in about 1827 and appears at a variety of addresses in Kent, Essex and London between 1861 and 1891. He is known to have been at Stepney in 1865 and Bow in 1882 but he is only listed at Romford on two occasions, in 1870 and 1871. This suggests that the Romford mark can be closely dated to around 1870, thus providing an accurate date for the stamped bowl found at Southchurch.

IR (Fig. 93.1)
A single example of a heel dating from *c*.1610–50 with the incuse stamp IR was recovered. The edges of this stamp have run off the heel, but similar examples, several of which are known from London, show that it was probably a stylised Tudor Rose design. This pipe has a fine all over burnish and would have been a high quality product. Examples have been recovered from other high status sites such as Oatlands Palace (Higgins 1981, fig. 35) and its presence at Southchurch may indicate a relatively wealthy household during the first part of the 17th century. The pipe was probably manufactured in London where several early 17th-century makers with these initials are known to have worked (Oswald 1975, 144).

Moulded marks

Moulded heel marks were taken up by the London makers towards the end of the 17th century and remained the standard way of marking pipes in the south-east until the end of the 19th century. Quite a large number of different sets of initials occurs at Southchurch. Unfortunately it is difficult to identify most of them with any certainty for two reasons. First, the local lists do not appear to be very comprehensive and therefore some of the marks may belong to as yet undocumented Essex makers. Secondly, many of the pipes could have been traded down the Thames from London. Given the number of known London makers there are often several possible options for any given set of initials. Until the individual products of each London maker have been identified it is impossible to attribute these pipes with any confidence.

From the second quarter of the 19th century onwards makers' names and slogans were also moulded along the stems of pipes. Only three different types were recovered from Southchurch and these are also listed below. The marked heels and spurs are listed first, in surname order. These are followed by incomplete or damaged marks and, finally, the marked stems.

EB (Fig. 94.32)
One heel fragment dating from *c*.1750–90 and marked EB was recovered. An Elizabeth Bland was recorded in Colchester in 1745 (Oswald 1975, 170) but Colchester is as far from Southchurch as London, where there were several makers with these initials.

PB (Fig. 95.35)
One heel fragment of *c*.1780–1830 marked PB was found. The only two known makers from Essex or London with these initials are Mrs P. Bellis of Romford, recorded in 1851, and Paul Balme of Mile End Wharf, recorded 1832–66 (Oswald 1975, 170 & 132). Both of these makers seem a little late for the style of the pipe, although it could be an early Balme product. He was certainly a prolific maker and the most likely candidate for this piece currently known.

EC (Fig. 94.33)
Two identical examples of a pipe dating from *c*.1780–1820 were found. There were several London makers with these initials.

TE (Fig.94.29)
Two identical examples of a London style spur pipe dating from *c*.1740–1800 and marked TE were found. The only likely maker documented by Oswald with these initials is a Thomas Edwards of London, who took his freedom in 1716 (Oswald 1975, 136).

SF (Fig. 95.39)
One pipe of *c*.1830–1900 with these initials was recovered. The bowl is decorated with leaves, a wreath and crossed keys. Oswald (1975, 136) lists three London makers during this period with the initials SF: Samuel Ford of Rotherhithe, 1832–53; Samuel Fitt (I) of Whitechapel, 1839–59 and Samuel Fitt (II) of Bow, 1896–8.

LG (Fig. 93.12)
One London type 25 bowl of *c*.1700–70 with the initials LG was found. Possibly Lawrence Grayson of Holborn, recorded in 1737 (Oswald 1975, 137).

WM (Figs 93.14–17; Fig. 94.18)
Twelve pipes with the initials WM were recovered, together with a further two damaged examples which probably read WM originally. Two main bowl forms are represented which, stylistically, cover the date range *c*.1680–1780. The earliest examples are London Type 22 bowls of *c*.1680–1710 of which there were six examples (four definite and two possible). Four of these (three definite and one possible) had crowned initials (Figs 93.14–15) and two (one definite and one possible) had plain initials (Fig. 93.16). There were eight of the slightly later London type 25 variety, dating from *c*.1700–80, all of which had crowned initials (Figs 93.17; 94.18). Slight differences in the detailing of the letters and crowns shows that all of these pipes were probably made in different moulds. There are also differences in the size and proportions of the surviving bowls, for example Figs 93.17 and 94.18, which probably reflect differing lengths and styles of pipe.

Pipes marked WM are very common in the London area and can be attributed to the Manby family. William Manby I is recorded at Aldgate from 1681–96 and William Manby II at Limehouse from 1719–63 (Oswald 1975, 142). They were clearly prolific makers who must have operated a large workshop with an extensive export business. Pipes marked WM have been found widely distributed across the eastern coast of Canada, the United States and in the West Indies (Atkinson & Oswald 1969, 206). The presence of so many WM pipes at Southchurch suggests that they also enjoyed a good domestic market with the Thames providing an easy means of transport to the coast of Essex.

WR? (Fig. 94.20)
Three examples of a London type 25 pipe dating from *c*.1700–70 with the Christian name initial W and what appears to be the surname R were recovered. The surname initial has been recut or altered giving it a distinctive appearance but uncertain reading. One of the examples (Fig. 94.20) has an internal bowl cross. There were several London makers at this period with these initials (Oswald 1975, 144).

HS (Fig. 95.37)
Four examples of a masonic pipe dating from *c*.1820–60 and marked with the initials HS were recovered. The initials are rather strangely formed and angular, as if they have been altered or modified in some way in the mould. The only recorded maker in this area with the initials HS is Henry Strutt, who was working in Romford in 1839 and Stepney in 1854 (Oswald 1975, 170 & 145).

MS (Fig. 94.22)
One London type 25 bowl of *c*.1700–70 with the initials MS was found. The only known London maker listed with these initials is Michael Simpson, who was apprenticed in 1694 (Oswald 1975, 146).

FW (Fig. 94.19)
One London type 25 heel fragment of *c*.1700–70 with the initials FW was found. The F is retrograde, and strangely formed so that it looks like an inverted L with a bar across it. There are no known London or Essex makers with these initials.

IW (Fig. 94.30)
One London type 27 heel fragment of *c*.1770–1820 with the initials IW was found. There were several London makers with these initials.

** (Fig. 94.24)
A London type 25 bowl of *c*.1720–70 with a star or flower mark either side of the heel was found. This symbol mark is fairly common in London, but it cannot at present be attributed to any particular maker or workshop.

E/ (not illustrated)
A damaged London type 25 heel of *c*.1700–70 with the Christian name initial E was recovered.

? Fleur-de-lys (not illustrated)
A small fragment of a moulded symbol mark, possibly a fleur-de-lys, was recovered from the site. This dates from *c*.1700–70 and occurred on a London type 25 heel.

I/ (Fig. 94.23)
A damaged London type 25 bowl of *c*.1700–70 with the Christian name initial I was recovered. This bowl also has an internal bowl cross.

S/ (Fig. 94.28)
A damaged London type 26 spur bowl of *c*.1740–1800 with the Christian name initial S was recovered.

W/ (not illustrated)
A heel fragment, probably from London type 22 bowl of *c*.1680–1710, with the Christian name initial W was recovered. This is probably part of a WM pipe (see above).

CHUBBY / MINER (Fig. 95.40)
Four identical pipes of *c*.1870–1920 with the pattern name CHUBBY/MINER moulded in incuse sans-serif lettering along the stem were found. Two of these have never been broken and a third has been reassembled from two fragments. All of the bowls show signs of heavy smoking and all have battered rims where they have been repeatedly knocked out. All three of the surviving mouthpieces also have a clean band next to the nipple section where some form of fitting, perhaps a rubber mount or cotton binding, has protected the clay from discolouration. This thick, chunky style of pipe was popular in the late 19th and early 20th century. The fact that two pipes were recovered intact and a third was reassembled may indicate that they had been deliberately buried. Occasionally pipes are known to have been treated in this way as a means of cleaning them. The signs of heavy use certainly suggest that these pipes were carefully looked after and used for much longer than was normal with clays.

FOR/ /EY (not illustrated)
A stem fragment with this relief moulded lettering along the sides was recovered. The full wording probably read FORD / STEPNEY originally, a common mark in the London area. Probably Thomas Ford, recorded 1850–90 (Oswald 1975, 136).

PHILOS / A PARIS (Fig. 95.43)
One French stem with the relief moulded lettering PHILOS / A PARIS was recovered. The lettering is contained within a relief border and there is also the start of a pattern number '2...' in a separate border next to the manufacturer's name. Quite large numbers of French pipes were imported to England from the 1840s until the end of the century. French pipes were characterised by their elaborately moulded decoration which, as in this case, was often coloured with enamels. This piece was produced by one of the less well known French importers, *c*.1840–80.

Decorated pipes

A relatively small number of decorated pipes were recovered from the excavations. This does not reflect any particular preference in the type of pipes used on the site so much as the low level of 19th century and later pipes which are represented in the archaeological record. The fragments which were recovered are insufficient to reach any firm conclusions about the styles circulating in this part of Essex although, as with the bowl forms, they generally conform to London fashions.

There is just one 17th-century decorated piece — a stem fragment with a single band of milling on it (Fig. 93.2). There are also a couple of milling marks further along this stem, but it is not clear whether these are intentional or accidental. Single milled bands are occasionally found on 17th-century pipes from most parts of the country. In some cases they appear to have been added to help disguise flaws in the pipe but in other cases, as at Southchurch, the band appears to be purely decorative.

There were only nine bowl and two stem fragments from the excavations with moulded decoration. The earliest of these is a fragmentary example of a London type 26 bowl dating from *c*.1740–1800 (Fig. 94.27). Although only a small part survives this seems likely to be a version of the Prince of Wales feathers. This design was popular during the 18th century (Le Cheminant 1981a; 1981b) although usually the feathers are depicted projecting below a slightly wider band facing the smoker.

There are four examples of a masonic pipe of *c*.1820–60 (Fig. 95.37) with the moulded initials HS on the spur. This can possibly be attributed to Henry Strutt, who is recorded from 1839–54 (see above). These bowls have quite thin walls decorated with a range of masonic emblems. The style of this piece is typical of the masonic pipes found in London and the south-east.

Another elaborately decorated bowl of *c*.1830–1900 depicts a pair of crossed keys within a wreath (Fig. 95.39). The decoration on this piece is very neat and sharply defined. The crossed keys are found occasionally on London area pipes from the 1830s (Tatman 1985, fig. 43) right through until the early 20th century (Higgins 1985, figs 18 and 24). The Southchurch fragment is a particularly good example of its type.

The more common forms of 19th-century decoration are represented by three examples at Southchurch; one with leaf decoration and two with flutes. The bowl with leaf decoration dates from *c*.1820–60 and just has leaves on the seam facing away from the smoker (Fig. 95.36). The leaves are crudely executed and the bowl has numerous flaws on its sides. The spur, which would probably have had a makers mark on it, is missing. The fluted pipes are represented by just fragments of a bowl and stem (Fig. 95.41–42). The former of these is probably from a heel or spur pipe which has been discoloured and burnt. Despite this, the very dark and uniform colour of this fragment suggest that it was made of a red rather than a white clay. Red clay pipes were occasionally made during the later 19th century, but they were never very common. The latter piece (Fig. 95.42) is probably from a spurless type of pipe. Both of these pieces probably date from the second half of the 19th century.

Apart from a bowl fragment of *c*.1850–1910 with insufficient surviving to determine the design, the only other decorated piece is a French stem of *c*.1840–80 (Fig. 95.43). This originally had enamel decoration on the leaves and it would almost certainly have had an ornately decorated bowl. Elaborate French pipes were popular in this country during the second half of the 19th century, even though they were many times more expensive than the plainer English examples.

Summary and conclusions

The Southchurch Hall assemblage provides a useful sample of the pipes which were being used in a part of Essex where little evidence was previously available. The group includes a few early and late pieces, but its main strength lies in the period between *c*.1650 and 1820. There is one high quality piece dating from the first half of the 17th century (Fig. 93.1) but otherwise the pipes are of ordinary quality. In general terms the pipes follow London fashions of bowl, mark and decoration quite closely. There is some indication that certain forms were favoured or disliked but further work is needed to assess this properly. Quite a number of the pipes can be identified with London makers and it appears that a significant proportion of the pipes from Southchurch were being obtained from the capital rather than being produced locally. In contrast, there are not any pieces which can be attributed to Kent makers. This suggests that the trade was very much along the river rather than across it. One particularly unusual group consists of a number of decorated stems made by Coats of Tyneside in the late 18th century. Tyneside pipes are not known to have been extensively traded along the coast and the reason for the occurrence of this group in Essex remains a mystery.

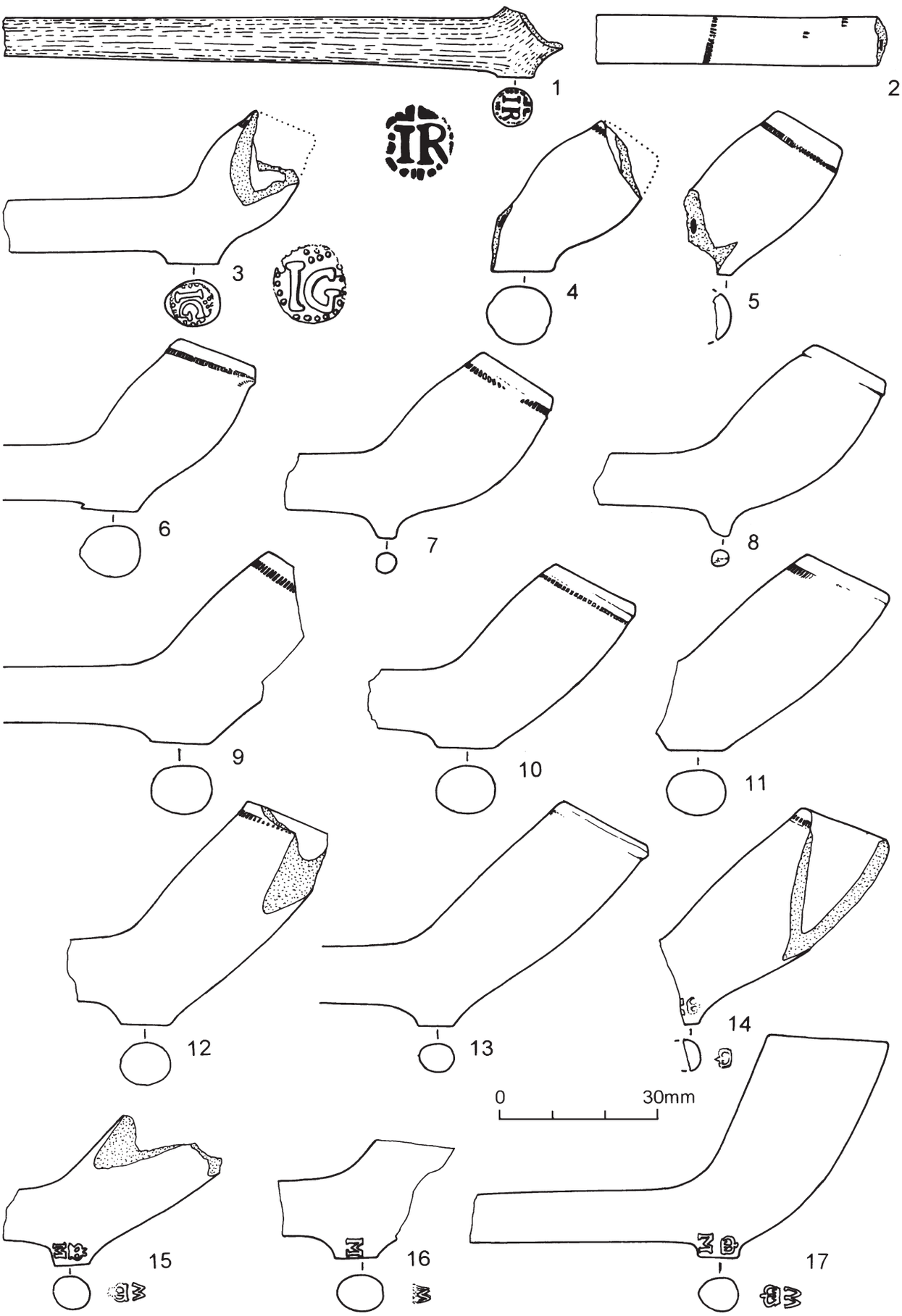

Figure 93 Clay tobacco pipes

Catalogue of illustrated pieces

All the pipe fragments illustrated are shown at 1:1 with details of the stamped marks at 2:1. Relief detail is shown in outline and incuse detail solid. Burnished surfaces are shown with dashed lines and broken edges are shown stippled. Heel/spur bases and internal bowl crosses are shown in plan view. It can be assumed that all the 17th-century styles have bottered rims and the later ones cut rims unless otherwise stated. Additional rim finishing, such as internal trimming or wiping, is consistently noted when present. At the end of each entry the bag, trench (Tr) and layer numbers have been given in brackets. All illustrations are by the author with the exception of Fig. 95.37, which was missing at the time of the study. This illustration has been copied from the archive drawing prepared by J.M. Johnston.

(Fig. 93)

1. Stem and heel fragment of *c*.1610–50 with an incuse heel stamp reading IR. Finely burnished bowl and stem with a bore of 8/64". (Bag 293, Tr. 18, MT2)

2. Stem fragment, probably dating from *c*.1650–1710, with a single band of milled decoration. Stem bore 5/64". (Bag 864, Tr. 48,
MT4)

3. London type 10/13 bowl of *c*.1650–70 with a relief heel stamp reading IG. Stem bore 8/64". (Bag 908, Tr. 54, MT4)

4. London type 10 bowl of *c*.1640–60. Stem bore 6/64". (Bag 836, Tr. 49, MT5)

5. London type 10/18 bowl of *c*.1650–80 with a fully milled rim. Stem bore 7/64". (Bag 973, Tr. 51, MT3)

6. London type 13 bowl of *c*.1660–80 with an internally trimmed and fully milled rim. Stem bore 7/64". (Bag 320, Tr. 21, MT2)

7. London type 15 bowl of *c*.1660–80 with an internally trimmed and fully milled rim. Stem bore 8/64". (Bag 1161, Tr. 56, MT2)

8. London type 15 bowl of *c*.1660–80, no milling on the rim. Stem bore 6/64". (Bag 1066A, U/S)

9. London type 18 bowl of *c*.1660–90 with an internally trimmed rim. Stem bore 7/64". (Bag 821, Tr. 49, MT2)

10. London type 18v bowl of *c*.1660–90 with an internally trimmed and fully milled rim. Stem bore 7/64". (Bag 120, Tr. 6, MD1)

11. London type 18/22 bowl of *c*.1680–1710 with a half milled rim. Stem bore 6/64". (Bag 893, Tr. 50, MT5)

12. London type 18/22 bowl of *c*.1680–1710. Stem bore 6/64". (Bag 874, Tr. 50, MT2)

13. London type 22 bowl of *c*.1680–1710, no milling on the rim. Stem bore 6/64". (Bag 1156, Tr. 63, MT2)

14. London type 22 bowl of *c*.1680–1710 with traces of moulded initials (crowned) on the sides of the heel. Only part of the surname initial survives, but this appears to be an M, probably part of a WM mark. Stem bore 7/64". (Bag 559, Tr. 11B, MT2)

15. London type 22 bowl of *c*.1680–1710 with the moulded initials WM (crowned) on the sides of the heel. Stem bore 5/64". (Bag 843, Tr. 48, MT4)

16. London type 22 bowl of *c*.1680–1710 with the moulded initials WM on the sides of the heel. Stem bore 6/64". (Bag 883, Tr. 50, MT5)

17. London type 25 bowl of *c*.1700–1770 with the moulded initials WM (crowned) on the sides of the heel. Stem bore 6/64". (Bag 962, Tr. 51, MT2)

(Fig. 94)

18. London type 25 bowl of *c*.1700–1770 with the moulded initials WM (crowned) on the sides of the heel; the bowl rim has been wiped. Stem bore 5/64". (Bag 875, Tr. 50, MT2)

19. London type 25 bowl of *c*.1700–1770 with the moulded initials FW (the F being retrograde) on the sides of the heel. Stem bore 5/64". (Bag 1156, Tr. 63, MT2)

20. London type 25 bowl of *c*.1700–1770 with the moulded initials WR? on the sides of the heel. The surname initial, R?, appears to have been recut or altered. This pipe has an internal bowl cross. Stem bore 5/64". (Bag 964, Tr. 51, MT4)

21. London type 25 bowl of *c*.1700–1770 with the moulded initials LG on the sides of the heel. Stem bore 5/64". (Bag 993, Tr. 50, MT3)

22. London type 25 bowl of *c*.1700–1770 with the moulded initials MS on the sides of the heel. Stem bore 5/64". (Bag 840, Tr. 48, MT4)

23. London type 25 bowl of *c*.1700–1770 with moulded initials on the sides of the heel. The Christian name initial `I' is clear but the surname is illegible. Internal bowl cross. Unusually small stem bore of 4/64". (Bag 871, Tr. 50, MT2)

24. London type 25 bowl of *c*.1700–1770 with moulded rosettes (with a central dot) on the sides of the heel. Wiped rim. Stem bore 4/64". (Bag 833, Tr. 49, MT2)

25. Unmarked London type 25 bowl of *c*.1720–1770. Internal bowl cross and wiped rim. Stem bore 4/64". (Bag 962, Tr. 51, MT2)

26. Unmarked London type 25 bowl of *c*.1700–1770. Stem bore 5/64". (Bag 522, Tr. 35, MT2)

27. Unmarked London type 26 bowl of *c*.1740–1800 with traces of moulded decoration on the bowl — possibly the Prince of Wales feathers. Stem bore 5/64". (Bag 809, Tr. 49, MT2)

28. London type 26 bowl of *c*.1740–1800 with moulded initials on the sides of the heel. The Christian name initial `S' (retrograde) is clear, but the surname in illegible. Stem bore 5/64". (Bag 1156, Tr. 63, MT2)

29. London type 26 bowl of *c*.1740–1800 with the moulded initials TE on the sides of the heel. Stem bore 4/64". (Bag 503, Tr. 14B, MD2)

30. London type 27 bowl of *c*.1770–1820 with the moulded initials IW on the sides of the heel. Stem bore 4/64". (Bag 252, Tr. 14A, MD2)

31. London type 27 bowl of *c*.1780–1820 with the moulded initials GI on the sides of the heel. Stem bore 4/64". (Bag 811, Tr. 48, MT1)

32. London type 25/27 bowl of *c*.1750–1790 with the moulded initials EB on the sides of the heel. Stem bore 4/64". (Bag 818, Tr. 49, MT2)

33. London type 27 bowl of *c*.1780–1820 with the moulded initials EC on the sides of the heel. Stem bore 5/64". (Bag 764, Tr. 46B, MD2)

34. Stem fragment of *c*.1790–1820 with an incuse stamped border incorporating the maker's name. This appears to read 'T:COATS', although the Christian name is poorly impressed and it could perhaps be another letter, for example, C or S. The border has been placed at least 78mm from the bowl and is inverted in relation to the smoker — a characteristic shared by all the other examples from the site where it is possible to determine the stem taper. The illustrated stem has a bore of 4/64" and comes from Bag 778, Tr. 46B, MD2. The die detail is a composite drawing prepared from this and four other examples (Bag 764, Tr. 46B, MD2 x 2; Bag 674, Tr. 42E, MT6 and an example from excavations at Chester-le-Street, Co Durham (CC 90 2) in the Bowes Museum).

(Fig. 95)

35. London type 27? bowl of *c*.1780–1830 with the moulded initials PB on the sides of the heel. Stem bore 4/64". (Bag 1, Tr. 1, MD1)

36. London type 28 bowl of *c*.1820–1860 with the spur missing. Crude leaf decoration on the front seam only; mould flaws on the bowl sides. Wiped rim. Stem bore 4/64". (Bag 66, Tr. 3, MD1)

37. London type 28 bowl of *c*.1820–1860 with the moulded initials HS on the sides of the heel. Moulded masonic decoration and leaf seams on the bowl. This piece was missing when the material was studied and so the stem bore and context information are not known.

38. London type 27v bowl with an incuse stamped mark reading 'PREBBLE / ROMFORD' on the bowl. William Prebble is only recorded at Romford in 1870 and 1871. He is known to have been living elsewhere in 1865 and 1882, thus allowing this piece to be closely dated to around 1870. Stem bore 4/64". (Bag 100, Tr. 5, MD2)

39. London type 28v bowl of *c*.1830–1900 with the moulded initials SF on the sides of the heel. Bowl decorated with neatly executed crossed keys and wreath design; leaf decorated seams. Stem bore 4/64". (Bag 82, Tr. 3, MD3)

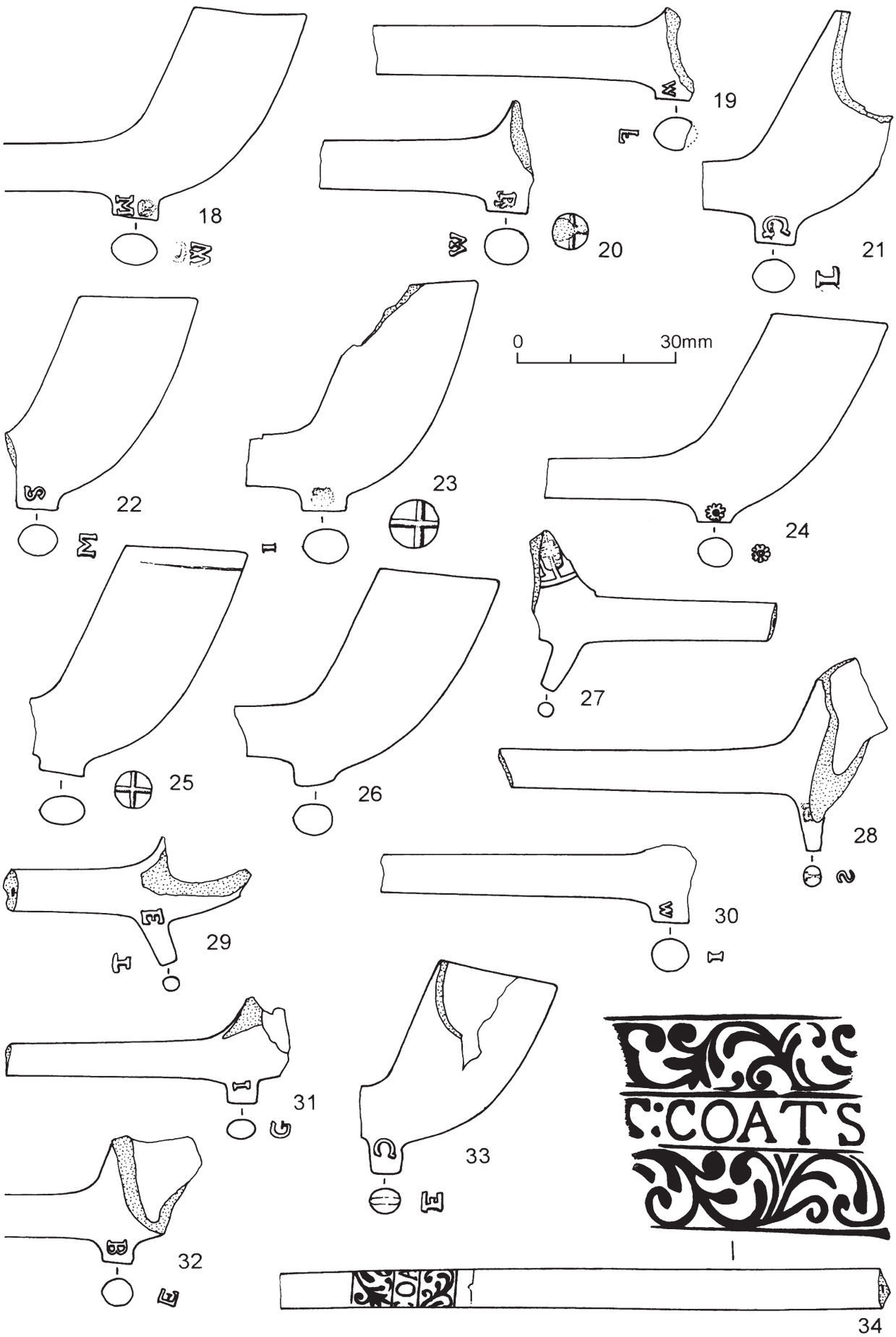

Figure 94 Clay tobacco pipes

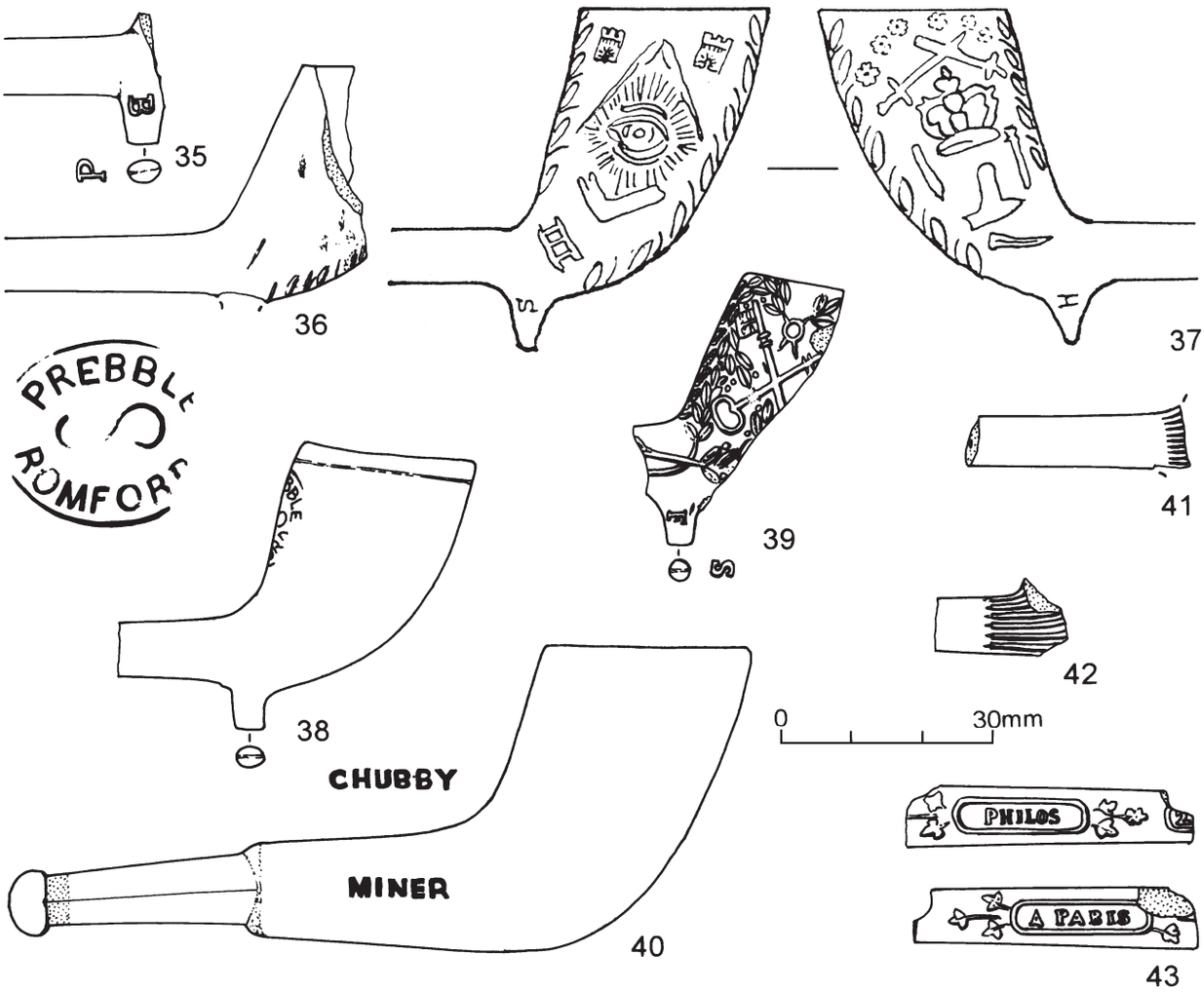

Figure 95 Clay tobacco pipes

40. Complete London type 30v pipe of *c*.1870–1920 with the incuse moulded design name 'CHUBBY / MINER' along the stem. There is a light band by the mouthpiece where some form of additional fitting, perhaps a rubber grip, has perished. Stem bore 5/64". (Bag 1109, Tr. 58, MT2)

41. Stem fragment of *c*.1840–1880 with traces of fine fluted decoration extending from the bowl. Stem bore 4/64". (Bag 3, Tr. 2, MD2)

42. Bowl fragment of *c*.1850–1900 with traces of fluted decoration extending from the bowl. Stem bore 4/64". (Bag 626, Tr. B37/38, MT6)

43. French stem fragment of *c*.1840–1900 with the relief moulded mark 'PHILOS / A PARIS' on the stem sides. There is also part of a pattern number, starting with a '2', on the left hand side of the stem. The lettering occurs within a plain border and is embellished with moulded leaf decoration. The leaves were originally enhanced with coloured enamel decoration, but this has degraded in the ground. Stem bore 5/64". (Bag 100, Tr. 5, MD2)

VI. Leather

by Q. Mould

Introduction

487 pieces of leather were examined from the excavations at Southchurch Hall. The leather was originally allocated 85 bag numbers; eight of these were discarded shortly after excavation and a further eight could not be located and, consequently, were not available for study. The material was studied some time after excavation (a maximum of seven years) and a small amount of lost or confused labelling was encountered. The illustrated leather was selected and drawn shortly after excavation by Jackie Johnston, prior to any involvement by the author, who subsequently provided additional sketches (Fig. 96) to show the shoe styles represented.

Condition and size

When examined just over half of the assemblage (59%) had been conserved with Bavon. The remainder was stored wet, however some pieces had mistakenly been allowed to dried out. The resultant differential shrinkage made any comparision of shoe size between phases or with those from other sites impossible, although components from shoes to fit both children and adults were present in the assemblage. It is interesting to note that one turnshoe sole (bag 1177 not illustrated), from the penultimate silting of the moat, had XIII scratched on the flesh side (interior) of the sole at the tread. This may point to the shoe having been made as part of a general stock rather than made to measure for a particular customer.

Provenance and composition of the assemblage

The majority of the leather (96.5%) was recovered from the moat (MT6–9), principally from the top silting (MT6)

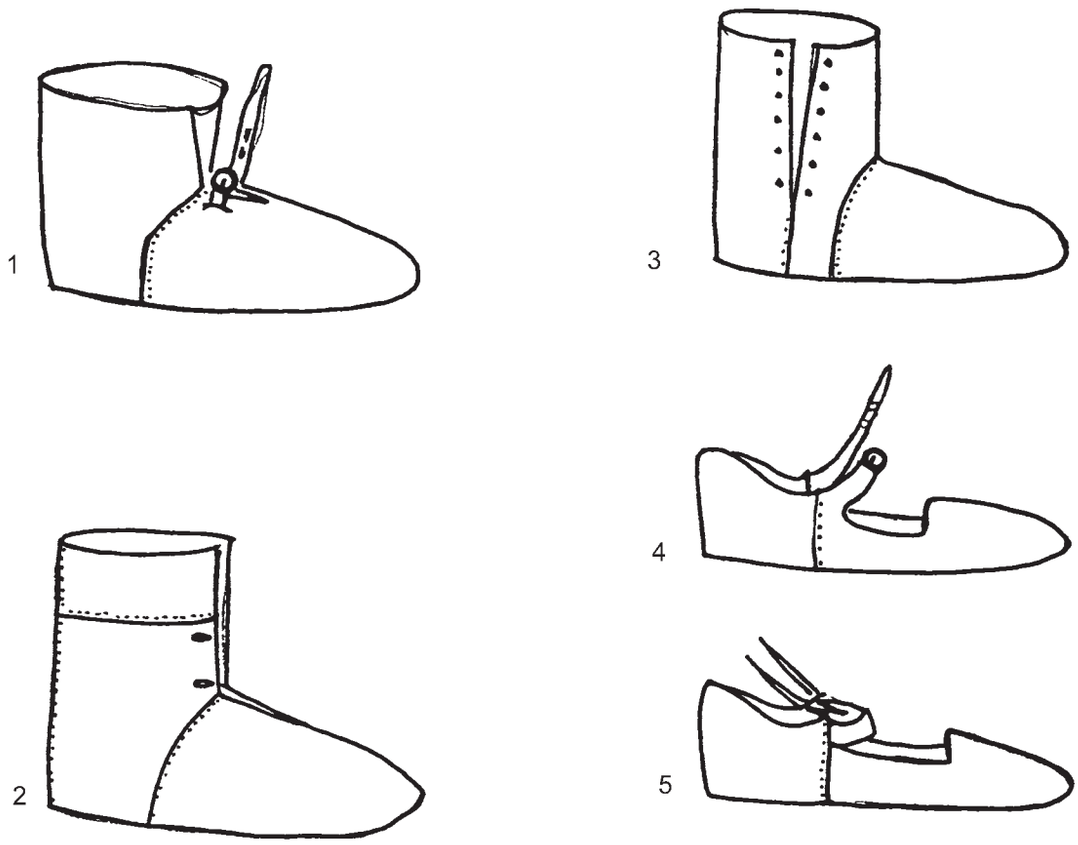

Figure 96 Sketch reconstruction of leather shoe styles found

and penultimate silting (MT7) associated with pottery ranging in date from *c.*1350–1600. A small quantity was also found in the garderobe (GR4–5) along with pottery spanning *c.*1250–1600. The leather comprised chiefly of heavily worn shoe components of turnshoe construction of late 14th- and early 15th-century date, along with a scabbard, a fragment of drawstring pouch, waste and scrap leather. A small amount of welted shoe components of post-medieval date were also recovered, see Table 18.

The moat

The majority of the leather found at Southchurch Hall derived from the penultimate (MT7 30%) and top silting (MT6 65%) of the moat. The top silting also contained a small quantity of welted shoe components (Fig. 97.1–4). The fragmentary components from welted shoes possessed few diagnostic features; however, the right side of two-part quarters of a shoe made with the flesh side of the leather outwards (bag 598 not illustrated) suggested a 17th-century date. This is compatible with the occurrence of pottery with date ranges extending as late as 1650 found within the same context.

Shoe bottom units

The vast majority of the leather from the penultimate and top silting of the moat were shoe parts of turnshoe construction, chiefly soles and clump sole repairs. The soles had short pointed, or occasionally oval, toes, petal-shaped treads and relatively narrow waists and seats (Fig. 97.5–Fig. 101.22). Nine had an extended pointed toe ranging in length from 20–35 mm (*c.* ¾–1½ in) suggesting a date in the late 14th/early 15th century, however, none of the high fashion excessively long 'poulaine' toes were found. Nearly half (44%) of the rand fragments found (*e.g.* Fig. 101.23–6) had tunnel stitching present by which the perimeter of the clump repair pieces (*e.g.* Fig. 101.27–9) had been attached to the sole, also suggestive of a later medieval date.

Shoe upper styles

The smaller proportion of upper components recovered were in a fragmentary condition and features indicative of shoe styles were few, however, a number were recognised.

One-piece upper ankle-shoes

Fragments from a minimum of four ankle-shoes of one-piece upper construction were recognised (*e.g.* Fig. 101.30; 102.31–35), the upper wrapping around the foot and joining with a single seam at the inside waist. All were of calfskin with a heel stiffener sewn to the interior at centre back for support. The better preserved example (unlabelled, not illustrated) had a single, angled side seam, cut top edge and central opening originally with a tongue (Fig 96.1). It is comparable with an early 15th-century example with a buckle fastening from the City of London (Grew and de Neergaard 1988, 71, 105). Indications of buckle and strap fastenings were found amongst the assemblage. The postion of a buckle fastening (Fig.102.36) could be seen on an upper fragment found along with a lace with a copper alloy lace tag (Fig.102.37). Laces with tags are usually associated with clothing, however, two examples with narrow strap ends were found amongst the City of London material each associated with early/mid 15th-century buckle fastening shoes (Grew and de Neergaard 1988, 75).

	MT6	*MT7*	*MT8*	*MT9*	*GR4*	*GR5*
Turnshoe						
Sole	48	25	2	-	1	3
Sole, 2 part	1	-	-	-	-	-
Sole, frag	49	8	1	1	1	2
Clump, forepart	17	4	1	-	-	-
Clump, seat	13	4	-	-	-	-
Clump, other	2	-	-	-	-	-
Clump, frag	9	8	-	-	-	-
Rand, frag	27	40	-	-	-	-
Upper, one-piece	4	1	-	-	-	-
Vamp	-	1	-	-	-	-
Vamp, frag	2	2	-	-	-	-
Quarters, one-piece	2	2	-	-	-	-
Quarters, two-piece	3	-	-	-	-	-
Quarters, frag	2	4	-	-	-	-
Upper, frag	18	23	2	-	1	2
Tongue	1	1	-	-	-	-
Heel stiffner	9	9	-	-	-	-
Stiffener, frag	2	2	-	-	-	-
Lacehole binding	2	-	-	-	-	-
Top band	-	1	-	-	-	-
Lace	1	1	-	-	-	-
Turnshoe total	212	136	6	1	6	10
Welted						
Sole	1	-	-	-	-	-
Sole, frag	1	-	-	-	-	-
Middle	1	-	-	-	-	-
Middle, frag	10	-	-	-	-	-
Insole	2	1	-	-	-	-
Insole, frag	1	-	-	-	-	-
Top piece	1	-	-	-	-	-
Welt, frag	3	-	-	-	-	-
Upper, frag	5	-	-	-	-	-
Quarters, two-piece	1	-	-	-	-	-
Welted total	26	1	-	-	-	-
Non-shoe						
Sheath	1	-	-	-	-	-
Pouch	-	1	-	-	-	-
Waste						
Secondary intersectional	2	-	-	-	-	-
Trimming	5	3	-	-	-	-
Other	3	-	-	-	-	-
Primary	1	-	-	-	-	-
Waste total	11	3	-	-	-	-
Scrap	66	4	-	2	-	1
Total	**316**	**145**	**6**	**3**	**6**	**11**

Table 18 Quantification of leather by Eric Hills' phases

A bellows tongue of calfskin (Fig.103.38) and a fragment possibly from a second example (bag 1177 not illustrated) were also found in the moat assemblage, shoe tongues are believed to be a late 14th-century introduction (Grew and de Neergard 1988, 32).

Boots

The fragmentary remains of four boots extending higher up the leg were found, although as all were torn their original height was unknown. Again, each had a supporting heel stiffener at centre back. Two examples (Fig.103.39; the second not illustrated) were made of two-part quarters construction with a seam down centre back indicative of a 15th-century date. One of calfskin (Fig.103.39) appears to have been laced at centre front (Fig. 96.2). Side-lacing boots (Fig. 96.3) were indicated by the occurrence of two internal lace hole bindings, one (Fig.103.40) with a minimum of six holes, the other (bag 504 not illustrated) with three holes remaining, all spaced *c.* 10mm apart. Side lacing ankle-shoes and boots were the most common style of footwear in the early 15th century and were worn by both sexes.

Shoes

Shoes were represented by a fragment of low-cut vamp wing (Fig.103.41) and fragments of one-piece quarters,all with stitching for the attachment of a strengthening cord present along the top edge on the interior (flesh side) to prevent stretching and tearing at points of weakness. The one-piece quarters were raised at centre back with no heel stiffener. One example (bag 1119 not illustrated), of calfskin, had a peaked right front seam. A more complete quarters (bag 606 not illustrated) of calfskin had slightly asymmetrical front seams. These pieces came from low-cut buckle and strap or latchet fastening shoes of late 14th-century date, the quarters appear to have been front fastening (Fig. 96.4), the vamp wing side fastening (Fig. 96.5).

Dating

The late 14th- and early 15th-century date suggested by the shoe soles and fragmentary remains of the shoe uppers is some years earlier that that suggested by the earliest date ranges of the pottery (fabric 40 *c.*1450–1600) for the upper silting of the moat (MT6) but accords well with the dating proposed for pottery fabric 23F (*c.*1350–1450) from the penultimate silting (MT7).

The small quantity of material recovered from the black fibrous layer (MT8) and the primary silting (MT9) of the moat, see Table 18, had nothing to distinguish them from the later material, with the possible exception of a fragment of turnshoe sole (MT9 721) which had a more rounded/oval toe shape.

Non-shoe leather

Two other items were found within the moat. A fragment of calfskin with a drawstring thong (Fig. 103.42) deliberately cut from a pouch was found in the penultimate silting (MT7). It is comparable with three drawstring pouches found in the City of London and ranging in date from the late 12th, late 13th or early 14th, and late 14th century (Egan and Pritchard 1991, 342–7).

Fragments of a plain, unlined sheath (Fig. 103.43) of cattlehide with a thonged side seam were found in the top silting (MT6). Holes running around the top edge, with a fragment of thong *in situ*, indicated that the sheath was originally worn suspended vertically from the belt as seen in examples from the City of London (Cowgill *et al.* 1987, 54 nos 425, 483).

The handle and blade areas of the sheath were not differentiated and the surface was undecorated, although if originally painted this may not have survived the burial conditions. Undecorated sheaths are unusual, those found often being internal sheath linings with the grainside of the leather on the interior. A flat, thonged sheath or possibly a strap of cattlehide was found in a mid/late 13th-century deposit at Lucy Tower, Lincoln (L127) and another thonged strap from Oxford Castle (Jones 1976, fig. 20, 37). The Southchurch Hall sheath is not flat but moulded and there is little doubt that it was a sheath rather than a strap. The number of knife sheaths found declines markedly in the 14th century (Cowgill *et al.* 1987, 61). Its comparatively late date, the unsophisticated nature of the thonged construction and lack of decoration may suggest it was for a tradesman's blade rather than a knife for the table.

The garderobe

The small quantity of leather from the garderobe comprised shoe parts of turnshoe construction with little to distinguish them from the larger assemblage from the moat. Again, the soles had short pointed toes, one with an extension of 40mm (bag 382d not illustrated), petal-shaped treads, medium waists and seats. Few diagnostic features remained on the upper fragments found, those that did suggested they came from early 15th-century ankle-shoes with buckle fastening (Fig. 101.30; Fig 96.1).

The nature of the assemblage

The turnshoe parts were dominated by soles and clump sole repair pieces, relatively few fragments of upper were found, see Table 18. This and the extent of wear and repair suggests that the assemblage represents the disposal of cobbling waste. 38% of the soles in the top silting of the moat (MT6) had been repaired (*e.g.* Fig.98.8, Fig.98.10, Fig. 99.12–4, Fig. 101.22), 66% in the penultimate silting (MT7). One clump seat repair piece (Fig. 101.28) had itself been repaired by the addition of further clump repairs. Occasionally unusally-shaped pieces were used to repair particular areas of wear as in the long, narrow clump (bag 1061 not illustrated) used to repair the lower tread, waist and seat area of a sole. In addition, 6% of the turnshoe parts recovered from the top silting (MT6) showed signs of having been deliberately cut up to salvage reusable leather, 2% from the penultimate moat silting (MT7). At least one piece (Fig. 103.44) had been cut from a sole for later use.

The extent of repair also suggests that the turnshoe assemblage represents ordinary working wear. Although slightly extended, pointed toes typical of the fashion of the time were found, none of the exaggeratedly long 'poulaines' nor any hint of decoration were recovered which might suggest their having been worn by the wealthy.

A relatively small quantity of waste leather was found in the penultimate (MT7) and top (MT6) silting of the moat including a single piece of primary waste from the trimming of a hide, and secondary waste (*e.g.* Fig.103.45), including two intersectional cutting pieces, produced when cutting out pattern pieces during shoemaking. The very small amount found however, makes it of limited significance.

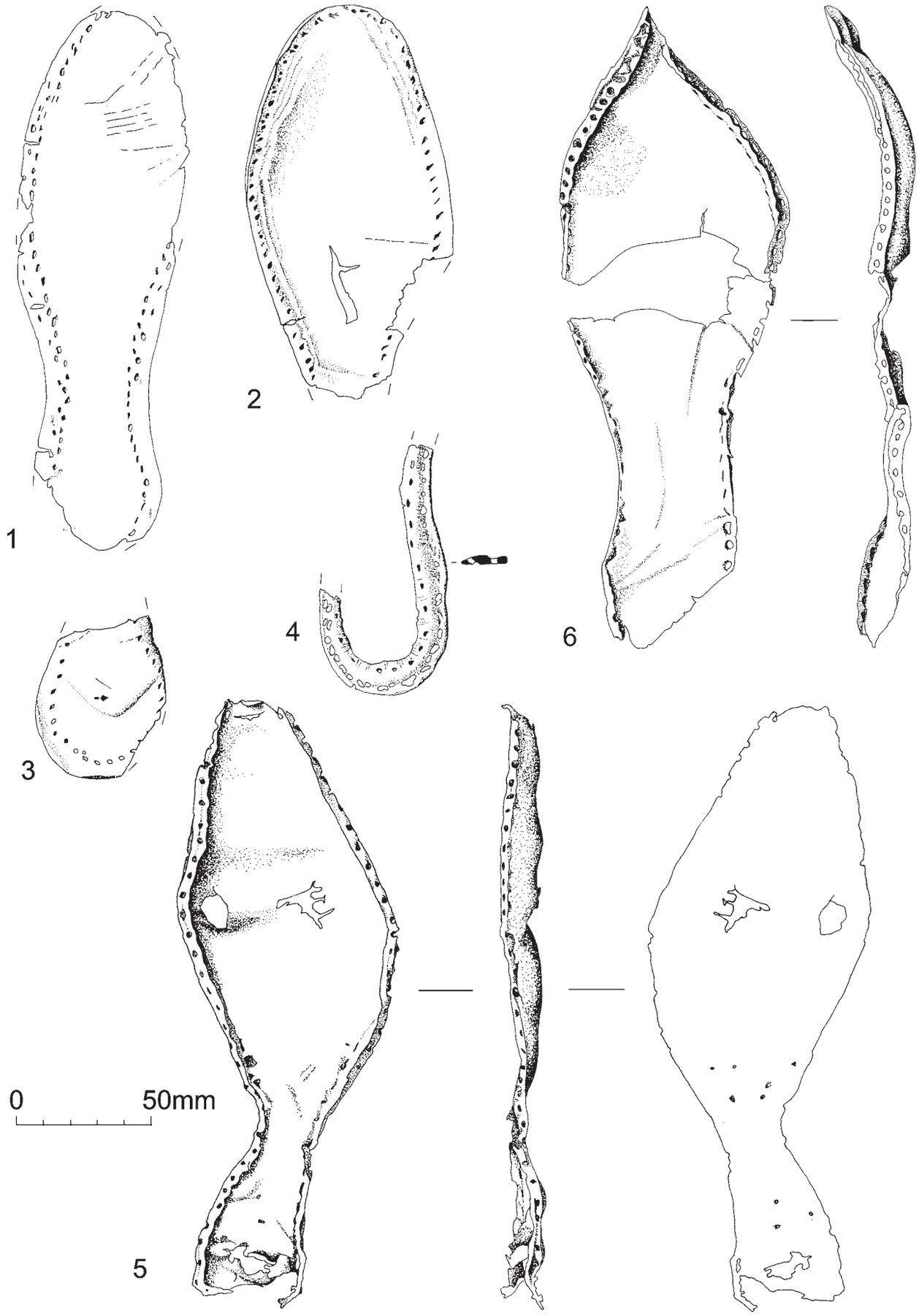

Figure 97 Leather

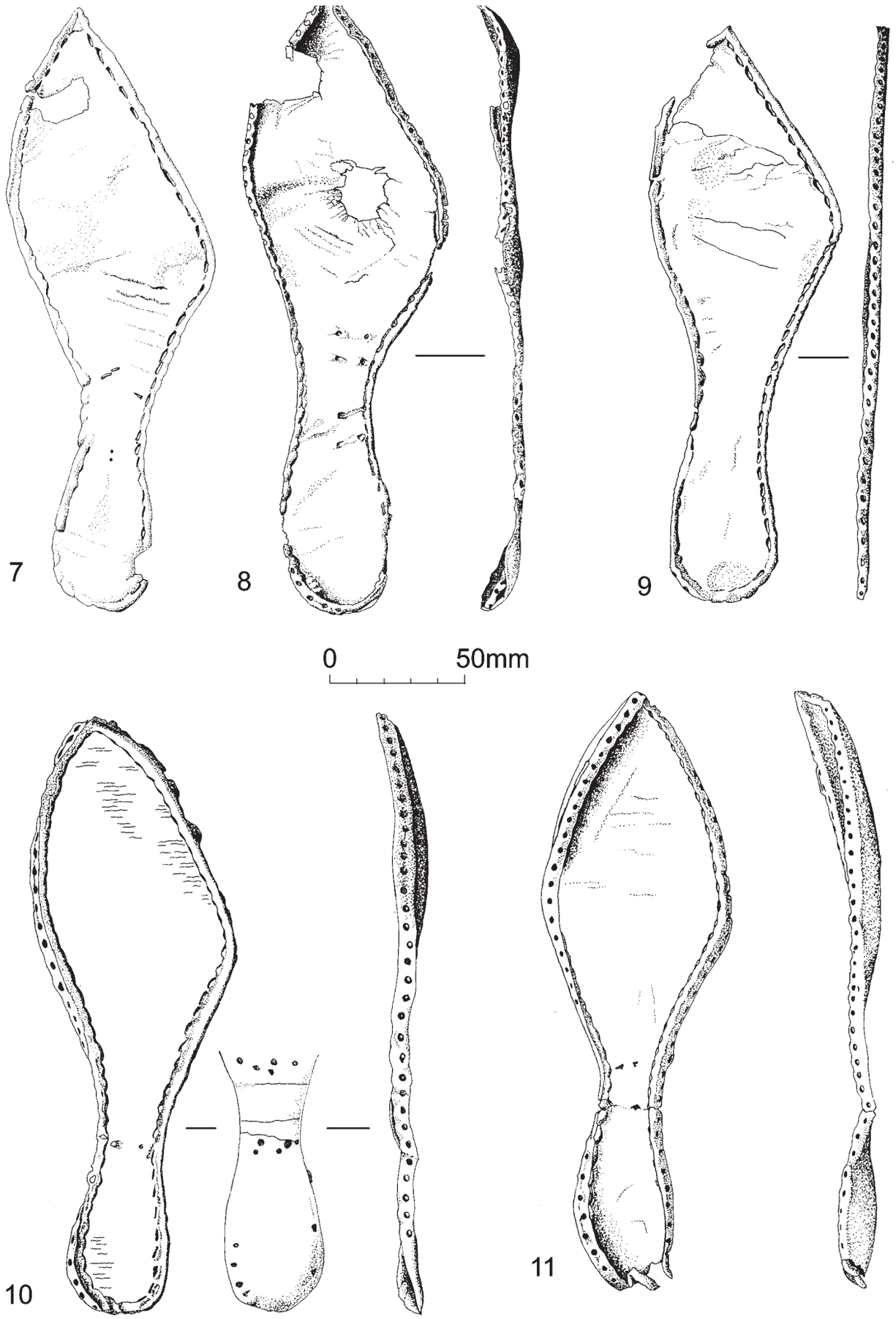

Figure 98 Leather

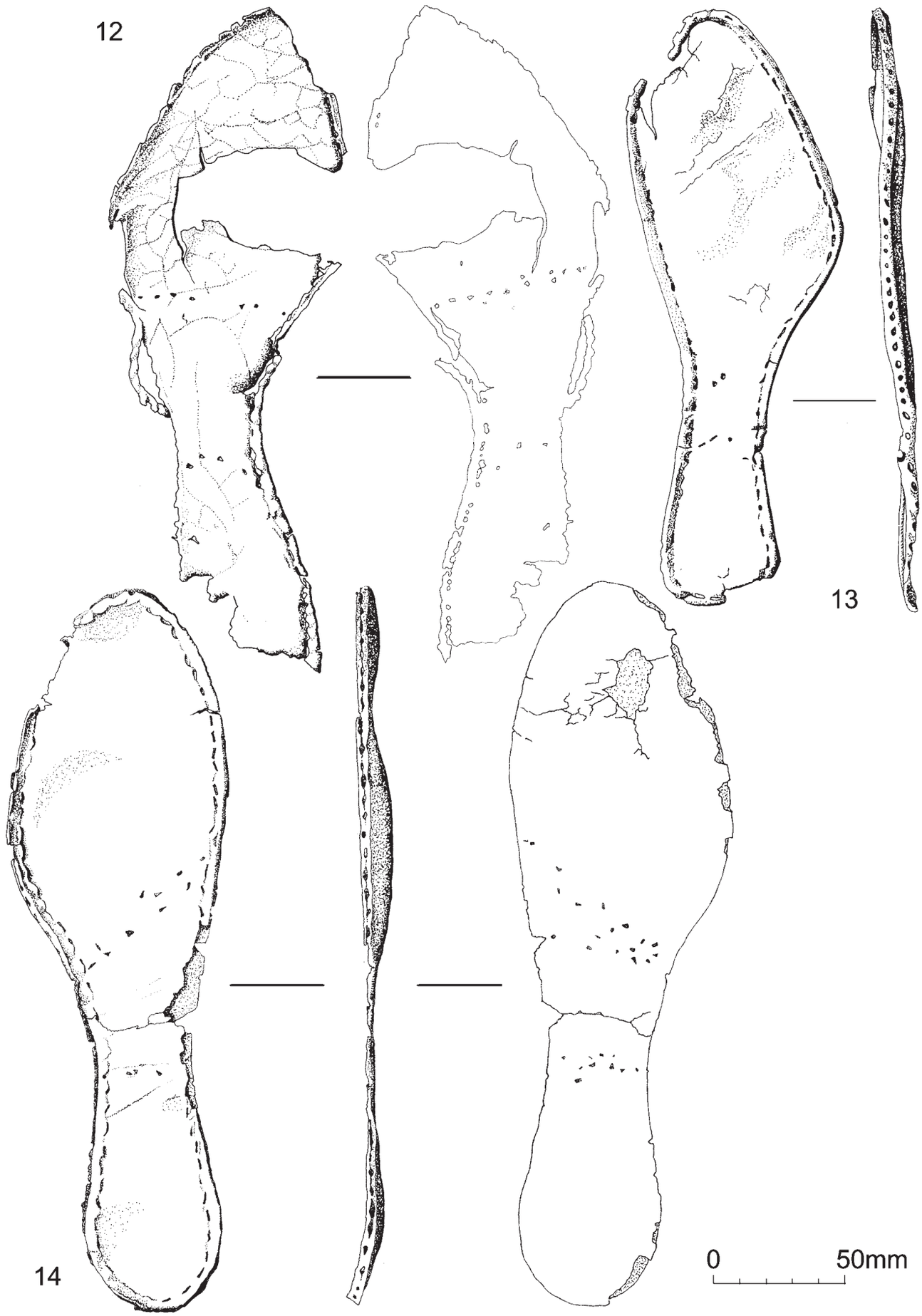

Figure 99 Leather

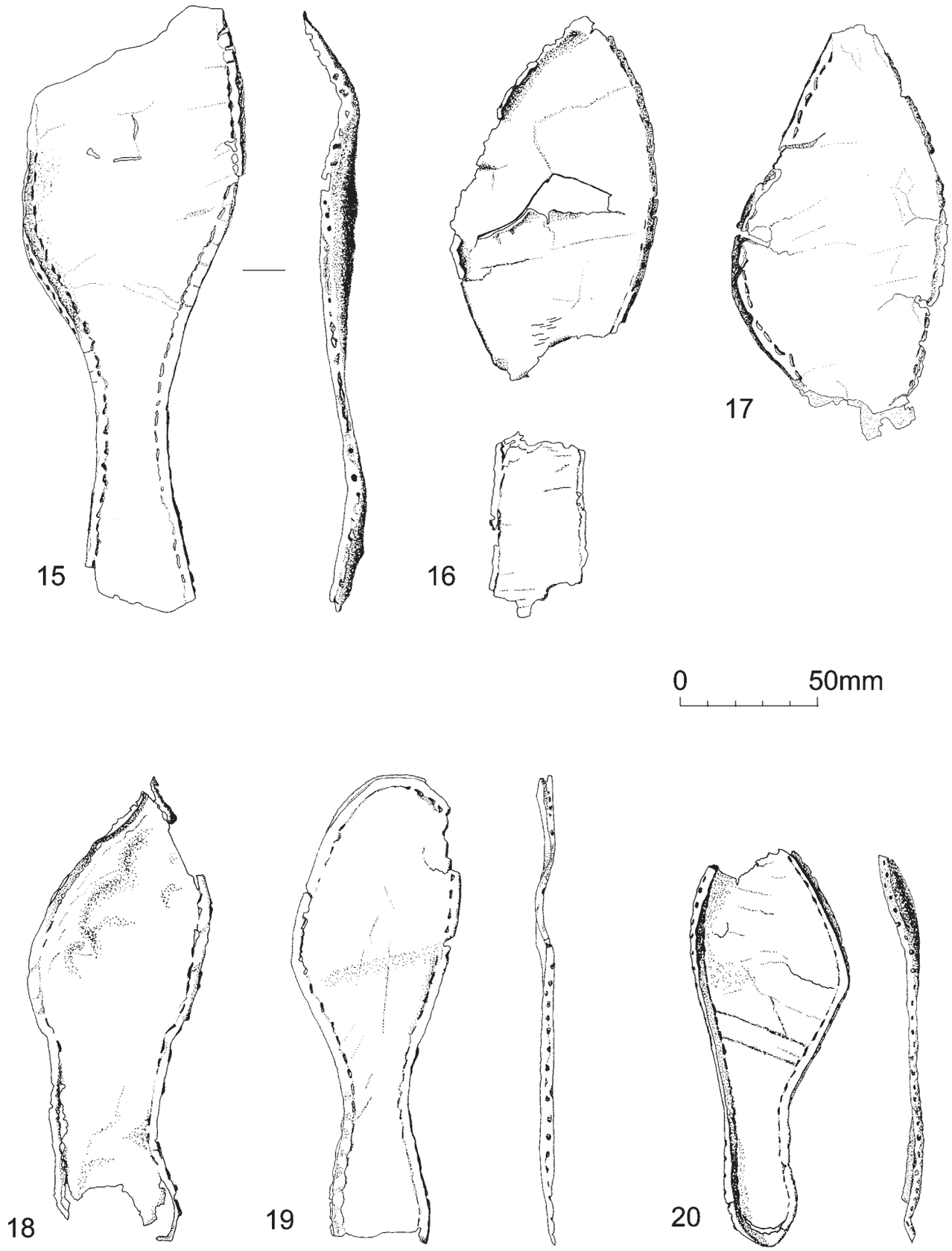

Figure 100 Leather

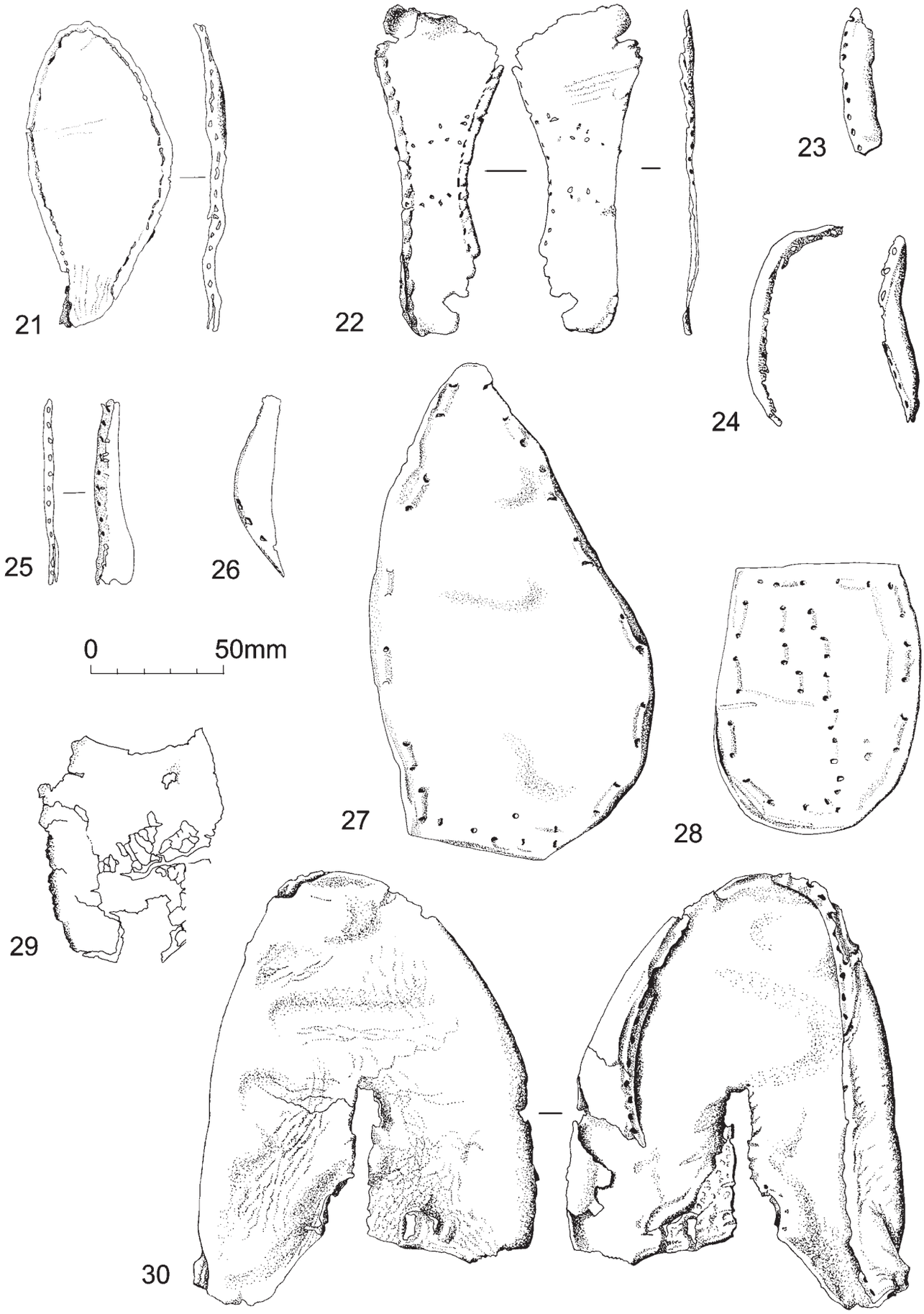

Figure 101 Leather

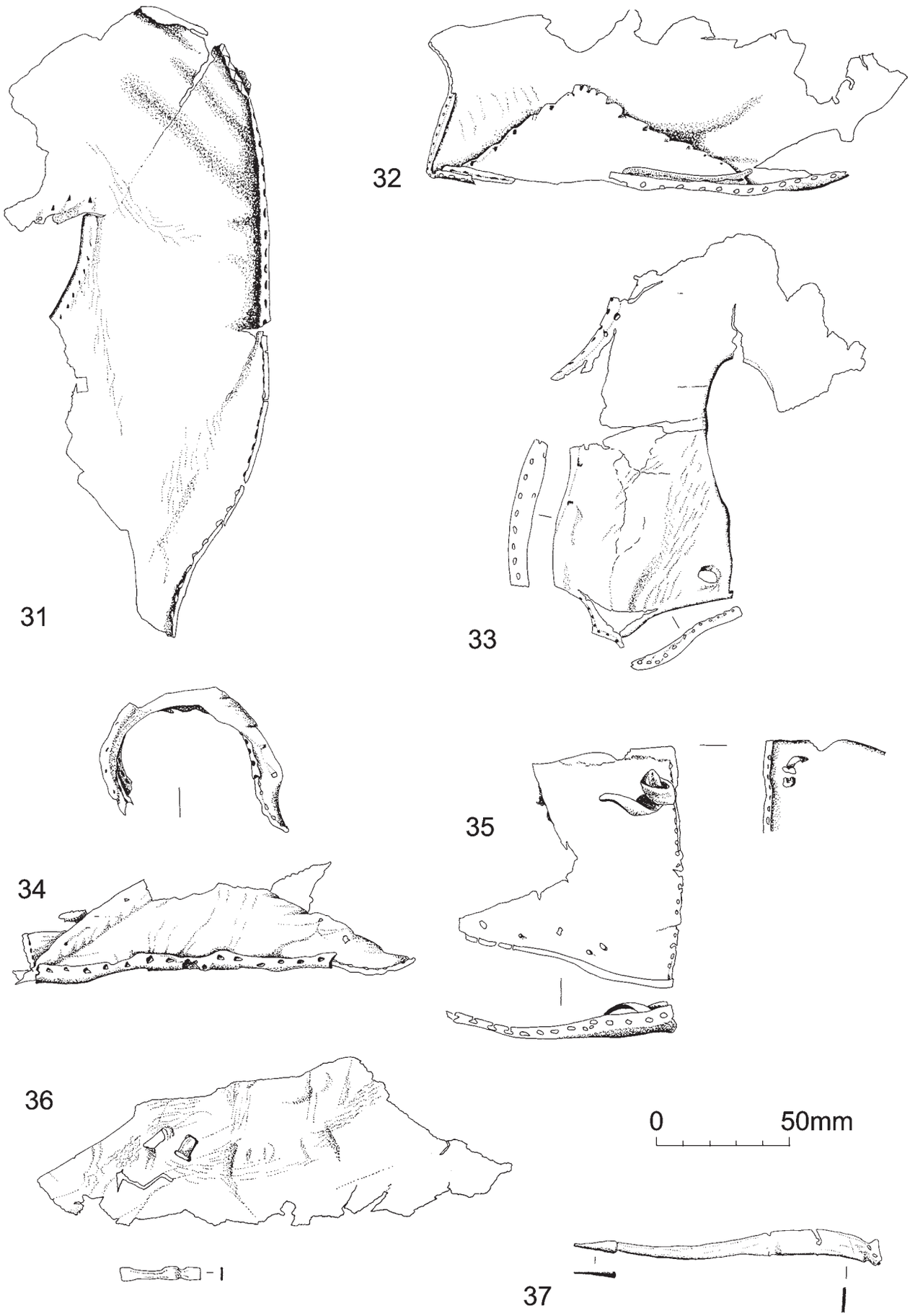

Figure 102 Leather

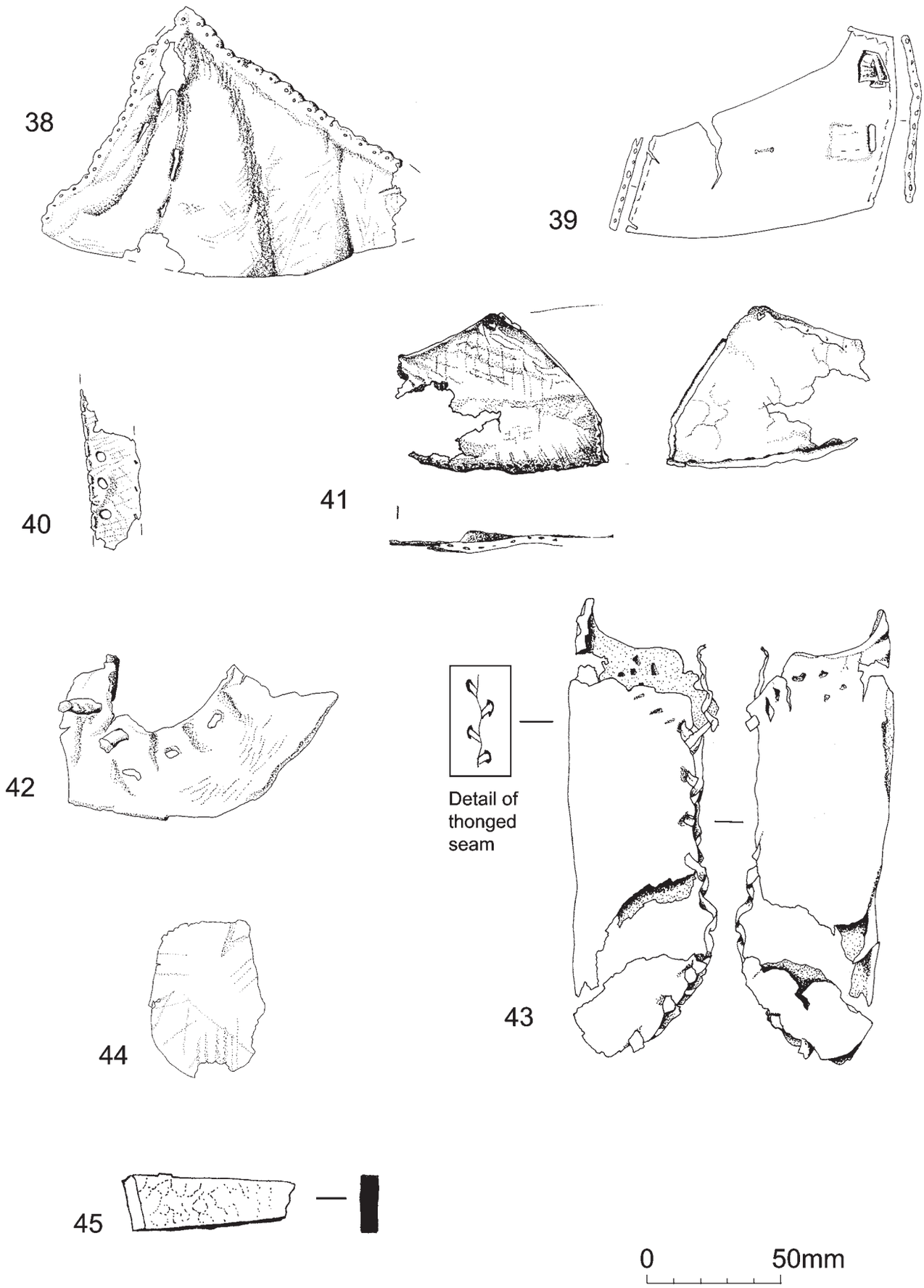

Figure 103 Leather

VII. Boat timbers

by Gillian Hutchinson

Several pieces of boat planking were found in the moat of Southchurch Hall. Although scattered, they were in similar stratigraphical positions, and some of them were sealed under the trestle of a timber bridge probably constructed in the early 14th century (Hutchinson 1994, 123–5).

Shared characteristics

The excavated planking was very fragmentary and fragile. There are nine main pieces, several consisting of more than one plank and showing evidence for extensive repairs. All the finds share sufficient common characteristics for there to be no doubt that they are all from the same small clinker-built boat.

The hull of a clinker boat is built up from the keel, by fastening successive strakes one above the other. A strake is a run of planking, usually extending the whole length of the boat's side from stem to stern, which may be made up of several planks scarfed end to end. Each strake laps over the top of the strake below. They are normally, as is the case with this boat, held together with clench nails (sometimes less accurately termed rivets) along this overlap. To give transverse strength to the hull, frames are inserted into the shell of planking and normally, again as in the Southchurch boat, fastened by treenails.

The planks found on this site are made from oak split radially from the parent trees. Planks produced in this way are wedge-shaped in cross section. The rings and rays visible in the ends of the Southchurch planking show that the planks were built into the boat with the edge from nearer the centre of the tree downwards. This would provide surplus thickness at the top of the plank which could be trimmed away on the outboard face to create a bevel at the overlap with the strake above. A bevel is necessary to enable the builder to alter the angle at which each strake is fastened to the one below and so determine the curve of the side as it is built up.

The planks are exceptionally thin, with a maximum thickness of 12mm which is reduced to 9mm towards the edges along the lines of the nail holes. This means that the greatest thickness of the boat's hull, at the overlaps of the planking, even allowing for the layer of waterproofing in the lap, was scarcely more than 20mm.

The longest individual plank, in piece 1, is broken but is preserved to 1.34m, assuming that the patching which covers both sides does not conceal a scarf, and none of the composite pieces exceeds this length. The second longest, piece 6, which is also broken, measures 1.06m. As they are so fragmentary, only three of the planks still show their complete width. The widest, piece 5, is 18cm and the others are 15cm (piece 7) and 13cm (piece 1). The main plank in piece 8 measures 14cm from one edge to the nailholes of the other, so would originally have been about 16cm wide. The strakes of a boat are widest at the broadest part of the hull and taper towards the stem posts.

The foregoing remarks about plank widths have taken no account of shrinkage. Waterlogged oak suffers radial shrinkage as the wood structure breaks down, while the length is not affected significantly. Holes (treenail holes for example) which were originally circular and drilled tangentially through the wood become elliptical as a result of shrinkage and comparing their radial and longitudinal axes gives a shrinkage factor. It is not possible to calculate an accurate shrinkage factor for the Southchurch planks since treenails remaining in their holes would have impeded the shrinkage of the surrounding planking and holes no longer containing treenails appear to have been distorted during their removal but the planks might originally have been as much as 10% wider.

The iron clench nails used to fasten the planking had round heads outboard. The heads are now very corroded but the original size range was apparently between 17mm and 20mm diameter. The nail shanks were sub-angular in cross-section and measured about 6mm across. The roves, the rectangular iron plates laid against the inside of the planking, through which the nail shanks were hammered and clenched, were cut from sheet or strip metal.

Little attention seems to have been paid to making the roves square or uniform in size, and their sides vary in length between 15mm and 34mm. The nails were generally spaced between 15cm and 18cm apart, a distance which can be gauged by a span between thumb and index finger, except where interrupted by scarfs and repairs.

Animal hair was put into the overlaps of the planks as they were fastened together to make them watertight. The hair has been identified as either cow or horse body hair, not sheep's wool, and was therefore probably a waste product of tanning and not a by-product of the woollen industry. No tar or any other binding matrix could be detected. The waterproofing layer was also used in the scarf joints which joined the individual planks in each strake together. These scarfs were formed by feathering the ends of the planks to be joined, removing wood from the inboard side of the outer plank and the outboard side of the inner plank so that the thickness of the run of planking remained constant. The scarfs appear to have been 18cm to 20cm long originally. Of the seven scarfs which can be seen four are nearly complete and measure 17cm to 19cm and three other scarfed plank ends are badly broken. Only one plank (Fig. 105.9) has a scarf at each end, showing that it retains very nearly its full length. As it is only 74cm long this suggests either that the boatbuilder was faced with a shortage of good long boards or that the extensive repairs which the boat had undergone included piecing in lengths of plank as well as patching.

Remains of seven of the treenails which held the planking to the frames remained in their holes. They had a diameter of about 15mm with larger heads, about 2lmm diameter, outboard. Not enough of their length is preserved to be able to make deductions about the depth of the frames. The treenails, and therefore the frame positions, were very closely spaced approximately 38cm apart, centre-to-centre. The planking does not reveal any marks or changes of texture which might indicate how wide the frames were.

Descriptions of the individual pieces

The numbers used here refer to the drawings. A key to drawing conventions is provided but an explanation of the orientation may be helpful. Both faces of the planking are drawn; the upper view is of the outboard face shown the same way up as it was in the boat while the second view, of the inboard face, shows the piece rotated towards the viewer so that it is upside down. Cross-sections are presented as if looking at the items from the right-hand end.

(Fig. 104)

1. Parts of three strakes, noticeably curved, indicating that they are from a part of the hull where the planking is flared out but also sweeping towards the post. This piece shows that the boat had undergone a lot of repair work as it consists of the remains of four planks and three patches. The repairs will be discussed in greater detail in a separate section below. Of the upper strake a strip of one plank is preserved, patched inboard for part of its length. The middle strake from this piece retains its full width and the left end of the plank when viewed from outboard is scarfed and virtually complete. It has a patch outboard and a longer one inboard. The lower strake retains parts of two planks scarfed together. Although six treenails or treenail holes can be seen on the middle strake, only three penetrate from one side to the other. From left to right when viewed from outboard the spaces between these are 40cm and 38cm. Two of these treenails, of smaller diameter than is usual in this boat, were inserted after the patching and go right through the outboard patch, the plank and the inboard patch. The other remains of treenails indicate that the patches were made from reused boat planks, as discussed below.

2. Fragment of a single plank, lacking the lines of nail holes on both edges but with remains of a scarf at one end.

3. Broken plank from one strake with a fragment of the strake below still attached at the bottom lap. Traces of hair caulking on the outboard face of the main plank and a clench nail which did not belong to a strake overlap nor a scarf indicate the former presence of a patch.

4. Fragments of the overlapping edges of planks from two strakes. The upper and larger plank has a single treenail and also a nail shank which may have been for attaching a patch.

5. This is the broadest plank from the assemblage with a maximum width of 17cm. Its bottom edge is almost intact and a small part of the top edge appears to be original. The plank is broken at both ends. Remains of a large patch cover most of its inboard surface. It is not apparent what defect the patch was intended to repair; the damaged part of the strake is now missing. The patch was laid against the inboard face of the planking so that its lower edge butted against the top edge of the strake below. As the patch extended right up to the top edge of the plank, the upper clench nails had to be removed; otherwise the roves would have prevented the patch and plank from fitting closely together. The replacement nails were driven through the original holes and through the patch to secure it tightly.

(Fig. 105)

6. Parts of two strakes. The left end of the piece when viewed from outboard is a slightly broken hood end, which means that the strakes are cut off and bevelled for fastening to a stem- or stern-post. The angle between the strake edges and the hood end is quite oblique, indicating a steeply raking post. The hood end incidentally demonstrates that the boat was built in the normal clinker technique, with each strake lapping down over the outboard face of the one below, and not in reverse clinker where the strakes lap down over the inboard face. There is a probable broken treenail hole on the top edge about 70cm from the hood end and there may possibly have been another in between, in the broken area 25cm to 40cm from the hood end which was caused by a stake having been driven through the disassembled planking in the moat.

7. Parts of three strakes, with a scarf at the right end of the middle one. The lower edge of the middle strake is intact and has very little curvature. The angle of attachment of the top strake (if it is part of a strake and not a patch) indicates that the middle strake tapered towards the left when viewed from outboard. The lower strake retains part of a patch outboard and two small tacks which held it on. There are three treenails from two frame positions each spaced about 38cm apart.

8. Parts of two strakes, the lower one represented only by a fragment. The main strake has nearly its complete width preserved at the left end when viewed from outboard, where it has broken off along the upper line of nail holes. This strake was scarfed and the feather ends of both planks are broken. Two treenail holes indicate a frame spacing of 37cm.

9. Parts of two strakes, the upper strake scarfed at both ends and the lower strake scarfed or patched at the left end when viewed from outboard. The treenail positions are 40cm apart.

Discussion

It is good clinker boatbuilding practice to have the scarfs opening aft, in other words to arrange the run of the planking so that the feathered plank ends on the outboard side lap back over the next plank towards the stern. This is so that the forward motion of the boat does not push water into the scarfs. There are seven scarfs in the Southchurch boat planking, on five of the nine pieces, and all the scarfs open to the left when viewed from outboard. This means it is highly probable that the scarfed planking is from the starboard side of a boat and likely that the other pieces were too.

The hood-end on piece 6 shows that it originally fitted at one of the ends of the boat. If the above inference from the scarf directions that the planking is from the starboard side is correct, it would have been fastened to the sternpost. This would confirm what is to be expected of a boat of this date, that it was double-ended (pointed at both ends), not square sterned. The curved strake edges to be seen in piece 1 indicate that this was also from near the end of the boat. Piece 7 exhibits some curvature and tapering of the strakes as if running towards the sternpost. Because of its greater width, piece 5 may have been from nearer the middle of the hull than the others.

It is to be expected that the treenail holes should give vital clues as to the relative positions of the fragments within the boat. Determined attempts have been made to relocate the individual pieces but unfortunately, although it is possible to line up the treenail holes along putative frame positions, the edges of the fragments are so badly damaged that it is not possible to make any connections. The only indication about the boat's size is the thinness of the planking. This suggests that it was quite small but it is impossible to estimate the length or beam of the boat.

This small collection of planking has no fewer than six patches, three outboard and three inboard. They may all belong to a single episode of repair which must have involved the removal and refastening of frames. Piece 1 illustrates the characteristics of the repair work. A variety of fastenings was used. It appears that the outboard and inboard patches of the middle strake were first held in position by short tacks with small heads about 8mm across. Their shanks do not penetrate through the composite piece. Longer nails with heads about 15mm across were driven in through the outer patch and the plank and have their shanks hammered flat against the inboard face of the inner patch. Additionally clench nails were used to secure the patches. They all have their heads outboard, on the patches of either the top strake or the middle strake, and their roves on the inner patch of the middle strake. The patches covered the treenail holes so two new ones were drilled, of slightly smaller diameter than the others in the boat. The inboard patch on the middle strake has the remains of two treenails. Their similarity in size (about 21mm diameter) and spacing (37cm) to the others in this boat suggest that the patch was made from part of one of the boat's planks which had been removed during the repairs. A single treenail on the outboard patch of the middle strake suggests that that too had been part of a plank.

The clench nails which replaced the originals when the planking was patched are indistinguishable from the rest. Although clench nails of any given size must, clearly, be quite similar they are nevertheless not an entirely standard product and those in the Southchurch boat planks give an

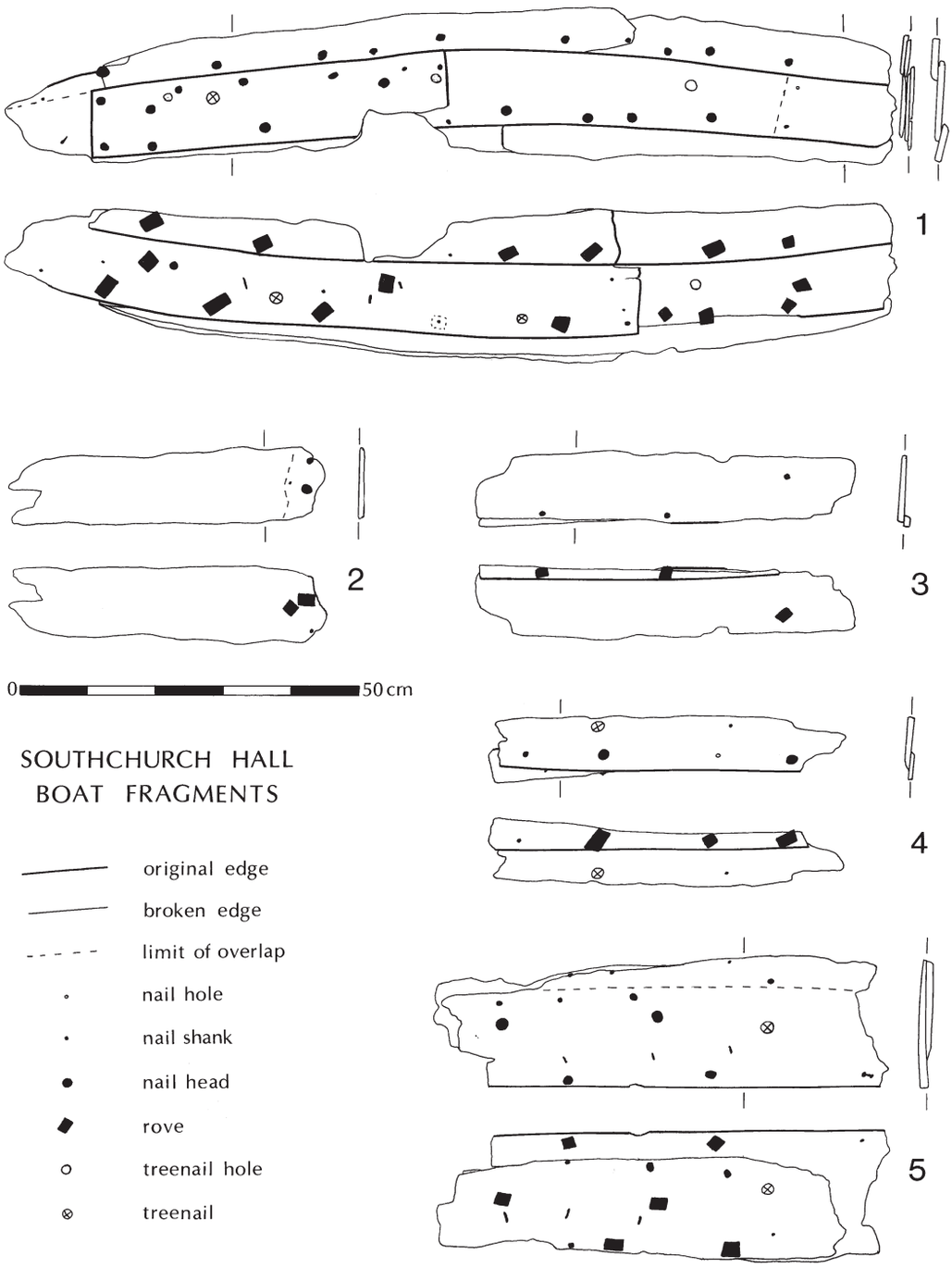

Figure 104 Boat timbers

impression of having been made by the same hand. If this is indeed the case it suggests that the boat was built and repaired in the same place, presumably close to where it was used, and that the interval between the building and repair was less than the working life of the nailsmith.

It cannot be said with certainty how the pieces of planking came to be deposited in the moat. Perhaps the boat became derelict and sank or perhaps sections of planking from the broken up boat were put to some secondary use. Many of the breaks in the planking appear to coincide with frame positions. Considerable force would have to have been used to detach the planking from the frames as they were securely held by treenails with expanded heads. Treenails still remain in their holes in several instances, broken off on the inboard face of the planking. This evidence for forceful disassembly suggests deliberate human activity rather than simple falling apart. Natural causes clearly helped in the process of disintegration as it was reported by the excavators that numerous boat nails and fragments of wood were recovered from the moat silt to the east, presumably washed there by the current's flow.

From the foregoing we can conclude that the fragments of planking found in the moat at Southchurch Manor were from the starboard quarter area of a small, lightly-built boat whose useful life was prolonged by

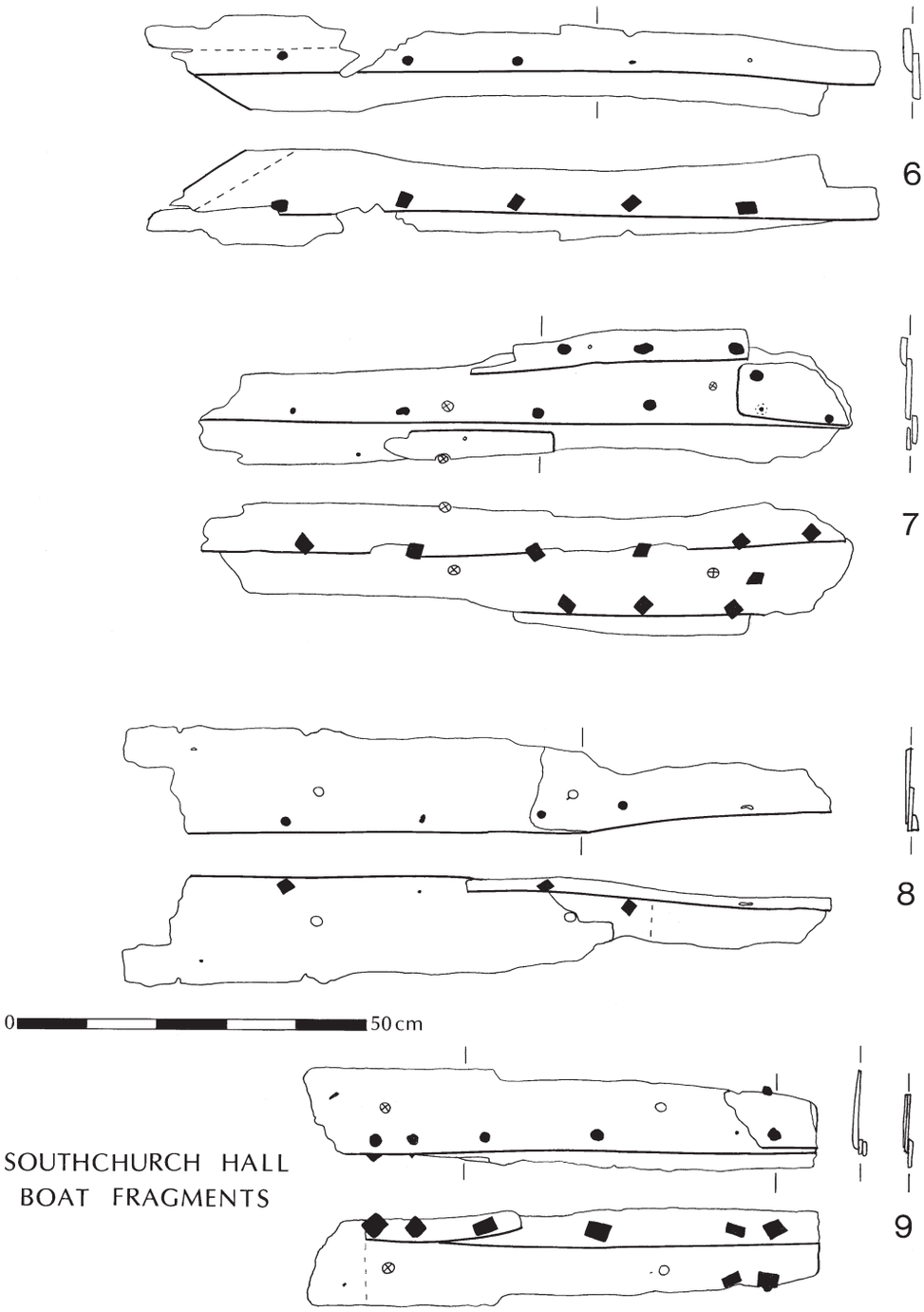

Figure 105 Boat timbers

major repairs. The boat was probably made, used and repaired locally. Although there is evidence that the boat had a sternpost we do not know whether it had a keel or a flat planked bottom. The length and beam of the boat and the shape of the bow are also unknown. Although the remains are so fragmentary, this find makes a useful contribution to knowledge about small boats of the middle ages.

The plank fragments have been conserved and are held by Southend Museums Service, together with the recording notes, drawings and photographs which were made at the National Maritime Museum.

6. Discussion

Period I

As noted above (Part I p.1) evidence for later prehistoric, Roman and to some extent Saxon settlement evidence is widespread in south-east Essex (Wymer and Brown 1995; Rippon 2000a). As such the nature of the prehistoric and Roman finds from the excavations at Southchurch Hall is little more than might be expected from any large scale excavation in this area. It is clear that the zone around the former Southchurch creek/marsh was one of a number of favoured locations for early settlement (Francis 1925; 1931, and above p.1). It seems likely that the sheltered site later occupied by Southchurch Hall, and supplied by fresh water springs, was a particularly attractive location for settlement.

The field systems of south-east Essex have long been recognised as a broadly rectilinear layout of ancient origin. This pattern has generally been assumed to be a unitary phenomenon, covering much of the area between the Crouch and the Thames, excluding the marshes and wooded hills of the Hadleigh/Rayleigh ridge, and likely to be of Roman or Iron Age date (*e.g.* Rackham 1986). However, more detailed work by Rippon (1991, 1999), has identified a number of sub-divisions within this rectilinear system, including three areas of 'radial landscapes' around Stambridge, Shoebury and Southchurch which are suggested to be of middle/late Saxon origin (Rippon 1991, 57–58).

Whilst bearing in mind that 'The simple coincidence of village, manor and parish was rather unusual …' (Lewis *et al.* 1997, 9), it may be worth considering the distinctive location of Southchurch Hall, Holy Trinity Church and the parish boundary. The historic settlement pattern of south-east Essex was generally dispersed with church/hall complexes providing focal points. Church and hall are generally situated in close proximity, and this can be seen in the parishes neighbouring Southchurch, at Shopland and Sutton immediately to the north and at South and North Shoebury immediately to the east (Wymer and Brown 1995). By contrast Southchurch Hall lies about 1km from Holy Trinity church, this may reflect the relationship between the church/hall complex and local topography. In south-east Essex it is notable that, where churches are situated fairly close to creeks and estuaries and their associated marshes, the hall is placed some distance from the church, closer to the marsh/creek, as at Little Wakering, or actually adjacent to the creek as at Barling and Great Stambridge. This pattern is particularly striking at Stambridge. Here the 'inland' parish of Little Stambridge had church and hall adjacent to one another. By contrast in the 'coastal' parish of Great Stambridge the hall is situated some 500m south-east of the church, adjacent to the Roach estuary. Southchurch may be a further example of this pattern with the hall situated away from the church to take advantage of the proximity of the former Southchurch creek/marsh. At about 1km the distance between church and hall at Southchurch is roughly twice that at Little Wakering, Barling and Great Stambridge.

To the east of Southchurch a possible minster site has been identified at Great Wakering (Gem 1995; Vaughan 2001) perhaps related to a planned late Saxon settlement (above p.1). Circumstantial evidence might suggest that another existed at Prittlewell (Rodwell 1980; Wymer and Brown 1995). It may be that the eastern boundaries of the later parishes of Shopland and Southchurch represent the boundary between the jurisdictions of these putative minsters. If Southchurch parish was created from a larger unit perhaps originally administered from Prittlewell, this must presumably have happened after the importance of the site of Southchurch Hall had been established. The western boundary of Southchurch parish seems to have deliberately included a small salient to allow the Southchurch Hall site to be fully within the parish.

Period II

The initial early medieval settlement as revealed by the excavations, dates on the basis of pottery recovered to the later 12th or possibly early 13th century. Given the limited areas dating to this period which were revealed at the base of four trenches (7, 8, 26, and 47 above p.8), it is difficult to characterise the nature of the occupation. It is probable that the shallow features and associated deposits may represent an early phase of the development of the manorial centre. The occupation clearly took place before construction of the moat, as it was sealed by the upcast which formed the mound. However, it seems likely that this early occupation was enclosed; at North Shoebury, to the east of Southchurch, a substantial ditch surrounded the broadly contemporary manorial centre (Wymer and Brown 1995). The North Shoebury enclosure, at its widest and deepest close to the entrance, was 4m wide and about 1.5m deep, not quite of moat proportions but nonetheless substantial. Had such a feature existed at Southchurch, construction of the moat, which at its narrowest was more than 5m wide and over 2m deep, might have completely removed any trace of an earlier ditch.

Period III

Construction of the moat at Southchurch (phase III.1 above p.8) was a major undertaking clearly designed to enhance the site's appearance and the prestige of the occupants. The moat appears to have been dug early in the 13th century and is therefore to be associated with the long tenancy of the de Southchurch family, and may have been constructed by the first Richard de Southchurch (Ryan above p.27; Nichols 1932). Upcast from the moat was used to create a substantial mound or raised platform.

The deposits revealed in the base of the moat in trench 37 indicate a period of ditch maintenance prior to a major refurbishment: this work (phase III.2) extensively remodelled the south side of the north moat. The

foundations of a timber bridge were preserved within the moat silts indicating the location of the entrance. Either side of the entrance a substantial wooden structure was revealed, comprising a sole plate with a series of wooden uprights which appear to have supported horizontal planking providing a revetment for the moat. A comparison may be made with the enclosure at North Shoebury where a slot in front of the base of the inner face of the ditch has been interpreted as a foundation for a timber revetment (Wymer and Brown 1995). At Southchurch, beyond the eastern limits of the timber revetment, the south face of the north moat was revetted with upright posts packed around with stones and clay (in trench 37, above p.12), whilst further east again the moat facing was provided by a simple dump of clay. Unfortunately the subsequent construction of a stone-built gatehouse and ancillary structures has removed any clear trace of a gate structure associated with this refurbishment of the moat. However, some timberwork incorporated into the later gatehouse may derive from an earlier gateway (above p.18), and it seems reasonable to suppose that the timber revetment flanked a substantial gate structure of some kind. It certainly appears that the intention of this refurbishment was to enhance the imposing character of the approach to the platform. This is reflected in the way the formality of the facing to the moat declined further away from the entrance. This refurbishment (phase III.1) may be the work of the second Richard de Southchurch, the most notorious member of the de Southchurch family (Ryan above p.27; Nichols 1932). The mound created within the moat was presumably the focus for domestic structures throughout period III, unfortunately the excavations do not appear to have revealed any trace of these. The foundations uncovered seem most likely to belong to the succeeding period IV, when, following a period of stability in the moat, which allowed a considerable depth of silts to accumulate beneath the bridge at the entrance (phase III.2), another major phase of refurbishment took place.

Period IV

The excavations revealed the substantial stone-built foundations of a gatehouse (structure III), which cut through the central part of the earlier timber revetment and removed any earlier entrance features. The gatehouse formed part of a group of structures, which dramatically altered the entrance to the platform. A substantial wall (structure IV) ran east from the gatehouse, which formed the northern wall of a garderobe (structure VI). A second garderobe (structure V) was inserted into the corner between the gatehouse and wall. This structure was clearly an addition but close similarities in design, level, and materials used indicate that the two garderobes were conceived and built as part of a single construction scheme. On the north side of the moat a substantial bridge abutment (structure VIII) was faced with finely dressed stone of a type not found elsewhere on the site. From the moat silts immediately in front of this abutment a number of carefully dressed blocks of flint clearly derived from flushwork decoration; perhaps the upper levels of this structure were decorated, which would certainly fit with the fine ashlar of the lower part of the abutment. Recent excavations of a moated manorial site at Low Hall, Walthamstow, have shown that the site was provided with a stone bridge abutment in the first half of the 14th century (Blair 2002) and rather later a stone gatehouse and garderobe. Somewhat later in date there is a substantial stone-built gatehouse at the moated site of South Ockenden Hall (Priddy 1987). It seems that the occupants of moated sites across a wide area of south Essex were willing and able to make substantial investment in the enhancement of the entrances to their residences. Presumably this reflects the economic advantages which could be exploited in south Essex, and the relative ease of access to the Thames estuary would have facilitated transport of stone.

The second phase of the timber bridge seems designed to be part of this major, and rather grand, refurbishment of the entrance to the moated enclosure. On site at Southchurch today looking into the interior of the deep pit-like foundation of the gatehouse, it seems ideal for the counterbalance pit of a drawbridge. However, this can never have been the case. A floor had once existed at a fairly low level within the gatehouse, evidenced by the sockets for the floor joists and by fragments of floorboard recovered from the waterlogged lower fill of the gatehouse. Furthermore, a large timber cross brace had occupied the middle of the gatehouse interior. The sockets for this brace and the floor joists were clearly an integral part of the original design of the gatehouse. Any drawbridge must have been a counterbalance structure, which pivoted from a frame above the timber bridge. It is noticeable that the horizontal timbers in both the second and third bridge rebuilds were much more substantial toward the north end, and additional angled shores were added at this location. It seems possible that this may be the position where a drawbridge pivoted to rest on the stone faced northern bridge abutment.

Whilst structure IV formed a revetment/facing wall for the moat, it is presumed that it also provided the northern foundation for a timber-framed building. Such a building, together with a room over the gatehouse, would have been served by the two garderobes. However no trace of any foundations for the south, east or west walls of any structure which had wall IV as its northern boundary, were recovered during the excavations. Shallow foundations for a cill beam would easily have been lost through extensive modern disturbance in this area. Any building which had run south from wall IV, would have abutted the north-east corner of structure VII and the nature of the foundations of structure VII indicate how easily foundations running south from structure IV could have been lost. The foundation of the north wall of structure VII was cut back into the earth platform as a facing wall to the moat. It was comparable to wall IV but rather more massive, being provided with a larger off-set foundation to counteract instability at the moat's edge particularly toward the junction of the north and east moats. By contrast the south and west walls of structure VII were represented by little more than shallow footings of chalk and rubble. Such slight foundations could easily have been lost given the scale of modern disturbance south of structure IV.

The dating evidence of the remaining two structures is particularly poor but they may belong to this phase and for convenience are included here. Structure II simply consists of a single length of wall foundation, partly beneath a 1930s extension of the present timber-framed hall, and running parallel to the south wall of the hall. By

Plate 6 Painting of Southchurch Hall under attack during the Peasants Revolt, by Alan Sorrell. Sorrell's first four reconstruction paintings were commissioned in the 1930s to decorate Southend Central Library, this was his fifth commission also in the 1930s, and the style so familiar from his later works is already apparent. It is clear that Sorrell's depiction of the gatehouse was inspired by the then extant gatehouse at Moat House, North Shoebury a few miles to the north-east of Southchurch Hall. In the early 1930s the Southend Estates Company suggested a scheme to dismantle the gatehouse and re-erect it at Southchurch Hall, the scheme came to nothing and the North Shoebury gatehouse was demolished in the 1960s. Excavation has shown that the gatehouse by the moat at Southchurch was rather different, but the North Shoebury gatehouse has been used as a model for the outer gate in the latest reconstruction of the manorial complex at Southchurch (see frontispiece).

contrast structure I represents a substantial part of the north and east walls of what had once been a large building, aligned east west and parallel to the hall.

This major refurbishment, the construction of structures III–VI, and possibly I and II, probably dates from the first half of the 14th century and may be associated with Sir Peter de Southchurch, the son of the second Sir Richard. Peter held Southchurch for fifteen years from the death of his father in 1294 to his own death in 1309. A less flamboyant character than his father, he was prominent locally and also active in national politics, successfully extending the family estates (Nichols 1932, 106). His career may have provided both the stability and wealth for his standing in the world to be expressed in the major works around the entrance to his principal residence.

Period IV phase 2

Following construction of the gatehouse and associated features a further period of stability in the moat ensued, with some indication of periodic partial cleaning of the moat silts (above, p.25). A third rebuild of the bridge took place. The position of the mortises and angles of the uprights in the sole plates of this rebuild indicate a form for the trestles of Rigold's type II (Rigold 1975, 56). Construction of the existing timber-framed hall occurred in this phase. Dendrochronogical samples indicate a felling date for the timbers of AD 1321–1363 which accords well with Peers' suggestion (above, p.3) derived from his study of the building in the 1920s prior to its restoration, of a date in the second quarter of the 14th century for the hall. The construction of the hall may date from the time, around 1354, that Southchurch returned to the hands of Christ Church Canterbury (Ryan above, p.27). Such a structure would fit the status of resident serjeants, the first two of whom seem to have been prominent both locally and in London (Nichols 1932), but clearly not of the same status as the de Southchurch family. This would explain the discrepancy, graphically described by Rackham (1986, 44), between the massive earthworks of the moats, the stone-built gatehouse, and the rather modest hall with its timbers, which show '…obvious signs of economy and of using the fewest trees possible'. It would also provide a context for the presence in the structure of the hall of features designed to impress (Stenning and Andrews above, p.35), despite the frugal use of timber. The de Southchurches must presumably

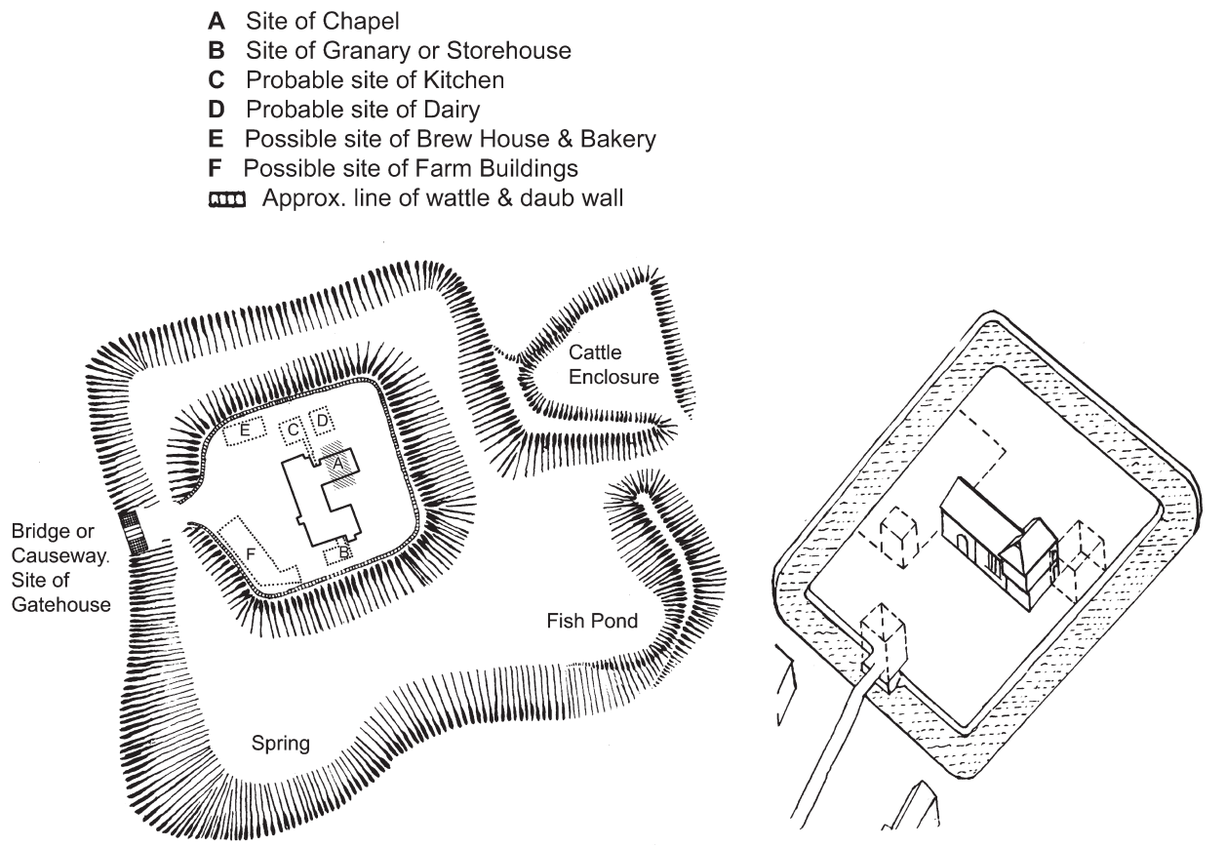

Figure 106 Earlier interpretations of the layout of the manorial complex; Helliwell 1969 (left), Rigold 1978 (right)

have had a hall at Southchurch and it may be that the existing structure replaced an earlier building. Alternatively it is also possible that the enigmatic mention of 'le Stonhalle' in a document of 1399–1400 might refer to the de Southchurch Hall, the foundations represented by structure I are quite substantial and may be associated with such a building.

The inventory of 1391 provides an insight into the agricultural basis of Southchurch Hall's economy with considerable arable production and a significant role for the manor's two marshes at Southchurch and Canvey, which together pastured over 500 sheep (Ryan above, p.28). Rippon (2000b, 237–40) has made a plausible case for the use of open saltmarsh pasture in the medieval period on the marshes of south-east Essex in general, and Canvey in particular, with embankment being a relatively late development in the area. However, documentary records of expenditure at Southchurch Hall for 1437 record payments of 7s to labourers to 'mend the gutter near the sea wall of the marsh' and 1s 4d 'for making of 8 rods of ditch in the marsh' whilst in the previous year payment of 38s 6d was made to 'John atte Wode and his assistant for making 154 perches of marsh wall on Canvey Island' suggesting that at least by the early 15th century attempts were being made to protect the valuable marsh pasture from flooding (Nichols 1932).

Layout and function

It may now be appropriate to consider the layout of the manorial site and function of the various buildings revealed by the excavations. In doing so the caveat noted by Ryan (above, p.29) that rooms or indeed whole buildings may easily change their use must be born in mind; furthermore documentary surveys may not accurately reflect contemporary reality (Le Patourel 1978, 24). It is interesting to compare the earlier interpretations provided by Helliwell (1969), prior to the excavations, and Rigold (1978) which incorporated some data from the early stages of the excavations (Fig. 106), with the interpretation outlined below (Fig. 108). Despite the considerable quantity of excavated and documentary evidence it is surprisingly difficult to assign functions to the various structures. It may be appropriate to try to relate the buildings listed in the inventory of 1391 (Ryan above, pp28–9) to the excavated evidence. Firstly it is worth recalling that the excavations only sampled the moated enclosure, and only examined part of a manorial complex which clearly extended far beyond this area.

As Nichols (1932) suggested, beyond the moat an outer court presumably existed and contained a number of the buildings which the documentary sources indicate were present at Southchurch. The area of an outer court to the north of the present moated enclosure is now submerged beneath early 20th-century housing. It may be indicated by the northern part of an enclosure shown on the tithe map (Fig. 107), including the two enclosures numbered 144 and 145. To the north of this, the linear field (143) shown running rather like a broad track north to the main road between Prittlewell and Southchurch may be the 'broad field before the manor gate' noted by Nichols (1932) as a likely common meeting place for the people of the manor.

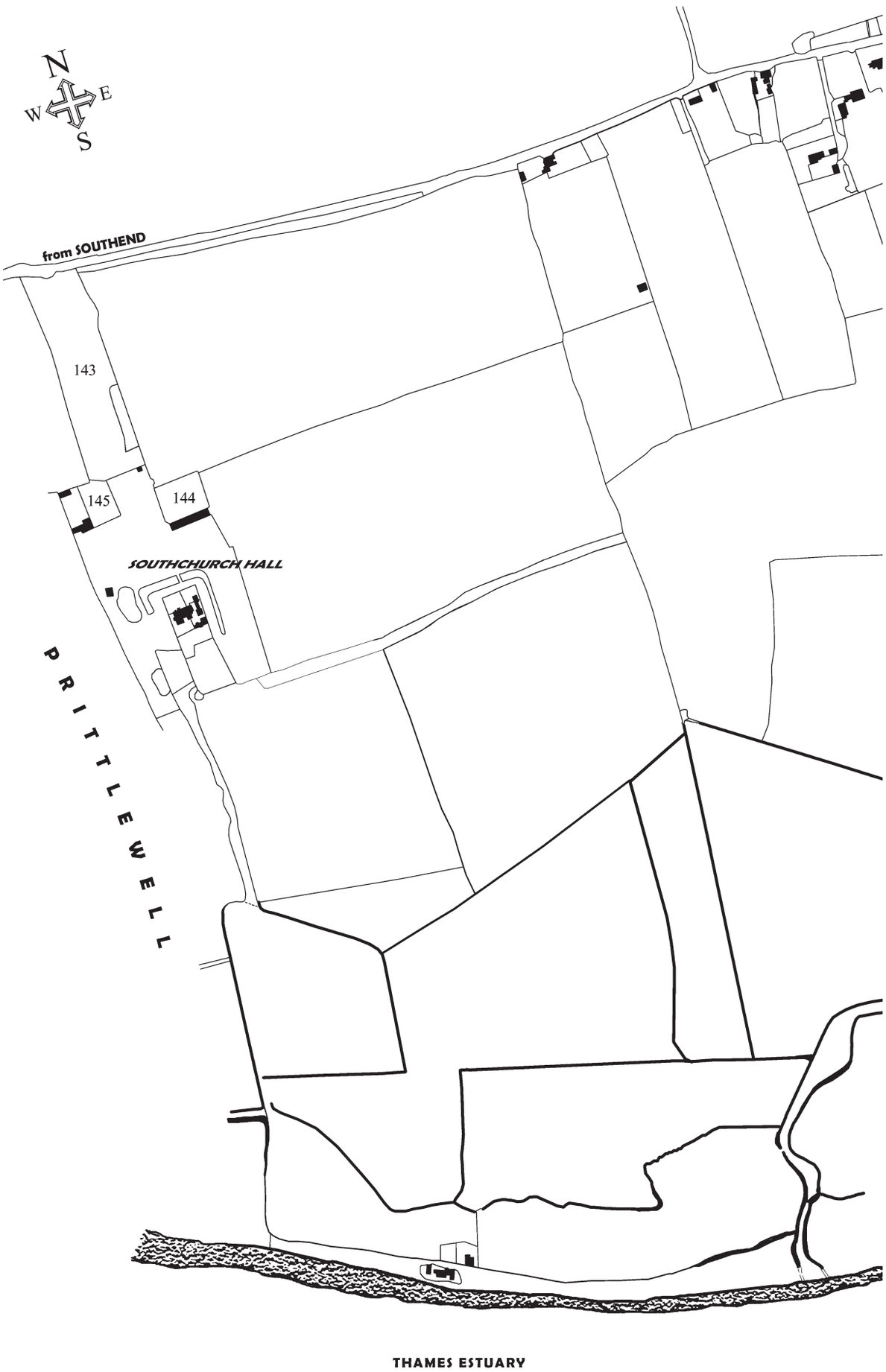

Figure 107 Extract from the tithe map showing Southchurch Hall and surrounding fields

Amongst the buildings mentioned in the documentary sources are both an inner and an outer gatehouse. Nichols considered that the outer gatehouse lay on the north side of the present moat. It is possible that the ashlar faced bridge abutment revealed by the excavations may have served as the foundation for a small gatehouse, and some kind of superstructure, perhaps incorporating flushwork, can be inferred from the excavated evidence. However, it seems more likely that the reference to an outer gate of sufficient size to have had a substantial tiled roof (Ryan above, p.29), indicates a structure at the entrance to the outer court. It is tempting to speculate that the small building shown on the tithe map and indicated on Figs 107 and 108 might represent the outer gatehouse. Such a location would certainly fit the identification of the strip-like field as the 'broad field before the manor gate'. Other buildings, which may be inferred to have stood in the outer court, include the great barn. It is clear from the documents that this building was aligned east west. It seems reasonable to suppose that this substantial and no doubt useful building may have survived into the 19th century to appear on the tithe map as the long east–west aligned structure which formed the south side of enclosure 144 (Figs 107 and 108). If this identification is correct it gives a clue to the location of the small barn, which apparently lay close to the great barn (Ryan above, p.29), and the granary was near these two buildings. Walls, of cob or wattle and daub, joined the small and great barns. These walls seem to have defined a separate 'court', since the records speak of repairs to a gate between the outer court and the barn court. Perhaps the line of the barn court survived to become the enclosure marked 144 on the tithe map. References to extensive repairs to 'walls around the manor' (Nichols 1932) suggest that the whole manorial complex may have been enclosed by such cob or daub walls (Fig. 108). It seems likely that the stables also lay in the outer court. Finds distributions from the excavations indicate a concentration of horse equipment in the moat east of the gatehouse, so it may be inferred that the stables were in the south-east corner of the outer court (Fig 108). Such a setting might be convenient location for stabling, close to the principal domestic buildings but outside the moated enclosure. The dovehouse lay close to the stable. It is likely that the cowshed and other structures relating to animal accommodation and other farming operations also lay in the outer court, perhaps north and west of the barns and stables, further away from the moated enclosure. This intepretation of the layout of the manorial site at Southchurch, is broadly similar to the notional layout suggested by Le Patourel (1978, 24–25), on the basis of documentary evidence, for another Essex moated manorial site at Chingford.

Turning to structures within the moated enclosure, the 'chamber over the inner gate' was presumably above the excavated foundations of the gatehouse (structure III). The 'adjoining chamber' may refer to the building which had the retaining wall structure IV (above) as its northern foundation. These two chambers would have been served by the two garderobes structures V and VI respectively. The 'hall' and the 'principal chamber' may be identified with the present timber-framed hall and its western cross-wing. That the principal chamber was physically attached to the hall and not a separate building seems to be confirmed by the reference to a plumber repairing the gutter between the hall and principal chamber. The chapel presumably lay within the moated enclosure and the substantial foundations of structure VII may indicate its site. Painted window glass fragments from the excavations concentrated around structure VII may support its identification as the site of the chapel (above, p.82).

The basic layout of the hall, moat and bridge at Southchurch are broadly paralleled by the plan of the excavated moated manorial enclosure at Low Hall, Walthamstow, where a hall with service wing and solar faced a stone-built bridge abutment serving a timber trestle bridge. A base plate for one of the trestles of the Low Hall bridge was dated by dendrochronology to 1344 (Blair 2002).

At Southchurch, the kitchen and brewhouse were presumably close to the service end of the existing hall, and may be represented by the foundations of structures I and II. The excavation records show deposits of ash and soot associated with structure I and these deposits may represent the debris from cooking. A location for the kitchen in this area would match the fairly common arrangement, of a hall with service end and detached kitchen to the east, and chamber (either detached or attached) to the west (*e.g.* Blair 1993, fig. 2; Rahtz 1969). The dairy noted in various documentary sources is perhaps likely to have been in the inner court, as may the press house and wool store.

Considerable areas to the west and south of the present hall were not investigated during the excavations; further buildings may well have existed in these areas. The reference to 'le Stonhalle' in documents of 1399–1400 (Ryan above, pp28–9) is problematic, as such a structure cannot be easily related to the excavated evidence. It might have lain in an area not examined by the excavations, or 'le Stonhalle' might be the substantial foundations of structure I.

The south moat was much broader than the north moat, broadening further at the south-west corner into a fishpond. South of the south-east corner of the moat, the extant earthworks include a sub-rectangular enclosure defined by a bank. The enclosure is at present surrounded by a fence and hedge. Superficial inspection does not suggest that the earthwork was much affected by the landscaping of the 1920s, however the interior is very flat and may well have been levelled at that time. Previous interpretations have suggested that this earthwork might represent an enclosure for livestock. However, given the interpretation offered here, that most of the buildings associated with the manorial farming operations were concentrated in an outer court north of the present moat, a stock enclosure south of the moat is unlikely. The situation of this enclosure in the medieval period, sheltered to the north both by the rising ground and the buildings of the manorial complex, and with views to the south across the Thames estuary, might be well suited to the location of a garden or orchard. In the post-medieval period, a document of 1568 lists two gardens attached to the manor and the earthwork enclosure may be the site of one of these. If this view of the enclosure is correct there is an interesting irony in the present situation. Currently the enclosure is set apart as a children's play area, an area of rough grass in the otherwise well manicured gardens which now surround the hall.

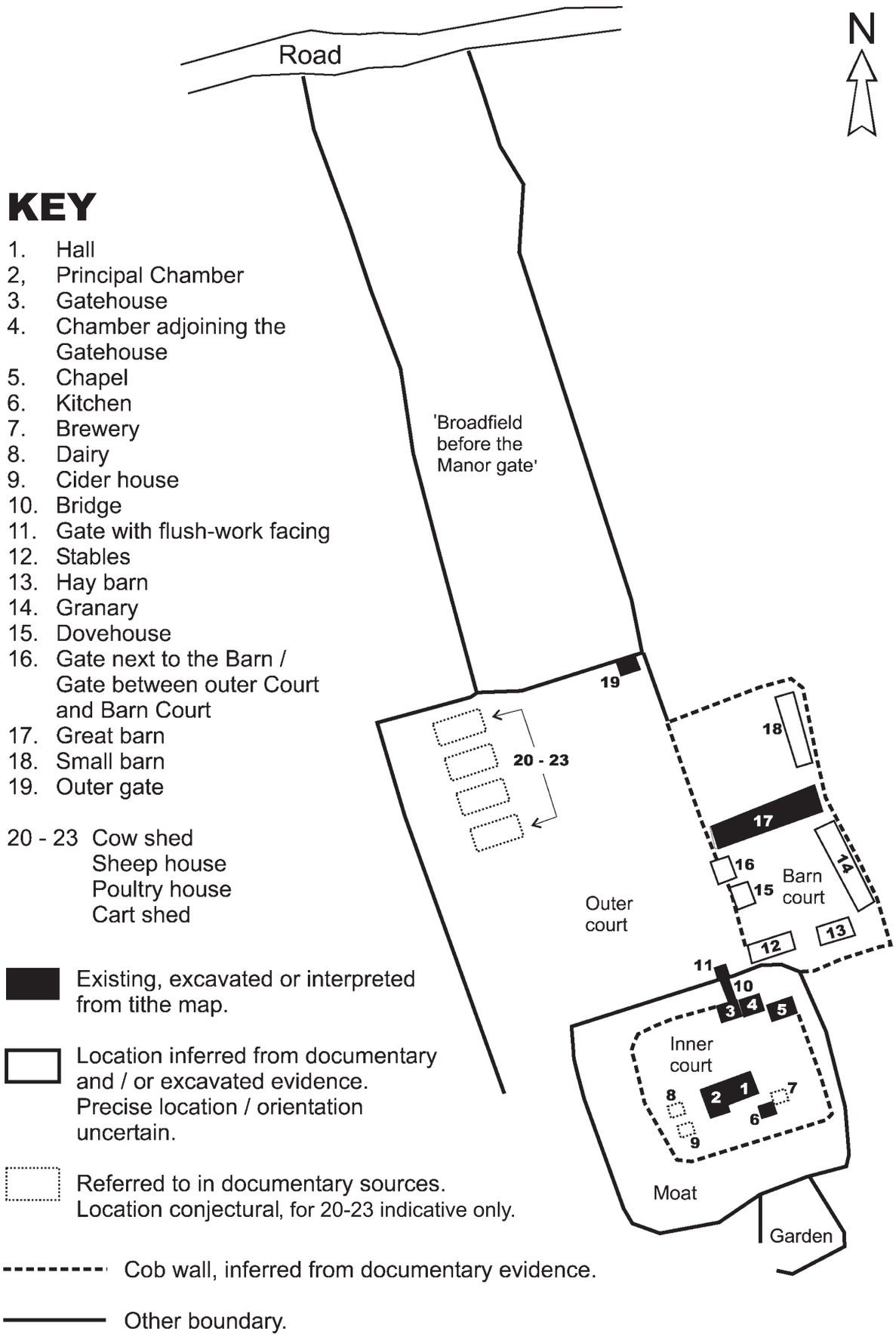

Figure 108 Suggested layout of Southchurch Hall manorial complex based on an interpretation of the excavations, documentary evidence and map

Period IV phase 3 and Period V

During the later medieval period an accumulation of moat fills suggests no regular moat clearance. After the manor was taken back into the hands of Christ Church, Canterbury, the first two serjeants were relatively prominent individuals who held office for some years. However, from 1391 and throughout the 15th century Southchurch was let on short leases. Such tenancies provide a context for the decline in range of items recorded in the inventory of 1489 noted by Ryan (above, p.28). Finds from the lowest fills of the garderobes suggest a last use in the late 15th or early 16th century. Subsequently, perhaps in the 16th century or later, the garderobes and lower part of the gatehouse were backfilled and altered or perhaps even demolished.

By contrast the artefacts recovered during the excavations suggest the occupants of the site in the late 16th, 17th and early 18th centuries were relatively wealthy. In the mid 1540s the manor of Southchurch was granted to Lord Riche, one of the most powerful men in England with extensive holdings of land throughout Essex. The manor was let to tenants who seem to have enjoyed close connections with the Riche family during the late 16th and early 17th century (Ryan above, pp27–8). This would have allowed them scope to exploit the considerable economic potential offered by the location of Southchurch Hall, and the lands attached to the manor as listed in 1568.

The excavations yielded glass tableware and quantities of imported pottery; the latter mainly dating to the 15th, 16th and 18th centuries and comparable to elite patterns of consumption in London (Gaimster above, p.117). The varied economic potential which could be exploited by the occupants of Southchurch Hall is indicated by the list of the manorial holdings in 1568 (Ryan above, p.27). For tenants who appear to have had close connections with the locally and nationally powerful Riche family, Southchurch Hall would have provided an ideal base from which to develop their economic and social status. Not least among Southchurch Hall's advantages may have been proximity to the Thames estuary with an opportunity to easily link with the trade to and from London and the wider world. A notable and unusual find indicating the wealth of the occupants of the hall at this time is provided by the silver spoon dated by its hallmark to 1554, recovered from the excavations. The presence of the spoon is particularly striking given the reference to bequests of silver spoons in the will of Thomas Hobson, one of the early 17th-century tenants of Southchurch Hall. The recovery of a late 17th- early 18th-century candle-sconce from the excavations is an indication of the fairly high standard of domestic fixtures and fittings which were available to the occupants of Southchurch Hall.

As well as indicating the relative wealth and status of the occupants, these artefacts reflect social changes relating to the service of food and drink. Similar changes in domestic life are also indicated by the subdivision of the hall and cross-wing to form smaller rooms together with the insertion of additional chimney stacks and fireplaces. The latter included one provided for an integral kitchen at the east end (Stenning and Andrews above).

The owner in the early 18th century, George Asser, was a considerable local figure, with quite extensive business interests and landholdings in south-east Essex, including at North Shoebury nearby (Wymer and Brown 1995). Interestingly one of the wine bottles recovered from the excavations had a seal of Thomas Dorman, one of the signatories of Asser's will.

Plate 7 Photograph taken *c*.1850 of Mr and Mrs Kilworth, tenants of Southchurch Hall

Following the Asser tenancy the occupants of Southchurch Hall (Ryan above) were of rather lower social standing and the hall continued its transition to a farmhouse. However, the decline was neither precipitate nor deep, the status of the tenants seems always to have been that of 'gentleman farmer'. The tenant in 1738, John White, was described as a 'butcher of Rochford' but by 1754 was referred to as a gentleman (Ryan above). Members of the Kilworth family, tenants throughout much of the 19th century, appear in a photograph of 1850 (Plate 7) as a model of middle class propriety. Again changes in status, social and domestic arrangements are reflected in the artefacts recovered from the excavations and continued alterations to the hall building. The metalwork includes a large number of tools and other items relating to a working farm. The glass artefacts include a range of drinking glasses and wide variety of bottles. Ceramics included a variety of tea and tableware. Such items would have been suitable for use in the new dining room built as an extension to the hall in the late 18th or early 19th century.

It is likely that the rather dilapidated and overgrown state of Southchurch Hall apparent from photographs taken immediately before restoration (Plate 1 and Pollitt 1949) occurred quite quickly during the 1920s; neglect and decay being the result of uncertainty over the fate of the building, faced with the threat of demolition, in what

was by then an urban-edge environment. The vulnerability of historic buildings in such circumstances is still a familiar problem. Fortunately the building and its surrounding earthworks were saved, restored and opened to the public. Today Southchurch Hall remains in the ownership of Southend Borough, as one of its museums providing a particular focus for educational activity with local schools. All the excavated finds and site records are in the care of Southend Museums Service, they will, together the varied documentary sources, and the physical remains of the hall and its associated earthworks, remain a valuable resource for future research.

Bibliography

Amer, M., 1987 — *A study of medieval hand-querns in England* (unpub. dissertation, Univ. Southampton)

Andrews, D., 1986 — 'Old Copped Hall. The site of the Tudor mansion', *Essex Archaeol. Hist.*17, 96–106

Andrews, D. and Stenning, D., 1998 — 'Heybridge Hall. The end of a manor. An assessment of the importance of the listed building and its site', *Essex Archaeol. Hist.* 29, 233–238

Atkin, M., Carter, A. and Evans, D.H., 1985 — Excavations in Norwich, 1971–78, Part II, E. Anglian Archaeol. 26

Atkin, S., 1989 — *Bibliography of clay pipe studies* (Society for Clay Pipe Research)

Atkinson, D. R. and Oswald, A., 1969 — *'London clay tobacco pipes', J. Brit. Archaeol. Assoc. 32, 171–227*

Baart, J., 1977 — *Opgravingen in Amsterdam* (Haarlem)

Barker, D., 1986 — 'North Staffordshire post-medieval ceramics — a type series 1: Cistercian Ware', *Staffordshire Archaeological Studies (Museum Archaeol. Soc. Rep. new series 3)*, 52–7 (Stoke-on-Trent)

Barovier Mentasti, R., Dorigato, A., Gasparetto, A. and Toninato, T. (eds), 1982 — *Mille anni di arte del vetro a Venizia*, (Albrizzi Editore, Venizia)

Barton, K.J. and Holden, E.W., 1977 — 'Excavations at Bramber Castle, Sussex, 1966–67', *Archaeol. J.* 134, 11–79

Battie, D. and Cottle, S. (eds), 1991 — *Sotheby's Concise Encyclopedia of Glass*, (Conran Octopus, London)

Blair, I., 2002 — 'Low Hall Manor, Walthamstow', *Essex Archaeol. Hist.* 33, 191–220

Blair, J., 1993 — 'Hall and Chamber: English Domestic Planning 1000–1250', in Meirion-Jones, G. and Jones, M. (eds) *Manorial Domestic Buildings in England and Northern France*, Soc. Antiq. Occ. Pap. 15, 1–21

Bodey, H., 1983 — *Nailmaking* (Aylesbury)

Brears, P., 1981 — *Horse Brasses* (London)

Bridge, M., 1998 — *Tree-ring analysis of timbers from Fyfield Hall, Essex,* English Heritage Ancient Monuments Laboratory Report 17/98

Bridgland, D., 1994 — *Quaternary of the Thames*

Britton, F., 1987 — *London Delftware* (Jonathan Horne, London)

Britton, V., 1995 — *The Complete Tack Guide* (Marlborough)

Buckley, D.G. and Major, H., in prep. — *Excavations at Marks and Spencers, Chelmsford*

Butler, W., 2000 — *Musical handbells: a comprehensive history of the bells and their founders* (Chichester)

Charleston, R. J., 1984 — *English glass and the glass used in England, c.400–1940* (Allen and Unwin, London)

Chessher, J. L., 1971 — 'Southend-on-Sea Historical Society: 1920–1970', *Essex J.* 63, 71–3

Clark, J. (ed), 1995 — *The Medieval horse and its equipment* Medieval Finds from Excavations in London 5

Clark, J., Egan, G. and Griffiths, N., 1995 — 'Harness fittings', 43–74 in Clark, J. (ed)

Cotter, J., 2000 — The Post-Roman Pottery from Excavations in Colchester, 1971–85*, Colchester Archaeol. Rep. 7*

Couchman, C. R., 1980 — 'The Bronze Age in Essex', in Buckley, D. G. *Archaeology in Essex to AD 1500* Counc. Brit. Archaeol. Res. Rep. 34, 40–46

Cowgill, J., de Neergaard, M., and Griffiths, N., 1987 — *Knives and Scabbards*, Medieval Finds from Excavations in London 1 (London HMSO)

Crummy, N., 1983 — *The Roman small finds from excavations in Colchester 1971–9*, Colchester Archaeol. Rep. 2

Crummy, N., 1988 — *The post-Roman small finds from excavations in Colchester 1971–85*, Colchester Archaeol. Rep. 5

Crummy, N., 1996 — 'The small finds' in Shimmin, D. and Carter, G. 'Excavations at Angel Yard, High Street, Colchester, 1986 and 1989' *Essex Archaeol. Hist.* 27, 35–83

Cunningham, C. M., 1982 — 'Medieval and post-medieval pottery' in Drury, P. J. 'Aspects of the Origin and Development of Colchester Castle', *Archaeol. J.* 139, 358–380

Cunningham, C.M., 1985a — 'The pottery' , in Cunningham and Drury *Post-Medieval Sites and their Pottery: Moulsham Street*, Counc. Brit. Archaeol. Res. Rep. 54, 63–78

Cunningham, C.M., 1985b — 'The stock pottery'in Cunningham and Drury *Post-Medieval Sites and their Pottery: Moulsham Street*, Counc. Brit. Archaeol. Res. Rep. 54, 83–88

Cunningham, C.M.,1985c — 'Bone objects', in Cunningham and Drury *Post-Medieval Sites and their Pottery: Moulsham Street*, Counc. Brit. Archaeol. Res. Rep. 54, 57–58

Cunningham, C. M. and Drury, P.J., 1985 — *Post-Medieval Sites and their Pottery: Moulsham Street*, Counc. Brit. Archaeol. Res. Rep. 54

Dent, A., 1987 — *Horses in Shakespeare's England*, (London)

De Raedt, I., Janssens, K. and Veeckman, J. 1999 — 'Compositional distinctions between 16th century '*facon de Venise*' and venetian glass vessels excavated in Antwerp, Belgium', *J. Analytical Spectrometry* 14, 493–498

Doyle, R., 1967 — 'Museum Newsletter', *Panorama* 11, 13–21

Drewitt, P. L., 1975 — 'Excavations at Hadleigh Castle, Essex', *J. Brit. Archaeol. Assoc*. 38, 90–154

Drury, P.J., 1993 — 'The later Saxon, medieval and post-medieval pottery' in Rodwell, W. J. and Rodwell, K. A. (eds) *Rivenhall: Investigations of a Villa, Church and Village, 1950–1977*, Counc. Brit. Arch. Res. Rep. 80, 78–95

Ecclestone, J., 1995 — 'Early Iron Age settlement at Southend: excavations at Fox Hall Farm 1993', *Essex Archaeol. Hist*. 26, 24–39

Edwards, C., 1988 'Seventeenth and eighteenth-century Tyneside tobacco pipe makers and tobacconists' in Davey, P.J. (ed) *The Archaeology of the Clay Tobacco Pipe XI*, Brit. Archaeol. Rep. 192, 164

Egan, G., 1992 'Marks on Butterpots' in Gaimster, D.R.M. and Redknap, M. (eds) *Everyday and Exotic Pottery from Europe. Studies in honour of John G. Hurst*, 97–100 (Oxbow, Oxford)

Egan, G., 1998 *The Medieval Household: daily living c. 1150–c. 1450*, Medieval Finds from Excavations in London 6

Egan, G. and Pritchard, F., 1991 *Dress accessories c.1150–c.1450*, Medieval Finds from Excavations in London 3 (HMSO, London)

Ellis, B., 1976 'The Spurs' 300–302 in Hassall, T.G. 'Excavations at Oxford Castle, 1965–73', *Oxoniensia* 41, 232–308

Ellis, B., 1990 'Spurs', 1037–41 in Biddle 1990

Emmison, F. G., 1978 *Elizabethan Life: Essex Gentry's Wills*

Emmison, F. G., 1998 *Essex Wills: the Commisary Court 1587–1599* Vol.II

ERO Essex Record Office

Eveleigh, D.J., 1985 *Candle Lighting*, (Aylesbury)

Fitch, M. and Emmison, F. G., 1991 *Feet of Fines for Essex* Vol. V

Ford, B., 1987 'The finds' 121–153 in Holdsworth, P. (ed.) *Excavations in the medieval burgh of Perth 1979–1981*, Soc. Antiq. Scot. Monograph Ser. 5

Francis, A. G., 1925 'A shell-mound on a prehistoric creek at Southchurch, Essex; probably belonging to the Beaker period of the Bronze Age', *Trans. Southend-on-Sea Dist. Antiq. Hist. Soc.* 1, 208–229

Francis, A.G., 1931 'A west Alpine and Halstatt site at Southchurch, Essex', *Antiq. J.* 11, 49–75

Gaimster, D.R.M., 1997a *German Stoneware 1200–1900. Archaeology and Cultural History*, (British Museum, London)

Gaimster, D.R.M., 1997b 'Regional Decorative Traditions in English Post-Medieval Slipware', in Freestone, I. and Gaimster, D.R.M. (eds) *Pottery in the Making. World Ceramic Traditions*, (British Museum, London)

Gaimster, D.R.M. and Nenk, B., 1997 'English households in transition 1450–1550: the ceramic evidence' in Gaimster, D.R.M. and Stamper, P. (eds) *The age of Transition. The Archaeology of English Culture 1400–1600*, 171–196 (Oxbow books, Oxford)

Galloway, P., 1990 *Object and Economy in Medieval Winchester: Artefacts from Medieval Winchester*, Winchester Studies 7(ii), 665–678

Geddes, J., 1985 'The Small Finds', 147–177 in Hare, J.N., *Battle Abbey: the eastern range and the excavations of 1978–80*, HBMC England, Archaeol. Rep. 2

Gem, R., 1995 'Anglo-Saxon minsters of the Thames Estuary' in RCHME *Thames Gateway: Recording Historic Buildings and Landscapes on the Thames Estuary*, 41–54

Gentle, A. and Feild, R., 1975 *English domestic Brass 1680–1810 and the History of its Origin*, (London)

Gentle, A. and Feild, R., 1994 *Domestic Metalwork 1640–1820*, (Woodbridge)

Goodall, A.R., 1985 'Miscellaneous copper-alloy' 45–47 in Cunningham and Drury

Goodall, I.H., 1976 'Metalwork' 298–302 in Hassall, T.G. 'Excavations at Oxford Castle, 1965–73', *Oxoniensia* 41, 232–308

Goodall, I.H., 1978 'Iron objects' 157–161 in Musty, A.E.S. 'Exploratory excavation within the monastic precinct, Waltham Abbey, 1972', *Essex Archaeol. Hist.* 10, 127–173

Goodall, I.H., 1982 'Iron objects', 227–235 in Coad, J.G. and Streeten, A.D.F. 'Excavations at Castle Acre Castle, Norfolk, 1972–77', *Archaeol. J.* 139, 138–301

Goodall, I.H., 1983 'Iron objects' 240–52 in Mayes and Butler

Goodall, I.H., 1984 'The Iron Objects' 80 and microfiche in Shaw, M. 'Excavations on a medieval site at Derngate, Northampton', *Northants Archaeol.* 19, 63–82

Goodall, I.H., 1985 'Ironwork', 51–7 in Cunningham and Drury

Goodall, I.H., 1990 'Locks and keys', 1001–1036 in Biddle

Goodall, I.H., 1993 'Shoe accessories', 'Iron hearth equipment', Iron knives' and 'Iron door, window and furniture fittings; lock furniture, hasps and keys' 60–63, 86–9, 124–133 and 148–163 in Margeson

Green, C., 1999 *John Dwight's Fulham Pottery. Excavations 1971–79*, English Heritage Archaeol. Rep. 6

Grew, F. and de Neergaard, M., 1988 *Shoes and Pattens*, Medieval Finds from Excavations in London 2 (HMSO, London)

Harley, L. S., 1974 'A typology of brick: with numerical coding of brick characteristics', *J. Brit. Archaeol. Ass*. 37, 63–87

Harvey, Y., 1975 'The small finds: catalogue', 254–293 in Platt, C. and Coleman-Smith, R. *Excavations in Medieval Southampton 1953–1969 Vol. 2: the finds*, (Leicester)

Haslam, J., 1993 'Glass Vessels' in Margeson, S. *Norwich Households Medieval and post-Medieval from Norwich survey excavations 1971–78*, E. Anglian Archaeol. 58, 97–117

Helliwell, L., 1969 *Southchurch Hall: an illustrated Guide*, Southend Museums Publications No. 6

Helliwell, L., n.d. unpublished typescript notes on history and excavations at Southchurch Hall

Henkes, H.E., 1994 *Glass without gloss. Utility glass from five centuries excavated in the Low Countries, 1300–1800*, Rotterdam Papers 9 (Rotterdam)

Hewett, C.A., 1969 *The development of carpentry 1200–1700. An Essex study*, (David and Charles, Newton Abbot)

Hewett, C.A., 1980 *English Historic Carpentry* (Philimore, Chichester)

Heywood, S., 1998 'From aisles to queen posts. Medieval timber framing in Norfolk', in D. F. Stenning and D. D. Andrews (eds), *Regional variation in timber-framed building in England and Wales*

down to 1550, 47–50 (Essex County Council, Chelmsford)

Higgins, D. A., 1981 'Surrey clay tobacco pipes' in P. J. Davey (ed) *The Archaeology of the Clay Tobacco Pipe VI*, Brit. Archaeol. Rep. 97, 189–293

Higgins, D. A., 1985 'Clay tobacco pipes from the Dorking area of Surrey' in P.J. Davey (ed) *The Archaeology of the Clay Tobacco Pipe IX*, Brit. Archaeol. Rep. 146, 405–22

Higgins, D. A. and Davey, P. J., 1994 *Draft Guidelines for using the clay tobacco pipe record sheets* (unpublished)

Hildyard, R.C., 1985 *Browne Muggs: English Brown Stoneware*, (Victoria and Albert Museum, London)

Holmes, E.F., 1988 *Sewing Thimbles*, Finds Research Group 700–1700 Datasheet 9

How, G. E. P., 1957 *Silver Spoons and pre Elizabethan hallmarks on English Plate*, (London)

Huggins, P.J., 1976 'Excavations at Sewardstone Street, Waltham Abbey, Essex, 1966', *Medieval Archaeol*. 20, 47–99

Hutchinson, G., 1994 *Medieval Ships and Shipping*

Hurst, J.G., 1977 'Imported pottery' in Williams, F. W. *Pleshey Castle (XII–XVI Century): Excavations in the Bailey, 1959–1963*, Brit. Archaeol. Rep. 42, 164–167

Hurst, J.G., 1991 'Italian pottery imported into Britain and Ireland' in Wilson, T. (ed) *Italian renaissance Pottery. Papers Written in association with a Colloquium at the British Museum*, 212–227 (British Museum, London)

Hurst, J. G., Neal, D. S. and van Beuningen, H.J.E., 1986 *Pottery Produced and Traded in North-West Europe 1350–1650*, Rotterdam Papers 6 (Rotterdam)

Jackson, C. J., 1922 *English Goldsmiths and their Marks* (London)

Jackson, J. R., 1987 'Excavations at Southchurch Hall. An interim Report', *Essex Archaeol. Hist.* 18, 34–38

Jermyn, S.T., 1974 *Flora of Essex*

Jones, J., 1976 'The Leather' in Hassall, T.G. 'Excavations at Oxford Castle, 1965–1973', *Oxoniensia* 41, 232–308

Le Cheminant, R., 1981a 'Clay pipes bearing the Prince of Wales' Feathers' in Davey, P.J. (ed) *The Archaeology of the Clay Tobacco Pipe VI*, Brit. Archaeol. Rep. 97, 91–101

Le Cheminant, R., 1981b 'Armorials from Paul's Wharf' in Davey, P.J. (ed) *The Archaeology of the Clay Tobacco Pipe VI* , Brit. Archaeol. Rep. 97, 102–26

Le Patourel, H.E.J., 1978 'Documentary evidence', in Aberg, F. A. *Medieval Moated Sites*, Counc. Brit. Archaeol. Res. Rep. 17, 21–28

Lewis, C., Mitchell-Fox, P. and Dyer, C., 1997 *Village, Hamlet and Field*, (Manchester University Press)

Liefkes, R. (ed.), 1997 *Glass*, (V&A Publications)

MacGregor, A., 1985 *Bone, Antler, Ivory and Horn. The Technology of Skeletal materials since the Roman Period*, (London)

Major, H., 1988 'Other non-building stone' in Clarke, C.P. 'Roman Coggeshall: excavations 1984–85', *Essex Archaeol. Hist.* 27, 102–181

Major, H., 1996 'Small Finds' 151–156 in Medlycott, M. 'A medieval farm and its landscape : excavations at Stebbingford, Felsted 1993', E*ssex Archaeol. Hist.* 19, 47–90

Major, H., 1999 'Miscellaneous finds' 116–126 in Isserlin, R.M.J. 'The Carmelite Friary at Maldon: excavations 1990–1', *Essex Archaeol. Hist.* 30, 44–143

Major, H., 2001 'Miscellaneous finds' 165–6 in Ennis, T. 'Helions Farm, Helions Bumpstead', *Essex Archaeol. Hist.* 32, 154–167

Major, H., 2002 'Miscellaneous Finds' in Brown, N. and Germany, M. 'Jousting at windmills: the Essex Cropmark Enclosures Project' *Essex Archaeol. Hist.* 33, 8-53

Major, H., 2003a 'Iron' in Clarke, R. *A medieval Moated Settlement and Windmill: Excavations at Boreham Airfield, Essex* E. Anglian Archaeol. Occ Pap. 11, 33

Major, H., 2003b 'Stone' in Clarke, R. *A medieval Moated Settlement and Windmill: Excavations at Boreham Airfield, Essex,* E. Anglian Archaeol. Occ Pap. 11, 33-34

Major, H., n.d. *The small finds, Chelmsford,* unpublished report, Essex County Council

Margeson, S., 1993 *Norwich Households: Medieval and Post-Medieval Finds from Norwich Survey Excavations 1971–78*, E. Anglian Archaeol. 58

Mayes, P. and Butler, L., 1983 *Sandal Castle Excavations 1964–1973*, (Wakefield Historical Publications)

Medlycott, M., 2003 *Great Wakering: historic settlement assessment*, (unpublished report for Essex County Council and Rochford District Council)

Moorhouse, S., 1971 'Finds from Basing House, Hampshire (*c.*1540–1645): Part Two' *Post-Medieval Archaeol.* 5, 35–76

Morant, P., 1768 The History and Antiquities of the County of Essex

Nenk, B., 1999 Post-Medieval Redware Pottery of London and Essex

Neve, R., 1726 *The City and Country Purchaser and builder's dictionary or the Compleat builder's Guide*, (London)

Nichols, J. F., 1932 'Southchurch Hall' *J. Brit. Archaeol. Assoc.* 37, 101–17

Noel Hume, I., 1961 'The glass wine bottle in colonial Virginia' *J. Glass Studies* 3, 91–11

Noel Hume, A., 1970 *A guide to the artifacts of Colonial America*, (New York)

Noel Hume, A., 1973 'A group of artifacts recovered from an eighteenth-century well in Williamsburg' in Noel Hume A., Abbitt, M.W., McNalty, R.H., Davies, I. and Chappell, E. *Five Artifact Studies*, Colonial Williamsburg Occ. Papers in Archaeol. 1, 1–24

Oswald, A., 1975 *Clay pipes for the Archaeologist*, Brit. Archaeol. Rep. 14

Pearson, S., 1994 *The medieval houses of Kent. An historical analysis*, (HMSO/RCHME, London)

Pearce, J.E., Vince, A.G., White, R. with Cunningham, C. M., 1982 'A dated type series of London medieval pottery 1: Mill Green Ware', *Trans. London Middlesex Archaeol. Soc.* 33, 266–298

Pearce, J.E., Vince, A.G., White, R. and Jenner, A., 1985 *A Dated Type Series of London Medieval Pottery 6: London Type Ware*, London Middlesex Archaeol. Soc. Special Paper 10, (London)

Pearce, J.E. and Vince, A.G., 1988 *A Dated Type Series of London Medieval Pottery 4: Surrey Whitewares*, London Middlesex Archaeol. Soc. Special Paper 10, (London)

Pearce, J.E., 1992 *Post-medieval Pottery in London 1500–1700, 1: Border Wares*, (London)

Perry, E., 1995 *Corkscrews and Bottle Openers*, (Princes Risborough)

Pollitt, W., 1923 'The Roman and Saxon settlements, Southend-on-Sea', *Trans. Southend-on-Sea Dist. Antiq. Hist. Soc.* 1.2, 93–141

Pollitt, W., 1949 *Southchurch and its Past*, Southend Museums Handbook No. 11

Poulton, M.F., 1989 'Some Rumbler Bells from East Hertfordshire', *Hertfordshire's Past* 17, 38–9

Priddy, D., 1987 'South Ockenden Hall Moat' in Priddy, D. (ed) 'Work of the Essex County Council Archaeology Section 1986', *Essex Archaeol. Hist.* 18, 88–103

Rackham, O., 1986 *The ancient woodland of England: the woods of south-east Essex*, (Rochford District Council, Rochford)

Rahtz, P.A., 1969 *Excavations at King John's Hunting Lodge, Writtle, Essex, 1955–57*, Soc. Medieval Archaeol. Monog. 3

RCHME 1923 *Historical Monuments in Essex, IV south east*

Reader, F., 1913 'Appendix B: remarks on the pottery found' in Francis, E. B. 'Rayleigh castle: new facts in its history and recent explorations on its site', *Trans. Essex Archaeol. Soc*. 12, 171–85

Rigold, S.E., 1975 'Structural aspects of medieval timber bridges', *Medieval Archaeol.* 19, 48–91

Rigold, S.E., 1978 'Structures within English moated sites' in Aberg, F. A., *Medieval Moated Sites*, Counc. Brit. Archaeol. Res. Rep. 17, 29–35

Rippon, S., 1991 'Early planned landscapes in south-east Essex', *Essex Archaeol Hist.* 22, 46–60

Rippon, S., 1999 'The Rayleigh Hills: patterns in the exploitation of a woodland landscape', in Green, S. *The Essex Landscape in Search of its History*, 20–28

Rippon, S., 2000a 'Landscapes in transition: the later Roman and early medieval periods' in Hooke, D. (ed) *Landscape: the Richest Historical Record*, 47–62

Rippon, S., 2000b *The Transformation of Coastal Wetlands*

Rodwell, W., 1980 'Ecclesiastical sites and structures in Essex' in Buckley, D. (ed) *Archaeology in Essex to AD 1500*, Counc. Brit. Archaeol. Res. Rep. 34, 118–22

Ryan, P., 1996 *Brick in Essex: from the Roman Conquest to the Reformation*

Salaman, R.A., 1975 *Dictionary of Tools*, (London)

Salaman, R.A., 1986 *Dictionary of leather-working tools c.1700–1950: and the tools of allied trades*, (London)

Schiffer, P.N. and Schiffer, A., 1978 *The Brass Book: American, English and European, fifteenth century to 1860*, (Pennsylvania)

Sparkes, I.G., 1976 *Old Horseshoes*, (Aylesbury)

Steane, J.M. and Bryant, P.A., 1975 *Excavations at the deserted medieval settlement at Lyveden,* J. Northants Mus. and Art Gallery 12

Stenning, D.F., 1997 'Normans Farm, Wakes Colne', *Essex Archaeol. Hist*. 28, 240–243

Stenning, D.F., 1998 'Regional variation in timber-framing: geography, chronology, status and building form', in D. F. Stenning and D. D. Andrews (eds), *Regional variation in timber-framed building in England and Wales down to 1550*, 139–42 (Essex County Council, Chelmsford)

Stephenson, R., 1999 'Tin Glazed Ware in London: A review' in Egan, G. and Michael, R. L. (eds), *Old and New Worlds,* 264–268 (Oxbow Books, Oxford)

Tait, H., 1979 *The Golden Age of Venetian Glass*, (British Museum Press, London)

Tatman, C., 1985 'Stamps and mouldings on clay pipes found in London' in Davey, P.J. (ed) *The Archaeology of the Clay Tobacco Pipe IX*, Brit. Archaeol. Rep. 146, 363–22

Taylor, R. M. and Taylor, J., 1965 *Anglo-Saxon Architecture*

Tyler, S., 1988 'The Anglo-Saxon cemetery at Prittlewell, Essex: an analysis of the grave goods', *Essex Archaeol. Hist.* 19, 91–116

Tyers, I., 1995 *Report on the tree-ring analysis of buildings in Essex*, MOLAS Dendrochronology Archive Report DEN02/95

Vaughan, T., 2001 'Great Wakering, churchyard extension' in Bennett, A. (ed) 'Archaeology in Essex 2000', *Essex Archaeol. Hist.* 32, 250–266

Vince, A.G., 1985 'Saxon and Medieval pottery in London: a review', *Medieval Archaeol.* 29, 25–93

Walker, H., 1990a 'The Medieval and Later pottery' in Andrews, D., Milton, B. and Walker, H. 'Harwich; its archaeological potential as revealed in excavations at George Street and Church Street', *Essex Archaeol. Hist.* 21, 57–91

Walker, H., 1990b 'Pottery from a possible Late Medieval kiln dump at 77 High Road, Rayleigh', *Essex Archaeol. Hist.* 21, 92–102

Walker, H., 1995 'The Medieval and Post-Medieval Pottery' in Wymer, J.J. and Brown, N.R. *Excavations at North Shoebury: settlement and economy in south-east Essex 1500BC–AD1500*, E. Anglian Archaeol. 75, 102–124

Walker, J., 1998 'Essex medieval houses: type and method of construction', in Stenning, D.F. and Andrews, D.D. (eds), *Regional Variation in Timber-framed Building in England and Wales down to 1550*, 5–15 (Chelmsford, Essex County Council)

Walker, J., Watkin, B., Andrews, D.D. and Tyers, I., 1997 'Belchamp St Paul, Turners. An early 14th-century aisled hall with archaic framing', *Essex Archaeol. Hist.* 28, 228–32

Ward Perkins, J.B., 1940 *Medieval Catalogue*, (London Museum)

Wessex Archaeology, 1996 *The English Rivers Palaeolithic Survey Regions 7 and 10: North of the Thames and Warwickshire Avon*

Wickenden, N., 1993 'Summary of finds reported to Chelmsford and Essex Museum 1988–92', *Essex Archaeol. Hist.* 24, 219–24

Williams, D., 1996 'Some recent finds from East Surrey', *Surrey Archaeol. Coll.* 83, 165–186

Williams, F.W., 1977 *Pleshey Castle, Essex (XII–XVI Century): Excavations in the Bailey, 1959–1963*, Brit Archaeol. Rep. 42

Willmott, H., 1997/8 'Lion mask stems from London: a preliminary survey', *Glass News* 4, 5

Wymer, J.J. and Brown, N.R., 1995 *Excavations at North Shoebury: settlement and economy in south-east Essex 1500BC– AD1500*, E. Anglian Archaeol. 75

Youngs, S.M., Clark, J. and Barry, T.B., 1983 'Medieval Britain and Ireland in 1982', *Medieval Archaeol.* 27, 161 – 229

Index

Note: Plates and Figures are not indexed as they are fully cross-referenced from the text. Locations are in Essex unless otherwise stated.

East Anglian Archaeology

is a serial publication sponsored by ALGAO EE and English Heritage. It is the main vehicle for publishing final reports on archaeological excavations and surveys in the region. For information about titles in the series, visit **www.eaareports.org.uk**. Reports can be obtained from:

Phil McMichael, Essex County Council Archaeology Section
Fairfield Court, Fairfield Road, Braintree, Essex CM7 3YQ

Reports available so far:

No.1, 1975 Suffolk: various papers
No.2, 1976 Norfolk: various papers
No.3, 1977 Suffolk: various papers
No.4, 1976 Norfolk: Late Saxon town of Thetford
No.5, 1977 Norfolk: various papers on Roman sites
No.6, 1977 Norfolk: Spong Hill Anglo-Saxon cemetery, Part I
No.7, 1978 Norfolk: Bergh Apton Anglo-Saxon cemetery
No.8, 1978 Norfolk: various papers
No.9, 1980 Norfolk: North Elmham Park
No.10, 1980 Norfolk: village sites in Launditch Hundred
No.11, 1981 Norfolk: Spong Hill, Part II: Catalogue of Cremations
No.12, 1981 The barrows of East Anglia
No.13, 1981 Norwich: Eighteen centuries of pottery from Norwich
No.14, 1982 Norfolk: various papers
No.15, 1982 Norwich: Excavations in Norwich 1971–1978; Part I
No.16, 1982 Norfolk: Beaker domestic sites in the Fen-edge and East Anglia
No.17, 1983 Norfolk: Waterfront excavations and Thetford-type Ware production, Norwich
No.18, 1983 Norfolk: The archaeology of Witton
No.19, 1983 Norfolk: Two post-medieval earthenware pottery groups from Fulmodeston
No.20, 1983 Norfolk: Burgh Castle: excavation by Charles Green, 1958–61
No.21, 1984 Norfolk: Spong Hill, Part III: Catalogue of Inhumations
No.22, 1984 Norfolk: Excavations in Thetford, 1948–59 and 1973–80
No.23, 1985 Norfolk: Excavations at Brancaster 1974 and 1977
No.24, 1985 Suffolk: West Stow, the Anglo-Saxon village
No.25, 1985 Essex: Excavations by Mr H.P.Cooper on the Roman site at Hill Farm, Gestingthorpe, Essex
No.26, 1985 Norwich: Excavations in Norwich 1971–78; Part II
No.27, 1985 Cambridgeshire: The Fenland Project No.1: Archaeology and Environment in the Lower Welland Valley
No.28, 1985 Norfolk: Excavations within the north-east bailey of Norwich Castle, 1978
No.29, 1986 Norfolk: Barrow excavations in Norfolk, 1950–82
No.30, 1986 Norfolk: Excavations at Thornham, Warham, Wighton and Caistor St Edmund, Norfolk
No.31, 1986 Norfolk: Settlement, religion and industry on the Fen-edge; three Romano-British sites in Norfolk
No.32, 1987 Norfolk: Three Norman Churches in Norfolk
No.33, 1987 Essex: Excavation of a Cropmark Enclosure Complex at Woodham Walter, Essex, 1976 and An Assessment of Excavated Enclosures in Essex
No.34, 1987 Norfolk: Spong Hill, Part IV: Catalogue of Cremations
No.35, 1987 Cambridgeshire: The Fenland Project No.2: Fenland Landscapes and Settlement, Peterborough–March
No.36, 1987 Norfolk: The Anglo-Saxon Cemetery at Morningthorpe
No.37, 1987 Norfolk: Excavations at St Martin-at-Palace Plain, Norwich, 1981
No.38, 1987 Suffolk: The Anglo-Saxon Cemetery at Westgarth Gardens, Bury St Edmunds
No.39, 1988 Norfolk: Spong Hill, Part VI: Occupation during the 7th–2nd millennia BC
No.40, 1988 Suffolk: Burgh: The Iron Age and Roman Enclosure
No.41, 1988 Essex: Excavations at Great Dunmow, Essex: a Romano-British small town in the Trinovantian Civitas
No.42, 1988 Essex: Archaeology and Environment in South Essex, Rescue Archaeology along the Gray's By-pass 1979–80
No.43, 1988 Essex: Excavation at the North Ring, Mucking, Essex: A Late Bronze Age Enclosure
No.44, 1988 Norfolk: Six Deserted Villages in Norfolk
No.45, 1988 Norfolk: The Fenland Project No. 3: Marshland and the Nar Valley, Norfolk
No.46, 1989 Norfolk: The Deserted Medieval Village of Thuxton
No.47, 1989 Suffolk: West Stow: Early Anglo-Saxon Animal Husbandry
No.48, 1989 Suffolk: West Stow, Suffolk: The Prehistoric and Romano-British Occupations
No.49, 1990 Norfolk: The Evolution of Settlement in Three Parishes in South-East Norfolk
No.50, 1993 Proceedings of the Flatlands and Wetlands Conference
No.51, 1991 Norfolk: The Ruined and Disused Churches of Norfolk
No.52, 1991 Norfolk: The Fenland Project No. 4, The Wissey Embayment and Fen Causeway
No.53, 1992 Norfolk: Excavations in Thetford, 1980–82, Fison Way
No.54, 1992 Norfolk: The Iron Age Forts of Norfolk
No.55, 1992 Lincolnshire: The Fenland Project No.5: Lincolnshire Survey, The South-West Fens
No.56, 1992 Cambridgeshire: The Fenland Project No.6: The South-Western Cambridgeshire Fens
No.57, 1993 Norfolk and Lincolnshire: Excavations at Redgate Hill Hunstanton; and Tattershall Thorpe
No.58, 1993 Norwich: Households: The Medieval and Post-Medieval Finds from Norwich Survey Excavations 1971–1978
No.59, 1993 Fenland: The South-West Fen Dyke Survey Project 1982–86
No.60, 1993 Norfolk: Caister-on-Sea: Excavations by Charles Green, 1951–55
No.61, 1993 Fenland: The Fenland Project No.7: Excavations in Peterborough and the Lower Welland Valley 1960–1969
No.62, 1993 Norfolk: Excavations in Thetford by B.K. Davison, between 1964 and 1970
No.63, 1993 Norfolk: Illington: A Study of a Breckland Parish and its Anglo-Saxon Cemetery
No.64, 1994 Norfolk: The Late Saxon and Medieval Pottery Industry of Grimston: Excavations 1962–92
No.65, 1993 Suffolk: Settlements on Hill-tops: Seven Prehistoric Sites in Suffolk
No.66, 1993 Lincolnshire: The Fenland Project No.8: Lincolnshire Survey, the Northern Fen-Edge
No.67, 1994 Norfolk: Spong Hill, Part V: Catalogue of Cremations
No.68, 1994 Norfolk: Excavations at Fishergate, Norwich 1985
No.69, 1994 Norfolk: Spong Hill, Part VIII: The Cremations
No.70, 1994 Fenland: The Fenland Project No.9: Flandrian Environmental Change in Fenland
No.71, 1995 Essex: The Archaeology of the Essex Coast Vol.I: The Hullbridge Survey Project
No.72, 1995 Norfolk: Excavations at Redcastle Furze, Thetford, 1988–9
No.73, 1995 Norfolk: Spong Hill, Part VII: Iron Age, Roman and Early Saxon Settlement
No.74, 1995 Norfolk: A Late Neolithic, Saxon and Medieval Site at Middle Harling
No.75, 1995 Essex: North Shoebury: Settlement and Economy in South-east Essex 1500–AD1500
No.76, 1996 Nene Valley: Orton Hall Farm: A Roman and Early Anglo-Saxon Farmstead
No.77, 1996 Norfolk: Barrow Excavations in Norfolk, 1984–88
No.78, 1996 Norfolk:The Fenland Project No.11: The Wissey Embayment: Evidence for pre-Iron Age Occupation
No.79, 1996 Cambridgeshire: The Fenland Project No.10: Cambridgeshire Survey, the Isle of Ely and Wisbech
No.80, 1997 Norfolk: Barton Bendish and Caldecote: fieldwork in south-west Norfolk
No.81, 1997 Norfolk: Castle Rising Castle
No.82, 1998 Essex: Archaeology and the Landscape in the Lower Blackwater Valley
No.83, 1998 Essex: Excavations south of Chignall Roman Villa 1977–81
No.84, 1998 Suffolk: A Corpus of Anglo-Saxon Material
No.85, 1998 Suffolk: Towards a Landscape History of Walsham le Willows
No.86, 1998 Essex: Excavations at the Orsett 'Cock' Enclosure
No.87, 1999 Norfolk: Excavations in Thetford, North of the River, 1989–90
No.88, 1999 Essex: Excavations at Ivy Chimneys, Witham 1978–83
No.89, 1999 Lincolnshire: Salterns: Excavations at Helpringham, Holbeach St Johns and Bicker Haven
No.90, 1999 Essex:The Archaeology of Ardleigh, Excavations 1955–80
No.91, 2000 Norfolk: Excavations on the Norwich Southern Bypass, 1989–91 Part I Bixley, Caistor St Edmund, Trowse
No.92, 2000 Norfolk: Excavations on the Norwich Southern Bypass, 1989–91 Part II Harford Farm Anglo-Saxon Cemetery

No.93, 2001 Norfolk: Excavations on the Snettisham Bypass, 1989
No.94, 2001 Lincolnshire: Excavations at Billingborough, 1975–8
No.95, 2001 Suffolk: Snape Anglo-Saxon Cemetery: Excavations and Surveys
No.96, 2001 Norfolk: Two Medieval Churches in Norfolk
No.97, 2001 Cambridgeshire: Monument 97, Orton Longueville
No.98, 2002 Essex: Excavations at Little Oakley, 1951–78
No.99, 2002 Norfolk: Excavations at Melford Meadows, Brettenham, 1994
No.100, 2002 Norwich: Excavations in Norwich 1971–78, Part III
No.101, 2002 Norfolk: Medieval Armorial Horse Furniture in Norfolk
No.102, 2002 Norfolk: Baconsthorpe Castle, Excavations and Finds, 1951–1972
No.103, 2003 Cambridgeshire: Excavations at the Wardy Hill Ringwork, Coveney, Ely
No.104, 2003 Norfolk: Earthworks of Norfolk
No.105 2003 Essex: Excavations at Great Holts Farm, 1992–4
No.106 2004 Suffolk: Romano-British Settlement at Hacheston
No.107 2004 Essex: Excavations at Stansted Airport, 1986–91
No.108, 2004 Norfolk: Excavations at Mill Lane, Thetford, 1995
No.109, 2005 Fenland: Archaeology and Environment of the Etton Landscape
No.110, 2005 Cambridgeshire: Saxon and Medieval Settlement at West Fen Road, Ely
No.111, 2005 Essex: Early Anglo-Saxon Cemetery and Later Saxon Settlement at Springfield Lyons
No.112, 2005 Norfolk: Dragon Hall, King Street, Norwich
No.113, 2006 Norfolk: Excavations at Kilverstone
No.114, 2006 Cambridgeshire:Waterfront Archaeology in Ely
No.115, 2006 Essex:Medieval Moated Manor by the Thames Estuary: Excavations at Southchurch Hall, Southend