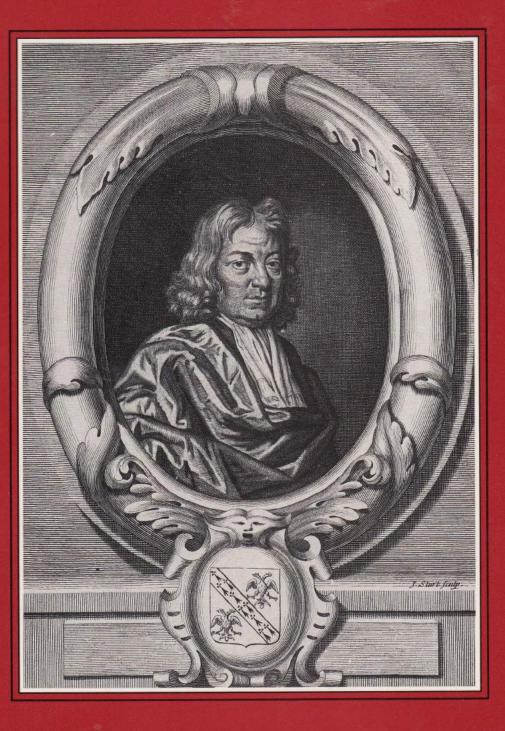
ESSEX



ARCHAEOLOGY AND HISTORY



TRANSACTIONS OF THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

Volume 24

1993

ESSEX

ARCHAEOLOGY AND HISTORY

THE TRANSACTIONS OF THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

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THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

The Society was founded in 1852 as the Essex Archaeological Society

Its objects are:

(1) To promote and encourage the study of the archaeology and history of the historic county of Essex.

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- (2) In furtherance of the above to publish the results of such studies in *Transactions* and to disseminate information on matters relating to archaeology and history in Essex through appropriate media.
- (3) To organise conferences, lectures, and visits for the benefit of members and interested members of the public; to educate the wider community in the historical and archaeological heritage of Essex; to co-operate with other bodies on matters of common interest and concern.
- (4) To provide library facilities for Society members and approved members of the public.

Publications

The articles in its *Transactions* range over the whole field of local history. Back numbers and offprints are available; list and prices on application to the Librarian.

Members receive a quarterly Newsletter covering all aspects of the Society's activities, news of current excavations and fieldwork, and items of topical interest.

The Library

The library is housed at the Hollytrees, High Street, Colchester, and is extensive. It aims to include all books on Essex history, and has many runs of publications by kindred Societies. Members may use the library on any weekday during museum opening hours (10-1, 2-5, Saturdays, October to March, closes 4 p.m.) on presentation of a signed membership card.

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Application should be made to the Hon. Membership Secretary for current rates.

Articles for Publication are welcome and should be set out to conform with the Notes for Contributors, of which offprints are available. They should be sent to the Hon. Editor.

A list of officers, with addresses, will be found in this volume.

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Billericay Archaeological and History Society; Brain Valley Archaeological Society; Castle Point Archaeological Society; Colchester Archaeological Group; Essex Society for Family History; The Friends of Historic Essex; Great Bardfield Historical Society; Halstead and District Historical Society; Haverhill and District Archaeological Group; Ingatestone and Fryerning Historical and Archaeological Society; Maldon Archaeological Group; Saffron Walden Historical Society; Southend-on-Sea and District Historical Society; Waltham Abbey Historical Society; West Essex Archaeological Group; Woodford and District Historical Society; Chigwell School.

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This volume is dedicated to the memory of Sir William Addison, Kt., D.L., J.P., F.S.A., F.R. Hist. S.

> born 4 April, 1905 died 1 November, 1992

> President - 1963-1966

"A man beloved, a man elect of men" In memory of John Wm. Inchbold = A.G. Swinburne

"A true man... whose honour knows not rust" The Tale of Balen, 3 st 18 = A.G. Swinburne

William Addison dedicated his life, talents and literary work to his adopted County of Essex and to this Society he gave unstinted time, effort and encouragement from his election as a member on 18th February, 1947, on the nomination of the Revd O.E.R. Alexander, M.A., Hon. Treasurer, and later as a member of Council from 6th October, 1949. William was elected President in 1963 and served his term of office with distinction.

He was one of the founders, in 1964, of The Essex Archaeological and Historical Congress, in the foundation of which this Society played a major part. Among other offices he held in local history circles, William was Chairman of The Friends of Historic Essex, President of the Essex Society for Family History, President of Waltham Abbey Historical Society and Chairman of the Victoria County History of Essex, etc. etc. To all he gave ardent support, encouragement and, what to me will always stand out, wise counsel and the need for patience and understanding of all points of view.

So William Addison, justly proud Verderer of Epping Forest, renowned as a worthy magistrate in the legal world, author and lecturer, received the royal accolade in 1974. An honour he well earned and deserved.

We who are left to take over the mantle from such a perfect gentleman and scholar rejoice that we were privileged to know him and are sure that he will be remembered and honoured along with other distinguished Essex historians and antiquarians.

May he rest in peace.

A 'principia' at Boreham, near Chelmsford, Essex: excavations 1990

by N.J. Lavender

Introduction

During June 1990 a programme of field-walking was carried out by Essex County Council Archaeology Section at Bulls Lodge Farm, Boreham, in advance of the first phase of what is to be the largest gravel quarry in Britain (Fig. 1). Two fields, totalling 20 hectares, were walked, and proved largely barren of finds, except for an area immediately north-east of Bulls Lodge Dairy, where a large concentration of Roman roof tile and brick was identified (Fig. 2), together with a lesser, but corresponding scatter of Roman pottery. Background scatters of worked flint, medieval and post-medieval pottery and tile were also recorded, but with no obvious concentrations.

The area concerned lies half a kilometre north of the A12 which follows the course of the main Roman road from Chelmsford to Colchester, and slightly over five kilometres north-east of the Roman town of Chelmsford (*Caesaromagus*) itself. Other Roman activity in the area is shown by burials found c. 1900 at Great Holts Farm one and a half kilometres to the north-east, scattered field boundary ditches in the Chelmer valley, the use of Roman tile in the fabric of Boreham parish church a kilometre to the south, and frequent finds of Roman pottery in the churchyard. South-west of Great Holts Farm another tile concentration was located during field-walking during October 1991 (Germany 1991).

Excavation

An area of c. 3000 square metres was stripped of topsoil, corresponding approximately to the extent of the tile spread (Fig. 1). As a result, an occupation sequence ranging in date from the Late Iron Age to the late Roman period was recorded during July to September 1990 (Fig. 3). The excavation was carried out by Essex County Council Archaeology Section under the directorship of the author.

The site lay on boulder-clay mixed with brick-earth patches at the south-eastern edge of the Springfield Till. It sloped gently towards a spring-fed stream which lies c. 40m from the eastern limit of excavation, within a patch of medieval or later woodland called "The Grove". All phases of occupation extended under the Grove, probably up to the stream.

Following the excavation, the whole of the remainder of the field was stripped of topsoil and examined for further archaeological activity (Fig. 15). The total absence of features and surface finds of any date within the stripped area demonstrates that any continuation of activity in any of the phases must have occurred to the south and or east of the excavated site.

The earliest phases of the sequence produced finds of a domestic nature, from a variety of ditches and pits, but no traces of any buildings. During one of the later phases, two buildings were constructed, but these do not seem to have been domestic or agricultural in nature, and represent a radical change in the use of the site.

The phases of the site are described in sequence below.

Phases I and IA: Late Iron Age (1st century AD)

The earliest activity consisted of a number of Late Iron Age ditches forming parts of at least two rectangular enclosures in the eastern half of the trench (Fig. 4).

The southern enclosure, Enclosure I, was represented by part of its northern side (ditches 2 and 5), and some 2m of its western side, apparently formed by ditch 5 turning through a right angle to the south, although this relationship was obscured by the slightly later ditch 227. A further ditch (ditch 4) ran north from the narrow gap between the terminals of ditches 2 and 5 and continued for 2.5m before being truncated by a late Roman linear feature (70), and did not emerge again to the north of this. Within this part of Enclosure I there were no contemporary features. All the ditches of this enclosure were slight, being no more than a metre wide and half a metre deep from the top of the subsoil. The fills were all consistently silty clay loams, brown to dark yellowish brown in colour.

To the north of Enclosure I, and also cut by feature 70, lay ditch 19, the south side of Enclosure II. This was a far more substantial ditch than those of Enclosure I, being some 3m wide. Directly north of the corner of ditch 5, ditch 19 turned north and continued for c. 20m (ditch 185) before being truncated at its terminal by ditch 78. The north side of this enclosure was probably represented by the terminal of a large ditch (319) in the north-east corner of the trench. This was badly disturbed by modern activity probably associated with the farm track at the east of the site, and was not excavated. The surface of the surviving feature, however, produced a quantity of exclusively Late Iron Age pottery. The fills of these ditches, like those of Enclosure I, were brown and

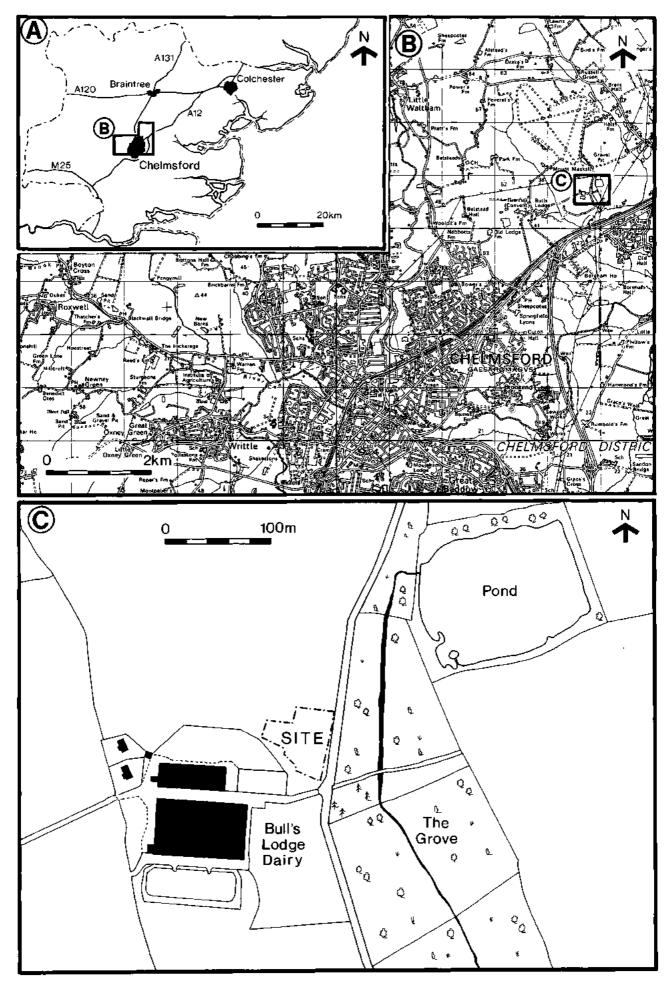


Fig. 1 Location of the site.

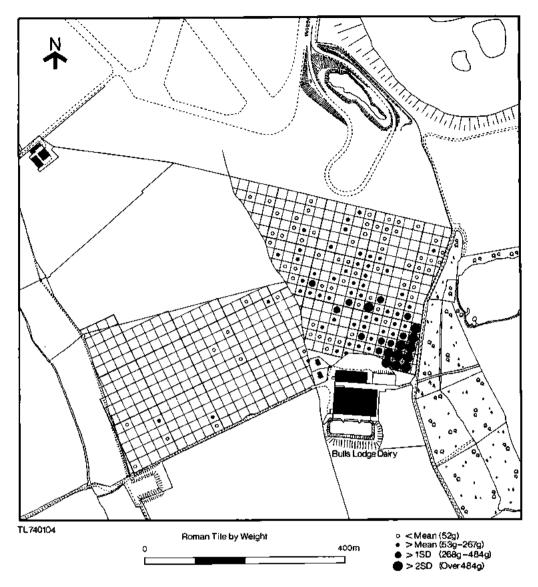


Fig. 2 Field-walking survey: distribution of Roman tile.

yellowish-brown silt clay loams.

Ditch 227 ran south from the junction of 19 and 185 (this relationship was, once again, obscured by feature 70) and cut across the corner of Enclosure I. The function of this ditch is uncertain, but it could represent the replacement of Enclosure I with a revised layout which used the south side of Enclosure II as its northern boundary. Since no other parts of this new system appeared within the excavated area, its existence can only be postulated. This ditch had been recut at least twice, and was at each stage even slighter than the ditches of Enclosure I. Apart from the fill of the final recut, which was darkened by the presence of charcoal, all aspects of ditch 227 were filled with brown and yellowish-brown silt clay loam, which seems to be a consistent factor throughout the Iron Age and many of the Roman features on site. It is therefore likely that the fills were derived largely from the natural subsoil edges of the negative features, rather than any positive features such as banks alongside them.

The only other Late Iron Age feature was a single posthole situated in the 20m-wide gap between the terminals of 185 and 391.

The recognisable grog-tempered vessel-forms in ditches 2 and 5 belong to the first half of the 1st century AD — nothing was as late as the later 1st century (the date of some of the residual pottery in Enclosure III and the pits, below).

All the other pottery-yielding fills of the late Iron Age ditches contained nothing more diagnostic than assorted jar rims and storage jar bodysherds. The North Gaulish butt-beaker (CAM 113) rim sherds in the second recut of ditch 227 are too fragmentary to be closely datable, but are pre-Flavian anyway.

Phase II: earlier Roman (3rd century AD)

Third-century activity accounted for most of the features dug into the subsoil (Fig. 5). These were principally a small enclosure and a number of ditches and

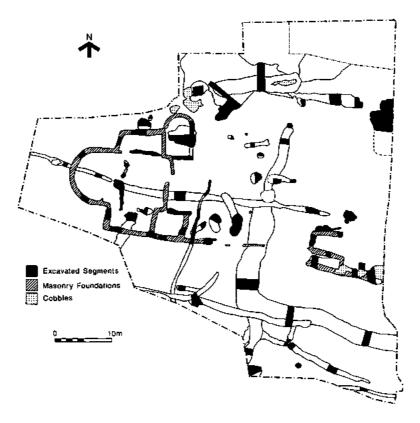


Fig. 3 Composite plan of all phases.

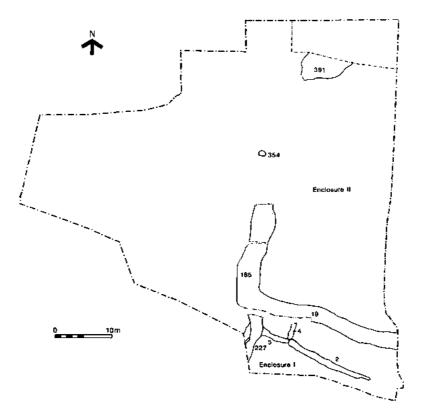


Fig. 4 Phases I and IA: Late Iron Age.

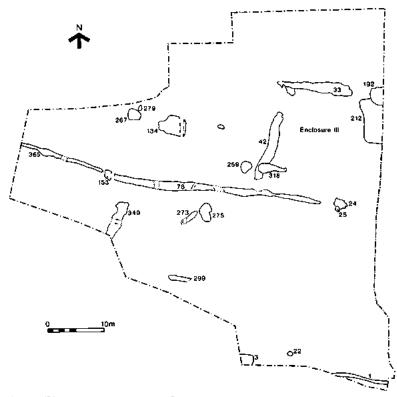


Fig. 5 Phase II: 3rd century AD.

pits. The dominant feature of this phase is an east-west ditch across the middle of the trench (ditches 78, 365 and feature 24). At its east end, ditch 78 forms the south side of Enclosure III, the west and north sides consisting of ditches 45, 33 and 192. As it progressed eastwards, ditch 78 was severely truncated by ploughing, but is probably represented by feature 24, and may have continued much further in this direction.

The northern side of this enclosure cut a large pit at the eastern limit of excavation (2.12), probably of earlier 3rd-century date. At the west end of ditch 33 lay a complex of intercutting features (see Phase III, below).

Scattered throughout the western part of the trench were a number of fairly small pits which seem to belong to this period. Many were barren of finds, but others such as pit 153 produced a large quantity of pottery and domestic rubbish. Pit 153 cut the western terminal of ditch 78, but is of very similar date according to its pottery, perhaps indicating that the whole of this phase was one of fairly rapid change.

The pottery from the fills of the ditches making up Enclosure III is broadly early-mid 3rd century in date. Dr. Rodwell comments that the size and condition of the samian sherds (largely Antonine/Late Antonine Central and East Gaulish) suggests that they are not reliable dating evidence for the contexts in which they were found.

Phase III: later Roman (late 3rd-4th centuries AD) At some point in the late 3rd or early 4th century the use of the site seems to have changed radically. Two buildings with substantial masonry foundations were established in what appears to have been an imposing complex (Fig. 6).

The larger, western building (Building A) comprised an aisled hall occupying an area of c. 22 metres square (Fig. 7). The arcades separating the 9m square nave from the aisles were based upon foundations of tile packed in clay (56 and 363). At the west end of the nave a large apse, also 9m wide, extended 8m beyond the end of the aisles. This was opposed by a slightly projected eastern entrance which was flanked by two small chambers.

The northern flanking chamber was apsidal, orientated to the north, and measured 6m by 4m. For the most part the foundations were still in situ, but contained only late 2nd- or 3rd-century pottery, which the limited dating evidence from elsewhere within the building suggests is residual, probably derived from the large pit (134) which is cut by the east wall. The foundations of the south wall were constructed in the same way as those of the aisles within the main part of the building, and are directly in line with them, indicating that this chamber was not fully enclosed by a solid wall. The same may be true of the north wall of the southern chamber, which was some 4m square, but the robbing in this area was so thorough that it is only the relative slightness of this northern foundation trench which suggests this interpretation.

The external walls of Building A were all constructed on broad foundations (c. 1m thick) of flint

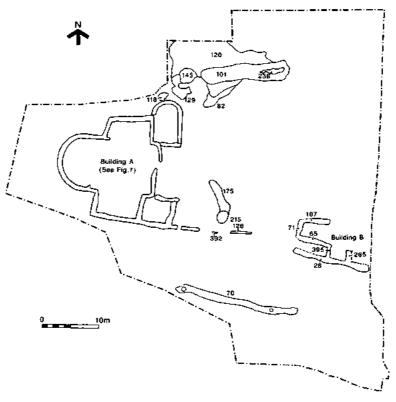


Fig. 6 Phase III: late 3rd to 4th century AD.

rubble, which survived to the top of the subsoil in the northern entrance flanking chamber, but had been thoroughly robbed out elsewhere. In three excavated segments of the wall trenches, however, the bottom course of flints survived, mostly in that of the western apse. From one segment in the southern aisle came the only pottery that can be associated with the construction. A few sherds of BB1 dated to the late 3rd or early 4th century were recovered from among the surviving foundations, and had mortar adhering to them. These few sherds remain the only dating evidence for Building A; even the fill of the robber trenches contained residual pottery of the late 2nd to early 3rd centuries.

Twenty metres east of Building A lay the heavily robbed and plough-damaged foundations of a second structure (Building B). Little of the plan of this building survived, but it continued beyond the eastern limit of excavation, and is probably better preserved under The Grove itself. The foundations still *in situ* (mainly the west wall) were largely composed of pitched brick and blocks of *opus signinum*.

From the contexts making up building B was recovered a quantity of box-flue tile far in excess of that found elsewhere on site (Major, below), suggesting that part of this structure may have included a hypocaust.

Ten metres to the south of the two buildings and parallel with their south walls lay a trench (feature 70), 22m long and covering the gap between them. This was filled with clay and tile in the same way as the arcade foundations of Building A, and had clearly defined settings, for posts or columns, with flat tile bases. This would seem to be the foundation trench for a monumental feature covering the entrance to the building complex, and so is almost certainly contemporary. Late 3rd-century pottery was recovered from the fill of this feature.

A large quantity of tile was recovered from the site both during field-walking and excavation. This suggests that at least one of the buildings had a tiled roof. A lot of this tile, however, is derived from features which are dated by their pottery to a phase before the buildings were erected. This could be explained by the presence of a large quantity of tile "wasters" among the assemblage, indicating that there was a kiln nearby producing tile for at least local use, which may have been in operation prior to the construction phase.

At some point during the life of Building A a partition was inserted to the east of the western apse, effectively dividing it off from the nave. This must represent a change in the use of the building, and if the arcades were blocked off at the same time (though there is no evidence to suggest this), then the building would have been converted into a suite of smaller rooms. These would still have been quite big, perhaps too big to suggest a change to domestic use.

The date of the demolition and robbing of the buildings cannot be ascertained since the excavated segments of the robber trenches of both structures yielded nothing but residual 2nd- and earlier 3rd-

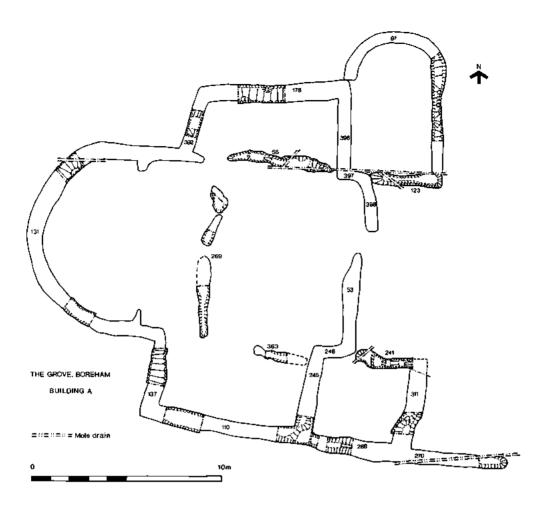


Fig. 7 Building A.

century pottery. Part of Building B was covered over by cobbles, and parts of the foundations have survived because of this. Other areas of cobbling to the northeast of building A may belong to this time, or may be part of the building phase. Ploughing has left so little of the cobbling *in situ* that its relationship with other aspects of the later Roman activity is often uncertain.

To the north-east of Building A lay a complex of intercutting features. Much of this complex consists of a large irregular pit, about eighteen metres by twelve (feature 120), which may have been a quarry pit. Feature 82, a shallow projection pointing south-west from 120, may be a separate feature, but any indication that it might be cut by the larger pit (as was originally believed), rather than an integral part of it, has been destroyed by the insertion of a modern field drain at the precise point where such a relationship should have been evident. The fills of 120 indicated that after a short period of silting it had been deliberately backfilled, whereas the majority of features do not appear to have been backfilled, although many (including ditch 33) contain large deposits of rubbish in their silts. Pottery from the back-fill of 120 is dated to the late 3rd or 4th century.

Cutting the top of 120 and just clipping the terminal of 33 was a shallow ditch (101), dated by its pottery to the late 3rd to 4th century, and containing much tile and charcoal. Further west a pit of similar date also cut the edge of 120.

To date Building A itself, there are only the two mortar-coated sherds of a BB1 dish/bowl (Going 1987, form B6.3) of the later 3rd to 4th centuries (pottery from the fills of the robber trenches falls into the same late 2nd- to 3rd-century date-range applied to Enclosure III/Phase II material).

Roman pottery was recovered from the surface of Building B (context 37) and from its robber trenches (contexts 29, 67 and 115), but in such small quantities that no firm dating can be offered. Nothing more helpful could be gleaned from the contents of pits 332 and 375, immediately adjacent to the building, either.

The only good dating evidence for feature 70 comes from an upper fill of feature 70, which can be assigned a mid/late 3rd-century date, providing a *terminus post quem* for the foundations.

F101 has the same later 3rd- to 4th-century pottery as F82 and F120, but is stratigraphically later. F120, whose relationship to F82 is unclear due to a

modern field-drain, is alone in having appreciable amounts of residual pottery of late 2nd- to 3rd-century date (as Enclosure III).

Of the ditches and gullies, only ditch terminal/pit F74 can be at all closely dated, to the 3rd century.

The pottery from the pits falls into a broad late 2nd- to 3rd-century date-range, much as Enclosure III, with only some pieces of samian (above, contexts 264 and 349) of earlier date.

The material from cobbles 118 and 130 provides a later 3rd century *terminus post quem* (the pottery from the surfaces of two of the patches is no later).

Specialist reports

The pottery by Colin Wallace

with Brenda Dickinson and W.J. Rodwell

The pottery from this site can be considered under four broad headings; earlier prehistoric; Late Iron Age; third century; later thirdfourth century, and is briefly discussed below in this order.

Pottery as dating-evidence is summarised above, in the main report text. These dating-evidence notes derive from the context-bycontext spot-dating records in the site archive, which summarise all the pottery present (classified according to the pottery typology published by Going (1987, 3-54), which is the standard for all ECC reports) and provide the base for the conclusions set out here and above. While dating evidence, although often quite broad, could be won from the material, good groups for quantification (chosen through favourable combinations of stratigraphy, size and dating) did not present themselves.

Earlier prehistoric pottery

A few of the Late Iron Age features (ditches 2, 4, 5 and 19) also produced residual sherds of Late Bronze Age/early Iron Age flinttempered pottery. A jar rim sherd in sand-tempered ware (*c.f.* Kelvedon Fabric B; Rodwell 1987, 103), possibly Middle Iron Age, was amongst the pottery in one of the segments of ditch 2 and a bodysherd in similar fabric occurred in late Roman context 371 (pers. inf. N. Brown).

Late Iron Age pottery

Pottery of the first half of the first century AD, all local grogtempered wares with the exception of one imported piece, dated the earliest demonstrable activity on the site — a phase of Late Iron Age enclosures. While enough diagnostic material survived to provide dating evidence, no sherds justified illustration — for example, the North Gaulish Cam 113 butt-beaker was represented only by sherds from its bead rim, enough to recognise the form but no more.

There is then a gap of perhaps a century and a half between this material and the third-century pottery in the fills of Enclosure III and elsewhere. While some pre-third-century pottery does occur (e.g. samian stamp 2, below, from pit 259), there is no reason to regard this as other than residual in features of later date.

Third-century pottery

Material dating to the first half of the third century dominated the ceramic assemblage from the site. The wares found match with the general trends discerned at nearby Chelmsford in Ceramic Phase 5 (c. AD 200/210-250/260) (Going 1987, 113).

Hadham products, widely distributed just after the end of this period, are virtually absent and there were no definite examples of flint-tempered Rettendon-type wares of the later third century plus. Because of this, I would tentatively suggest that some types of ostensibly later vessels found in contexts of this period (e.g. bowl-jar E5.4) may extend back earlier in the third century than previously suggested. There were no groups of sufficient size to make quantification worthwhile, to provide direct comparisons with other Ceramic Phase 5 groups.

Contexts belonging to this grouping produced a number of pieces of intrinsic interest, described below.

Samian potters' stamps (Brenda Dickinson)

- 1. AL[BILLIM] retr. on form 31R: Albillus i of Lezoux, where the die, 2b, is known to have been used. This stamp appears almost exclusively on cups of form 33, but has been noted once on form 31. It occurs in a late-Antonine pottery store at Corbridge (Haverfield in Forster 1908, 270-271) c. AD 160-200 (context 48, ditch 33).
- [OFA]LBAN on form 27: Albanus ii of La Graufesenque, Die 2a. This occurs in Period IIA (after AD 75) at Verulamium (Hartley 1972, 231: S25) and a stamp from another die comes from Period II (AD 60-75). Albanus ii's output includes very few pre-Flavian forms; the site evidence also suggests mainly Flavian activity. It is noticeable that there are no examples from Domitianic contexts. c. AD 65-85 (context 264, pit 259).
-]TI retr. on form 31, slightly burnt, Central Gaulish. Antonine (context 104, ditch 120)

(Dr Warwick Rodwell kindly examined *all* the samian ware from the site and a copy of his notes, drawn on for dating evidence, can be consulted in the site archive. The only piece of intrinsic interest was a dish, a form 42 variant, probably East Gaulish, from Building A context 263. An unusual piece, it featured barbotine decoration on the rim in the form of a *running scroll*, rather than ivy leaves.)

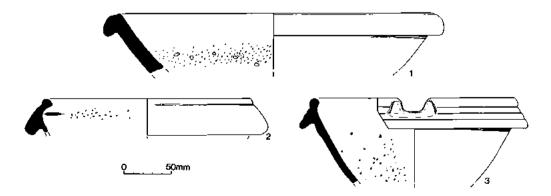


Fig. 8 Pottery: mortaria.

Ceramic counters

Recent work on this category of find (Crummy 1983, 93-5) has found no clear evidence for the use to which they were put: whether 'domestic', as reckoning counters or as pieces for board games. All the examples from this site belong to Crummy's second group, 'counters with no abraded surface but with an edge ground for at least part of its circumference'. There were no counters made from samian: all were in reduced fabrics.

- 1. Context 35, a lower fill of Enclosure III ditch 33. First half third century. Diameter 36mm, thickness 7mm, weight 14g. Body sherd, sandy grey ware (with black surfaces).
- 2. Context 33, surface of ditch 33. Diameter 34mm (max.), thickness 7mm, weight 11.3 g. Bodysherd, sandy grey ware (with black surfaces), same fabric as 1.

A possible waster-sherd

While it is reasonably certain that much of the tile found in the excavations was made on or near the site (tile report, below), nothing definite can be said about the source (or sources) of the bulk of the coarse pottery, in fine and sandy grey-wares. Of interest in connection with this is a jar rim from pit 134 (context 163) which is noticeably distorted, making the original vessel a 'second', if not a waster. Evidence for small-scale third-century pottery production in Central Essex is slowly accumulating — in the light of discoveries at Ivy Chimneys, Witham (Turner forthcoming) and Heybridge (Wickenden 1987, 46-50), a pottery kiln may be expected hereabouts too.

Mortaria

Of intrinsic interest are three mortaria rims from Enclosure III contexts (Fig 8. 1-3):

- 1. fabric group 47: dark brown (Munsell 10YR4/8) fabric with black surfaces. Frequent quartz inclusions, visible trituration grits quartz — this example preserves very little of the gritted area of the original vessel, where flint grits may have been present (context 90, a feature fill related to Enclosure III).
- 2. fabric group 4: appears to be very sandy Hadham red ware. The form is a variant on Going D11, the hammerhead type (context 48, upper fill of ditch 33).
- 3. fabric group 24: Nene Valley cream ware. A reeded hammerhead mortarium, a third-century type (context 48 also).

Going recognised both sandy grey ware and flint-tempered ware mortaria as minor components of the grey-ware form-assemblage from Chelmsford (Going 1987, 9-10). More recently, a study of the mortaria from the central Essex site of Ivy Chimneys, Witham enabled Hartley to recognise five reduced East Anglian mortaria fabrics, but again none was present in quantity (Hartley in Turner forthcoming, section 16c).

The very simple out-turned rim of the Boreham example cannot be paralleled amongst the grey-ware mortaria from Chelmsford or Ivy Chimneys, but typologically should be of late second- to third-century date.

Later third-fourth century pottery

The (latest) pottery from contexts associated with Building A, the 'colonnade', ?quarry F120 etc and the cobbles can be matched with Ceramic Phases 6 and 7 at Chelmsford (Going 1987, 113-15).

The site produced no examples of wares like Oxfordshire red colour-coat or late shell tempered, present in quantity after c. AD 360/370 — but the pottery from all the features of this broad phase is dominated by residual late second- to third-century material, so that detailed comparisons with Chelmsford's useful groups cannot be pressed (an extreme illustration of the high level of residuality is that out of the several hundred sherds recovered from contexts associated with Building A, only *rwo* served to provide dating evidence). However, an end-date for the fourth-century activity on the site is reasonably certain from the absence of Hadham products and Rettendon-type wares is interesting).

The coins

by S. Wallis and M. Winter

Thirteen coins, all of them Roman, were recovered from the excavation. The majority were worn and could not be closely identified. Of note was a silver *denarius* of Septimius Severus (*RIC* 99 or 112), dating from AD 197 or 198, from pit 153.

The following table summarises the date ranges of the coins:

Date	Number of coins
lst/2nd century	5
3rd century	5
3rd/4th century	2
4th century	1

With the exception of the silver *denarius*, the 1st/2nd-century coins were very worn and had probably been in circulation for a long period when lost. Of the remainder, the preponderance of 3rd-century coins over those of the 4th century is probably significant.

Thus, though limited, the coin evidence indicates that the 3rd century was the period of greatest activity on the site.

The Roman brick and tile by H. Major

A total of 1324kg of brick and tile was examined, i.e. 14,101 pieces, which constituted the entire assemblage from the excavated contexts.

It was obvious that the buildings had been thoroughly robbed, and that the tile recovered was only a small proportion of the original tile used on the site. Indeed, since some of the tile came from contexts predating the buildings, not all of the material could have come from the excavated buildings. It was hoped that analysis of the material might suggest a progression of tile types or fabrics over time. However, the usefulness of the assemblage in this respect was limited by the sparsity of the pottery on the site, which meant that many features were poorly dated, or undatable.

Detailed quantitative analysis plus a discussion of the methodology employed is to be found in the site archive. Percentages of tile given below are by weight unless otherwise specified.

Fabrics

Ten fabrics were identified (A-K) and three waster fabrics (W1-W3). There was a rough division into chalky, non-chalky and sandy fabrics, with B and C relatively chalky, A and D having little chalk and E being sandy. Fabrics A, B and H are similar in texture and appearance and fabric F may be a variation of fabric C. Fabric K is possibly not tile, but occurred in only two contexts. All the fabrics except G and K, which were very rare, occurred in features of all periods, although their relative proportions varied.

The waster fabrics were very hard, fired purple to black, and often distorted or partially vitrified. They were classified by the different amounts of sand and chalk visible. Due to the changes in colour and texture induced by overfiring, it was not possible to equate these fabrics with any of the normally fired fabrics. Overall, 5% of the tile was waster, but a few contexts contained considerably larger amounts.

There is suitable clay for tile-making in the vicinity of the site, and it is likely that most of the material was made locally. There are natural variations in the amounts of sand and chalk present in the boulder clay, even over a small area, and variations in the inclusions in the tile may be largely due to this, and need not imply widely separated sources. The wasters from the site also contain varying proportions of sand and chalk, and as they are less likely to have been brought in from a distance, their presence supports the theory that both the chalky and non-chalky fabrics were locally made. The only non-local fabrics are probably G and K, which form only a very minor component of the assemblage.

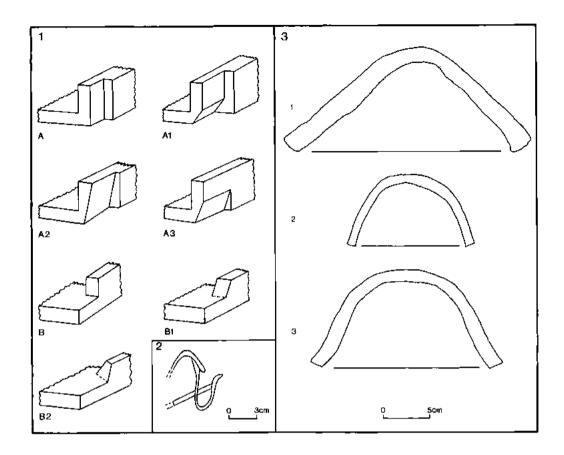


Fig. 9 Tile 1. Tegulae forms 2. Signature on tegula 3. Imbrex profiles.

Tegulae

The shape of the flange cutaways was examined, and the types categorised as A, A1, A2 and A3 for the lower end of the tile, and B, B1 and B2 for the upper end (Fig. 9.1). There were 120 lower cutaways and 112 upper cutaways as follows:

Type (Lower)	А	A1	A2	A3	Type (Upper)	в	$\mathbf{B1}$	B 2
No. of examples	6	107	5	2	No. of examples	95	15	2
Percentage	5	89	4	2	Percentage	85	13	2

Al and B were the predominant cutaway types. Only two tiles have both ends present, and both have Al and B cutaways. Both types occur in contexts of all periods, and imply a long-lived local tradition for these forms. The less common types of lower cutaway are concentrated in the northern part of the site, and the distribution suggests that these types predate the buildings and are residual in the later features. Types Bl and B2 are more widely distributed across the site. They are close in form to B, and may represent maladroit workmanship rather than a true variation in shape.

Comparisons with lower end flange types from other sites in Essex demonstrate the localised nature of preferred flange types. Type A1, the most common at Boreham, is equivalent to Colchester E, which is rare and early there, whereas A3, very rare at Boreham, is equivalent to Colchester B, common throughout the Roman period (Crummy 1984). The most common flange type from Chelmsford (Wickenden and Drury 1988) does not occur at all at Boreham. The differing types of cutaways are thus likely to have been associated with separate tileries who used them over a long period, rather than representing a change through time.

252 pieces of *tegula* had 'signatures', usually the ubiquitous finger-drawn arcs. The number of arcs present was as follows:

	Number
l arc	105
At least 1 arc	92
2 arcs	31
At least 2 arcs	11

Thirteen *tegulae* had other markings, all incomplete. These include two with parts of oval 'signatures', six with one or more straight lines and two with the normal arcs cut by a straight line. One more complex 'signature' is illustrated (Fig. 9.2). Twenty-five pieces of *tegulae* had probable or definite nail-holes, less than 1% of the total number of fragments, showing that only a small proportion of the tiles would have been nailed. Nearly half the tiles with nail-holes came from Building A, and only one from Building B, perhaps representing a difference in the structure of their roofs. Most of the nail-holes were circular, with two oval and two square. All were pierced before firing. The diameters of the round holes range from 5mm to 17mm with an average of 9mm.

Imbrices

These were mostly fragmentary, with few markings and little variation in the shape. There were no complete tiles, and relatively few where the profile could be reconstructed. Only two tiles still had their full width; both were from context 258 (Pit 257) and were almost certainly from the same batch. One *imbrex* had a possible nail-hole close to one edge.

Three basic profiles were identified (Fig. 9.1-3):

- Almost V-shaped, with virtually flat sides. 33 examples. (45%)
- Roughly semi-circular, with a regular curve. 37 examples. (51%)

3. Similar to 2, but with the bottom edges flared out. 4 examples (4%)

There was no correlation between profile type and fabric. All of the profile types were present in contexts of all periods.

Brick

Bricks were present in quantity on some parts of the site, particularly in Building B, where they were used in the foundations. Some were still in place in context 72, pitched and mortared together. On average, 30% of the tile from each context was brick. Other contexts high in brick were in features 33, 82 and 101. However, since 101 also contained one of the contexts low in brick, showing it was not uniformly distributed through the feature.

Two types of brick could be definitely identified.

- a) Bessales. A group of nine bessales came from 72, where they were in situ in the foundations of Building B. All were in the same fabric (D), bore no markings, and were uniform in size, ranging from 190x193x29mm to 200x206x31mm.
- b) Lydion. Two groups of fairly complete lydion were found. At least three fragments came from 72, none of which had a complete length. They were 268-270mm wide and 33-36mm thick. All were in fabric D and had finger-drawn arcs at one end, two with one arc and one with two arcs.

The second group was from 93 (top of ditch 101), with five almost complete *lydion*. Sizes ranged from 257x350x30mm to 270x380x 31mm. None were marked, but one had numerous animal footprints on the surface (see below).

There were very few bricks with complete widths or lengths from other contexts, but the measurements available suggest that more derived from *lydion* than *bessales*. Other brick sizes may have been present in small quantities, as there were a few fragments with thicknesses above the normal range, up to 75mm.

Finger-drawn lines and arcs were present on 95 examples. The number of arcs present were as follows:

No. of arcs	No. of tiles
1	33
At least 1	21
2	25
At least 2	9
3.	3
4?	I

Three tiles had other markings: one with two straight lines parallel to the edge, one with one straight line, and one with two short straight lines.

Box flue tile

A total of 3401kg of box flue tile was recovered, i.e. 316 pieces, 3% of the total. It is unlikely that it was used for its original purpose on this site. Nearly half of the box tile came from Building B and this concentration suggests that there may have been a hypocaust in the part of the building to the east of the excavation.

Broken box tile was not widely utilised in the fabric of the building, since mortar was present on the broken edges of only two tiles. There are, however, traces of original use in a hypocaust system, with 26% of the fragments exhibiting sooting on their inner surface, mortar on their combed faces, or both.

Only eight pieces had measurable dimensions, and none had more than one. These comprise one width of 142mm, one height of 180mm, and six depths: two of 105mm, 110mm, 120mm, 150mm and 156mm. These are within the normal ranges cited by Brodribb (1987). There was one possible fragment from a half-box tile.

Forty-two tiles had parts of cut-outs in their sides. Both rounded (oval or circular) and straight-sided (rectangular or square) cut-outs occurred, with straight-sided being more common (32 examples). One of each type occurs in an earlier Roman context, so there is probably no chronological significance, nor is there any correlation with a particular fabric. Combing was common, with only a single example of a knifecut lattice pattern. But, few of the pieces were large enough to show much overall pattern. Recording of individual elements suggested that the pattern schemes used were mainly variations on saltire crosses or diamonds, within a rectangular frame, or with lines down the sides of the tile. Curvilinear elements were rare, occurring on only 6 of the 205 combed fragments. Little work has been done on variations in combing patterns between sites in Essex, but a simple comparison with the box tile from Ivy Chimneys, Witham (Turner pers. comm.) shows that variations exist. At Witham, where there were more near-complete tiles, 25 pattern styles were identified on a total of 196 tiles, and 12 of these incorporated curvilinear elements. The range of combing patterns is thus very different at Boreham and Ivy Chimneys. Three of the more complete tiles from Boreham are illustrated in Figure 10.1-3.

One tile has possible comb-stabbing, a feature illustrated on a tile from Itchingfield in Sussex (Green 1979). The Boreham example is not definitely on a box tile fragment.

Animal and other prints (Bouchner 1982; Bang 1987)

Some of the *tegulae* and bricks bore animal and human prints. These comprised: 25 dog prints; 5 cats; 3 deer (probably all roe deer); 1 cattle; 15 shoe prints with hobnails; 6 human finger and foot prints; 2 unidentified paws. Sheep/goat and pig were notably absent. One example is shown in Figure 10.4.

Tile from individual features

Pre-building contexts Only three of the definitely pre-building contexts contained more than 10kg of tile, all within 33. All three contexts contained similar proportions of tile types; 34-35% *tegula*, 12-15% *imbrex*, 38-44% brick, 1-3% box-tile and 5-12% spall. Fabric C was consistently most common in all the tile types, except for brick from context 214, where D was most abundant. All three large contexts contained some wasters, but they were particularly common for brick in context 48, where 21% by weight was waster, the average being 6%.

Building A This provided 29% of the tile. Brodribb (1987) gives a weight of c. 1376 kg for a roof area of 15x15m. Assuming that the roof was tiled, the weight of roof tile recovered, 306kg, is only a small proportion of the roof tile which must have been used in the building, and it is likely that much of the tile was recycled elsewhere when the building was demolished.

The amount of brick from the building is significant, as it is considerably lower than the site average. Even given that the building was comprehensively robbed, this suggests that, unlike Building B, the structure of the building contained little brick.

The proportions of different fabrics suggest that the roof was mainly in fabrics A and D, both containing little chalk. This may be compared with the pre-building contexts, where fabric C, a chalkier fabric, is commonest, and implies that the roof tile from Building A was from a different 'population'. Thus it probably is from the roof of that building, rather than being residual from earlier activity on the site.

Building B This group of contexts is characterised by the large amount of brick present. Context 72 contains 84% brick (the site average is 30%), and includes pitched bricks in mortar, still in situ in the foundations. Fabric D predominated, forming 74% of the brick from 72, and 70% from 287, and all the substantially complete tiles from 72 were in D. It therefore seems likely that the foundation tiles were a single order made specially for this building. Smaller proportions of most of the other tile fabrics were present, and may have been used as broken tile in the fabric of the superstructure, or may have been residual from earlier features.

The range of fabrics present in the tile types other than brick was much more variable. The proportion of roof tiles in fabric D suggests that the roof was predominantly in this fabric, but unlike Building A, the proportion of A was insignificant. Some of the roof tile had mortar on the broken edges, suggesting that it had been used in the fabric of the building, rather than the roof.

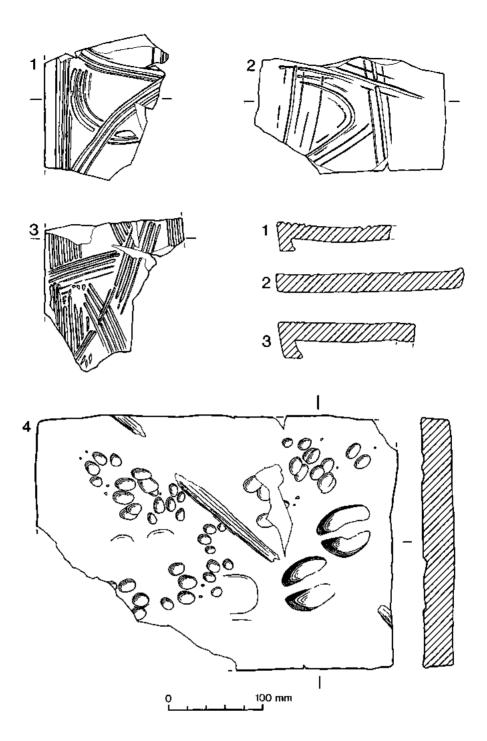


Fig. 10 Tile. 1-3. Combing patterns on box-flue 4. Animal prints on lydion from ditch 101.

Waster fragments were comparatively rare, only 1% by weight; the site average was 5%. On the other hand, 49% of the modern brick and tile on site came from Building B. This may be due to the proximity of a modern track, roughly paved with brick fragments and other debris.

The use of brick and tile in the buildings

The types of tile present suggest that different construction methods were used for each building. Building B had extensive use of structural tile, both in the pitched brick foundations and in the superstructure of the building. The concentration of box tile implies a hypocaust nearby, and this, together with the evidence of the mortar

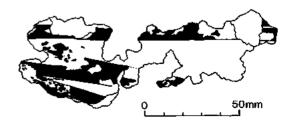


Fig. 11 Painted wall-plaster from Building B.

A 'PRINCIPLA' AT BOREHAM

and wall-plaster (qv) suggests that B is probably only a small part of a large and well-appointed building. The room we have probably had plain white-washed walls, but other rooms were painted. The material from the earlier features on the site may have come from an earlier phase of this building.

The brick and tile provides rather less evidence for the structure of Building A. The surviving foundations show far greater use of rough-hewn stone, and the amount of brick present suggests there was little use of it in the superstructure. It might be expected that the roofs of the apses had tapering rooftiles, or other abnormal forms, but none were identified. The mortar found was described as 'crumbly', as opposed to the harder mortar of Building B. The evidence suggests a building which, despite its elaborate ground plan, was not as substantially constructed as Building B.

Mortar

by H. Major

The mortar was not systematically sampled, so the amount of analysis possible is limited. As well as the discrete samples, mortar was present on some tiles. No mortar was kept from Building A, but where present, it was described as 'very crumbly'. Some of the mortar (from pit 24 and ditch 33) may predate the buildings on the site, but there is nothing to distinguish it from the later mortar.

The mortar was roughly typed according to colour and the amount of crushed tile present. Four basic fabrics were identified. About half of the samples came from Building B, and the evidence suggests that the foundations were mainly constructed using an offwhite mortar containing very little crushed tile, with the faces of the walls finished off in a light pink mortar, with a much higher proportion of crushed tile. Some of the mortar had a whitewashed surface and was probably from the interior walls of Building B.

Painted wall-plaster (Fig. 11)

by H. Major

Two joining fragments came from context 108, within the foundation trench of Building B. They had a pale yellowish-green background with intersecting black lines 7mm wide over. They had been overplastered with a hard, coarse white mortar, a small area of which survived; some of the damage to the surface represents shallow pockmarks to key on the mortar.

The painting was done on a thin layer (0.5mm) of fine white plaster over a layer of light pink mortar with common tile fragments, 26mm thick over at least 25mm of a similar mortar with less common tile. The mortars are very similar to samples from Building B, and while the evidence suggests that the excavated part of the building had whitewashed walls, this painted fragment may have come from a nearby room.

MISCELLANEOUS FINDS by H. Major

The metalwork

Most of the metalwork could be described as 'scrappy', particularly the iron. Very little of it was associated with the buildings, and it provides no information relative to their use. None of the copper alloy came from Late Iron Age contexts, although the brooches are probably residual from this phase. There were two iron objects, and a single scrap of lead, an unusual find for this period.

The Roman copper-alloy assemblage contains a range of small objects often found on rural sites, such as tweezers and studs, but also includes a few items of note. A curious small, winged fitting came from context 103, and a possible hoof-shaped casket foot from 165.

The bulk of the iron from the definitely pre-building contexts came from ditch 33. This material was mostly incomplete fragments, suggesting that the ditch may have been used as a rubbish dump. Alternatively, some of the scrap may have been deposited during a refurbishment of adjacent buildings, as the contexts also contain large dumps of tile. Neither of the buildings on site produced much iron. There were two plate fragments from Building A, and a single surface find from Building B which may be modern. Of the remainder of the iron, the largest groups were from F101 (eight pieces, including a possible tub handle) and F120 (thirteen pieces, including an axe blade). Perhaps the only non-utilitarian iron object from the site was a fragment from pit 145 which had a decorative copper-alloy plate attached.

Copper alloy (Fig. 12)

The brooches

Parts of three brooches were found, two of them unstratified, and one from ditch 78. They are probably all residual from the Late Iron Age phase of the site, and are in poor condition.

- 1. (Fig. 12.1) Foot from a small bow brooch, probably a Colchester brooch. 1st century AD, possibly pre-Roman. U/S.
- 2. (Not illustrated) Part of the bow and spring of a Nauheim derivative brooch with a narrow flat bow. Probably pre-Roman. U/S.
- 3. (Not illustrated) The spring and pin from a Nauheim derivative brooch of Hull's type 11c (Crummy 1983), with a wire bow. A separate foot with a plain, thin bow and an unperforated catchplate, is probably from the same brooch. Original length c. 50mm. Context 106.

Items for personal use

- 1. (Not illustrated) A curved strip fragment with a lenticular section, possibly from a plain bracelet or finger ring; and another fragment, probably from the same object. Context 130, SF24.
- 2. (Fig. 12.2) Strip bracelet fragment, with alternating notches on the outer face. This is similar to Crummy 1983, 41, no. 1654, a type typically late 3rd-4th century. Context 130.
- 3. (Fig. 12.3) Finger-ring fragment with part of a bezel and hoop. There was at least one transverse line at the junction between the shoulder and the hoop, and the bezel has a setting for a small oval or round stone. The ring belongs to Robinson's type 8 (Robinson 1979). Context 165.
- 4. (Fig. 12.4) Nail-cleaner. A distorted fragment with a thin, leafshaped body and transverse moulding at the junction with the handle. The handle and point are missing. C.f. Crummy's type 2a, mid 1st century into 2nd century (Crummy 1983). This dating suggests that it may be residual in its context. Context 104.
- 5. (Fig. 12.5) A pair of plain tweezers in two pieces. Context 106.
- 6. (Not illustrated) A curved bar with an oval section, tapering at both ends. This is probably part of a buckle, possibly D-shaped. Max. section 6x4mm, Length c. 38mm. Context 342,

Other objects

- 7. (Fig 12.7) Circular sealbox lid with a central hole, probably for a decorative stud, with a rope-effect moulding round it. The edge is damaged. U/S.
- 8. (Not illustrated) Lock bolt fragment, with the bar and part of two triangular cut-outs. Length 53mm (Cunliffe 1971). U/S.
- 9. (Fig. 12.9) A moulded fitting, consisting of a tube with two curved, T-shaped arms. It has incised decoration; two sides of the tube have vertical slashes, the other two have crosses. The ?upper surfaces of the arms have crosses, with transverse slashes on the T-bars. Context 103.
- 10. (Fig. 12.10) A stud with a large, slightly domed head and broken shank. Context 163.
- 11. (Fig. 12.11) A semi-circular moulded fitting, probably a foot from a casket or a small piece of furniture. In the shape of a horse's hoof, with incised lines on the bottom part. There are traces of an attachment on the upper back. Examples of similar fittings include a box or tankard mounting in the shape of a booted human foot, from Richborough (Cunliffe 1968). Animal feet are common on classical furniture, but are usually in the shape of paws. Richter (1966) illustrates hooves on Greek folding stools. Context 165.
- (Fig. 12.12) An iron strip with a ball-headed copper-alloy nail 12. through it. The iron is a short tapering strip with a protuberance at one end, and is possibly complete. The use of the copper-alloy nail suggests that this was a decorative object, possibly a box fitting. Context 337.

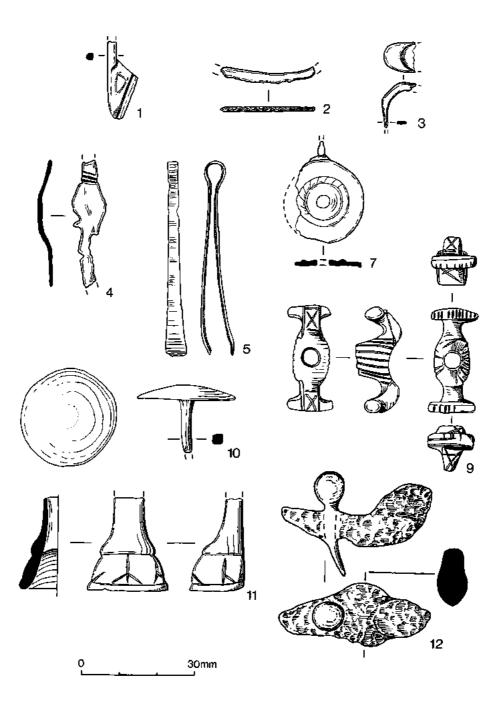


Fig. 12 Copper-alloy objects.

- (Not illustrated) Fragment of iron sheet, c. 20 x 12mm, with a copper-alloy rivet through it. The rivet has an incomplete domed head with a slight flange, diam. 13mm. Context 255, SF65.
- 14. (Not illustrated) A rather crudely cut sheet strip, probably part of a buckle strap. It is broken across a rivet hole at one end, and curved at the other. Width 15mm, Length 31mm. Context 165, SF52.

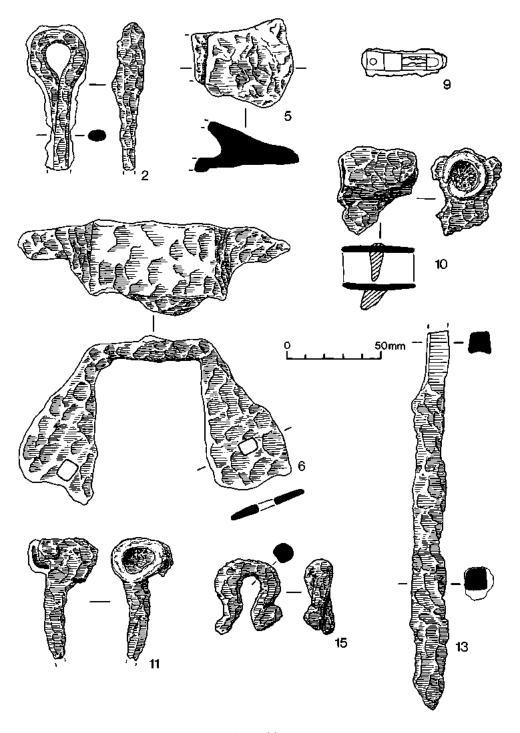
Small rod fragments came from contexts 76, 84 and 103, and sheet fragments from 106, 165 and 308.

Iron (Fig. 13)

1. (Not illustrated) Pointed bar fragment, possibly a spike with a slightly expanded head. Length 56mm, section 11x4mm.

Context 21, LIA ditch 19.

- 2. (Fig. 13.2) Ring-headed bar. Context 50, LIA ditch 19.
- (Not illustrated) Ox goad, point broken off. Rees' type II (1979, 75-9). External diameter. 16mm, made from strip 15mm wide. Context 48.
- (Not illustrated) Blade point, probably from a small, straightbacked knife. Length 20mm, max. Width 16mm. Context 103. Other knife fragments came from contexts 35, 158 and 163.
- 5. (Fig. 13.5) Short axe blade, broken across the handle hole. Context 104.
- (Fig. 13.6) Strap handle formed from a single strip twisted to make two right angles. The terminals are perforated. A strap handle of this shape could have been used on a tub. Context 103.
- 7. (Not illustrated) Small strap hinge made from a strip of





constant section; end broken. Part of the iron hinge pin survives. 55x12x3mm. Context 122. Another strap hinge fragment came from context 84.

- (Not illustrated) Probable barrel padlock key fragment. Length 70mm. Context 158.
- 9. (Fig. 13.9) An iron bar fragment with a decorative copper fastened by a copper-alloy rivet at one end. This is possibly a decorated handle for an object such as a knife. Context 159.
- 10. (Fig. 13.10) Fitting, consisting of a tube with a broken bar projecting at an angle on one side. The object superficially resembles a horse-bit link, but the X-ray shows a nail through the tube, implying that the object was fixed to a pole. Context 165.
- (Fig. 13.11) Horse-bit link fragment with cylindrical head. Context 214.
- (Not illustrated) Bolt, with a truncated pyramidal head, and a square shaft (incomplete). Length 50mm, head 20x18mm. Context 35.
- (Fig. 13.13) Two large spikes, both broken at one end, and one bent. They are possibly rake tines. One is illustrated. Context 80.
- 14. (Not illustrated) Ring, with a circular section. External diameter 44mm, internal diameter 28mm. Context 34. Another small ring, external diameter 30mm, came from context 162.

- (Fig. 13.15) Double hook made from rectangular sectioned Ushaped loop with turned-up points. Context 35. Another incomplete double hook came from Context 32.
- (Not illustrated) Split loop made from a bar of constant section, 13x4mm. Length 70mm. Context 93. Another example came from context 163.
- (Not illustrated) Flat-topped staple, made from a squaresectioned bar. Width 31mm, Length of arms 28mm. Context 163, SF56.
- (Not illustrated) Two pieces of a curved strap or collar, probably the same object, but non-joining. One end is broken across a rivet hole. Made from a strip 24mm wide. Length 47mm and 40mm. Context 206.
- (Not illustrated) Perforated disc. External diameter 33mm, internal diameter 13mm. Context 165.
- (Not illustrated) Rectangular plate with a central perforation, diameter 6mm. Probably complete. 37x25mm. Context 263.

iron nails

Seven types of iron nail were identified:

- 1 Round or slightly oval flat head, square shaft.
- 2 Hobnail, with a small domed head.
- 3 Oval head in the same plane as the shaft, similar to a post-Roman horse-shoe nail.
- 4 Square, flat head, square shaft.
- 5 Inverted triangular head, square shaft.
- 6 Rectangular, flat head, square shaft.
- 7 Roughly circular, domed head, square shaft.

The numbers found were as follows:

Туре	No.	Percentage
1	177	64
2	83	30
3	1	0.4
4	5	2
5	5	2
6	4	1
7	2	1
Total	277	100.4

There were also 209 shaft fragments found. None of the nails came from Late Iron Age contexts.

The type 1 nails predominate, as on most Roman sites, and occurred in 54 out of the 56 contexts with classifiable nails. Twentyseven type 1 nails were complete, with an average length of 56mm, and a length range of 32-98mm. An incomplete type 1 nail from context 10 had been hammered through a piece of lead sheet, probably circular, with a diameter of c. 24mm.

The hobnails (type 2), while relatively numerous, came from only four contexts, with the largest group of 62 coming from F129.

The size and types of the nails suggest that there was no major structural use of nails on the site. The nail-holes in some of the *usgulae*, however, argue for a greater use of large nails than is shown in the excavated material. These may have been salvaged during demolition of the building, thus avoiding entering the archaeological record.

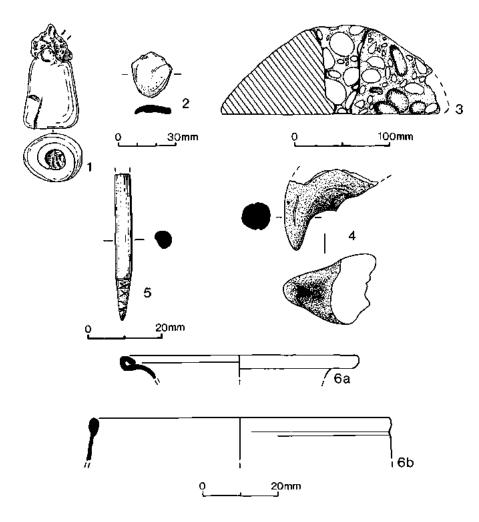


Fig. 14 1-2. Lead objects 3. Quernstone 4. Fired clay object 5. Bone pinhead 6a, 6b. Glass vessels.

Lead (Fig. 14.1-2)

- 1. (Fig. 14.1) A weight formed from a lead strip wrapped round an iron core; the iron suspension loop has broken off. Context 162.
- 2. (Fig. 14.2) A roughly discoidal fragment of lead. It appears to be a scrap of waste, but is a shape suitable for use as a repair patch for a pot. This is an unusual find, as lead is fairly rare on pre-Roman sites, particularly away from the main lead-producing areas. Context 16.
- 3. (Not illustrated) Three fragments of waste sheet with irregular edges. The largest is c. 26x18mm. Context 1.
- (Not illustrated) Folded lead sheet, comprising one or more pieces folded together to form a lump c. 48x30x10mm Context 370.

The stone

The stone examined consisted mainly of lumps of hard chalk, unworked natural pebbles and septaria, doubtless used as building rubble, although only one piece still had mortar on it. The septaria would have come from north-east Essex, and was extensively used in the masonry buildings of Chelmsford. It is not suitable for use as a dressed facing stone. The septaria from Boreham are unlikely to have been specially brought in, and were probably reused from elsewhere. Other non-local stones present were greensand, limestone, millstone grit, Rhenish lava and puddingstone. The only pieces of utilised stone from Late Iron Age contexts were two fragments of burnt sarsen pebble from ditch 19. Both were probably used as rubbers.

The source of the greensand was not identified, and it may have come from either south of the Thames, or Lincolnshire. The three fragments of greensand had probably been used as building rubble, and one fragment bore mortar. They may have originally come from quems. Greensand was rarely used for Roman quems in Essex, if at all. There are, however, at least five Bronze Age sites with saddle quems in the stone (e.g. North Shoebury, Buckley and Major forthcoming), and a few Late Iron Age beehive quems. The Boreham greensand is therefore likely to represent a re-use of prehistoric material, perhaps from the Iron Age activity on the site.

The puddingstone quern would also have been residual from the Late Iron Age site. The millstone grit and lava quern fragments are Roman, and the millstone grit had probably all been reused only one piece still bore definite traces of its original use. The scraps of lava, all eroded, came from contexts 39 and 344.

- 1. (Fig. 14,3) Hertfordshire puddingstone. Almost half of an upper quernstone with a cupped hopper and short feedpipe. There is slight damage to the edge. The handle-hole is missing, and there is no groove for a handle. The grinding surface was probably flat. Diam. 314mm. Context 239.
- 2. (Not illustrated) Millstone grit. A slabby fragment with a straight, bevelled edge. The edge and one surface are smooth. This was probably a quern fragment reused as a rubber or sharpening stone. c. 65 x 90mm, 34mm thick. 364g. Context 99.
- (Not illustrated) Millstone grit. A fragment from a quern lower stone, with the edge of the central hole present. No full thickness. The surface has a groove across it, probably caused by blade-sharpening. Original thickness greater than 57mm. 490g. Context 214.
- 4. (Not illustrated) Millstone grit. A lump with one smooth surface. Probably from a quern with an original thickness greater than 65mm. 732g. Context 314.

Burnt clay (Not illustrated)

The total weight of burnt clay was 1699g. This breaks down by period as follows:

LIA	672g
Earlier Roman	543g
Building A	18g
Building B	38g
Other features	428g

The burnt clay is clearly concentrated in the LIA and earlier Roman contexts, and some of the later contexts contain parts of triangular loomweights, which must be residual. 830g of the material derives from fragments of triangular loomweights, from seven contexts. The only other object was a piece of a slab 20mm thick, from Late Iron Age ditch 2.

Fired clay object (Fig. 14.4)

The following object came from the surface of foundation trench 241, Building A.

This fragment is apparently part of a horned animal head in a tile-like fabric. It comprises a short horn with a shallow groove on each side, widening at the bottom into the head of the animal. There is a suggestion of the edge of an eye-socket, but the fragment has broken across it. The fabric is similar to tile fabric H; orange-brown, fairly hard-fired, with moderate sand and occasional small chalk and grog fragments (206g).

The shape of the horn suggests that this was a cattle head. I know of no parallel for it in this country, and there is no obvious reason for its occurrence on this site. The similarity of the fabric to one of the tile fabrics suggests that it was made locally. There is no indication of whether the complete object was just the head, or the whole animal, although the latter would be so large that it would surely be difficult to fire.

Two hypotheses can be put forward for its use: that it was religious in function, or that it was decorative. Votive offerings of animal models in terracotta are known from the continent, although they are generally smaller than this. Alternatively, since it was probably made at a tilery, it may have been a decorative element, perhaps part of an elaborate antefix.

'Jet' (Not illustrated)

A fragment from the tapering shaft of a pin. Length 19mm, maximum diameter 4mm. The material is jet-like, with a conchoidal fracture and a black shiny surface, but deterioration of the surface after excavation suggests that the material is not jet, but possibly a product of the coal measures similar in appearance to jet (Allason-Jones pers. comm.). Context 130.

Bone objects (Fig. 14.5)

Fragments of eight hairpins were found, five of them from feature 33. There were six shaft fragments, one of which (from feature 120) was swollen. Crummy (1983) considers this to be a later Roman feature, and at Colchester such shafts mainly occur in 3rd- to 4thcentury contexts. The only other bone object was part of a needle.

- 1. (Not illustrated) Pin, head damaged and point missing. The shape of the head is unclear, but it may have been T-shaped or a flat kidney shape (Crummy 1983). Length 102mm. Context 86.
- 2. Pinhead; a plain conical head, decorated with crudely cut, shallow, criss cross lines above a circumferential line. Crummy Type 1 (Crummy 1983). This type is not closely datable, but is likely to be earlier, rather than later, Roman. Context 214.
- 3. (Not illustrated) Needle, broken across the bottom of the eye, which was probably rectangular. Oval section. Length 84mm, Context 48.

Slag

A small amount of slag was found; 314g from five contexts. A brief examination suggested that it was mostly non-metallurgical in origin, with only a few small pieces from contexts 10 and 130 possibly from metallurgical processes.

Glass

by J. Shepherd

A total of 66 fragments of glass were examined. Of these 36 are window glass and 16 are vessel fragments but which cannot be assigned to any particular form.

Of the remaining 14 fragments, 6 come from an indeterminate number of square-sectioned bottles (Isings 1957, form 50). These robust, purpose-made vessels are very common in the north-west provinces of the empire from the middle of the 1st century AD to the beginning of the 3rd century, although their numbers decline after the middle of the 2nd century (Charlesworth 1966). They functioned as containers for the transport and storage of liquid commodities. One fragment comes from a very thick-walled vessel suggesting that it was a large example of the form (examples are known up to 370mm in height). A fragment from the neck of a bottle or flask may also belong to this type of vessel.

The remaining eight fragments are all tablewares and, furthermore, are all drinking vessels. Two fragments come from vessel types which appear in the glassworkers' repertoires during the late 2nd century AD. These are the facet-cut bowl and the straight-sided cup or bowl.

The bowls, decorated with wheel-cut patterns consisting of circular or oval facets and wheat-ear motifs, are common in the 3rdcentury Rhineland (Fremersdorf 1967) and are well-recorded on Romano-British sites, for example York (Harden 1962), King William Street, London (Wheeler 1930) and Verulamium (Charlesworth 1972).

The straight-sided cup or bowl with the slightly inturned firerounded rim (Fig. 14. 6a) belongs to the late 2nd and early 3rd centuries (Isings 1957, form 85). The fire-rounded rim is typical of these vessels and the majority have double base-rings like that from Airlie, Angus (Charlesworth 1959). Fragments from Lullingstone Villa, Kent (Cool and Price 1987), come from late Antonine contexts and provide the earliest dated examples of this form in Britain.

A sherd from a small straight-sided cup or bowl in a very thin colourless glass decorated with fine horizontal wheel-cut lines in groups was recovered from the fill of a modern field drain which cut Building A.

Also found here are two fragments from indented beakers. The fragments are very small but are comparable with 2nd-century examples from Harlow (Price 1987). Such decorative techniques are, however, known also from the 1st century.

The small fragments from the small bowls or jars come from vessels which cannot be positively identified. It is possible that the rim fragment belongs to a small squat jar form (Isings form 68), a universal glass shape which during the Roman period appears in all parts of the empire from the 1st century until the late Roman period (Fig. 14.6b).

Finally, all of the window-glass fragments are of the cast variety, that is the variety of variable thickness with one glossy side and one matt. The upper side and the edges and corners often show signs of tool-marks where the cast pane has been manipulated and sagged while still viscous into the required size. Although this assemblage has not been fully quantified, it is evident from the number of fragments alone that the survival of window glass has predominated over that of vessel-glass fragments. It may be that, as building material, the final deposition of the window glass differed from that of the vessel glass. The greenish colourless and natural green metals used indicates that at least two panes are represented here.

To conclude, this very fragmentary assemblage contains a small cross-section of the vessel types which were in circulation during the second half of the 2nd and early 3rd centuries. Both utilitarian vessels (bottles) and tablewares are represented, but in such small numbers as to suggest that the supply of glass to this site can never have been great. The presence of two colours of window glass offers a logical interpretation — namely that at least two windows at the Grove were glazed.

Animal bone

by O. Bedwin

A total of 396 fragments of bone and teeth were recovered; 989 fragments were not identified. This material came from 112 contexts dating from the Late Iron Age through the Roman period. There was also a handful of modern contexts (e.g. mole drain fills) in which the bone was almost certainly residual.

The 396 fragments were classified as follows:-

Bos 273 (68.9%); Ovis 73 (18.4%); Equus 24 (6.1%); Sus 14 (3.5); Canis 5 (1.3%); Gallus 3 (0.7%); Avis 3 (0.7%); Cervus Elaphus 1 (0.3%) The bone and teeth were in a highly fragmented state, and most of the material was worn. The changes in site layout, through phases I to III, and the subsequent robbing-out of the buildings of phase III, imply considerable disturbance. Inevitably much of the bone assemblage is residual, and this is reflected in its worn condition. This, coupled with the absence of any large, closely-dated groups, means that no general conclusions can be drawn about changes in diet or economy through time.

Marine shell

A surprisingly small quantity of marine shell was recovered from the site (829 complete oyster valves and 479 fragments; 9 whelk, 3 cockle shells and 1 snail shell). Nearly all were from 3rd-century contexts or accompanying the residual 3rd-century pottery in the robber trenches. There was no shell from the Late Iron Age contexts.

Around 40% of the oyster shell from the site came from ditch fills of Enclosure III and ditch 78. The only other large assemblage of shell (257 valves and 203 fragments) was from the fill of pit 153 which cut the western terminal of ditch 78.

A small quantity of shell was recovered from the fills of feature 120 (59 valves and 22 fragments), which constitutes the entire later 3rd-century assemblage.

Discussion

The Late Iron Age and earlier Roman phases of the site are interpreted as being of an agricultural nature, with an increase in the amount of domestic activity represented by the pottery assemblages in the ditches of Enclosure III and the pits during the 3rd century. Subsequent stripping of top-soil over the rest of the field revealed no archaeological features or surface finds to the north or west of the site limits. It must therefore be assumed that the main focus of the activity, probably a farmstead, lay to either the south or east of the site, closer to the stream being the most likely possibility. What seems to be indicated is a period of farming during the Late Iron Age, followed by a lengthy hiatus lasting up to the 3rd century AD, which was followed by a second phase of activity during which Enclosure III and ditch 78 were established. It is possible that at this time the original construction of Building B took place. At the end of the 3rd century, Building A was constructed to the west of a recently refurbished Building B. Unfortunately the lack of dated contexts in Building B make the date of its foundation impossible to state with any certainty. Indeed, neither the date nor the character of the finds are very helpful in the interpretation of the site.

Both Buildings A and B were almost completely robbed of their foundations, but sufficient material survived to demonstrate that these had consisted of tile and flint-rubble. The variation in the mortar found adhering to the tiles in the foundations of Building B suggest that these were reused from another building, though their source is unknown. The town of *Caesaromagus* is the closest known possible source for this tile, but is over five kilometres away, and perhaps a closer origin for this material should be sought. The Roman tile in the fabric of Boreham church may have come from the Bulls Lodge site, or may mark another building in the area, as yet unidentified. It is not possible, therefore, to speculate upon either where the reused tile was derived from, or where it was taken following the robbing of the Bulls Lodge structures.

The poor survival of Building B, and the fact that the portion of it exposed may be only a small part of the whole, means that interpretation is difficult. The presence of box tile in the robber trenches is, as has already been stated (Major, above), suggestive that a hypocaust may have been included in the structure. The quantity of building debris located in the fills of ditch 33 may indicate that Building B is originally earlier than Building A, and that the structure excavated is merely the last phase, the finds in 33 being representative of a refurbishment during the earlier 3rd century.

The distinctive plan of Building A allows at least two opinions with regard to its purpose to be offered.

Given the scale and arrangement of the rooms in Building A it is likely that a domestic, agricultural or industrial function can be discounted, and the lack of finds also argues in favour of this view. All the parallels for buildings which resemble Building A in any way appear to be official (representing government functions, either civil or military) or religious.

Below the Constantinian Aula Palatina at Trier lay the remains of two buildings which have been interpreted as phases of the residence of the Procurator of Belgica and the two Germanies (Wightman 1970). These show a marked similarity to Building A at Boreham. These structures consist of a hall with an apse at one end and a "fore-hall" (analogous with the two small eastern chambers at Boreham) at the other. The Aula Palatina which replaced them also follows the same basic plan, although on a far grander scale. Furthermore, the plans of some military *principia* which have apsidal shrines, for example that in the west compound at Corbridge, bear a resemblance to the Boreham structure.

Thus there is a clear tendency for official structures

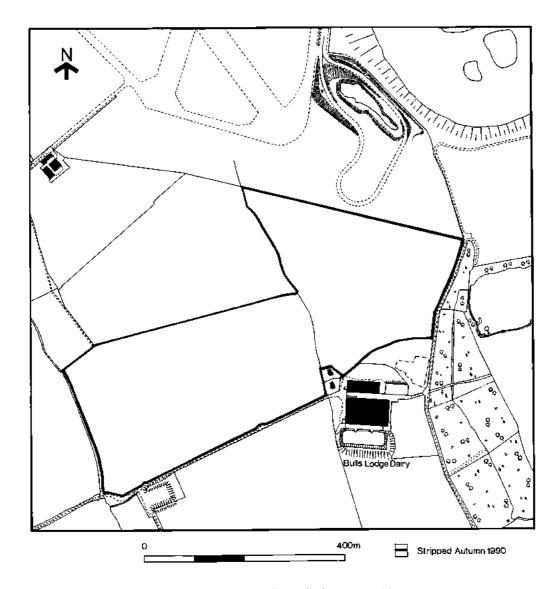


Fig. 15 Map showing limit of area stripped of topsoil, Autumn 1990.

to be laid out this way, particularly those which serve as some form of audience chamber or throne-room. An apse was also present in the Hadrianic building at Stonea in Cambridgeshire, which has been interpreted as the *principia* of an imperial estate (Potter 1989). The existence of one other such building is known from an inscription at Combe Down, in Avon (RIB 179).

On these grounds Ernest Black has suggested that the Boreham building is a *principia* similar to that at Stonea (Black pers. comm.).

From late in the reign of Claudius the procurators of imperial estates acquired judicial powers over the tenants and slaves of the estate (Tacitus, Annales XII. 60), and it is with regard to the exercise of these powers that the Boreham and Stonea buildings may need to be considered. The hall would serve as an audience chamber, with the procurator seated before the apse in which would probably stand a statue of the reigning emperor as a symbol of the imperial authority. In this case, the fore-hall at Stonea and the two eastern chambers at Boreham are best interpreted as serving as reception and waiting rooms.

An alternative interpretation offered by Dr. Warwick Rodwell is that of a church (Rodwell pers. comm.). The limited pottery evidence does not preclude a date subsequent to the Edict of Milan (313 AD), and the area of the nave conforms to Thomas' average congregational area for Romano-British churches (Thomas 1980).

The plan of the building was clearly laid out from the start with aisles divided from the nave by arcades. The arcades were certainly never built as outside walls, having foundations far too slight for this. Thus a developed basilican plan was present from the outset, which while quite normal for an official building, is less usual for a church of this date, which would be more likely to start as a simple apsidal cell and have aisles added later and its old walls pierced to create arcades. Therefore, this interpretation can probably be discounted, especially in view of the fact that no finds of a votive or sacerdotal nature were recovered from anywhere on the site.

Therefore a secular interpretation for the building seems most likely to be correct, and that of a *principia*

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the most attractive. Building B might be interpreted as an ancillary structure or even a residence. The Stonea example was a similar distance from timber domestic and agricultural buildings and so the proximity of other structures to the *principia* at Boreham continues to fit the pattern of this parallel.

Other buildings with apses of comparable size have been identified at Green Lane, Wanborough, Surrey (O'Connell 1984) and Rough Grounds Farm, Lechlade, Gloucestershire (Allen unpublished). At Rough Grounds Farm the Phase I Roman apse measured c. 7m across the chord, and that of Phase II, c. 12.5m. The function of neither of these structures is known, but the Lechlade example may have been domestic or agricultural. At some point, probably after the withdrawal of Roman authority, the building lost its established function and the partition was added across the chord of the apse. This still left a suite of large rooms, probably too large for domestic use and unsuitable for agricultural purposes. The date of the demolition and robbing is unknown, but the reusable material may well be among that to be seen in the walls of Boreham parish church.

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Roman Braintree: excavations 1984-90

by R. Havis

This report presents the results of eight excavations carried out between 1984 and 1990 to investigate the Roman town of Braintree.

The main conclusions are that the previously accepted model of town development and of the road network requires considerable revision. In particular, it has been possible to identify a group of minor roads within the town, suggesting a largely nucleated settlement, and an area within the town specifically involved with iron working.

A remarkable find was that of a copper-alloy horseand-rider of probable third- or fourth-century date.

Introduction

Braintree was one of the Roman small towns of Essex (Fig. 1). It was situated on the main east-west route of Stane Street, located on the ridge between the two rivers Blackwater and Brain. Many finds of Roman material have been made over the last two centuries, and these, in the absence of any signs of town defences, have largely served to define the limits of the town.

The development of Braintree was considered in detail by Drury (1976). Using evidence from an area excavation at 51-57 Rayne Road (Fig. 2), observations from other minor excavations or watching briefs, plus the first comprehensive gazetteer of the many Roman finds made over the years, he was able to suggest a model for the layout of the Roman town and its development. Its main points were as follows:-

- i) the Roman town developed adjacent to a complicated junction of seven roads (Drury 1976, 124; figs 2, 3, 4).
- ii) the morphology of the town can best be described as "ribbon-development" along some (but not all) of the roads, with timber houses fronting more or less directly onto the roads.
- iii) the earlier settlement (first century A.D.) was along the line of London Road/High Street (Fig. 2), and subsequently (second century A.D.) spread up the hill to the north-east. Also during the second century A.D., the Rayne Road area appears to have been built up. The town appears to have been largely abandoned by the end of the fourth century A.D.

Since the publication of Drury's report in 1976, much of the centre of modern Braintree has been re-developed. Considerable areas of the Roman town have been investigated prior to redevelopment, and this report brings together the results from eight excavations carried out between 1984 and 1990. Six of these were in what is known as the George Yard development; the other two (Mount House and Gypsy Corner) were small-scale operations to examine the line of different Roman roads.

Before presenting the evidence from these eight excavations, something needs to be said about the way in which rescue archaeology was carried out in Braintree during the 1980s. With the construction of Pierrefitte Way and the development of the George Yard area, this decade represented the final opportunity for large-scale rescue excavations within the Roman town. Three organisations were involved:-

- i) Brain Valley Archaeological Society, working under its then field director, John Hope. Several trenches were excavated over a number of years, especially along the line of Pierrefitte Way (Fig. 2), using the Society's own funds.
- ii) Braintree District Council, operating a large Community Programme scheme, funded by the Manpower Services Commission. Excavations were initially directed by John Bakewell, later by Martin Smoothy. This organisation carried out the bulk of the work on the George Yard sites, and also undertook a substantial area excavation at the rear of College House, London Road (Fig. 2). Excavations came to an abrupt end in September 1988, with the demise of the M.S.C.
- iii) Essex County Council Archaeology Section, operating a programme of selective excavations focussed either on the putative oppidum (with English Heritage funding), or specific developer-funded projects elsewhere in the town.

In fact, the final George Yard site (the Methodist Church, below) was excavated in 1989 by ECC, with developer funding, under the direction of Martin Smoothy. Following his departure to British Gas, the post-excavation work on the Methodist Church site, plus the five others excavated by BDC in the George Yard development, was undertaken by ECC under the direction of the author with grant-aid from English Heritage. (N.B. Full details of the limited medieval and post-medieval material can be found in the archive.) BVAS and BDC intend to publish the results ROMAN BRAINTREE



Fig. 1 Location plan of Braintree. (Area D shown in Fig. 29. Area E shown in Fig. 2.)

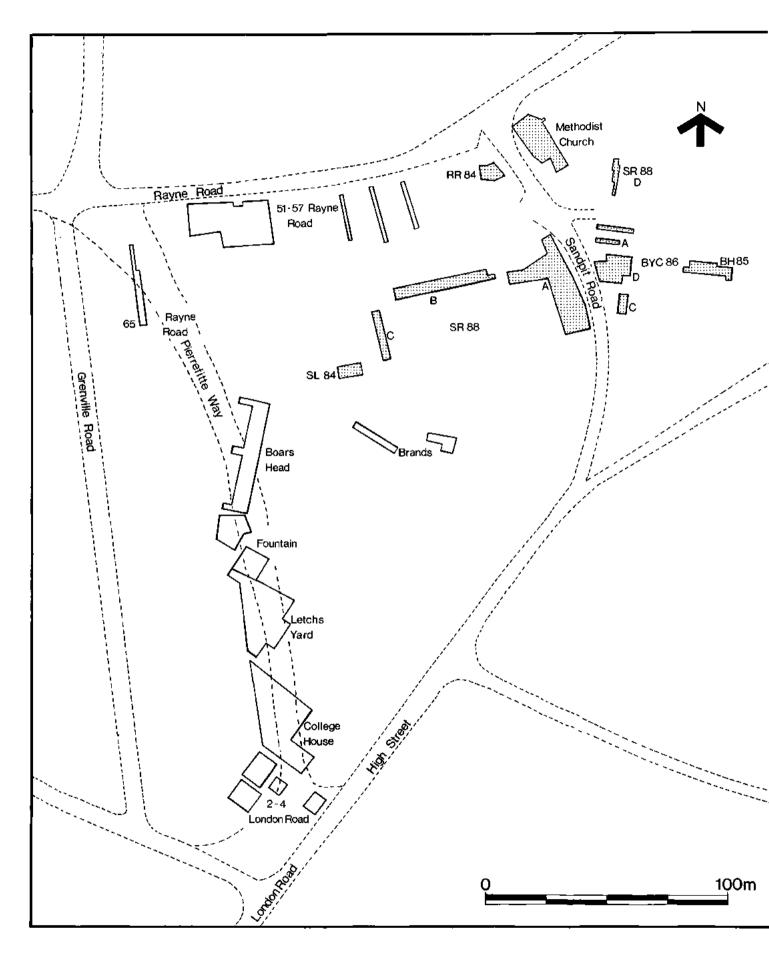


Fig. 2 Excavated sites within the centre of Braintree (the stippled areas represent those sites discussed in this report).

of their work separately.

It is appropriate also to say something of the way in which the content of this report has been decided. The excavations described here produced an abundance of finds from a large number of features. However, only certain classes of features survived, i.e. pits/wells, ditches/gullies, post holes and small patches of cobbling. There was virtually no surviving evidence of structures (except for the Bank Site, BH85), and little worthwhile stratigraphy (i.e. sequences of floor levels and buildings, occupation/demolition layers) of the sort which has enabled a very precise understanding of the development of Roman towns like Colchester or Chelmsford. Thus, it has been possible to assess the development of Roman Braintree only by the dating of backfilled features: this may inevitably be very different from when they were opened up, particularly in the case of roadside ditches, which may have been cleared out several times. This means that our dating framework for the growth of Braintree is a rather coarse one, and is compounded by the problem of residuality.

In summary, the excavated evidence, although abundant, is essentially "low-grade". In presenting this evidence, therefore, a policy of rigorous, though explicit, selection has been necessary, especially with regard to the pottery and bone. Although plans of most of the trenches are published, only a small, but representative, sample of sections are given (Fig. 8).

The excavations

The six George Yard excavation sites (Fig. 3) A single phasing system has been used for all these sites. Eight phases are identified, as follows:

VIII N	ineteenth	and	twentieth	century
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- VII Post-medieval
- VI Medieval
- V 350 AD-450 AD
- IV 250 AD-350 AD
- III 150 AD-250 AD
- II 50 AD-150 AD
- 1 50 BC-50 AD

Where more accurate dates were possible, these phases have been sub-divided. Each site will be described in phase sequence beginning with the earliest phase.

Rayne Road 1984 (RR84) (Fig. 3)

The intention was to confirm the position of the Roman road (Stane Street) as suggested by Drury (1976). An area of c. 60 sq. m was stripped across the line of the road (Fig. 3). Part of the trench contained the remains of a Victorian cellar, resulting in the destruction of all other deposits. The rest of the trench was filled by a single layer (16) which seemed to be

consistent with the infilling of a pond which was shown on early Ordnance Survey maps. These deposits were all of nineteenth- or twentieth-century date, and were 1.0 to 1.5 metres in depth. Thus any evidence of a Roman Road would have been removed.

Sandpit Road 1984 (SL 84)

An area of 50 sq. m was stripped in the south-west corner of the Sandpit Road car park (Fig. 3), to assess the archaeological potential of an area away from the road frontages. The main features on this site were two ditches (3, running north-west by south-east and 4 running north-east by south-west) initially thought to be contemporary. The pottery dates the backfilling of feature 4 to the second to mid third centuries. Although feature 3 contained several Roman sherds, these were all very abraded. Two medieval sherds were also found which indicate a backfilling date between the thirteenth and sixteenth century. It is impossible to state categorically that these ditches are of different dates but it seems probable. Both ditches are likely to represent field or property boundaries.

Bank Site 1985 (BH85)

This trench, c. 76 sq. m in extent, was entirely handexcavated in the garden behind the National Westminster Bank. Roman, medieval and post-medieval features were found.

Phase III

Evidence for Roman occupation was confined to the late second through to the early third century.

Interpretation of the scattered and, in some cases, ill-defined features in Figure 4 is problematical. The gully 43 (3.00 x 0.30m, by 0.15m depth) does appear to be a post-in-slot trench, turning south as it disappears beneath the section, and may tentatively be interpreted as a fence line or as part of a roofed structure.

Similarly, two sets of roughly parallel post holes (55, 171, 42, and 65, 63, 98) may indicate fence lines, one set perhaps replacing the other.

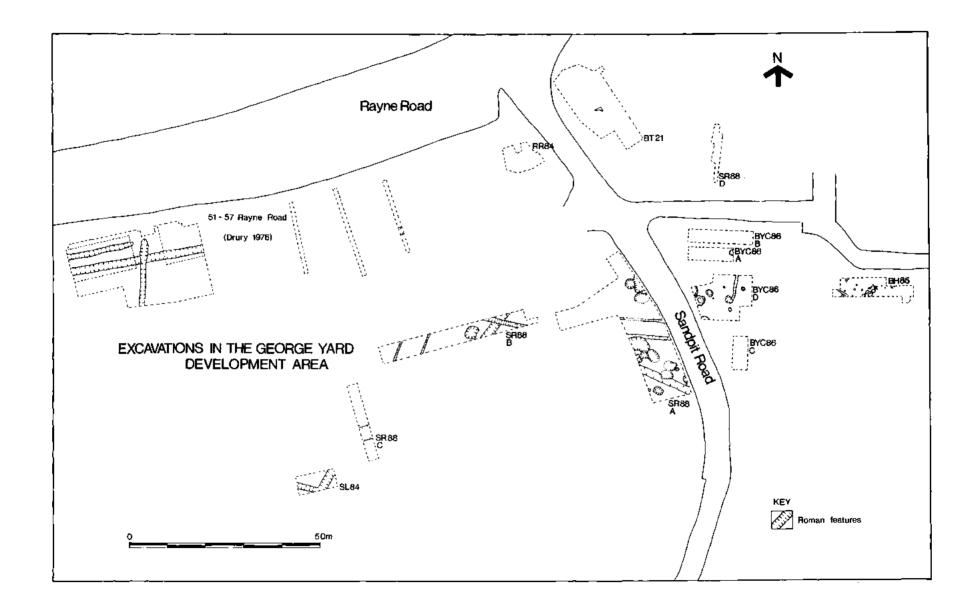
(For the record, this rather limited rationalisation of Roman features within the trench supersedes the more ambitious claims of timber-framed buildings made in the interim report [Smoothy 1988].)

Medieval

A single medieval cess pit (87) was excavated at the eastern end of the trench (Fig. 4). It had been extensively damaged by later post-medieval features.

Post-medieval

A concentration of post-medieval features were present towards the eastern end of the trench (Fig. 4). A single north-south ditch (148) probably represented a property boundary. A cess pit (44) was excavated, cutting through the medieval cess pit (87), which was also cut by several rubbish pits. The position of the



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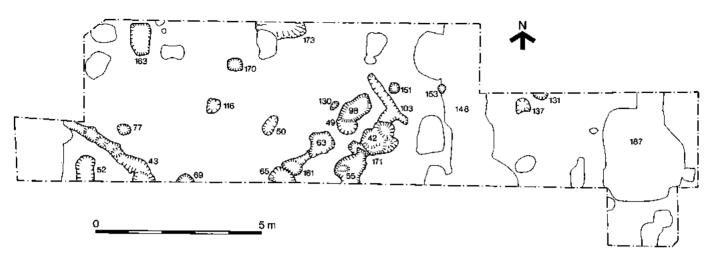


Fig. 4 Bank site (BH85), all features planned; medieval and post-medieval only in outline.

post-medieval features suggest that they were in the gardens or backyards, relating to properties fronting the main roads of Sandpit Road and Rayne Road.

Braintree Youth Club 1986 (BYC 86)

Four trenches were excavated (Fig. 3) totalling 290 sq. m in the area to the east of Sandpit Road beneath the old Youth Club. These were recorded as Trenches A-D and will be described in order. Trenches A-C contained virtually no Roman material, so only Trench D is shown in detailed plan (Fig. 5).

Trench A

This rectangular trench (Fig. 3) contained a single Roman pit (119), 1.70 by 1.35m with a depth of 0.25m, dating to the mid third to early fourth century. There was much post-medieval disturbance in the form of pits and post holes.

Trench B

Many of the features in a second rectangular trench had been extensively damaged by Victorian activity including a cellar and sewer-pipe trench. A single Roman feature (103) was partially beneath the section and cut within the trench by the sewer. Finds suggest a date in the late fourth century, but interpretation of such a truncated feature is impossible.

Some medieval pottery was found in a pit (129) which had been extensively damaged by later features. The remainder of the features were post-medieval and Victorian in date.

Trench C

This was the most southerly of the four trenches, and was found to contain only post-medieval disturbance.

Trench D (Fig. 5)

Trench D can be divided up into five phases: (i.e. III

to VII in the system set out at the beginning of this section).

Phase III

The earliest feature (179) consisted of a pit (1.35 x 0.90m) in the centre of the trench (Fig. 5) dating to the mid second to third centuries. The large quantity of pottery and animal bone present suggest its final use as a rubbish pit.

Phase IV

This phase (late third and early fourth century) was characterised by rubbish pits spread generally across the site. Two of the features (184, 302), both approximately 2m in diameter and 0.80m in depth, had been partially excavated in 1984 (Bedwin 1985), and were completely excavated in 1986. Both features contained a large quantity of residual pottery. A pit, 2m by 1m with a depth of 2m, (298, Fig. 8, no 2), cut by a later well (see below), contained a large quantity of domestic rubbish. The pottery forming the backfilling of this pit was accurately dated to the late third century.

Phase V

On the western side of the trench a large pit (187), $3.20 \text{m} \times 2.40 \text{m}$ with a depth of 2.20m, was found to contain a well cut into its base (Fig. 5). Although no evidence survived it was suggested (Smoothy pers. comm.) that staining on the sides of this well represented the remains of a timber lining. The well cut a pit (298) which contained fills producing mid third- to late fourth-century material.

The top fills of pit 187 (Fig. 8, no. 1) dated to the late fourth century. These represent levelling phases due to the probable sinkage of earlier fills within the pit, which had then been filled with domestic rubbish. The presence of domestic rubbish here suggests that occupation continued in Braintree at least into the late fourth century.

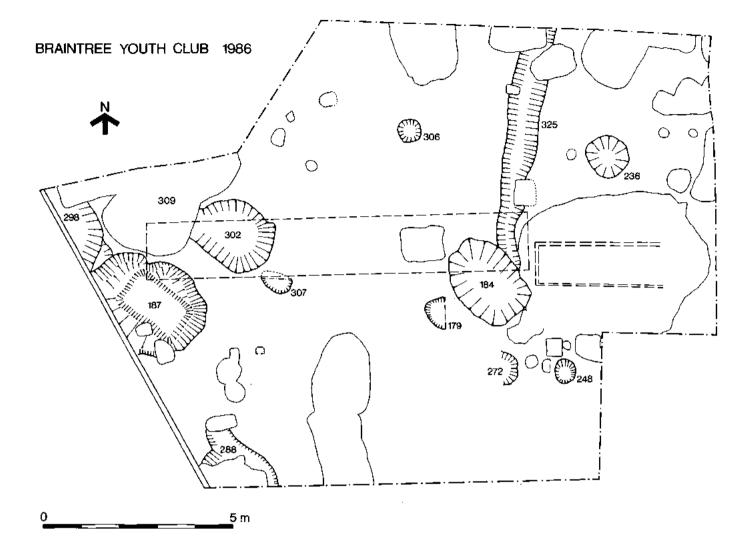


Fig. 5 Braintree Youth Club, Trench D. Dashed area in centre of site represents trench excavated by O. Bedwin in 1984. All features planned; medieval and post-medieval only in outline.

Phase VI

A single post hole (337) of medieval date was excavated.

Phase VII

The post-medieval period was represented by a series of pits and post holes distributed across the trench (Fig. 5). No logical sequence was formed by these features. They probably represent rubbish pits or post holes dug in the backyards or gardens of the Victorian houses known to have fronted Sandpit Road.

A cess pit (309) in the north-western corner of the trench served the structures on Sandpit Road.

Phase VIII

Several Victorian walls were visible during the initial phase of excavation. On the eastern side of the trench, a Second World War air-raid shelter was found, plus several modern pits.

Sandpit Road 1988 (SR88)

A series of four trenches were excavated covering 750 sq. m. Trenches A, B, and C were positioned to assess and define the density of occupation within the Sandpit Road car-park area (Fig. 3). Trench D to the north-east of the other three, on the western side of Sandpit Road was excavated to define the location of the Roman road (Stane Street). These trenches will be discussed in alphabetical order.

Trench A

Phase II

A large (4m x 3m and 0.30 in depth) pit (533) contained finds of an early second-century date. No evidence was found to suggest a use for this feature, but one possibility is that it represents a gravel quarry.

Phase III

It was possible from some of the features dating to Phase III to provide more accurate dating (IIIa), while other features produced pottery extending over two phases (Phase IIIb-IV). Only 510 (below) fitted into the general Phase III date range.

A pit, 2.55m deep (510), situated on the eastern edge of the trench (Fig. 6) was interpreted as a well (Fig. 8, no. 3), indicating occupation in the vicinity. The size and shape of this well was similar to that of 187 on BYC 86 (see above).

Phase IIIa (150-200)

A group of three pits (546, 575, 577), to the north of ditch 521 (Fig. 6), ranged in depth from 0.16 to 0.70m, and represent a series of rubbish pits. All contained large quantities of domestic rubbish.

Phase IIIb-IV (225-350)

This sub-phase was mainly confined to the southern area of the trench consisting of groups of pits (519, 526, 527, 528, 529, Fig. 6). Several of the pits were inter-cutting, forming a stratigraphic sequence from the mid-third to mid-fourth century (Fig. 8, no 7). The finds suggest that these pits had been used for the disposal of domestic rubbish. A ditch (521) at the southern end of the trench was also of late third/early fourth-century date, and probably represents the remains of a property or field boundary. Ditch 521, containing a single fill (96), cut through the top layers of a late second-century pit (570, Fig. 8, no. 9). It was cut by a pit (524) containing a quantity of diagnostic fourth-century pottery. One of the most interesting objects to be found in the George Yard development was a copper-alloy horse-and-rider (Fig. 21) found in the top fill of pit 527 (Fig. 6). At the southern end of the trench, a deep pit (534) contained substantial quantities of pottery dating to 250-310. The feature was not fully excavated, beyond a depth of 1.70m, for safety reasons.

Several features, although of a Roman date, could not be assigned to any phase. Two parallel gullies (530, 537), 1.04m and 0.60m in width respectively, cutting diagonally across the trench (Fig. 6), formed the remains of roadside ditches for a minor road. These were traced for a distance of 5m before being disturbed by later features. No evidence of a cobbled surface was found between them, however, this may well be due to the whole area having been levelled for the construction of the car park.

Phase VII

Many post-medieval features were found within this trench causing extensive damage to earlier phases. The features consisted entirely of pits and post holes spread over the whole area. No definite pattern could be distinguished and it can only be assumed that these features would have related to structures fronting on to Sandpit Road.

Phase VIII

The site had been occupied by a series of cottages in the Victorian period with the remains of several walls and a cellar (513) still surviving. Several modern features were excavated including a sewer pipe and two pits.

Trench B (Figs 3 & 7)

Phase I

An irregularly-shaped pit (591), 2.30m in length by 0.90m in width, produced pottery of either a late Iron Age or early first-century date.

Phase II-III

Two parallel gullies (592, 593), both c. 0.45m wide, were traced for a distance of 5m at the western end of the trench (Fig. 7) formed the side ditches of a Roman road. An area of cobbling was found between them, although in parts it had been extensively damaged by the construction of the car park. The finds from 592 showed a second-century date with nothing datable coming from 593.

A pit (588), dug originally in the second century, remained in use into the late fourth century. The lower fills contained few finds in contrast to those in the top fills (Fig. 8, no 11).

Phase IV

The top fills of pit 588 contained a large amount of pottery and bone indicating it had been used as a rubbish pit.

Other evidence of late Roman occupation consisted of a ditch (585) forming a probable property boundary.

Phase V

A single ditch (587, Fig. 8, no 10), 2.4m wide, cutting 585 (Fig. 7) produced late fourth-century finds. The ditch produced a large quantity of datable material including coins and pottery. One of the coins was of Gratian dating to 367-385 AD. The most probable interpretation is that the ditch marked a property boundary.

Phase VII

Compared to the other sites excavated, the postmedieval evidence was very limited. This consisted of a single ditch (586) representing a property boundary (Fig. 7).

Trench C

A trench running north-south in the south-western corner of the car park (Fig. 3) was found to contain only two features.

Phase II-IV

The east-west ditch (579), 1m in depth, contained finds ranging from the second to the third century. This again probably represents a field or property boundary.

Unknown date

The second feature (578) was recorded as a gully. There were no finds, making it impossible to date.

Trench D

A machine trench was excavated to determine the

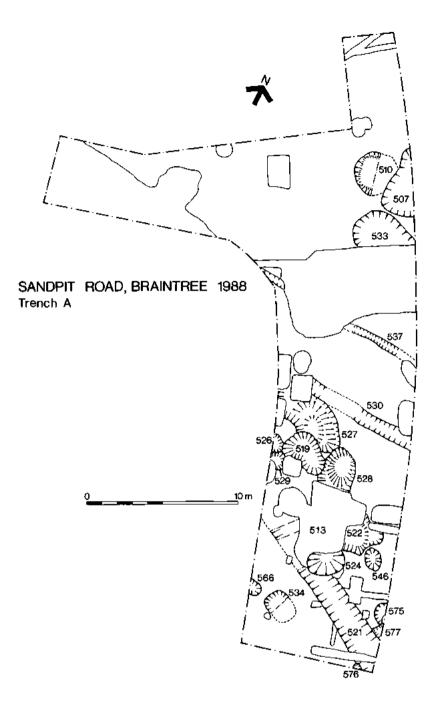


Fig. 6 Sandpit Road, Trench A. All features planned; medieval and post-medieval only in outline.

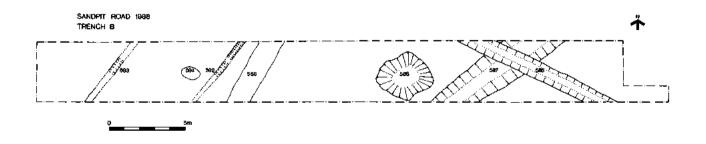


Fig. 7 Sandpit Road, Trench B. All features planned; post-medieval only in outline.

position of the Roman road situated to the south of present-day Rayne Road (Fig. 3). No evidence of any road surface was present. There was a shallow eastwest ditch (c. 0.18m deep), but no finds were recovered, although a considerable length was investigated. The lack of finds is sufficiently at odds with other Roman ditches of comparable size that a pre-historic date is far more likely.

Braintree Methodist Church (BT21 1989)

The purpose of this excavation was to confirm the location of the Roman road (Stane Street) and to assess the density of occupation on the road frontage. An area of 220 sq. m was stripped by machine (Fig. 3), after demolition of the church to ground level.

Phase IV

The only evidence of Roman occupation consisted of a group of four features in the centre of the site. These features were very shallow as they had been extensively truncated; however they contained material of mid third- to fourth-century date.

Phase VII

All other features excavated on the site were postmedieval. The largest of these was substantial ditch (502), c. 1.70m in depth, running north-east by southwest across the site. It almost certainly represents a large ditch although the feature has not been found on any other sites.

Other excavations

Mount House, Braintree

Excavations in the garden of Mount House in 1984 (Bedwin 1984/5) uncovered the remains of a Roman cobbled surface as well as several other features. Further trenches were excavated in 1990, in advance of the building of a police station, but these produced only post-medieval and modern disturbance.

Gypsy Corner, Braintree (TL 746 239)

This site, located on the outskirts of Braintree (Fig. 1) was excavated in advance of the construction of a new school, to examine one of Drury's proposed road routes (Drury 1976 route III). A trench, 2m wide by 120m, was stripped of top-soil, running north-south across the field at right angles to the proposed route. No features were visible in the undisturbed sub-soil. Several drainage trenches dug by contractors were examined but again no evidence of the road was found.

Watching brief

Rayne Road

During the resurfacing and structural work on Rayne Road between Sandpit Road and Bank Street no evidence was visible of a Roman road. Some postmedieval disturbance was visible, although this would not have totally destroyed the Roman road.

Specialist reports

The coins

by S. Wallis

Fifty coins were recovered from four of the sites (SL84, BH85, BYC 86 and SR88). Of these, 38 were Roman, 1 was medieval, and the remaining 11 were post-medieval.

Only two Roman coins dated from before the late third century, one of these being a silver *denarius* of Marcus Aurelius (AD 172-3). The majority of the remainder were very worn mid and later fourthcentury issues. Worthy of mention was a coin of Constantius II from Thessalonika (RIC 185), minted in the fourth officina.

Though fourth-century coinage predominates on most Roman sites in Britain, the overwhelming proportion from the excavations described in this report indicates activity in the area was largely or wholly limited to that period.

The Roman pottery

by Katherine Horsley with B. Dickinson, K. Hartley, W.J. Rodwell and D.F. Williams

Introduction

This report is based on the Roman evidence from only five of the eight excavated sites. However, the pottery from three of them (SL84, BH85 and BT21) was only of interest as dating evidence. The two sites which justified detailed study were Sandpit Road and Braintree Youth Club (sites SR88 and BYC86, respectively) from which a considerable quantity of material (54,385g/3996 sherds) was recovered. Much was very abraded and highly fragmentary as might be expected from the backyard nature of many of the features. Most of the pottery found was of a late third- to fourth-century date.

Three basic aims guided the study of Roman pottery from sites SR88 and BYC86. These were:

- (i) to provide a dating framework;
- (ii) for comparisons with other areas of Roman Braintree, and with the Roman towns of Great Dunmow, Chelmsford and Cotchester;
- (iii) to identify any pottery of intrinsic interest.

Spot-dating was carried out using the system developed by the Chelmsford Archaeological Trust for the study of Roman pottery fabric and forms in Essex (Going 1987). The results are incorporated into the site reports (above) and provide a basis for the selection of material for (ii) and (iii).

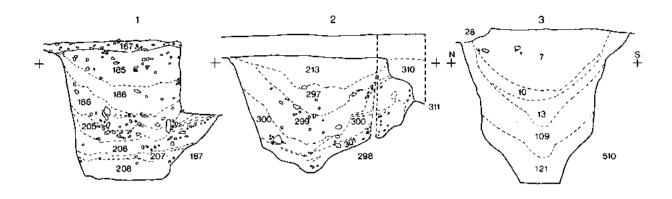
The 1970's excavations on Rayne Road (Drury 1977, Site E) examined stratified archaeological deposits from which a large quantity of Roman pottery was published, including eight phase groups. In contrast, the excavations in the George Yard area showed little stratigraphy suggesting a lower density of occupation especially when compared to sites as yet unpublished (Fig. 2; sites along the Pierrefitte Road), further to the west which indicate a longer period of occupation. Nevertheless some worthwhile groups were recovered and are published here.

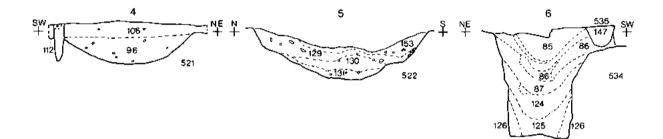
Selected groups

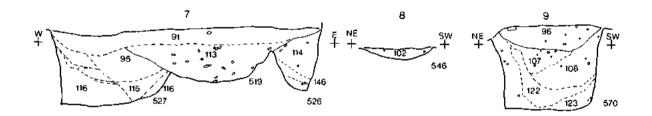
Of the Roman pottery from sites SR88 and BYC86, only eight groups merit detailed publication: six late third- to fourth-century pits (2, 3, 6, 7 and 8); a mid fourth-century pit (4); and a late fourth-century ditch (5).

These particular contexts best reflect the range and composition of the assemblages from these essentially late Roman sites. In the accounts below, fabrics and forms refer to the published Chelmsford type series. Table 1 lists the fabrics; Table 2 the contexts of the selected groups; Table 3 presents the results of the quantification, expressed as either a percentage of each group by EVE or by number and weight (in grammes) of sherds.

Detailed comment and comparison are contained in the discussion section.







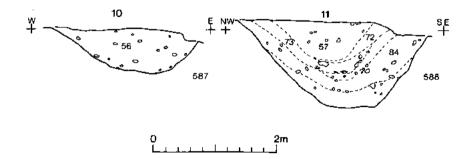


Fig. 8 BYC86 and SR88; selected sections.

Table 1 The fabrics.

- 1. Colchester colour-coat
- 2. Nene Valley colour-coat
- 4. Hadham oxidised red wares
- 7. Other colour-coats
- 8. Central Gaulish Rhenish ware
- 9. East Gaulish Rhenish ware
- 12. Local mica-dusted wares
- 14. Hadham white-slipped wares
- 15. Miscellaneous white- or cream-slipped sandy wares
- 16. Miscellaneous fine white- or cream-slipped red-buff wares
- 21. Miscellaneous oxidised red wares
- 24. Nene Valley 'self-coloured' wares
- 25. Oxfordshire white wares
- 27. Colchester buff wares
- 31. Unspecified buff wares
- 32. ?North Kent grey wares
- 34. Fine romanising wares
- 35. ?Hadham black-surfaced wares
- 36. Hadham grey wares
- 39. Fine grey wares
- 40. Black-burnished 1
- 41. Black-burnished 2
- 44. Storage jar fabrics
- 45. Romanising grey wares
- 47. Sandy grey wares
- 51. Late shell-tempered ware
- 53. Grog-tempered wares
- 55. South Spanish amphorae
- 56. South Gaulish amphorae
- 58. Amphora fabric of unknown origin
- 60. Samian

Table 2 The selected groups.

Group	Context	Context description	Date	Ceramic* Phase
1	SR88 F534	Well	AD 250-310	6
2	SR88 F524	Pit	AD 290-330	6
3	SR88 F527	Pit	AD 290-330	6
4	SR88 F528	Pit	AD 310-360	7
5	SR88 F587	Ditch	AD 385-	8
6	BYC86 F184	Pit	AD 260-310	6
7	BYC86 F187	Pit	AD 310-370	7
8	BYC86 F298	Pit	AD 260-320	6

* Chelmsford Ceramic Phases (Going 1987, chapter XII)

[See Table 3 below, for quantification]

Group 1 (SR88 F534)

This group contained a fragment of a mortarium in Oxfordshire white ware (Chelmsford fabric 25); a new jar form in Hadham blackburnished ware (Chelmsford fabric 35); and a shallow, plainrimmed dish (B1/3 type) in sandy grey fabric (Chelmsford fabric 47); all date from the mid third century.

(Fig. 9)

1 47 (B1/3.1); 2 47 (G5/5.1); 3 35 (G-new form); 4 47 (G9 type-late form); 5 47 (G24); 6 45 (G24/2.1); 7 47 (G25/1.1); 8 44 (G44 type); 9 44 (G44 type).

Group 2 (SR88 F524)

A late Roman date for this pit is indicated by a fully flange-rimmed dish (B6 type) in Black-burnished 2 fabric and another in a sandy grey fabric (Chelmsford fabric 47). This date is confirmed by the presence of a fourth-century decorated beaker (H41 type) in Nene Valley colour-coat (cf. Howe *et al.* 1980, fig. 5.49) and a "castor box" lid in the same fabric.

(Fig. 9)

10 35 (B1/2.1); 11 40 (B1/5); 12 39 (B1/5.1); 13 45 (B3/2.1); 14 45 (B6/1); 15 47 (B6/2.1); 16 47 (B6 variant); 17 27 (D11/1.1); 18 47 (G24/1.2); 19 47 (G24); 20 47 (G24); 21 47 (G24); 22 47 (G24); 23 36 (H15/1.1); 24 2 (H33/2.1); 25 4 (beaker rim); 26 2 (H45-new form); 27 2 (K7/1.1); 28 47 (necked jar).

Group 3 (SR88 F527)

Amongst the coarse wares the presence of high-shouldered jars with everted rims (G9 type) and fully flange-rimmed dishes (B6 type) in Black-burnished 1 fabric suggest a post AD 280 date, which is supported by a fourth-century decorated beaker (H41 type) in Nene Valley colour-coat.

(Fig. 10)

29 40 (B1); 30 40 (B1); 31 47 (B1); 32 35 (B2/3); 33 47 (B3/2); 34 40 (B6/3.2); 35 41 (B6/2); 36 45 (B6/2); 37 47 (B6 variant); 138 45 (G9 type); 39 47 (G9/3); 40 47 (G24/1); 41 47 (G24/2.1); 42 47 (G24/1); 43 47 (G25/1.1); 44 2 (H41); 45 47 (R3).

Group 4 (SR88 F528)

This group contained a high-shouldered jar with an everted rim (G9 type) and a plain-rimmed shallow dish (B1 type) in Hadham blacksurfaced ware (Chelmsford fabric 35) providing an early-mid fourthcentury date range.

(Fig. 11)

46 35 (B1/2); 47 47 (B1/2.1); 48 47 (B3/2); 49 late black-surfaced ware (B3/2); 50 late black-surfaced ware (B3/2); 51 47 (B5/1); 52 47 (B6/3.2); 53 47 (B6); 54 47 (B6); 55 47 (B6); 56 39 (?C20); 57 47 (E3); 58 39 (bowl-jar form); 59 40 (G9/3); 60 47 (G24/1.1); 61 47 (G24/2.1); 62 47 (G24); 63 47 (G24); 64 44 (G44 type); 65 44 (G44 type); 66 44 (G44 type); 67 44 (G44 type); 68 47 (small jar with rilled shoulder and bead rim); 69 4 (J6/2.1)

Group 5 (SR88 F587)

One of the latest Roman features on this site, the fill contained late shell-tempered ware (Chelmsford fabric 51), occurring here in both the jar form (G27 type) and the less common dish form (B5 type). Also found was a bowl with a 'Romano-Saxon' motif of dimples and stars. The presence of a coin of Gratian (AD 367-385) confirmed a secure late fourth- to early fifth-century date for this group.

(Fig. 12)

70 47 (B1/3.1); 71 51 (B5/3.1); 72 MNO (D3/5); 73 47 (G24); 74 51 (G27/2.1); 75 47 (G40); 77 44 (G44 type); 78 44 (G44 type); 79 35 (Romano-Saxon bowl); 80 4 (jar rim).

Group 6 (BYC86 F184)

This group contained two dishes of the late third to early fourth century; one with a plain rim and slightly flaring sides (B3 type) and the other a plain rimless dish (B1 type) in Hadham black-surfaced ware (Chelmsford fabric 35).

(Fig. 12)

81 35 (B1); 82 47 (B1/4.2); 83 41 (B3/2.2); 84 47 (B3/2.2); 85 47 (B6); 86 47 (B6); 87 47 (G24); 88 47 (G24); 89 47 (G24/1.1); 90 47 (G24); 91 47 (necked jar); 92 47 (G26/1.1); 93 2 (H32/H33); 94 47 (H34); 95 47 (R3/4.1); 96 47 (jar with everted rim and wavy line decoration on shoulder).

Fabrics				Selected	groups			
	1	2	3	4	5	6	7	8
1	12;70.5	1;36.5	4;31.9	1;3.2			7;24.1	6.45
2	1;2	4.52	1.95	14;56.8		3.15	88;485.1	18;72.9
4	2;21.3	6.8	8;32	8.58		25;110.8	2.97	3;21
7	1;7.2	1;3.1	1;16					
8	•	-				1;2.4		3;2.9
9						14;23.8		
13								
14	1;9.35	1;5.2	1;8.1	6;51	3.73		3;9.2	
15	-	-		2;15.2		2;30		1;7.8
16	3;12			1;1.8			3;16.2	1;48
21	1;26	13;21.44		4;40.1	4;26.9	2;110.1	7;59.4	1;20.3
24	2	-					0.94	1;55.4
25	1;14		1;10.9					
27	1;4	1;177.6	7;35.7	1;17.2	2;13.1	3;21.5	11;236.8	4;66.8
31	4;47	1;3.6		1;3.5			4;15.7	1;2
32	5.28						1;3	1;5.3
34			1;4.8					
35	4.32	1;9.6		9;160.8	11.68	0.76	11.35	
36		3.74	2.93	1;4.3			2;5.9	
39	4;21.I	1.61	1;9	11;84.7	2;65.8	18;117.1	8.79	4;18.7
40	-	1.94	11.4	2;46.2		1;4.6		
41	9;8.24	3;48.2	4.56	3.78	2;12.1	5.17	3.86	12.57
44	33;1870	12;1288	44;2516	132;5692	19;828.3	28;709.2	140;5403.3	5.02
45	1.44	1.45			11;56.1	2.96	12.18	14.32
47	88.94	77.67	75.57	78.78	84.57	78.45	58.43	53.65
51					6;42.8		1.23	2;21
53					-			2;26.4
55		2;262.1		1;111.4			5;88.5	4;72.4
56		-		·		1;37.1	-	
57						-		1;92.3
58			1;45.8					•
60	4;48.1	2.23	11;32.3	9;46.8	4;10	9.47	1.16	4.30

Table 3 Quantification of the selected groups.

Group 7 (BYC86 F187)

Most of the diagnostic pottery contained within this pit can be dated to the fourth century, including a round-rimmed jar (G27 type) in late shell-tempered ware (Chelmsford fabric 51) and two bowls decorated with 'Romano-Saxon' motifs; one in Hadham black-surfaced ware (Chelmsford fabric 35) and another in a finer grey ware. This pit also contained a late fourth/early fifth-century coin.

(Fig. 13)

97 47 (B1/2); 98 35 (B2/1); 99 35 (B3/1); 100 47 (B3/2.2); 101 39 (B5/1.1); 102 40 (B6/3.1); 103 47 (B6/3); 104 47 (B6); 105 39 (C23); 106 24 (D14); 107 24 (D14/1); 108 4 (E6); 109 4 (new hemispherical bowl form); 110 35 (G9/3); 111 40 (G9/4); 112 45 (G9 type); 113 45 (G24/1.2); 114 47 (G24/1.2); 115 47 (G24/2.1); 116 51 (G27/2); 117 44 (G44 type); 118 44 (G47/1); 119 2 H32/1.1); 120 35 (Romano-Saxon bowl); 121 45 (?crucible).

Group 8 (BYC86 F298)

This pit contained a fragment of mortarium in Nene Valley 'selfcoloured' ware, dated from the late third to fourth century. This is confirmed by the presence of a round-rimmed jar (G27 type) in late shell-tempered ware (Chelmsford fabric 51). Also present were several long-lived dish forms (B1 and B3 types) in both a sandy grey fabric (Chelmsford fabric 47) and in Black-burnished 2 fabric.

(Fig. 14)

122 41 (B3/2); 123 47 (B6/3); 124 47 (B6/3); 125 31 (D11); 126 47 (G24); 127 47 (G24); 128 47 (G24); 129 47 (G24/1.1); 130 47 (G26/1.1); 131 51 (G27/2); 132 45 (G40/1.1); 133 44 (G40 type); 134 47 (H34); 135 45 (K form).

Pottery of intrinsic interest

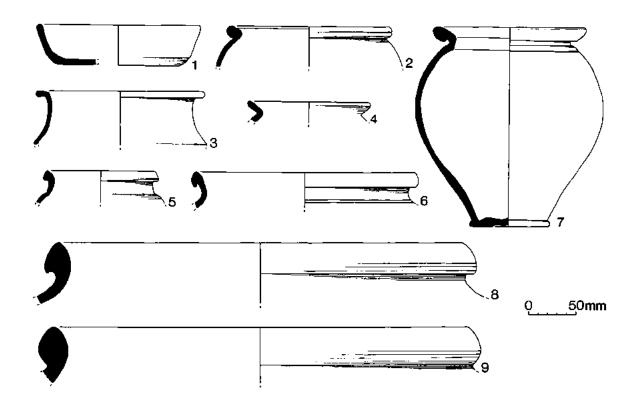
Under this heading are grouped four contributions:-

- (i) reports on the samian from sites BYC86 and SR88;
- (ii) a report on a stamped mortarium from site BH;
- (iii) descriptions of all fabrics new to the Chelmsford series (Going 1987, 3-11);
- (iv) a catalogue of all vessel forms new to the Chelmsford series (Going 1987, 13-54).

Samian ware

by W.J. Rodwell

BYC86 A very poor collection of small and abraded sherds. The vast majority is plainly residual and of no relevance to context dating.



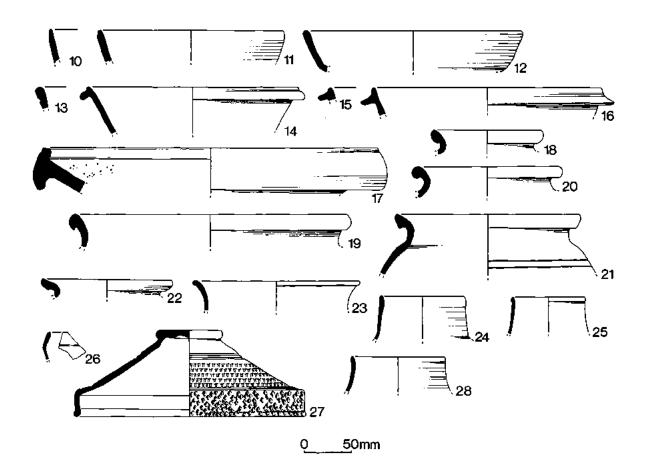


Fig. 9 Roman pottery Groups 1 and 2.

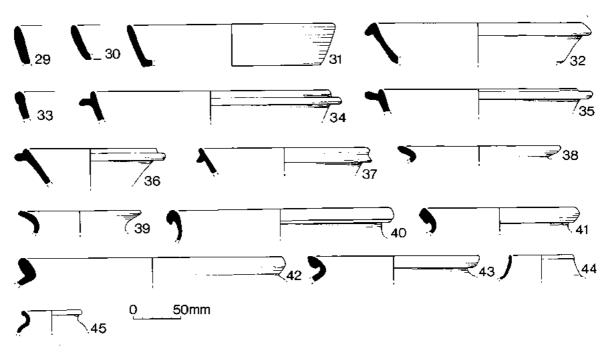


Fig. 10 Roman pottery Group 3.

(Decorated ware 137, potters' stamps 138, 140, and 141) SR88 A mixed collection, with many small and abraded pieces that are clearly residual and of no real interest. There is an interesting collection of Neronian to early Flavian pieces (mostly in amongst later material) that must relate to a substantial first-century occupation (probably all post-Boudicean could be military). Virtually nothing is Trajanic to Antonine, then comes quite a large assemblage of later Antonine forms (including a fair proportion of East Gaulish wares). (Decorated ware 136, potters' stamps 139, 142, and 143)

The decorated ware

Form 37. Central Gaulish. c. AD 160-195 (Fig. 15.136)

Three adjoining sherds of a small panelled bowl, with large beadrow divisions. The neat double-bordered ovolo, with a thin tongue and swollen tip, is Criciro's ovolo no. 2 (Stanfield and Simpson 1958, fig. 33); the characteristic overlapping of the impressions is also present. The vessel is, however, unmistakably in the style of Casurius of Lezoux.

The panels are arranged in groups of three, and contain, respectively, a single vine leaf, a bird in a double-bordered medallion, and a semi-nude figure. The bird is evidently a pigeon or a dove, 0.2239, which is recorded on the work of Casurius. The draped figure, with right arm extended, is a crude approximation to 0.324 (assumed to be Venus). The components of the Braintree vessel are all precisely matched in a signed bowl by Casurius, from Corbridge (Stanfield and Simpson 1958, pl. 132.9). The two vessels are not from the same mould since the panels are arranged in a different sequence. (SR88, context 101).

Form 37. East Gaulish. c. AD 170-200+ (Fig. 15.137)

Many sherds, including half the base, of a bowl; worn footring, but otherwise in good condition. The decorative zone appears to have been divided into only three panels (the dividing lines having lost leaf terminals), with freestyle arrangements in each, combining human and animal figures. The fabric and style are reminiscent of the Rheinzabern workshops, but the vessel is not confidently attributed to any of the well attested potters there. The distinctive ovolo has a double border, narrow central projection and a square-beaded tongue; it is generally similar to Ricken 1948, Taf. 261.3, although there the ovolo is decidedly more angular in form.

The leaf terminal and frequent use of a double-bordered arch as an unconnected motif are characteristics of Reginus, although the employment of rosettes as terminals to the arch is seen in work attributed to Augustinus (Ricken 1948, Taf. 148.5). The kneeling warrior with a shield over his head is 0.224, a figure used by many Rheinzabern potters. Likewise, there was widespread use of the two large animals, a bear (not illustrated by Oswald, but generally associated with the group represented by 0.1633) and a lion (only the hind legs and tail are represented here). (BYC86 context 183; context 211.)

The potters' stamps

by Brenda Dickinson (Fig. 15)

The potters' stamps are attributed with (a) or (b) after the pottery, thus:

- (a) Stamp attested at the pottery.
- (b) Stamps from other dies attested at the pottery.

Ligatured letters are underlined.

- 138. Form 15/17 or 18, stamped OFF[EICIS]: Felix i of La Graufesenque (a), Die 2b (Vanderhoeven 1975, no.284). Dating evidence for this stamp is sparse, but an example on form 24 suggests pre-Flavian use. This fits with the record for Felix in general. c. AD 45-65.
- 139. Form 32 etc., stamped [FIR]MAN[VS]: Firmanus of Rheinzabern, Die 5a (Ludowici 1927, p.215, a). Like many Rheinzabern potters Firmanus is not dated by good site evidence. His use of this stamp on forms 31 (Sa), 31R (Sb), 32 and 37 suggest a range in the late second or first half of the third century.
 140. Form 29. Riveted. Stamped)FLMACCA; Maccarus of La
- Graufesenque (a), Die 6a. The winding scroll in the lower zone includes a large almondshaped leaf (Hermet 1934, pl.9, 34).

There are not many stamps of Maccarus in Britain, and they tend to occur mainly at sites founded by Claudius. This particular stamp is common enough on the Continent, but this is only the second example recorded in Britain so far. The other, from

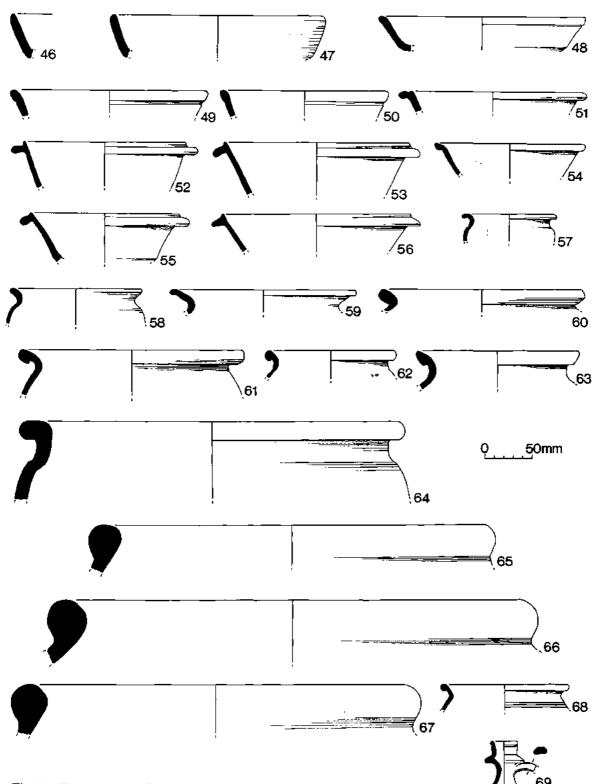


Fig. 11 Roman pottery Group 4.

Camulodunum (Hawkes and Huil 1947, p.198. 121) has a complete O. The Braintree bowl shows only the right side of the O, up against the beginning of the frame, and must have been stamped when the die was in an advanced state of wear. c. AD 45-55.

141. Form 33. Stamped [QV]INTIM: Quintus v of Lezoux (a). Die 5a (Hull 1958, p. 123, 24).

This stamp was used on some of the forms first made after c. AD 160, such as 31R, 79 and 79R.

It is widely distributed on Hadrian's wall and there are several examples from Pudding Pan Rock. c. AD 160-200.

142. Form 31. Stamped SATVRNIN: Saturninus ii of Lezoux (b). Die 11a. This is noted in the material from the Wroxeter forum destruction, while stamps from other dies occur in the late-Antonine samian off Pudding Pan Rock.

Saturninus ii's forms, mainly 31 and 31R, suggests that he was not at work before AD160 and may have continued to the end of the second century.

143. Form 31. Stamped TINTI[RIOM]: Tintirio of Lezoux (a).

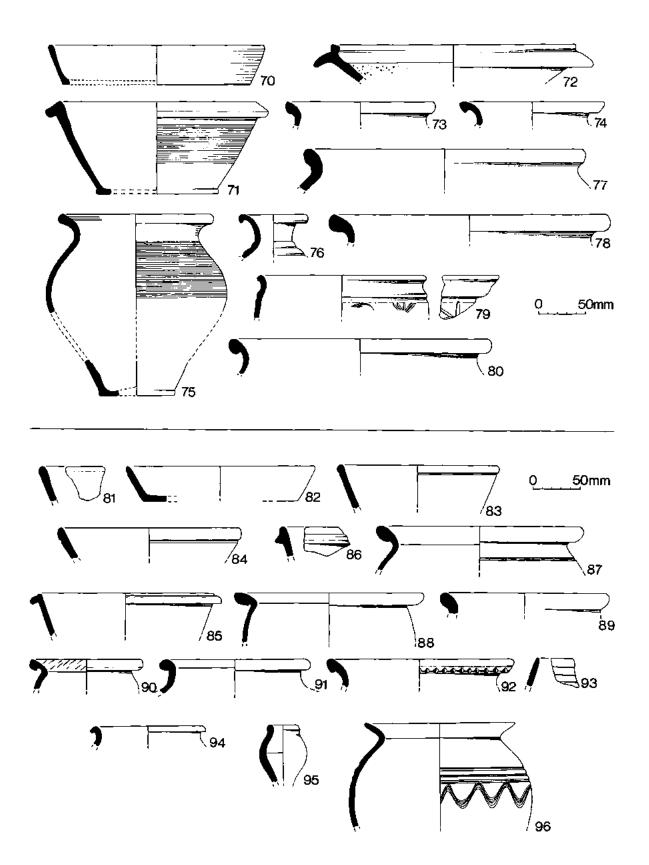


Fig. 12 Roman pottery Groups 5 and 6.

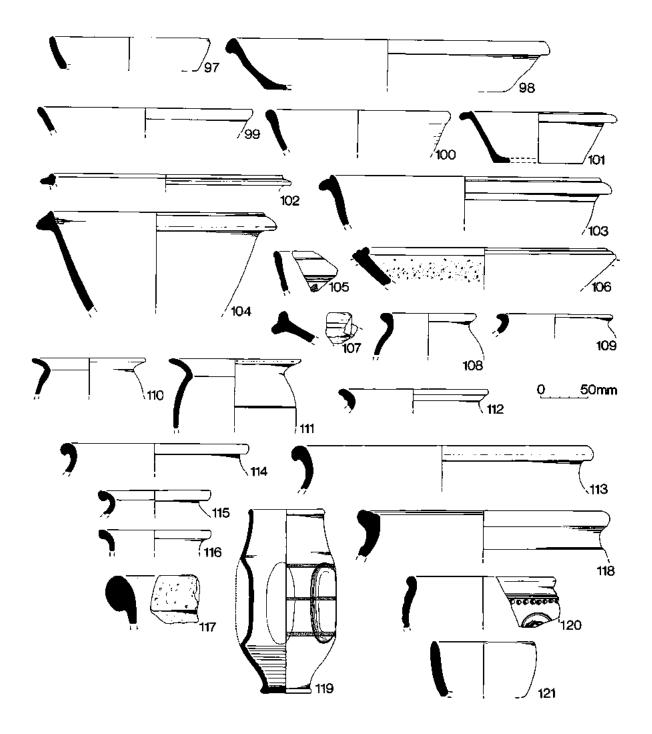


Fig. 13 Roman pottery Group 7.

Die 1a (Nash-Williams 1930, p. 181, 13). Some of Tintirio's stamps, on forms 18/31, 18/31R and 27 and from the destruction of a pottery shop at Castleford, will be before c. AD 150, but this one is rather later, being used on forms 31R and 80. c. AD 155-175.

Stamped mortarium from BH85

by K.F. Hartley

(Fig. 16.164b) name stamp Macrinus

Self-coloured, brown, fine-textured cream fabric with sparse and ill-sorted quartz, flint and red-brown inclusions. Trituration grit, flint with occasional quartz. The retrograde stamp MA[C]RIN[...; is

from one of the three dies of Macrinus. His mortaria are now known from Braintree, Chelmsford, Colchester (many) and Lower Hacheston, Suffolk (Campen Coll. Suffolk C.C. S.M.R. HAH 001). Macrinus worked at Colchester and his rim profiles would best fit a date within the period AD 90-130. The Braintree example is likely to be second century (BH85, context 2).

New fabrics

Site SR88 yielded a number of sherds in fabrics not represented in the published fabric series (Going 1987, 3-11). All are detailed below, in the order amphoras, fine wares, mortaria and coarsewares.

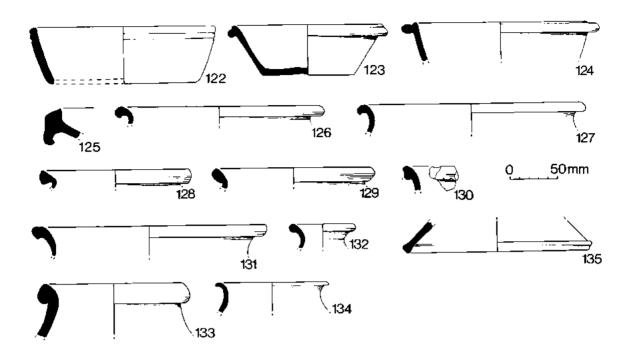
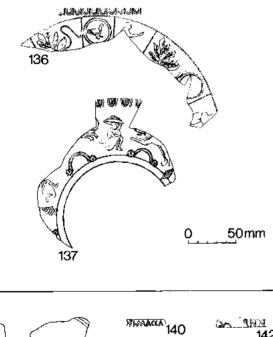


Fig. 14 Roman pottery Group 8.



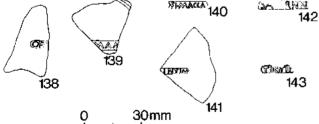


Fig. 15 Decorated and stamped Roman pottery.

Amphoras (Fig. 16.158)

by D.F. Williams

Part of a rim of an amphora or flagon in a soft, fairly smooth and somewhat fine-textured fabric, creamy white to very pale brown (Munsell 10 YR 8/2 to 8/3). Thin sectioning and study under the petrological microscope shows little else except silt-sized quartz grains and sherds of mica, giving no real indication of origins. The shape of the rim, which is sharply angular, splayed outwards and is slightly scalloped on the inner edge, is difficult to parallel exactly. The nearest similar form known to the writer is the flat-bottomed southern French amphora Gauloise 7, which is known to have been made at kilns at Aspiran, Velaux-Moulin Du Pont and Frojas (Laubenheimer 1985). It is possible that the Braintree vessel may be a variation on this type, although the latter seems to have been in production during the first and second centuries AD, somewhat earlier than the date of the Braintree find.

Fine wares

?Cherry Hinton fine wares

Three examples of ring-and-dot beakers were encountered (in late Roman features) at the SR88 site (Fig. 16. 161). Two were in a fabric common to the Verulamium Region type, while the third was in a different fabric.

The fabric itself was a pale cream/buff colour (Munsell 10 YR 7/4) with a contrasting decoration of barbotine rings and dots in a darker orange/pale brown colour (Munsell 7.5 YR 7/8).

The colour contrast between fabric and slip appears to be a distinctive feature of Cherry Hinton wares and consisted of a pattern of individual rings and blocks of dots, a fact which would seem to forestall any comparison with similar wares from the Claudio-Neronian kiln 26 at Colchester (Hull 1963, 160).

The surface of the sherd was unburnished, ruling out any comparison with West Stow painted wares (West 1990, 84-86). (SR88 context 56).

Terra Nigra (Fig. 16. 163)

Description: Stead and Rigby 1989, 126

Amongst the residual early Roman material from site SR88 (above)

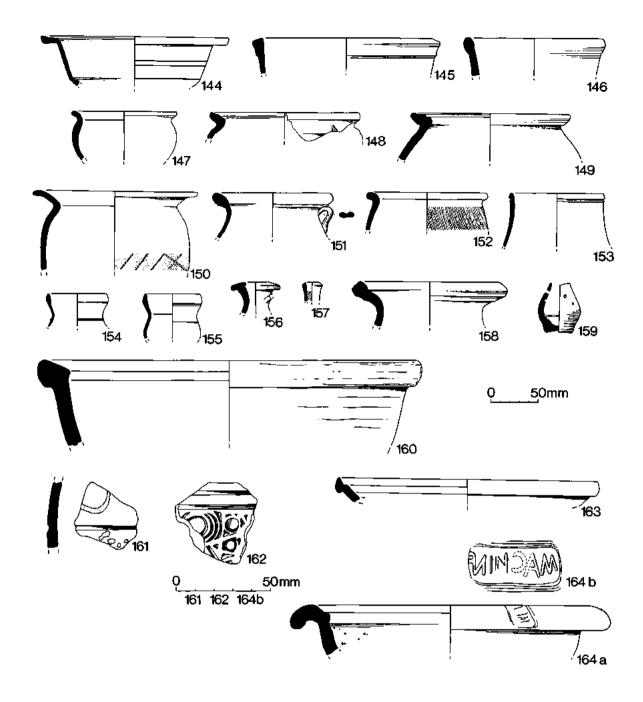


Fig. 16 Roman pottery of intrinsic interest.

was a rim sherd from a platter, Cam. 5 variant (less pronounced overhang of the rim, internal mouldings quite light). This is a longlived type, late Augustan-Neronian, but is residual here in a late third- to fourth-century pit.

Other unprovenanced, Gaulish imports found in Braintree comprise a TN platter and a North Gaulish butt beaker rim (Drury 1976, fig. 44.91 and 92) of a similar date to this piece (SR88 context 96).

Mortaria

(i) Iron-rich fabrics

Fabric 1

A red fabric (Munsell 2.5 YR 5/8) with a darker core (2.5 YR 5/6) and a cream-coloured slip (10 YR 7/4).

The fabric has abundant, small, well-sorted quartz sand inclusions and sparser black; chalk, and mica inclusions. The trituration grits were a miscellaneous mixture of quartz and flint.

This would seem to be a local East Anglian product. Other mortaria possibly from the same workshop were in late Roman contexts (BYC86 F181 and SR88 F91). Date third-fourth century (K. Hartley, pers. comm.) (SR88 context 96).

Fabric 2

A hammerheaded mortarium in a fairly uniform brown fabric (Munsell 5 YR 4/6) with an orangey slip (7.5 YR 7/6).

Abundant well-sorted quartz sand inclusions and sparse to moderate miscellaneous black, red, grey and chalk inclusions. Trituration grits appear to be quartz only. The form is D11/2 (Going 1987).

A local East Anglian fabric of third- to fourth-century date (K. Hartley, pers. comm.) (SR88 context 91).

21

3.1

(ii) Reduced fabrics

Fabric 3

A mortarium with a heavy bead on top of the rim (c.f. Going D3.5), in a coarse, sandy, grey fabric (Munsell 5 Y 5/1) packed with abundant well-sorted, white quartz inclusions; with a dark grey core (7.5 YR 4/0), reddish margins (5 YR 5/6) and miscellaneous trituration erits.

A product of local East Anglian origin. Dated fourth century. (K. Hartley, pers. comm.).

(iii) Iron-free fabrics

Fabric 4

A burnt wall-sided mortarium with a grey core (Munsell 7.5 YR 4/0) with dark red margins merging between 7.5 YR 4/2-4. The slip is an off-white colour (10 YR 7/2).

The fabric is flint with sparse, small inclusions of quartz, chalk and red material. The trituration grits are mainly quartz and flint with some black grits.

The form is D12 (Going 1987) and the fabric is of local/Essex origin. Date fourth century. (K. Hartley, pers. comm.) (SR88 context 40).

Fabric 3 is somewhat different to the published description for reduced East Anglian mortaria at Chelmsford (Going 1987, fabric 49) — indeed the mortaria in the Chelmsford report are considered as rather broad categories and do not compare well with the range of fabrics described from other Essex sites. A future pottery report will attempt to integrate the wide variety of independent descriptions into a more coherent whole (see meanwhile the Ivy Chimney report [Turner forthcoming, Section 16c]).

New fabrics — coarseware

a) Miscellaneous grey fabric with cream slip

A pedestal urn in a sandy fabric with a light grey core (Munsell 2.5 Y 6/0) with contrasting margins ranging between 2.5 YR 5/8 and 5 YR 6/6. The slip is pale cream in colour (10 YR 3/4).

The fabric has sparse chalk inclusions and moderate-abundant inclusions of mica and quartz sand (0.5mm). The fabric is of probable local/East Anglian origin, but this example is unstratified and undateable. It has some similarities, in both fabric and form, to the pedestal urns excavated at Palmer's School, Grays, Essex (Rodwell 1983,28) and dated to the late second-early third centuries (SR88, unstratified).

b) Miscellaneous buff fabric with cream slip

A granular variable fabric with a grey-brown core (Munsell 8.75 YR 5/4) and reddish-brown margins varying between 2.5 YR 5.5/6 and 5 YR 4/6. The slip is a cream colour (10 YR 7/4). The fabric has abundant, well-sorted quartz sand inclusions and sparse-moderate mica inclusions. The inner surface of the sherds show a tendency to laminate.

This fabric falls within the Colchester fabric category MQ (Symonds & Wade, forthcoming). The form is not closely definable, but is definitely enclosed (SR88, contexts 40, 95, 128 and 144).

New forms

As with the Roman pottery fabrics, there were a small number of vessel-forms not represented in the published series (Going 1987, 13-54). In addition, some forms occurred in fabrics to which they had not previously been assigned. A county-wide system has now been adopted based on the form numbering established by Going and all new forms from Braintree are now integrated with this.

New forms — descriptions (Fig. 16)

- 144. C16/2 As Type, with slightly up-turned rim and horizontal grooved double-line decoration on body and rim.
- 2.3 mid first-second century SR88 (context 510) 145. C37/1 Thick-rimmed bowl with shallow grooves on exterior, similar to examples from Colchester. (Symonds & Wade forthcoming, type 86)

47

1.1 third century BYC86 (context 214) 146. C38/1 Thick-rimmed, round-rimmed bowl, similar to examples from Colchester. (Symonds & Wade forthcoming, type 86) 47

SR88 (context 91) 1.1 third century

- 147. E9/1 Plain, miscellaneous bowl with cordon on shoulder and flaring rims, similar to examples found at Colchester. (Symonds & Wade forthcoming, type 94) 45
 - late second-early third century SR88 (context 136) 1.1
- 148. G7/3 As Type, neckless jar with grooved rim. (cf. Wilson 1984a, fig. 96, 2308)
- SR88 (context 40)
- 149. G7/4 As Type, with stubbier, more compact grooved rim. (cf. Wilson 1984a, fig. 96, 2308) 14

SR88 (unstratified)

- 4.1 150. G9/5 As Type, larger ovoid body with zone of obtuse lattice decoration and more flaring rim. 40
 - 5.1 mid-late third century SR88 (context 113)

G47/1 A necked storage jar with a pointed, grooved bead rim. 44

- late third-mid fourth century BYC86 (context 185) 1.1 (Fig. 13.118)
- 151. H17/1 As Type, with small handle. New example from SR88 in Hadham oxidised red ware.
 - 4 1.2fourth century SR88 (context 57)
- 152. H23/2 As Type, but with square, bead rim and rouletted decoration on body.
 - 2 2.1 SR88 (context 57)
- 153. H33/1 As Type, with horizontal groove underneath small bead rim. Now an example from SR88 in Hadham oxidised red ware. 4
- 1.2 third century SR88 (context 40) 154. & 155. H45/2 As Type, with shorter neck and cordon separating shoulder and neck and horizontal groove separating neck
 - and rim. 2 2.1fourth century SR88 (context 57) 2.2 late third-early fourth century SR88 (context 128)
- 156. J4/3 As Type, with down-turned rim. 21
 - 3.2 late third century SR88 (context 40)

J6/2 As Type, with "top hat" rim consisting of elongated grooved rim on top of the flange, example also from Hinton Field, Cambridgeshire (Pullinger & White 1991)

2.1 early-mid fourth century SR88 (context 144) (Fig. 11. 69)

- 157. J15/1 As Type, narrow-necked flagon. (Howe et al. 1980) 2 1. late third-early fourth century BYC86 (context 215)
- 158. P6/1 Amphora with sharply angular rim with a slightly scalloped inner edge. General comparisons with southern French flatbottomed Gauloise 7 amphorae. (Laubenheimer 1985, fig. 162) 1.1 SR88 (context 65) second century

R3/4 As Type, miniature jar with no neck and small bead rim. 47

4. late third-early fourth century BYC86 (context 183) (Fig. 12. 95)

159. R4/1 A miniature oval-bodied jar with slight pedestal base and no remaining rim. There are three holes in one side of the shoulder and evidence of two more incomplete holes in the same area on the interior. 47

1.1 second century SR88 (context 84) To the above material can be added two pieces from sites SL84 and BH85:

160. C28/2 As Type, a large, wide-mouthed bowl with a squared off, angled rim.

44

2.1 ?third-fourth century SL84 (context 4)

C39/1 A mica-gilt rim and body sherd from an exaggerated flange bowl (Marsh 1978, Type 37). One of the less common bowl-forms in this ware, known regionally from London, Chelmsford and Colchester.

12

1.1 late first-early second century BH85 (context 35) (Not illustrated)

Conclusion

This discussion confines itself to the Roman pottery from SR88 and BYC86 for reasons given in the introduction (above).

The range of fabrics and forms from SR88 and BYC86 can be compared with the pottery found at excavations at 51-57 Rayne Road, Braintree (hereafter known as Site E), and more recent work at Great Dunmow (Going and Ford, 1988) and Chelmsford (Going 1987). The quantified groups from SR88 and BYC86 are contemporary with Chelmsford Ceramic Phases 6 (AD 260/75-300/10), 7 (AD 300/10-360/70) and 8 (AD 360/70-400+).

Of the colour-coated fabrics in the quantified groups, the most prolific throughout Ceramic Phases 6, 7 and 8 were the Nene Valley wares (1152.9g). These occur in increasing amounts right through until the middle of the fourth century (Table 3, Groups 4, 7 and 8). This is consistent with the pattern observed at both Chelmsford and Great Dunmow. However, whilst at Chelmsford and Great Dunmow this fabric is present until the end of the fourth century, at Braintree the Nene Valley colour-coated wares are totally absent from the late fourth-century group (SR88 F587). This could be due to several factors, not least of which is the decline of the Nene Valley colour-coat industry towards the middle of the fourth century. The fact that other towns show a presence of this fabric throughout the fourth century could mean that the material found elsewhere is simply residual or the result of a small amount of this ware going to limited markets, of which Braintree was not one.

A small amount of Hadham oxidised red ware was also present but few of the contexts had sherds numerous enough to reconstruct any recognisable form. However, one feature, a fourth-century ditch (SR88 F528), contained recognisable flagon rims similar to some found at Site E (Drury 1976, fig. 25 105). At Chelmsford and Great Dunmow, contemporary fourth-century contexts do appear to contain a greater variety of forms in this fabric than at Braintree, but this diversity perhaps reflects the proportionally greater amounts of Hadham oxidised red ware recovered from those sites.

There were no examples of Oxfordshire red colour-coated wares from either SR88 or BYC86 (Table 3, Groups 4, 5, 7 and 8); a similar phenomenon was noted by Drury (1976) at Site E. The absence of this fabric from Braintree was surprising, particularly as the evidence from other nearby sites such as Colchester (Symonds and Wade, forthcoming) and Chelmsford (Going 1987) all confirm the existence of a later fourth-century trade in this ware, although not in large quantities. The absence of Oxfordshire red colourcoated wares cannot be reasonably explained by site destruction as contexts dated to the late fourth century were found (ditch 587). No satisfactory explanation can be offered for this.

Of the 'table wares' found, Hadham black-surfaced ware was the most common and was present in greater quantities than both the Black-burnished 1 and Black-burnished 2 wares found (Table 3); and was found almost exclusively in deep, bead-rimmed dishes (B4 type) and bowls with 'Romano-Saxon' decorations; a pattern also observed at Chelmsford (Going 1987, 7).

At Braintree Black-burnished 1 ware forms were restricted to high-shouldered jars with everted rims (G9 type) and fully flangerimmed dishes (B6 type); while the Black-burnished 2 ware appears almost exclusively in the earlier form of deep, bead-rimmed dishes (B4 type), with only a few sherds of plain-rimmed dishes (B1 type) being found.

Fragments of late shell-tempered ware (63.8g), provisionally sourced at Harrold, Beds. and along the lower Nene Valley (Going 1987, 10), were found at Braintree in a late fourth-century ditch (SR88 F587) and in a mid to late fourth-century pit (BYC86 F187). Considering the soft, easily-abraded nature of the fabric, the sherds were in quite good condition with several recognisable rim sherds. The late shell-tempered fabric is recorded at several other sites throughout Essex, including Heybridge (Wickenden 1986, 36) and Chelmsford, but is commonest in the north of the county, with comparatively large quantities (12kg) being found at Great Dunmow (Going and Ford 1988, 70).

Unsurprisingly, as with most sites in Essex, the most common coarse wares found were the sandy grey wares (23kg) which appeared in almost every context on both SR88 and BYC86 in a variety of forms including dishes, bowls, bowl-jars, jars and beakers (Table 3).

The sandy grey wares consist of a variety of fabrics which are fairly indistinguishable from each other; the sources are as yet unknown but are in all probability local. However, some of the forms suggest that the fabrics may originate from the Colchester area (C.J. Going, R. Symonds, pers. comm.s). (N.B. This is purely an informed opinion based on other writers' individual knowledge of the ceramics of the Colchester area.)

Mortaria

Most Braintree mortaria were in Colchester buff ware, a fact also recorded at Site E; although examples in Nene Valley 'self-coloured' ware and Oxfordshire white ware were also found. There were also a number of mortaria fabrics from unknown sources; (these have been kindly identified by Mrs. K. Hartley as local East Anglian products of the third and fourth centuries); although none of the fabrics found can be precisely sourced to a particular kiln they do appear to 'fit in' with several broad-based categories previously observed at Ivy Chimneys (Turner forthcoming). This suggests a number of small kilns throughout East Anglia producing mortaria for purely local demands and, in some cases, sharing similar clay sources.

Residual pottery

Although the material with which much of this pottery report is concerned is of a late Roman date, it should be noted that there was also a small amount of flint-tempered (LBA/EIA) and grogtempered (LIA) pottery residual in late Roman contexts. Similar material was observed in the 1974 excavations at Site E, although, in general the prehistoric pottery from that site appears to be in better condition with several recognisable rim sherds being found. Indications of Late Iron Age occupation have been found during excavations in other areas of Braintree, but as yet no published details are available.

Also found was a sherd from an Augustan-Neronian *Terra Nigra* platter. Material of a similar date, comprising of another *Terra Nigra* platter and a North Gaulish butt beaker have been previously published (Drury 1976, fig. 44 91-92).

In no case was it possible to demonstrate that this pottery or the equally residual second-century Roman pottery (below), were related to the earliest fills of the features.

There was much residual mid to late second-century material within many of the late Roman features (SR88 F528, F587; BYC86 F184, F187). This pattern is reflected by the presence of fairly large quantities of samian of an Antonine date throughout the site. Rodwell (in Drury 1976) observed that most of the samian recovered from Site E was from the Antonine period, with only nominal amounts of samian from the Flavian, Trajanic and Hadrianic periods. As with the samian from Site E, the samian from SR88 and BYC86 showed signs of being burnt both before and after breakage, a puzzling Essex phenomenon, (Rodwell 1975, 93), unaccompanied by any other evidence to support the notion of destruction by fire.

Conclusion

The evidence from the SR88 and BYC86 excavations indicated occupation in those areas occurred largely during the mid third to fourth centuries; while the road-frontage site showed material of an earlier date. Braintree appears to be, from a ceramic point of view, an 'ordinary' small town in the centre of Essex and as such shares many similarities in the type of fabrics and forms found, with other sites in the county. It does appear that SR88 and BYC86 have slightly less fine wares than excavated examples from Chelmsford and Colchester. Most notable is the total absence of Oxfordshire red colour-coated ware and the lack of Nene Valley colour-coated ware in the late fourth century; a period when other sites show a fairly large quantity of these fabrics. SR88 and BYC86 also possess certain ceramic characteristics, especially in the forms present in the sandy grey wares (above), which are associated with Colchester. It is probable that this is a reflection of Braintree's proximity to Colchester and its position along a major trade route to and from this town.

Given that these excavations have resulted in occupation evidence from the third and fourth century, which confirms previous work in this area of the Roman town, future post-excavation work, particularly in the field of Roman pottery study, might benefit most from concentrating in the pre- and post-conquest period.

The brooches

by H. Major

Three brooches were found, all of first-century type.

- Bow from a 'Colchester' brooch, distorted and incomplete. Short side wings and rather sharply-angled head. BYC86 SF1 (Fig. 17).
- 2) A Langton Down brooch with a rather narrow reeded bow, details of the head and bow obscured by heavy corrosion, catch plate and pin missing. Type E at King Harry Lane, Verulamium (Stead & Rigby 1989, 91). BYC87 286 SF1159 (Fig. 17).
- 3) Bow brooch with a diamond-shaped section with beading along the central ridge, and a line each side. The head is sharply angled and has a double line of punched dots up the middle and a beaded moulding at the junction with the cylindrical spring cover, which is damaged. The catchplate probably had a single triangular cut-out. SL84 SF1 (Fig. 17).

The type was classified as Langton Down C by Hull (Hawkes and Hull 1947, 319), and was Type J (Nertomarus brooch) at King Harry Lane, Verulamium (Stead and Righy 1989, 95). The head decoration is less elaborate than many in its class, although it is clearly of the same form. The Verulamium example is post-conquest, but pre-conquest examples can occur. At Colchester all are pre-Flavian.

Copper alloy

by H. Major

The material described below does not include all of the copper alloy; the remainder of the material is mainly broken sheet fragments, and does not include anything of significance. Most of the copper alloy came from BYC and SR88. A single hairpin came from BH85, one brooch (above) from SL84, and nothing definitely Roman from BT21 and RR85.

The majority of the items are of well-known Roman forms, although the hairpin from BH85 is somewhat unusual. One exceptional object came from SR88 113, a horse-and-rider figurine in relatively good condition, despite having been covered with thick corrosion products when found. A possible colander or strainer fragment (SF21) came from the same context. Strainers may have ritual uses (see Toynbee 1986, 49-50 for discussion), so it is possible that the two items form a 'ritual deposit'. However, none of the other metalwork from the pit has definite religious connotations, and such a conclusion must remain tentative.

 SR88 113 SF19 A horse-and-rider figurine (Fig. 18), solid cast in two pieces; in good condition. Height 80mm. The moulding is rather crude, with a minimum of detail. The rider is apparently nude, apart from a rolled belt, with the left arm positioned to hold reins, or a shield and the right arm raised. The right palm is grooved, and would probably have held a spear. The head has stylised features and spiky hair (or possibly a headdress). The eyes are circular holes, and were presumably originally inlaid. The left leg has a crack in the calf, possibly a casting fault. However, the left foot is shorter than the right and may have been damaged in antiquity; the crack may have been caused by attempts to balance the figure by altering the angle of the left foot.

The horse is narrow-nosed and short-legged, with front feet resembling paws, and its ears pricked forward, giving it a doglike appearance. The mane is embellished with vertical slashes, and the tail has broken off.

The rider was found corroded in position on the horse, and only became detached during conservation. No means of attachment was visible; there was no trace of solder, although it is possible that the figure was glued on. One of the examples from Brigstock (Greenfield 1963, 243, no. 1), had a small hole in the horse's back, presumably to seat the rider, but there was no such arrangement here. The figure will balance in place, but needs careful positioning to do so. If the rider was not fixed to the horse by some means, the group must have been very carefully placed in the pit where it was found, otherwise the two parts would have become separated.

This figure belongs to a class of two-piece horse-and-rider figures discussed in Taylor (1963). Although it is broadly comparable to the other examples, it is much cruder in its details, and is clearly native in style as opposed to the pseudo-classicism of the other figurines. The four closest examples are two from Brigstock (Greenfield 1963 and Taylor 1957) and two from Willingham Fen, Cambridgeshire (Rostovtseff 1923, 94). A number of other horse figures may have had riders originally, and a larger hollow-cast rider, missing its horse, came from Caves Inn, Warwickshire (Anon 1953, 118). A related class of objects are the horse-and-riders from 'pole tips', which are generally smaller, and cast in one, such as that from Canterbury (Hildyard 1958), but the two groups may overlap, since one of the Brigstock horses had an iron pin through its belly, presumably to attach it to a pole.

The riders on these figures are normally clad in cavalry dress, with tunics, cloaks and helmets, whereas the Braintree example is scantily dressed. The lack of detailing may not preclude a loin-cloth, but the suggestion of shoulder-blades implies that the figure is at least bare above the waist. The hair bears a vague resemblance to the 'radiate crown' familiar from coins of the later 3rd century, but may be simply stylised curls, seen in some stone carvings (c.f. the stone head from Hulme, Manchester, illustrated in Ross 1974, 121, fig. 54) or an attempt at a shaggy 'barbarian' hair-style as shown on a better-modelled horseman (minus horse) from London (Toynbee 1964, 119 & pl. XXXII). The face is almost masklike, with a triangular shape in the Celtic tradition. One of the most striking stylistic parallels is to be found on a pot from Kelvedon, Essex (Rodwell 1988), which displays relief-stamped figures. The most complete is of a horseman with spiky hair and a prominent nose, wearing a short nether garment bunched at the waist. The figure carries a shield in his left hand, and an implement resembling a shepherd's crook in his right. However, the date postulated for this pot (late 1st century BC to early 1st century AD) is much earlier than that of the Braintree rider, and the resemblance emphasises the existence of a long tradition of such figures rather than being a direct parallel.

The horse has all four feet on the ground, rather than one forefoot raised as in others of its kind. It lacks any detail of its accoutrements, a trait which it shares with one of the Brigstock horses. The small head and narrow, rather pointed nose can be paralleled on an entirely different class of object, the horse-shaped plate brooches which are probably 2nd century (Wickenden 1988, fiche 1d). Many of these exhibit an almost 'beaked' head (e.g. from Woodcock Hall, Norfolk; Brown 1986, 39, no. 177), which although stylised, may have had some basis in reality. Ross (1974, 263, note 94) cites a

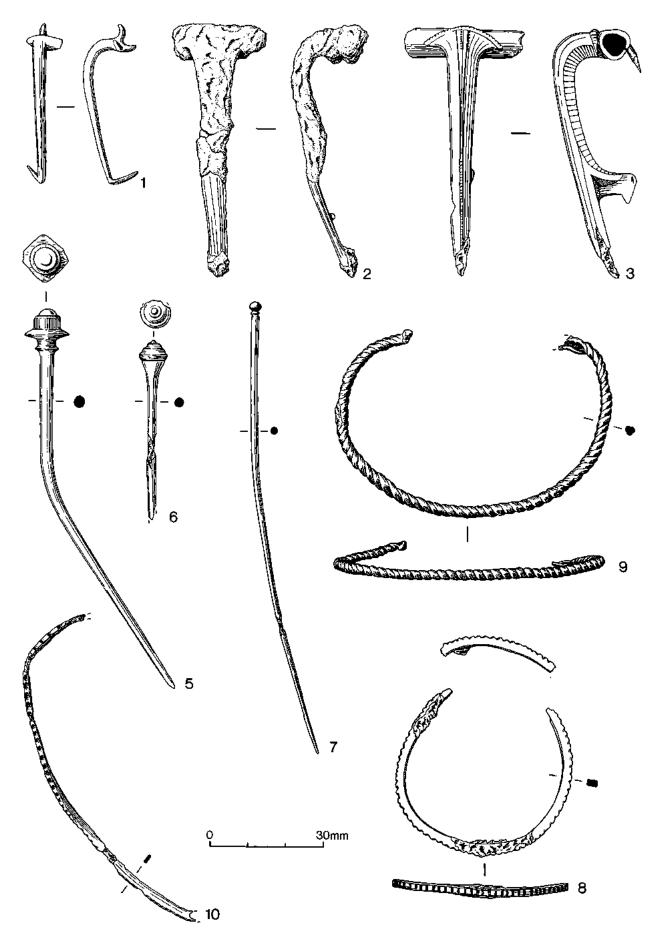


Fig. 17 Copper-alloy artifacts.

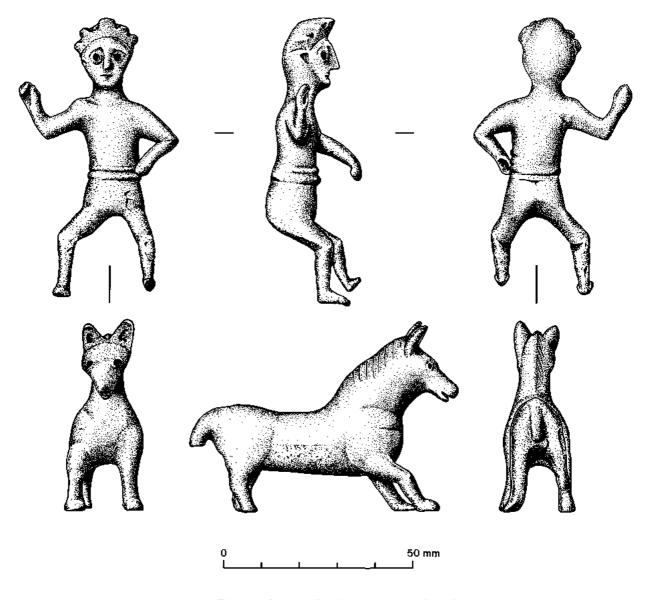


Fig. 18 Copper-alloy horse-and-rider from SR88.

description from an early Irish source of horses which were 'smallheaded... large-eared, small-snouted, sharp-beaked', all of which can be applied to the Braintree horse.

Only one of the comparable figures is dated. One of the Brigstock examples came from the floor of a shrine, and is 3rd-4th century. The Caves Inn rider is probably 2nd century, and thus somewhat earlier, but is different in both style and technique, though not necessarily in significance. The Braintree figure comes from a context dated late 3rd to early 4th century.

All of the other figures of this class come from ritual contexts; the Brigstock figures are associated with a shrine, whereas the Willingham Fen horse-and-riders were part of a hoard containing other ritual objects, perhaps associated with Commodus-Hercules. Another possible association of the armed horseman is with a Celtic Mars, who could be one of a number of gods (Ross 1974, 244). The Celtic style of the figure suggests a leaning towards the Celtic deity rather than the Roman equivalent. The Braintree figurine is not directly associated with a religious context, and does not appear to have been buried with other ritual objects, unless the possible colander fragment (SF21, below) was associated with religious practices. There are no known temples in the area, and the purpose of the pit in which the figure was found is unknown. The object, for reasons stated above, may, however, have been buried with some care, so the deposition in the pit may have been deliberate.

- 5) Hairpin with a flanged, cupped head, inset with pale green glass. Length 109mm. This pin is paralleled by one from a late 3rd- to 4th-century context at Shakenoak (Brodribb et al. 110, no. 204), and another from the temple at Nettleton (Wedlake 1982, fig. 93, no. 19) from a 4th-century context. BH85 104 SF9 (Fig. 17).
- Hairpin, point missing. Bi-conical head decorated with concentric grooves on the top. Length 46mm. SR88 84 (Fig. 17).
- 7) Pin with small sub-globular head with reel below. Length 119mm. SR88 C U/S (Fig. 17).
- 8) Strip bracelet, damaged. The ends overlap to form a circle with an interior diameter of 40mm. Rectangular section, notched along the outer edge. BYC87 185 SF11 54 (Fig. 17).
- 9) Three-strand cable bracelet, broken at one end. The other end has been finished off by wrapping one strand round the others to form a small knob. BYC87 185 SF11 56 (Fig. 17).
- Fragment of strip bracelet with shallow notches along one edge. Section 2x1mm. SR88 53/56 SF11 (Fig. 17).
- Finger-ring fragment; part of a hoop with a setting for a circular stone, now missing. SR88 89 SF15 (Fig. 19).

- 12) Needle with a flat spatulate head with a slight groove above and below the eye. Length 108mm. SR88 40 (Fig. 19).
- 13) Cast bodkin with button point and two eyes, one rectangular and one circular. The metal is in very good condition. The object may be post-medieval, although such bodkins occasionally occur in Roman contexts. C.f. Stead & Rigby 1986, 128 and fig. 55, no. 229 for a single-eyed button point needle from a 3rd-century context. BYC87 185 (Fig. 19).
- 14) Copper-alloy fleur-de-lys key handle with part of the iron shaft. This is a fairly common pattern, and is similar to an example from Colchester (Crummy 1983, 126, no. 4161). The general date for the type is post-A.D. 150. SR88 113 SF20 (Fig. 19).
- 15) Convex sheet, all edges broken, but possibly originally circular, with a diameter greater than 55mm. It exhibits radiating lines of small perforations. This may have been part of a colander or strainer. A few identifiable colander fragments have survived from Roman Britain including a colander lip from Colchester in thin metal, with small punched holes in a swastika pattern (Crummy 1983, 71, no. 2029). Another possible fragment from Gadebridge Park is in thicker metal with much larger holes (Neal 1974, 129, no. 46). Circular strainers from London are illustrated in Anon 1903; they appear to be flat, and one has a handle socket attached. SR88 113 SF21 (Fig. 19).
- 16) Harness fitting, possibly a rein guide. A roughly heart-shaped plate, edges damaged and distorted, with a circular loop on the back and a rectangular loop on the front. BYC87 168 SF1138 (Fig. 19).
- (Not illustrated) Strap end, made from a plain folded strip. 22x13mm. SR88 40.
- (Not illustrated) Strip, folded in half width-wise. Probably an edge binding. 60x8mm. SR88 91.
- 19) (Not illustrated) Looped buckle pin in poor condition, with traces of transverse moulding on the pin and loop. Point missing. Length 31mm. Possibly post-Roman. SR88 91.
- 20) (Not illustrated) Domed boss or stud head, made from plain sheet metal with traces of iron on the back. Fragmentary. Diam. 22mm. BYC 185.
- (Not illustrated) Domed boss or stud head made from sheet metal, with a flanged, beaded edge. Fragmentary. Diam. c. 22mm. BYC 185.
- (Not illustrated) Small stud with a domed head. Length 10mm, head diam. 7mm. SR88 91.
- (Not illustrated) Ball-headed tack or rivet. Length 20mm, head diam. 7mm. SR88 44 SF36.
- 24) (Not illustrated) Six sheet fragments, probably all from the same object, set with copper-alloy studs at intervals of 6-14mm. The largest piece is c. 40x23mm, head diam. of studs is 5mm. The context also contains intrusive post-medieval material, so this may not be Roman. BYC 183.
- 25) Piece of sheet in the shape of a right-angled triangle with one corner broken off. Length of sides, 28mm and c. 25mm. BYC87 214 (Fig. 19).
- 26) (Not illustrated) About eighteen fragments of folded and distorted thin sheet, probably all from the same object. A few of the pieces have parts of the original edge, including a piece with a corner between a straight side and a slightly curved side, and a piece with parts of two slightly wavy edges. The little that can be determined of the original shape suggests that it was irregular. The maximum width of the sheet was at least 60mm. There are a number of rivet holes, diam. c. 1.5mm, both close to the edge and away from it. From the same context came four other sheet fragments from different objects, and four small strip fragments, slightly curved lengthwise. The largest strip is 27x9mm. SR88 113.

Iron

by H. Major

As with most Roman sites, the most common objects were nails (see below). Most of the other objects were fragmentary, and probably derive from domestic items such as hinges, staples and knives. The complete catalogue is in the archive.

- 27) The eraser end of a stylus. Length 56mm. BH85 1 (Fig. 19).
- 28) Socketed blade. The blade is short relative to the socket, and may have a rounded spatulate end rather than a cutting edge. It appears complete. Length 135mm, max. width of socket 20mm, length of blade c. 70mm, width 18mm. BYC 299 SF1162 (Fig. 19).
- 29) Tanged blade. The object ostensibly looks like a trowel with an L-shaped tang, but the 'blade' has a constriction in the middle. There is no indication of any perforations, so it is unlikely to be part of a hinge or other structural fitting; it could possibly be the handle of a latch-lifter. This may be a specialist moulding trowel, used for interior plasterwork. SR88 57 (Fig. 19).
- 30) A small socketed knife with a thin blade, possibly complete. Max. blade width 18mm, Length 130mm. SR88 57 (Fig. 19).
- 31) (Not illustrated) A tanged knife blade with a curved back and straight cutting edge; mineralised wood on the tang. Length 148mm, length of blade 109mm, max. width 27mm. BYC 183.
- 32) (Not illustrated) Knife-blade fragment, parallel sided. 15x48mm. Also knife point, probably from the same object. SR88 113.
- 33) (Not illustrated) The point from a hooked blade, possibly a pruning knife. Length 98mm, max. width 36mm. SR88 136.
- 34) (Not illustrated) Socketed blade, possibly a chisel. The blade is incomplete. Length 123mm, max width of blade 25mm, socket diam. 19mm.
- 35) (Not illustrated) Small spike or wedge with a chisel point. Max. section 12x7mm, length 35mm. BYC 214.
- 36) (Not illustrated) A hipposandal heel; others from Braintree are illustrated in Drury 1976, fig. 15. A possible hipposandal wing also came from SR88 144. SR88 84.
- 37) (Not illustrated) Ox goad, made from a strip 10mm wide with an external diam. c. 17mm. Length including point, 37mm. Rees' type II (Rees 1979, 75-9). SR88 510.

Iron nails

Eight types were identified as follows:

- A Round, flat head with a square-sectioned shaft.
- B Square, flat head, usually with rounded corners, squaresectioned shaft.
- C Round, mushroom-shaped head, square-sectioned shaft.
- D Inverted triangular head, flattened in the same plane as the square-sectioned shaft.
- E Roughly circular head with four facets on top, square-sectioned shaft.
- F T-shaped head with a square or rectangular-sectioned shaft.
- G Hobnail, small domed head.
- H Diamond-shaped head flattened in the same plane as the rectangular-sectioned shaft. This may be a post-medieval type.

Type H was only found at BH85. Thirty nail fragments were found in Roman contexts at this site, but due to later contamination, some may be post-Roman. The number of nails found at BYC was unusually small compared to the number of objects; no explanation is offered for this.

SR88

A total of 157 nails and 115 nail fragments were examined. The majority of the identifiable nails were type A (89%), followed by type 7 (hobnails) with 5%. All other types were represented by only 1 or 2 examples, except for type H, which was absent at this site.

Only 48 nails were complete, and there were no complete examples of type C or F. The details of the complete nails are summarised below.

Type A — 35 examples; average length 65mm, length range 28-106mm.

- Type B 2 examples; 55mm and 72mm long.
- Type D 1 example, 75mm long.
- Type E 1 example, 90mm long.
- Type G 6 examples; average length 14.5mm, length range 12-17mm.

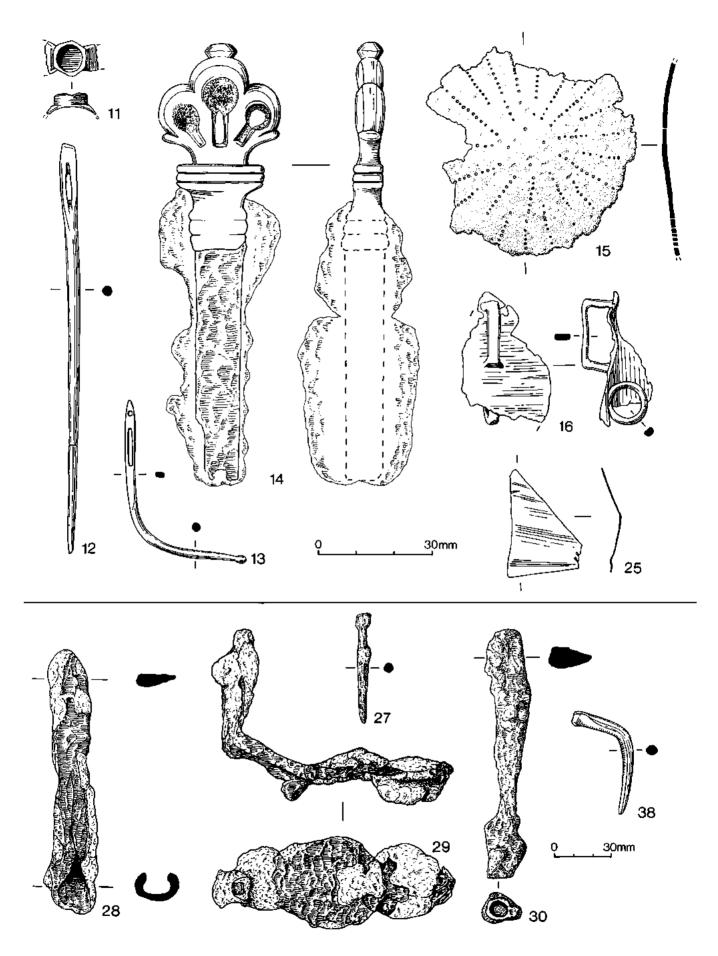


Fig. 19 Copper-alloy, iron and lead artifacts.

Lead

by H. Major

Only one piece of lead was found, from BYC86.

38) Bent spike with a flattened head. This is possibly post-Roman. BYC86 174 (Fig. 19)

Bone objects

by H. Major

All the bone objects found are described below.

- 39) Antler segment, probably an unfinished handle. The ends have been sawn, a flake cut off the narrower end, and the centre partly hollowed out. Length 80mm. BYC86 186 (Fig. 20).
- 40) (Not illustrated) Hairpin fragment with an incomplete small bead-and-reel head. Length 34mm. BYC86 188
- 41) Hairpin, with sub-globular, slightly pointed head. It appears to have broken in antiquity, and been repointed. Length 51mm. SR88 113 SF30 (Fig. 20).
- 42) Hairpin, with sub-globular head and slightly swollen shaft. Length 97mm. SR88 138 SF35 (Fig. 20).

Shale

by H. Major

Three bangle fragments were found. None were closely datable.

- 43) Bangle fragment with rounded rhomboid section. The outer face is decorated with simple diagonal slashes. BYC86 186 (Fig. 20).
- Half of a bangle with a plain oval section, slightly ridged on the inside. Section 8x5mm, external diam. c. 68mm. SR88 57 SF12 (Fig. 20).
- 45) Fragment from a cable-effect bracelet, no full section present. External diam. c. 80mm. The type is generally 3rd-4th century. SR88 91 SF28 (Fig. 20).

Beads

by H. Major

- Light blue glass; sub-globular, diam. 4mm, hole diam. 1mm. SR88 91 SF29.
- 47) Blue glass; cuboid, 3x3x4mm. Hole diam. 1mm. SR88 128 SF37.

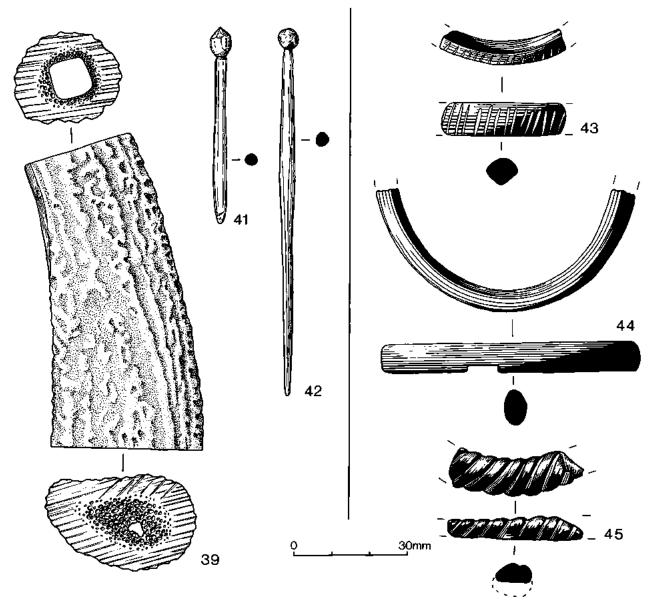


Fig. 20 Bone and shale artifacts.

Stone

by H. Major The querns

Quern fragments came from BYC86 and SR88. Two small fragments of lava came from BYC86 286, which would have derived from a quern. SR88 has quern fragments in both lava and millstone grit, the two most common stone types from Roman Essex. None of the pieces are worthy of illustration.

- 48) Niedermendig lava came from seven contexts at SR88. It is mostly badly eroded, but fragments of both upper and lower stones are present. An upper stone fragment from 128 has the grooved surfaces typical of Roman quems, but a piece of lower stone from 26 has a pecked grinding surface. This is unusual for a Roman quern, but can be paralleled at other Essex sites, for example Chigborough Farm, Goldhanger (Major, in prep.).
- 49) The four millstone grit fragments come from flat querns; the grinding surfaces on two pieces were pecked, but a piece from 40 has shallow grooves, a more unusual dressing technique for this type of stone. Grooving was sometimes combined with other dressing techniques on the same stone, for example at Baldock (Foster 1986, 182, no. 805), where the outer edge had a band of grooves, with pecking towards the centre.

Other stone

At BH85 and SL84, all the utilised stone from the Roman contexts was intrusive coal and slate. At BYC86 and SR88 there were a number of possible rubbers made from natural pebbles. These were probably all of local origin except for a piece of greensand from SR88 106.

- 50) Purbeck marble. A slab fragment, probably from a mixing palette with a bevelled edge. One face has traces of polish, but the other face is fairly rough. 20mm thick, c87x48mm. 144g. A piece of a similar palette came from earlier excavations in Braintree (Drury 1976, fig. 14.40). BYC86 299 (Fig. 21).
- 51) Coarse sandstone, possibly millstone grit. A slightly tapering cylindrical fragment, broken at both ends, with no definite areas of wear. This is probably not a whetstone; the shape would be unusual for a Roman example, and there is no sign of use. It could be part of a pestle. (See Crummy 1983, 77 for examples of elbow-shaped pestles.) Diam. 37-39mm, length 82mm. 200g. SR88 75 (Fig. 21).
- 52) Millstone grit. Three joining pieces, probably originally from a flat quern, but re-used, probably as an architectural feature. Two edges have been trimmed into curves. One face has traces of wear, the other is roughly finished. 30mm thick, c. 115x95mm. 496g, SR88 96 (Fig. 21).
- 53) Purbeck marble. A slab fragment, with one straight and one curved edge, possibly from a D-shaped slab. The curved edge has a rounded profile, but the straight edge is damaged, and there may originally have been just a groove across the surface rather than an edge. 86 x 75mm, 35mm thick. 386g. SR88 114 (Fig. 21).

Slag

by H. Major

The amounts of slag from BH85 and SL84 were insignificant. SR88 contained a slightly higher amount, just over 3 kg. It was not examined by a metallurgist, but a few comments on the material can be made. The slag from the Roman contexts is mainly light, vitrified material, likely to be non-metallurgical in origin. There are a few fragments of iron-working slag, from SR88, 65 and 68 (both feature 580), 76 and 128. The amount is so small that it does not imply iron working on the site, and the presence of such slag is not unexpected given that the site is only a few hundred metres from an area where iron working was taking place.

Baked clay

by H. Major

Very small amounts of burnt clay came from BH85 and SL84. For BYC86, 2175g of burnt clay was examined. Over half of this came from context 215, and may have been part of a hearth or oven lining. Most of the rest of the material consisted of abraded fragments, but a possible fragment from a Late Iron Age triangular loomweight came from context 165.

SR88 produced a total of 4000g of burnt clay (196 pieces). Few contexts contained more than a few scraps, but over a quarter of the total by weight came from a single context, 73. In most cases there was nothing to indicate the original use of the material. Fragments from 7 and 40 had possible lath impressions, and a possible triangular loomweight fragment came from 57. This would be unlikely to be later than very early Roman.

Salt briquetage

by H. Major

One piece of definite salt briquetage was found in BH85, context 100, a rim from a flat-sided vessel. There were also three possible fragments of salt briquetage from SR88, contexts 52, 53 and 85. These finds add to the list of inland sites in Essex producing briquetage, discussed in Barford (1990).

Building materials

by H. Major

Mortar

The only mortar examined was from SR88. This comprised a mere three pieces, and it was not considered that any useful information could be derived from such a small sample.

The Roman brick and tile

Catalogues were prepared for SR88, BYC 86-88 and BH85. BT21, RR85 and SL84 were not examined as the amount of Roman tile was so small.

Part of the BYC tile had been catalogued by the MSC tearn, and it was initially hoped to use their fabric type series for the rest of the material. This did not prove feasible. Due to lack of time, it was decided not to examine the fabrics of the remainder of the tile in detail. In general, the fabrics appeared to be fairly consistent. They were predominantly hard, with sparse sand temper, and red or reddish-orange in colour. A small proportion of the tile was sandier, and some was in a rather soapy brown fabric. Soft, orange fabrics and chalk temper were absent. All the tile, except for the spall, was kept for possible future study.

SR88

Method Only the tile from Roman contexts was examined. The types of tile distinguished were: *tegulae*, *imbrices*, box-flue tile, medieval/post-medieval brick and tile, spall and other tile. The 'other tile' category includes all tile and brick with no distinguishing features. It thus includes a proportion of *tegula* and *imbrex*; examination of the thicknesses of *tegulae* from selected contexts suggests that most of the *tegulae* from the site are less than 26mm thick, so it is probable that the 'brick' could be separated out on grounds of thickness. There is, however, an overlap in the thickness range of *tegulae* and *imbrices*, so it was not possible to separate these where there were no distinguishing features. A small amount of intrusive post-medieval brick and tile came from Roman contexts.

A total of 108,201g of brick and tile from Roman contexts was examined (1363 fragments). The percentage breakdown by weight is as follows:

Tegulae 33% Imbrex 10% Box flue 2% Other tile 43% Post-medieval 4% Spall 8%

Brack The brick was categorised with the other tile, which included imbrex and tegrala with no diagnostic features. Comparison of the distribution of the thickness of the other tile with that of the tegralae

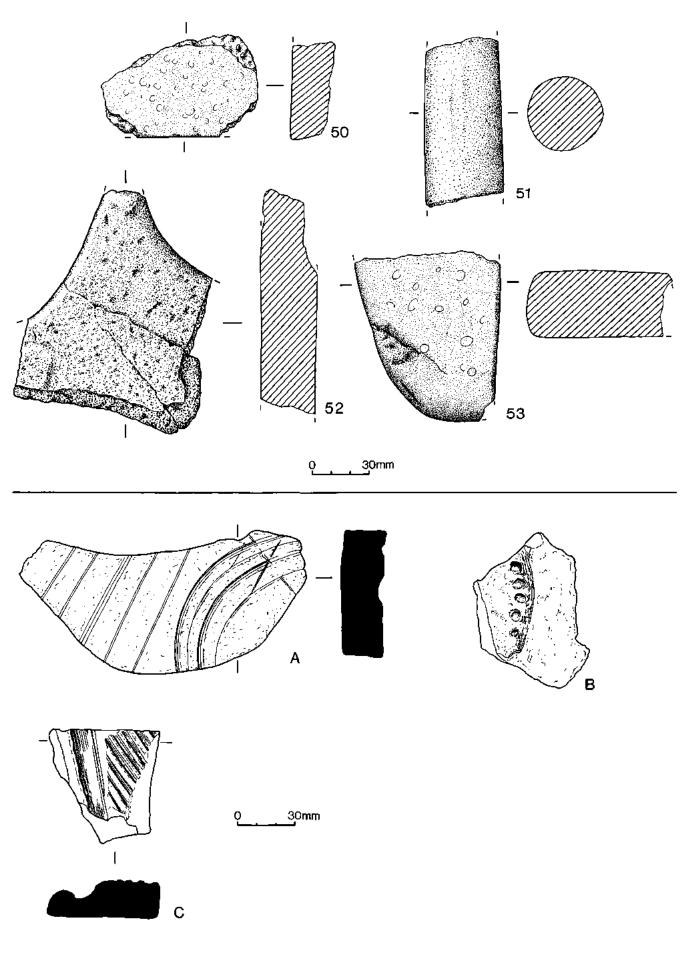


Fig. 21 Stone and tile artifacts.

suggested that there was a small overlap in thickness range between the brick and the *tegulae*. The *tegulae* were up to 26mm thick, while the range of brick thickness was c. 24-46mm, the average being about 30mm. Only three pieces out of over 135 were more than 40mm thick.

The evidence of the thickness suggests that none of this material derived from the larger brick types such as the *bipedalis*, which has an average thickness of 60mm (Brodribb 1987, 42), but is more likely to have derived from forms such as the *pedalis*, chiefly used as capping tiles for hypocaust *pilae*, or from wall bonding tiles. However, even for these types, the thickness is below average for the country as a whole. Only one brick still had mortar adhering, though others had traces of mortar.

Markings on bricks are comparatively rare, and only one, from 96, had a single straight finger mark. One of the hobnail prints may be on a brick, and there is a possible fingerprint from 91.

Tegulae Flange types were not categorised. The thickness of the body of the tile ranged from 11-26 mm, with an average of 18 mm.

'Signatures' in the form of one or more arcs against the edge of the tile were noted on a number of fragments, but the number of arcs was certain in only twelve cases; one had one arc, eight had two arcs and three had three arcs. One tile had two parallel lines drawn with the fingers. One of the tiles with a double arc also had lightlymarked parallel lines drawn after the signature, but before firing. They are slightly glossier than the rest of the surface, suggesting that they may have been made with a wet stick (Fig. 21, A).

Hobnail prints occurred on four pieces, one of which may be a brick. The latter has the edge of the sole with a row of hobnails along it (Fig. 21, B).

One probable *tegula* fragment from 120 had a low, sharp-edged ridge, 22mm wide, perpendicular to its edge. This may have been a by-product of the manufacturing process, caused when the top of the *tegula* was smoothed off using a wooden batten. A number of other tiles exhibit faint longitudinal striations about 20mm apart, which may have been created in the same way.

One possible nail-hole was noted from 95. A relatively small number of *ugulae* on each roof would have been nailed in place.

Imbrices The *imbrices* were unremarkable, and too fragmentary to make any estimation of size. Thickness varied from 9-18mm. One probable *imbrex* fragment had a line cut 18mm away from, and parallel to, the edge.

Box-flue tile Twenty-five fragments of box-flue tile were found. Eighteen had combed surfaces, and one had a cut lattice on the front. The combing consisted mostly of straight lines, with occasional swirls. Four tiles had part of the side cut-outs surviving. Three were oval or circular; the fourth, which was on the tile with the cut lattice, was rectangular. There was one unusual fragment, from 96B (Fig. 21, C), with a deep groove along the edge. The fabric is, however, similar to some of the post-medieval tile, and I am not convinced that this is Roman.

BYC86

Contexts 1-184 were catalogued by the MSC team. Due to problems with the documentation, reliable statistics for these contexts were not available. The total amount of tile from all Roman contexts was 493 pieces, including 286 pieces of spall. The tile from contexts 185 onwards weighed 18,371g (366 pieces, including 202 pieces of spall). The largest amount from a single context was 4,713g from 185. Little analysis of the material from BYC is possible, since the overall amount of tile is not very large.

Bricks As with SR88, there is probably an overlap in thickness between the *tegulae* and bricks, giving a total of about 30 brick fragments. The maximum thickness is 46mm, but this is the only example over 38mm thick. The average is about 35mm, which is slightly thicker than for SR88. There were no markings on any of the bricks. Tegulae Thickness ranged from 16-23mm. Two of the tiles had drilled nail-holes, 7mm and c 15mm in diameter. One probable *tegula* fragment had two arcs on it. Two tiles had cat pawprints: one from 284 had three prints, and a tile from 286 had a single print.

Imbrices The range of thickness was 9-19mm.

Box-flue tile Only four pieces of box-flue tile were present, one of which was dubious. All were combed, but the area represented was too small to surmise the overall pattern.

BH85

The total number of fragments was 152, weighing 5821g, including the post-medieval material. Out of this, the number of measurable Roman tile fragments was 19. Brick, *tegulae* and *imbrices* were present, but no box-flue tile, and there were no markings or other distinguishing features.

The animal bone

By M.D. Smoothy

Introduction

This report will only consider the animal bone derived from Roman period contexts from SR88 and BYC87. The bone sample from the other sites within the excavation is too small to warrant detailed consideration (basic identification information is included in the site archive). Equally, only SR88 and BYC87 produced sealed, well-dated Roman contexts with abundant animal bone. This restricts analysis to Phase III to V, as identified by the main author (i.e. c. 150-450).

SR88 and BYC87 produced a combined total of 13,888 bone fragments, of which 2,215 were identified by species and skeletal element, leaving 11,673 unidentified. The unidentified material is composed overwhelmingly of very fragmented large mammal longbone shafts (in this case the bulk of which will be from cattle); it was not thought cost-effective to attempt a detailed identification of this material. The identified material was catalogued and analysed using a suite of computer programmes provided by Professor Richard Klein of Chicago University (details of the method may be found in Klein & Cruz-Uribe 1984 and Cruz-Uribe & Klein 1986). Briefly, this involves the use of articular ends of bones and dentitions to calculate the Minimum Number of Individuals (MNI), in the sample.

A summary total for MNI and bone frequency, by species, for phases III (c. 150-250 AD), IV (c. 250-350 AD) and V (c. 350-450 AD) is given in Table 4 (the phases are as described in the main body of the report), the quantity of bone from the other phases is very small and have been included in the site totals ("Roman" in table).

The following contexts produced bone listed in Table 4:

SR88 Phase III:- 7, 10, 13, 60, 84, 85, 87, 89, 102, 107, 108, 109, 123, 124, 130, 131, 133, 135, 136, 145, 510.
Phase IV:- 6, 9, 40, 57, 73, 91, 95, 96, 113, 114, 115, 120, 128, 129, 138, 140, 141, 142, 144, 146.

Phase V:- 56. Roman:- 26, 33, 53, 56, 75, 106.

BYC87 Phase III:- 5, 165, 178. Phase IV:- 46, 168, 171, 174, 181, 182, 183, 186, 188, 205, 206, 207, 215, 242, 286, 297, 299, 300, 301.

> Phase V:- 101, 185, 213. Roman:- 169, 221, 279.

Most of the bone examined was well preserved; clearly the soil conditions on site allowed good survival. However, the bulk of the

	Cattle	Sheep	Pig	Horse	Dog	Deer	Unidentified
SR88						·	
Ph.III MNI (Sa=411)	10 364	4 38	2 5	1 4	0 0	0	1433
Ph.IV MNI (Sa=996)	19 815	6 88	5 52	1 17	2 21	1 3	5582
Ph.V MNI (Sa=18)	1				0 0		37
Total Phases II	I-V = 1425						7052
Roman MNI (Sa=1468)	23 1206	10 144	5 57	2 33	2 25	1 3	7183
BYC87							
Ph.III MNI (Sa=16)	2 4	1 9	1 2	0 0	1 1	0 0	188
Ph.IV MNI (Sa=598)	43 45 6	8 76	7 34	3 20	1 10	1 2	3477
Ph.V MNI (Sa=124)	6 85	3 22	3 14	2 2	1 1	0 0	732
Total Phases II	I-V = 738						439 7
Roman MNI (Sa=747)	46 550	9 109	9 52	3 22	1 12	1 2	4490

Table 4 George Yard — summary of bone totals.

Total SR+BYC ID = 2215 Unidentified = 11673

Total = 13888

material consists of dense bone from mature animals and the possibility of differential decay of immature bone should be borne in mind. None of the deposits were sieved on a systematic basis so the smaller species are probably under-represented.

Species breakdown

The data from Table 4 is presented by percentage in Table 5. According to the bone fragment count (for the whole sample), the assemblage is dominated by cattle (79.4%), with sheep next in order of importance (11.4%), followed by pig (4.9%), horse (2.5%), dog (1.7%) and deer (0.1%). The order of importance according to MNI is the same, cattle (61.6%), sheep (17.0%), pig (12.5%), horse (4.5%), dog (2.7%) and deer (1.8%). The relative increase in frequency of the less common species in comparison to cattle is an artifact of the MNI method (Grayson 1984), but especially in the case of sheep and pig it may give a more accurate impression of the original composition of the assemblage. The greater size and robustness of cattle bone will tend to exaggerate the importance of cattle when comparing simple bone fragment frequencies.

Species breakdown by phase

The species breakdown by phase for the combined sample is given in Table 6 for the main domestic species. Given the sample size, the variation in the minor species (Horse, Dog and Deer), is probably random. Clearly, the sample is dominated by cattle in all three phases. Cattle is relatively more abundant in phase IV with a corresponding reduction in the representation of sheep and pig, but given the general distribution of bone between the three phases (the sample from phases III & V are much smaller than that from phase IV), this patterning may not be significant.

Ageing and metrical data

For cattle, sheep and pig an attempt was made to age the material by Mandible Wear Stage (MWS, see Grant 1982 for details of the method). Although fusion states were recorded for use in the MNI calculations (in archive), I have not generally used these data for ageing purposes as for this type of sample MWS is a simpler and more reliable method. Unfortunately, the sample for all three species is relatively small and may not be fully representative (the sample was: cattle 34; sheep 45; pig 31 specimens). The data are graphically presented in Figures 22-24 and listed in the archive.

Due to the fragmented nature of the sample, few useful measurements were obtained. Those taken on cattle metacarpals and metatarsals (24 and 18 specimens respectively), are graphically presented in Figures 25 and 26 and listed in Tables 7 and 8. The few other measurements obtained are given below under the appropriate species.

	Cattle	Sheep	Pig	Horse	Dog	Deer	Unidentified
SR88							
Ph.III MNI	58.8	23.5	11.8	5.9	0	0	348.7
(Sa=411)	88.6	9.2	1.2	1.0	0	0	
Ph.IV MNI	55.9	17.6	14.7	2.9	5.9	2.9	561.6
(Sa=996)	82.0	8.8	5.2	1.7	2.1	0.2	
Ph.V MNI	50.0	0	0	50.0	0	0	205.6
(Sa=18)	33.3	0	0	66.7	0	0	
Roman MNI	53.5	23.3	11.6	4.7	4.7	2.3	490.0
(Sa=1468)	82.3	9.8	3.9	2.3	1.7	0.1	
BYC87							
Ph.III MNI (Sa=16)	40.0 25.0	20.0 56.3	20.0 12.5	0	20.0 6.3	0 0	1175.0
Ph.IV MNI	68.3	12.7	11.1	4.8	1.6	1.6	582.4
(Sa=598)	76.4	12.7	5.7	3.4	1.8	0.2	
Ph.V MNI	40.0	20.0	20.0	13.3	13.3	0	590.3
(Sa=124)	68.5	17.7	11.3	1.6	0.8	0	
Roman MNI	66.7	13.0	13.0	4.3	1.4	1.4	601.9
(Sa=747)	73.7	14.6	7.0	2.9	1.6	0.1	
SR88+BYC87							
All MNI	61.6	17.0	12.5	4.5	2.7	1.8	527.7
(Sa=2215)	79.4	11.4	4.9	2.5	1.7	0.1	

Table 5 George Yard - summary of bone percentages.

Cattle

From the limited number of measurements available and the general appearance of the sample, the cattle seem to be similar to those described from Colchester and Chelmsford (Luff 1982), and the nearby rural site at Rayne (Smoothy 1989). The four complete metapodia (MC-205.0, 197.0 & 196.5 mm. MT-225 mm.), give a mean withers height of 1.22m with a range of 1.26 to 1.20m (calculated as in Bourdillon & Coy 1980, 105). A complete skull (with horncores removed), was found in Context 140 (SR88). The skull had been crushed by ground pressure so few useful measurements were obtained, however the left maxillary toothrow was lifted intact:

Cheektooth Row (20) = 131.0 mm, Molar Row (21) = 81.9 mm, Premolar Row (22) = 50.6 mm (the figures in brackets refer to standard measurements defined in Von Den Driesch 1976).

The MWS data, shows a distribution skewed towards the older end of the age range with a peak at MWS 41 and a further smaller peak at MWS 47 (the range for the sample is MWS 14-50). MWS may be approximately equated with absolute age as follows (based on Grant 1984 and Sisson & Grossman 1975):

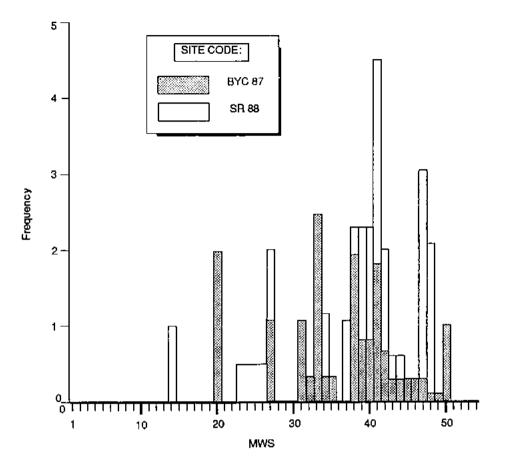
MWS1-8	up to 1 year (Young)
MWS9-16	1 to 1.5 years [M2 erupting]
	(Young Juvenile)
MW\$17-28	1.5 to 2.5 years [M3 erupting]
	(Juvenile)
MWS29-38	2.5 to 4 years (Young Mature)
MWS39-51	4 years + (Fully Mature)
MW\$52+	? (Old)

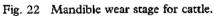
Table 6 George Yard — species by phase (SR88+BYC87).

	Cattle	Sheep	Pig	Horse	Sample
Ph.III MNI	12	5	3	1	427
	57%	24%	14%	5%	
Ph.IV MNI	62	14	12	5	1594
	67%	15%	13%	5%	
Ph.V MNI	7	3	3	3	142
	44%	19%	19%	19%	

As these estimates are necessarily based on recent cattle populations the age categories should be taken only as a rough guide.

The age distribution contrasts with that from Rayne (Smoothy 1989), and College House, Braintree (Smoothy Unpublished Ms). At Rayne the aged mandibles fell into two groups, one centred on MWS 20 and the other on MWS 51. At College House the data (which is from a much larger sample than that at the other two sites), shows a clear trimodal pattern with major peaks at MWS 21 and 41, and a minor peak at MWS 32. Animals up to one year of age are not represented in any of the three samples (presumably either due to





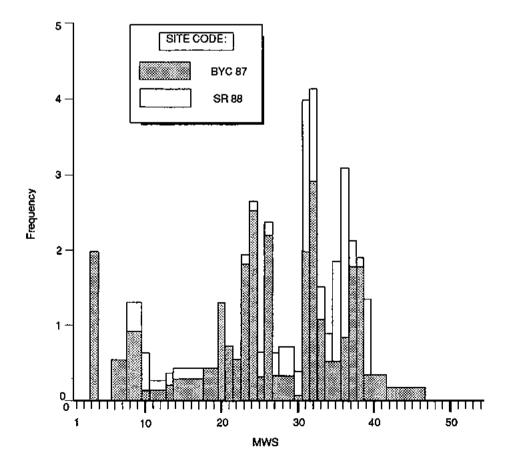


Fig. 23 Mandible wear stage for sheep.

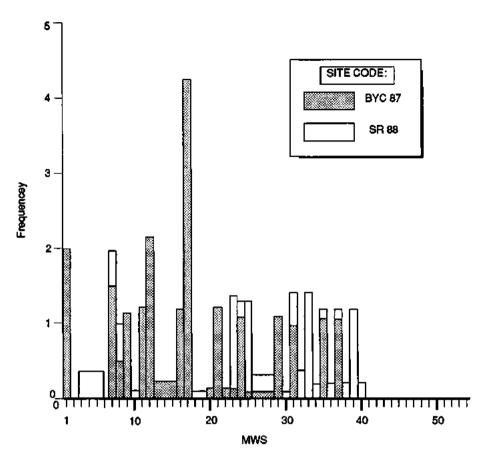


Fig. 24 Mandible wear stage for pig.

differential decay of immature bone or a product of site function), which clearly biases the death assemblage. However, the sample from College House seems to indicate a regular kill pattern (possibly an annual cull). The animals present at George Yard fall principally into the fully mature class, whilst the rural site at Rayne lacks animals in this age group. Assuming that both sites are part of the same agricultural system (and taking account of the limited sample involved), this is suggestive of the patterned movement of animals from a rural to an urban setting.

The graphs of cattle metapodia distal epiphysial width/distal width (Figs 25 and 26), are intended to detect any sexual dimorphism in the sample. Unfortunately both samples show a relatively even distribution which makes any firm interpretation problematic. For metacarpals (Fig. 25), the isolated specimen in the upper righthand corner may be interpreted as male, while the other specimens are difficult to resolve and may probably be taken to represent females (though the presence of castrates may further complicate the picture). A larger sample from College House, Braintree (data in archive), shows a very clear cluster of specimens in the upper righthand corner which are interpreted as males. As both sites may reasonably be considered part of the same agricultural system this suggests that the apparent absence of male cattle at George Yard may be real, rather than a product of the methodology used. A similar picture is shown by the metatarsals (Fig. 26); a single isolated specimen on the right-hand side of the graph may be male whilst the rest of the specimens show no clear pattern. However, a larger sample from College House also shows a cluster in the upper right-hand corner which confirms the interpretation given for the metacarpals.

The skeletal part distribution for cattle (Table 9), does not generally depart significantly from that expected in a standard domestic assemblage. The presence of the full range of skeletal elements indicates slaughter (or at least the butchering of whole carcases), on site. However, the MNI for BYC87 is clearly inflated by the figure for frontlets (ie. horncores with attached skuil). The frontlets give a MNI of 46 whilst the next most common element (i.e. scapula), gives an MNI of 14 (30% of site MNI). Several other elements give similar figures e.g. astragalus MNI = 13 (28%), mandible MNI = 12 (26%), distal metacarpal MNI = 10 (22%) and calcaneum MNI = 10 (22%). A number of pits in the north-west corner of the site (principally contexts 188 and 301), contained inter alia a large quantity of homeores which account for the inflated MNI. It appears that horncores were being disposed of differentially whilst the remainder of the carcass was utilised and discarded elsewhere. For SR88 frontlets are also the most common element (MNI = 23), but an identical figure is obtained for the distal humerus and a number of other elements approach this figure e.g. proximal radius MNI = 20 (87%), astragalus MNI = 16 (70%), mandible MNI = 15 (65%), proximal ulna MNI = 15 (65%), calcaneum MNI = 15 (65%) and navicular MNI = 13 (57%). Clearly, for SR88 the skeletal part distribution is more uniform than that for BYC87, many of the differences seen in MNI for various skeletal elements can be explained by standard attritional processes operating on bones with differing survival potential (Binford 1981).

It is notable that in both samples the limb bones are in a very fragmented condition, presumably due to deliberate breakage in order to extract marrow. This accounts for the high proportion (84% of the combined sample) of unidentified bone fragments, the bulk of which are large mammal long-bone splinters (presumably mainly from cattle). Butchery marks were not systematically recorded, however knife and chopper marks were observed to be fairly frequent. The following marks were commonly observed: transverse chop marks on ribs (usually on the lateral side); oblique chop marks on the neck of the scapula (often detaching the glenoid from the blade); oblique chop marks on the shaft of the calcaneum. One rather Table 7 George Yard: cattle metacarpals.

	Context	DIST.W	D.EPI.W	DIST.T	GL
SR88	144	56.9	55	30.4	0
	144	59.2	57.9	32.3	0
	95	57.5	52.2	29.4	0
	96	55.2	49.6	27.3	0
	101	55. 9	51.4	30.3	205
	101	56.9	52.8	30.7	197
	102	58.8	53.5	33.9	0
	141	56.5	55.8	34.8	196.5
	141	54.5	48.3	30.7	0
	113	55.5	50.2	29.6	0
	106	58.5	54.1	30	0
	9	48.8	43.4	22.3	0
	15	57.4	55.5	30	0
	40	53.7	48.4	28.3	0
	123	53.4	49.5	30	0
	91	56.3	53	27.6	0
	91	55.1	50.7	29.4	0
BYC	181	55.8	50	31.4	0
	181	61.5	57.2	28.6	0
	188	74.2	66.2	32.7	0
	188	64.2	56.7	32.7	0
	211	61.4	57.7	31.8	201••
	170	63.4	60.9	36.9	215.5
	183	57.3	55	30.6	198.5

unusual feature was noted, a hyoid bone (SR88 — context 40), showed four clear cut/chop marks on the superior edge of the stylohyoid, presumably due to removal of the tongue. Generally one gains the impression that any available animal was intensively utilised.

Sheep

The term "sheep", is used in a general sense and may also include some goat bones (ovicaprid would be a more accurate designation), as much of the post-cranial skeleton is virtually indistinguishable between the two species (particularly in a small sample where statistical techniques are not available). Those cases where definite attribution is possible (for horncores), are noted below.

As with the cattle, the sheep bones are generally similar to those described from Roman levels in Colchester and Chelmsford (Luff 1982), and Rayne (Smoothy 1989). The sample is unusual in the district in producing a fragment of sheep (*sensu stricto*), horncore. All other assemblages the author has examined from Roman contexts in the area lack horncores, the animals presumably being derived from a hornless breed (the horncore is from SR88, context 40 — this context lay directly below a post-medieval layer and it is possible that the horncore may be intrusive, as a horned breed of sheep was present in the post-medieval period). The only other ovicaprid horncore from the site is from SR88, context 113, and is definitely attributable to goat (the only specimen from the site). Due to the highly fragmented nature of the sample the only measurements obtained were on four metapodia (all from SR88):-

Metatarsus	Con. 53	Gl = 129.5 mm.	Dist.W = 23.2 mm.
Metacarpus	Con. 128	Gl = 114.5 mm.	Dist.W = 26.4 mm. Dist.W = 27.1 mm. Dist.W = 24.9 mm.

The MWS data (Fig. 23), shows a distribution skewed towards the older end of the age range with a peak at MWS 32 and a further smaller peak at MWS 36 (the range of the sample is MWS 3-46). The peaks at MWS 32 and MWS 36 approximately correlate with 4 and 5 years old respectively (Grant 1984).

The skeletal part distribution for sheep (Table 10), differs from that of cattle in that the highest MNI from both SR88 and BYC87 is based on mandibles and loose teeth. Based on post-cranial material the MNI figures would be reduced by at least 50%. This discrepancy is probably due to the greater fragmentation and attrition suffered by the relatively delicate sheep bone when compared to the more robust cattle bone. The survival potential of teeth tends to be more equal across species and so may give a better impression of the relative abundance of species originally present. The lack of sieving will also lead to an underestimate of the relative importance of sheep versus cattle. Table 10 indicates the presence of a wide range of skeletal elements and we may presume that whole carcases were being butchered and utilised on site. Butchery marks are markedly less common than on cartle bone.

Pig

The small sample size and fragmented nature of the assemblage precludes any detailed consideration of the pigs utilised at the site. No metrical data are available for the sample. The MWS data (Fig. 24), gives a range of MWS 1 to MWS 40, with an apparently random distribution (given the small sample size the peak at MWS 17 is probably of little significance), presumably indicating a more irregular slaughter pattern for pig than that suggested for cattle and sheep.

Table 8 George Yard: cattle metatarsals.

	Context	DIST.W	D.EPI.W	DIST.T	GL
SR88	144	58.4	55	31.3	0
	144	58.5	52.5	32	0
	144	52.4	48.7	29.7	0
	96	555.2	51.8	30.2	0
	113	52.4	49.6	31	0
	113	51.1	49.7	30.3	0
	106	55.7	54.6	30.2	0
	99	51.9	49.9	28.5	225
	132	62.1	55.8	35.2	0
	57	53.4	50.1	30.8	0
	53	47.5	44	26.2	0
	87	60.7	56.3	33.4	0
BYC	183	61.9	57	33.3	0
	181	52.9	48.9	30	0
	238	47	43.3	27.1	0
	185	56	53.4	29.5	0
	186	68.4	54.6	35.5	0
	174	52	47.6	39.5	0

Skeletal element		SR88			BYC87	
creater.	NISP		MNI	NISP		MNI
Frontlet	50	23	100%	88	46	100%
Occipital Condyle	5	4	7%	б	4	9%
Auditory Bulla	4	3	13%	0	0	-
Mandibular Fossa	1	1	4%	0	0	-
Premaxilla	2	2	9%	3	2	4%
Maxilla (incl. Teeth)	65	11	48%	35	9	20%
Mandible (incl. Teeth)	97	15	65%	45	12	26%
Mandibular Condyle	19	7	30%	7	4	9%
Hyoid	3	2	9%	0	0	-
Atlas	7	4	17%	2	2	4%
Axis	8	5	22%	2	1	2%
Cervical Vert.3-7	23	4	17%	7	2	4%
Thoracic Vert.	21	2	9%	8	2	4%
Lumbar Vert.	13	2	9%	5	2	4%
Sacral Vert.	0	0	-	2	1	2%
Caudal Vert.	4	1	4%	0	0	-
Ribs	5	1	4%	0	0	-
Scapula (glenoid)	31	12	52%	29	14	30%
Humerus (prox.)	53	8	35%	9	3	7%
Humerus (dist.)	124	23	100%	33	8	17%
Radius (prox.)	84	20	87%	25	8	17%
Radius (dist.)	45	9	39%	12	4	9%
Ulna (prox.)	54	15	65%	14	3	7%
Ulna (dist.)	4	2	9%	5	1	2%
Carpais	32	7	30%	0	0	-
Metacarpal (prox.)	21	10	43%	10	6	13%
Metacarpal (dist.)	24	12	52%	18	10	22%
1st Phalange	50	7	30%	14	3	7%
2nd Phalange	18	4	17%	25	4	9%
3rd Phalange	23	3	13%	18	3	7%
Innominate	14	3	13%	13	4	9%
Femur (prox.)	17	4	17%	4	2	4%
Femur (dist.)	27	6	26%	7	3	7%
Patella	2	2	9%	0	0	-
Tibia (prox.)	38	5	22%	6	2	4%
Tibia (dist.)	42	10	43%	20	7	15%
Calcaneum	50	15	65%	22	10	22%
Astragalus	61	16	70%	29	13	28%
Navicular	30	13	57%	14	7	15%
Metatarsal (prox.)	20	8	35%	15	7	15%
Metatarsal (dist.)	20	11	48%	8	4	9%
Total for bones	1044	23	100%	470	46	100%
Fotal for teeth	162	15	65%	80	12	26%
Grand total	1206	23	100%	550	46	100%

Table 9 Cattle: skeletal part distribution.

Distal Width / Epiphisial Width

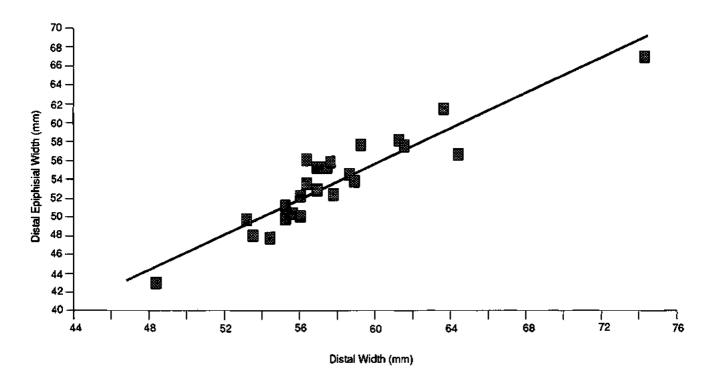
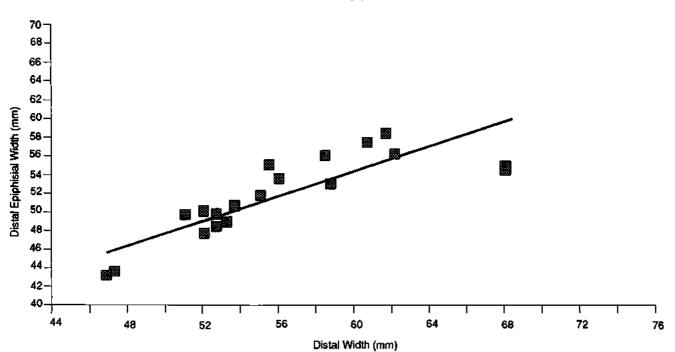


Fig. 25 Graph comparing cattle metacarpal distal width to distal epiphysial width on the bone from the George Yard excavations.



Distal Width / Epiphisial Width

Fig. 26 Graph comparing cattle metatarsal distal width to distal epiphysial width on the bone from the George Yard excavations.

	SR	88		1	BYC87	
Skeletal element	NISP		MNI	NISP		MNI
Frontlet	2	2	20%	1	1	 11%
Occipital Condyle	0	0	-	1	1	11%
Maxilla (incl. Teeth)	27	9	90%	21	8	89%
Mandible (incl. Teeth)	40	10	100%	36	9	100%
Mandibular Condyle	б	4	40%	7	5	56%
Atlas	I	1	10%	1	1	11%
Axis	0	0	-	1	1	11%
Cervical Vert. 3-7	3	2	20%	1	1	11%
Lumbar Vert.	1	1	10%	0	0	-
Ribs	1	1	10%	0	0	-
Scapula (glenoid)	2	1	10%	0	0	-
Humerus (dist.)	3	2	20%	2	1	11%
Radius (prox.)	2	1	10%	5	4	44%
Radius (dist.)	3	2	20%	2	2	22%
Ulna (prox.)	2	2	20%	2	1	11%
Metacarpal (prox.)	10	5	50%	4	4	44%
Metacarpal (dist.)	8	4	40%	2	1	11%
1st Phalange	2	1	10%	11	3	33%
3rd Phalange	0	0	-	2	1	11%
Innominate	6	2	20%	0	0	-
Femur (dist.)	3	2	20%	0	0	-
Tibia (prox.)	2	2	20%	1	1	11%
Tibia (dist.)	8	4	40%	2	2	22%
Calcaneum	1	1	10%	1	1	11%
Astragalus	2	1	10%	3	2	22%
Metatarsal (prox.)	6	3	30%	3	2	22%
Metatarsal (dist.)	8	3	50%	3	2	22%
Total for bones	77	5	50%	52	5	56%
Total for teeth	67	10	100%	57	9	100%
Grand total	144	10	100%	109	9	100%

Table 10 Sheep: skeletal part distribu
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The skeletal part distribution for pig, demonstrates that the MNI figures are heavily biased in favour of dentitions. The occurrence of post-cranial elements is very limited (even when compared with sheep). It is well established that pig bone is more vulnerable to attritional processes than bone from most other large/medium mammals and considering the degree of fragmentation shown by the cattle and sheep bone the under-representation of pig bone is not surprising. Whilst juvenile bone is certainly more prone to decay than adult bone for any given species, this fact cannot be used to explain the whole discrepancy that is often observed between the survival of dental/cranial and post-cranial pig bone. The MWS data clearly demonstrate that pigs of all ages were present on site, therefore the differential decay of juvenile bone is not the only factor at work. While many other causes may be suggested (e.g. off-site transport, butchery practices etc.), I am of the opinion that pig bone is more vulnerable to "natural" decay than comparable bones from other species of similar size.

Horse

Horse bone occurs in small quantities in all Roman phases. Its condition is not noticeably different from that of the cattle bone. The skeletal part distribution shows that all parts of the skeleton are present. Due to the fragmented sample, measurements are only available for 2 bones: 1st Phalange (SR88, con.144), Gl = 84mm, Dist.W = 46.8mm, Prox.W = 56.9mm; Metatarsal (SR88, con.95), Gl = 250.5mm, Bp = 43.7mm, Bd = 45.3mm, SD = 28.2mm (measurements as in Von Den Driesch 1976). These measurements fall at the upper end of the range for Iron Age horses recorded at Danebury (Grant 1984), but are still small by modern standards (pony rather than horse). No butchery marks were observed on the horse bones.

Dog

The remains of at least three dogs were recovered from the site. Bones from all parts of the skeleton were present, generally as scattered, isolated finds. Dog bone does not appear to have received any special treatment, e.g. no articulated burials etc. No measurements are available from the sample. Subjectively, the animals involved appear to be slightly smaller than a modern labrador (this does not imply that the breeds are similar in any other respect). No butchery marks were observed.

Deer

The very small sample of cervid bones from the site are all from red deet (*Cervus elaphas*), though bone from roe deer is present on other Roman sites in the neighbourhood (Smoothy 1989). Beyond noting its presence the small bone sample (one molar tooth and two phalanges, all from BYC87), allows little room for interpretation. Clearly venison was not an important food resource at the site. Only one of the antler fragments (all presumably from shed antlers, though in no case is the burr present), is worked. BYC87, context 186, produced a section of antler time (76.5mm long), transversely sawn at both ends. The distal end was hollowed out (to take a tang?); the piece is probably an unfinished knife handle.

Chicken

Chicken was rare (four bones from SR88 Archive), and the distribution is apparently random and unpatterned. No measurements were taken. Subjectively, the birds appear smaller than most recent domestic breeds (approximately the same size as a modern bantam).

Avian bones

Six bones from the site (Archive), may be attributed to small/ medium wild birds, but it has not proved possible to identify the bones to species. Given the small size of the sample and its apparently random distribution, the bones may be assumed to have been incorporated into the deposits by natural processes.

Discussion

A. Taphonomy

The bulk of the bone considered in this report was recovered from a series of rubbish pits presumably relating to structures outside the excavated area. The character of the bone sample accords well with this "backland" interpretation. Although the sample is heavily fragmented, the bone is well preserved and few specimens show the weathering and abrasion one would expect if the material had been subjected to prolonged surface exposure. Generally the bone distribution is remarkably uniform, suggesting that the bones are derived from domestic rubbish deposits, with little specialised activity represented. The pit group in the north-west corner of BYC87 may be an exception, and the relative abundance of cattle horn cores may be primary butchery waste. Clearly all available animal resources were heavily utilised, as indicated by the fragmentation of cattle limb bones which is probably due to systematic marrow extraction. The general impression given by the assemblage is exactly what one would expect of food refuse from a relatively low-status semiurban context.

B. The farming economy

It cannot be assumed that the relative distribution of animals found on any single archaeological site accurately mirrors their distribution in the contemporary farming economy. However, when one combines the information from George Yard with that from other sites in the town (Luff 1976, Smoothy Unpublished Ms), and the surrounding countryside (Smoothy 1989), a coherent picture begins to emerge.

The evidence indicates a mixed farming economy in which cattle form the principal component, sheep being the next most common species (the material from George Yard mainly relates to the third and fourth centuries A.D.). The sample from College House (which covers the whole Roman period), suggests that sheep declined in importance relative to cattle during the later Roman period (a feature noted on a number of sites in southern Britain; King 1978). Horse and pig are consistently present in the assemblages but at a lower level. Certainly the bulk of the meat consumed would be derived from cattle, although the age pattern of the population suggests that secondary products (milk, cheese, etc.), would have been of considerable importance. In the case of sheep it is probable that the production of wool would have taken precedence over meat production.

Discussion

Drury's (1976) review of the archaeology of Braintree considered all the evidence from the earliest occupation through to the post-medieval period, but this discussion will consider the evidence that has become available since then, and will concentrate on the Roman town and its layout, with some consideration of its immediate Late Iron Age predecessor.

Evidence of Late Iron Age occupation has been found on several sites. At both the Fountain (Hope 1983) and Boar's Head excavations (Hope 1987) (Fig. 27), Late Iron Age roundhouse gullies and coins were found. The coins included two of Addedomarus and one of Cunobelin. A large ditched enclosure was found on the College House excavations (Bakewell 1988), also being traced into the garden of the former 4 London Road (Bale pers. comm.). No interpretation has been proposed for this enclosure at present, although a date in the early first century AD seems probable, on the basis of both coins and pottery.

It had been previously suggested that Iron Age occupation had been centred on the putative *oppidum* (Drury 1976), but excavations on various sites (Eddy 1983, Bedwin 1984/5) found little evidence of domestic settlement within the area defined by the earthwork. The new evidence found to the north of London Road suggests that the Late Iron Age domestic occupation was centred here (Fig. 27).

Given the existence of Late Iron Age settlement here, it is not perhaps surprising that the earliest evidence for Roman settlement is also in this area. This has been amply confirmed in the trenches excavated along the line of Pierrefitte Road by B.V.A.S. and B.D.C.'s M.S.C. team, where the evidence shows continuity through into the second half of the first century A.D. Little has been done in the areas fronting directly onto the Roman road here (i.e. the line of the London Road/High Street), apart from small trenches in the garden of the former 2-4 London Road (Fig. 3). It is therefore difficult to confirm or refute the notion of ribbon development in this part of the town during the second half of the first century A.D. Certainly the evidence of first-century timber-framed buildings from the Fountain and Boar's Head excavations noted in interim reports (Hope 1983 and 1987, respectively) rather point towards nucleated settlement in the area between the two Roman roads corresponding to modern Rayne Road and London Road/High Street (Fig. 2).

During the second and third centuries, the area of the Roman town expanded to the area now known as

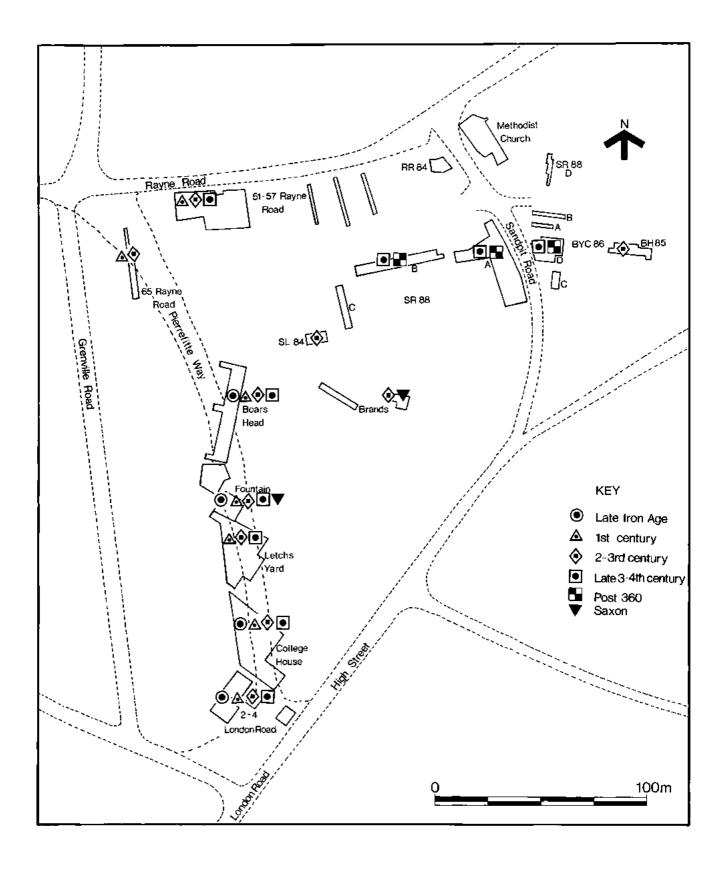


Fig. 27 Evidence for various phases of occupation within Braintree.

George Yard, and along Rayne Road. Drury's excavations at 51-57 Rayne Road demonstrates this clearly (Drury 1976), as does the B.V.A.S. trench at 65 Rayne Road (Fig. 2), which extends the known limits of the Roman town to the west. Evidence of domestic activity during the second and third centuries came from all the trenches excavated along the line of Pierrefitte Road and in the George Yard area (Fig. 2), wherever later disturbance allowed Roman features to survive.

However, the poor quality of the excavated evidence makes finer resolution almost impossible, particularly with regard to the presence or absence of houses. Although many features have survived, these belong to certain classes only i.e. pits/wells, ditches/gullies, post holes and a little cobbling. Features like the gravel or mixed gravel/brickearth spreads of building A and B from 51-57 Rayne Road (Pratt, in Drury 1976, 6-15) could easily have been removed by post-Roman ploughing (Pratt, in Drury 1976, 15) or by relatively recent disturbance associated with house building, demolition or levelling to form temporary car parks. However, the absence of any gravel flooring which had subsided into pits and ditches of BYC 86 and SR 88 (c.f. layer 13 which had subsided into pit 47 in the 51-57 Rayne Road trenches: Pratt in Drury 1976; fig. 6, 51) may be a more significant indicator of the lack of buildings. On balance, therefore, much of the area sampled by BYC86 and SR88 may be 'backlands', in spite of the presence of the minor roads or tracks observed in SR88 A and B (Fig. 3).

It seems unlikely that all the road-frontage stretches were built-up and it seems more likely that some of these minor roads identified (Fig. 29) were cul-de-sacs and/or fairly ephemeral. The structures diffidently identified in BH 85 (above) may be fence lines, rather than roofed structures, and would seem to be towards the eastern edge of the town.

Roman Braintree began to decline and contract at, or shortly after, the mid-fourth century. The evidence for this is fairly consistent from all parts of the town. Pratt's trenches at 51-57 Rayne Road show a decline in the mid-fourth century (Pratt, in Drury 1976, 14-15): the coin evidence from the gardens of the former 2-4 London Road indicates occupation coming to an end in the mid to late fourth century (R. Bale pers. comm.). The George Yard excavations, especially BYC86 and SR88, showed a concentration of material in the late third through to the mid and late fourth century. The presence of late shell-tempered wares and pottery decorated with 'Romano-Saxon' motifs indicate a post-360 A.D. date, and this material may have continued in use into the fifth century. Thereafter, Braintree appears to have been more or less abandoned: the only evidence to the contrary consists of two possible sunken-featured buildings noted by B.V.A.S. in excavations at the Fountain and at Brand's (Fig. 2; Hope 1982 and 1984 respectively).

The road system and the town layout

The main conclusions drawn from the excavations described in this report are that the road system and the model of town development proposed by Drury (1976) both need radical overhaul.

New roads have been found within the town, while some of Drury's routes can be discounted. In general, it is possible to simplify the road system, as long as a distinction is maintained between the major roads (or through routes) and minor roads within the Roman town itself. The evidence for this is outlined below and should be considered in conjunction with Figure 29; the major roads are dealt with first.

The main east-west route (Drury's IV and V) represent Stane Street. Drury (1976) interpreted the evidence from 51-57 Rayne Road as indicating the line of Stane Street, but there remains serious doubt about such an interpretation. First, the roadside ditch seems to have been open in the second half of the first century A.D. and into the early second century, but was then built over on two separate occasions (buildings A and B; Drury 1976; figs 8-10). It seems highly unlikely that the main east-west road to a centre as important as Colchester would have been encroached upon in this way.

Secondly, this roadside ditch could not be satisfactorily traced eastwards either in Pratt's slit trenches (Drury 1976, fig. 4; trenches 1, 2, 3) or in the more recent trenches BT21 and SR88 (Fig. 3). Again, it seems improbable that the ditch of such a major route would not be present. Finally, the description of the road surface itself (L23) as comprising "8-12cm of gravel in a loamy sand intermix, having much clean sand and brickearth in its lower levels" and "merging with L13", the gravel platform for building A (which seals the roadside ditch) does not seem to be compatible with a major road.

It seems preferable to interpret this road as a minor road within the town, akin to the roads identified in SR88 A and B (Fig. 3). If this is accepted, then where is Stane Street? It cannot lie to the south, because it would have been located somewhere within the George Yard excavations. It is suggested that a more likely route is that shown in Figure 29, i.e. a continuation of the modern Coggeshall Road; only future excavations can confirm this.

Two of Drury's other routes can be ruled out: Excavations at Toft's Garage in 1980 failed to find any trace of a Roman road, corresponding to route II. The line of route III was checked in 1990 during work on the Tabor High School. No sign of a Roman road was found, even though a trench some 150m long was examined at 90 degrees to the proposed position of the road.

The line of the main south-west north-east route (Drury's routes VI and VII; Chelmsford to Gosfield) is not seen as needing revision; in any case there has been little opportunity to check it. A slight alteration in the

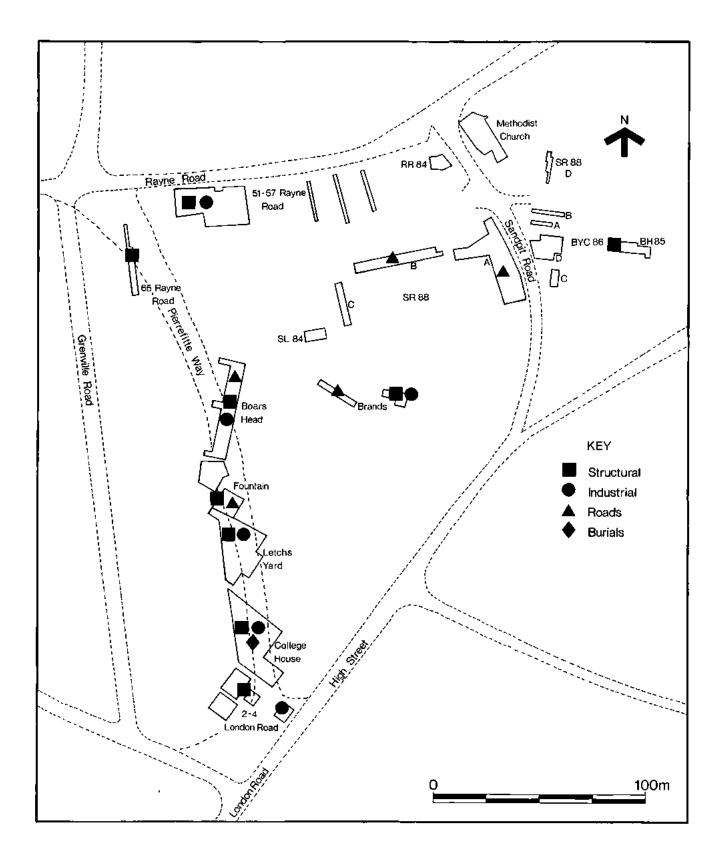


Fig. 28 Evidence of structures, industries, roads, and burials within Roman Braintree.

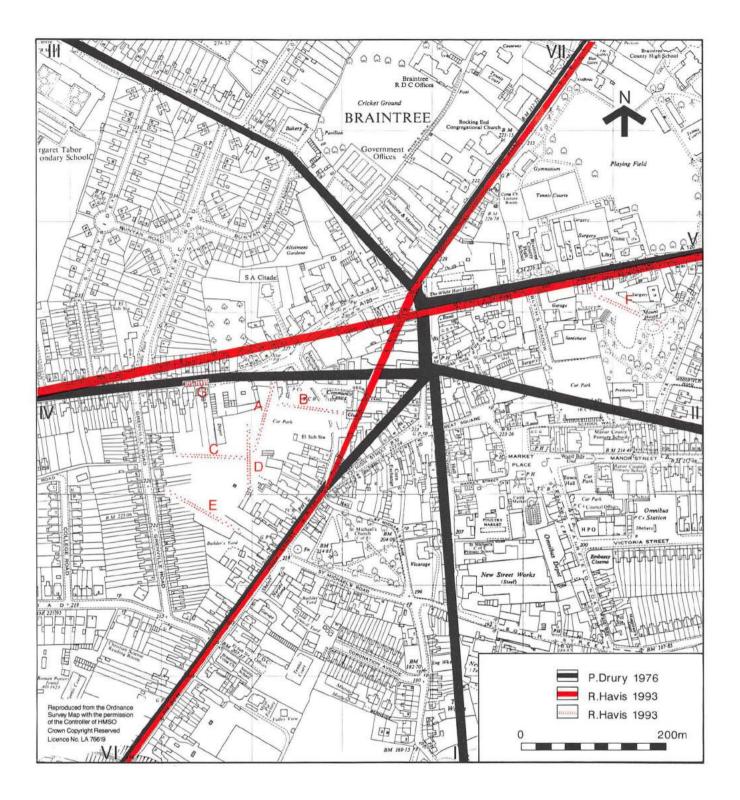


Fig. 29 Re-interpretation of the road system within Braintree. The road system of Drury 1976 is overlaid by a new interpretation from the information available.

line of the Chelmsford route is proposed (Fig. 29) to produce a simple crossroads, rather than a staggered junction. This revised line should have run between BYC86 D and BH85, and should have been detectable in BYC86 C, had the latter not been totally destroyed by footings, sewer pipes and cess pits.

No fresh evidence for or against Drury's route I (to the putative villa at Black Notley) has been forthcoming.

In summary, therefore, Drury's seven through routes with a staggered junction, are reduced to four routes with a single, simple junction, plus a fifth route (his route I) not ruled out.

As regards minor roads, six are indicated in Figure 29, listed A-F. A seventh minor road, G, may be added for the reinterpretation if the findings at 51-57 Rayne Road (above) are accepted.

Although road F is well to the east of the Roman town, and presumably runs off towards a nearby farmstead, it must surely be significant that the other six minor roads are all in a group between Drury's routes IV and VI (Fig. 29). This suggests that the town developed not around the putative cross-roads, which seems never to have been a focal point, but in an area between two of these roads. The original focus of the town seems to have been on the area around College House in the first century A.D., and considerable expansion then took place during the second century, filling much of the space between the two roads. The hypothesis of 'ribbon development' along two of the major routes (Drury 1976) would seem to be untenable.

It is noteworthy that many of these minor roads are roughly parallel to one another (e.g. B; C; G) or at right angles to one another, or to one of the main roads (e.g. A and B; E and the Chelmsford road). It is tempting to see a degree of planning in this, but the excavated evidence, such as it is, cannot really support the idea. For example, none of the roads A, B, and G can be traced from one trench to another in the George Yard area (Fig. 3), and must therefore be relatively short. Equally, some may be rather short lived; the ditch to the south of road G was backfilled during the second century to have a building constructed across it (Pratt, in Drury 1976, 6-8). This would seem to be evidence of piecemeal, organic growth rather than formal planning. It is not necessarily suggested that all these roads are heavily built up. Only three of them (G, E, C) had evidence of timber structures fronting onto them, and in the case of the latter two (known from the Fountain and Boar's Head trenches), these are only published in interim reports.

Within the town, there seems to have been a degree of zoning of industrial use. The George Yard trenches, for example, produced no evidence of ironworking, but there were large quantities of iron slag in the Brand's excavation (Fig. 2; Hope 1984), where two phases of a timber structure were identified. These had floors of beaten clay into which had been incorporated large amounts of smithy slag (identified as such by Dr J.J. Cleland of the Department of Metallurgy of Cambridge University; Hope 1986).

Further west, at Letchs Yard, were a possible bloomery and smithy, plus several pits, interpreted as casting pits (Hope 1986). The College House excavation also produced abundant iron slag (M. Smoothy, pers. comm.). All this points to a concentration of iron working in the south-west of the Roman town. (It is not claimed that this is the only area where iron working took place; there was some small-scale evidence from 51-57 Rayne Road [Drury 1976].)

The cemetery of the Roman settlement lay in the Grenville Road area; it seems to have been exclusively a cremation cemetery (Drury 1976). Little can be added to Drury's account except to note the presence of child burials at College House (A. Wade pers. comm.).

Acknowledgements

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Thanks must be extended to all those producing reports for this article. All illustrations were produced by Leslie Collett, Stewart McNeil, and Nick Nethercoat.

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Excavations at Church Street, Waltham Abbey 1976-87: urban development and prehistoric evidence

by C.P. Clarke, M.F. Gardiner and P.J. Huggins with major contributions by K.N. Bascombe and R.M. Huggins

Rescue excavations at Nos 6, 6A and 7 Church Street, immediately south of the parish church, are reported.

The archaeological sequence began with a north-south ditch containing organic material from which a later Bronze Age radiocarbon date was obtained. The ditch corresponds to the western boundary of Eldeworth, the old enclosure, known from documentary sources.

The start of the medieval urban sequence may date to the Saxo-Norman period. The earliest features consisted of lines of post holes at approximately right angles to the street frontage, plus three gullies.

Later features included: late medieval chalk foundations, serving as the base of a timber-framed building; two deep pits of early 13th-century date; a mid 13th-century clay-floored building with an associated undercroft of the mid 16th century; and a group of 5 ovens, probably of the town bakery. These latter dated, on pottery evidence, from c. 1300 to the early 17th century. An archaeomagnetic date for the earliest oven was late 13th/early 14th century, compatible with the pottery.

Among the finds were two large groups of pottery belonging to the first half of the 13th century, a silver-gilt pin, a sceat of c. 715 A.D., a pivoting knife blade and pricket candleholders of iron, and a piece of carved bone thought to derive from the decoration of an altar (13th/14th century).

A comprehensive documentary survey is included. An incidental discovery is the identification of the birthplace of Thomas Leverton, the architect (1743-1824).

1. Introduction

This report describes three rescue excavations undertaken on three vacant plots just south of the Abbey Church on land sloping down from the Market Place to the tail of the Cornmill stream.

In 1976, a trench was excavated at No. 6, Church Street by the Waltham Abbey Historical Society under the direction of P.J. Huggins. In 1979, at No. 6A, a single machine slot was excavated by Essex County Council Archaeology Section under the direction of C.P. Clarke.

Finally, in 1987, at Nos 6 and 7, an area excavation of c. 200 m² was carried out by Essex County Council Archaeology Section under the direction of Mark Gardiner. The eastern edge of this area was partly contiguous with the western edge of the 1976 work. Later in 1987, W.A.H.S. continued work in the same area.

As a matter of record, it should be noted that a joint report on the 1976 and 1979 excavations had been prepared by 1984, and it had been hoped to include it in the 1988 volume of *Essex Archaeology and History*. However, by that time, the 1987 excavation had been carried out, and it seemed more sensible to incorporate the results from this with the report on the earlier work, rather than publish two separate reports, with some inevitable duplication.

2. The site

The site, TL 381 006, is some 46m (150ft) south of the Abbey Church along the south side of Church Street (Fig. 1). The site is bounded on the south by the modern road called Leverton Way. It is some 31m (100ft) east of the Cornmill tail stream at about 20m (65 ft) O.D. The sub-soil in the area is a yellowishbrown, sandy clay, a typical terrace deposit.

In 1976, the Baptist Chapel (No. 7 Church Street) and the 20th-century Ritz Motors garage (No. 6) were demolished for redevelopment. In 1979, the Lawns Hotel (No. 6A) was likewise demolished. The rescue excavations described in this report were carried out between these demolitions and the construction of the office blocks which now cover the site.

3. Documentary survey

by K.N. Bascombe

The site (Fig. 1B, area Ia and Ib) lies within the town of Waltham Abbey, directly opposite the church founded or refounded c. 1060 by Harold, Earl of Wessex (later King of England), as a college of secular canons, refounded by King Henry II as an Augustinian Priory c. 1177 and upgraded to an abbey in 1184 (VCH 1907, 166). It lies also within the manor of Waltham Holy Cross granted to the Abbey in 1189 and held after its dissolution in 1540 successively by the families of Denny, Hay and Wake (VCH 1966, 157-8).

The surviving court rolls of the manor go back only to 1669 but light is thrown on the earlier history of the site by some early 17th-century transactions surviving

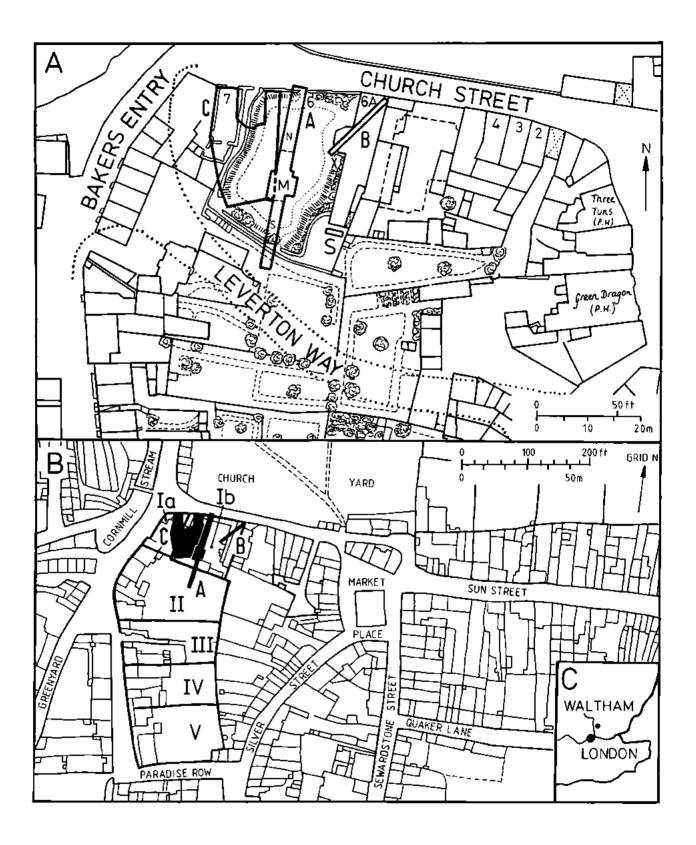


Fig. 1 Church Street, Waltham Abbey.

- A. Site between Church Street and Leverton Way showing trenches A, B, C and S; N, M and S refer to North,
- Middle and South parts of trench A. Based on first edition 1:500 O.S. map of 1879. B. Street plan based on Crawter map of 1826. The numbers Ia, Ib, II-V represent properties mentioned in Para. 3.
- C. Position of Waltham Abbey relative to London.

as copies¹ made in 1775 when the copyhold property immediately to its west, known as Bakers Entry (area Ia) was to be seized for want of a tenant;² at this time earlier court rolls were evidently still extant.

At a court on 5 June 1609 it was presented³ that on 15 July 1608 James Crew, citizen and baker of London, had surrendered a property in Water Street. in Waltham, abutting on a tenement of the widow Harrison towards the south, and a customary tenement then in tenure of Robert Cordell towards the east, to the use of William Prieshey, citizen of London and merchant, and his wife Elizabeth. This description, if Water Street is equated with the modern Church Street (a name not found before the mid-19th century) fits area Ia, i.e. Bakers Entry; the property to the south (area II) was certainly freehold (or more strictly, a customary freehold) in 1627.4 The same court also recorded the surrender⁵ by Robert Cordell, baker, on the day of the court, of the tenement in Waltham in which he then dwelt, and abutting on a tenement then in tenure of Thomas Thome, brewer, towards the west, and Water Lane towards the north, also to Prieshey and his wife. It is strongly suggested that this was area Ib. The copyholder of area Ia to the west would no doubt still have been Prieshey (or more correctly Priestley, the early 17th-century "tl" having been misread by the copyist as "h") but Thorne could have held it on lease and in fact by his will⁶ of 1616, Thomas Thorne, brewer of Waltham Holy Cross, bequeathed the lease of a brewhouse there to his "servant" (i.e. employee) William Nash.

A surviving index7 of tenants and acts for the court rolls covering the period 1603-78 records an admission of James Crew on 25 May 1605 and one of Robert Cordell on 16 May 1608; Crew's residence in Waltham during the relevant period is evinced by the baptisms of three children (Sara, 4 December 1605; Thomas, 16 November 1606; and Margaret, 17 December 1607) recorded in the parish register. An interesting earlier link between the Crew family and Waltham Abbey is in the will⁸ of Edward Woulde of Waltham Holy Cross, "gentleman", dated 1598, which records a debt of 40 shillings by James Crew (and one of 18 shillings by Thomas Crew); James Crew appears in the quarterage records9 of the Bakers' Company from 1592 to 1599 so must have been living in London at this time. A slightly earlier connection between the Crew(e) and Priestley families is indicated by the marriage¹⁰ of James' and Thomas' brother Josua to Jane Priestley of London in 1602 (for the Crew(e) family, see the will¹¹ of their father James Crew, citizen and whitebaker, dated 1591, which does not mention Waltham Abbey). By his will¹² of 1620, William Priestley, citizen and merchant tailor of London, bequeathed his brewhouse (interpreted as Area II) and copyhold lands and tenements nearby (areas Ia and Ib, and possibly other properties) to his son, also William. This double surrender of adjacent properties, both

occupied by resident bakers, to a citizen and merchant tailor, and the mention on the latter's will of a brewhouse, but no bakehouse, suggests that baking ceased in areas Ia and Ib in 1608-9. The archaeological evidence that, in area Ib at least, baking had been carried on for more than 300 years before this, suggests strongly that the name Bakers Entry applied to area Ia (and to the lane or broad footpath running (Winters 1888, 64) between its west side and the Cornhill stream) refers to the trade rather than to an eponymous Baker. It is suggested that areas Ia and Ib were originally one, the northernmost of a series of parallel plots (areas I to V) and may well represent the "lord's oven" as discussed by Bennett (1967, 135-7). A bakery in this position would have been very convenient for the manorial water-mill which lay just west of the church (and which survived till 1904).

Earlier references to baking in Waltham Abbey are not numerous. However, terra furner (baker's land) lies¹³ in a list of lands and tenants held in Waltham of the Abbey c. 1230-5, shortly before successive entries for terra heremite (hermit's land) (considered to cover the present Grange Court/Abbey Court/Mead Court area to the south-west, and may well have extended to within a few metres of the excavation site at that time) and terra godardi (which might be represented by a property later called Goddards, which lay in Silver Street and about 50m south-east of the site), and this 'baker's land' could well represent area I. The same survey names Ricardus pistator, Galfridus pistor and Hugo pistator. A list of householders in Waltham probably c. 1260 mentions¹⁴ Ric' pistoris, Ysaac pistoris, Walt'i pistoris, Rob'i pistoris, also bndicit fernun'. An undated 13th-century deed¹⁵ refers to a house sold by Edith, daughter of Thomas the baker (pistoris) of Waltham. A rather later survey¹⁶ probably c. 1320, and now incomplete, gives Simon pistator in Eststrete, the later Sun Street, but careful examination of the document suggests that the area round the excavation site is missing. A deed of 1335 alludes¹⁷ to Isabella widow of Richard Pistoris son of Alan le Forester of Waltham.

Thomas Thome's employee William Nash appears to have prospered: in 1627 he bought¹⁸ from the younger Priestley a freehold messuage which can be equated with area II. The index referred to¹⁹ quotes a surrender of copyhold property by William Prisley (Priestley) and an admission of William Nash at a court also in 1627, but this may refer only to another surviving transaction²⁰ which probably relates to area III (and incidentally shows that Nash owned yet further property in the area). "William Nash, a brewer" died in 1658 but no will or administration grant of his estate appears to exist.

The next mention of area Ib, is as "*le Boreshed*" in 1647/8 where the churchwardens held²¹ two dinners during their year of office. From some date before 1669 the "Boars Head" was held by George Dewy or Dewey, a scrivener of Chancery Lane, London, who was employed²² by the parish in 1669-72 in connection with an attempt to raise money for repairs to the church by means of a 'brief' or national appeal. His son and heir, also George, was admitted on 10 December 1683, and, in 1688, surrendered the property to William Trayherne of Waltham and his wife Susan with an entail for the longer liver and then to the heirs of William. The Trayhernes mortgaged it in 1690 to John Bell.23 Trayherne, who was a bailiff of Waltham hundred from 1680-9624, died in 1697: in spite of the entail, the next transactions, mortgages to Philip Trayherne of Chipping Ongar²⁵ in 1698 and Rowland Trayherne of Netteswell²⁶ in 1700, stand in the name of William Trayherne (junior), associated with his wife Sara in the first case; a marginal note records the redemption of the latter mortgage in 1726. Susan Trayherne married John Lateward in 1710 (parish register); in 1726 a court recorded²⁷ her death (buried 3 December 1725) and that of her first husband and son — the two William Travhernes — so that the next heir to le Bores Head was the only daughter and heiress of the last-named, Sara Butcher née Trayherne, who was admitted for the considerable fine of f_{120} . Joseph and Sara Butcher seem to have had financial problems; after redeeming the 1700 mortgage (see above) they promptly remortgaged²⁸ to Sara's step-grandfather, John Lateward, innholder, for £150.

He was buried 13 January 1729 and another mortgage, to Ralph Wiggs of Bengeo, Hertford, yeoman, this time for £120, was executed²⁹ 17 February 1730, so that Lateward's executor could be paid off. On failure to redeem, Wiggs claimed forfeit, and was admitted tenant³⁰ to the property on 29 October 1730. It seems likely that Wiggs, unlike the earlier mortgagees, was not a relative.

The extant rate books for the parish of Waltham Holy Cross start in 1705 and until 1730 the occupiers were in general the copyholders. The widow Trayherne paid from 1705 to 1709, succeeded in 1710 by her new husband, John Lateward, and then by John Green till 1712, with rateable value £10. A jump to £22 accompanied Lateward's return in 1713, falling to £16 in 1715 and £15 by 1721.³¹ A further fall to £13 occurred in 1725, and Joseph Butcher from 1726 to 1730 was rated for £10.32

Wiggs, being non-resident, leased out the property and Thomas Freeman was rated there for £12 from 1730 to 1735.³³ In September 1735 *the Boares Head* was empty, but in March 1736 Lancelot Leverton had taken over, remaining until February 1749 when the inn was again empty; the rateable value varied between £8, £9 and £10, while in and after 1741 Leverton was also rated for a brick kiln and ground, whose rateable value jumped from £4 to £23 between September 1746 and March 1747. Leverton moved in 1749 to another house in the town which he occupied till 1752.³⁴ This Lancelot Leverton was the father of Thomas Leverton, the architect (1743-1824), who was baptised in Waltham Abbey Church 11 May 1743, and is stated on his monument in the church to have been a native of the parish (though the Dictionary of National Biography (Anon 1893) claims he was born at nearby Woodford). Thomas appears to have spent his first nine years, at least, at Waltham Abbey, which he remembered generously in his will.³⁵ The records thus suggest that his father was an innkeeper turned brickmaker; D.N.B. describes him as a builder of Woodford.

After Leverton's departure the property was let out on short leases³⁶ until 1761, when Ralph Wiggs the younger, who had succeeded his uncle and namesake as copyholder³⁷ in 1739, took up occupancy, being succeeded³⁸ on his death in 1764 for two years by his widow Susannah, who also took the copyhold;³⁹ after 1766 the property was again let out on short leases.⁴⁰ The admission of Henry Wiggs, recorded in an index as having taken place 1 March 1776 (though not found in the text⁴¹ of the court book) did not change this situation, but in 1779 (being described as of St. Luke Old Street, sadler) he first mortgaged and then sold the inn to James Preston of Waltham Holy Cross, carpenter, who promptly obtained a licence⁴² to pull it down and rebuild, granted under condition that the property should not be worth less than f_{10} 10s per annum; the rateable value had stood at $\pounds 10$ till 1773, after which it had increased to £16.43 The property was described in 1779 as having been formerly known as the Boars Head, but then generally known as the Ship; the last innholder, John Death, took the sign to a property in Sun Street, now Nos. 40 and 42. The sign had been the Ship since at latest 1769.44

No illustration showing the Boar's Head is known, but insurance policies (Sun Fire Office) taken out by Joseph Butcher⁴⁵ in 1729 and Ralph Wiggs⁴⁶ in 1731 refer to a dwelling house "brick and timber tiled" (insured for £240 in 1729, £160 in 1731), a brewhouse "plaster and tiled" (£20 in 1729, £15 in 1731) and stables "boarded and tiled" (£40 in 1729, £25 in 1731).

Although Prestons appear in the parish registers in the 17th century, the baptism of James in 1750 apparently represents the first appearance of this particular family or branch. He was probably a "self-made" man, there being no record (in the manor of Waltham Holy Cross at least) of any property owned by his father John (d. 1769) and the probably dilapidated Boar's Head or Ship Inn seems to have been one of James' first property acquisitions. On the site he built himself a house and no doubt ran a prospering business; by 1800 he was established as a timber merchant.⁴⁷ He continued to be rated as occupier of this property (annual value £12) from 1782 till the end of the surviving sequence of overseers' rate books⁴⁸ in 1805.

In 1799 James enfranchised the property, together with four other copyholds,⁴⁹ for £376/0/3, and in his will made in 1812 (and proved in the following year) bequeathed "my freehold messuage or tenement with the outhouses and appertenances thereto belonging situate opposite the church in... Waltham Abbey now in the occupation of Lance Tuck Whitley" to the use of his son Charles, his heirs and assigns forever.⁵⁰ In the will James described himself as "esquire" and disposes of much property, nearly all in Waltham Abbey parish, and including a "capital messuage or mansion house" with an 83-acre estate in Sewardstone.

Evidence from the rate-book documents relating to areas Ia⁵¹ and II,⁵² in conjunction with the parish map of 1826⁵³ and land tax records,⁵⁴ leaves no reasonable doubt that the property bequeathed as above in 1813 is in fact the former Boar's Head and area Ib.

At least thirteen children of James and Susannah Preston were represented at their father's death by Elizabeth (1773-1857, married John Wood 1797), Ann (1777-1816), William (1779-1826, a magistrate for Essex (Winters 1885, 153), Charles (1783-1858), Maria (born 1787, married 1811 John, son of (Sir) John Soane the architect (Bolton 1927, 87), and Harriet (1799-c. 1860). The two sons were in business, apparently carrying on their father's trade; William died, apparently unmarried, in 1826, leaving all his property to Charles, except for 100 guineas to each sister living at the time of his death.⁵⁵ Charles, who lived at Luthers, a country house in Sewardstone, was an able, forceful and unscrupulous character who caused trouble in 1818 through illegal enclosures of land⁵⁶ but nonetheless became "an active and zealous magistrate of the county of Essex as well as in the Commission of the peace for Middlesex and Hertfordshire"57 and a deputy lieutenant of Essex from 182758 until his death in 1858. Area Ib formed only a minor part of Charles Preston's property and was described in a survey of 182559 as a "house and carpenters yard in Town", the occupier being one Whitley.

Charles Preston died in January 1858 with no surviving issue, and devising all his real estates in trust of Joseph Cockfield Dimsdale of London, banker, for certain named relatives and others, including two sons or more probably grandsons of his "old and faithful servant, Thomas Chetwood".60 The estates included lands in Waltham Holy Cross, Nazeing, and Stanford Rivers (all in Essex) and Cheshunt and Anstey in Herts. Following an action in Chancery, and an enquiry under an act of 1856, it was agreed that the estates should be sold by auction, which took place in July 1861 in London. Area Ib, forming lot 20, was bought for $\pounds 610$ by James Carr; it was described as freehold messuage, with stables, sheds, yard and garden, formerly in the occupation of Lance Tuck Whitley (who had died in 1819), and then of the said James Carr; also a freehold messuage, tenement or cottage, on the north-west corner of the garden, formerly in the occupation of Lance Tuck Whitley, afterwards of Robert Maguire, but then unoccupied.⁶¹ Carr was the town's miller (the water-mills near the abbey)

and a corn and flour dealer (White 1848, 285); he remodelled the property, building the house called "The Lawn" (later 6A Church Street) along its eastern side (and incorporating the first of the above two houses at its southern end) and making the rest of the property into a lawn (Fig. IA). On his death in 1886 Carr bequeathed the property to his daughter Sarah, and his sons James and Thomas, in trust to sell, with Sarah to have first option to purchase. The sale was not achieved till 1897, when Sarah and Alice Carr, spinsters, effected the purchase, the money being put up by three named mortgagees who were probably relatives. The next purchaser was Josiah Coxshall, in 1907; he died in 1922 and his widow Emma in 1927, and in 1928 their trustees conveyed the property to Mr. J. Chapman, of Highbridge Street, Waltham Abbey, motor engineer.⁶² He built the Ritz Motor Garage on the lawn soon afterwards. Subsequently this garage passed into separate ownership and the house became the Lawns Hotel.

The 1987 excavation extended the area investigated over the western part of the area 1b and into the eastern part of area 1a, the Bakers Entry property. That part of this property formerly occupied by a substantial timber-framed building, demolished in 1846 (Winters 1888, 64), had been largely covered up when Leverton Way was built about 1960, and the 1987 excavation area covered what was effectively the rear curtilage of the property (Fig. 1).

The earliest surviving document attributable to the Bakers Entry property is that mentioned above - a manorial transaction (surrender Crew to Prieshey) reported at a court held 5 June 1609.63 Evidence of later transactions from the extant court rolls begins in 168064 and extends to 181265 with the death and proclamations of Streeter Bennett, baker of Waltham Holy Cross, who had been tenant since 1795, and who left a son, Joseph, legally an infant and about 15 years of age. Tenants after about 1750 were bakers, but earlier in the 18th century successive tenants George and Edmund Langthorne (father and son) were tanners⁶⁶ although the property was already called Bakers Entry. Since the post-medieval levels in the 1987 excavation were sacrificed because of limited time and resources it seems unnecessary to recite the successive tenancies in detail.

By 1824 the Bakers Entry property appears to have been held by John Thompson, a deacon of the Baptist chapel in Paradise Row (Fig. 1) who nevertheless led a secession of eleven of the chapel members following the formation of a Sunday school there (Winters 1888, 181). Thompson let a building on the Bakers Entry premises, to be fitted up as a Strict and Particular Baptist chapel, which, receiving a further secession from Paradise Row chapel in 1842⁶⁷ lasted until 1845 when it was rebuilt in a simple neo-classical style and named Bethel. A painting by Thomas Shotter Boys, 1803-74, shows the earlier building as jettied at first floor level and apparently of c. 1600-1650. In 1868 the congregation was given notice to quit, and removed to a new chapel in Fountain Square (near Paradise Row) termed Ebenezer. Bethel continued however in use till at least 1902 (Kelly), though apparently without a pastor. Its history has not been fully researched, but c. 1914 it was the stores for "C" squadron of the Essex Yeomanry, and by 1933 it had become a working men's club. This was its final use, up to about 1965; it was demolished, with the garage next door, c. 1976.

4. The excavations (Fig. 1)

In 1976, trench A was machine-scraped north-south across the site of No. 6 down to the archaeological levels; some loss of these levels was accepted. The subsequent excavation by Waltham Abbey Historical Society (directed by P.J.H.) took place at weekends in April and May. The work was not followed up because of the time limit imposed by the developers.

When the Lawns hotel was demolished the investigation was continued nearer to the Market Place where Romano-British occupation was expected. The Essex County Council Archaeology Section undertook this work (directed by C.P.C.), when trench B was machine dug. During the actual development of No. 6A several features were recorded by the Society and a post-medieval well or cess pit was cleared just south of trench B (marked by a cross on Fig. 1A, just south of the south end of trench B).

After these two excavations, the area on the corner of Church Street and Leverton Way remained wasteland. The opportunity was then taken for an open-area excavation from July to September 1987 by E.C.C. Archaeology Section (directed by M.F.G.).

Subsequent salvage excavation, in the form of narrow trenches in the area already opened up, was carried out by W.A.H.S., the object being to investigate specific remaining problems of interpretation.

5. Excavations at No. 6 Church Street

(by P.J.H.)

Trench A was scraped of modern rubble for a length of 35m (116ft). For the present description it is divided into three lengths: the north part, the middle part and the south part. Extensions of the middle part were made to the east and west.

5.1 Trench A; select feature list (Figs 2-4)

The features listed are those of special interest and/or for which there are significant finds. The pottery codes are referenced in Para. 10.1.

F27 Weathered dark brown humic loam with charcoal, (equivalent to F42 to south), the medieval ground surface. *Pottery:* 2A, 3 gritty B, 2 D1, 4 D2, 29 H, 3 J1,1 Samian fragment; one piece Roman, Saxon to 14/15th century. *Daub:* 2 substantial pieces with clear wattle impressions. *Iron:* Para. 10.2,3.

- F28 Deposit of stones in loam below F42, about 12cm thick, seen right across trench A; possibly deposited when some posts of plan 2 were in position. *Pottery:* 1 Roman, 2 B, 1 D1, 1 D2, 9 G, 1 H, 13th century and derived.
- F29 Grey-brown humic loam, under F27, (numbered F45 else-where), taken to be the ground surface in the Saxon period. Pottery: 1 A, 3 B, 1 C, 1 D2, 2 E, 2 fine grey; 2 possibly Roman, Saxon and 11th century. Coin: 1 sceat (Para. 10.4,1). Loomweight: Para. 10.7,4. Iron: 10.2,2.
- F42 Weathered humic loam to north of F27, the medieval ground surface. *Pottery*: 1 A, 1 B, 1 Ipswich, 64 D2, 31 G, 10 H, 11 J, 25 M, 13 N, 1 delft, 1 Raeren, 4 blue maiolica; late 12th/early 13th century, (Fig. 12, 17-20) mixed with 16th/ 17th century.
- F47 Dark-brown to black clay, a horizon of maximum humus accumulation above unaffected orange clay, an ancient ground surface.
- F50 Remains of building rubble over ovens and associated levels. *Pottery*: 7 D2, 1 G, 6 H, 9 M, 39 N, 35 stoneware, 6 blue and white; mainly 15th-19th century. *Iron*: Para. 10.2,1.
- Example 1 and 5, mixed but must include the weathered burnic loarn and some leached loarn. *Pottery*: 1 A, 2 B, 1 D1, 9 G, 9 H, 24 J2, 8 M; 14th and 16th century and derived.
- F63 Rectangular pit, 8 to 25cm deep, under tile wall F62, 64 and 66. *Pottery*: 2 D2, 8 G, 18 H, 43 J2; late 13th or 14th century (Fig. 12, 27-31); *Iron*: Para. 10.2,5.
- F64 Hearth, or fire pit, shape mirroring F63, layers of loam, charcoal and burnt clay. *Pottery*: 2 D2, 8 H, 9 J2, 7 M; 15/16th century.
- F66 Hearth or fire pit reduced to circular shape after tile wall F62 built, charcoal fill. *Pottery*: 1 H, 1 M; 16th-century.
- F71 Sandy clay in which floor F70 of oven 1 was set; F71A is the same but under oven structure. *Pottery*: 2 J2 (Mill Green); before 1300; same pot as F72.
- F72 Lines of roof tiles on edge set in solid clay, probably part of the E side to oven 1. *Pottery*: 1 J2; (Mill Green); before 1300, see F 71.
- F74 Reddened grey clay with few roof tiles on edge under oven 1. Pottery: 4 D2, 4 G, 5 H, 1 J2; 13th century on jug sherd.
- F80 Top fill of deep pit, mixed clay, loam and sand. Pottery: 110 D2, 67 G, 227 H, 45 J2; first half of 13th century.
- F81 Wet silt, the middle deposit in the deep pit. Pottery: 75 D2, 29 G, 50 H, 31 J2; first half of 13th century. Silver-gilt pin: Para 10.3,11. Leather: Para. 10.10,1-5,8. Iron: Para. 10.2,6.
- F82 Vegetable matter with grey silt at the bottom of the deep pit. Pottery: 6 D2, 15 G, 5 J2; first half of 13th century. Pottery from F80-82 is combined for illustration in Fig. 12,1-16. Leather: Para. 10.10,6-7. Iron: Para. 10.2,4. For environmental evidence, see Para. 12.
- F94 Loam under oven 2, cut by digging of the deep pit F80-82. Pottery: 2 D2, 2 G, 7 J2; 12/13th century.
- F96 Pit, 1.5m deep, filled with loam, clay and building rubble, to NW of oven 2. *Pottery*: 6 J1, 4 J2, 103 N, 46 stoneware; 17th century.
- F97 Layer of vegetation at bottom of F96. Pottery: 3 G, 2 J1, 3 N, 2 Staffs purple, 1 Cologne stoneware; late 16th century. Iron: Para. 10.2,7-8.
- F113 Shallow fire pit, filled with black ash. Pottery: 2 H, 1 J2; 14/15th century.
- F116 Weathered humic loam with charcoal, below ovens 4 and 5. Pottery: 1 B, 3 D2, 4 G, 7 H, 5 J2, 1 K; 15th century and earlier.
- F128 Brick feature, probably a cess pit, in S. part of trench A (not illustrated). Pottery: 5 M, 116 N, 8 stoneware, 10 delft; late 17th/early 18th century (Fig. 12,33-35). Clay Pipes: 61, probable range 1680-1710. Jeton: Para. 10.4,3, derived. Loom-weight: Para. 10.7,3.
- F130 Weathered humic loam with charcoal; like F116 but not under ovens 4 and 5. *Pottery*: 1 D2, 9 H, 12 J2; 13/14th century.

- F131 Patch of cobbles in clay F86, behind W. arm of oven 5. Key: Para. 10.3,10.
- F132 Line of large stones across middle part of Trench A; no clear association. *Pottery:* IM; 16th century. *Mortar:* Para. 10.9.

5.2a The soil profile

There was 1.04m (3ft 5in) of developed podsol soil profile above the unaffected orange clay. This sequence was understood better in 1987 (see Para. 8); descriptions have been altered to suit the later evidence. The general sequence is from a weathered humic loam, called loam and including F27, F42, F116 and F130, through an almost sterile leached loam F46, F116A and F130A, to the level of humic accumulation, called black clay F47 on sections, and the unaffected natural clay below. However, in this present trench, an extra layer called humic loam, F29

and F45, was recognised below the top weathered humic loam in the north part of the trench.

The humic loam was presumably the ground surface during the Saxon period and into the 11th century, until the weathered humic loam developed above. The pottery content of the weathered loam was late 12th and/or early 13th century with later sherds in the upper parts; under the brick-floored building to the north, this later pottery dates to the 14th/15th century and, in F42 to the south, it extends into the 17th century. It is interesting that this pottery deposition began following the foundation of the Augustinian priory, later Abbey, in 1177 just to the north-east. The inclusion, in the loam, of 5.8kg of bones of food animals, some 70 pieces of metal-working slag and pieces of Roman building debris suggest that miscellaneous

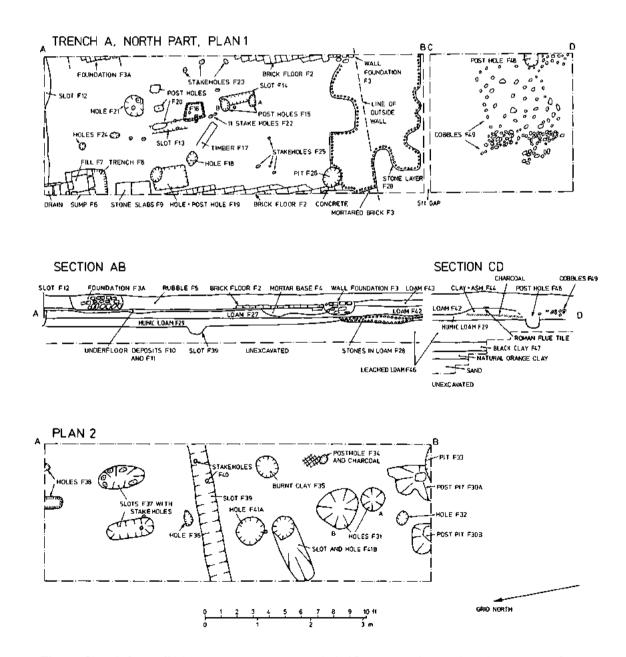


Fig. 2 Church Street, Waltham Abbey, 1976. Trench A, North part; plans and sections AB and CD.

rubbish was being spread around at this time on this ground surface.

5.2b The brick-floored building and underlying buildings (Fig. 2)

Part of the brick floor of the narrow building shown along the Church Street frontage on the Crawter map (Fig. 1B) remained after machine scraping. This L-shaped building was probably used as a timber store or carpentry workshop (Para. 3). The foundation, F3, of the south wall of the building shows it to have been a meagre one. The only internal features were a brick sump, F6, with a drain northwards to the street; and a probably later foundation, F3A; material in the sump construction trench, F8, and its silt, F7, is of 18thcentury date, possibly of the time of James Preston.

Under the brick floor there were earlier floor deposits, F10 and F11, of sand, gravel, coal dust and stones with material of the 17th and 18th centuries. A trench, F12, across the north end of the excavation could be a north wall timber slot, but did not appear to be at quite the right angle; it contained pottery and pipes of the 18th century.

Various features cut into the deposits F10 and F11 (Fig. 2, plan 1). Some of these exhibit the same alignment with respect to the street as the brick floor. The two slots, F13 and F14, line up with the post-holes, F15, and contain mid-17th-century material. The gravel-filled depression, F16, had a groat of Elizabeth (1558-1603) underneath. A group of 11 stake holes, F22, ran roughly in line for a distance of about 2m. These, and the other features illustrated, probably represent workshop facilities dating at least back to the early 17th century. The features were dug through the loam, F27, itself with a range of pottery up to the 14th or 15th century. Also in F27 were two quite large pieces of daub with impressions of woven wattles, possibly from a wall represented by the stake holes, F22, with which some of the post holes could be associated. The date of such a structure could range from the late 16th or early 17th century when material was again being deposited in the loam, F42, to the south; thus it could be part of a late bakery building or a part of the newly-established Boar's Head.

5.2c The earlier features

Another group of features, below those described above, are shown in Figure 2, plan 2. They were dug through the humic loam, F29, and into the leached loam, F46. This group of pits, holes and slots retain the alignment with respect to the street noted in the later features. The slot, F39, contained three shellyware (D2) sherds, the pit, F41A, contained 2 Saxon or prehistoric sherds (fabric B), and the post-pits, F30A and B, contained 2 sherds of 12th/13th-century date.

Several of these lower features were covered by a layer of stones, F28, with pottery dated from Saxon to 13th century. Some holes were covered by the stones, but posts could have remained in others when the stones were laid in the 13th century.

The few finds in the humic loam, F29, spanned the Roman period to the 11th century. The *sceat* (Para. 10.4,1) of c. 715 is notable amongst the stray material. The fragment of loomweight (Para. 10.7,4) could be of a similar date.

5.3 Trench A, middle part

5.3a The 13th-century pit, F80-82 (Figs 3 & 4)

A notable medieval feature was the pit, F80-82, which was dug some 1.8m deep from the existing ground surface. The pit was dug through the developed podsol profile to the water-bearing gravel and may suggest it was a temporary waterhole.

The pottery in all three deposits (for details see Para. 5.1) dates within the first half of the 13th century (Para. 10.1). Sherds from F80 and F81 fit as do some from F81 and F82. It is suggested that the pit was open for a short time before the reference of c. 1230-5 to 'bakers land' (Documentary Survey, Para. 3), and was finally used for the deposition of rubbish over a period starting in the first quarter of the 13th century.

Other finds in the pit include: leather shoe components (Para. 10.10); a pricket candleholder (Para. 10.2,4) and a fiddle-key horseshoe nail (Para. 10.2,6); a silver-gilt pin (Para. 10.3,11); fragments of Romano-British brick and tile and a piece of lava grindstone; c. 33kg of animal bone (Para. 11). Environmental evidence from F82 is discussed in Para. 12; there was a sparse range of plant remains.

At the very top of the pit, in the fill F80, the sherds were encrusted due to the effect of heat from the ovens above. Above the fill there was a layer of Reigate stone chippings, F76, 87 and 102. Pottery of the 13th century in F87 is taken to date the deposit, which may possibly be waste from the Augustinian building period of 1177-1242.

5.3b The five ovens, possibly of the town bakery (Fig. 3, P1. I)

The ovens are considered in two groups because the stratigraphic relationship of ovens 1 to 3 and of 4 and 5 is clear. The relationship between the two groups is less clear, but, on the evidence of one layer, the clay, F85 (Fig. 4, section JK), oven 4 should be later than oven 3. If this is correct, the ovens were constructed in the order of the numbers given.

Oven 1 The remains of this oven are the least substantial. The floor stones, F70 (Fig. 3, plan 2; Fig. 4, section GH; P1. IC), were set in clay and had several basal deposits of the same material. The extent of the clay foundation, F71 for the floor and F71A for the oven structure, was traced in part. A row of tiles set in clay, F72, appears to be the base to one side of this oven, suggesting that the entrance was to the north or south.

WALTHAM ABBEY: URBAN DEVELOPMENT AND PREHISTORIC EVIDENCE

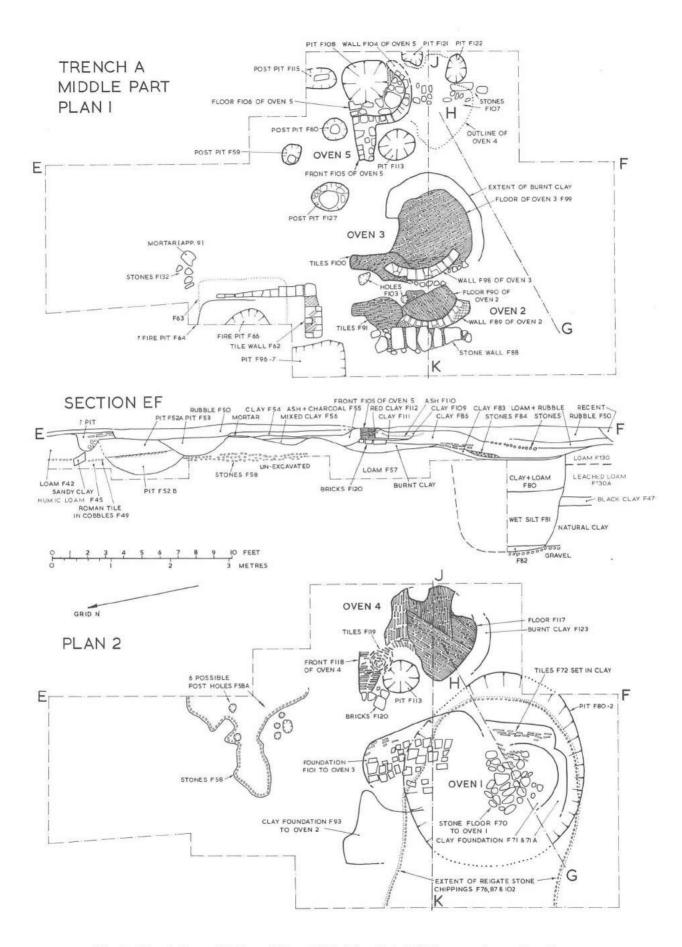


Fig. 3 Church Street, Waltham Abbey, 1976. Trench A, Middle part; plans and section.

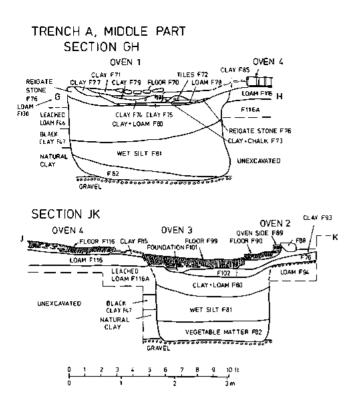


Fig. 4 Church Street, Waltham Abbey, 1976. Sections GH and JK.

Oven 1 post-dates the filling of the pit, F80-82, in the first half of the 13th century. Fresh Mill Green green-glazed jug sherds, two in the clay F71A and one in the clay F72, all incorporated into the structure of the oven, date to before 1300 and this is, therefore, the date suggested for oven 1. The archaeomagnetic date for the final heating of the oven of AD 1290 to 1350, at the 95% confidence level (Para. 13) fits well for such an oven, the life of which would be expected to be several decades.

Oven 2 The western side of oven 2 remained, having been cut by oven 3 (P1. IB). The floor, F90, was of roof tiles set on edge in clay whereas the oven wall, F89, was of coursed roof tiles also set in clay; thus the tiles were set at right angles to the oven space, to give a long life in the event of spalling. The oven was backed to the west by a single remaining course of a Kentish ragstone wall, F88, set in clay. Slanting roof tiles F91 set in sandy clay formed part of the west side of the entrance to oven 2. A layer of clay, F92, covered the tiles, F91, at the front and contained some 17th-century sherds but there was no dating for the construction of oven 2.

Oven 3 This was the latest of the group 1 to 3. Almost the whole of the roof-tile floor, F99, remained (P1. IB) set in sandy clay. Part of the west side wall, F98, of coursed tiles, remained. There was a foundation, F101, of roof tiles laid flat. Roof tile, F 100, set at an angle, formed the base to the front of this oven on the west side. In the top of the Reigate chippings, F102, was 15th-century pottery and this is taken to have been introduced when the oven foundation was dug out.

Thus ovens 1 to 3 all appear to have been constructed, successively, from before 1300 to the 15th century.

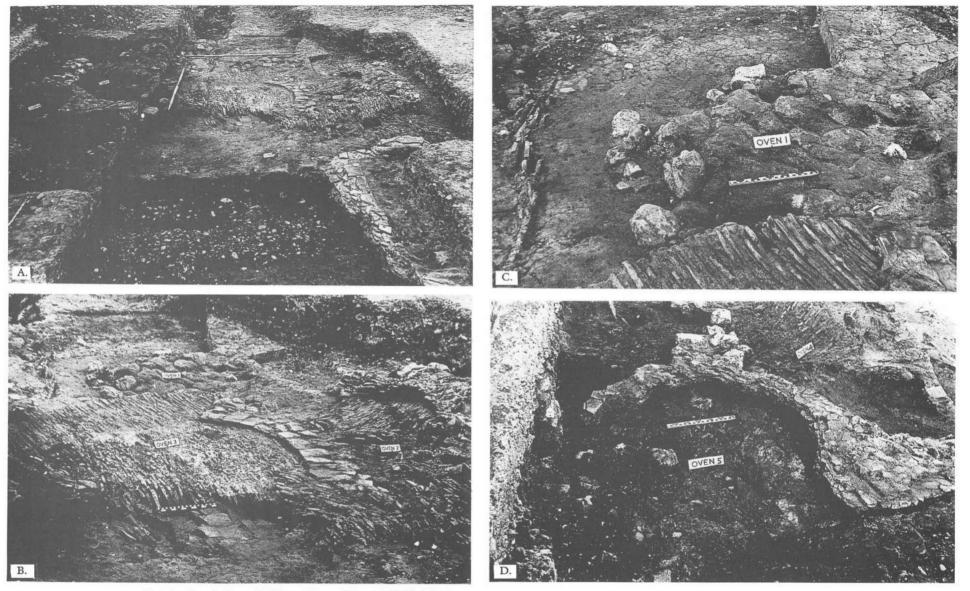
Oven 4 is represented by most of its floor, F117, of roof tiles set on edge in sandy clay, F123 (Fig. 3, plan 2; P1. ID); this clay extends beyond the limit of the tiles. Part of the front, F118, of this oven remained to show that it faced north as did ovens 2 and 3 and possibly 1. The tiles, F119, set spirally, were to fill a hole. The medieval brick fragments, F120, to the west of the oven front are covered by a thin layer of burnt clay and probably represent an earlier hearth; the pit, F113, nearby may be associated.

Oven 4 is related to oven 3 by the one layer, F85, as mentioned above. Since the other ovens appear successive it is reasonable to see oven 4 following oven 3. Pottery in the loam, F116, under the oven must date into the 15th century. The clay, F123, in which the floor was set, contained five jug sherds of c. 1450; a stony loam, F124, overlying this basal layer, contained two 15th-century sherds. A hole, F125, under oven 4, later cut by the pit, F121, contained worn sherds of 14th- or 15th-century date. However since oven 4 is thought to follow oven 3 it is taken to be of late 15th-century date or later.

Oven 5 This was almost entirely on top of oven 4 (P1. ID). It has a floor, F106, of medieval bricks and stones with a wall, F104, and a façade, F105, both of coursed roof tiles set in clay; seven courses remained. Ash layers, F114, under oven 5, presumably derived from oven 4, contained 2 sherds of 16th-century date suggesting that oven 4 was then still in use. The clay layer, F54, in front of the oven (Fig. 3, section EF), was possibly laid when the oven was constructed or in use and contains late 16th- or early 17th-century sherds. The clay, F111, overlay the front tiles of oven 4 so was probably an oven 5 constructional deposit and contained two Raeren stoneware sherds dated 1475-1550. Taking the evidence as a whole, a date in the first half of the 16th century is suggested for the construction of oven 5.

The pit, F108, was dug through the floor of oven 5 and contained sherds of the first half of the 17th century. Sherds in a clay deposit, F109, to the rear of the front wall of oven 5 could have been from the period of use of the oven. Thus oven 5 could have lasted into the 17th century; the suggestion based on the documentary evidence is that baking ceased in 1608-9.

One would expect the ovens to have been under cover. Certainly they would be detached from main



- Plate I Church Street, Waltham Abbey. (Photos: J.H. Littlefair.)
 - A. View to the south showing the five ovens, possibly of the town bakery (scales in feet). Compare with plans of Figure 3.
 - B. Church Street, Waltham Abbey. View to the south showing ovens 1 to 3. (Scale in inches and centimetres.)
 - C. Church Street, Waltham Abbey. Oven 1 showing the floor, F70 (scale in inches and centimetres laying thereon), the extent of the clay foundation, F71 and F71A, and, on the left, the row of roof tiles, F72. The floor of oven 3 appears in the foreground.
 - D. Church Street, Waltham Abbey. Oven 5; the pit, F108, through the floor, is not yet excavated. Some of the floor of oven 4 is seen at the top. (Scale in inches and centimetres.)

buildings to prevent the spread of fire. The stone wall or ground wall F88 and the tile "wall" F62 give only a slight idea of surrounding structures. A line of stones F107, at the back of oven 5, could have the same function. A number of post holes and post pits could have supported a timber structure but no convincing pattern emerges; the post pit F115, in front of oven 5, contained 16th-century pottery and a hole F121, cutting the base of oven 4, also contained such pottery; also the post pit F127 contained 15th-century pottery both in its fill and in its packing of clay and stones.

Summary of the dating of ovens The ovens are taken to date in order of their numbers. Oven 1 is dated to before 1300. Ovens 2, 3 and 4 may all have been built successively in the 14th and 15th centuries with oven 5 following in the first half of the 16th century. The latter may have lasted into the 17th century to 1608-9. Thus the 5 ovens could have spanned a period of more than 300 years.

Use of ovens Ovens similar to these have not been found in any other of the many town excavations undertaken at Waltham. In the monastic area, however, one such oven was found in building I in Veresmead, part of the outer close of the Abbey (Huggins 1972, fig. 3); it was there dated to the second half of the 15th century. It was thought to have been devoted to some domestic activity. In the dissolution inventory of the abbey, the monastic bakehouse and brewhouse are mentioned together after the buttery, kitchen and scullery, all buildings which are likely to have been within the monastic precinct wall.

The west corner of area 1 is known as Bakers Entry and this, coupled with the discovery of the five ovens and the evidence of the Documentary Study, may give a direct indication of the use of the site. In medieval England the lord had the 'right of oven' which required the peasant to bake his bread in an oven belonging to the lord (Bennett 1967, 135). This oven might be rented to an individual baker: the bakery was either a communal convenience or a sign of seigneurial oppression depending on one's point of view. It seems probable that the ovens excavated represent such a communal town bakery. The site is quite central for a town bakery, being close to the commill site and the market.

Parallels Two parallels from Essex can be cited. At 217-18 Moulsham Street, Chelmsford, three ovens were excavated in 1980 (Isserlin and Harris, forthcoming). The ovens are provisionally dated to the 15th and 16th centuries. The second comparable group is from Market Place, Rochford, excavated in 1978 (Eddy 1984/5). There was a sequence of at least three ovens of 15th- or 16th-century date; of these, oven 3 had a floor of peg tiles laid flat in concentric curves.

5.3c The hearths and the tile wall (Fig. 3)

Besides the five ovens described there were successive hearths, F64 and F66, within the corner of a mortared roof-tile ground wall, F62, to the north of oven 2 (Fig. 3, plan 1). The tile wall itself overlay a rectangular pit, F63, with late 13th- or 14th-century pottery (Fig. 12,27-31); pottery in the surrounding loam, F69, was of the same date. The first hearth, F64, containing pottery roughly dated 15th or 16th century, fitted just within the wall and was presumably related to it; a clay lining, F65, contained a few similar sherds. Further clay, F67, was laid as the base to the next hearth, F66; a few sherds suggest a 16th-century date for this. Clay F68, probably a base to the tile wall, had similar pottery.

These hearths were therefore probably in use during the life of ovens 4 and 5 and were out of use by the late 16th century when the adjacent deep pit, F96-7, was dug. These hearths or fire pits could have been where the fires were started to provide embers to insert into the ovens to heat them. The medieval bricks F120 by oven 4, and pit F113 nearby, may represent other such hearths.

5.3d Other features

The deep pit, F96-97, which destroyed the tile wall, F62, would appear to presage the end of the use of the area as an oven and hearth complex. This seems to have been in the late 16th century from pottery in the vegetation layer, F97, in the bottom of the pit; the pit was probably filled in the 17th century on the evidence of material in F96.

To the north of ovens 3 and 4 the stony patch, F58, (Fig. 3, plan 2) is undated; this applies also to the six post holes, F58A. Roof-tile rubble, F51, near the tile wall, F62, may derive from it; it contained mid-16th-century pottery and may indicate a slightly earlier end of the use of the area than the digging of the pit, F96-7. A line of stones, F132, under this covering layer, F51, may be associated with the tile wall; it contained an up-turned piece of stone mortar (Para. 10.9,2). Pottery from a pit, F52A and F52B, is unhelpful.

5.4 Trench A, south part

Towards the south there were few archaeological features and none are illustrated. Just over 3m to the south of oven 1 was a rectangular cess pit, F128, with much late 17th/early 18th-century pottery (Fig. 12,33-5), including tableware probably from the Harlow kilns. Further south, near the end of the trench, were brick-floored cess pits with Victorian pottery, and an Anderson air-raid shelter of World War 2.

5.5 Trench A conclusions

(1) Stray Roman finds support the notion of limited occupation at Waltham; this is thought to centre around the Market Place.

- (2) The podsol soil sequence suggests the area was open and subjected to rain for centuries. The humic loam is likely to have been the ground surface from the middle Saxon period into the 11th century, with some activity then, near the street frontage.
- (3) By the early 13th century a positive use of the area is suggested. There is the deep pit dug to the water-bearing gravel and, at the street frontage, there are pits and post-holes, aligned with respect to the street, which probably represent some structure or structures.
- (4) From before 1300, possibly into the 17th century, the central part of the trench was occupied by the five successive ovens. It is argued that these represent the town bakery.
- (5) By the 17th century another building appears to have been aligned on the street, and, in the 18th century, it was followed by a brick-floored construction. This, by the 19th century, is thought to have been a carpenter's workshop.

6. Excavations at No. 6A Church Street (by C.P.C.)

Trench B was a 15 x 1m machine trench dug diagonally across the site. It was between 1.1 and 1.2m deep.

The object was to detect occupation by recording the features in the sections, excavating by hand where necessary to elucidate the stratigraphy.

6.1 Excavation procedure

A number, from 1 to 67, was assigned to each layer or feature. Layers together forming a larger composite feature were then grouped under a particular descriptive heading (e.g. pit 2, comprising FB57, 62, 63, 64, 65). Feature numbers are prefixed by FB in the text in order to distinguish them from the trench A features. The main section ABC is shown on Figure 6. Its opposite number, which is not published, is referred to in the text as section A1B1C1. The more significant features are listed here.

- FB15 Wall of re-used Reigate stone blocks, oriented E-W, surviving to a height of c. 70cm. Four courses high, two courses thick. Second and third courses from top levelled by tile layers in Section A1B1C1. Bonded with mortar. North side only regularly faced. Wall less well preserved in Section ABC (Fig. 6) where collapse northward was more severe. Layer of thick handmade tiles, two courses deep and two wide were present at the base of the wall, in Section ABC only. Formed wall of the Phase IIIb undercroft. (Plate IIA; Fig. 6, Section ABC). Stone Para. 10.9.
- FB16 Dark grey to black silty loam overlying the natural terrace deposits to a maximum depth of 85cm. Scattered pebbles and root penetration. Phase I. *Pottery*: 1 B, 2 D1, 18 D2, 12 G, 5 J2; late 12th century.
- FB57 See 'pit 2' below.

FB59 Crude wall, oriented ESE-WNW, surviving to a height of 40cm in Section ABC (Fig. 6). Constructed of brick, tile and flint, bonded with mortar. A stone mortar (Para. 10.9, Fig. 21,2) had been re-used in the wall as building stone. No Reigate stone was present. Robbed-out foundation trench for FB59 was visible in Section A1B1C1 (FB24). Covered by FB27B. Phase IIIa-IIIb. Mortar: Para. 10.9. Coins: Para. 10.4,4-5; found in layer FB27B over and beside wall FB59.

FB57, 62-65 pit 2

- 57 Upper part of FB62. Slightly charcoaly dark grey loam containing occasional pebbles to 3cm dia. Poorly visually differentiated from FB16, but distinctly softer. *Pottery*: 2 D2, 2 G, 1 I2, early 13th century.
- 62 As FB57 above, but called FB62 below the base of wall FB15 where Pit 2 was excavated below bottom of machine trench. Contained occasional fragments of bone, some burnt. Fill sampled for environmental evidence (Para. 12). *Pottery*: 23 D2, 4 G, 16 H, 5 J2, early 13th century.
- 63 Water-logged silt; greyish-brown with deep red tinge and occasional pea-grits. Macroscopic vegetable remains sampled (Para. 12).
- 65 Mixed olive green and grey silt with occasional small chalk lumps. Environmental sample taken (Para. 12).

6.2 The sequence of events: trench B phases Phase 1: 11th to 12th century

A silty loam FB16, up to 85cm thick, which formed the medieval ground surface, was deposited on the terrace strata; R. Allen of the Soil Survey of England and Wales considered it to have been dumped. This level is probably to be compared with the loams in trench S (Fig. 10) and the thick "black earth" known nearer the Market Place: it is not taken to be part of the podsol sequence seen in trenches A and C, since no leaching was noted. Besides a single probable prehistoric B sherd the pottery dates to the late 12th century (Fig. 13/9-11). No Roman material was found.

Phase II: early 13th century

Pit 2, probably square and 1.85m deep, was dug from the top of the loam FB16 (Figs 5 and 6). Water-logged vegetable matter FB64 and 65, at the bottom, was analysed for seeds and pollen (Para. 12); a possible fragment of bread was identified. Pottery from FB57 (upper fill of FB62) dates to the early 13th century (Fig. 13/1-8). The pit is slightly earlier than pit F80-82 and could be a previous waterhole. All the species of seeds identified are absent in the pollen spectrum showing they were not growing nearby; this together with the presence of seeds of blackberry and elderberry may suggest the feature was a cesspit. The pollen identified suggests the contemporary local environment was grassland.

Phase IIIa: possibly post-medieval

The first building identified is represented by a ground wall FB59 of mortared brick, tile and flint. This ground wall overlies a layer of clay FB60 which is interpreted as a floor level of the building aligned on Church Street. There is no clear dating evidence for the construction of this building but the bricks indicate a post-medieval date.

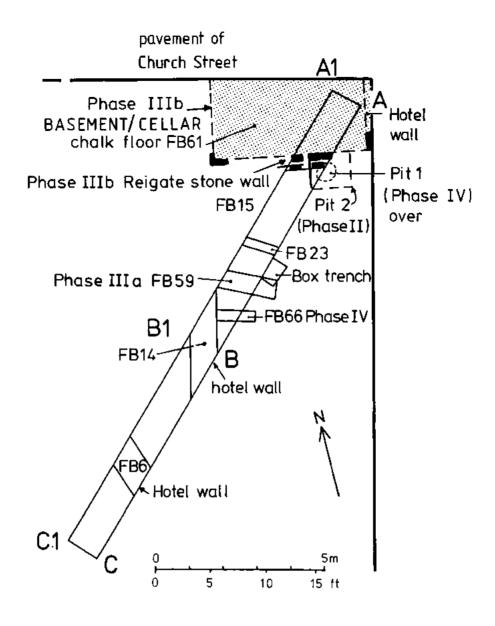


Fig. 5 Church Street, Waltham Abbey, 1979. Trench B; plan.

Phase IIIb: mid-16th century or later

Towards the street a chalk floor FB61, or the base to a floor, was laid some 85cm lower than the level of the Phase IIIa floor discussed above. This floor for a partly below-ground room can be considered in relation to examples from Southampton and Oxford (Platt 1976, 61-3). The room can be described as a basement shop or storage cellar, the former requiring stairs down from the street. Whether these existed is not known so the description remains basement/cellar; if the latter, a shop would have been above. The evidence for the plan of this basement/cellar is shown in Figure 5; it measured 4.5 by at least 2.3m (15 by 7 ft). It is not aligned very closely with the Phase IIIa ground wall, so whether it is associated is not clear. It was formed on the south and west by the remains of a wall FB15 of Reigate stone blocks (P1. IIA), including a re-used jamb stone; there was also a capital of Purbeck marble

(Para. 10.9). The presence of this Abbey stone suggests a date of construction after the middle of the 16th century.

After the Reigate stone wall had collapsed over the chalk floor, the basement/cellar had been backfilled mainly with broken peg tiles FB32. A few sherds and clay pipe fragments indicate the late 16th or early 17th century for the backfill, so that it had a short life of a few decades at most.

Phase IV: later post-medieval

Events between the end of Phase IIIB and 1861, when the house called The Lawn was built, are poorly represented. A layer of mortar FB30 over the filled Phase IIIb basement/cellar, may represent the reinstatement of the original Phase IIIa floor level. Pit 1, filled with lenses of clay with charcoal, was dug through some of the backfill of the basement/cellar; the bottom was

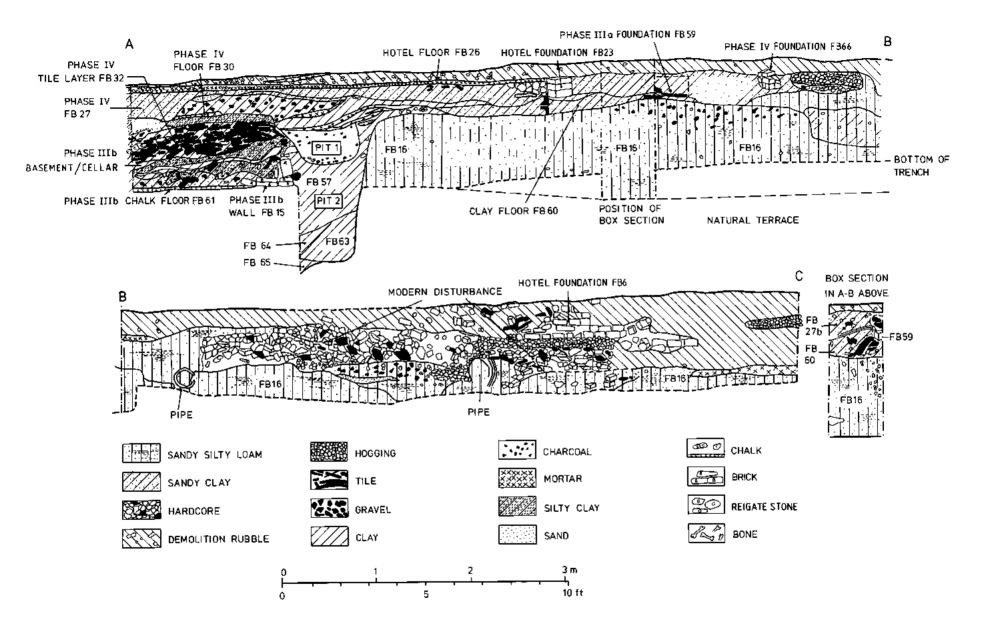


Fig. 6 Church Street, Waltham Abbey, 1979. Trench B; section ABC.



- Plate II Church Street, Waltham Abbey.
 - A. [above] Reigate stone wall, FB15, in trench
 B, section ABC, from the west. (Scale in 50cm sections.) (Photo: C.P. Clarke.)
 - B. [below] Purbeck marble bell capital from wall, FB15, in trench B (Para. 10.8a). (Scale in inches and centimetres.) (Photo: J.H. Littlefair.)

burnt to suggest the pit may have been an unlined fire hole.

All features of the Phase III building were sealed by the loam layer FB27/27B which contained pottery of 1500-c. 1640 (Fig. 13/13-14) and two coins of 1625-44. A post-medieval well or cesspit to the south (cross on Fig. 1A), 1.2m diameter and 2.6m deep, may have belonged to the Phase III structure.

No features attributable to the buildings on the 1826 map were recognised. A brick "wall" (FB66) may be a part of an outbuilding of the Boar's Head. Brick walls, FB6 and 14, of the Lawns Hotel, were recognised.

6.3 Trench B, conclusions

- In this trench the flood loam seen lower on the site was not present, but the "black earth" known around the Market Place was.
- 2. A deep pit represents activity in the early 13th century.
- 3. The most significant discovery is of the partly below-ground basement shop or store cellar of the 16th century; this is the first such recognised at Waltham.

7. The 1987 excavations (by M.F.G.)

Since only limited time and labour was available, it was decided to remove the post-medieval layers by machine to enable the earlier deposits to be examined in greater detail. The site was therefore machine-stripped down to the top of the medieval deposits. The exposed surface was then cleaned up, planned and areas



selected for further excavation (Fig. 7). No additional ovens were found within the stripped area, but oven 1, excavated by the Waltham Abbey Historical Society in 1976, was relocated at the corner of the excavation trench and the opportunity was taken to sample for archaeomagnetic dating.

The stratigraphy of the excavated area was similar to that recorded in the earlier work. A section in the north-east arm of the excavations revealed yellow silty clay at the base (180) overlain by grey-green silty clay containing some charcoal (178; Fig. 9, section E). Layers 63, 75 and 159 above this were various deposits of dark green or grey sandy silts with considerable quantities of charcoal. These were immediately overlain by rubble from the early modern period.

Area excavation of trench C was carried out during 6 weeks in August and September 1987. The site was then vacated, according to an agreement reached with the landowner, on the understanding that the development was to proceed immediately. However, the site remained vacant for several months, and the Waltham Abbey Historical Society was able to use the opportunity to excavate a series of narrow trenches, of which P, Q, R, T, V, W, X and Y are shown in Figure 7. These located a linear ditch (context 199) running north-south below layer 63.

7.1.1 Period 1: prehistoric

The evidence for the prehistoric period is minimal, consisting of flint-gritted pottery (29 sherds, some residual) and 6 flint flakes. Apart from one later Bronze Age rim sherd, none of this material is diagnostic.

The north-south ditch (Fig. 7, context 199) may be later Bronze Age, on the basis of a single radiocarbon date (Para. 14, below), and pottery, including a sherd with thumbed-band decoration (Fig. 14,1).

7.1.2 Period 2: Roman

No features were discovered which could be definitely attributed to the Roman period. As in previous excavations in Waltham Abbey, residual Roman material was found in later features.

7.1.3 Period 3: late Anglo-Saxon/Saxo-Norman

Features of presumptively late Anglo-Saxon or Saxo-Norman date were identified in the north-east arm of the excavation (Fig. 8). They were found after removal of the overlying dark soil layer (63) and were cut into a soil of hard, mottled green and yellow sandy clay loam (75). It was not possible to excavate all the features in the time available and only those in the north half of this area were fully dug, although sections were cut across the two gullies to the south.

Only a single sherd of pottery was found in the features excavated. This was a sherd in Fabric D1 from pit 100. This alone provides inadequate dating evidence. All the features were, however, sealed by and must pre-date, the thick soil layer (63), attributed in the earlier excavations to the late 12th or early 13th century. A number of the post-holes lay in two lines which ran southwards and approximately at right angles to the street frontage. In the more westerly line, a single post-hole (106) was excavated and the plans of seven others recorded (201 to 207, respectively). The other line was represented by two excavated post-holes (98, 104) and traces of three further features (208 to 210, respectively). These lines may represent successive buildings, for they appear to have been too close to be contemporary.

Three gullies were found crossing the excavated area (114, 183, 187). Only sample sections were excavated across two of these. It is uncertain if they were structural or served as drainage ditches leading towards the Cornmill Stream.

7.1.4 Period 4: c. 1150-c. 1300

The layer identified in the excavations of 1976 and 1979 as a deposit of late 12th- to early 13th-century date was also encountered in trench C. This black or dark grey compact silty clay layer (63) was found mixed with bone and some pottery, mainly of Fabrics D2 and G. It had been laid over and sealed features of the preceding period. The layer attenuated towards the west of the site where the underlying deposits sloped down towards the Commill Stream.

After this layer had been deposited, a series of features were cut into it. These were mainly concentrated near the street frontage on the east side of the excavation. The features were consistently shallow and had presumably been truncated. Many of the pits, for example, were little more than a few centimetres deep. On the basis of the pottery, pits 8, 10, 19, 23, 79 and 143 may be attributed to this period. Likewise the post-holes 29, 130 and the slot 38 are likely to be later 12th or 13th century. Excepting very recent disturbances, no features were found in the area later than the 13th century and it is therefore possible that all the features here were of this period.

The presence of pits on the north side of the site (27, 31, 35) suggests that the street frontage is likely to have been open ground for at least part of the period. The slot 38 lying parallel to the street frontage may have been for a structural timber. It was neatly cut, straight-sided and butt-ended, and evidently not intended for drainage (Fig. 9, Section G). The slot may have held an earth-fast sill beam for the rear wall of a building. The only other suggestion of a structure here is a flat stone slab at the north-east corner of the excavation which overlay a shallow pit (31). There is no dating evidence for this stone which may be interpreted as a stylobate for the post of a timber-framed building.

No trace was found for the continuation of F39 (Para. 5.2c) discovered in the north part of trench A in 1976. This must have stopped beneath the unexcavated baulk between the two excavations.

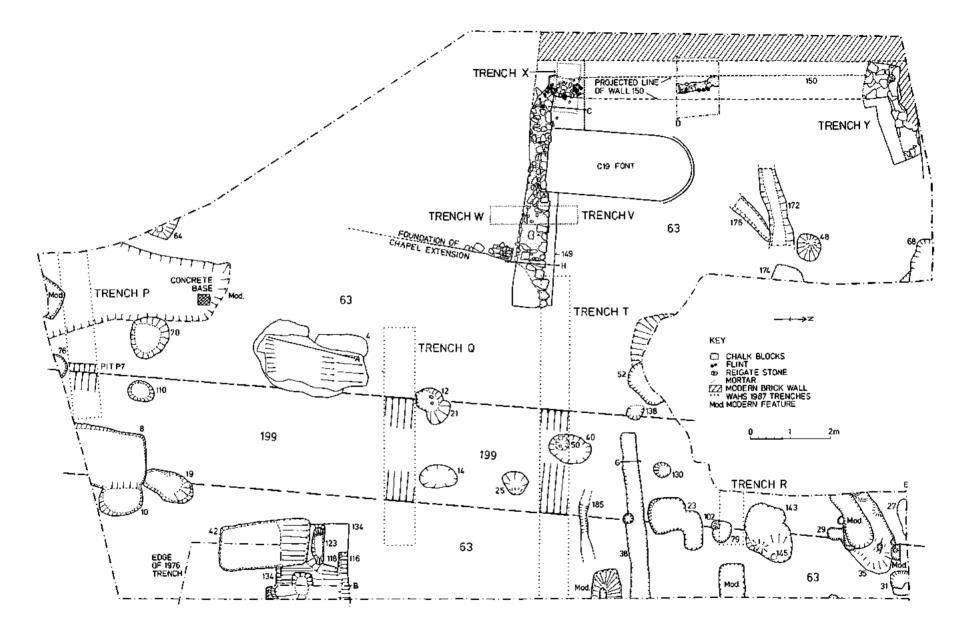


Fig. 7 Church Street, Waltham Abbey, 1987. Trench C; general site plan, showing major features and the location of drawn sections A-D, F, H, J. This represents the plan of features cut into the extensive deposit context 63, apart from context 199, which ran beneath.

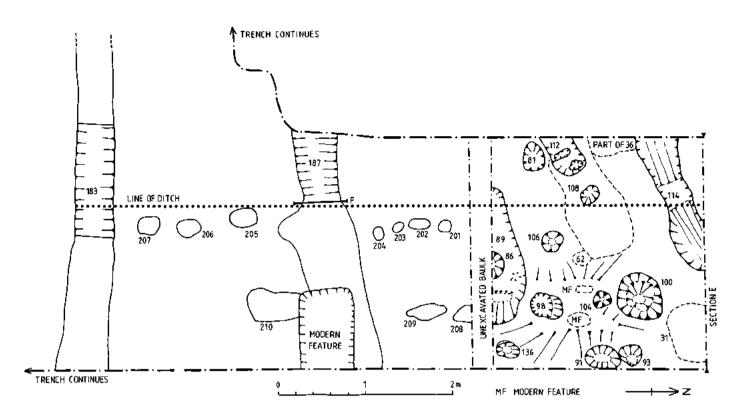


Fig. 8 Church Street, Waltham Abbey, 1987. Trench C; period 3 features at north-east corner of the trench, showing locations of sections E and G. These are features sealed by context 63 (refer to caption of Fig. 7).

Two ditches and three pits were found in the north-west arm of the excavation. These cut the dark soil layer (63), but must have been sealed under the fill deposited within the chalk wall described below. On the basis of this stratigraphy, these features belong to this period, but they contained no pottery for dating. Fragments of Reigate stone, which have been associated with the building of the abbey church, were found in pit 48. The presence of the stone suggests that the fill of the pit dates to the last quarter of the 12th century, or later.

A further feature of this period is a deep pit (52) found just to the south of the concrete base of the garage. This had been badly damaged in removing concrete associated with the garage and only part remained. During excavation this filled with water and the bottom of the feature was not reached. So little remained of the feature that no section could be recorded.

7.1.5 Period 5: c. 1300-c. 1600

The chalk-built structure On the north-east side of the trench, traces of a foundation of hard chalk or 'clunch' were recorded. This had been partially damaged by later activity, particularly at the street frontage. The deep foundations of a font of a 19th-century Baptist chapel lay in the south-west angle of the wall and fortunately had barely cut into the earlier chalk structure. The structure comprised a foundation course or courses of chalk rubble (195) which had been set in a trench (149). On top of this were built dressed, coursed clunch blocks with an internally battered face (196). The blocks were bonded with a brown clay mixed with flint gravel (Fig. 9, section H). The southeast corner had been partially robbed out, but sufficient remained to show that it turned northwards and concluded with a stub-end of the east foundation. No foundation trench was found to determine the line of the east footing.

On the west side, a section cut across the line of the foundation showed that only the bottom course of blocks of clunch remained (Fig. 9, section D). The foundation trench below had been filled with a gravelly layer with bands of burnt clay, decayed mortar and broken tile (171). Above this single course of chalk the foundation had been robbed out. A layer of large flint pebbles (160) suggests that the foundations had subsequently been replaced for a later building.

At the south-west corner of the structure an area of undisturbed stratigraphy remained between the Baptist font and the chalk foundation (Fig. 9, section C). No cut was found here for the construction of the chalk foundation indicating that material had been subsequently deposited against the structure. The fills (168, 169, 179) comprised brown-orange clay mixed in varying proportions with dark olive green silty clay

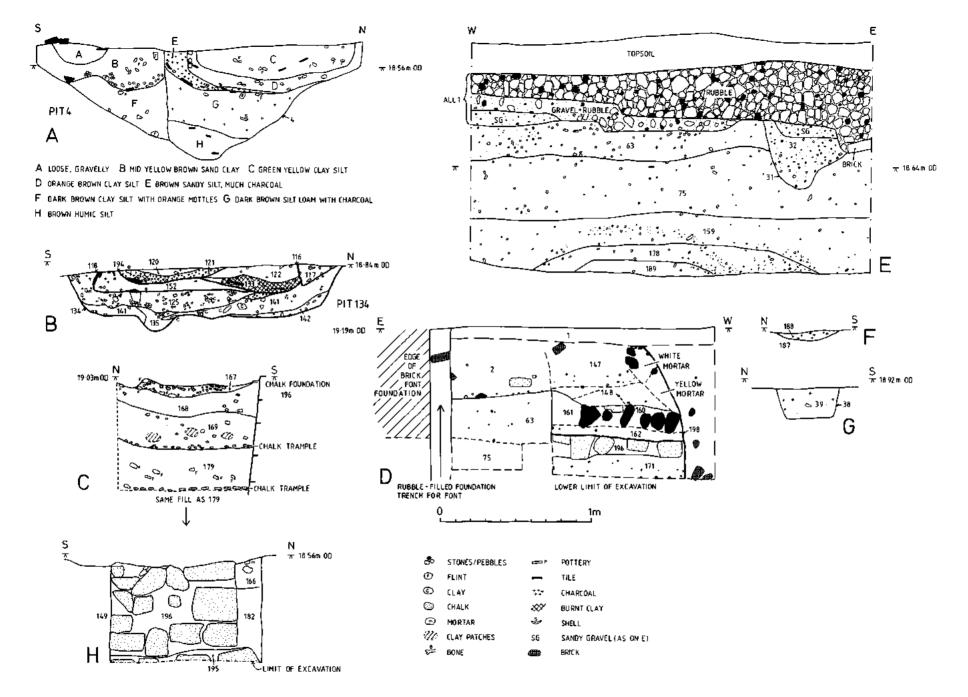


Fig. 9 Church Street, Waltham Abbey, 1987. Trench C; selected sections. The positions of these are shown in Figs 7 and 8. (Note that section F is drawn to a different scale.)

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loam. Within this fill were found a number of objects which included, in addition to pottery, a fragment of stone mortar and an off-cut of lead. These were sealed by a layer of flint and chalk rubble (167).

The chalk-built structure evidently had been constructed on sloping ground, which dropped away to the Cornmill Stream to the west. At the south-east, on the landward side, the lower courses of the chalk ashlar had been set below the contemporary ground surface and buried in the foundation trench. Elsewhere they were probably exposed, for otherwise the rubble courses would have continued higher. Once the clunch foundations had been constructed the interior was filled with dumped material to provide a level floor for the building above. The building, which was presumably a timber-framed structure, would have stood on the top-most course of the chalk blocks. The section cut in the south-west corner above the probable floor (167) and the top of the chalk foundation here was therefore the level on which the soleplate would have rested. There remains the problem of the east side of the building where no foundations were found. The ground here, further from the river, is likely to have been more stable and substantial foundations were not necessary. Any underpinning of slight stones, which is all that would have been required, may have been lost in subsequent disturbance to the site.

The hearths Clearance of an area contiguous to the middle section of trench A (Fig. 1) revealed no further ovens. Oven 1 was re-exposed and samples were taken for archaeomagnetic dating. It was possible to recover more of the plan of the hearths lying near to the ovens and first recorded in 1976 which lay near to the ovens. A large square-shaped pit (134) was presumably dug to deposit rubbish, and pottery within it suggests a 14th-century date (Fig. 9, section B). This might be the same as pit F63 recorded in 1976, but the edges of the cut do not correspond closely. After this had been filled in, a hearth was constructed over it. A cut (118) was dug into the top of the rubbish pit and tiles were laid in parallel lines on edge and set in a yellow clay. Subsequently a pit (132) was cut through this hearth and later it had been filled with burnt clay, charcoal and tile. This is evidently the same as the hearth F64 or 1976, attributed to the 15th or 16th century.

A narrow trench (116) dug along the north side of the hearth area seems to have continued the line of a tile wall F62 found in the earlier excavations and may be related to that. The trench fill was a homogeneous compact soil with a medium number of sub-rounded stones. It appears to be the footings of a chimney of which the tiles were only the lowest course. It may be compared with the front of Oven 5 which was constructed of tile (F105) supported on footings of brick (F120, Fig. 3 section EF). The final cut, 194 (Fig. 9, section B), may be identified with confidence with the fire pit partially excavated in 1976, F66. Though no datable finds were discovered in 1987, the earlier work had suggested that it was 16th century.

Few other features could be reliably attributed to this phase. It must be presumed that the street frontage was occupied by buildings, though with the exception of the chalk-built structure no archaeological evidence of this was found. The reason for the absence of traces of later medieval buildings is discussed below. There was a virtual absence of rubbish pits. In other English towns these have been found to be less common at this period than in the preceding or succeeding centuries.

7.1.6 Period 6: c. 1600 onwards

The excavation strategy necessitated that the upper deposits, including post-medieval stratigraphy, was removed by machine. Consequently, details of the buildings along the street frontage may have been lost. The section on the north-east of the site, however, showed that the upper levels in this area were fairly disturbed (Fig. 9, section E). The stratigraphy at the centre of the east side had been entirely destroyed by the foundations and inspection pit of a garage. Traces of building foundations were seen in section on the north-west side, but could not be recorded in the available time. A layer (147) above the flint pebble footings lying over the chalk wall on the west side of the site contained pipe stems of the 17th century and may be connected either with the robbing of foundations here, or with the filling-in of such a robber trench preparatory to building (Fig. 9. section D).

The cutting of the rubbish pit (42; [1976: F96-7])close to the area of the hearth marks the beginning to the final phase. A pit here suggests that the building containing the ovens and hearth had been demolished. The rear of the excavated area was given over to a series of deeply-cut rubbish pits of the 16th- or early 17th-century date (4, 5, 12, 14, 64, 70, 110). A group of intercutting pits (given the single context number 4) lay to the west of F96-7. This was cut by machine so that the section could be recorded and pottery was extracted for dating purposes (Fig. 9, section A).

One of the pits (70) had been subsequently truncated for the ground surface had been lowered in the area and a layer of gravel (54) deposited. A cellar had been cut down into the archaeological deposits on the west side of the site and lined with brick.

7.2 Discussion

The excavations span an area at the edge of medieval Waltham Abbey. The land here sloped downwards towards the bank of the Commill Stream and part of this low-lying area must have been too wet for habitation until the level was raised by the construction of the chalk block wall and the dumping of make-up within it. The features discovered underlying the 12th- or 13th-century dark soil layer are from the first period for which there is clear evidence for use of the site. These features have been tentatively attributed to the late Anglo-Saxon or Saxo-Norman periods, but the fallibility of dating has already been discussed.

On the higher, eastern side, there were lines of post-holes at right angles to the street frontage. These may represent walls of a building or buildings, though the evidence is not certain. Nearer the stream the ditches and a few pits reflect the marginal nature of the land during this period.

That phase was terminated by a dark soil layer (context 63) which covers the whole site. Previous excavations had not been able to determine whether this soil layer had accumulated over a period of time or if it had been systematically deposited. The work in 1987 cast no further light on this, though the variations within the layer tend to favour the view that the deposit was made up of loads of different material which had been dumped.

The pits cut into this dark soil occur right up against the street frontage and suggest that if the land had been occupied earlier, it had later fallen out of use. During part of the period from c. 1150-1300 the land would seem to have been open. The deep pit (52) found near the concrete foundations of the garage appears to be similar to Pit 2 excavated at 6A Church Street and Pit 80-82 from the 1976 excavations at 6 Church Street. The former was identified as a cesspit and the latter interpreted as a water hole. No evidence was found for the use of the pit in the present excavations. The slot and possible stylobate may be connected with buildings erected towards the later part of this period.

Around 1300 the area examined by excavation was occupied. At the rear of the plot a bread oven was built. Nearer the Commill Stream a retaining wall was constructed, and on the platform created a building erected. It is difficult to believe that the considerable expense of building a chalk substructure wall would have been undertaken if the remainder of the street frontage had not been already built up. The absence of evidence for buildings in the north-east arm of the excavation might seem to argue against this interpretation. The examination of levels suggests, however, that slight wall footings may have been removed by later activity. The floor level of the chalk-founded building stands at about 19.02 m Ordnance Datum (O.D.). This may be compared with the top of the tile-laid hearth (118) which was at about 18.80 m O.D. Such fireplaces were set flush or slightly raised above floor level. In the north-east arm of the excavation postmedieval and modern deposits extended down to about 18.85 m O.D. (Fig. 9, section E) or what was probably close to the medieval ground surface and floor level.

A timber-framed structure would have sat on stonefootings placed on this surface or in a slight trench cut into it. Any footings may have been removed after a building had been demolished. Alternatively, they may have been disturbed by later activity for there was little stratified material above this level.

An archaeomagnetic date on oven 1 gave a result of 1290-1330 AD at the 68% confidence level. This refers to the final firing of the oven. It matches closely the date derived from the pottery evidence and places the early use of the ovens at the beginning of Period 5. The distance of the oven from the street frontage suggests that this was set in a detached building, though no trace of this was found. Detached bakehouses were constructed apart from the main building because of the risk of fire. These have been found attached not only to buildings of higher status (Hewett 1973), but also are now recognised associated with vernacular houses. Wood (1965, 247) cites an Essex example mentioned in 1292, evidently on an ordinary free tenement and the 1301 Colchester taxation list also records bakehouses (Rotuli Parliamentorum i, 243). After it was constructed the bakehouse may have been extended to accommodate a hearth laid over a rubbish pit, which must originally have been outside the building.

By about 1600 the building containing the hearth may have been demolished and the rear of the site was open ground used for disposal of rubbish in pits. The subsequent history of the site was poorly represented in the archaeological record.

8. The 1987 W.A.H.S. excavations (by P.J.H.) Following the E.C.C. work, the site was vacated in September according to the timetable agreed with the developer on the understanding that building work was imminent. In the event, the site lay vacant for several months apart from some backfilling at the edges to make the sides safe. W.A.H.S. was able to make use of this opportunity to dig additional small trenches, T and V to Y from October 4 to 8, within the area of trench C, and trench S (position indicated on Fig. 1A), was machine dug to the east; also section D was dug deeper to natural. Then as "backfilling" had left some areas still uncovered, three more trenches, P to R, were dug at weekends from November 22 to December 20 in wet conditions. All this work was planned to answer specific questions and was done at salvage urgency.

8.1 The ditch, the flood loam and the podsol development Since the same strata were evident in most trenches a general description is given; this can be followed by reference to Figure 10. The strata showed a classic podsol development (Cornwall 1958, 81-82) as noted in trench A in 1976 (Fig. 2, section DD; F29, F46 and F47). Particle-size analysis was carried out on many samples; this was by dry sieving so that the silt and clay components were counted together; but the finer characteristics could be assessed by feel (Cornwall 1958, 120). The A1 humic horizon is represented by the E.C.C. dark soil 63, of which remains can be seen at the top of trench T. Analysis showed this to be a

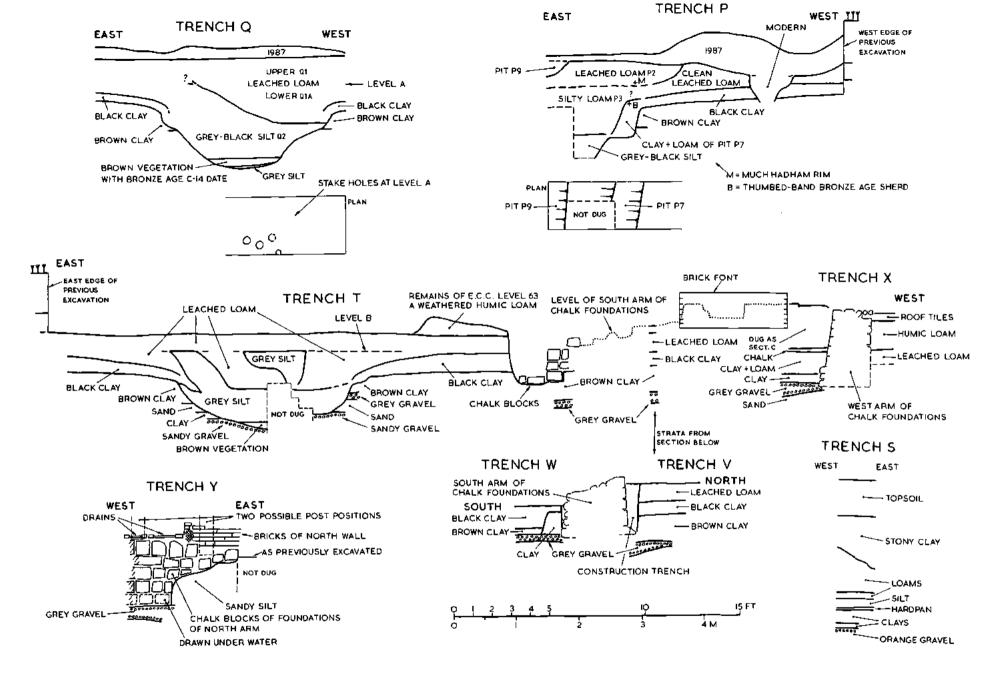


Fig. 10 Church Street, Waltham Abbey, 1979. Selected sections from trenches P, Q, S, T, V, W, X and Y.

mixture of sand, silt and clay, thus it is a loam and is labelled "weathered humic loam" on the sections; it must have formed the ground surface, generating raw humus, for hundreds of years for the podsol sequence to develop. Below is the bleached or leached eluvial A2 horizon where the humus has been washed through by percolating moisture; this is labelled "leached loam" on the several sections of Figure 10; it contained about equal amounts of medium and fine sand and a larger amount of silt/clay. The weathered humic loam was finer than the leached loam, this is a characteristic of weathering and it is suggested that both strata are of the same origin.

Below the leached loam is the humus-enriched illuvial B horizon which had itself originally formed the ground surface for thousands of years. This had a higher silt/clay content and, with the feel of clay, is labelled "black clay" from its dark colour. This weathered black clay was again finer than the more impervious parent yellow-brown to orange clay below, labelled "brown clay"; the humic content itself contributing to this fineness. There was also some evidence of iron enrichment in the top of this brown clay, another characteristic of a mature podsol sequence. Cornwall (1958, 109) notes that a podsol is "typically the soil of northern and western cool-temperate regions with plentiful rainfall to develop the characteristic leaching". Although the differential colouring of the deposits was clear, boundaries in places were blurred; however they remained sufficiently well defined, due to lack of worm action, to be drawn without too much uncertainty.

Below still were presumed Taplow river terrace deposits. Drawn in detail in trench T (Fig. 10), these include layers of grey gravel, illustrated in several trenches, sand, clay and sandy gravel; the section from trenches V to W illustrates a degree of current bedding.

The sections show that the ditch was originally dug from the level of the black clay; that this was the ancient ground surface is instanced by the discovery therein, where no doubt lost, of a fine 82mm-long Mesolithic blade. The ditch deposits were mostly of a water-logged grey or grey-black silt. The presence of grains of bright blue ferrous phosphate in the ditch silts, formed from iron in the presence of phosphates in moist anerobic conditions, indicates the presence of occupation rubbish in general (Cornwall 1958, 183). At the very bottom, in trenches T and Q, a structured brown vegetation in mud remained (see Para. 14 for the later Bronze Age radiocarbon date). The section of trench T suggests a phase of re-cutting the ditch profile, deeper to the east. A superficially similar cut in trench P is however of a pit or trench P7; this is clear from the fill being a mixture of clay and loam with some gravel patches, it could not result from ditch silting. This feature is important because of the presence of a flint-gritted sherd with applied thumbed band (Para. 10.1 and Fig. 14/1) probably also of later Bronze Age date, also it is the first feature to be

recognised at Waltham with prehistoric pottery in situ and not showing the effects of later wear.

A clear indication of how the ditch was eventually filled, at this north-west corner of the enclosure, is evident from the way in which wet grey silt has oozed up to a surface as backfilling, of what has since become leached loam, proceeded. From trench T (Fig. 10) it can be seen that some material must first have been pushed in from the east just over the lip of the ditch and to a height later reached by the wet silt. Clearly then material was thrown into the middle of the ditch from the west which started to push up the spout of grey silt on the east side. Further material was thrown over the western lip of the ditch forcing up the other spout of wet silt. So the wet silt and the backfill must have reached a level as evidenced in the section of trench T (labelled level B). The section of trench Q shows a simpler sequence of backfilling but also clearly undertaken from the west. That a similar level of backfilling was reached here is supported by the recognition of a group of stake holes at level A in trench Q.

That the backfilling took place from the west leads to the idea that the original bank, the obvious material to backfill, was on this side of the ditch. The greater remaining thickness of black clay, the current ground surface, to the west (trench T) perhaps confirms this fact. The same reasoning may suggest a lesser amount of material was deposited on the east side, perhaps from cleaning out the ditch and/or re-cutting it.

The fairly shallow depth of the ditch from the current ground surface of about 4ft (1.2m), and the width of about 9ft (2.7m), together with the shape, however weathered, suggest the ditch was not intended to be defensive. Thus it is seen to be of an enclosure, which from the lie of the land, could only be to the east. With the bank thus on the outside, the ditch could drain storm water from the inside of the enclosure. The evidence of the radiocarbon date of 1420 to 1105 BC at the 95% confidence level, together with the presence round about of other sherds of flint-gritted pottery, including one in the grey-black silt of trench Q, suggests strongly that this is the ditch of a later Bronze Age enclosure.

The subsequent deposit of what has, over the centuries, become the upper part of the leached loam and the weathered humic loam (E.C.C. dark soil 63) above, to a total thickness of about 2ft (61cm), must surely derive from a flood loam. Such alluvial deposits in the Thames Valley date from the Neolithic to quite recent (Sherlock 1960, 58). There is surely no possibility that this amount of material was dumped by man over the whole of the site of trenches C and A.

It is noted that these almost level flood loam deposits are not met on higher ground as at trench S (for position see Fig. 1A) or at trench B. At trenches S and B and higher towards the Market Place a thick occupation loam, or black earth, is noted, forming immediately above Romano-British features (Huggins 1988, fig. 2); at trench S this layer contained 12th- and 16th-century pottery. The layer of hardpan of ferric hydroxide, lower in the section (Fig. 10, trench S), had formed presumably at the junction where iron compounds had percolated to the top of the groundwater level and been diluted (Cornwall 1958, 89).

8.2 Additional information on the chalk-foundation building

The deposits inside the building as shown in section C (Fig. 9) were dug out deeper in trench X (Fig. 10) to show further localised backfill in the construction trench for the chalk foundations which were carried down to a natural clay and grey gravel; that this is not dumped material filling the inside of the building is clear from the presence of the leached loam and the black clay in trench V. At this south-west corner the foundations were buried some 1.1m (3+ ft) into stable natural deposits existing when it was built. The levels, as indicated by the top of the leached loam, dropped only very slightly over the whole east-west dimension of trench C (see continuation of sections of trenches T and X, Fig. 10). The irregular height of the eastern arm foundations, shown dotted, is due to the machine scraping. A similar story is shown in the sections of trenches V and W, with the foundations carried down through stable natural deposits.

In the middle of the west side the foundation trench, but not the chalk, was carried down to a wet unstable grey silt, to show the first evidence of what the builders would have considered to be a ground problem. At the north-west corner, the elevation (Fig. 10, trench Y) shows that the chalk blocks, here set in puddled chalk, were carried down to the stable grey gravel, whereas the north arm rose to the east over a wet unstable sandy silt. So it was at the north-west corner that a ground problem was evident, although the most costly reaction to ground conditions was at the southwest corner where the problem seemed not to exist. The fact that the building was partly situated on wet ground, rather than slightly to the east, is possibly because it was constrained by a property boundary still following the line of the old ditch.

The chalk foundations may have supported a sill beam for a timber-framed building. However two possible post positions (Fig. 10, trench Y) suggest such a beam may not have been continuous at some stage. Parallels for chalk-foundations at Waltham are several: the stone-walled monastic forge of c. 1200 (Huggins and Huggins 1973); the great timber barn (Huggins 1972, 53-61) of c. 1200 for the stylobate foundations; and the stone precinct wall (Musty 1978, 141 and Huggins 1988, 134) of c. 1370.

The foundations apparently continued in use to support the building, of c. 1600 to 1650, shown on the Boys painting and the Bethel chapel of 1845. The obtuse angle at the north-west corner (Fig. 7) being still evident on the 1826 map (Fig. 1B) but not on the

1879 map (Fig. 1A), the front must have been set square in the rebuilding of the chapel in 1845. The brick-built base to the immersion font of the chapel is shown in plan in Figure 7 and in section in Figure 10; it is seen just to cut into the chalk foundations, thus presumably being tight against the north wall. The remains of a line of brick and tile meeting the south arm of the chalk-foundation building at an angle (Fig. 7) seem to mirror an extension to the chapel on the 1879 map.

The chalk foundations were dug into the dark soil 63 like the features shown in Figure 7. Pottery in 168 and 179 (Fig. 9, section C), construction backfill deposits, shows a preponderance of "after 1250" date. A single J1 jug sherd below in a similar deposit (loam and clay, Fig. 10, trench X) is judged of 14th- or 15th-century date so that the date of construction of the building should be limited to these centuries.

8.3 Dating

The ditch is taken to be part of the enclosure, called Eldeworth, meaning "old enclosure", and first recorded in 1235. The outline of the enclosure remained, in part, in some way, to be indicated on the map of Waltham of c. 1600 (Hatfield House, Maps and charts II/23). A ditch on the same line to the south, in the present Baptist Church garden, was excavated in 1990. Here the ground had been extensively used and the ditch silts only contained pottery of the 15th and 16th centuries. The butt end of a ditch, which may be part of the eastern side of the Eldeworth enclosure, was excavated in 1991 behind No. 3b Sun Street by the E.C.C., and this contained 11th- or 12th-century pottery. Recent ideas on the outline of the ditch, enclosing an area of about 4 acres (1.6 hectares), have been discussed (Huggins 1988a, 202).

The reasons for suggesting an origin in the later Bronze Age, for the ditch at the north-west corner of the enclosure, have been given above. There is no evidence that the whole of the Eldeworth enclosure was of this date; the ditch seen in the present excavation could be one arm of a smaller enclosure, later to be extended to form Eldeworth. Some of the other flintgritted sherds found on the site may similarly be prehistoric although they were previously thought to be Saxon. The record of these sherds as is follows: there were 24 in trench A and 1 in trench B; there were 14 from the 1987 E.C.C. excavation, all in a worn condition, spread around in 9 early medieval and later features; there are 125 more such sherds from 11 other sites at Waltham. This leaves another 15 such sherds, either fresh or showing less wear, which were found in the small trenches P, Q and R. The thumbed-band sherd was clearly found in situ where originally deposited, in a pit or trench P7 which was filled prior to the digging of the ditch; superficially in the section of trench P the feature looks like an earlier ditch, but the fill is not consistent with ditch silting. The other 14

sherds were either in ditch deposits, in loam of ditch backfill, or in what is interpreted as flood loam over the ditch backfill; these latter two loams had, over the centuries, been changed into the leached loam shown in the sections (Fig. 10) but, in trench P, it is not clear which is which. However it is clear that one flintgritted sherd was in the silty loam in trench P with a Saxon AC sherd, the latter indicating a final period of use of the ditch; one was in the grey-black silt in trench Q; one was in the grey-black ditch silt in trench P; two were in the upper leached loam, the flood loam, in trench Q with 1D2 and 2M sherds, showing this level had been dug into although this was not recognised; four were in the leached loam in trench P, with a Much Hadham 4th-century rim, this is either backfill into the ditch or flood loam; a piece of Roman flue tile and a fragment of Bronze Age loom weight (Para. 10.7,5) were in the clean leached loam in trench P, of the same origin as the last-mentioned finds; then the largest group of 6 flint-gritted sherds was in the lower leached loam in trench Q which is interpreted as backfill into the ditch from the bank. Thus it appears that much of the flint-gritted pottery and the other material had collected, over a period of time, on or in the bank later to be backfilled into and over the ditch. This leaves a sandy red sherd in the leached loam of trench R (section not illustrated) which is of indeterminate date. Whatever the details of the origin of this pottery, the indications are that there was later Bronze Age occupation at Waltham before the ditch was dug, how long it existed before or afterwards is not known. Bearing in mind the small size of the deeply-dug trenches T, P and Q, only a tiny percentage of the ancient ground surface was excavated, and one definite preditch feature was detected.

From the radiocarbon date range of 1420-1105 BC for the material at the bottom of the ditch, it is most likely that Waltham was occupied during the great eruption of Hekla, in Iceland, in 1159 BC (see *Current Archaeol.* 117, 1989). This was a severe dust veil catastrophe which may be related to far-flung events such as the end of the Mycenaean civilisation and of the Shang dynasty. Nearer home the dust itself fell in Scotland and settlement there declined, it is known that a period of low growth of Irish bog oaks started then and lasted for about 20 years. So the people at Waltham are likely to have witnessed this event and to have suffered crop failure for many years.

Also it has been noted that there is new settlement on the river margins in the Thames valley at this time showing that existence here was still possible. On balance then, from the dates, one would suggest that the people were already settled here in 1159 BC and, from the evidence of new Thames valley settlement, that life was still possible at Waltham and they survived.

As to the date of the back-filling of the ditch in this location, the evidence is sparse. A little Romano-

British debris is not helpful; this includes five pieces of probable brick or tile, including the fragment of flue tile, which were found in the upper leached loam flood deposit, there was the Much Hadham 4th-century rim in trench P in the same deposit. The only object to give a useful terminus post quem to the ditch filling is a grassand-sand tempered AC sherd in the silty loam in trench P. This sherd must be of middle or late Saxon derivation; in order to allocate the maximum number of centuries for the development of the podsol sequence it is possible that the filling and subsequent covering by the flood loam is early in the middle Saxon period. This may be supported by the sceat of c. 715, lost nearby, if this can be accepted as dating evidence (trench A, in the humic loam F29). This coin is not in a deposit dumped by man from elsewhere but rather is likely to have been lost where it was found, thus the deposit of flood loam, and thus the ditch filling, should predate it.

This means the filling of the ditch may fall in the period c. 650-715. Church 1 at Waltham is thought to have been built by this time just to the north (Huggins and Bascombe forthcoming) and the enclosure ditch must have followed north across present Church Street to swing round to the east only some 150ft (45m) south of that church and within the present church-yard. Also the route along Church Street would have had to be bridged unless the ditch there was filled. Thus there might well have been an early impetus from the church to fill the ditch at the north-west corner of the enclosure including that seen in the present excavations.

8.4 Conclusions

- 1. A pit and ditch of the later Bronze Age are the first such features recognised at Waltham. The ditch seems to define part of the west side of *Eldeworth*, the old enclosure. The bank appears to have been on the outside.
- 2. The ditch was filled, at this north-west corner, possibly in the middle Saxon period following the building of the first church to the north.
- 3. The site of trenches C and A, but not the higher trenches B and S, was covered by flood loarn early enough for the mature podsol sequence to have developed and before any medieval building took place.

9. Concluding remarks

Separate conclusions have been written for each of the four excavations. The predominant feature is the ditch of the *Eldeworth* enclosure for which there is a later Bronze Age radiocarbon date at the north-west corner. A few flint-gritted sherds and a loom weight are probably of this period. The associated ancient ground level was recognised. The ditch was back filled possibly early in the middle Saxon period and the whole of the lower part of the site was then covered by flood loam which weathered to a nearly level new ground surface. The first recognised activity thereon appears to be of the 11th century.

The ditch line, which still today determines some property boundaries elsewhere in the town, appears to have affected development of the site for several centuries, presumably because medieval boundaries, represented by post holes on the eastern lip, continued to follow its line. The five ovens and associated fire pits all lie to the east of the old ditch line and cover a period of use of over 300 years; the reference to baker's land suggests these ovens are of a town bakery. During the period of use of the ovens, a chalk-foundation building was constructed parallel to the ditch line to the west and so again, apparently, was constrained by it; these foundations seem to have supported at least three buildings.

Of the other structures, the 16th-century basement shop or storage cellar is the first to be recognised at Waltham. The four separate excavations have each contributed significantly to the history of Waltham.

10. The artefacts

10.1 Pottery

by Rhona M. Huggins

Pottery from the excavations here recorded includes, from trench A, 24 small sherds of Saxon pottery with three or four Roman sherds from the humic loam, F29 and nearby features; this loam also contained a sceat of c 715 (Para 10.4/1). From trench B the only premedieval sherd was a heavily gritted base fragment of fabric B which may be either Saxon or prehistoric. Otherwise there was a sequence of medieval and post-medieval pottery from seven pits and other features. Dating is based on previous work at Waltham Abbey (see Bibliography) confirmed by stratigraphy and other finds such as coins and leather (Para 10.4,8). Pottery from trench C includes groups of prehistoric, Roman, Saxo-Norman, 12th-, 13th- and 15th-century, and 16th- to early 17th-century material.

An attempt at achieving a more objective dating of groups from Waltham Abbey has been made by the use of bar charts (Fig. 18) based on generalised fabric types and a sherd count. Such statistical methods can only be used with caution but they do demonstrate the relative change of fabric types and techniques particularly for the 12th and 13th centuries.

Fabrics are as defined in Huggins 1988a (136), with the addition of:-

- B/G Buffware with green glaze
- De Delftware or maiolica
- St Stoneware from the Rhineland

Fabric B is now re-defined as:-

Grit temper; fine grits giving a rough surface occur in hand-made black or brownish fabrics. This has occurred with fabric A in stratified contexts but never in sufficient quantity to classify with any certainty as Anglo-Saxon. More recent excavations at Waltham have produced Bronze Age and Iron Age pottery with heavy flint gritting, and a prehistoric origin for this group, particularly the sherds showing little curvature, is likely, although a Saxon origin for some of the material is still possible. Pottery from trench A (Fig. 11)

From pit F80-82 (1st half of 13th century)

- 1. Upper part of jug, complete, unglazed grey ware with grit temper, some large white flint inclusions like Northolt fabric 'k' (Hurst 1961, 267). Rod handle thumbed at top junction and stabbed along back, applied thumbed band at base of handle, pulled spout. The rim can be paralleled at Northolt but is unlike the rest of this pit group. A Middlesex or Hertfordshire source seems likely.
- 2. Base of handle, worn gritty red ware, thumbed along back. (H).
- 3. Part of handle of jug, sandy red ware, stabbed along back and side. (H).
- 4. Jug rim, worn, sandy red ware, no glaze remaining but traces of white slip still adhere suggesting it was slipped and glazed (cf. Huggins and Huggins 1973, fig. 9,139). (J2).
- 5. Jug rim, red ware, unglazed, scar of handle remains (c.f. Huggins and Huggins 1973, fig. 9,151). (J2).
- 6. Jug rim, grey core, orange surfaces, trace of orange glaze outside over slashed applied band. Fabric like No. 8 below. (J1).
- 7. Jug rim with rilled neck bands, also body sherd of similar fabric with part of strap handle with thumbed or tooled impression. Grey/buff ware with light red/orange surface, sand temper, light orange/brown glaze outside. The base sherd is probably from a different jug but is of similar fabric reduced so that the surfaces are grey and the glaze greenish.
- 8. Rim of jug with handle and base of similar fabric, red ware with grey core, greenish orange glaze outside with traces of 'scales' of white clay applied decoration which appear lighter green under the glaze. The base of the handle has been inserted into the body and two tool impressions show how it was pressed into the soft clay. Usually such a join is covered by clay to give a smooth surface. The base has greyish surfaces. (J1). Other jugs with 'scale' decoration at Waltham have been found in early 13th-century contexts (Huggins and Huggins 1973, fig. 9,153) and are thought to originate in London.
- 9. Bowl with incised wavy band outside, coarse grey fabric like No. 1.
- 10. Bowl rim with thumbed top, red ware with sand and some shell temper. (D2).
- 11. Jug or pitcher rim with top pierced, thick black core, red margin, black surfaces, some shell temper. (D2).
- 12. Dish with thumbed rim and incised wavy line inside, grey ware with some shell temper, roughly made with rim formed by adding clay over simple wheelmade rim, blackened outside and after breakage. A similar dish with incised line decoration was found in F94, the loam below oven 2. (D2).
- Large part of small pot of red shell-tempered ware. (D2).
- 14.a-h Rim forms of red shell-tempered ware, diameters between 10-13cm, a and b have thumbed rims. (D2).
- 15.a-f Rim forms of sandy red ware, diameters: a, 8.5cm; b, c, and e about 11.5-12cm; d and f, 13cm. (H).
- 16.a-i Rim forms of sandy grey ware, diameters: a, 11cm; b, 9.5cm; c,11.5cm; d, 13.5cm; e, 10.5cm; g, 13cm; f, h, and i, 14cm. (G).

Nos. 12 and 16b were in F82. Nos. 1, 5, 7, 8, 13, 14b,e, 15b and 16a,e,f,g were in F81. Nos. 2, 3, 4, 6, 8, 9, 10, 13, 14a,c,d,f,h, 15a,c,e,f, and 16c,d,h,i were also in F80. Nos. 11, 14g and 15d were in F80A.

Pottery from trench A (continued) (Fig. 12)

From loam, F42 (late 12th/early 13th century).

17-20 Rims of coarse shelly ware (D2),

From construction levels of oven 1, F71A and F72 (not illustrated) Three body sherds, two from F71A and one from F72, are probably from the same jug. The fabric is finely tempered, dark inside and red outside with a bi-coloured section. White slip with a mottled green glaze covers the outside and the glaze is in excellent condition. Vertical decoration has been scored, in 5mm wide bands, at intervals

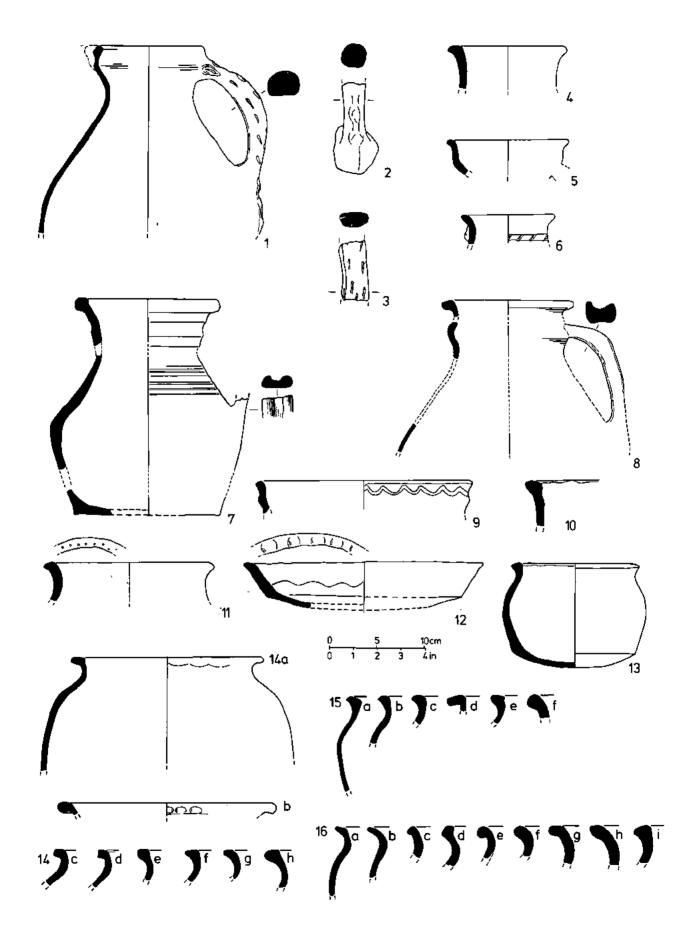


Fig. 11 Church Street, Waltham Abbey, 1976. Pottery from trench A. All from pit F80-82; first half of 13th century.

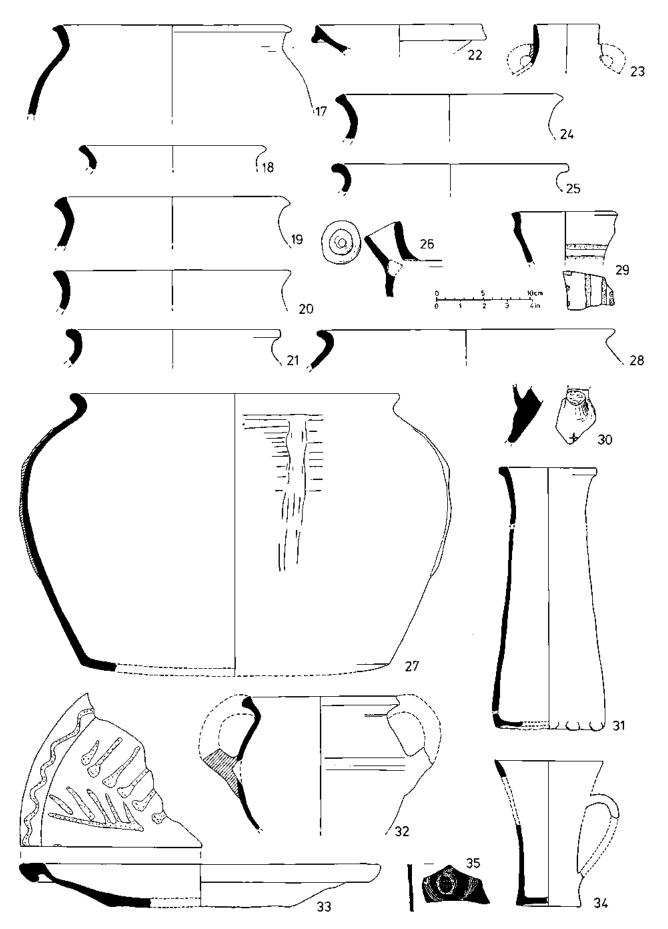


Fig. 12 Church Street, Waltham Abbey, 1976. Pottery from trench A. (Note: coloured slip indicated by stipple.) Nos 17-20; late 12th/early 13th century: nos 21-23; late16th century: nos 24-26; late 12th/early 13th century: nos 27-31; late 13th/early 14th century: no 32; late 16th or early 17th century: nos 33-35; late 17th/early 18th century.

with a 6-toothed comb or tool so that some of the body shows through the slip. The jug was probably a conical type sometimes called 'West Kent' (Rackham 1972, pl.25) but is more likely to have been made at the Mill Green kilns in the Chelmsford area of Essex. Similar jugs occurred at Writtle (Rahtz 1969, fig. 53/26 and 20) dated to Period 1 (1211-1306). E. Sellers has identified these sherds to Mill Green fabric.

From top of pit F52A (late 16th century)

- 21. Sandy red ware. (H).
- 22. Bowl rim, probably chafing dish, red ware, light brown glazed both sides. (M).
- 23. Rim of vase with trace of handle, one of a pair, maiolica soft buff were with dark blue glaze outside, crackled whitish tin glaze inside. Fragments of these plain blue maiolica vases from the Netherlands have been found elsewhere at Waltham in mid-16th century contexts (Huggins 1969, fig. 26,10; Huggins 1988, fig. 9,13).

From loam of pit F52B (late 12th/early 13th century)

- 24. Rim, slightly grooved on top, dark grey ware, some red surface patches, sand temper with a little shell. (D2).
- 25. Rim, of similar fabric to no. 24 with brownish/buff surfaces (D2).
- Spout or handle of bowl, diameter not known and angle approximate, sand temper with grey core, buff surfaces. (H).

From F63, a rectangular pit underlying F62, 64 and 66 (late 13th/14th century).

- 27. Large part of pot, sandy grey ware with black surfaces. (G).
- 28. Rim of similar fabric, slightly smaller pot. (G).
- 29. Jug rim, red ware with dark surfaces, grey core in rim thickness, white horizontal bands painted on neck with slight traces of glaze, a body sherd of similar fabric and painted lines found with it is shown. (J2).
- 30. Base of rod handle of jug, red ware with dark green glaze outside. Trace of 'scale' decoration on right-hand side of body area, a cross has been incised through the glaze after firing. This is the third such case of this jug type found at Waltham marked with a cross; no other jugs have the mark, which may indicate 'Holy Cross'. (J2).
- 31. Sherds of tail jug, handle missing, red ware with grey core, slipped overall, yellowish green glaze patchily applied, base thumbed. (J2).

From F54, clay below floor level of oven 5 (late 16th or early 17th century).

32. Large part of pipkin, red ware, brown glaze inside rim and outside.

From F128, cesspit (late 17th/early 18th century)

- 33. Part of 'Metropolitan' dish with trailed slip pattern under lead glaze giving yellow against a brown background. Probably from Harlow kilns. The rim form and rather debased style of decoration suggest a late 17th-century date. (N).
- 34. Sherds of black glazed tyg, red ware, probably Harlow. (N). (Compare Huggins 1972, fig. 24,151).
- 35. Body sherd of mug, light grey stoneware with salt glaze, cobalt blue background with moulded medallion of purple and grey incised bands. From Westerwald, Rhineland.

Pottery from trench B (Fig. 13)

From pit 2 FB62 (early 13th century)

- 1. Cooking pot rim, grooved on top, wheelmade, coarse shelltemper, grey fabric with reddish surface inside. (D2).
- Cooking pot rim, coarse shell-temper, grey fabric, black surface inside, reddish outside rim. (D2).
- 3. Cooking pot rim, grey fabric, red surfaces, some shell temper with other inclusions giving harder fabric. (D2).
- 4. Cooking pot rim, grey core with red surfaces, some fine shell with sand temper giving even harder fabric than No. 3. (D2).
- 5. Sherd with applied thumbed band outside. Thin sandy grey

ware with red margins and black surfaces. (G).

- 6. Rim with sharp out-turn, sandy grey ware, (G).
- 7. Large sherd of pitcher, red with grey core, sand temper, mottled dark green glaze outside from neck down. (J1).
- 8. Fragment of strap handle, coarse-shell temper, grey core with red surfaces. The sherd had split and the two parts were in different spits. (D2).

From layer FB16

- Cooking pot rim, coarse shell-temper, grey core, red surfaces. (D2).
- 10. Cooking pot rim, coarse shell-temper, wheelmade, grey core, red/brown surfaces. (D2).
- 11. Fragment of rim, sandy grey ware, black surfaces, red margins; this was the only rim out of several sherds of similar fabric. (G).

Dating: The proportion of shell-tempered D2 to grey sandy G and glazed ware are typical of groups in the 2nd half of the 12th century (see bar chart, Fig. 18, where the 1177 F9 ditch in Sun Street is the best match).

From junction of FB16 and FB27

2. Jug rim of fine sand-tempered ware, thin grey core and red margins, grey outer surface has pulled away like a slip. The curved neck is typical of 14th-century jugs. It is likely to be imported from another area.

From FB27B

- 13. Large storage jar with strap handle, probably one of two opposed handles. Fine red ware with little tempering, yellowish white painted pattern on shoulder. (M).
- 14. Body sherds of jug of similar fabric to No. 13, white painted curvilinear pattern on outside flaking off in places. (M).

Dating: The two pots 13 and 14 were unworn and must date the deposition of the layer. Other sherds were few and must be residual. Pots 13 and 14 are of the fabric M which is dated 1500-c. 1640 but the decoration of painted lines suggests a date early in this sequence.

Pottery from trench C

Prehistoric: 14 flint-tempered sherds were found together with early medieval sherds in early levels. However a further 15 flint-tempered sherds were found in the trenches P, Q and R, six were in Q1A, and 1 each in Q2, R1 and P7 (Fig. 14/1) without later pottery. Sherds were found in Q1 with medieval; in P2 with Roman pottery and in P3 with a grass/sand-tempered sherd probably of Middle Saxon date.

Figure 14,1 is probably later Bronze Age; the thumbed-band decoration, coarse fabric, lack of curvature indicating a straight large vessel accords with this date. The only other group of similar pottery found at Waltham Abbey was from the excavation of the Abbey church crypt in 1984 where a small group was found.

Roman: 14 Romano-British sherds were found. None occurred in situ, but taken as a whole they appear to date from the later Roman period.

Saxon: Only two grass/sand-tempered sherds were found (P3 & 168) and one possible Ipswich sherd of the Middle Saxon period.

Saxo-Norman: Sherds of fabric D1 (Fig. 14, 2-5) were found in several features; 26 D1 sherds occurred in the loam level 2 and suggest a starting date for its deposition. Pottery of this fabric found previously below the forge at Waltham Abbey (Huggins and Huggins 1973) was considered there to be 10th/11th century in date.

12th century: The biggest group (Fig. 14, 6-37) came from layers 2 and the underlying 63 found over the whole site, and is to be equated with layer 16 in trench B and F27 in trench A. Context 2 comprised a total of 529 sherds and context 63 had 117 sherds, both with a high percentage (58%) of D2 ware with fabric G next in precedence. There were very few later intrusions and the broken state of the pottery suggests this layer was deposited until the late 12th or early 13th century and then covered.

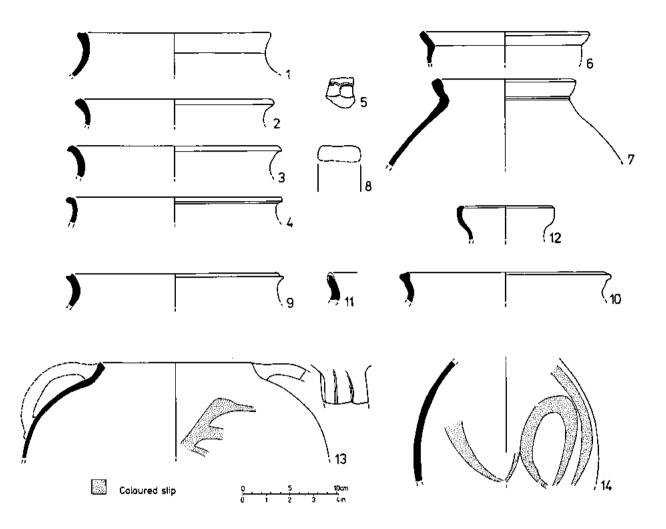


Fig. 13 Church Street, Waltham Abbey, 1979. Pottery from trench B. Nos 1-8; early 13th century: nos 9-11; late 12th century: no. 12; 14th century: nos 13, 14; 16th century.

Pit 8 was the earliest medieval feature on the site, the pottery being possibly contemporary with or even earlier than layer 2.

The fill of pit 23 (Fig. 14, 38-40) also suggests a 12th-century date, but both could contain material derived from layers 2 and 63.

The pottery from 170 and 151 associated with the trench of chalk foundation 150 may also be derived, but the rim of a polychrome 'rib' jug no. 42 and jug rim with brown mottled yellow glaze no. 43, together with the reddening of the D2 fabric of no. 41 and 44 suggest an early 13th-century date for the deposit.

13th and 15th century: The four flanged rims (Fig. 14, 45-48) cover the period from 13th to 15th century. No. 45 with its grey core and rim edge pushed under, leaving nail prints on the neck, occurred with another redware sherd with brown specks of glaze inside and sooting outside which may come from its base. The rim compares with Figure 11/15d from trench A dated to the first half of the 13th century. No. 46 from 179 against the wall 150 compares with rim 120 found in the Monastic Grange excavations (Huggins 1972, fig. 23) from a context dated to the second half of the 15th century.

Rim 47 from 189 compares with Figure 15,12 below dated by the jugs to c 1270-1290, the fabric being lighter in colour than nos. 45 and 46. No. 48 from 135 is very similar to 47 in fabric and shape.

Figure 15 illustrates the two largest pit groups 125/134 and 40. Nos 5-13 include jugs and cooking pots resembling those from the Mill Green kilns in Essex (Pearce 1982); of these nos 6, 7 and possibly 12, together with other sherds have been identified as Mill Green ware (Alan Vince, pers. comm.). The other pots compare closely in shape and style of decoration but not fabric, and are probably of the same period from Waltham Abbey kilns as yet undiscovered. A date of c 1270-90 is suggested on the Trig Lane, London, evidence, for this pit group.

From pit 40 the range of fabrics suggests a date in the first half of the 15th century (Fig. 15, 1-4). The pierced strap handle no. 4 and the large, unworn, often fitting pieces of jugs 1-3 in buff-green glazed, pinkish K or red/brown glazed ware are typical of this period.

Fabric K increases in dominance until the mid-15th century (Huggins 1988, fig. 9, 15-18).

Post-medieval groups: Figure 16 illustrates pottery from pits 12, 95 and 4, which all cut into lower levels and have residual pottery. Pit 12 has a redware jug (no. 1) and Raeren sherd of mid-16th century date while the stoneware (no. 2) is slightly later in date. Pit 95 has redware vessels (nos. 4-6) with little glaze and probably mid-16th century. Pit 4 has a range of vessels from the bunghole vessel (no. 10) to the later 16th-century stoneware base sherd (no. 11) and buff/green glazed cup rim (no. 12).

The unusually large and rare Frechen stoneware pot (Fig. 17) was found during preliminary clearing by machine and may have come from pit 4 which was exposed during the clearance. The royal coat of arms of the Stuart family dates it to after 1603 and its shape and the use of blue suggest a date soon after that.

Pottery catalogue

(Fig. 14) From pit P7 cut by ditch 199

1. Large body sherd with applied thumbed band. Fabric heavily

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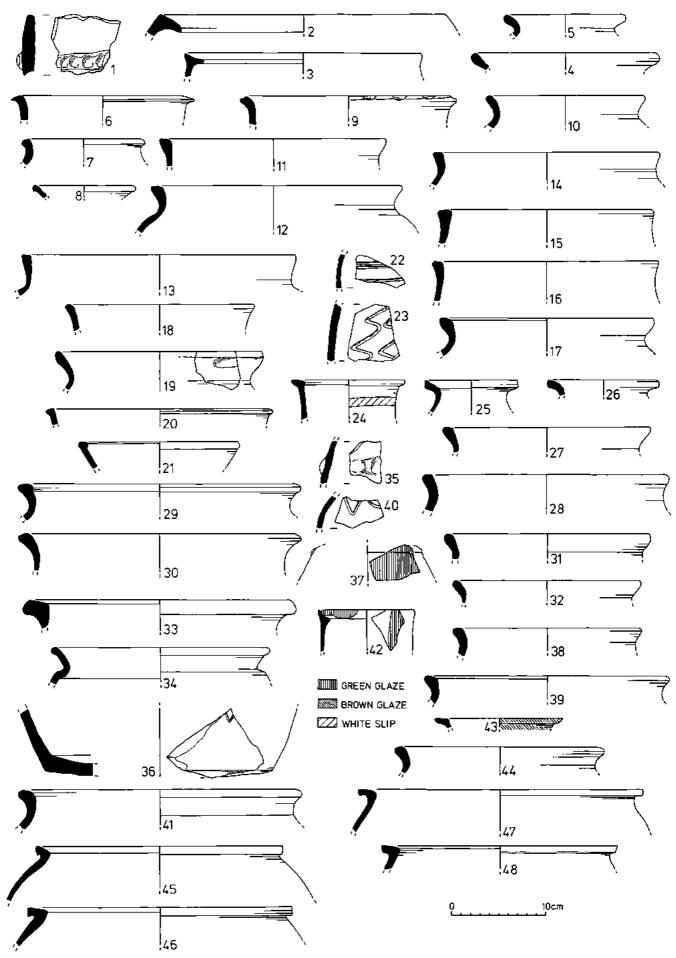


Fig. 14 Church Street, Waltham Abbey, 1987. Prehistoric (no. 1) and medieval pottery (from trench C).

tempered with white or grey angular flint fragments of widely variable size, dark grey surfaces with lighter grey core and some surfaces exposed as buff, the temper showing white through the surfaces. Later Bronze Age. Sherds of similar fabric from Q1A, Q1, P3 and a thinner grey sherd from Q2.

From P9 above pit P7

- 2. In-turned bowl rim, grey wheel-thrown with pinkish surfaces, fine shell temper, (D1).
- From 15 post-medieval pit fill (1 D2, 9 J2, 2 K, 5 M, 1 St)
- 3. In-turned bowl rim, fabric like 9, pinkish surfaces, (D1).

From pitfill 9 of pit 8 (12 D, 23 D2, 2 E, 9 G).

4, 5. Two rims, 15cm and 20cm dia., fabric like 9 & 10, (D1). Not illustrated; another similar rim with worn surfaces.

From layer 2, general loam level after site clearance (1 Ipswich, 4D1, 330 D2, 24 E, 103G, 20 H, 6 J1, 33 J2, 1 K, 3 B/G, 18 M, 13 N, 1 De, 7 St).

Not illustrated. Lug? Light grey, sandy hand-made ware, underside roughly finished. Possibly horizontal lug of Ipswich ware.

- 6-8. Three rims of coarse shelly ware. (D2).
- 9-10. Two rims of shelly ware; no. 9 has thumbing outside rim, 22cm dia. (D2).
- 11-18. Eight rims of shelly ware. (D2).
- 19. Rim, grey sandy ware with scar of ?handle outside rim. (G).
- 20-21. Two bowl rims, grey sandy ware, dia. uncertain but wide. (G).
- 22-23. Two body sherds, grey sandy ware with incised grooving. (G).
- 24. Jug rim, fine red ware with worn white slip band on neck and patchy brown glaze outside. (J2).
- Rim of small thinly potted vessel, redware with brown glaze traces inside rim. (J1).

From layer 63 below layer 2 (1 Ipswich, 3 D1, 69 D2, 36 G, 4 H, 2 J1, 1 B/G, 1M).

- 26. Rim of small pot, blackened both sides, (D1).
- 27-33. Six rims of approx. 25cm dia., some red surfaces and some black (D2).
- 34. Rim, grey sandy ware, (G).
- 35. Sherd with thumbed applied band, (G).
- 36. Base sherd with trace of incised pattern like no. 35. (G).
- Shoulder of jug, fine white fabric with speckled green glaze outside, waste fragment of clay adheres to shoulder, (J1).

From 85 fill of pit 23 in NE of site (6 D2, 5 G).

- 38-39. Two similar rims, (D2).
- 40. Sherd; incised pattern. (G).

From 170 fill of wall trench 150 (1D2, 3H, 1J1).

- 41. Rim of shelly ware with red surfaces. (D2).
- 42. Jug rim, red inner surface, grey core, thick polychrome glaze outside, dark brownish central 'rib', dark green glaze to right light greenish/yellow to left. (J1).

From 151 robber trench fill, where 150 has been removed (1 D2, 1 G, 1 H, 1 J2).

- Jug rim of fine redware with brown mottled yellow glaze overall (J1).
- 44. Rim. (D2).

From 161 fill heaped against wall 160 (2 H).

- Rim, fine sandy red ware, grey core, outer edge pushed under, leaving 3 nail-prints on neck surface, (H). From 179 layer below 169 against wall 150 (4 D2, 4H).
- 46. Rim, red sandy ware, dark outside surface, (H).

From 189 fill of 123 (1H).

47. Rim, light red sandy ware, c.f. Fig. 11, 12/13. (H).

From 135 fill of 134 (1 G, 7 H).

48. Rim, light red sandy ware like 47. (H).

(Fig. 15)

From fill of pit 40 (worn sherds: 7 D2, 9 G, 2 J1, 2 J2, other unworn: 1 pot J2, 1 pot E, 14 B/G; 'pot' indicates fitting sherds).

- Fragmentary jug, rim complete with handle, red sandy ware with rough brown glaze outside below rim, base thumbed. (J2).
- Base of jug, pinkish friable fabric, splitting in thickness, darker surface, outside flaking, 2 thumb impressions in 130mm circumference of base represent probably 3 groups of 3. (K).
- 3. Jug rim, buff sandy ware with splash of green glaze outside. (B/G).
- Part of strap handle, buff sandy ware, green glaze on top, also grooving and shallow piercing by triangular tool point. (B/G).

From 125, fill of 134 (5 D2, 20G, 8 J1, 137 J2).

- 5. Fragmentary conical jug, red sandy ware with thick grey core, white slip linear decoration on red surface, thin patcby brown glaze from rim to base outside but covering only about half the surface. Handle base with two deep thumb impressions. Sherds fit from 125, 152 and 117. Mill Green shape but not fabric, (Pearce 1982, fig. 3 no. 2 dated 1270-90). (J2).
- 6. Jug rim, grey fabric, no glaze, dark surfaces, possibly Mill Green.
- 7. Neck and shoulder of conical jug similar to no. 5, redware with dark surfaces, white slip linear decoration, green flecks in yellow glaze which lessens near top, red margins and grey core. Probably Mill Green.
- Handle of jug, redware, no glaze on handle but thin brown glaze inside vessel, grey core, deep thumbing on sides, applied thumbed neat strip down centre back with piercing by ?pin on back and sides. (J2).
- Flanged rim of small vessel, redware with dark under surface, speckled brown glaze inside rim. (H or J2).
- 10. Rim, redware, unglazed, grey core, some sand temper. (H).
- Sherd of jug, red fine ware with dark green thick glaze outside, applied concentric pad glazed lighter green, on brown area. (J1).
- Flanged rim, fine grey fabric with dark surfaces, glaze splash, possibly Mill Green.
- 13. Flanged rim, fine sandy fabric with grey core (from 152) (H).

(Fig. 16)

- From 13, fill of pit 12 (1 D1, 3 D2, 2 J2, 18 M, 2 St).
- 1. Rim of jug, unglazed redware, dark outer surface, trace of white slip decoration on shoulder. (M)
- 2. Rim, light grey stoneware, mottled brown glaze outside, grey glaze inside. (St).
- 3. Shoulder of Raeren stoneware with roulette stamp decoration, dark grey fabric, brown glaze with small patches of grey glaze splashed outside, matt brown inside. (Sr).

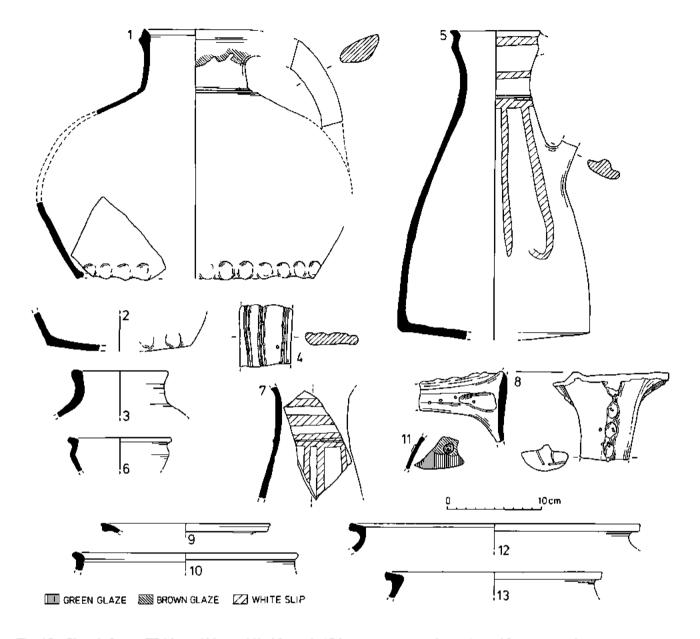
From 96 and 97, fills of pit 95 (1H, 14 M, 1 N).

- 4. Rim of redware vessel, trace of glaze inside. Also one sherd with white slip decoration and glaze. (M).
- 5. Rim of pipkin, fine redware with no grey core, splashes of glaze outside, light brown glaze inside rim; piece of rod handle probably belongs to this pot. (M).
- 6. Base of coarser redware, grey core, 2 pairs of impressed thumb marks on base. (M).

From 5, fill of pit 4 (3 D2, 10G, 1 H, 4 J2, 3 B/G, 35 M, 1 St).

- Rim of jug with fragment of strap handle, redware, unglazed. (M).
- 8. Pipkin rim, redware with orange/brown glaze inside rim. Possibly Dutch. Also two sherds with patches of slip outside. (M),
- Rim of jar with part of handle, perhaps one of two, dark redware brighter red on inside, dark brown glaze inside rim. (M).
- Base with bunghole and two groups (out of probable five) of double thumbing on baseline. Probably same pot as 9. (M).

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- Fig. 15 Church Street, Waltham Abbey, 1987. Nos 1-4; 15th-century pottery from pit 40. Nos 5-13; 13th-century pottery from fill 125 of pit 134.
- 11. Base of jar, light grey stoneware with buff glaze all over. (St).
- 12. Rim of small jar, fine buff ware with green glaze outside and upper part of rim inside. (B/G).
- 13. Base of buff ware, unglazed. (B/G).
- Rim of pipkin, redware, grey core, brownish glaze inside rim. (M).
- 15. Fragment of strap handle with deep thumbing on back, redware unglazed. (M).
- Base of large redware vessel, unglazed, worn outside surface, trace of small thumb impression on baseline. (M).
- 17. Rim of redware vessel, sandy, unglazed. (M).
- 18. Sherd of jug, green glaze outside and criss-cross pattern combed with 4-prong comb, redware. (J1).

(Fig. 17)

Unstratified from machine digging near pit 4.

Large piece of stoneware vessel, main part unbroken. Royal coat of arms after 1603 with lion of Scotland shown 2nd and 4th wrongly. Brown glaze overall with dribbles of brown over grey near base; large blobs of blackish colour over the coat of arms are probably overfired cobalt blue. Part of mouth and beard of face-mask shows the crest was on the side of the vessel, probably one of three. Fabric and shape suggest Frechen of 'Bartmannkrüg-type' or Bellarmine. The arms are Stuart and the shape and use of cobalt blue suggest James I period.

D. Gaimster of the British Museum comments:

"English Royal arms are quite common on Frechen stoneware imports of the late 16th-early 17th century. The British Museum, for example, possesses three large Bartmannkrüge of the late 16th century with the arms of Elizabeth I: MLA 51, 4-8, 1 (dated 1594 and MLA 51, 4-8, 2 (c. 1600). On display in Gallery 47, case 22 no. 6 is the Bartmannkrüge MAL 1854, 7-26, 1 with Tudor Royal arms (dated 1594) flanked with a medallion containing a version of the Royal Danish arms (Anne of Denmark married James VI of Scotland in 1587). The vessel was probably produced in the early 17th century during James I's reign, incorporating an old mould of 1594."

Stoneware vessels with similar coat of arms (showing Scotland rwice) were found in the Dutch East Indiaman 'Witte Leeuw' discovered by Dr R. Steinuit off St Helena 1976 and sunk in 1613 (Boiten et al. 1982). The pot has a capacity of about 2 gallons.

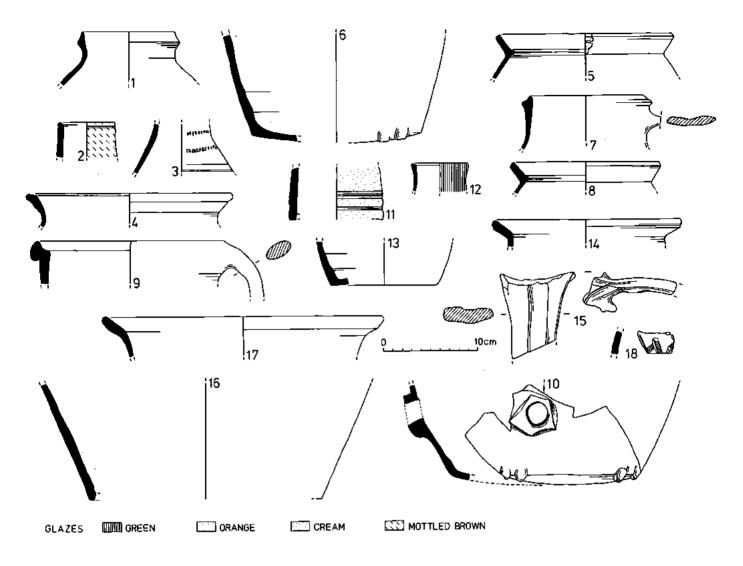


Fig. 16 Church Street, Waltham Abbey, 1987. 16th- and 17th-century pottery from trench C. Note that sherd 18 is green-glazed; the colour convention is omitted to avoid confusion with the combed decoration.

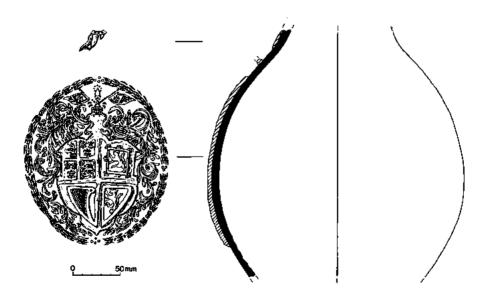


Fig. 17 Church Street, Waltham Abbey, 1987. Unstratified early 17th-century Frechen stoneware vessel.

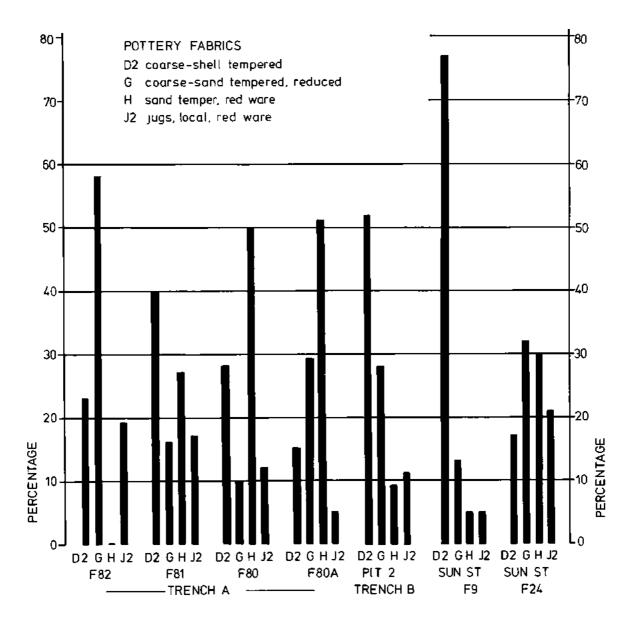


Fig. 18 Church Street, Waltham Abbey. Bar charts of pottery fabrics from four levels of the pit, F80-82, in trench A, and from pit 2 in trench B. For comparison, two features, the ditch, F9, and the pit, F24, from excavations on the north side of Sun Street (Huggins 1988) are included.

Discussion of bar charts (Fig. 18)

Only the two pit groups F80-82 in trench A and Pit 2 (FB57/62) in trench B had sufficient numbers of sherds (334 and 53 respectively) to attempt statistical analysis, and even this quantity is too small to give an undistorted result. Previous work at Waltham Abbey has distinguished changes in pottery fabrics and techniques of manufacture through the Saxon and medieval periods. These changes have been seen in stratified layers elsewhere in the town; closed pit groups, such as those discussed here, can be used to give relative dating.

The large pit, F80-82, was at first considered to be filled at one time, but analysis of its four levels shows a gradual change in proportions of the fabrics which suggests it was filled over a period in the first half of the 13th century. The fabrics D2 and G which predominate in the late 12th century can be seen, in the bar charts, to be replaced by increasing quantity of fabric H which represents a new technique of firing and probably the establishment of new kilns in the area. Comparison with the Sun Street F9 ditch group (filled before the 1177 Abbey church building) shows a typical dominance of D2 at that time which is unlike the 13th-century groups. F82 is the smallest group with only 26 sherds but it shows a transition from shell temper to grit and sand which was followed by oxidation in controlled kiln conditions. The F24 pit group from Sun Street shows slightly more of the late components (H and J2 together) compared to the early components (D2 and G). These proportions are most nearly matched by the highest level, F80A, of the trench A, pit F80-82; the Sun Street pit F24 was filled by c. 1220-1240. Pit 2 from trench B still has a predominance of D2 and G over H and J2 and the bar chart suggests it was filled after the ditch, F9, but before the trench A pit had been closed (the H and J2 sherds in Pit 2 are from two pots only and represent large fresh pieces probably thrown in immediately before its closure). Therefore trench B Pit 2 is probably dated earlier in the 13th century than the trench A Pit F80-82).

10.2 Iron objects (Fig. 19)

(Only the best of the iron is illustrated.)

 Knife with pointed flat tang, 124mm long, grooves with remains of probable latten insert. Found in rubble F50 with an 18th-century clay pipe, therefore out of context.

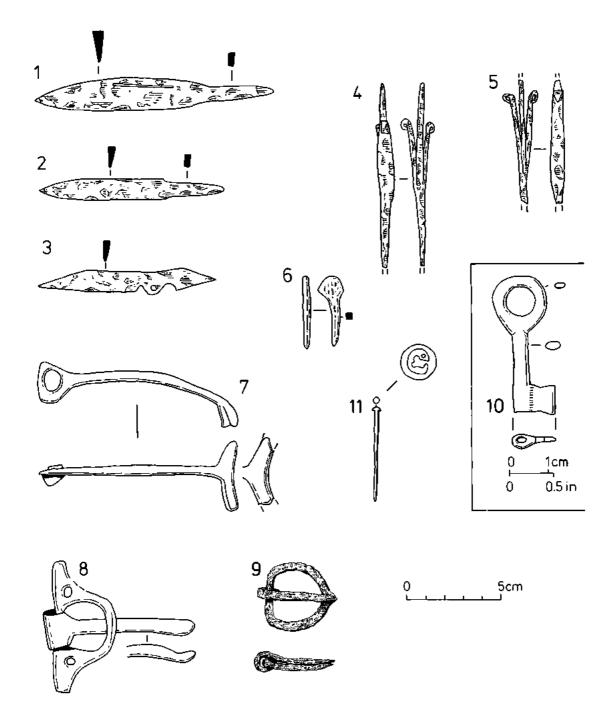


Fig. 19 Church Street, Waltham Abbey. Metalwork. 1-9; Iron, 10; Bronze, 11; Silver gilt. (Note different scales.)

- 2. Knife with pointed flat tang, 97cm long. Found in humic loam F29, with mixed Saxon to 11th-century material.
- 3. Pivoting blade knife, 93mm long. I.H. Goodall writes: several similar knife blades are known, principally from 10th-11th century contexts, including one retaining its decorated antler scales from Northampton (Goodall in Williams 1979, fig. 118,31). In use the blade pivoted on a rivet through the hole in the M-shaped depression, and a second rivet in the handle acted as a stop to the blade when both open and closed. Found in weathered humic loam F27 with Saxon to medieval material.
- 4, 5. Pricket candleholders consisting of a central rod spiked at each end and with applied flat springs with ends curved over. No. 4 was found in the pit deposit, F82, of the first half of the

13th century; No. 5 was in F63 with 14th-century pottery. Comparable holders have been found in London (Tatton-Brown 1974, fig. 38,69 and 70) and are there associated with pottery of the late 13th to early 14th century.

- 6. Fiddle-key horseshoe nail, this is a Waltham Type A nail (Goodall in Huggins and Huggins 1973, 173) for use in shoes with large countersunk nail-holes, the shoes thus being wavyedged; generally thought not to be later than the 13th century. Found in the pit silt F81, of the first half of the 13th century.
- 7. Object of unknown purpose, curved arm of circular section ending in flattened terminal with rivet, other end branching out into two curved arms. Found in pit deposit F97 with late 16th-century pottery.
- 8. Object, very corroded, with arm 76mm long; if the end shown

in dashed line is valid, this is probably one of the mouthpieces of a snaffle bit (c.f. LMMC 1954, Type III, fig. 196 and p. 82). The side ring for attaching the reins would be turned back 180° from the position shown, and the extensions with the holes may be for the attachment of a bridle boss used to conceal the ends of the mouthpiece (LMMC 1954, 85). Found in pit deposit F97, with No. 7, and late 16th-century pottery.

 D-shaped buckle with strip tongue. The plain style is not closely datable, and either a medieval or a post-medieval date would be acceptable. W 35mm, L c. 34mm (Context 2).

10.3 Copper-alloy and silver-gilt objects (Fig. 19)

- 10. Copper-alloy key, 36mm long; a small rotary key for a casket. Found in cobbles F131, without daring material. Comparable keys are illustrated as Roman (LRT 1930, fig. XXXI,1-9) but these, unstratified, are probably medieval; an excavated example from Southwark (Sheldon 1974, fig. 44,39) is associated with mainly 12th- and 13th-century pottery.
- 11. Silver-gilt pin, 49mm long, with very sharp point; the 4.7mm diameter head is of silver with the applied gold possibly representing a fish; this being a Christian symbol may imply that the pin was lost from the vestments of a canon or pilgrim to the nearby Augustinian Abbey. Found in silt F81 with pottery of the first half of the 13th century.

Not illustrated Copper-alloy pins and rings were found in the general loam levels but are not closely datable or of intrinsic interest.

10.4 Coins and jetons

- 1. Silver sceat, diameter 11mm, weight 0.65g. Stuart Rigold saw the coin just before his death and supplied notes on which this description is based. The coin is one of 'the most characteristic type' of English sceattas, the 'unintelligible Porcupine' which Rigold (1977, 22-3) described as being 'thoroughly barbarous in design'. He wrote that this was a specimen of Series E, one of the 'intermediate' sort with which the Aston Rowant hoard ends, and for which a date around 715 is generally agreed (the margin of error is not likely to be more than 10 or 15 years either way). The distribution, he wrote 'is Midland right up to the Severn and Wirral, and also Kent, Essex, London, Sussex, Wessex, Humberside and N. Yorks'. The distribution map (Rigold and Metcalf 1977, fig. 2) shows that there is only one other from Essex, at Bradwell-on-Sea, with none in East Anglia or Hertfordshire; the greatest concentration of finds is in Kent. Rigold wrote 'similar pieces, but usually distinguishable by technique, are numerous in Frisia and occur in Gaul'. He mused on the significance of this coin at Waltham; 'it suggests there was something, a market and/or minster there in the early 8th century'. This was well before the recognition of three pre-Conquest churches at Waltham (Huggins and Bascombe, forthcoming). Rigold (1977, 24) maintained that the Porcupine did not evolve or degenerate 'in the orbit of English sceattas, but sprang into that orbit fully prickled'. Found in trench A in humic loam F29, with mixed pottery.
- Half groat of Elizabeth, 1558-1603. Found under gravel patch F16 in Trench A.
- 3. French jeton of the Chambre de Comptes dated 1575, legend not clear but apparently the same as one dated 1577 from Romeland, Waltham Abbey, which read: CAMERAE COMPUSTOR REGIORUM (accountant of the treasury of the kingdom) + crowned shield with 3 fleur-de-lys; SUBDUCENDIS RATIONIBUS (for casting accounts) + date + lady in flowing robes holding a board with numbers 1 to 10. Found in probable cesspit F128 in trench A with later material.
- 4. Seaby type 2f rose farthing, Charles I (1625-49, but issue discontinued 1644), single rose, single-arched crowns; DG.MA.BRI.CAROLV: FRA.ET.HI.REX; crescents both sides. Found resting on top of wall FB59, Trench B, immediately above re-used mortar.
- 5. Seaby type 2 rose farthing, Charles I, single rose, single-

arched crowns; DG.MA.BRI.-ROLU: FRA.ET.HI.RE-; mint marks not visible. Found east of wall FB59, trench B, and in association with it, in mixed layer FB27.

 Jeton of Edward II. Class XI, dated to 1310-14. Rev 3-armed cross, in each angle a "shield accosted by pellets" (Mitchener 1988, 101; no. 129). From context 41, the fill of period 5 pit 40 (Fig. 7).

10.5 Clay pipes

Some 150 clay pipe bowls were found; none were of intrinsic interest. They have been classified according to Oswald (1975, figs 3-4) and used for dating late levels.

10.6 Glass

Fragments of post-medieval glass bottles were found in trench A, but were not needed for dating. There was little window glass even at the north end of Trench A; this perhaps supports the suggestion that the brick-floored building was a timber store rather than being of domestic use.

10.7 Spindle-whorls and loom weights (Fig. 20, 1-5)

Two spindle-whorls were found, one ceramic, and one in chalk. Both are decorated with concentric grooves, a common feature of medieval spindle-whorls, as illustrated by a large group from Winchester (Woodland 1990).

- 1. About two-thirds of a sub-conical spindle-whorl in fine, light grey ceramic with a black surface. There are concentric lines on the sides and top. Diam. 39mm, wt. 16g (Context 168). Phase 4.
- Half a plano-convex spindle-whorl in chalk. The body is decorated with shallow concentric grooves. Diam. 36 mm, wt. 14g. (Context 9). Phase 4.
- 3. Fragment of intermediate (Hurst in Dunning et al, 1959, 24) baked clay loom weight, c. 110mm diameter, hole off-centre. Found in trench A in the 17th/18th-century cess pit F128, so clearly derived.
- 4. As 3, c. 130mm diameter, hole off-centre. Found in humic loam F29 with pottery of Saxon to 11th-century date.
- 5. Fragment of baked clay, medium to coarse, mainly rounded, flint grits, soft fired, surface cracked. Reconstructs to a diameter of c. 100mm (4 in.). By comparison with an example, c. 120mm diameter and 105 mm high, from Mucking (Jones 1977/78, 49) on the Thames estuary, this is probably a Bronze Age loom weight. Found in clean leached loarn in trench P (Fig. 10). A fragment of similar shape, but different fabric was found in the Vicarage garden in 1992. (Attribution confirmed by Nick Merriman, London Museum.)

10.8 Building materials

a) Tile and stone from trenches A and B

Fragments of Roman brick and tile are often found in service trenches close to the Market Place and some have been found at a depth of 2m on the site of No. 8 on the E side of Market Place in 1975. *Tegula* and *imbrex* fragments were found in the Market Place in August 1981 at a similar depth. In the present excavations 17 fragments in the pit, F80-82, were of Romano-British origin, and this included six pieces of *tegula* and one of *imbrex*; elsewhere there were about 35 such fragments. A piece of flue tile is seen in section CD (Fig. 2) on the top of the clay, F44, and a fragment of roof tile seen in section EF (Fig. 3) indicate the ground level when Roman building debris was still being spread around.

Fragments of Abbey building stone — Reigate stone, Barnack stone, chalk and Caen stone — were found in a number of features as is usual at Waltham. The only stone-built feature was the wall, FB15, (Plate IIA) sectioned by machine in 1979 and traced during the building work; it was seen to consist mostly of ashlar Reigate stone including a jamb stone and a Purbeck marble capital. These stones have been classified in previous publications (Huggins 1970, 263 and 1972, 114). K.N. Bascombe describes the capital (Plate IIB) as follows: engaged bell capital for circular shaft of 5-inch

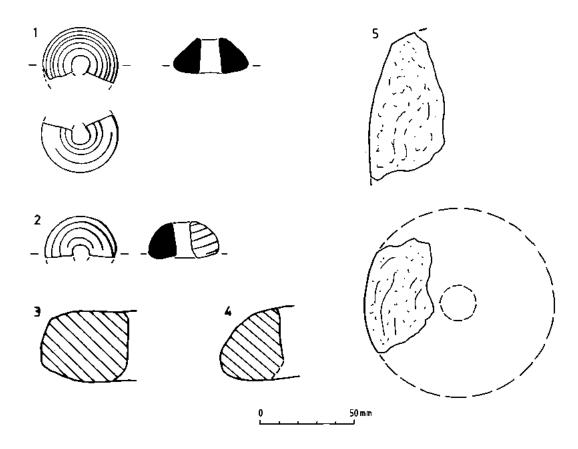


Fig. 20 Church Street, Waltham Abbey. 1, 2; spindle whorls. 3, 4, 5; loomweights.

diameter, bold roll moulding at top and bottom; a respond, to which the capital is engaged, has a deep hollow chamfer on each face next to the capital; first half of the 13th century.

Flat medieval and later roof tile was used extensively in the construction of the five ovens and in the tile wall, F62.

b) Brick, tile and daub from trench C (Pat Ryan)

A total of 25.0 kg of roof tile was recovered from twenty-six contexts; contexts 41, 43, 71, 72, 96, 111, 122 and 152 all produced more than 1 kg. Both flat and cambered tiles were found. Whilst the majority of tile from 41, 71, 111, 112 and 152 were flat, those from 41, 111, 112 were of particularly poor quality. These may be of pre-1600 date. Several examples of tiles with drips or splashes of glaze were found in contexts 71, 111, 121 and 125.

Roman tile fragments weighing 15.9 kg were found in 37 contexts with 8.2 kg from 93 and 2.2 kg from 36. Two fragments from possible box-flue tiles, and five fragments from *tegulae*, one of which included the greater part of a signature were amongst this material. Nine fragments of vitrified clay and Roman tile were found in 36, 63 and 159, weighing 1.9 kg approximately, two-thirds of which came from 36.

Burnt daub was found mainly in small quantities in twenty-six contexts. Context 144 produced the greatest amount, 3.5 kg. The largest fragment was 140 x 105 x 70 mm in overall dimensions and contained pebbles up to 20 mm in greatest dimensions and lumps of chalk up to 15 mm. The daub in context 144 may have come from an oven, chimney or kiln.

Only eight contexts contained brick, most of which was very fragmentary. Three of the six fragments in context 72 can be dated to the 15th/16th century and a fragment of London stock brick from context 24 to the 19th century.

10.9 Mortars and lava (Fig. 21)

- Basal fragment of Purbeck burrstone mortar. External diameter c. 30 cm (probably 12 in.), internal diameter c. 24 cm, base c. 28 cm diameter. Found built into the phase IIIA ground wall FB59 in trench B.
- 2. Fragment of base and side of a hard micaceous' limestone mortar. External diameter 28 cm (possibly 9 in.), internal diameter 22 cm, base 20 cm (possibly 8 in.) square. Evidence of one corner lug, possibly two diagonally, one with spout, certainly not four. Found in trench A in the line of stones F62, of 15th- or 16th-century date. Marks, as on the base, are often cited as merchant's marks but Girling (1962, 9) suggests that personal or identity marks may be a better description. This mark, based on the cross, shows the letter R on the right. K.N. Bascombe concludes that the lower letter is D, by comparison with the marks of the D.
- Dellamarke family in the Southampton Linen Hall Book of 1554-55 (Girling 1962, 15). No person, at the relevant period, with these initials is known.
 Fragment of shallow burrstone mortar. Plain, flat rim, evidence of one lug with a flat-buttomed runnel Found in
- dence of one lug with a flat-bottomed runnel. Found in trench C, in fiint and chalk rubble 167, at the top of the chalk foundation (Fig. 9, section C) above foundation trench backfill.

Eight pieces of lava, probably of Neidermendig origin, were found in trench A. Most were in the ground surface loams. Some showed evidence of use as grindstones of thickness from 32 to 50mm; two estimated diameters are 41 and 48 cm.

10.10 Leather (Fig. 22)

The description of the leather is based on the published work of Thornton (such as 1975a, 1975b) and after discussion with June

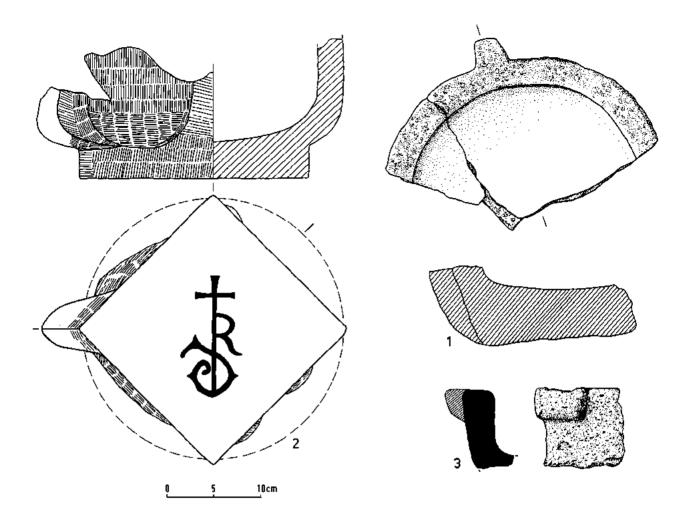


Fig. 21 Church Street, Waltham Abbey. 1, 3. Purbeck Burrstone mortars. 2. Limestone mortar; plan of base with combined elevation and section. Chiselling is indicated by parallel lines; lug and base worn smooth.

Swann, Keeper, Shoe Collection, Northampton Museum. The eight illustrated pieces, together with other patches and fragments of rands, all come from the pit F80-82 in trench A; Nos. 6 and 7 were in F82, the others being in F81.

1. Right-foot turnshoe sole, 302mm long, 126mm across tread originally, flesh side inside, edge/flesh stitching at about 6mm spacing, hole worn through at heel, tunnel-stitch holes show heel to have been repaired twice (see No. 3); other holes suggest the forepart was also reinforced twice by a combination of tunnel-stitching and through-stitching although it was not worn through.

On the form of the sole, June Swann writes as follows: 'The sole shape is fascinating, it is frequently found on heelless shoes, including recent primitives like North American Indian moccasins. There is obviously a certain way of walking/ running that produces the rather pin-toed effect; this occurs on the more practical, rather than fashionable footwear. It is just possible that this sole, and the others, may have come from footed hose, or had flimsy tops such as goatskin, to account for why no uppers were found'.

- 2. Complete length, forepart only illustrated, now in two pieces, of a rand which fits exactly the sole No. 1 and is shown in place in the section. The rand is a strip of leather of roughly triangular cross-section, and this one is included in the upper/bottom area to make it more waterproof.
- Heel patch, itself worn through, shown in position on the underside of the sole No. 1, fitted hair side outside by tunnel-

stitching, while the other holes indicate a previous heel patch.

- 4. Left-foot turnshoe sole, remaining length 250mm, 109mm across tread, worn through at heel and toe, flesh side inside, edge/flesh stitching at nearly 6mm spacing, though holes along the inner edge suggest a forepart repair probably stitched to a rand on the outer edge.
- Right-foot turnshoe sole, remaining length 260mm, 120mm across tread, worn through in three places, flesh side inside, edge/flesh stitching at about 7.5mm spacing, many through holes and some tunnel-stitch holes show sole was repaired several times.
- 6. Heel end of right-foot turnshoe, remaining length 180mm, worn through at heel, flesh side inside, edge/flesh stitching at about 6mm spacing, mostly tunnel stitches show heel and forepart repaired at least twice.
- 7. Band, 5mm wide, 300mm long, double thickness of thin leather folded over, joined by inserting one end of the Ushape into the other, the open edge is over-stitched leaving a scalloped shape, the other edge is through-stitched. June Swann described this as a whipped top edge band possibly for a lobed-front child's shoe. This is a narrow strip of leather stitched to the top edge of the quarters and round the throat of the shoe for reinforcement.
- Band, 7mm wide, double thickness of thin leather folded over, edge joined by overstitching. This has a weakly scalloped edge, two V-shapes are cut out to facilitate the formation of abrupt bends, distance apart of cuts 300mm, short end

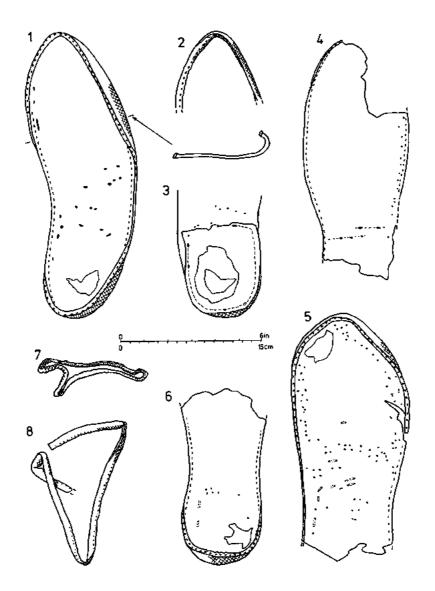


Fig. 22 Church Street, Waltham Abbey, 1976. Leather from pit deposits, F81 and F82.

probably broken, other probably not. This is another top edge band, like No. 7, June Swann writes: this band may have come from a shoe cut with a dip under the ankle bone each side.

10.11 Worked bone (incorporating comments by Neil Stratford) The piece carved from animal bone comprises a single Gothic arch (Fig. 23). On one side, two holes have been drilled and on the other there is a single hole. It is almost certainly of ecclesiastical origin, possibly from the decoration of an altar. It may be dated to the 13th or 14th century (Context 2).

11. Animal bones

Trench A

Some 33kg of animal bone, all food debris, except the cat, was recovered from trench A. The only considerable group was in the pit, F80-82, of the first half of the 13th century. These bones were very broken; only astragali, calcanea, phalanges and two metatarsals were not fractured. The details, with the minimum number of animals represented is as follows:

Vegetable matter F82: 2.0kg; representing 2 ox, 1 sheep, 1 pig, 1 goat, 1 chicken, 1 goose; with 167 oyster shells, 1 cockle.

Silt, F81: 5.9kg; representing 2 ox, 2 pig, 1 sheep, 1 fallow deer, 1 cat, 3 chickens, 3 geese; with 260 oyster shells.

Fill, F80: 5.8kg; representing 1 horse, 2 ox, 1 sheep, 2 pig, 1 cat, 2 chickens, 3 geese, 1 mallard; with 84 oyster shells.

The evidence probably confirms that goose, as well as chicken, was domesticated by the 13th century; this had been noted from other excavations (Huggins 1976, 129). Chicken had been found in preconquest levels (Huggins 1976, 129). Here, there was a total of 30 goose bones, representing at least 6 birds, and 32 chicken bones of 5 birds.

The fallow deer in F81 was represented by one antler in broken, rather than cut, fragments; the animal was probably older than six years on the evidence of antler development. An attached piece of

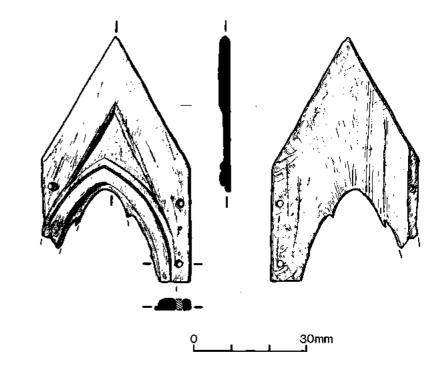


Fig. 23 Church Street, Waltham Abbey, 1979. Carved bone plaque.

skull shows this was not a shed antler. Fisher (1887, 195) states that the fallow deer was present by the 12th century but suggests it was not an indigenous animal because of the lack of mention of it in the laws of Cnut; he does however cite a 10th-century reference to it. By the 14th century, grant of deer to be taken annually were made to the Abbot of Waltham (Fisher 1887, 199). These 13th-century remains may imply that rubbish from the abbey was being deposited on the site of the excavation; the presence of the silver-gilt pin (Fig. 19,11) may support this contention.

Trench B

A total of 204 small fragments of animal bone weighing 1.4kg was recovered. Of these, 80 (39%) came from the Phase I sandy silty loam, FB16; 62 (30.5%) came from the Phase II, Pit 2 (layers FB57, 62 and 63); and 40 (19.5%) came from the Phase IV layer, FB27B. The remaining 22 fragments (11%) came from the following Phase IIIb deposits: the Reigate stone wall, FB15; the undercroft backfill; and Pit 1. The assemblage was far too small for detailed statistical analysis.

Species represented by phase were as follows:-

Phase I	sheep/goat, ox, pig, wader, dog.
Phase II	sheep/goat, ox, pig, domestic fowl, fish, mouse, cat, rabbit/ small hare.
Phase IIIb	sheep/goat, ox, pig, domestic fowl.
Phase IV	sheep/goat, ox, domestic fowl, ?wader.

The absence of horse remains is of some interest. Clearly the bulk of the above represents food animals; bones of the larger animals exhibited marks of butchery in all phases. Dog and cat were present in the Phase I dumped sandy silty loam, and Phase II, Pit 2 respectively.

Trench C

The 1987 excavations also produced an assemblage of wellpreserved animal bone and teeth. Identification of this material does not provide any information additional to that described above for the 1976 and 1979 work, except for a group of bones from context 125, a substantial period 5 layer (1300-1600), within pit 134.

Context 125 contained 79 identifiable fragments, of which the majority (68 fragments) were sheep bones. Of these 68, there were 23 metatarsals, 21 metacarpals, 11 phalanges, 7 skull fragments, and 3 horn cores. This would seem almost certainly to be the waste from some industrial process, and is similar to a group of bones found on the north side of Sun Street (Huggins 1988, 149-50). There, it was suggested that the material was waste from the production of vellum or parchment, an interpretation which depended on the fact that the bones came from *inside* the monastic precinct. The area excavated in 1987 lay *outside* the precinct; this may rule out the interpretation of the vellum production, in which case the production of sheepskin may be more likely.

12. Environmental studies

12.1 Macroscopic analyses by Francis J. Green and pollen analysis by R.G. Scaife are summarised below.

Trench A, pit F80-82, first half of the 13th century

A sample of vegetable matter consisted entirely of wild or weedy species. The seeds identified included meadow or creeping buttercup, goosefoot species, mallow species, knot grass, hazel, toothed corn salad, thistle species and sedge species. This range of species is typically found in silts at the bottom of wells and in other waterlogged features not specifically associated with human occupation such as ditches and water channels. There is a distinct lack of delicate plant materials such as airborne seeds of the *compositae* or even fragments of grass or straw. The sparsity of evidence either reflects poor preservation conditions or indicates that the feature may have been covered. The evidence indicates that the feature may have been a waterhole.

Trench B, Pit 2, early 13th century

- FB62 A fragment of charred material of coke-like appearance contained epidermal fragments of cereal grains, the cell patterning being similar to wheat. One grain of barley was noted. This fragment may result from accidental carbonisation of grains or might represent bread.
- FB63 Carbonised cereal grains including wheat, barley and possibly oat were recognised. There were many blackberry and elderberry seeds and a single fragment of plum, sloe or bullace. Such accumulations are common in cess and garderobe deposits.

The pollen sample was of low frequency and only 100 grains were counted. Grasses dominated (52%) and may indicate local pasture. Arboreal and shrub elements (6%) are poorly represented and might imply little woodland growth. There was no evidence to suggest an arable economy. The low frequency and possible differential destruction/preservation precludes any firm conclusions being drawn from the pollen analysis.

- F64 Represented here was a single fragment of apple and a largeseeded vetch and a quantity of blackberry seeds.
- F65 Herein was a single fragment of plum, sloe or bullace and a few blackberry seeds.

The main point of interest in this pit is the presence of cereals, including a possible fragment of bread, so close to the five ovens taken to represent the town bakery.

12.2 Wood from *Eldeworth* ditch (Rowena Gale)

This is the level of brown vegetation at the bottom of the ditch in rrench Q, within trench C (Fig. 10). The material was of severelycompressed woody fragments so that diagnostic fragments were difficult to identify; there was young stem or twig material with the bark adhering. An identification of maple, *Acer* sp., was probable although cherry or blackthorn, *Prunus* sp., is possible. Samples were also identified of the family Salicaceae, with willow, *Salix* sp., being more likely than poplar, *Populus* sp.

This vegetation was also seen in trench T and could have resulted from clearing of the sides of the ditch. The material was radiocarbon dated (Para. 14).

13. Archaeomagnetic dating

(by A.J. Clarke)

The hearth (oven 1; pp. 76-8 and 85) lay in the south-east corner of trench C. It consisted of flat slabs of stone of various sizes, bonded together, and to some extent overlain, by clay and a white concretion that was not readily identifiable. It had been cut into by a pit on its north side and an earlier excavation trench on the south. Thirteen samples were taken by the disc method from the interstitial clay, and two from the clay coating the upper surface of the biggest slab. Orientation was by theodolite magnetic compass, after careful checking for the reliability of the magnetic variation on the site.

In the laboratory, alternating field partial demagnetisation tests showed the samples were reasonably stable magnetically. The precision of the combined result was greatly improved by the removal of the viscous magnetic components with an alternating field of 10 millitesla peak. Although such treatment is routinely carried out, it is rarely as effective as it was with this set of samples.

In spite of the hearth's chequered history, good coherence between the individual measurements indicates that there has been little differential subsidence within it. This in turn implies that the ground beneath is stable, so that the thermoremanent direction has probably not been seriously altered by subsidence. The final result from 15 samples was as follows:

Measurement reference no. AJC-15.

 $Dec = 0.9^{\circ}$ W; Inc = 58.3°; alpha-95 = 2.9°

Date: cal AD 1290-1330 at the 68% confidence level.

14. Radiocarbon date

The sample submitted for radiocarbon dating was of brown vegetation found in December 1987 in trench P, within trench C (Fig. 10); for the content of the sample see Para. 12.2.

The determination was by the Scottish Universities Research and Reactor Centre, sample GU-2599. The resultant raw date is 3020æ50 years before 1950. This gives an uncalibrated date of 1070æ50 bc. Using the computer programme based on Pearson and Stuiver (1986), this gives a date range of cal. BC 1420-1105 (courtesy of David Jordan, English Heritage).

The object of the determination was to check whether the *Eldeworth* ditch was of Roman or Saxon origin. Thus the result was a complete surprise and, as the site was of a 20th-century garage, the possibility of contamination with fossil fuel was raised. However Dr G. Cook wrote: "There is no way whatsoever that there could be fossil fuel contamination of your sample following the extensive pretreatment we carry out. Furthermore the sample was of reasonable quantity and yielded the optimum weight of benzene required for the radiometric measurement". The significance of the dating is discussed in Paras 8.1, 8.3, 9 and 10.1.

15. Acknowledgements

The 1976 excavations were carried out by Waltham Abbey Historical Society. All members who took part are thanked; K.N. Bascombe was Secretary, R.C. Gray was Treasurer, J.H. Littlefair was photographer. The owners of the site, Brickworth Developments, and David Lee, for organising permission to excavate, are specially thanked.

The 1979 excavations were carried out by Essex County Council Archaeology Section; B. Randall, D. Reeve and Jane Pullibank are thanked for their help on site. Patricia M. Wilkinson and Pamela A. Greenwood loaned a hut for the duration of the excavation for which thanks are given. M.R. Eddy (formerly of the Archaeology Section) is thanked for his advice and comments during the preparation of the text.

The 1987 excavations were also carried out by E.C.C. Archaeology Section, with the aid of a grant from Epping Forest District Council. Thanks are due to Maureen Bennell (site supervisor), Steve Godbold, and, from WAHS, Rhona Huggins, Mary Salton and J.H. Littlefair, for their help on site. Tony Clarke is also gratefully acknowledged for responding rapidly to a request for archaeomagnetic dating.

The 1987 material has been stored in Epping Forest District Museum, Accession no. 1992;193.

The following gave of their specialist knowledge and are thanked accordingly; R. Allen, soil analysis; F. Green, macroscopic vegetable remains; R. Scaife, pollen analysis; M. Wadhams, trench B animal bone; Rhona Huggins, pottery; K.N. Bascombe, documentary study and stone; Ian Goodall, iron; June Swann, leather; Martin Howe and John Cherry, stone mortar; Dept of Environment Laboratory, X-ray of iron; British Museum, identification of French jeton; Martin Winter for the identification of the Edward II jeton; the late Stuart Rigold for the description of the *sceat*.

The trench B drawings were prepared by Lesley

Monk and Hazel Martingell; Rhona M. Huggins drew Figures 10 to 12; the trench A drawings were by P.J.H. trench C drawings (Figs 7-9) were by Miranda Bedwin, Figure 10 was by P.J.H. and Figure 17 by N. Nethercoat. Beryl Symes is gratefully thanked for word-processing the final draft.

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Abbreviations

BL	British Library
Cal. Close	Calendar of Close Rolls, London
Cal. Pat.	Calendar of Patent Rolls, London
ERO	Essex Record Office
GL	Guildhall Library
NRO	Northampton Record Office
PRO	Public Record Office
PRS	Pipe Roll Society

Notes

- 1. NRO X2759/136.
- NRO X2762/175. 2.
- 3, 4. NRO X2759/109.
- 5. As ref. 1.
- GL MS 9171/22 f.559. б.
- 7. ERO T/A 449/4.
- 8. PRO PROB 11/93, f.245.
- 9 GL MS 5179/2.
- GL MS 10091/2 f.43. 10.
- PRO PROB 11/79 f.50r. 11.
- PRO PROB 11/135 f.307. 12.
- 13. BL Cott. Tib. cix f.232.
- 14. BL Harl. 391 f.19r.
- 15. PRO C146/1628.
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- 17. PRO E40/9528.
- As ref. 3. 18.
- 19. As ref. 7.
- 20. As ref. 1.
- 21. ERO D/P 75/5/1 f.135.
- 22. ERO D/P 75/5/1 ff.227-8.
- ERO T/A 6/2/3. 23.
- ERO Assize files 35/122/1 to 35/139/1. 24.
- 25. ERO T/A 499/1 (D/D JgM2 p.17).
- 26. As ref. 25, p.82 L1.5.
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- 28. As ref. 27, p.110.
- 29. As ref. 27, pp.287-9.
- As ref. 27, p.315. 30.
- ERO D/P 75/11/6. 31.
- 32. ERO D/P 75/11/7.
- 33. ERO D/P 75/11/7-8.
- ERO D/P 75/11/9-11. 34.
- 35. PRO PROB 11/1691 f.64.
- 36. ERO D/P 75/11/11-12; ERO D/P 75/11/3.

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- 50. PRO PROB 11/1545 f.374.
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- 52. As ref. 3.
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- 54. ERO Q/RPI 973-1001.
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- 56. NRO X2782/43.
- 57. Monument in Waltham Abbey Old Cemetery.
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- 59. NRO X2748/1.
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- 61. Deeds kindly made available by Waltham Abbey.
- 62. **Building Society.**
- 63. NRO X2759/136.
- NRO X2759/134. 64.
- 65. NRO X2736/40.
- NRO X2759/136 and X2736 45. 66.
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The age of hedgerows on a Bocking estate

by J.M. Hunter

In 1975 the Countryside Commission established a Demonstration Farms project to show that conservation practice could be integrated into commerciallyrun farms. Ten farms were selected across England and Wales, and Bovingdon Hall, Bocking, was chosen for the chalky boulder clays of East Anglia and Essex.

Separate studies were carried out on all aspects of land use and conservation to form a multi-purpose plan. The Landscape Plan researched the history of the estate and included a hedgerow-dating survey carried out in the summer of 1976.

The landform is the typical dissected plateau of the Essex Till with ancient woodlands on the highest and flattest areas; a multitude of springs fill meandering ditches and watercourses bring spring and rain water to feed the River Pant which winds through the estate. While considerable agricultural improvements and field amalgamations were made in the 1960s, a regard for the amenities allowed the retention of much of the meadowland and very little woodland was lost. Botanically-rich hedgerows and hedged farm lanes remained, and no water features (fifteen ponds and two moats) lost.

The owners, the Tabor family, make their appearance in records of the seventeenth century and by 1803 (the earliest parish map) owned virtually all the present estate which included the manors of Fennes, Bovingdon Hall, and Bocking Hall (Fig. 1), all covered in the hedgerow survey. They also owned Great Priory Farm in Panfield which was tenanted in 1975 and so did not form part of the Demonstration Farm project.

Hedgerow dating by the content of trees and woody shrubs was developed at Monks Wood in the 1960s (Pollard, Hooper and Moore 1974) which indicates a date in centuries equivalent to the number of species occurring in an average 30-yard length. The method should be treated with reservation on certain soils; the acid Bagshot and Claygate beds, and areas of glacial outwash encourage fewer species and on the heavy London clays elm is dominant and may suggest a recent origin where the field patterns are decidedly ancient. On the boulder clays and chalk, however, the method works well. It should be added that the method was applied rigorously with as many 30-yard lengths as possible used along each hedge in order to reach an average. The hedges in most cases were in good condition, managed traditionally as coppice, and there were only a few localized areas of elm dominance. It is possible that numbers of species may be slightly underestimated as some members of the plum

family, such as bullace, can easily be mistaken for sloe if not in fruit. A day of dating by keen WI members found more species in certain hedges than I had. If there is error, therefore, I suggest that it would indicate a slightly younger rather than older age.

A further caveat is that certain hedges, newly coppiced when the survey was made, would be impossible to date. Also the older datings, suggesting a pre-Conquest date, reach the limit of variety of species; a Saxon hedge could indeed mark a boundary twice or more as ancient — at about the reign of Canute the species count is exhausted.

The results of the survey

In making a breakdown of hedge dates, 1350, when the Black Death was raging, gives a division between early and later medieval. 1600 is taken as a second division. Thus hedgerows in 1977:

	km	miles
Saxon and early medieval	11.99	7.19
late medieval and Tudor	17.12	10.64
later or undatable	10.74	6.68
Total	39.85	24.51

The reduction in hedges and woodland edges was monitored from the maps of 1803, 1945, and 1977. The estate is unusual in the extent of surviving woodland on glacial drift, and the habitat provided for many species of bird, small mammal and insect is much the same on wooded margins as hedgerows. The area south-west of the River Pant was omitted as it was not covered by the map of 1803, lying in the parish of Panfield.

		1803	1945	1977	
hedgerows	(km)	59.2	50.3	35.9	
woodland edge	(km)	20.1	14.6	12.3	_
Total		79.3	64.9	48.2	

The overall area of the estate was 798 Ha (1971 acres) of which the cropped area was 680 Ha (1680 acres). The ratio of hedges to the cropped area was 5.8 km per sq. km. or 9.3 miles per sq. mile.

If woodland edges (12.3 km) are accepted as hedgerows, this gives a ratio of 6.53 km to the sq. km over the whole estate, or 10.4 miles per sq. mile.

HEDGEROWS ON A BOCKING ESTATE

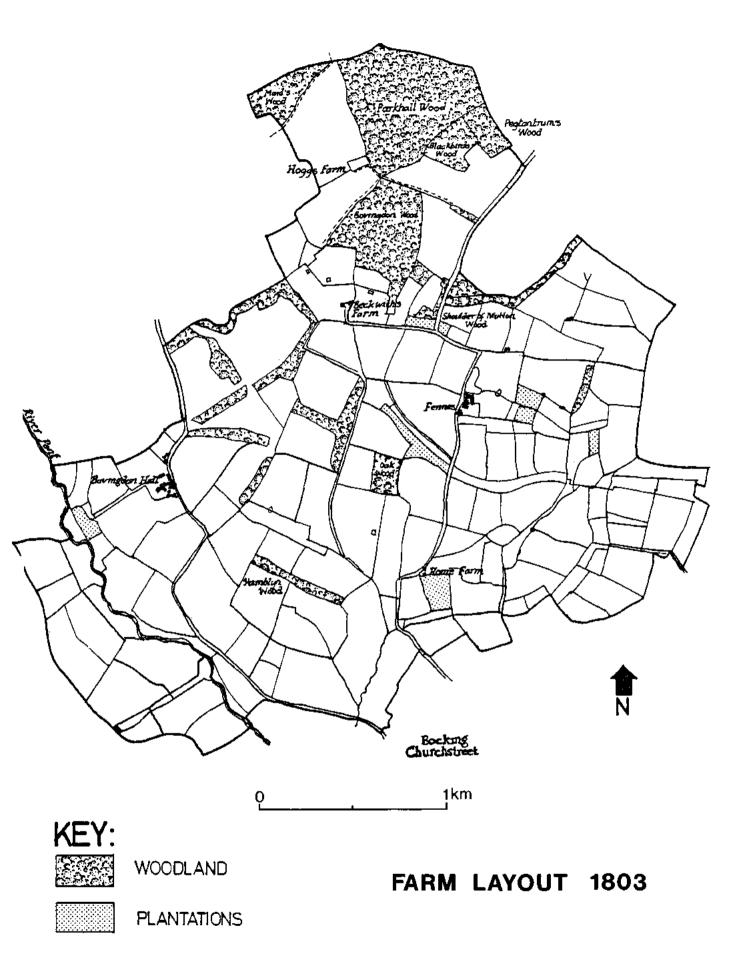
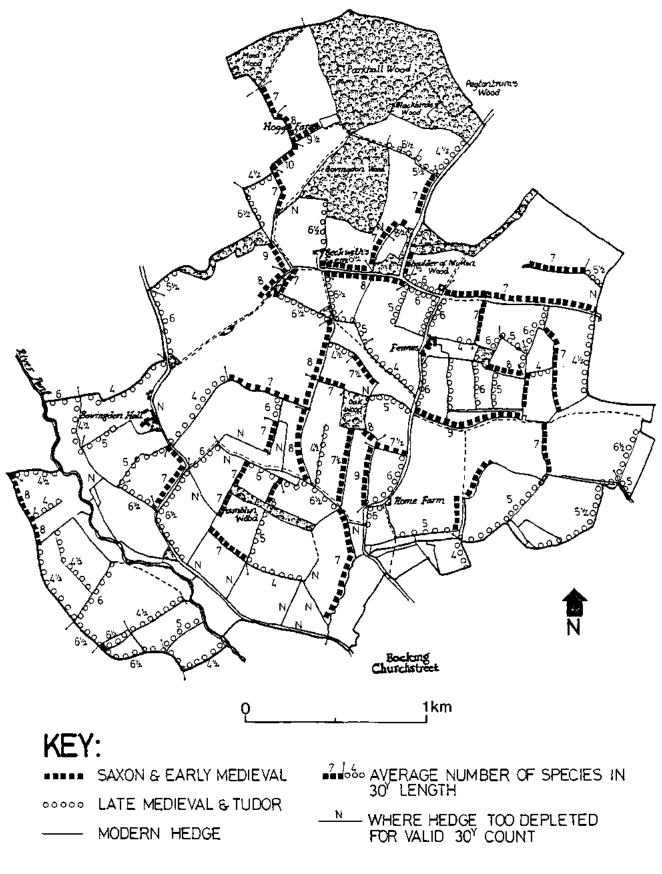


Fig. 1 Layout of Bovingdon Hall, 1803 (taken from the earliest parish map).



HEDGEROW SURVEY 1976

Fig. 2 Results of the hedgerow-dating survey at Bovingdon Hall, 1976.

Conclusions

The analysis confirms the field pattern as "ancient" (Rackham 1976, 17), substantially, established by 1500 with many features of much earlier date (Fig. 2). There are no field names or features to suggest former common fields, although this does not altogether preclude them. If there were common fields, and it is tempting to consider the the block of fields around Hamblin Wood in the manor of Bocking Hall (the only manor mentioned in Domesday), they were subdivided at a very early stage.

There are no greens or tyes, and also few pollards. Hedgerow pollarding as a landlord/tenant agreement did not seem a part of the estate custom here.

While the extent and survival of woodland in the Parkhall/Bovingdon complex is unusual in its extent, the exception to the general pattern of fields and woods lies in the patchwork of wooded belts lying north-east of Bovingdon Hall as shown on the map of 1803. This is flat and heavy land, difficult to bring into cultivation before modern drainage became available. With Bovingdon Wood this could have comprised the medieval Monks Park which was still extant in the time of Henry VIII (Let. Pat. 30), comprising "400 acres of wood". The map suggests ad hoc nibblings to increase pasture, leaving relict strips. Such strips occur on several early Essex estate maps and surveys and are described as springs or shaws. At Cressing Temple (Hunter, 1993) I have suggested that they may have been planted or derived from hedgerows allowed to colonize outwards to provide a local source of wood, as was traditional on the Weald. This would relate to a decline in the overall area of woodland, which would not, however, have been a problem in this area. On balance, the slow clearance of park woodland appears most likely.

There has been no archaeological survey of the

estate, and several features recorded in the Sites and Monuments Record were noted in the course of other surveys. Roman debris was found in the plough soil not far from Bocking Hall, but this was by chance. A considerable archive exists at Canterbury Cathedral which includes the Manor of Bocking (Nichols 1930). Some future scholar might consider the hedgerow survey in the course of study of these documents.

I wish to thank my colleague Angela McCann for her help in carrying out the hedgerow survey and also Miss Lucy Tabor who recorded those in the vicinity of Bocking Village; and to thank in particular the Tabor family for allowing me to roam their land freely. All the survey forms have been deposited with the Essex Record Office.

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Early domestic cross-wings

by D.F. Stenning

Introduction

The evolution of the mediaeval house reflects an everincreasing move away from communal living towards solutions that afforded greater personal privacy. With the medium-sized or larger house, this involved the provision of a two-storeyed cross-wing at one or both ends of the open hall. This process appears to have originated sometime in the thirteenth century, but the cross-wings then constructed have invariably been rebuilt in later times.

In this paper a number of surviving cross-wings are considered and compared with a view to ascertaining the general lines of development. Such a comparison illustrates the structural relationship between crosswing and hall and suggests that early experimental diversity led to an eventual relative uniformity. Such a study also throws light on the variations in wall bracing which seem to indicate that this aspect of 'structural progress' was more rapid in some areas than in others.

Alston Court, Nayland, Suffolk

Alston Court is a remarkably large and elaborate timber-framed complex, including a merchant's house and its associated outbuilding. On the southern edge of Nayland village, it is situated only a short distance from the River Stour which here forms the county boundary between Suffolk and Essex. The westernmost building on the site forms the starting point of this paper and must represent one of the most important timber-framed structures surviving in England.

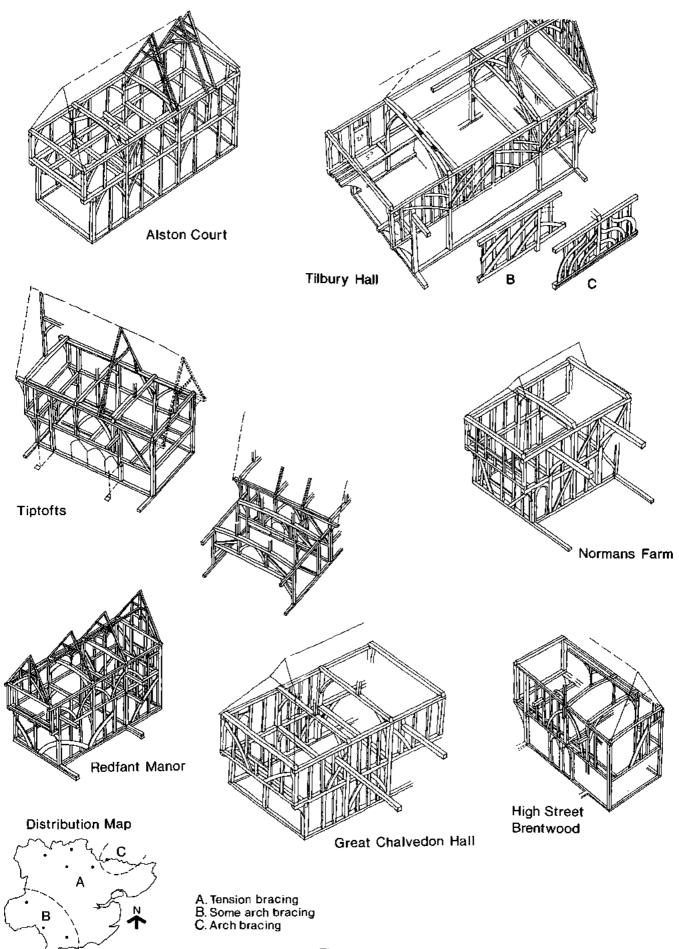
The building (Fig. 1) is of two storeys, has three unequal bays and was formerly jettied and gabled to the north (front). It appears to be a domestic crosswing and is, in most aspects, similar to later mediaeval cross-wings which abound in great numbers throughout Essex. However, the structural details such as open notched-lap joints and a passing braced roof are of an archaic type and suggest a probable date between 1250 and 1300. Other late thirteenth-century details include angle ties between top plates and tie beam and a simple Sampson post floor over the rear half of the building. Wall bracing is all of the 'arch brace' type (rising from post to horizontal members), thought to be the earliest system, which was originally associated with 'earth-fast' posts. The front jetty appears in fullydeveloped form, identical in concept to numerous later examples. To the rear, the roof was hipped with an upper gablet, again a familiar feature of so many Essex cross-wings. It would appear that the building was designed to provide one large upper chamber over two equally sized chambers as the ground floor. From this it can be seen that there is a contradiction between the three-bay basic structure and the ground-floor subdivision which may in itself be of considerable interest.

It is suggested that a now vanished aisled hall once stood on the west flank of our supposed cross-wing and it is known that a 'house' existed in this location in the late nineteenth century. A hall flanking wall of a cross-wing of similar date survives at Tollesbury Hall, Essex (McCann and Scott 1987) and provides a useful comparison. In that case the wall incorporates long passing braces as in the other trusses of the surviving hall so clearly hall and cross-wing were of one build. The lack of such passing braces at Alston Court suggests that either the 'cross-wing' was an independent building or that it was a later addition to a pre-existing hall. Whilst the latter is more likely it fails to provide an explanation for the curious and particular placing of the structure's principal posts.

The village of Nayland falls in that area between Colchester and Ipswich where a modified form of arch bracing was occasionally used right to the end of the mediaeval period.

Tiptofts, Wimbish

The older of the two cross-wings remains difficult to date but is almost certainly younger than that at Alston Court (Fig. 1). Many of the features have been previously described (Hewett 1980) but it is the basic structural concepts that are here discussed. Evidence for arch bracing survives similar in its usage to Alston Court but here sandwiched between an external and internal skin of boarding which was fixed into narrow grooves in the principal members. It is becoming increasingly evident that wattle and daub and boarding were alternative infill materials in the thirteenth century, the latter perhaps being considered superior. Tiptofts is situated in an area where later buildings invariably make use of tension bracing. As at Nayland the spatial subdivision of this 'service' cross-wing is independent of the principal structural system although there is no evidence of structural partitions in this space. The tie beams carrying curious crown posts which extend a short distance above the collar purlins, are independent again of the full height posts which have been generally assumed to have carried the top plates of a former aisled hall. These posts incorporate empty mortices, in an appropriate location, but lack



Illustrations not to scale

the usual accompanying mortices for supporting arch braces. This peculiar arrangement with the threearched service door openings off-set in the flank walls perhaps suggests a single-aisled arrangement with the doors more or less central to the overall space. However, the off-setting of the doors might equally relate to the internal planning of the cross-wing, but disturbance to the internal arrangements here now makes this all difficult to determine. The De Tibetot family, probable builders of the cross-wing, had a more important house at Nettlestead in Suffolk. The design of the cross-wing roof is similar in some respects to a former house at Church Farm, Fressingfield (Suffolk) and of the newly-discovered Lodge Farm, Denton (Norfolk). It is thus possible that the carpenter of the cross-wing was from Suffolk, rather than Essex, and this may help explain some of the more problematic features. Both the previously mentioned buildings have "raised aisled halls", where the arcade posts rise from a hall-spanning beam. Such a hall could possibly be relevant here and a hypothetical suggestion is included in the accompanying illustrations.

If such a reconstruction is valid then the mortices in the intermediate posts would be for asymmetrical lobbies, linked to lateral speres. Such a concept would be of extreme sophistication and similar 'porches' at Cammas Hall and Great Chesterford (Stenning 1991) were probable offspring.

The drawing indicates a possible double-aisled hall structure but as has already been discussed this is only one of a number of possibilities.

Unlike Alston Court, the jetty construction involves short projecting spurs of wall girt, tenoned in to full-height posts. This technique we will meet again, and it was long thought to be an experimental and perhaps timid solution, related to the early date. It seems evident that these full height posts provide an ideal fixing point for an aisle or main arcade plate and this, generally, seems to be their function. It should be noted that here, as at Alston Court, the floor joists at the jettied end have a relatively long span, adding credence to the possible structural origins of the jettying concept. Unlike Alston Court, it is now difficult to decide which is the 'front' of the building and this is a problem that will continue to tax us. The outer flank of the wing has evidence for an outward-opening door, at first floor level, more or less over a stair trap in the floor. Again, this door location will be met with again, in other examples. A somewhat similar crosswing at Wynter's Armourie, Essex (Walker 1987) has a single tie beam, independent of the arcade, terminal, posts and the jetty assembly is, like Alston Court, of 'conventional' type.

Probably of a similar date to Tiptofts, Wynters had arch bracing at most of the principal junctions and the building is situated in that zone where arch bracing continued in use in the majority of later buildings. The roof pitch, as at Alston Court, is remarkably steep and appears to be of the 'French' projecting rafter couple type, at least at the jettied end.

Tilbury Hall, Tilbury Juxta Clare, Essex

The cross-wing at Tilbury Hall is similar in many respects but is clearly later in date. Again, a tall, raised aisled hall could be postulated and one, visible, intermediate post again carries a mortice. The general bracing pattern is similar to Alston Court but has been duplicated to form a rich decorative pattern (Fig. 1). Richardsons shop, Friary Street, Sudbury has a similar pattern but here restricted to an unaisled hall (B) and a long-wall jetty house in Elstowe, Bedfordshire has the same pattern, but with an ogee profile on the front wall (C). In this case, it is possible to interpret this pattern as either arch or tension bracing and it may represent the transition between the two principal types.

The flooring arrangement is similar to the earlier examples, but the roof tie beams are here again related to the terminal aisle posts. This is the first example that is jettied at both ends and the jetties again use full height posts, presumably to accommodate the aisle outer top plates. It is possible that the roof was half hipped at one end, but this has proved impossible to determine. Bracing stopping against a stud, rather than a principal post, is characteristic of later Essex and Suffolk border practice and can here be seen to be a relatively early concept.

Normans Farm, Wakes Colne, Essex

Here, the contemporary, early fourteenth-century aisled hall and cross-wing survive relatively intact (Fig. 1). The jetty is of the conventional kind and the roof over (front elevation?) is hipped with a gablet. The other end of the cross-wing has been demolished, but it appears that this part was unfloored and it has been assumed that the roof here was also hipped. Compared with the other examples, the cross-wing here is small and probably contained the parlour/solar only. Traces of in-line service rooms survive and the other end of the aisled hall. The curious bracing pattern is of tentative tension bracing type; that to the ground floor has braces between the horizontal members which seems to be one of the intermediate stages (see the early cross-wing at the Woolpack Public House, Coggeshall, Essex).

Nos 60, 62 and 64 High Street, Brentwood

No. 60 consists of a massively-built, fourteenthcentury service cross-wing, contemporary with a probable single-aisled hall, fragments of which survive in No. 62. (Fig. 1.; the structure is more substantial than the sketch suggests!) No. 64 is a later cross-wing which appears to have taken the place of the upper bay of the former hall. As can be seen, the jetty has full height posts, to house an aisle top plate and the girt is halved across one face. In order to provide service doors, reasonably centred on the 'nave' of the hall, the three major structural posts rise above the girt level. One of these, and possibly one other, mounts a tie beam and a curious 'crown-strut' to reduce the span between the true, crown posts. This cross-wing was possibly hipped to the front. The hall crown post is unusual in that it is supported on a projecting corbel and this detail may suggest that the aisled hall pre-dates this cross-wing. Tension bracing is used throughout, surprising in view of the prevalence of arch bracing in this area.

Great Chalvedon Hall, Pitsea, Essex

This cross-wing is very similar to Normans Farm, Wakes Colne but with two tie beams to cater for its greater depth.

Probably of the second half of the fourteenth century, the rear bay has again been damaged and the roof form here, or the possibility of another jetty, cannot be determined. The provision of extra wide studs, on the first floor, to house the hall arcade plate, is a radical development from the earlier full height posts and can be seen in a number of other late fourteenth-century buildings. The bracing pattern of the originally exposed flank, utilises arch bracing, but this is only to be expected in an area, near to London, where arch bracing retained its popularity.

Redfants Manor, Shalford, Essex

This late fourteenth-century cross-wing has the usual Essex pattern of tension bracing for a building of this date. The full height post, behind the jetty, carries the top plate for an unaisled hall (now rebuilt). The parlour, with solar over take up the front two bays and the bay to the rear contains a small room on each floor. This three bay, cross-wing, format seems a popular Priest's house type of the fifteenth century, probably without a hall and usually with a chimney-stack in the centre of one flank. (All Saints' Vicarage, Maldon is one example.)

Conclusions

The three bay cross-wing can thus be seen to be a strong and logical concept that arose naturally where aisled hall and cross-wing were all of one build. Some early examples, such as Tilbury Hall and Tiptofts, may well represent 'single-ended' arrangements, with one wing combining both service rooms and parlour. Very early on, it seems to have been realised that the wall of the central flank could be recessed, forming an undershot cross-passage or a recessed bench area. (The Star Public House, Thaxted is an early example.) Such an undershot cross-passage survives in the late fourteenthcentury cross-wing at Cammas Hall, White Roding, and its three-storeyed format again suggests a combined service/high end purpose.

Jetties utilising full height posts now seem surprisingly common, and at least one of their functions can now be ascertained. Kent Cottage, Staplehurst, Kent (V.A.G. Report of Spring Conference 1992) has been dated, by dendochronology, to 1394 and has jetties, with full height posts and hipped roofs, both back and front.

It is suggested that jetties and hips, sometimes in unexpected places, could be part of an early 'type' solution that was gradually modified to suit changing needs and varying client requirements. The prevalence of hipped roofs and numerous jetties, south of the Thames, could be the result of a longer period of survival in a relatively conservative part of the south-east.

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King John's hunting-lodge at Writtle

by J.M. Hunter

This painting (shown opposite) is the most recent in a series of reconstructions by Frank Gardiner of monuments and historic sites in Essex. Writtle was chosen as the moated area was fully excavated by Philip Rahtz in 1955-57, and although the site had been farmed after abandonment in the 16th century and more recently was subject to testing of agricultural machinery, the published report (Rahtz 1969) gave the disposition of the principal buildings on whose plan reconstructions could be drawn using material from surviving buildings and fragments of similar age. The nature of the surrounding landscape could be deduced with reasonable confidence from Ken Newton's study of the manor of Writtle (Newton 1970). The immediate spur to commission the painting was the display of the site by its owners, Writtle College, with the buildings marked out in the turf, and also the exhibition of finds at the Oaklands Museum, Chelmsford.

'Hunting-lodge' is a term frequently used for early medieval royal residences in rural areas. It was known traditionally in the locality as King John's Palace, perhaps a better description. The Forest and Great Park, where a lodge would be expected, were over 4 kilometres away.

To advise the artist, a group consisting of David Stenning, David Andrews, Adrian Gibson and the author met for an initial briefing and at stages as the painting progressed. The external forms of the buildings derived from Rahtz's plan were plotted into an Apple computer using a perspective programme designed by Simon Ruffle. This provided total choice in arriving at an optimum viewpoint. Any reconstruction of a building of this early date will invite some criticism or dissent, and it was agreed that the reasoning and justification should be recorded.

The date

The painting shows the visit of King Edward I in 1305, with his young second wife, Margaret of France.¹ He had visited previously in 1277 as had his father, Henry III, who ensured moneys for repair and maintenance. The King was old and irascible and we see the palace put in good order for his visit and very tidy. There was lawlessness under the burden of taxation for Edward's Scottish Wars and the palace and manorial farm are shown well protected by palisades, gate-houses and guards. The manor could scarcely house the full court retinue and tents are shown pitched on the greens in the foreground.

The date chosen, 94 years after King John had built the Palace, makes the task of reconstructing the buildings easier as only very poorly preserved remains were found of those of the first phase of occupation. It also resolves the problem of roof covering. No tile fragments were found from the first phase and since it would be most unlikely that thatch would be used for a royal residence, shingles would seem the likely alternative. If so, all evidence would have rotted away.

The moated enclosure

"The King's house at Writtle" was built in 1211 away from the old manor which lay presumably beside the church facing the green in Writtle. The new site abutted the vast demesne of arable land stretching northwards and allowed as much space as needed for a farming enclosure and storage of crops. The moat itself was sited on a line of meadows with a brook to sustain the water level, no doubt with sluiced control, with the water continuing on to feed the three fishponds.

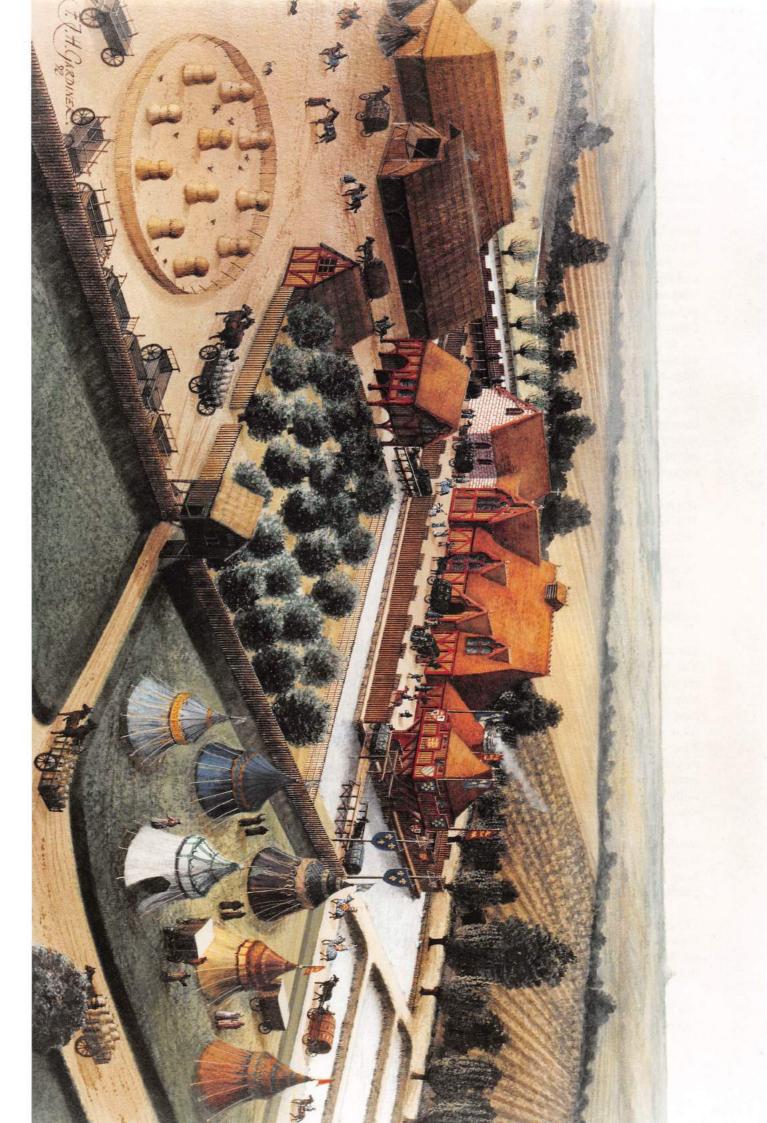
As a royal commission one would expect the work executed to the highest standard, a precise rectangle with the slippery Essex clays well revetted. An Essex analogy is Southchurch Hall (Southend-on-Sea) where a revetment round part of the moat has been found by excavation (Jackson 1987). The lines of the moat in the painting were defined after giving allowance for subsidence, falling trees with their roots and siltation — problems of abandoned moated sites. Pollard willows are shown along the moat on the evidence of later Flemish paintings. In 1305, for King Edward's visit, the moat and its defensive wall are in fine order.

The Great Hall

The building plan was of a double square with a central bisecting passageway entered by a formal doorway from the courtyard. The wide hall was no doubt of aisled construction, similar to the surviving 13thcentury timber-framed hall of the "Bury", Clavering (Hewett 1980, fig. 95).

It would have been crowned by a central smoke louvre. A narrow cross-wing that contained the King's private chambers abuts the west end of the hall. To the

Plate 1 [opposite] Frank Gardiner's reconstruction of King John's hunting-lodge as it was c. 1305.



east of the central passageway, the large service area (buttery and pantry) has been reconstructed to have an upper room lit by a dormer window.

The tracery of the windows is modelled on the surviving stone tracery at Stokesay Castle (Salop) of roughly similar date. The windows are shown glazed as we see surviving in medieval churches. The timber framing is decorative as well as functional and the gable barge-boards copy those depicted in the Luttrell Psalter of c. 1340. We show this woodwork painted as was fashionable then. As archaeological evidence is lacking for wall-panel infill, the walls are shown with solid vertical planking, a technique apparently originally used for the walls of the late 13th-century Wheat Barn at Cressing Temple, a similarly superior building.

In keeping with a high status complex, the principal roofs have been shown tiled with decorative crested ridge tiles. Excavation revealed no tile fragments from phase I (1211-c. 1306) but they were present in phase II (c. 1306-c. 1425). However, the two 13thcentury Knights Templar barns at Cressing Temple appear to have been tiled from the start, and the building of a royal manor would no doubt soon have been given tiled roofs even if they were shingled initially.

The kitchen

The square kitchen was set apart from, but aligned with, the service end of the great hall. The example used for the central louvre is one of pottery as was found by excavation of the kitchen at the manorial site at Great Easton. This elaborately decorated louvre dates to c. 1300 and is displayed, restored, in the Saffron Walden Museum.

The chapel

The building near the cross-wing housing the King's private chambers had substantial foundations and may have been built of rubble masonry. Alternatively it may have been timber-framed above dwarf rubble walling. As it was a church, the construction would probably have been concealed beneath plaster rendering, painted with red lining to imitate finely-dressed stone work. This technique was commonly used and is especially appropriate for Essex, a county lacking building stone.

Traces of footings for a further building to the south of the chapel were found by Rahtz, but were insufficient to develop a reasoned reconstruction. We have consequently omitted this structure and the painting is a compromise.

The gate-house

Excavation revealed a building adjacent to the principal bridge over the east side of the moat. We have shown it as partly for defence and partly as a vehicle for heraldic display. The first floor gallery is modelled on the existing wooden gallery, partly of c. 1300, at Stokesay Castle. The practice of displaying shields was very fashionable then; they were carved on the Eleanor Crosses, memorials to Edward I's first wife.

The farm

The late medieval and subsequent farm lay to the south of the moat, the 15th-century barn still surviving. It is assumed that this is the original site laid out with the moated palace which is described in a survey of 1419: "In the court outside the moat there is a house called the Squire's Chamber roofed with tiles, in which lives the caretaker of the manor". This is shown linked to the palace by a bridge implied by the archaeological evidence. The many buildings of the farm are listed, all roofed with straw, but there is no indication of layout; the disposition shown, therefore, is hypothetical.

The manor was sited on a rough east/west line where surface geology changed, leading to a different settlement pattern and farming practice. To the south were the stony soils of glacial outwash giving way to the acid Bagshot and Claygate Beds. Here the tenants lived on smallholdings of a few acres grouped around greens, and further south still lay the woodlands, commons and Great Park of Writtle Forest.

To the north were the soils of the chalky boulder clays and here lay the great arable fields of the demesne. In the middle distance Alfarefeld stretches to the Newland Brook. It is cropped, from left to right, with winter wheat now harvested and ploughed, spring wheat awaiting cutting, and fallow.

On the skyline, to the north, the tower of Pleshey Castle (Williams 1977, fig. 3) is just apparent.

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1. Calendar of Close Rolls, 1302-7, 345-6.

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The town clerks of medieval Colchester

by Stephen Alsford

Historians have paid increasing attention in recent years to office-holders manning the executive and conciliar branches of medieval borough governments governments often described as administration by amateurs, albeit practised ones. This emphasis on the political officers in part explains the corresponding neglect of the bureaucratic arm of borough government. Yet the development of professionalism in administration is an important trend in late medieval England; experience and expertise were characteristics that delegators of authority (whether king or community) valued, selected for, and fostered through the structured promotionalism of the hierarchy of officialdom.¹ Fundamental to stability and continuity in government was a knowledge of the legal environment in which that government functioned: royal command, common law, and above all local custom and precedent. Borough records embodying this information quite soon became, after the attainment of self-government, the backbone of good and efficient governance, especially as their compilation became increasingly systematic.

Officers responsible for recording, keeping, and interpreting (for the political decision-makers) this information had an accordingly vital role in the smooth operation of the administrative machine. The town clerk brought to the benefit of the borough necessary yet uncommon skills and acquired, over the course of years of continuous service, a familiarity with borough affairs that was sometimes all too difficult to replace. The recorder too — generally at a later stage in urban history - brought a trained expertise that was similarly needed. These two officers are perhaps the most notable, although not the sole, representatives of the class of lay professionals that was expanding in most spheres of government. This paper proposes to examine the office of town clerk and the men who held it in Colchester between the thirteenth and fifteenth centuries.

The origins of the office of town clerk are not easy to trace: certainly not in Colchester for which few records survive from its first century of self-government, yet neither from English boroughs as a whole. Obviously the need for clerical skills assumes the compilation of records, and the need for *permanent* clerical officers the existence of regular series of records (such as court rolls) creating a volume of on-going work; but in most towns it is not entirely certain when such series took shape. Custumals are among the earliest town records known, but could have been written on commission. London's city clerk is first heard of in 1220 in conjunction with the setting up of an archive for husting records; similar officers are known at Chichester, Exeter, Beverley, and Oxford by midcentury, and at Ipswich, Lynn, and Gloucester by the 1270s.² However, it seems that the earliest clerks, visible in the twelfth century, were servants of borough reeves rather than officers of the community.³ As such, their role was probably no more than that of scribes, perhaps employed on a continuing rather than ad hoc basis, yet without any real status in that early phase of the genesis of officialdom. However, the transition from clerk of the executive to clerk of the town could not have been a difficult one (although it may have more significance than is immediately apparent); it seems to be witnessed in Oxford in the 1250s.⁴ It has been suggested that the rationale for bureaucratic officers was to allow executives to delegate routine or tiresome tasks.⁵ Although in principle the duties of a town clerk largely devolved from the implicit responsibilities of the executive (as did those of sergeants or chamberlains), clerks brought to town government a level of literacy normally lacking in holders of executive office and, as their sphere of operations expanded beyond scribe to town attorney, they undertook many non-routine tasks - whilst the 'routine' task of the executive to preside in borough courts was, of course, not delegated.

This surely represents the way in which the office of town clerk evolved at Colchester, even though there is little to marshal in direct evidence, beyond the knowledge that Colchester's court roll series goes back to the very beginning of the fourteenth century (without appearing an innovation at that time), and coroners' rolls are evidenced from at least the early years of Edward I;⁶ a possible town clerk may be seen almost as early as the latter (see below). Colchester's reeves, some of whose identities are known from the twelfth century,⁷ may have required clerical assistance, but when a permanent officer became attached to them cannot be said.

The duties of town clerks, when we see the office in full flower in the fourteenth century, had several facets: scribe, archivist, administrator, accountant, and attorney. Two versions of the Colchester clerk's oath of office come down to us, one written down in the late 1370s but conceivably copied from an earlier source, the other a revision made a decade or two later.⁸ The foremost duty, as one would expect, is the recording of

all matters relating to pleas in the town courts: complaints, attachments, distraints, pleadings, fines and amercements. This, together with the enrolment of documents relating to property transactions, recognisances of debt, wills, and other matters falling within the jurisdiction of the court (in whichever of its several guises) must have occupied a good part of the clerk's working week. Dr. Britnell has amply demonstrated the tremendous volume of work this could entail, as court business increased in the later fourteenth century, and the efforts of fifteenth-century clerks to introduce labour-saving secretarial reforms.9 The second duty specified in the oath is to keep track of the profits due the town from business conducted in court sessions; the principal difference between the two versions of the oath is that the later elaborates more on this second task. Although not himself an accounting officer in the same sense that the chamberlains were, the clerk was required to calculate sub-totals and totals (written onto the court roll membranes) of amounts due. These had to be transcribed onto estreat records and a check made to ensure the amounts on both records tallied. The estreats were then delivered to the chamberlains (whence to the sergeants, for collection). As Dr. Britnell notes, the town clerk likely wrote up the annual accounts of the chamberlains too, as well as other miscellaneous records, including apprenticeship contracts from c. 1418 onwards.¹⁰

Many of the clerk's tasks were not addressed in his oath of office. As archivist, he had to ensure that information necessary for the furtherance of administrative or legal matters was preserved and could be found in borough archives at need. This is witnessed in the surviving records (or those known but not extant) by the proclivity for creating volumes of memoranda into which were collected texts clerks felt would be useful for ready reference.¹¹ Also by the numbering of court roll membranes and upkeep of an index to selected contents of the rolls, as well as (occasionally) crossreferences in the rolls to other locations where information about specific court cases could be found.¹² Elsewhere, instances may be found of clerks providing reference services to the corporation or to outsiders, such as officials of other towns seeking constitutional guidance;¹³ the same may have been true of Colchester, although no record of it exists today. Some aspects of day-to-day administration fell to the clerks, since Colchester bailiffs were only part-time officials. They would receive, and note, reports (both from private individuals and from the town sergeants) of any quarrels that were liable to come into court; they may have exercised some supervision over sergeants in their collection of fines or making of distraints, summonses, and arrests. Another administrative duty was to join with the bailiffs in hearing the sergeants' accounts.¹⁴ By the late fourteenth century they were playing a role in the annual elections: certainly instructing the electorate in the regulations governing conduct of the elections (a task demanding both reading and translation skills) and perhaps administering oaths to electors and to those taking office.¹⁵

Familiarity with borough affairs and custom, some knowledge of legal forms, along with general literacy, meant that the town clerk was sometimes called on to act as, in effect, the town's solicitor although this was probably not part of the original conception of the office. The retention of professional lawyers towards the end of the Middle Ages did not entirely displace this role. In some towns the requirement to provide counsel to the corporation was written into the clerk's oath.¹⁶ At Colchester it was not; but it seems more than probable his expertise and experience were resources that bailiffs and council felt free to call upon. It would likely be he who read out royal writs, or other communications, to bailiffs and council, and who may also have expounded legal technicalities therein. Clerks were natural agents for conducting official business in town; in 1382, for example, Colchester's clerk was involved in acquiring property for use by the corporation.¹⁷ It was common for town clerks to be sent out of town as agents to conduct the borough's business. On occasion they substituted for bailiffs in delivering the annual fee farm payment at the Exchequer, or for prosecuting other town business there or in the king's courts; there is a reflection of this in Colchester in 1409, in a reference to a former town clerk paying amercements, just possibly as parcel of the Colchester farm, at the Exchequer.¹⁸ Other causes for journeys abroad (sometimes as assistant to, more often as deputy of, the executive officers) included: to obtain writs, to prosecute cases or to claim borough liberties in other courts, to seek legal advice, to engage in arbitrations, to consult the constitutional records of other towns, to negotiate for new charters of borough liberties, or to carry gifts to those whose favour the town wished to cultivate.¹⁹ Most information about those activities comes from borough financial accounts, which are unfortunately missing from Colchester's archives; however, its town clerk tempore Edward IV is found entangled in a legal dispute in consequence of his activities in what appears to be official town business with the Earl of Oxford.²⁰ In the fourteenth century — particularly the first half — town clerks were frequently selected as parliamentary burgesses.²¹ Again they were natural choices in this role, since they understood borough interests, had a grasp of the law, some skill in negotiating, the ability to take notes and report back on parliamentary affairs,22 and could also be required to pursue other town business at the site where parliament was held.

Who then were the men responsible for this diverse array of duties at Colchester? The earliest explicitly identified with that office is Michael Aunger. It is true of most boroughs that, before the fifteenth century, references to holders of the town clerkship are largely incidental; court roll headings refer only to the bailiffs

of the year and the best sources for identifying clerks tend to be financial accounts. Annual election of a clerk was established in the context of the New Constitutions of 1372; although the consular lists, the recording of which the reforms prompted - at first rather tentatively - did not include the town clerk for some time.²³ Aunger's identity is known from: his entrance to the borough franchise on 11 June 1380, which was granted to him without fine because he had just become the town clerk; a self-identification in a register entry he made at the time of the Peasants' Revolt; and from being named (as clerk) in the terminal position of an official witness list of April 1384. Dr. Britnell's careful study of the court rolls has revealed that Aunger's term lasted from mid-1380 to about Michaelmas 1398.24

Dr. Britnell's calligraphic evidence indicated that, before Aunger took office, an unknown scribe was engaged in writing the court rolls from 1372 and an earlier clerk, who had written the rolls since 1349, continued to have a hand in this task during the 1370s.²⁵ It may be possible to throw some light on the identities of both men. A significant piece of evidence is the fact that, on the very same day that Aunger entered Colchester's franchise, the will of Robert Beche, clerk, was proved in borough court.²⁶ This was no coincidence. For Aunger's predecessor was Beche and it was undoubtedly the latter's approaching death that prompted the search for a permanent replacement. For reasons to be suggested later, the scribe whose hand is most common in the town records of 1372-80 may not have been eligible or inclined to become Beche's successor. Beche entered the franchise in 1343 and we may imagine that he took office in 1349 as a consequence of the death from plague of its previous holder.27 That he was terminal witness (usually as clerk) to numerous documents between January 1352 and January 1379,28 is seen very frequently in court as essoining agent, pledge, or attorney between 1350 and 1375, and was sent to parliament for Colchester in 1355, all support the belief that he was town clerk in this period.

Dr. Britnell assumed, naturally enough, that the clerk here suggested to be Robert Beche retired at some time between 1367 and 1372, yet continued to help out his successor with scribal duties, although his handwriting became 'progressively shakier over the years'.²⁹ However, towns did not easily relinquish men of such invaluable experience as Beche, on whom administrative continuity partly depended; suitable candidates for the office were often not easy to find. And the concurrence of Beche's death and Aunger's assumption of office is too neat to ignore. We may hypothesize that as decline — whether old age or ill health, either is consistent with Beche's age (born c. 1320?) and the deterioration of his writing — set in the search began, if not for a replacement, then for a part-time assistant who took over much of the more laborious duties of clerkship (the compilation of records) while Beche remained to supervise and to supply the corporation with legal and administrative expertise. Perhaps this arrangement, involving a failing town clerk and an assistant without the correct training, throws light on the blaming of clerical error in the controversy (1394/5) over the ordinance governing the election of town sergeants.³⁰ As Beche's impending death became increasingly apparent, the corporation was finally forced to take real action in finding a permanent successor, rather than its stop-gap measure of the 1370s.

Why then was the assistant of those years not the successor? Perhaps because his training as a writer had not included the knowledge of common law required by a town clerk? Although the identity of this man remains unknown, a circumstantial case might be made for the candidature of dom. John Stanstede clerk. He was rector of Stanway by at least 1364, when there was settled a dispute between him and the Abbot of St. John's over lands adjacent to Colchester's wall and associated with the hospital of Holy Cross. In the following year he was one of those to whom Lionel de Bradenham mortgaged his manor and goods to pay off the royal fine his violent dispute with Colchester had incurred.³¹ After resigning that living, Stanstede is found as rector of neighbouring Copford (c. 1372-81) and during much the same period as chaplain of Holy Cross, which pertained to the manor of Stanway, and near which chapel his residence lay in 1383.32 That a John Stanstede junior entered the franchise at Colchester in the summer of 1372 may point to our man and link him to the appearance of a new court roll scribe. Dr. Britnell has plausibly identified the scribe of the 1370s as the author of the town chronicle of 1373-78 in the Red Paper Book - regardless of when it was copied into the volume, it is difficult to believe that the original composition was not contemporary with the events described; such accounts were not typical of the inclinations of lay clerks.33 The style of Latin employed, the upholding of bailiff William Reyne as a model for future governors of the town, a quotation from St. Matthew, and the use of the head-body metaphor, all suggest an ecclesiastical background for the author. Stanstede's authorship might even explain the chronicle's description of a trial by battle in the castle bailey (not strictly relevant to borough government), since one contestant came from Stansted.

Further events of some possible significance occurred after Aunger had taken up the clerkship and Stanstede had shortly afterwards (by November 1381) resigned his posts at both Copford and Holy Cross in exchange for a prebend at West Thurrock and the associated stall in the choir of the free chapel at Hastings.³⁴ The Peasants' Revolt had targeted both records — including those in Colchester's moothall and their writers, causing Aunger to fear for the safety of himself and his friends (would Stanstede have been among them?). As one of several incidents shortly thereafter that might be construed as harassment, Stanstede's house was broken into by a group of men who forced open his chest and carried off the documents therein, among other valuables from the house. The matter was brought to court (despite one of the accused admitting the deed, the case came to nothing) in 1382, but the incident apparently occurred while Stanstede was still chaplain of Holy Cross.³⁵ One is bound to ask why Stanstede should have been the local cleric singled out for such an attack? Could this have been a repercussion from the Peasants' Revolt, based on the suspicion (true or false) that he was harbouring court rolls or other town records, bearing in mind that it was not unknown for town clerks to have in their personal possession borough documents on which they had recently been working.36 No wonder that Stanstede was trying to disengage himself from Colchester, a plan cut short by his death in late 1383.37 Except in small towns, where the recruitment pool of literate persons was small, clergymen are almost never found holding town clerk's posts; Stanstede, although able to provide assistance to the ailing Beche, was not a suitable successor.

Looking further back than Beche's clerkship, the waters become murkier. Even assuming that Beche replaced a clerk who succumbed to the plague, we cannot necessarily rely on the lengthy list of wills from the 1348/9 and 1349/50 rolls to reveal that clerk; the epidemic caught some unprepared. The appearance of Richard Tote clerk in terminal position of an official witness list of 1345 is slim evidence. He may be the same as the Richard le Clerk who holds terminal position in such a list of 1336 and acted as essoining agent on several occasions between 1329 and 1345; there is a little evidence to suggest that William Tote (bailiff 1321/2) was an alias of William le Clerk (bailiff 1318/9, 1320/1).38 Benham believed that Richard le Clerk was town clerk up to 1348 and was a son of William le Clerk.³⁹ The will of Richard son of William le Clerk was among those proved in 1349. Parts of the puzzle begin to fit. I am inclined to assign Richard Tote, alias le Clerk, tentatively (and in the absence of other candidates), to the clerkship from c. 1336 to 1349. Very close to Richard's name in the list of wills is that of Robert son of William le Clerk. He appears as the terminal witness in lists of 1328 and 1334, acted as essoining agent in 1329, 1333, and 1336, and several times as attorney in 1334; furthermore, in September 1326 he journeyed to the Exchequer, as attorney of the community, to deliver Colchester's farm. He may have been the Robert Tote who appears fleetingly amongst the burgesses in 1343.40 On this evidence, a clerkship of c. 1326-34 is plausible. Family succession in the town clerk's office is found in other towns and we may note that Adam Tothe, clerk of the Colchester chirographers, took terminal position in a witness list of c. 1274.41

Robert le Clerk's predecessor in office could have

been Warin atte Welle, perhaps serving from c. 1310 to c. 1326. Identified as a clerk in a deed of 1332 of the Abbey of St. Johns, he appears to have been employed as an occasional scribe by the Abbey. Warin clerk is terminal witness in six official witness lists between 1310 and 1326; Warin atte Welle (not designated as clerk) is terminal witness in an official witness list of 1325, and again in a non-official witness list (i.e. one in which borough officers are not heading the list) of 1321; Warin atte Welle clerk holds terminal position in a non-official list of 1326.42 He represented Colchester in four parliaments between 1329 and 1340 (on the last occasion as town bailiff), and was one of the defenders by force of borough liberties against outside authority in 1319 and 1325. Yet he was also closely tied to the Abbey, serving as its attorney in town court in 1316 and as its agent during the 1330s in acquiring property to be alienated in mortmain.43 He seems to have been acting as attorney in the Court of Common Pleas 1325-31, and was very active in Colchester's court in the 1340s (he too was a casualty of 1349).44 Using a clerkship as a 'promotional' route to an attorney's practice was not uncommon with town clerks; but, in the final analysis, there is no conclusive proof atte Welle was town clerk.

Further back in time than this we cannot venture, except to note the Ralph clerk who takes the terminal position in an official witness list of c. 1287/8.⁴⁵ Moving forward in time from Aunger's clerkship, town clerks are easier to identify — though not at first. Between them, the clerkships of Beche and Aunger tided Colchester over through half a century of changes in executive personnel. In the fifteenth century the town had difficulty in holding on to most of its clerks for more than a few years each.

The identity of Aunger's successor from 1398 to 1404 is another mystery. Aunger spent a little effort breaking him in and then disappears from borough records, perhaps retiring to Alphamstone, a connection evidenced in 1393.46 A viable and tempting, but uncertain, candidate presents himself in the person of John Beche, a younger son of the former town clerk. Robert Beche's will had provided for his heir, grandson Robert, to provide for the university education of Andrew son of Agnes de Dedham — either a grandson or a son (possibly illegitimate) of the testator.47 In the unlikely event that he had any thought of a family member following in his footsteps, it was not to be Andrew Beche, whose involvement in Colchester's administration was nominal (chamberlain 1400/1) and who seems to have preferred commerce to clerking.48 John Beche, however, became a notary public, as his father had before him; he held on to his father's shop on the east side of the moothall entrance, convenient to serve Robert (we may speculate) as a clerk's and attorney's office, and presumably continuing to do so for John.⁴⁹ John appears occasionally as pledge and attorney in the town court from as early as 1372 - in

which year only Robert acted as attorney more often and up to at least 1400, as well as mainperning in several county cases 1398-1400. By the 1390s he was beginning to be described as 'clerk' and appears as such in terminal position of witness lists of April 1393 and April 1400, as well as being prover (perhaps scribe) of the testament of John Revekyn in 1403. From 1398 to 1400 he served as one of the borough coroners, a post which would not have precluded him from being town clerk as well, although filling both roles could have proved tricky at times.⁵⁰

If John Beche did take over the clerkship upon Aunger's retirement, its demands could have interfered with the attorney's career he was trying to build. At any rate, the town clerk's post was vacant again by May 1404, when a temporary scribe filled in while a replacement was sought.⁵¹ This situation, again reflecting a scarcity of suitable candidates, was not unknown elsewhere. In August 1433, Thomas Chevele expressed a desire to retire from the clerkship of Lynn, but was persuaded to stay on during the search for a successor. No suitable person having been found by Michaelmas 1434, and Chevele declining to remain in office further, one of the councillors - a man showing no other evidence of clerical ability - was appointed 'quousque maior cum sociis suis abiliorum possint invenire'; a permanent replacement was not found until January 1435.52

Thomas Stampe, a Writtle man connected to a Colchester family, was appointed to the office at about the same time that he took up the franchise, on 20 October 1404 (although his fine was not waived as Aunger's had been). He was the first town clerk to identify himself in the consular lists, although the positioning of his title and name almost appear an afterthought and his name is added in a different ink to that of the other office-holders.53 Yet Stampe's term lasted only a few years; he, like Aunger, returning to the countryside.54 His successor, Thomas Rypere, took office c. 1408 and remained therein to 1414.55 John Browneswold was in the office by 1418, leaving a gap of several years to which the only clues are an incidental reference to John Doraunt, town clerk, as witness to a will made in May 1416 and proved September 1417, and the telling fact that Doraunt, a Salcott man, entered the franchise in October 1414; otherwise he is a mystery man.56

Browneswold was yet another short-lived town clerk, his term lasting only to 1423. He had been pursuing a career as attorney since at least 1399 and continued to do so after his clerkship.⁵⁷ Next up to bat was John Olyver, again assuming the clerkship at much the same time as he entered the franchise, in October 1423; he too is found, during his term, supplementing official duties with commercial services as essoining agent and pledge.⁵⁸ However, he left office in 1428, under a dark cloud. In 1430 charges were brought by the town bailiffs against the Abbot of St. John's, four monks, and four others - including Olyver; this volley in an intermittent battle between town and abbey is traceable back to 1428/9, when the Abbot sent a bill of complaint against the community to the king's Council. Olyver's legal or scribal services may have been engaged by the Abbot in this matter (the details in the bill suggest an informant), with a consequent fall from grace in the town. In 1428/9 he continued to make a living through legal services, although he was by no means in as much demand as a pledge as he had been in 1425/6.59 If we may accept the word of Bacon, who had more medieval records at his disposal than are extant today, Olyver accepted the post of town clerk of Ipswich around Michaelmas 1434, but within a year had returned to his old post at Colchester, staying on this time until 1439.60 Between 1428 and 1435 John Heyward had served in the office.

After his second term, Olyver was succeeded by John Horndon, he lasting until c. 1450.⁶¹ Roger Purtepet was in office by at least 1451; in him Colchester had finally found a clerk with the staying power of those of the fourteenth century: his term ended only with his death in 1481.⁶² John Hervy followed him and was still in office in 1484/5, but here the court rolls disappear for a generation. John Wyro is found in the office during 1487/8 and perhaps continued therein until the next office-holder (William Teye) entered the franchise in 1503.⁶³

For the most part these men appear to have handled all the clerical duties, described earlier in this paper, necessary to borough administration. Their formal title seems to have been simply 'clericus ville'. 'Common clerk' was used in the context of the 1372 ordinances and contemporary oaths of office but, before Wyro's clerkship, only John Olyver adopted that styling — doubtless influenced by the title's use in his home town, Oxford.⁶⁴ We should not make too much of this distinction; however, in some towns 'common clerk' was used to differentiate the principal clerk from other clerical officers (e.g. mayor's clerk). Although Dr. Britnell has shown that additional scribes might be employed for temporary assignments⁶⁵ — and one wonders how the corporation managed when its clerk was sent out of town on official business --- this seems to have been at the discretion, possibly even the expense, of the town clerk. This is indicated by two references: one, in the clerk's oath, to his duty to record estreats 'or cause them to be written by some other person, for whom you shall be willing to be answerable to the Bailiff and commonalty'; the other, in an ordinance of 1447, that warrants of arrest be written out by 'the seid Common Clerk or his depute in his absence, for wych he will answere for and non othir'.66 In December 1454, during Purtepet's clerkship, the bailiffs ordered a royal writ to be publicly proclaimed by 'their clerk' John Horndon; Horndon was the writer of the court roll index for 1454/5.67 If there was a second clerical officer at this time - a bailiffs' clerk, as

opposed to the community's clerk — then it probably represents only a short-lived experiment. Certainly it did not find a place into the consular tables; nor should we expect it to. Those tables were not intended to describe the details of administrative arrangements, but to record the formalities of democratic procedure; the fullest specification, as far as town clerks were concerned, being 'hoc anno electus ac publice in plena curia juratus'.68 We need not doubt that annual election disguises reappointment, for the electorate hardly had an array of clerical candidates from which to select! It is compatible with the situation in other towns of the time to assume that, before 1372, Colchester's clerks may have been elected only when a vacancy occurred.⁶⁹ Listing of annual elections of clerks reflects the general trend in fifteenth-century towns of formalising constitutional arrangements in a way that both protected the vestiges of democratic controls, yet at the same time confined them.

The addition of clerks' names to the consular tables from 1404 may also reflect growing prestige of the clerkship in the official hierarchy.⁷⁰ By the end of the century the office was perceived as suitable for a, or conferring the status of, gentleman.⁷¹ This was largely because its legal and administrative duties had come to overshadow its scribal ones, notwithstanding the addition to official ranks, by royal charter grant of 1462, of a 'legisperitus' — in effect, a recorder.⁷² Earliest manifestations in English boroughs of such an officer, as far back as 1298, depict them not only as legal advisors but as supervisors of record-keeping and as custodians of archives, although most recorders originated in the fifteenth century (or later) as towns acquired enhanced legal jurisdiction and as better-trained lawyers were needed to protect borough interests in an increasingly complex legal and political environment. In some places the town clerk was a subordinate of the recorder, losing some of his roles (e.g. ambassador-atlarge, legal counsellor, parliamentarian) to the latter; in others the two offices were so intimately connected as to appear synonymous at times.73 At Colchester, however, the recorder does not appear to have infringed greatly, if at all, on the town clerk's jurisdiction. The holders who are known, mainly from the consular tables — John Grene (c. 1463-c. 71), John Sulyard (c. 1473-83), and Thomas Appulton (1483-c. 89) were all outsiders, of Essex and Suffolk gentry families, with formal legal training and pursuing careers in royal service.74 There is no indication they were in Colchester very often; at Grene's first election he is not recorded as having been sworn in, suggesting his absence even at that important (in borough eyes) ritual. The specified duty of the recorder was to sit on borough sessions of the peace; however, he is also seen assisting the borough in paying its fee farm and arbitrating in a dispute between Colchester and St. John's Abbey.⁷⁵ In the latter case John Wyro is also referred to as 'legisperitus'; the town clerk undoubtedly remained the on-hand legal advisor to the corporation.

From where were Colchester's town clerks recruited, and on the basis of what qualifications? It is evident that men combining the skills required (secretary, linguist, lawyer, accountant, administrator) were not that common. Before Aunger's time, the clerks were all recruited locally; even Robert Beche, although a newcomer to the town, arrived several years before he had any prospect of the clerkship. The cases of the le Clerk and Beche families hint at father-son apprenticeship as one avenue for training; it may not necessarily have been direct passing on of skills so much as instilling an appreciation of the value of education.76 Nor is there yet clear evidence of apprenticeship to one's predecessor in office, whether a relative or not. Informal training of this type is eminently plausible, yet there were other schooling options. A university education was hardly essential for a town clerk, nor were the Beches' notarial qualifications. John Heyward, in the early part of his career, was simply a scrivener; as such he would have had proper writing skills, knowledge of basic accounting, and of the legal forms necessary for conveyancing. In 1380 a John Skryvener was suing two Colchester chaplains for his fee for teaching them the art of writing.⁷⁷ By that period at least, local residents had access to the initial training needed by a town clerk (given that some of the training would have to be acquired on the job), although relatively few may have had the inclination to pursue a career as lay clerk. The teachers themselves were part of the pool of qualified candidates. John Olyver was likely the schoolmaster who, with other Waltham Cross townsmen, ambushed and intimidated the sheriff of Essex c. 1417; the investigation of the affair in 1423 may have been what prompted him to move to Colchester.78

John Browneswold was another local recruit; he had been pursuing a career as attorney before his election to the clerkship.⁷⁹ Stampe is a surname found in Colchester *tempore* Richard II, although Thomas Stampe may not have come from that branch of the family. He, Aunger, Rypere, Doraunt, and Olyver all seem to have been recruited from outside the town, whilst Heyward, Horndon, and Purtepet were firstgeneration immigrants — Horndon coming from Thaxted and Heyward probably from Coggeshall (Purtepet's place of origin is unknown).⁸⁰ Recruitment did not extend beyond Essex.

Part of the reason for this small catchment area may have been that Colchester could not be very competitive in attracting the most skilled candidates from further afield. According to Strutt, the town clerk's salary there in 1319 was £1.6.8d; based on comparison with clerical salaries of towns of similar size and importance from that century, this appears plausible.⁸¹ Salary was supplemented, and quite possibly surpassed, by customary fees. There is specific reference to fees for enrolling recognisances of debt and deeds, payable by the burgesses who benefited from having official record; also to 1s. due from any man 'delyvered of an enditement for felonye or trespace'. In other towns we hear of fees for enrolling essoins, apprenticeship indentures, freeman entrances, and licences, and for endorsing wills brought into court for probate, preparing chamberlains' accounts, drafting writs, or making copies of extracts from the records; some of these may also have applied at Colchester.⁸² Furthermore, a term as town clerk brought greater experience of legal procedure in local courts, the favour of local authorities, and contact with potential clients for scribal and legal services; town clerks were natural choices as pledges and essoining agents.

On the other hand, the demands of official duties on a clerk's time and the restrictions on freedom of movement (being required in town full-time to pursue duties in person) would have inhibited the building of a private practice; activities as attorney do seem reduced during the actual term of clerkship. This may have been one reason why so few of the fifteenthcentury clerks remained long in office. The Beches' conveniently located business office, their notarial status, and the frequency with which they acted as attorney have already been noted. Warin atte Welle's activities as attorney, including his land acquisition services to St. John's Abbey, have also been mentioned. Robert le Clerk was similarly involved in acquiring land for St. Botulph's Priory; as an attorney he was following in his father's footsteps.83 Rypere only occasionally appears in private practice after his clerkship,84 but Browneswold was an attorney throughout his visible life — his participation in cases often being noted in the rolls by a mere 'J. Brow.'. Attorney was one of several occupations Olyver juggled. Heyward progressed from scrivener to town clerk to in-demand attorney — one of the very select number who appear so regularly as to create the impression of official accreditation of his role by the court. Horndon was cast in the same mould, numbering the Abbot of St. John's, local gentry, the town sergeants, Londoners, and a horse-thief amongst his clients during the one and a half decades of private practice following his departure from the clerkship. Purtepet's sideline as attorney was a little more restrained because he remained in office, but he too served a diverse clientele that included a sheriff and Ipswich's chamberlains of 1448.85

At times during the fifteenth century there were living in Colchester several one-time holders of the clerkship and a certain collegiality can occasionally be seen. In 1405 Thomas Stampe and Thomas Rypere stood pledge together for plaintiff Edward Rysby. In October 1425 John Olyver and John Browneswold acted together as pledges for Thomas Godeston in a plea of debt, and John Heyward performed the same service for Thomas Stampe's son. The following January Browneswold and Heyward were pledges for Olyver to prosecute a plea of debt, whilst in June 1426 Olyver and one of the town sergeants pledged Browneswold in a case of broken contract. In February 1440 Horndon and Heyward were pledges together for Simon Langton and in June for the four town sergeants, prosecuting a cleric for transgression. Roger Purtepet was a pledge for Heyward in 1448. Heyward assisted Horndon in a property transaction in 1451. In March 1452 Horndon was acting as attorney (joined by Purtepet as pledge) on behalf of the widow of John Heyward, in chasing a debt that may have been owed Heyward for legal services he had performed.⁸⁶ On the odd occasion these clerks appeared on opposite sides of a court case, sometimes related to legal costs incurred by a party one had represented.⁸⁷

For the most part, these men made their livings by selling their special skills and expertise. Yet, as was typical of medieval townsmen, they were not averse to seeking profit from other sources. The le Clerk family had wealth in land, in the countryside surrounding Colchester; for them, clerical and legal activities may have been the sideline. Thomas Stampe had some landed interests further afield in Essex. Warin atte Welle had a little land in Brightlingsea and inherited a few acres in Colchester's suburbs from his wife in 1348, but died himself shortly after; he also held a stall opposite his house in the market.88 Robert Beche too had a market stall, whilst the frequency with which his son John was involved in pleas of debt is suggestive of commercial activity. Robert managed to make a good living from his various occupations, judging from the several properties listed in his will;89 he laid the foundations of the family's rise into the urban ruling class in the fifteenth century. Several of the wives of town clerks were, at one time or other, amerced in the lawhundred for brewing ale contrary to the assize: those of John Beche, Rypere, Olyver, and Purtepet, and frequently (1425-52) the wife of John Heyward. Heyward himself was on occasion amerced as a taverner and for breaking the assize of wine.90 John Olyver's commercial ventures are again witnessed: in a suit (1424) against William Page, who had tried to cover up a botched job of producing malt for Olyver; and by indications of supplying the local cloth industry (in 1439 he, described as 'merchant', was distrained by woad and ashes to answer a plea of debt, and he was involved in other such pleas with fullers and a draper). John Horndon too had a finger in that pie, for in 1459 he was sued by Thomas Dyster for delivery of two well-made broadcloths, of the type he used to sell to Hanse merchants, as per their agreement; and in 1440 he had sued a tailor for a debt of 43s.4d.91 Horndon also served as town councillor 1451-53, although this cannot be called profit-making employment. Robert le Clerk was bailiff 1339/40, 1340/1, and 1343/4. However, further office-holding after (or before) the clerkship was the exception, not the rule, in Colchester and elsewhere. Service brought social advancement, but generally not quite to the level of the urban elite.

These men pursued their careers as they thought

best: for many the office of town clerk was only a stepping-stone. With the possible exception of Olyver, it does not seem that any was ever expelled from office for malfeasance, although there are examples of that in other towns. Oaths of office served to specify not only duties but also standards of conduct; at Colchester the specifications were: to record accurately all things that ought to be enrolled; to keep an accurate account of court profits; not to reveal the private deliberations of the corporation; and to be obedient to the lawful commands of the same. In this we see concerns about falsification of records, embezzlement, and conflict of interest. In addition to the safeguard of the oath of office, the corporation preferred that its clerks be bound also by the freeman's oath: almost all were either born to the franchise or seen entering it by fine (several at the time of assuming office). This was a form of bonding, and disfranchisement provided another stick to hold over the heads of public servants. The Colchester authorities had little cause to worry. John Browneswold, along with other Colchester men, was convicted of carrying off the valuables and the wife of William Baret (1407), but such behaviour was not apparent by the time he took up the clerkship.92 John Horndon may be implicated in forgery (c. 1445) instigated by William Barker, mortgagee of property of Simon Mate's widow, in a (successful) attempt to defraud Mate's daughter; Horndon was a party to transactions relating to the property and perhaps some of the suspect deeds were enrolled, or even drawn up, by him.93 And, in the list of breakers of the assize of ale enrolled by Thomas Rypere in October 1411, his wife's name is conspicuous by the absence of an amercement written adjacent.94

All in all, medieval Colchester was well-served by its town clerks. The officer was (by training) the principal borough bureaucrat and the one responsible for the records on which stable government became increasingly reliant through the late medieval period. Significantly, town clerks caught out in wrongdoing tended to revenge themselves by absconding with borough records, a problem Colchester would encounter in the sixteenth century. The town clerk represents an aspect of borough government worthy of study - not least for the light it can throw on the growth of a professional class in English administrative history, and on the spread of lay literacy. The historian too owes a debt of gratitude to those clerks, since from what they chose to put down on parchment (and paper), and from their efforts to organize borough records, stems the preservation of invaluable information about their boroughs — something often taken for granted. The Colchester registers that were the initiative of individual clerks present a different dimension from, and a vital counterbalance to, the routine matters of the court rolls. The town clerks compiled, in essence, the history of their boroughs.

It seems only fair for today's urban historians to return the compliment.

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Notes

In referring to Colchester records I have adopted the style of abbreviation established by Dr. Britnell, using CR for court rolls, OB for the Oath Book, RPB for the Red Paper Book. The books, however, have been consulted through the editions of Benham and references are to his page numbers. So too the earlier rolls have been consulted partly through the Benham editions, partly through the originals; in the former case the reference takes the form of CR i, 1. Other records housed in the Essex Record Office are preceded by the abbreviation E.R.O. The following abbreviations are also used; B.M. (British Museum); P.R.O. (Public Record Office); N.R.O. (Norfolk and Norwich Record Office — KL for Kings Lynn records, Y for Great Yarmouth records); S.R.O. (Suffolk Record Office). I am grateful to Colchester's archivist, Mr. Paul Coverley, for assistance with my research, and to Dr. Britnell for helpful comments on a draft of this paper.

- For a broader discussion of professionalism in borough government than falls within the scope of this paper, see Alsford, 1982, 88 125, 172-74.
- Martin, 1963, passim; Masters, 1969, 55; Easterling, 1938, 456, 472; Hortox, 1989, 25; Pollard, 1966, 49; S.R.O. Ipswich Great Court Roll 54-56 Hen.III, m.10d; N.R.O. KL/C37/2 m.2r; Stevenson, 1893, 260. Evidence for Lincoln town clerks in 1202 is not reliable enough to include here.
- 3. Easterling, 1938, 464-65; Davis, 1968, 54; Round, 1899, 423.
- 4. Pollard, 1966, 61.
- 5. Saul, 1975, 27.
- 6. RPB, 3.
- Pipe Roll Society, xxxvii (1915), 129; Rickword, 1915-17, 143.
- The former is in RPB, 5; for dating see Britnell, 1982, 96 the reference to Richard II in the bailiffs' oath is irrelevant to dating of the formulation of the oaths. The latter is in OB, 36.
 Britnell, 1986b, 134-38.
- 10. Britnell, 1982, 95; Britnell, 1986a, 239. See also the reference to minor loose documents in the archive, in CR 49/14r.
- See Britnell, 1982, 98-99. Such volumes, either for the informal use of individual clerks, or as formal repositories of texts testifying to borough rights or profits, are common enough in English boroughs, e.g. John Carpenter's Liber Albus, Daniel Rough's Register (Murray, 1945), William Asshebourne's Red Parchment Book (Owen, 1981), Paul de Roos' Domesday Gyppewyci (B.M. Egerton 2788) to name but a few. The archivist's role is made explicit in the oath of Bristol and London clerks; Ricart, 1872, 75; Riley, 1859, 311.
- 12. E.g. CR 57/4r.
- 13. E.g. Gross, i, 261; Salter, 1920, 85; Hudson and Tingey, i, 130.
- 14. Brimell, 1986b, 136; OB, 37.
- 15. RPB, 5; OB, 33-34. This duty, as well as other more supervisory roles, are witnessed in fifteenth-century Bristol, Norwich, and Shrewsbury; Ricart, 1872, xii; Hudson and Tingey, i, 95; *Rotuli Parliamentorum*, iv, 476-80. That newly-elected bailiffs took their oaths before the outgoing bailiffs (RPB, 11) does not preclude the involvement of the town clerk.
- 16. Riley, 1859, 311; N.R.O. KL/C9/1 f.12.
- 17. CR iv, 76, 100.

- CR 38/21r. For examples from other towns, see Pollard, 1966, 51; P.R.O. E101/507/30; *Cal. Memo. R.* 1326-27, 138; Bateson, iii, 42.
- E.g. Dobson, 1980, 39, 47-48; Finn, 1911, 186, 191-212;
 N.R.O. KL/C37/2 m.2r, KL/C39/3-8.
- 20. P.R.O. C1/67/20.
- 21. To give but a few examples: Thomas de Massingham of Lynn was sent to 20 parliaments (and 2 councils) during his clerk-ship of 1312-38; William Ambrose, Yarmouth's clerk tempore Edward II, attended 11; Nicholas de Seizevaux (York, 1316-27) sat in three; William de Burgh (Northampton, 1314-21) in two. For further discussion, see Alsford, 1982, 122-24.
- For an example of parliamentary reporting see N.R.O. KL/C6/3 f.8r.
- 23. OB, 34. The consular lists evolved both in scope (i.e. which officers' names were recorded) and in placement occasionally being appended as schedules, some of which are likely lost, but gradually finding a permanent place in the court roll membranes, separate from the Michaelmas lawhundred proceedings.
- 24. Brimell, 1982, 99-100; OB, 73; RPB, 155-56; CR 23/63r. For discussion on the utility of the terminal position in witness lists as a means of identifying clerks, see Bond, 1970-73, 279; Hodson, 1974-77, 71-87; Schopp, 1925, 8; Pollard, 1966, 49. My own fairly extensive examination of lists from many parts of the country has led me to conclude that where the terminal witness is identified as a clerk and executive officers are named at, or close to, the beginning of the list (hence official witness list), then the clerk will, more usually than not, be a borough officer.
- 25. Britnell, 1982, 96, 100.
- 26. CR 20/24r,d; the will had been drawn up on June 6.
- 27. OB, 54. For additional evidence that this was the year he became town clerk see OB,58. On the toll on officialdom from this plague see Alsford, 1982, 39.
- CR i, 229; CR ii, 102, 108; CR 13/2r; CR 14/3r; CR 15/8r; CR 16/2r; CR 17/5d; CR 18/11d, 15d; CR 19/9d; CR 45/21d; P.R.O. C146/205, E40/7951.
- 29. Brimell, 1982, 96.
- 30. OB, 34; RPB, 15; Britnell, 1982, 97. If indeed we can take the charge at face value, rather than as an attempt to deflect blame away from others.
- E.R.O. Colchester Ms.57 f.213v; Cal. Close R. 1364-68, 171; Powell, 1991, 73.
- 32. Powell, 1991, 75; CR iv, 2, 182, 193-94; Cal. Pat. R. 1370?4, 294, 1399-1401, 372.
- Britnell, 1982, 96, 100; Britnell, 1986a, 123-24; RPB, 5-13. However, Fitz Thedmar's *Chronicle of the Mayors and Sheriffs* of London, Ricart's Kalendar, and sections in N.R.O. KL/C10/2 (notably ff.105v-109) offer other instances.
- In 1383 he sued his successor at Copford for detention of goods. Cal. Pat. R. 1381-85, 56; CR iv, 193-94.
- 35. CR iv, 80, 97, 99, 101, 103, 106.
- 36. Note the stipulation it was felt necessary to make at Hereford concerning clerks not detaining borough records beyond the ballival year to which they pertained; Black and Hills, 1891, 465. The rebels did not seem to have found what they were looking for (if anything specific) in the moothall. It might be mentioned that John Beche is found acting as Stanstede's attorney on one occasion (CR iv, 19), but too much should not be made of this, especially since the hypothesis is already tenuous.
- 37. OB, 76; Cal. Pat. R. 1381-85, 312.
- CR i, passim; OB, 201, 209; E.R.O. Colchester Ms.57 f.101. Compare lists of townsmen in *Cal. Pat. R.* 1317-21, 366, 474 75; William Tote figures so rarely in the records that an alias is probable.
- 39. CR i, p.ix. However, I find nothing significant to support Benham's belief that William le Clerk was town clerk in 1312, or that Richard Legra (sergeant in 1312) was an alias for

Richard le Clerk.

- 40. CR i, passim; Moore, ii, 616; Cal. Memo. R. 1326-27, 2; Cal. Pat. R. 1343-45, 98.
- 41. Cal. Plea Rolls of the Exchequer of the Jews, ii, 236. There is a slight possibility that William le Clerk was a member of the de Colcestre family, which would link him and his sons to several of the more prominent Colchester rulers of the early four-teenth century. But those relations are too complex to devote space in untangling here.
- 42. Moore, ii, 640, 670; E.R.O. Colchester Ms.57 passim.
- Cal. Pat. R. 1317-21, 366, 1324-27, 146, 1334-38, 315;
 E.R.O. Colchester Ms.57 ff.181v, 199-200; P.R.O. C143/236/25.
- 44. Feet of Fines, Suffolk, 166, 170; Feet of Fines, Essex, ii, 221, iii, 3; CR i, passim; OB, 57.
- 45. RPB, 71.
- 46. Britnell, 1982, 96; CR 28/35d. A John Aunger who appears in town between the 1430s and '50s was not necessarily any relation.
- 47. CR 20/24r; OB, 206.
- 48. CR 20/24r; CR 32/1r; P.R.O. E122/193/33. That Andrew was essoined in paying suit at the lawhundreds of January and April 1383 suggests he may indeed have been at Cambridge at that time; CR 22/21d, 35r.
- 49. John was a notary by 1402, Robert by 1375. The latter leased the shop from the community in 1349 (its previous lessee another plague victim), strengthened his tenure in 1367, and bequeathed the proceeds of its sale to John who, however, opted not to sell and is found in possession in 1387. Cheney, 1972, 83; OB, 58, 70, 203; CR ii, 237; CR 20/24r. A similarly situated business office of a town clerk is seen in Winchester; Keene, 1985, 606.
- 50. CR iii, passim; CR 20/15r; CR 27/29r; CR 28/27d; CR 30/2d; CR 31/passim; CR 33/4r; Cal. Close R. 1396-99, 423, 499, 1399-1402, 111. Literacy may sometimes have been an influencing factor in the selection of borough coroners, since there is little evidence they employed clerical assistants as their county counterparts did. Unlike most other of Colchester's coroners, Beche did not go on to hold any other office in borough government; perhaps for him the coroner's office related to his legal career.
- 51. Britnell, 1982, 98. Beche's will was proved in 1415 (OB, 97) when he would have been in his mid-60s, a normal age for a man of that class in that period (see Alsford, 1982, 92), but he appears little in town records during the previous decade.
- 52. N.R.O. KL/C7/3 ff.38v, 47v, 50.
- 53. CR 34/1r, 4d. Henceforth the consular tables, on the first membranes of the court rolls, become the principal evidence for dates of clerkships, still supported in some cases by terminal witness appearances, and augmented and refined by Dr. Britnell's paleographic evidence. These sources will no longer be cited individually.
- 54. Cat. Anc. Deeds, iv, A7732, A7736.
- 55. Dr. Britnell (1982, 101) believes the term began in 1407, but I am assuming that the index to court rolls in the Oath Book was compiled retrospectively; e.g. the 1407/8 roll was indexed after Michaelmas 1408.
- 56. CR 40/46r; OB, 97. Several others of that surname lived in Colchester from the 1430s to '60s, but I find no proof they were relatives of the town clerk.
- 57. E.g. CR 31, 34, 38, 41, 46/passim.
- 58. CR 44/3r; CR 46/passim.
- 59. RPB, 51-56; CR 49/passim.
- 60. Bacon, 1884, 97; CR 53/1r. Certainly there is some indication that Thomas Dounham may have retired from Ipswich's clerkship in early September 1434, and in 1439 William Average was retiring from the post; B.M. Add.Ms.30158 f.6; S.R.O. Ipswich Doggett Roll 17-38 Hen.VI m.1r. There are several medieval examples of men holding the clerkship of more than one town at different times in their careers.

- 61. The rolls for 1449/50 and 1450/1 have not survived, but the fact that Horndon compiled the Red Paper Book index for the 1448/9 roll (Britnell, 1982, 101) suggests he was in office for at least part of the 1449/50 year.
- 62. OB, 134.
- 63. RPB, 99-100; Britnell, 1986a, 210. Teye is not actually seen in the office until 1510 but, based on precedent, his franchise entrance may well indicate the assumption of office.
- 64. RPB, 4-5; OB, 37; CR 44/3r; CR 46/1r.
- 65. Britnell, 1982, 97; Britnell, 1986b, 135, 139. For similar evidence from other towns, see: N.R.O. KL/C39/3; Dobson, 1980, 54; Bateson, ii, 169.
- 66. OB, 36, 186. At Leicester (1379) the mayor was given the choice of whether or not to appoint a second clerk - but that officer would have to be paid out of the mayor's salary; Bateson, ii, p.xxxii.
- RPB, 57; Britnell, 1982, 101. The original Latin (for which I 67. thank Dr. Britnell) reads 'prefati ballivi per Johannem Horndon, clericum suum'. This way of describing the clerk was atypical, and is one of several reasons why I suspect an office other than that of common clerk. Dr. Britnell prefers the conclusion that Horndon temporarily resumed the common clerkship in 1454/5, but there is no apparent reason (unlike in Olyver's case) for Purtepet to have relinquished office the term of office of town clerks was almost invariably continuous.
- E.g. CR 49/1r; some phrases were shorter but almost all at 68. least included 'electus'.
- 69. As at Exeter, for instance; Alexander, 1938, 409.
- 70. See Templeman, 1944, 16, for discussion of the same at Coventry,
- 71. Britnell, 1986a, 210; Britnell, 1986b, 139. Reginald Rokes, town clerk of Maldon 1465-70, is another example of a gentleman in the office; E.R.O. D/B 3/3/68 f.2; Cal. Fine R. 1461-71, 174. See also Horrox, 1988, 27-28, 32.
- 72. Cal. Chart. R., vi, 148.
- 73. Cam, i, pp.lviii-lix; Bickley, i, 48, 113, 143; Alexander, 81938, 409; Furley, 1923, 50; Platt, 1973, 254; N.R.O. KL/C7/4 f.41v; N.R.O. Y/C4/165.
- 74. Cal. Pat. R. 1446-1509, passim; Cal. Close R., 1454-1468, passim; Ives, 1983, 47, 477.
- 75. RPB, 63, 106.
- 76. Note that a possible son of Thomas Stampe became a notary; CR 67/19d
- 77. CR 46/9d; CR 49/19d; CR 20/29d.
- 78. Cal. Pat. R. 1422-29, 217. For other examples of schoolmasters who became town clerks, see: Jewell, 1982, 145; Orme, 1982, 229. One Oxford town clerk also taught letterwriting, conveyancing, and accounting; Pollard, 1966, 74.
- 79. CR 31, 34, 38/passim. Probably a son of Gilbert Brouneswold, who took up the franchise in 1367/8 and was moderately prominent in the 1380s and '90s, although never held borough office; OB, 66; CR iv, passim; CR 31/passim.
- 80. This conclusion comes from their franchise entrance records, and/or the lack of references to them, or others of that surname, before their clerkships. Horndon's first appearance is in 1426, when fined for having his cow on common pasture despite not being a freeman (i.e. he was not born to the franchise); CR 46/12d. The surname Hervy is too common to warrant drawing conclusions, and it is uncertain whether Wyro is a version of Wroo or Vero, both of which appear in Colchester before 1487.
- 81. Strutt, 1822, xi; Keene, 1985, 323; Horrox, 1989, 25; Bateson, ii, 8; Saul, 1975, 28; N.R.O. KL/C39/1. £2 would be typical, doubling by the next century; small towns like Maldon might afford only 6s.8d (E.R.O. D/B 3/1/1 f.33).
- 82. OB, 40; RPB, 18; Britnell, 1986a, 239; Bickley, 1900, 33; Smith, 1870, 354-55, 390, 411; Dobson, 1980, xii; Hudson and Tingey, i, 164, ii, 290-93; Riley, 1859, 48; Sellers, 1912, 138; Furley, 1923, 49; Salter, 1920, 85.
- 83. Cal. Pat. R. 1334-38, 382; P.R.O. C143/243/12; CR i, passim.

- 84. E.g. CR 41/20r, 30r.
- 85. CR passim.
- 86. CR 34/24r; CR 46/5r, 7r, 14r, 27r; CR 57/17d, 26r; CR 62/15d; CR 64/7r.
- 87. E.g. CR 38/21r; CR 57/7d, 9d, 11r.
- 88. CR i, 160, 164, 210; CR 5/8d (schedule); Feet of Fines, Essex, ii, 121, 123, 164; Cat. Anc. Deeds, iv, A7732, A7736; ?RPB, 69.
- 89. CR iii-iv, passim; CR 20/24r.
- 90. CR iv, 50; CR 38/2d; CR 41/14d; CR 46/3r; CR 49/15r; CR 57/3r, 22d; CR 62/2d, 18d; CR 64/2d, 20d; CR 69/2r; these references are not exhaustive. It is unclear whether, in the 1420s, John Heyward mercer is a separate individual from, or another aspect of, John Heyward scrivener; the fact that, on 21 January 1426, the latter stood pledge for several parties in pleas, yet not for the mercer in his plea, suggests them either the same or completely unrelated (CR 46/14r). The surname was quite common.
- 91. CR 44/25r; CR 49/3r; CR 57/20d; CR 58/7d, 9d, 10r; CR 69/20d.
- 92. Hunnisett and Post, 1978, 367; Cal. Pat. R. 1408-13, 276.
- 93. OB, 115-16; P.R.O. C1/17/89.
- 94. CR 38/2d.

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The spire of All Saints' Church, Maldon

by Elphin Watkin

Introduction

The dominating feature of the Maldon skyline is the tall spire of All Saints' Church (Fig. 1A). A massive but plain nave of double width, built in the 18th century, contrasts dramatically with the superb decorated 14th-century south aisle. Above rises the triangular tower surmounted by a glorious shingle-covered hexagonal wooden spire rising to a height of 29.3m (96 ft.), and set on an underframe encased within the top of the tower.

The foundation of the church is unclear but it almost certainly existed by $1170.^{1}$ The tower has round arched windows in the south (Fig. 1A) and north-west walls. The shape of this tower is not easily explained as it is not square to the original nave. The north-west wall follows the ancient road pattern, with the south wall in line with the aisle pillars of the nave. Why it was built this way is not explainable by historic fact, as some other important constricting factor must have decided the layouts, but it has left us with a unique structure.²

At the upper levels of the tower, where the bells (of which there were five by $1768)^3$ were originally positioned, it has double lancet windows positioned centrally within each wall (Fig. 1A). These are surrounded internally by a large semi-circular arch. Offset on two sides are single lancet windows between the centre and tower corners (Fig. 1A). This gives an appearance that is unbalanced and again not readily explainable. Could a single piece of timber still embedded in the masonry of the tower walls in the position for a second single lancet window be the reason for only one of these windows on the south and north-west side (Fig. 2T)? Little of the original stone dressings to the mainly flint tower survive. The facings below the string course are mainly recent except for the masonry of the round arched window. The lancet stonework is older and the north-east window, now facing into the nave roof, is much older, implying that the stonework of the south and north-west lancet are 18th century or later. Above the cornice, the buttress at each corner of the tower becomes a chamfered corner, which has some older examples of facing stone on the quoins (Fig. 1A). The walls at this level inside and out give the impression of not having been recently refaced, containing fairly well-sorted coursed flints with patches of septaria. The lower walls have amongst the flints many different pieces of random stone involving over a dozen different types mainly of flat section. Over the round arch windows are stones with Norman chevron

decoration which are unquestionably original to this build as other pieces appear in random positions in the inner walls. The voussoirs lining the round arches inside have diagonal tooling typical of romanesque work. This again shows that material from an earlier structure was available to build this tower.⁴

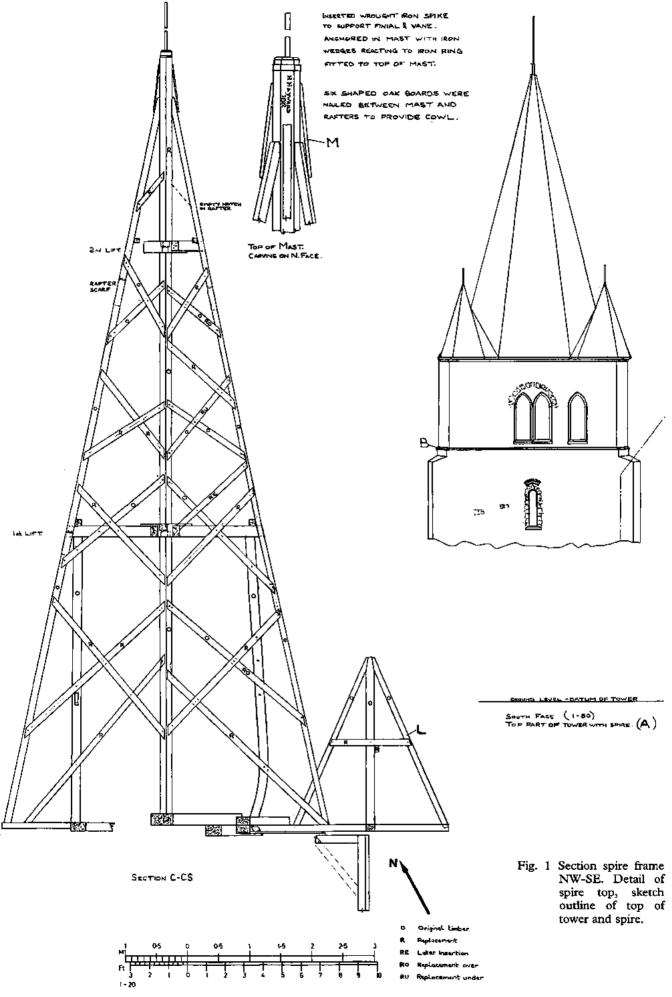
The tower gives no indication of age, other than the lancet windows⁵ and the large pointed arch between tower and nave. Some items could have been reused or may have been modified at the time that the spire was erected. From details in the tower and the general type of structure within the spire it is suggested that what exists is an example of early-to-mid 13thcentury workmanship.

At the string course above the top of the buttresses, 10.06m (33ft) above present ground level, the wall thickness reduces (Fig. 1B) on the outside by 0.1m (4in); although badly eroded, the inside appears to reduce at a similar height, with corbelled pad stones in each corner on which to support the underframe of the spire. This offset is the suggested base for the spire underframe being 3.65m (12ft) below the top of the walls (Fig. 3). The loss of all detail in this area is due to the Victorian restoration of 1867, when the bells were rehoused at a lower level, and the subsequent addition of another bell in 1922 involving a further change to the bell-frame.

The underframe

The timber remnants in this area consist of two nearly complete corner posts (Fig. 3/AS & CS), part of the top framework and some braces (Plate 1). From this it can be deduced that the underframe was a triangular (Plate 2), vertical-sided box frame set within the walls (Fig. 3P). Enough empty mortises and notched lap joints remain to suggest corner bracing at each angle (Plate 1). The position of three other braces can be traced. They rose from low on the corner posts of the frame to the base of the spire (Plate 3). Empty housings (Fig. 2W) for these braces exist on two of the side spines of the spire base (Plate 4). The brace from the west post (Fig. 3/AS) would have risen to the central spine; however no housing exists in the present spine. With oversize mortises for the spire mast and side supports, this does suggest that the present main spine of the spire base is a replacement. This is also evidenced by the shoring notches cut into the mast (Fig. 4/A2). Maybe this could be one of the badly-needed repairs in 1568 when the church needed the return of money

THE SPIRE OF ALL SAINTS' CHURCH, MALDON



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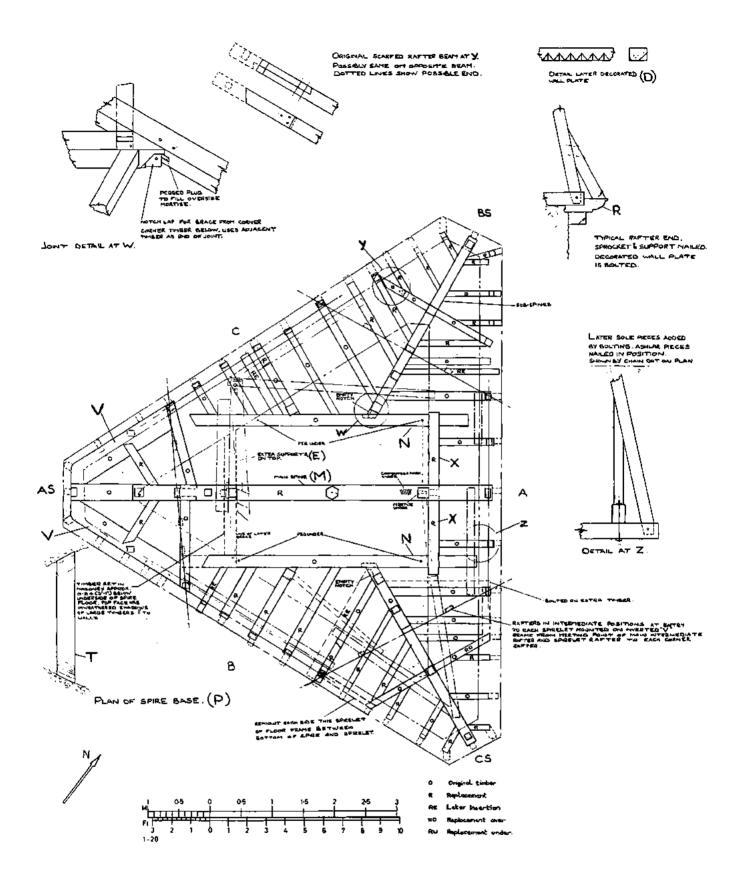


Fig. 2 Floor frame of spire. With detail of joint to sub-spines, scarf in spirelet and later additions.

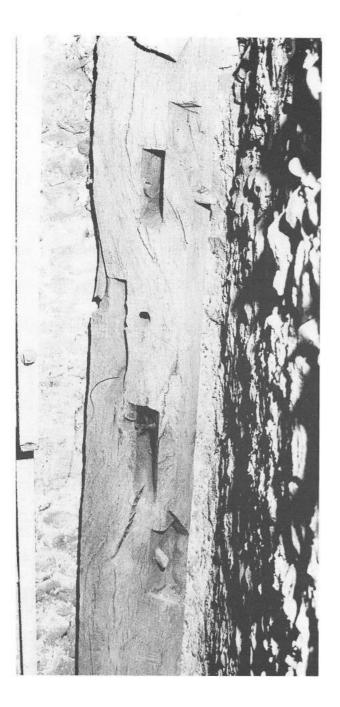


Plate 1 Spire underframe. West corner post showing from top. Square-cut mortise, angle mortise to left, angle mortise to right and notched lap joint.

loaned to the Borough in $1563.^6$ The ends of the main spine sit on short lengths of timber set in the masonry (Fig. 4S & T). The ends of these show similar grain formation which would suggest these are both parts of the original spine.

Two pieces of timber still exist dropping vertically from below the spire base in line with the centre of the twin lancet windows (Fig. 3M & N). If these had continued to the lowest level of the underframe on all three sides, it would allow a tying framework at the base to support a lower floor or bell-frame (Fig. 3P).

A lower floor using this outer frame as its support base could be one suggestion. If so, the piece of timber set in the masonry walls, previously mentioned, would be at the correct height from which tolling bells could be supported to ring out through the lancet windows. If supporting a bell-frame from this floor, the bells would be above the base line and again would ring through the lancets, not as with the Victorian rehanging at a lower level which has resulted in the bells ringing totally within the walls. The one square-cut mortise in the west corner post (Fig. 3P1) could be the end of a horizontal beam (Plate 1), at mid height, to the opposite intermediate post (Fig. 3P2) with braces rising from low notched laps on the corner post (Plate 1) and possibly from the opposite post. A housed and bolted beam, with the cut-off end being the only remnant (Fig. 3R), had been fitted sometime after 13507 horizontally across one end of the frame. To fit this timber required the removal of a down-brace from the frame and could relate to an increase in the number of bells.

The hexagonal base of the spire

The underframe construction in the upper tower is the suggested anchor base of the spire frame. It is here, level with the top of the masonry, that the enigmatic wonder of the carpentry begins: how to produce a hexagonal spire from a triangular base? The floor is heavily restored, and in detail modified, but still shows the ingenious solution devised by a great master carpenter (Fig. 2P).

The tower is not a true equilateral triangle and is some 0.6m (2ft) shorter to the west corner (Fig. 2/AS-A). The largest and longest timber in the spire is the main spine of the floor (Fig. 2M). Its alignment was almost certainly decided along this the shortest span to gain maximum strength from the timber. Parallel to this and 1.2m (4ft) to each side were placed two further timbers (Fig. 2N) from which sub-spines (Fig. 2P/BS & CS) run-out to the other two corners (Plate 3). Cross-members set in the masonry of the north-east wall locate the two side beams to the central spine (Fig. 2X). These may be replacements for something similar in the original frame. The spine replacement at a higher level necessitated a deeper section connecting member to allow joints to the spine and to the side beams still at their original height. Two original intermediate rafter beams have been rejointed into these cross-members (Fig. 2Z). The outer ends of the western cross-members were connected to two massive plank timbers (Fig. 2V) running parallel to the walls. These meet the spine at the western point (Fig. 2/AS) forming a triangular end frame (Fig. 2P). The walls were each divided into three parts, the centre part forming a side of the main spire (Fig. 2/A B & C), with the hexagonal base of the spire being completed by drawing a chord across the ends of each part to form the other three sides. The area between the timbers



Plate 2 Spire underframe. Top joint of frame beams into west post. Beams cut with tenons and spurs. Post double mortised.

parallel to the main spine, the angular sub-spines and the outer faces of the walls have beams set at 90° to the wall (Fig. 2P). These are positioned at each rafter foot and are tenoned into the components of the main floor frame to complete the base of the spire (Plate 3).

The spirelets

The three unroofed corners, having a trapezium base, were filled by constructing spirelets at each corner (Figs 1L, 4L & 5L). The spirelets are on a cruciform base, the centre of which is set at approximately onethird distance from side of spire to corner (Fig. 2P). The base timbers were jointed into the sub-splines on the north and east corners at 90°, with the spirelet mast rising from this point (Figs 1L & 5L). The west spirelet, due to its different base form, has no cross timbers and the mast is on the main spine. A set of cross braces set approximately half-way up each spirelet were housed into its four main rafters and halved through the mast. The inner rafter of each spirelet ends inside the main spire and is halved across the main intermediate rafter of the spire (Fig. 5V). From this intersection, timbers drop to the corners of the main hexagon base to form an inverted 'V' at the junction.

The main frame of the spirelet is complete but it cannot be clad to overlap the wall and meet the spire. The solution was a polygonal shape which has two long walls from the cruciform timbers of the base to the outer end of the trapezium (Fig. 5, Rafter plan). Beams to support the rafter feet at these points are tenoned into the sub-spines (Plate 3). With rafters to the mast, this forms a triangular section of roof on each side with the outer end another triangle. If the two side faces had been extended to meet the corners of the spire the joint would be an impractical, very steepsided valley, or, a dormer-shaped connection to the spire instead of a spirelet. To overcome this the spirelet was clad on the two inner faces from peak to bottom of the side rafters and to the intersection with the main rafter (of the spire) to produce two further triangular shaped roofs. The area between is a wide triangular valley from the intersection to floor level on each side providing a good open corner that can be lead lined. A broached corner, as found on many spires, would have

been a simple solution but not aesthetically satisfactory. Due to the large base area and the relatively low spire the finished effect would be to flatten and lower the whole spire. It would also not be a true broach as the tower corners are chamfered. The solution used, although complicated, provides a visually attractive roofed corner to each angle of the tower.

These spirelets stand some 2.5m (8ft) high and are important components in the wonderful roof line provided by the shingle-covered spire. One point to note is that the western spirelet penetrates the main spire at a higher level (Fig. 4V compare 5V) due to the reduced dimensions of the tower on this alignment. They are each topped by a lead finial.

The spire

The spire is an exceptional piece of carpentry designed to be assembled in sections, and it comprises three lifts to 12.4m (41ft) at the top of the mast.

From the main spine a central hexagonal mast rises 4.45m (14ft 6in), tenoned to the spine and into the centre of a cross-arm (Fig. 5, Centre first lift) at the top of the first lift (Plate 5). Two more vertical posts rise from the spine (Fig. 5P) (parallel to the mast),

tenoned near the ends of the cross-arm to form a rectangular frame. The eastern post has angular raking shores (Fig. 4, Section A'-A') to each side to stabilize the structure. This construction is repeated on the other two alignments of the spire and the three crossing rectangular frames produce the effect of a sixspoked wheel (Fig. 5, Plan first lift) at the top of the first lift (Plate 5). These spokes, at the mid-point of each of the hexagon faces, have a piece of timber set at 90° on top of each outer end (Fig. 5X). This timber is dovetailed (similar to a tie beam in a building) and pegged to the spoke and halved across the end of the timber from each adjoining face to form a hexagonal rim with extended corners (Fig. 5W). On the end of each spoke an angular tenon is cut to locate each main intermediate rafter (Fig. 5X). The corner rafters lodge into the extended corners of the hexagonal rim. Between each of these rafters is another rafter located to the rim with pegs. This provides centres for the shingle fixing battens of about 0.68m (2ft.3in) at the base reducing to 0.46m (1ft.6in) at the first lift.

Stiffening to the rafters and added stability was provided by fitting cross-bracing from the mast to the rafters (Figs 1, 4 & 5). These were set in overlapping pairs each side of the mast on the three alignments,



Plate 3 Underview of spire floor to north corner. Sub-spine to north spirelet, rafter beams and cut-off top beam of underframe pegged to floor. Empty notched lap joints in top beam and sub-spline.

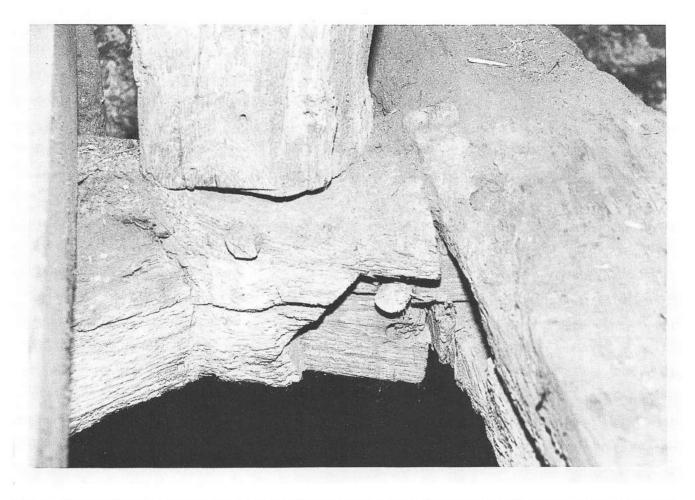


Plate 4 Junction of north sub-spline, showing oversize mortise, secret notched lap joint for brace to underframe corner post. Oversize mortise into beam (infill missing) with two peg holes. Base fixing for spire main frame post into top of sub-spline.

staggered up the mast to make room for the notched lap joints. At the mast the joints were cut as open notched laps (Fig. 4N) but due to the angular entry of each brace the appearance is of a secret notched lap. On the rafters they were cut as secret notched laps (Fig. 4M). Where the braces cross each other and the vertical posts of the main frame they were halved and pegged.

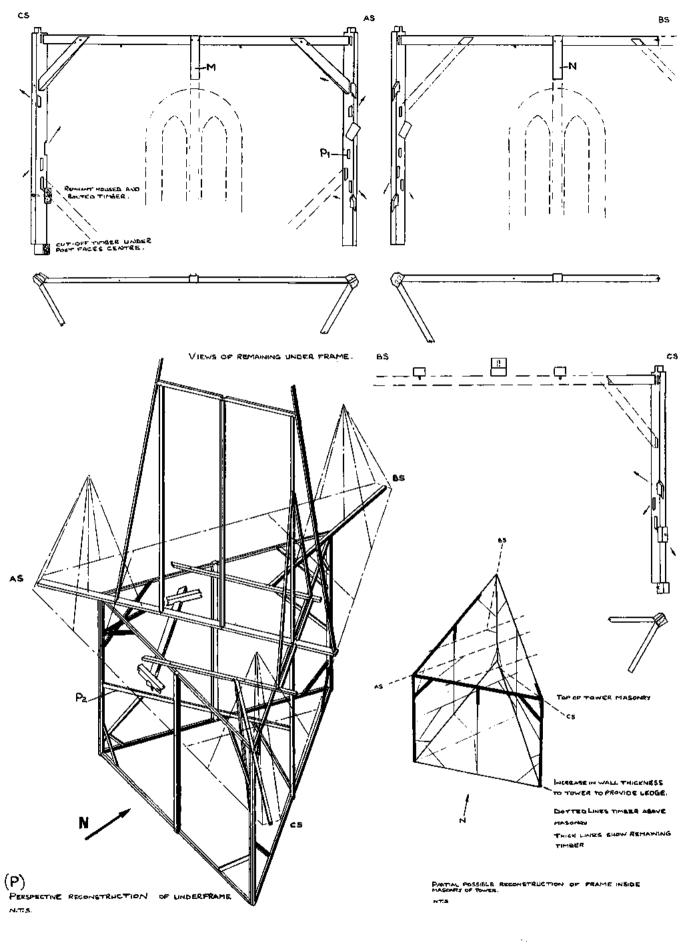
This has produced an exceptionally strong structure that still maintains its form and alignment after a life of some 700 years. This is more amazing when one considers the hard times recorded in its life and the fact that once or twice each century the laths were ripped off and a fresh covering of oak shingles applied.

The 'wheel' at the top of the first lift is a superb piece of carpentry (Plate 5), a gem of technical achievement which requires an explanation to its construction (Fig. 5 Details). The six spokes are in fact four sections, two sections extending the full width of the spire, and two half-pieces. The first, which extends

the full width of the spire, is mortised for the top of the first mast section. In the top half, a halving joint is cut at 60° over the centre point. A similar member is halved over the top to form a cross, with the second lift spire mast mortised into its top face. The final two spokes are separate pieces of timber (Fig. 5 plan C & CS). On each side of the 120° angle between the first two spokes a cross piece is housed and pegged to them (Plate 5). The final two spokes are tenoned into these pieces at 90° to complete the wheel. The cross pieces have a secondary function in bracing and controlling the position of the two crossing arms. Into the soffit of each spoke, towards the outer ends, are mortises for the vertical frame posts. Each of the full width spokes at the first lift has, including the halving for braces, a total of twelve joints not including the housings for the cross pieces (Fig. 5).

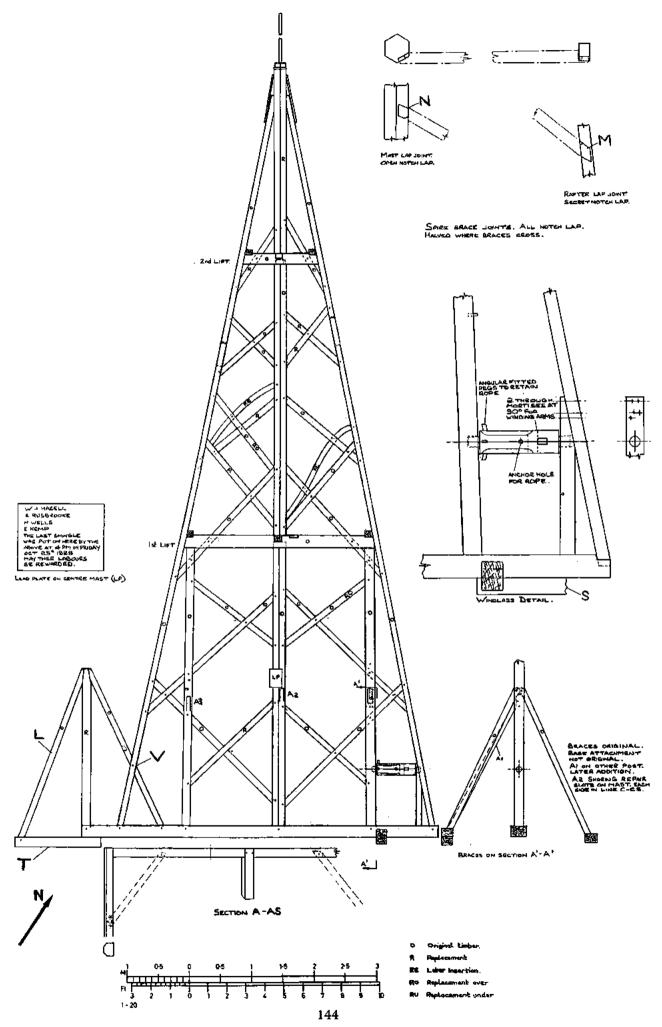
This has produced a centre construction that maintains maximum strength to all timbers. The wheel is completed with the hexagonal rim already explained.

Fig. 3 [opposite] Detail of remaining underframe. Perspective reconstruction of underframe.





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The hexagonal wheel is repeated on a smaller scale at the second lift. The general construction through the second lift is similar except for the vertical posts to each spoke which are not needed due to the much reduced cross-sectional size.

The spire brace system is arranged to cross and be halved into each of the spoked frames at the two lifts. This provides extra stability at the break points in the mast. The final lift has a replacement mast dated 1812^8 but existing joints and halvings on the wheel and rafters show the more limited bracing required to a smaller cross-section.

Within the structure of the spire and underframe it was noticed that only a minimum of carpenters' assembly marks appear on the construction. On the remnants of the underframe some marks were found on a brace and the top-plate of the structure. None were found on the corner posts. On the spire even less were found. The first lift mast has '1,11,111' on one face to one set of braces. One mark was found in the second lift. These appear to be the only visible marks and no record was made.

The spire rafters are scarfed as needed to reach the total height (Fig. 5). Most of the main rafters are in two pieces as are the lesser intermediate rafters which end at the top of the second lift. The final lift has twelve main rafters which meet at the top of the mast. The area where the rafters meet the mast was covered with shaped oak boards 0.76m (2ft.6in) long to form a wooden cowl (Fig. 1M) around the mast.⁹ Inserted into the mast top is a wrought-iron spike to support the elaborate finial and weather vane (Fig. 1). This must date from the mast replacement, and a plate in the tower also records the regilding of the vane in 1900.

The carpentry and layout of the spire contains many features of interest. Some are original, some later and many have been lost by later changes which can only lead to supposition as to the original detail. What one must understand from this spire is the exceptional detail and quality in all points of design and technical construction.

Other features

Situated across the width of the east wall on the main spire is a rope windlass (Fig. 4). This consists of a baulk of squared timber with turned spigots on each end. The spigots locate in holes in the vertical frame post and an added vertical timber running from the spine up to the main intermediate rafter. It has two through mortises at 90° for winding arms and a hole through which the rope would be anchored. To contain the rope on the windlass, angularly-placed rectangular pegs are fitted at the inner end (Fig. 4). The position astride the wall at first seems unusual and not practical. When one considers the construction sequence of the spire it shows that the windlass is built into the first framed and braced section to be erected.

This provided an early stable structure plus a good operating area on the wall top. With pulley blocks tied to the frame, materials could be easily lifted through the centre of the tower. Scaffolding above, as would be used for shingling, would allow lifts above the top of the walls. It could not be used to lift from outside the tower walls as this wall adjoined the nave.

The mast sections, formed to hexagonal shape, are exceptional pieces of carpentry, the first two sections being original and the third a replacement. Each notched lap joint on the masts is cut square into the hexagon face (Fig. 4N). Thus, if normal preparation techniques were used, with the mast lying on the ground, all joints were cut square to a horizontal face. The notched lap joints are all cut as if the lapping timber would run parallel with this face but were in fact used for the next adjoining face. The braces actually leave the faces at approximately 30° and the lap of the brace is cut at an angle to fit the joints. The final assembly produces the same visual impression as a secret notched lap joint with parallel assembly.

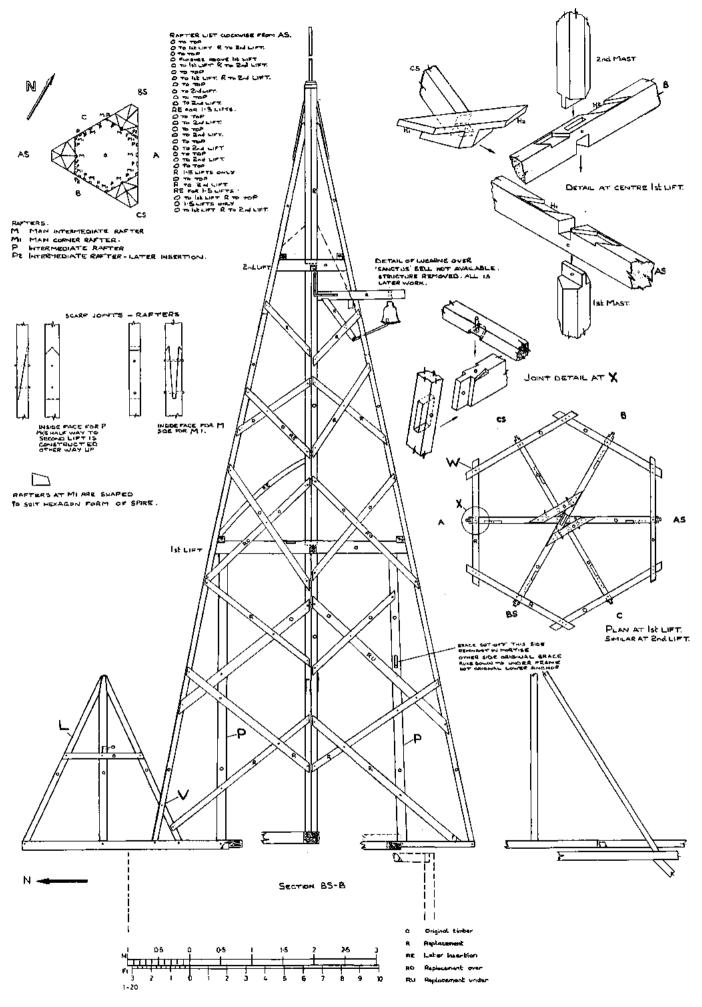
Where the angular side spines from the spirelets (Plate 3) meet the two side beams (Fig. 2W), and the two cross members at the west end meet the central spine, the mortises are cut oversize to allow a radial assembly (Plate 4). The open portion of the mortise was then infilled and pegged to lock the timbers in position. No immediate reason in the present frame layout explains this. The floor assembly now in place is much modified and has obliterated the technical reason for this type of mortise and tenon joint. The only clue is in the south-western spirelet. The massive side planks may have been jointed to the cross-members (Fig. 2V). This would have produced a triangle with the main spine and required radial assembly of at least one of the joints. As no form of triangulation exists in the other two spirelets the joints here remain a mystery.

The consideration of the carpenter for his work is shown in the northern spirelet where the timber forming the cross-arm of the cruciform base has a very twisted grain structure. To ensure sufficient strength to support one of the main spirelet rafters, he cut back the timber and scarfed on a good end (Fig. 2Y). This appears to have happened on both ends but is shielded on one side by later modifications and is also shortened to allow a later replacement timber to pass.¹⁰

The rafters, all of good section, from about 0.10m (4in) to 0.155m (6in) face by 0.09m (3in) to 0.115m (4in) depth were scarfed as required at varying heights

Fig. 4 [opposite] Section spire frame SW-NE. Detail of windlass, initial frame bracing and rafter braces.

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(Fig. 5). The type and direction of the scarfs depended on their place in the structure. The corner rafters have scarfs in line with a face to resist outward movement (Fig. 5M1). The main intermediate rafters were scarfed at 90° to the face to resist side movement (Fig. 5M), these being the first rafters erected in the assembly sequence. The practicality of this is shown by the fact that none of the scarfs on these timbers has seriously failed. On the intermediate rafters infilling between the twelve main rafters, the scarfs (Fig. 5P) are less sophisticated and the simpler form is reliant on pegs to maintain alignment. As these were not main structural timbers the need for a more sophisticated scarf was not essential.

Later alterations

At the top storey of the tower, a maze of timber of varying ages, with some re-arrangement of original timbers, reflects the many changes resulting from the good and bad times in the life of the spire. The last main changes date from the Victorian era and involved the replacement of rafter beams, or only beam ends in many cases (Fig. 2). All of these now have the outer end finished with a stepped roll moulding and form a consistent perimeter around the tower eaves (Fig. 2R). Nailed between these and the rafters are sprocket ends to flatten the eaves angle of the roof. What this end form and detail was before this time is lost, as is whether an outer wall plate extended around the tower. Externally, immediately under the rafter beams a moulded wood frieze is bolted to form a clean line with the masonry of the wall (Fig. 2D). The moulding consists of a repeated continuous half pyramid decoration on the outer edge.

The floor frame has been further reinforced by the placement of large horizontal timbers mainly in line with walls and bolted across the rafter beams. From these ashlar pieces have been fitted, nailed between these timbers and the rafters (Fig. 2Z).

Two very interesting pieces of heavy square section timber have been used to bolster the base of the west vertical post on the main spire (Fig. 2E). One has a cut end that implies some form of angular fitting, and has two mortises in one face at 1.525m (5ft) centres and an angular slot aligning with the cut end. The other, somewhat shorter, has one mortise and an angular slot. Could these relate with the timber (Fig. 2T) fixed in the masonry, within the area of the lower subframe, possibly to support the original bells? On the top face of this timber, near each wall, it has unweathered shadows where other timbers, housed over, but not pegged, ran approximately parallel with the inside walls of the tower just above window level. These, with perhaps an underframe from the mortises, would be suitable to mount tolling bells as still used on the continent of Europe.

No visible signs remain of any attachment of the spire to tower other than fishplates nailed to the remains of the underframe, and the Victorian infilling with brick and masonry of the areas between each rafter beam.

From the underframe construction discussed earlier one could see that this would effectively secure the spire within the tower. What appears to be left now is a spire sitting atop a wall with nothing but weight to support it!

The workers who last re-shingled the spire in 1928 left their names on one shingle batten, and a lead plate on the mast stating:-

W J HAZELL, A RUSBROOKE, H WELLS, E KEMP THE LAST SHINGLE WAS PUT ON HERE BY THE ABOVE AT 4PM ON FRIDAY OCT 25TH 1928. MAY THIER (sic) LABOURS BE REWARDED.

As the shingling lasted 64 years one can say that they did a good job, and we trust the new riven oak shingles fitted in July 1992 will give equally good service to this unique and wonderful spire. The present workmen have maintained the tradition and have left their names and date on another shingle batten.

Discussion

In conclusion one must say that the only known piece of carpentry showing a similar form of construction to the All Saints' spire is the south-east spirelet on Canterbury Cathedral. This is a square format tower and a spire with broached corners to form an octagonal shape. It has the main spine with vertical posts rising to a cross-member which is repeated four times and produces the spoked wheel at the first lift. The date for this is given as 1184 or later (Hewett 1985) based on carpentry techniques, and by 1184 in the account of GERVASE the monk (Willis 1845).11 The basic form of the sectional construction is also generally described as typical 11th/early 12th-century wooden bell frame construction.¹² If this is accepted, it could imply an earlier date for the Maldon spire, or that the carpenter had seen the Canterbury spire and used it as a base for his own hexagonal design, which technically is better. The use of generally square straight timbers throughout the spire and subframe implies two main points. One is that the construction was before the end of the 13th century and almost certainly earlier. The second is that the trees were fast grown from managed

Fig. 5 [opposite] Section spire frame N-S. Detail of frame at 1st lift. Rafter positions and rafter scarf joints.



Plate 5 Wheel centre at first lift showing crossing spokes, housed tying pieces with spokes mortised in. Spire braces passing through wheel with halved and pegged joints. Base of spire mast for second lift controlled by these braces from below.

woodland. This is confirmed by investigations carried out to attempt tree ring dating of the timbers. No pieces were found with sufficient growth rings to attempt a study by this method.13 The use of oak which is quick grown, by emphasising the late wood with more fibres, produces an increase in strength. A ring-porous wood such as oak gains most from this fact and a growth rate of 6-10 rings per inch produces optimum strength.14 A spire is required to stand straight and true. Any weakness in design will cause deflection in vertical slope or twist. Maldon spire is still straight and true, helped by the cross-bracing employed in its design. This is based on the principle of one longer brace passing through three timbers and its crossing brace passing through two timbers. This provides extra reaction to bending and twisting and is similar to another example in Essex of a similar age.¹⁵

All these and the previous description point to an extremely knowledgeable, highly technical master carpenter who knew his wood and the best way to use it. Who he was, who employed him, we do not know. It is thanks to his skill that we have the benefit of a unique structure worthy of the highest praise.

Acknowledgements

The opportunity to examine All Saints' spire in detail arose from the complete re-shingling of 1992.

This report bears heavily on the help and assistance given by English Heritage and Essex County Council; the Church of All Saints' and the workers from Bakers of Danbury for allowing me freedom of access; Cecil Hewett for useful comment and crawling with me under the bells looking for clues to the underframe; and to Mary Edman, an American ICOMOS student, who bravely assisted in surveying the spire to enable these details to be recorded.

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Notes

- 1. W.J. Petchey (1983) 'The Parish Church of All Saints', Maldon'. Maldon Archaeological Group Bulletin. The church was confirmed by Richard I in 1189 to the canons of Beeleigh Abbey. It is thought that All Saints' may have been among the foundation endowments when the Abbey was established earlier in the century by Robert Mantell.
- 2. L.F. Salzman (1952) Building in England down to 1540. Page 383 refers to an inquiry in 1245 to decide if it would be to injury of town or Abbey at Winchcombe if the King should allow the rector to lengthen the church. The finding was that "two carts would not be able to pass, and this would be very much to the damage of the town in fair-time". Similarly the following year the King allows the Prior of the Abbey to extend the chancel provided the Abbey road remains thirty foot broad and the aisle provided the highway remains eighteen foot broad. At Maldon we had an important market and All Saints' was a market church. Similar controls could have decided the layout of the church.
- 3. P. Morant (1768) The History and Antiquities of the County of Essex.
- 4. D.D. Andrews. Notes on the masonry of All Saints' tower in the Essex SMR.
- 5. Sir Banister Fletcher A History of Architecture: The Lancet. (1896) Considered from 1189-1307 in the early English period and the start of Gothic architecture — which was the first break from the round designs of the Norman period.
- 6. W.J. Petchey (1991) A Prospect of Maldon 1500-1689.
- 7. C.A. Hewett. Verbal comment on possible date on first seeing the design of bolt used to hold beam to post.
- 8. Top section replaced has date 1812 carved into it with the

name H. HAYWOOD.

- 9. It is disconcerting to see perfectly good material scrapped in repair work and replaced with new material, especially so when the original oak boards were more suited to the original design of the spire. The lead cowl on the top of the spire does not now form a smooth junction to the top row of shingles as was the case with the oak boards before work commenced. The repair of buildings is a necessity of time, but many parts can be reused, or repaired and reused. One sad point that emerged during the restoration of this spire was the lack of discussion, as work progressed, to the best and historically least damaging path to take with detail parts of the spire. By complaint, some items have been saved and reused but some, such as the boards have been needlessly lost.
- A similar example exists on the rear range jetty at 6/6a East Street, Coggeshall. An end jetty beam has a neatly scarfed end in the original construction.
- 11. C.A. Hewett English Cathedral and Monastic Carpentry. Drg. page 140. Shows spoked wheel, vertical timbers to spokes, secret notched lap joints of same shape as Maldon and interestingly no detail of an outer wall-plate to support the rafter beams.
- 12. H. Braun (1951) An Introduction to English Mediaeval Architecture.
- 13. Investigation by Tree Ring Laboratory of the Museum of London Archaeological Service.
- A good introduction to timber and its use can be found in "TIMBER" by Rik Middleton, Argos Books Ltd. 1989.
- 15. The Barley Barn at Cressing Temple has this form of cross bracing in the horizontal plane on the frames to each side of the great doors.

Essex history from church plate

by the late J. Horace Round

[NOTE. J.H. Round (1854-1928) joined the Essex Archaeological Society in 1884, became a member of Council in 1885, and was president 1916-21. Between 1885 and 1928 he contributed to every volume, except one, of the Society's *Transactions*, a total of 167 items.¹ Drafts of many other articles and notes relating to Essex were found among Round's papers at his death. They were given to the E.A.S., which undertook to publish them in the *Transactions*.² Between 1928 and and 1937 eight of them duly appeared, in the New Series volumes xix, xx, and xxi.³

In 1958 the Rev. G. Montagu Benton, then editor of the Transactions, asked me to prepare the remaining papers for publication, and in 1961, after his death, Council confirmed the invitation. The task, delayed at the start by illness, proved unexpectedly difficult, because many of the papers were incomplete, or were disarranged, and because Round's handwriting, from his later years, is not easy to decipher. Two of the papers originally listed had been lost before 1958. A few of them turned out to have been published already; others are no more than fragments; at least two have been superseded by publications of other scholars. There remain 21 articles and 8 short notes, mostly on medieval topics, which are complete, or substantial enough to be useful. It is intended to publish these in *Essex Archaeology and History*, with the aid of the Publications Development fund which the Society has launched earlier this year.

The book on Essex church plate⁴ to which Round refers in the following article was given a bland and somewhat superficial review in the Society's *Transactions*⁵ by William Watt, a former Keeper of Metalwork at the Victoria and Albert museum.⁶ Round's paper, while correcting one or two errors in the book, is mainly intended to demonstrate the importance of church plate as a source of Essex history.

Round's literary style, fashioned by a classical education at Oxford in the 1870s, now seems orotund; and as a scholar of international stature he is inclined to be condescending. But his devotion to Essex and to our Society is disarming. In editing his paper I have omitted a few short passages, and added several footnotes, distinguished by an asterisk *. W.R. Powell]

In venturing to offer some observations on a subject so far from my province as the church plate of our county, I hope members of our Society may not deem me an intruder. As the oldest member of its Council, I may, perhaps, be allowed to express the admiration which we all must feel for the noble volume on The Church Plate of the County of Essex that, in spite of difficulties, has now been successfully many completed, and for the learning and labour of those to whom we are indebted for a work of which the archaeologists of Essex have good reason to be proud. Dedicated fittingly to the loved and honoured memory of a former president of our Society, the late Bishop Stevens,⁷ it is enriched by the admirable photographs taken by our president, Canon Galpin.⁸ It is certainly not too much to say that, without this wealth of illustration, the subject of this volume could not have

been adequately dealt with, nor could its readers have formed any just conception of the beauty and interest of our church plate, or of the amazing variety of the pieces here figured. For some of them must originally have been fashioned for secular use, while others illustrate the skill and taste of the great Elizabethan silversmiths, the doctrinal changes of Tudor days, and even the deplorable lapses in taste which occasionally led the possessors of ancient silver plate, not only secular but sacred, to have it deliberately altered, or even wholly changed, in accordance with the fashion of the day.

The vicissitudes to which church plate has been exposed in the past are almost incredible: in fairness, however, we have to remember that its ex officio custodians had often no proper receptacle for its safe preservation. This difficulty is much increased now that genuine old silver has soared to so high a price. One is glad to see that the generous action of Mr H.W. Lewer, to whom our Society was already much indebted,9 in securing the Pattiswick cup and cover (p. 176) from the indignity of sale in a public auction room, is duly recorded; nor are the efforts of Mr Leveson Gower,¹⁰ to which is due the similar rescue of a cup belonging to Wakes Colne (p. 188) left unmentioned. The former pieces 'had been alienated since 1887', while at Pentlow (p. 169), even 'since the particulars... were returned the pewter flagon (dated about 1700), has been stolen from the church.' One of the most helpful features of the index to this volume is the classification under 'Plate, church', of cases in which it has been alienated, altered, changed, converted, repaired, restored, and finally, sold or stolen. Of this last calamity there seem to have been some five and twenty cases. We read, of a parish in south Essex,¹¹ that a former incumbent, in comparatively recent times, sold the old plate belonging to the parish: he was, however, compelled to redeem it again, and it was given back to the church, with the exception of the chalice, which is now doing duty in an episcopal church somewhere in Scotland. I select this example on account of a strange coincidence. For in the room in which I write, I look out upon a church in a modern south coast town¹² which possessed, until recently, 'a very large and handsome' almsdish of silver with the Edinburgh hallmark, which is assigned to c. 1616-42. It was given to the parish of Duffus (Moray, Scotland), by John Guthrie, its rector. Eventually it was acquired 'by

purchase in London in recent years.^{'13} Another instance of alienation in Sussex, similar to these met with in Essex, is that of a silver cup (1661) actually inscribed as having been given to the church of Glind (Glynde) in 1671. It was lost afterwards until discovered in a Norwich shop in 1892. It was then purchased and restored to the church of its dedication.¹⁴

In view of these deplorable instances, the value of such an inventory as this volume provides ought to be self-evident. Moreover, it is bound to arouse the interest of those to whose custody is entrusted the silver plate of our churches, in the objects committed to their charge. Apart from their intrinsic value, they afford quite an education in the development and artistic merits of the silversmiths' work in this country, and in the history of their craft. The ascertainment of their names and dates, in which we have yet so much to learn, will undoubtedly be much facilitated by the publication of the first-hand evidence afforded by this volume; but the subject of their marks and periods is not within my province.

There is, however, one aspect of the study of our church plate on which I may fairly claim to write with special knowledge. This is the evidence supplied by the inscriptions or armorial bearings found upon the church plate, or the records relating thereto, for the history of Essex families or the form of Essex place names. Let me take an instance in point. When our Society visited Woodham Ferrers in 1899, some discussion arose as to the name and history of the very attractive Tudor house which has long been alternatively known as 'Edwards' or 'Edwins' Hall. To Mr A.B. Bamford we are indebted for the charming view of this ancient house which appeared at the time in our Transactions.¹⁵ Our late member, Mr Chalkley Gould,¹⁶ contributed some notes on the mansion,¹⁷ in which he pointed out, of this charming specimen of Elizabethan architecture, that 'perhaps the special interest in the house centres in its supposed connection with Edwin Sandys, Archbishop of York.' Mr Gould proceeded to explain that, having escaped from the Tower and from the clutches of his sanguinary sovereign, he returned to this country on Elizabeth's accession, and successively became Bishop of Worcester (1559), Bishop of London (1570) and Archbishop of York (1577). Dying in 1588, he left a widow, 'Ciceley', who died in 1610, and whose interesting monument is still to be seen in the church of Woodham Ferrers.¹⁸

Mr Gould added, in conclusion, that:

The traceable connection of Edwin Sandys with this house seems principally to rest with the residence of Cecilie, his widow, here... and one can hardly help wishing that a local archaeologist would investigate the subject and tell us whether there was a more intimate connection with the archbishop than we are able at the moment to trace, or whether there is more to link it with the family of Wilford... than with the life of Edwin Sandys. Thereupon the late Mr E.A. Fitch, as being a local archaeologist, said that he 'had failed to find any connection between Edwin Sandys and the county of Essex except through his wife or wives.' He added that 'there are five Wilford pedigrees in the Harleian *Visitations of Essex*, and he believed it was her Essex connexion rather than her husband's that brought her to Woodham Ferrers.'¹⁹

Our indefatigable Hon. Treasurer, the late Mr W.C. Waller,²⁰ was the next to investigate the matter. On examining the registers of Woodham Ferrers in 1901, he found that they contained no entries relating to the Wilford family, but that, in the volume which dates from 1588, 'some half a dozen entries related to that of "Sandes"'. Of these, the first, which is found under 'the same year' [1558] records the burial of 'John Sandes, gentleman' on the 21 February.'21 Now on turning to the Essex heraldic visitation assigned to 1558, we find a John Sandes of Woodham Ferrers, son of a William Sandes, also of Woodham Ferrers.²² This implies that, contrary to what was stated at our Society's meeting, a family of Sandes was actually resident at Woodham Ferrers. It is at this point that the study of our county's church plate comes to our assistance. In 1914 Dr Dickin of Brightlingsea contributed to our Transactions a paper on the 'Embezzled church goods of Essex.'23 It is somewhat difficult, if I may say so, to distinguish between the several documents relating to this matter under Henry VIII and Edward VI. The documents dealt with by Dr Dickin are described by him as found in the Essex portion of 'S.P.D. Edw. VI, vol.v, no.19', and as referring to the goods which the churchwardens and parishioners had sold by 1548. Referring, however, to these 'certificates of churchwardens' as preserved among the State Papers Domestic of the reign of Edward VI in the Public Record Office, vol.v, no.19, the introduction to this stately volume²⁴ tells us that these certificates were 'drawn up in answer to specific enquiries made in 1552 as to what had become of the goods of the church that had been "embezzled" since the inventories of 1549 were made.'

Let us now turn to pp.159-60 of the new volume, where we read in the 'Summary' of the church plate in the deanery of Wickford, of 'one or two more old documents, which supply further information respecting the church plate in certain parishes in the deanery...' Of these we are told that they 'are the "certificates of the churchwardens," included among the State Papers of Edward VI (vol.v, no.19 in the Public Record Office) shewing the vessels and other property of the church which had been sold or made away with previous to the year 1552.' The reader must not imagine that I am here hypercritical about the date of these returns: my only object is to ascertain accurately the year in which a 'John Sandis, gentleman' is found acting as churchwarden at Woodham Ferrers; for this is a notable addition to our knowledge. I will place here the two manuscripts side by side:

Dr Dickin (p.161)

Wodeham Fferrvers

Church Plate of Essex (p.160) Wodeham Fferryes

Robert Styleman, Richard Newton churchwardens doe present that aboute three yeres agoo John Sandys gentleman and William Pirrs beinge churchwardens, dyd sell a broken bell [&c.]

Robert Styleman, Richard Newton churchwardens doo present that aboute three yeres agoo John Sandis, gentleman and William Pirrs beinge churchwardens dyd sell a broken bell [&c.]

Whether the right date here should be 1548 or 1552,²⁵ the year in which John Sandis was churchwarden of Woodham Ferrers three years earlier is, it will be seen, carried back by this evidence to a date substantially earlier than that at which, according to the speaker at our Society's meeting in 1899, the name Sandis is first found in connection with the parish. My own conclusion, therefore, is that this John Sandis was identical with the John Sandis, gentleman, of Woodham Ferrers, who is found in the Visitation pedigree and with the 'John Sandes, gentleman', whose burial on 21 February 1558/9 was found recorded on the register of Woodham by Mr Waller. Mr Robert Fowler tells me that he has investigated the question independently from the record evidence, and that he agrees with my own conclusion.26

A well-known Shakespearian scholar, the late Mr Haliwell Phillips, once told me that, in his opinion, the mischief wrought by 'municipal reform' among the ancient insignia of our 'unreformed corporations' was very imperfectly realised. In the early days of Queen Victoria, as in those of her immediate predecessors, many antique objects that would now be highly valued were thought 'old fashioned', and unworthy of an enlightened age. Even ancient monuments and buildings such as Colchester's Moot Hall, were apt to share their fate, and to be swept away. Some of them, as in that case, were even in their turn replaced by early-Victorian structures of what Morant would have loved to describe as 'neat' appearance. Churches themselves were demolished or denounced as in 'Gothic' taste. It is not surprising therefore, that even the objects they contained were altered or replaced. North Benfleet had a typical Elizabethan cup, with the date-mark 1564, which was 'mended and beautified at the expense of the Revd. Joseph Hazwell A.M., late rector,' as the inscription thereon and on one of the patens informs us.27 A second paten, inscribed as Hazwell's gift, was made by Gabriel Sleath, a silversmith of some note, and dated 1717. It is here stated that there is 'another paten by Sleath at Hutton', but there seems to be here some confusion. For under Hutton he is only mentioned as the maker of an 'almsdish' dated 1732.28 Of the three patens at Hutton, one is described as 'most probably a little later than 1650', but is definitely dated as 1652 on p.63, while the Introduction (p.vi) assigns it no less

definitely to 1648. It bears the arms of Thomas Cory, who, we read (p.64), was admitted to the Inner Temple in November 1737 [*sic*], settled at Hutton, where he died in 1656. Morant makes him die on 16 December 1656, aged 65, but gives no other date.²⁹ As for Jospeh Hazwell, rector of North Benfleet, he had obtained the living in 1685 and died in 1733, having made his will early in that year: in it he bequeathed £5 for 'exchange of communion plate.'³⁰

To criticise as it deserves such confusion as has been noted in the previous paragraph might be thought unkind; but it would not be right to ignore the fact that it throws doubt on the editor's competence and care in cases where we have no means of checking the statements he makes. In another case he has unconsciously applied an entry in the archidiaconal records first to Kelvedon Hatch and then to Kelvedon by Witham, with the result that he asserts that the 'cup and cover' given by Mr Luther to Kelvedon has 'disappeared' from from that parish since 1683, although they never were there.³¹ The epigram to Sir Boyle Roche reminds us that a man 'barrin he's a bird' cannot be in two places at once, and, as the above cup and cover were at Kelvedon Hatch in the donor's custody in 1683,32 and indeed, are still there, it is only the editor, surely, who would assert that 'what they may have seen is impossible to say', after describing them fully on another page.

I will now give another illustration of the value, for Essex family history, of the study of our church plate. Morant devoted less than a column to a house whose gifts to its parish church are now its chief memorial. This is that of the Chibbornes of Messing, who acquired that manor, with the rectory and the advowson of the vicarage, in the days of Elizabeth I, from the spendthrift Earl of Oxford.33 These were in the Crown after the Dissolution, until Henry VIII granted them to be held in capite by John de Vere, Earl of Oxford. Morant could only begin his account of the Chibbornes with the inquisition post mortem of 1606, when Charles Chibborne, serjeant-at-law, afterwards knighted, succeeded his father Christopher in this estate.³⁴ Norden, however, shows that the Chibbornes were already holding it in 1594.35 Sir Charles, who had married three wives, like his father before him, left a widow Margaret, who, as his executrix, presented, in 1620, a vicar with the somewhat ominous name of Nehemiah Rogers.³⁶ At the death of Sir Charles his successor was a boy, who not only bore the singular name of Hanameell, but gave it to two of his sons.37 This name, like that of Nehemiah Rogers,38 is suggestive of Puritan sympathies, but his gifts to his parish point in the opposite direction.

We read, of its church plate, that Messing 'is fortunate in having been presented with a set of handsome and valuable plate at an early period, and has also been successful in preserving them through all vicissitudes up to the present.³⁹ The details of this munificent gift are left, however, in some doubt. On p.293 we read only (under 'Caroline plate') of 'Messing, a pair of Cups with their Covers (1634)'; but in the full list (p.285) we find not only a third, and much larger paten, but two noble flagons, all included in the Chibborne gift, and bearing the Chibborne arms. On collation of this list with the 'Chronological List' (p.330), we find the third paten and the two silver flagons duly included in the 'Chibborne gift' (1634). Even here, however, there seems to be some confusion. For although the two flagons are thus correctly included on p.330, the detailed list under Messing (p.285) describes them as bearing the Chibborne 'armorials', but as of the same date as the fourth paten, viz. '1841.'

Now comes the question of the donor: by whom was this 'set of handsome and valuable plate' actually presented to Messing church? It bears, apparently, no name; but the arms borne upon it are blazoned as those of Chibborne impaling Newman. This is sufficient to identify the wife as Mary Newman, daughter of a Newman of Newman Hall, in Quendon (Essex). Such, at least, is Morant's statement, combined with that in the Heralds' Visitation in 1634.40 By a singular coincidence the date marked on the silver is the same as that of the Visitation. The donor, therefore, was Hanameell Chibborne, who was then a man of about 30, living at Messing Hall. In 1642 he presented a new vicar, John Preston, on the resignation of Nehemiah Rogers, who also then resigned the sinecure rectory of Great Tey, on being presented by Laud himself to the valuable City living of St. Botolph's, Bishopsgate, which, however, he lost in 1643.41 Rogers, who died in May 1660, made his will on 15 June 1653 (pr. 1 June 1661) at St. Osyth. In it he names his three sons, Nehemiah, John, and 'Hananiel'.42 It will be observed that the third son bore the name of the squire of Messing, who was about ten years younger than his vicar. Morant could not explain the descent of Messing after 1634, when, as I have shown, the Heralds' Visitation records Hanameell Chibborne as in possession. he could only say that 'soon after the Restoration we find it in the hands of the Luckyn family'. But an entry in our Transactions proves that Hanameell Chibborne, patron of the living, made his will in 1648.43

At this stage we are indebted, for a very important contribution, to the Rev. E.L.Y. Deacle, then vicar of Messing, who kindly transcribed from its parish register, in 1904, a note on 'Messing's contribution to the siege of Colchester'.⁴⁴ We there learn that the squire had died on 15 April (1648), and that his widow, 'Mrs Chibborne of Messing Hall', was contributing two trained men ('a corslett and a musket'), and two troop horses (for the 'auxiliary horse'), and Mr Preston, who was still vicar, one 'corslett'.⁴⁵

For the further descent of Messing we must turn to

a paper of my own on 'Some Essex family correspondence in the 17th century': it is based on letters in the possession of the late James Round, P.C., M.P. of Birch Hall, Colchester.⁴⁶

[These letters show that Messing was bought from the Chibbornes in 1650 for settlement on Mary, daughter of Sir Harbottle Grimston, Bt., who in 1648 had married (Sir) Capell Luckyn (Bt.), son of Sir William Luckyn Bt., of Little Waltham.⁴⁷]

It was through the marriage of Mary Grimston that the Grimston estates eventually passed to the family of Luckyn, under the will of Sir Harbottle Grimston. They took the name of Grimston with the estates, and thus became the ancestors of the lords Verulam. At the time of her marriage, Mary Grimston was a girl of fifteen; but, after presenting her devoted husband with thirteen children — six sons and seven daughters she lived to bestow on her grandson Charles Luckyn, 70 years after her marriage, the family living of Messing.48 When Mary and her husband set up housekeeping it was at Hutton, and one of the first of (Sir) Capell's letters to Mary was written from there. They did not, however, remain long at Hutton: in November 1650 Hutton was sold to 'Mr Cory',49 in whom we recognise the donor of the paten still preserved at Hutton.⁵⁰

As with the history of Essex families, and the descent of their estates, so also with Essex placenames: on both of these subjects we find ourselves assisted by the independent testimony of the church plate in the county. I have only space here for one illustration of the fact, but that illustration is decisive. It may not be generally known that Ugley, a parish in the north-west of Essex, has actually tried to persuade the world that its true name is Oakley. Smarting, I presume, under the infliction of four lines of doggerel verse irresistibly suggested by its name, it has so far succeeded in this amazing claim as to induce the Post Office authority to recognize 'Oakley' as the right form. This is the more surprising because there are two genuine Oakleys in Essex, named Great and Little Oakley, in the north-east of the county. One would surely expect the Post Office to be the last department to adopt a form that could only, in practice, introduce confusion. But, by whatever consideration the Post Office may have been influenced, the Ordnance Survey, happily, has not 'played ducks and drakes' with the historic place-names of the county.

Ugley has never changed its name from the time of the Domesday Survey to our own. In Domesday it is found as 'Ugghelea' (in Clavering hundred)⁵¹ and in Stephen's reign (c. 1145), as I have shown, as 'Uggeleia'.⁵² So again, Ugley church was known in 1428 as that of 'Uggele'.⁵³ What have Newcourt, in his record of the diocese, and Morant, the historian of the county, to say upon the name of Ugley? The former, in 1710, gives three forms: 'Ugley', 'Ugly', and 'Uggele', and knows no other.⁵⁴ As for Morant, whose work was

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Plate I 'Essex History from Church Plate'. Part of J.H. Round's manuscript c. 1926.

published in 1768, he heads his account of the parish by the name 'Ugley' only, as he also did in his index, although he admits that it is otherwise written in records 'Uggele, Ugghelea, Huggele'. Of Oakley as its name he admits nothing. He adds, however, these words:

But the true name, as we are informed by the Rev. P. Wright, was Oakley, which the Norman clerks according to their uncouth way of pronunciation, turned into Ugley.⁵⁵

It is obvious that he only went even so far as this out of politeness to the vicar; for he was careful to give the Domesday form (1086) immediately followed by that of 'Uggele' (1286 and 1314). It is clear, therefore, that the form 'Oakley' was nothing but an unsupported guess by the Rev. P[aul] Wright, who was presented to the living in 1740.⁵⁶ It is most unfair, therefore, to Morant to charge him with having been responsible for the change of Ugley's name to 'Oakley'. Yet this was done in *Kelly's Directory of Essex* (1906), where the account of the parish begins as follows:

Oakley (or Ugley). The name of this parish has been variously pronounced. Quercetum⁵⁷ appears to have been the name by which it was known by the Romans, from the locality abounding in oaks, and according to Morant the name has been corrupted, by the pronunciation of the Norman clerks, from Oakley to Ugley.

We now come to the evidence afforded by the church plate that this vicar was the culprit, the 'onlie begetter' of the monstrous tale that the true name was 'Oakley', which uncouth Norman clerks had previously changed to Ugley. Mr Wright, in order to strengthen his tale, actually went, we find, so far as to present to his church a cup (1632) and paten cover (1744) inscribed 'Ugley alias Oakley in Essex. Paul Wright M.A. vicar, 1744'.⁵⁸ We read that 'this affords yet another instance of misleading inscription dates'. But why? There is nothing to prevent the belief that the vicar instituted to the parish in 1740 gave both cup and cover in 1744, as the inscription states. He may have purchased the former for the purpose. What is clear is that he cannot possibly have given the silver mentioned, in a record, as being there in 1708. It is also obvious, unfortunately, that he used church plate for the very improper purpose of foisting on all who read the inscription he had placed upon it a name of his own concocting. In 1863 the name was further developed: the vicar and his two churchwardens presented a pair of cups and covers to the parish, which they styled, in the inscription thereon, 'Oakley, Essex', omitting altogether its true name. I hasten to add that those responsible for the statements in The Church Plate of Essex have done what they could to retain the historic name of the parish.

Notes

- * Listed in Family Origins, ed. W. Page (1930), pp. lxi-lxv.
 'Early charters of St. John's abbey, Colchester', which appears in this list was actually published in the English Historical Review, xvi. 721.
- * Family Origins, pp. lxv-lxvi. 'Presbyterian Essex', which appears in this list, had, in fact been published in Essex Review, xxxiii (1925), 28.
- 3. * Of those published in E.A.T. N.S. xix (1930), four are listed in Family Origins, p. LXV. That E.A.T. volume also includes a note on 'Ingatestone and Margaretting' (p. 128), and an article on 'An early rector of Stock' (p. 242). Volume xx (1933) includes 'The Thurrocks' (p. 41), and 'The Mantels of Little Maldon' (p. 254). Volume xxi (1937) includes 'Shellow Bowells and Torells Hall' (p. 25), and 'The Horkesleys of Little Horkesley' (p. 284).
- * The Church Plate of Essex, ed. W.J. Pressey. Descriptions by G.M. Benton, F.W. Galpin, and W.J. Pressey. Benham & Co. Colchester 1926.
- 5. E.A.T. N.S. xviii. 145.
- 6. * Who was Who, iv. 1212.
- * Thomas Stevens (1841-1920). First Bishop of Barking 1901-19; President of E.A.S. 1911-16. See: V.C.H. Essex Bibliography (1959), 128; G. Hewitt Hist. Dioc. Chelmsford (1984), 81; Who was Who, ii. 771.
- * Francis W. Galpin (1858-1945). Vicar of Hatfield Broad Oak 1891-1915; of Witham 1915-21; Rector of Faulkbourne 1921-33; President of E.A.S. 1921-6. See V.C.H. Essex Bibl. 87; Who was Who, iv. 419.
- * Henry W. Lewer (1859-1949). Of Loughton; Hon. Treasurer of E.A.S. 1929-49; contributed substantially to production costs of *Church Plate of Essex*. See E.A.T. N.S. xxv. 120;
- * Probably Arthur Leveson Gower (1851-1922). Of Hadleigh House; F.S.A. See Who Was Who, ii. 483.
- 11. * Childerditch, p. 61-2. See also V.C.H. Essex, viii. 23.
- * Round lived at 15 Brunswick Terrace, Brighton. The church to which he referred was St. Patrick's, Hove, in Cambridge Road.
- J.E. Couchman, 'Sussex church plate', Sussex Arch. Coll. lv (1912), 140.
- 14. Ibid. 163.
- E.A.T. N.S. vii. f.p. 407. * For A. Bennett Bamford-(1857-1939), of Romford, see V.C.H. Bibl. Suppl. (1987), no. 2107.
- * I. Chalkley Gould (1845-1907). Of Loughton. See V.C.H. Bibl. 90.
- 17. E.A.T. N.S. vii. 407.
- Visitations of Essex (Harl. Soc. 1878), 128. She was a Wilford, and, as such, connected with Kent, as with Essex. * For her monument see: R.C.H.M. Essex, iv. 173; Pevsner, Essex (1965), 435.
- 19. E.A.T. N.S. vii. 408; * For Edward P. Fitch (1854-1912), of Maldon, see V.C.H. Essex Bibl. 85.
- E.A.T. N.S. viii. 335-6. * For W. Chapman Waller (1850-1917), of Loughton, see V.C.H. Essex Bibl. 137.
- 21. At that period the year in the parish registers began on 25 March. This entry may be 21 Feb. 1558/9, i.e. 1559.
- 22. Visits. of Essex (Harl. Soc.), 99, 286.
- 23. E.A.T. N.S. xiii. 157. * For Edward P. Dickin (1871-1945), see V.C.H. Essex Bibl. 80.
- 24. Church Plate of Essex, p.iii.
- * The correct year was 1548: see Cal. S. P. Dom. 1547-80, 12. John Sandys would, therefore, have been churchwarden c.1545.
- 26. * See R.C. Fowler, 'Edwins Hall and the Sandys family', E.A.T. N.S. xviii (1926), 216. Fowler shows that Edwin Sandys's first wife, Mary, was the daughter of John Sandys of Woodham Ferrers. She joined him in exile abroad during Mary's reign, but died before January 1559, when he returned

to England. Cecily Sandys, who was buried at Woodham Ferrers, was Edwin's second wife. Long before either Round or Fowler wrote, the *D.N.B.* had pointed out that Edwin Sandys's first wife was 'daughter of Mr Sandys of Essex'.

- 27. Church Plate of Essex, 151.
- 28. Ibid. 63-4.
- 29. * Morant, Essex, i. 195.
- E.A.T. N.S. vi. 135. * See also: Newcourt, Repetation Eccl. ii. 135 (which wrongly names him as Harwell); Morant, Essex, i. 262.
- 31. Ch. Plate Essex, 284.
- Ibid. 136, * The donor was no doubt Richard Luther of Myles's in Kelvedon Hatch: see V.C.H. Essex, iv. 68.
- 33. Newcourt, Repertorium, ii. 416-17.
- 34. Morant, Essex, ii. 177.
- 35. J. Norden, Description of Essex (Camden Soc. 1840), 37.
- 36. Newcourt, Repertorium, ii. 417.
- 37. Visits. of Essex, 375.
- Rogers (1593-1660), however, was a Laudian: see the note on him in Davids, Annals of Evangelical Nonconformity in Essex, 156. * But he had Puritan friends, and held the livings of St. Osyth (1650-6) and Doddinghurst (1656-60) during the Interregnum: H. Smith, Eccl. Hist. Essex under the Long Parliament and Commonwealth, 147-8; D.N.B. For Round's interest in this period, see his 'Presbyterian Essex', Essex Review, xxxiii (1924), 28.
- 39. Ch. Plate Essex, 285.
- 40. Morant, Essex, ii. 177; Visits. of Essex, 375.
- Newcourt, Repertorium, ii. 417, 572; E.A.T. N.S. 49. See also: Davids, Evang. Nonef. in Essex, 156, 294-5; * H. Smith, Eccl. Hist. Essex, 311.
- 42. E.A.T. N.S. vii. 59. For the second son, John, see Davids, Evang. Noncf. in Essex, 272n. Born at Messing, he became an

Independent minister in Dublin, a Fifth Monarchy Man, a violent opponent of Cromwell, and finally a practising physician.

- 43. E.A.T. N.S. vii. 49.
- 44. Ibid. ix. 352.
- The John Hustler (or Hastler) of this list must be the John Haseler mentioned by Davids, op. cit. 295.
- 46. E.A.T. N.S. vi. 207. * Now E.R.O. D/DRg 1/123-45.
- 47. * This sentence in brackets has been added to bridge a gap in Round's manuscript.
- Morant, Essex, ii. 179. Mary Grimston was born in 1632, married in 1648, and died in 1718. The same Charles Luckyn was given the living of Pebmarsh by his brother: Morant, Essex, ii. 264.
- 49. E.A.T. N.S. vi. 213.
- 50. Ch. Plate Essex, 63.
- 51. V.C.H. Essex, i. 533.
- 52. E.A.T. N.S. viii. 329.
- 53. Feudal Aids, ii. 195, 197. * For Ugley see also P.N. Essex, 553.
- 54. Newcourt, Repertorium, ii. 609.
- 55. Morant, Essex, ii. 616.
- Ibid, ii. 619. Morant gives the date as 7 March 1739 (old style).
- 57. We are not told who was responsible for this further absurdity.
- 58. Ch. Plate Essex, 249. The book styles him 'the donor of the early cup and cover' and 'F.S.A.' an honour which does not surprise me. * Round's reference to the Society of Antiquaries is curiously waspish. In 1898 he had received a pressing invitation, apparently from the Society's Council, to stand for election as a Fellow of that society, accepted, but then withdrew on learning that there was an entrance fee: Soc. Antiq. Libr. Correspondence, J.H.R. to W. St. John Hope, 23 and 26 Jan. 1898.

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Beyond the 'Morant canon': some early historians of Essex

by W.R. Powell

For many years, as John Appleby recently recalled,¹ our Society has held an annual dinner in honour of the Rev. Philip Morant. That is fitting, for Morant's *History and Antiquities of Essex*, completed in 1768, is still in constant use. For over a century before 1768 a succession of scholars had been assembling materials for the *History*, but it was left to Morant to carry the project through to completion. He was a sound scholar and a skilful editor; he had taken the measure of his task; and, as he says in his preface, he had been granted 'beyond what I could expect, a continuance of life and strength.'

Essex historiographers, not unnaturally, have concentrated on what may be called the 'Morant Canon' — the work of Morant, his forerunners (Thomas Jekyll, John Ouseley, William Holman, Nicholas Tindal, and Nathanael Salmon), and the later writers (Peter Muilman, Elizabeth Ogborne, Thomas Wright, and Duffield W. Coller), whose histories of the county were derived from Morant. That is the approach taken by Edward P. Fitch and Charles F.D. Sperling,² later by Miller Christy;³ and, more recently, by Christine E. Cobbold, Geoffrey H. Martin and others.⁴ The Morant canon will always be of interest; but beyond it there is a large and rapidly-growing body of Essex historical writing that awaits analysis. The present paper is a contribution to such a review.

A visitor approaching Colchester is greeted by a sign proclaiming that this is the 'oldest recorded town'. In Britain, at least, the claim is a strong one, for Camulodunum appears in the histories of the Roman Tacitus (fl. c. A.D. 55-120) and the Greek Dio Cassius (fl. c. 155-230).⁵ Essex (Provincia Orientalium) is first mentioned in the 8th century by Bede, who narrates the conversion of its people to Christianity in 604, their relapse into paganism, and their reclamation by St. Cedd, who c. 653 built monasteries at Ythancaestir (Bradwell-juxta-Mare) and Tilbury. Bede also mentions the foundation of Barking Abbey (probably c. 666) by St. Eorcenwald.⁶ The Anglo-Saxon Chronicle contains many references to Essex, mostly in connexion with the wars of the West Saxon kings against the Danes.⁷ Particularly notable are Alfred's victory over Haesten at South Benfleet in 893, and Edward the Elder's Maldon campaign of 912, during which he fortified Witham. The battle of Maldon (991) is recorded in the Chronicle as well as in the well-known Old English poem.8 The battle of Assandune (1016), also mentioned in the Chronicle,⁹ is the subject of debate between those who locate it at

Ashingdon, near the Thames, and those favouring Ashdon, in north-west Essex.¹⁰

In the histories already mentioned, local references are incidental to wider themes, though some --particularly in Bede - are of great importance. This applies to most historical writing before the 16th century, but in post-Conquest monastic chronicles the local element becomes more prominent. The registers of Bury St. Edmunds Abbey relate that in the year 1010 the body of St. Edmund, the East Anglian king and martyr, was removed from Bury to London during the Danish invasion. It was taken back to Bury in 1013; during the journey it rested overnight in the manor house of Stapleford Abbots, where the owner was suffering from a lingering illness; following that visit he was miraculously cured, and in gratitude gave his manor to the abbey.¹¹ During the same return journey St. Edmund's body was accommodated 'at Ongar', where, says the Bury chronicler, writing c. 1300, 'a wooden chapel built in his name remains until today.^{'12} This statement probably refers to the church at Greenstead, which is only a mile from Ongar; and recent architectural research tends to confirm an 11th-century date for that church.13

A chronicle of Walden Abbey gives fascinating glimpses of 12th-century life and thought, centred on the lives of Geoffrey de Mandeville, Earl of Essex, and prior William, first head of the house.14 William of Canterbury's account of the miracles of St. Thomas the martyr sheds light on the early history of Thoby priory, at Mountnessing, and the cult of St. Thomas in the Brentwood district.¹⁵ The priory had been founded c. 1150 by Michael Capra or Chevre, predecessor of the Munteni family, from whom Mountnessing was named.16 Thoby priory was unique among Essex monasteries in taking its name from the first prior, Tobias. He ruled there for many years, was venerated for good works, and was credited with miraculous cures, using holy water from the shrine of St. Thomas of Canterbury. At Shenfield, for example, he cured two women possessed of the devil.

Another valuable source for early Essex history is the *Liber Eliensis*, a register compiled by a monk of Ely late in the 12th century.¹⁷ It includes narrative accounts relating to over twenty Essex parishes, besides copies of charters and other records. One entry describes an inquest of 1080 into the privileges claimed by Ely Abbey in the counties of Essex, Hertford, Huntingdon, and Bedford.¹⁸ Several of the inquest's jurors also appear among Essex tenants in Domesday book. Hamo *dapifer* in 1086 held 18 manors in the county.¹⁹ He was also sheriff of Kent, and a landowner in Woolwich, where he may have contrived to appropriate to his manor a piece of Essex, later called North Woolwich, which thereafter belonged to Kent until 1965.²⁰ Richard FitzGilbert was the Domesday lord of the honour of Clare, which included many manors in north Essex.²¹ Tihel de Heliun was a Breton who in 1086 held (Helions) Bumpstead.²² The *Liber Eliensis* also includes many references to Brihtnoth, ealdorman of Essex, the tragic hero of the battle of Maldon.²³ He and his family gave many estates to Ely, including Rettendon, which he devised to the abbey in return for its hospitality to him immediately before the battle.²⁴

William Camden's *Britannia*, published in Latin in 1586, and in English from 1610, tends to be ignored by Essex historiographers, perhaps because he equated *Camulodunum* with Maldon, and stated that Colchester castle was built by Edward the Elder. But he correctly identified the Roman *Othona* with *Ythancaestir*, and he set a standard for later writers by combining record evidence with local information and fieldwork; while his occasional descriptions of the contemporary scene are of permanent interest.²⁵ All these virtues enhanced by Philemon Holland's vivid translation are illustrated in his Essex section, for example:²⁶

A little below [Bartlow] standeth upon a hill Walden of Saffron, among the fields looking merrily with a most lovely saffron. A very good Mercat town incorporated by King Edward the Sixth, with a Treasurer, two Chamberlains, and the Commonalty. Famous it was in time past for a Castell of the Magnavilles (which now is vanished almost out of sight), and an Abbay adjoyning, founded in a place very commodious in the yere 1136, wherein the Magnavilles, founders thereof, were buried. Geffrey de Magnavilla was the first that gave light and life (as it were) to this place.

Camden goes on to quote a charter of the Empress Maud to Geoffrey de Mandeville,²⁷ and mentions Audley End, where Thomas Audley, Earl of Suffolk, 'hath begunne a magnificent building.' Close by, at [Great] Chesterford, was:

a town of far greater antiquity... which is now of the old *Burgh* the rusticall people call *Burrow Banke*, where remane the footings onely of a towne lying in maner dead, and the manifest tract of the very walls.

This reference to the remains of the Roman town appears to be little known.²⁸ Camden concludes his account of the district with a description of the saffron industry, introduced by a personal observation. 'The feeldes here on every side... smell sweetly and smile pleasantly with *saffron*...'. In quoting the evidence of his nose as well as his eyes, he was in advance of the present writer, who was reproached by one reviewer for failing to mention the stench of the Northern Outfall Sewer in his history of West Ham.²⁹

Britannia provides, for each county, only a brief guide: the Essex section of the 1610 edition amounts to 18 folio pages. A revised edition was published in 1695 by Edmund Gibson, later Bishop of London and patron of Philip Morant. He was assisted, in the Essex section, by John Ouseley (1645-1709), rector of Panfield, who had been for many years working on a full-scale history of the county. In acknowledging his help, Gibson added that it was Ouseley's request:

to all who are possest of any papers relating to Essex, that they would... please to communicate them. It is not long before the world may expect the work, if it meet with that encouragement from the gentry which an undertaking of this nature may justly require.³⁰

Ouseley, who in his later years was an alcoholic, never completed his history of Essex, but his notes were later useful not only to Morant, but also to another scholar, Richard Newcourt.

Newcourt's father, also Richard, was a country gentleman from Somerset and a friend of Sir William Dugdale, for whose Monasticon Anglicanum he had depicted religious houses; later he had drawn a detailed map of London, published in 1658, and thus of particular interest, as showing the City shortly before the Great Fire.³¹ The younger Richard (d. 1716), matriculated at Wadham College, Oxford in 1653, but never graduated.32 He became a notary public, and from 1669 to 1696 was registrar of the diocese of London. He is said to have been 'a nonjuror and a man of true integrity.' His Repertorium Ecclesiasticum Pariochale Londinense, subtitled 'An Ecclesiastical Parochial History of the Diocese of London', was published in two volumes, 1708 and 1710. The second volume is entirely devoted to Essex. For every parish there is a historical introduction, followed by a chronological list of incumbents and patrons which includes many biographical notes. Pre-Reformation religious houses, with their heads, are also included in the alphabetical sequence. The parochial introductions contain much information on advowsons, parsonage houses, and glebe, some of which does not appear in Morant's History of Essex.

In his preface Newcourt explains the scope of his book.³³

To write an exact Ecclesiastical Parochial History of a whole Diocese, will in the first place require an undertaker's travel to every particular parish, and nice inspection into such records and writings as are usually kept in the parish chest, or sometimes in private hands, as relate to the parochial church, and into the inscriptions and coats of arms on such monuments and glass windows in the same, as have yet escaped sacrilegious hands, and thence to collect such materials as are fit and adapted to the composure of such a work: but this requiring not only more leisure and cost than one in my circumstances could afford, but also good judgement and skill in antiquity and heraldry, to neither of which I can pretend, I hope will in some measure excuse any defect of this history if it be not so complete as may be expected.

However, in the next place, it requiring also the perusal of such records and monuments as are laid up in the principal registrary of such diocese, and I having had the custody of this diocese of London for near 27 years together, and having executed the office of principal Registrary of the same from August 1669 to May 1696 (at which time I voluntarily left it) have adventured to commit this ensuing history (however defective it may be) to the public.



Plate I Richard Newcourt (d. 1716). Engraved by J. Sturt. From Newcourt's Repertorium Ecclesiasticum Parochiale Londinense, vol. I (1708). E.R.O. photograph.

Newcourt goes on to say that he had often been obliged to search the diocesan records in answer to queries, and, having found there things that might be useful to the clergy, resolved 'to make a particular scrutiny', and to publish 'what acts have been advantageous, and what prejudicial to the parish churches of this Diocese for ages past, in as short a manner as I could.' When he had made some progress with the work:

A worthy and learned clergyman of this diocese, and one extraordinarily well versed in antiquities, especially of this county, named Mr John Ouseley, then rector of Panfield, since of Springfield Boswell and Little Waltham, in the same county, understanding what I was about, of his own accord (like a true friend and zealous promoter of a work of this nature) came to me at my office, informed himself of the manner of my proceedings, lik'd it, and lent me several manuscripts to assist me; but withal told me that he thought it would be requisite, to give a catalogue of the incumbents of every parish as I treated of it. This I look'd upon as a laborious task: however was resolv'd to undergo it.

In the introductions to each parish section, Newcourt cites his sources in marginal notes, or, occasionally, in the text itself. Information supplied by Ouseley is usually acknowledged by the marginal notes 'Coll. Cl. D.J. Ouseley.'34 Although these notes are not numbered, it is usually possible to relate them to particular statements in the text, from which it seems that Ouseley's material came mainly from 16thcentury public records: patent rolls, inquisitions post mortem, and chantry certificates. All those sources had been examined for Essex early in the 17th century by Thomas Jekyll, whose notes had been put at Ouseley's disposal by Jekyll's grandson.35 This suggests that Ouseley had not done much original research. But he had certainly worked on his material, for Newcourt mentions a manuscript book of Ouseley's 'intitled Essex Ecclesiastica, in which he hath inscrib'd in an alphabetical order, all the parishes in the county of Essex, and inter alia, to whose jurisdiction each parish belongs, and who are the patrons of the churches.³⁶

In a few places in the *Repertorium* Ouseley is quoted as an independent authority. Newcourt says, under Barnston parish:³⁷

My very good friend Mr John Ouseley... a great searcher into antiquities, especially those of this county, tells me that this village, nor anything like it, is in such transcripts as he has seen of Domesday Book, whence he concludes, that it was not in being, or wast, and that afterwards some of the antient family of Berners, or de Berneris, being owners of the land, gave the name to it, viz. Berneston, vulgo Barnston... further saying, that he finds by deeds in the hands of his neighbours, that it was very antiently possessed by that family.

Ouseley was right in emphasising the ancient connexion between this parish and the Berners family;³⁸ but he failed to realize that Barnston (*Bernestuna*) does, in fact, figure in Domesday Book, as a manor held by Hugh de Berners as a tenant of Geoffrey de Mandeville.³⁹ Unless the place had been given a new name between 1066 and 1086 — of which there is no evidence — it cannot have taken its name

from the Berners family.40

In his account of Faulkbourne, Newcourt quotes Ouseley at length:⁴¹

In the late additions to *Camd. Brit.* (after deducing some probable arguments from the situation of the place, and the remains of a large old Camp there, that the AD ANSAM was at Witham...) the author, my worthy friend Mr John Ouseley, tells me that, if those arguments be convincing, then 'tis probable that the stately Manor Place here, a mile from Witham, was formerly a *villa*, or country house of some noble Roman, and what renders the the conjecture more probable, is a silver coin of Domitian, found under the very foundation of an old wall partly of Roman brick by the servants of Edward Bullock Esq. lord of the manor.

The record of a Roman coin, while irrelevant to Newcourt's theme, is of interest, but Ouseley's remarks about Witham are worthless. As Morant observes drily:⁴² 'That hereabouts should be the station *Ad Ansam* is a mistake grounded on the false supposition that *Camulodunum* was Maldon, whereas I have plainly proved it to be Colchester.' The 'large old Camp' at Witham, mentioned by Ouseley, is now thought to have been an Iron Age hill fort, remodelled by Edward the Elder.⁴³

Ouseley's contributions to the *Repertorium* include also a paragraph on Mary Honeywood of Markshall, who had 367 descendants in her own lifetime;⁴⁴ and notes on Bruyns at South Ockenden,⁴⁵ the manors of High Ongar,⁴⁶ and Ouseley's own parish of Panfield.⁴⁷ None of them shows him to have been more than a plodding antiquary; but he was certainly generous in sharing his learning. Besides the tribute to him in Newcourt's introduction, there are in volume II at least 139 references to Ouseley's collections, under 111 parishes.

Two other scholars also assisted Newcourt in his work: Dr Matthew Hutton, and William Grimes.48 Hutton (1639-1711), formerly a fellow of Brasenose College, Oxford, was for many years rector of Aynhoe (Northants). He was a friend of Anthony Wood, and helped Henry Wharton in compiling Anglia Sacra (1691).⁴⁹ Like Ouseley, he never published anything himself, but his great antiquarian collection is in the British Library. He provided much material for volume I of the Repertorium, and some for volume II, including a list of the abbots of Waltham, which he had originally compiled for Wharton.50 William Grimes was an official 'of the Rolls' - the 17th-century equivalent of an assistant keeper of the Public Record Office. From Grimes's collection, says Newcourt, 'I have had a plentiful supply, especially of such things as have been alienated from the churches and and religious houses since the Reformation.' Grimes's contributions to the Repertorium were even more numerous than those of Ouseley, totalling some 200 in volume II.

Besides the unpublished material already mentioned, Newcourt made occasional use of official records belonging to other bodies, including the Dean and Chapter of St. Pauls for the 'Sokens' (Kirby, Thorpe, and Walton),⁵¹ and other places;⁵² the Archbishop of Canterbury for Bocking, Latchingdon, Southchurch and Stisted;⁵³ and the Dean and Chapter of Wells for Shalford.⁵⁴ Among private manuscript sources used were Silas Taylor's 'History of Harwich and Dovercourt',⁵⁵ and John Norden's 'Description of Essex' (1594), which is quoted in over 30 places in the *Repertorium*. Newcourt sometimes wrote from personal observation. Referring to the site at Colchester where Lucas and Lisle had been executed in 1648, and where, it was said, the grass never afterwards grew, he remarks:⁵⁶

Only thus can I speak of mine own knowledge, that being there in the years 1677 and 1680... I was shew'd this fatal place, and at both times there was no grass growing on it, but long grass growing by the sides and hanging over the edge of it; but having been there since, I found it is no more to be seen, for it then lay under a great deal of rubbish, thrown down from the castle wall.

In a few places Newcourt was able to supply information on matters of which he had special knowledge as registrar of the diocese. He records in detail the consecration of Billericay chapel in 1693.⁵⁷ More briefly, he mentions the scandal in 1675-9 at Mount Bures, where the assistant curate, Philip Havers, obtained the benefice by employing 'a layman, a chirurgion by profession' to impersonate him.⁵⁸ The purpose of the fraud was apparently to enable Havers, who was the son of a nonconformist minister, to evade his legal obligation to sign the Articles of Religion before being ordained priest.

In spite of the disclaimer in his introduction, Newcourt did obtain some help from local informants, in adddition to Ouseley. Under Copford he mentions the church repairs of 1690-1, which uncovered traces of the ancient wall-paintings; and he adds:⁵⁹

The doors of this church are much adorn'd with flourish'd ironwork, underneath is a sort of skin taken notice of in the year 1690, when an old man at Colchester... said that in his young time he heard his master say that he had read in an old history that the church of Copford was robb'd by Danes, and their skins nail'd to the doors, upon which, some gentleman being curious went thither and found a sort of tann'd skin thicker than parchment, which is supposed to be human skin, nail'd to the door of the said church, underneath the said ironwork, some of which skin is still to be seen.⁶⁰

At Leyton the vicar was the historian John Strype,⁶¹ who gave Newcourt much information, particularly on the recent rebuilding of the church and the vicarage. At Little Dunmow the living, a donative curacy, was in 1700, says Newcourt, 'in the gift of my worthy friend Sir Thomas May, Bt., lord of the manor.⁶²

For the parish introductions and the biographical notes much use is made of printed sources. A list of those that can be identified from the abbreviated references is printed below.⁶³ In the introductions Newcourt most often cites *Monasticon Anglicanum* and the *Baronage of England*, both by his father's friend Sir William Dugdale; John Weever's *Ancient Funerall Monuments*; and Camden's *Britannia* (1695 edn.) The main source for the biographical notes was Anthony Wood's Athenae Oxonienses, the lively book which caused Wood to be expelled from the university. The other printed sources, occasionally cited, include many well-known titles, among others now forgotten. Particularly notable are some early local studies: Dugdale's History of Warwickshire and Robert Thoroton's Antiquities of Nottinghamshire; William Somner's Antiquities of Canterbury and John Stow's Survey of London; Thomas Fuller's History of the University of Cambridge, and Anthony Wood's History and Antiquities of the University of Oxford. The list includes only one title particular to Essex: Thomas Fuller's History of Waltham Abbey.

The Repertorium has obvious defects, as Newcourt himself had pointed out. Since the parochial lists of incumbents were compiled almost entirely from the bishops' registers, there are relatively few entries before 1306, when the earliest register starts, or between 1642 and 1660. For Hornchurch, Writtle, and Roxwell, which, as peculiars of New College, Oxford, were exempt from episcopal jurisdiction, there are no lists at all. Throughout the work there are many gaps in the lists; and errors of transcription and printing are not uncommon. But the Repertorium is a work of honest scholarship and prodigious industry; and volume II, at least, is still in use after almost three centuries. Among some 270 subscribers to that volume were the archbishops of Canterbury and York; the bishops of Bath and Wells, Durham, Exeter, London, Lincoln, Rochester, and Winchester; many deans, archdeacons and canons; the heads of several Oxford and Cambridge colleges; the Lord President of the Council; and the Garter and Norroy Kings of Arms. Scholars subscribing included Edmund Gibson, John Strype, and White Kennett, the future Bishop of Peterborough. Among lawyers were Sir John Cooke, Dean of the Court of Arches, and many of the advocates of Doctors Commons. At least 45 subscribers were Essex men: mostly clergy, but including Sir Martin Lumley, Bt., then sheriff of the county.64 Such a list testifies to Newcourt's high reputation, and it is strange that Morant, who used the Repertorium extensively, does not mention it in the preface to his *History of Essex*, when acknowledging his debt to earlier scholars.

Newcourt's first volume was largely superseded in 1898 by George Hennessey's Novum Repertorium Parochiale Londinense. For volume II there are several printed supplements.⁶⁵ P.H. Reaney's Early Essex Clergy (1947), which incorporates additions by J.C. Challenor Smith and others, is particularly valuable for the 12th-14th centuries. Harold Smith's Ecclesiastical History of Essex under the Long Parliament and Commonwealth [c. 1931] supplies much new information, notably in its transcription of the returns to the Parochial Inquisition of 1650.⁶⁶ Dr Smith had previously published several papers on Essex clergy during that period.⁶⁷ His complete 'Sequence of the Parochial Clergy of Essex, 1640-64' survives in typescript.⁶⁸ Two substantial unpublished supplements to Newcourt's second volume are also preserved.⁶⁹ In spite of these necessary additions, wrote P.H. Reaney:⁷⁰

Newcourt remains the foundation of all our lists of Essex clergy, and when we consider the time at which he wrote, and the conditions under which he had to work, he deserves our grateful thanks for his industry and his accuracy. Only those who have searched through large numbers of manuscripts for specific information can fully appreciate the debt we owe to him.

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Notes

- 1. Essex Arch. and Hist. News, Sept. 1992, p.1.
- 2. See V.C.H. Essex, Bibliography (1959), 7.
- 'Rev. John Ouseley', Essex Rev. xxi. 132. For Ouseley's collaboration with Gibson and Newcourt see below.
- V.C.H. Essex, Bibliography Supplement (1987), nos. 143, 2575; W.R. Powell, 'Antiquaries in conflict: Philip Morant versus Richard Gough', E.A.T. 3rd ser. xx. 143.
- For references to Essex and its places in early narrative sources see: P.H. Reaney, *Place-Names of Essex*, 1, 218, 367 and *passim*; V.C.H. Essex, ii. 1f., 203f.
- 6. English Hist. Docs. c. 500-1042, 609, 635-6, 652.
- 7. Ibid. 171-2, 186-8, 194, 197.
- 8. Ibid. 213, 293.
- 9. Ibid. 227-8,
- 10. A. Green, Ashdon (1989), 143,148.
- 11. V.C.H. Essex, iv. 223-4.
- 12. Ibid. 60.
- 13. H. Christie and others, 'The wooden church of St. Andrew at Greenstead', Antiq. Jnl. lix (1979), 92.
- C.H. Empson and H. Collar, 'the book of the foundation of Walden Abbey', Essex Rev. xlv. 73, 147, 224; xlvi. 12, 88, 164, 227; xlvii. 36, 94, 150, 216; J.H. Round, Geoffrey de Mandeville, 38n; W.R. Powell, 'Norman Essex and its historian', Essex Inl. xviii (1983), 30-1.
- 15. Essex Jnl. xviii. 30.
- 16. J.H. Round, 'Thoby priory and Fryerning', E.A.T. N.S. xiv. 360; Reaney, Place-Names of Essex, 261.
- 17. Liber Eliensis, ed. E.O. Blake (Camden 3rd ser. xcii. 1962).
- 18. Ibid. 198.
- 19. V.C.H. Essex, i. 500f.
- 20. Ibid. vi, 8.
- 21. Ibid. i. 477f.
- 22. J.H. Round, 'Helion of Helion's Bumpstead', E.A.T. N.S. viii. 187.
- 23. Liber Eliensis, see Index.
- 24. Ibid. 133-6, 422-3.
- For Camden see S. Piggott, 'William Camden and the Britannia', Proc. Brit. Academy, xxxvii (1951), 199.
- Britannia (1610, English edn., in P. Holland's translation), 452-3.
- 27. Cf. Reg. Regum Angl. Norm. iii, no. 99.
- It is not mentioned by Morant, nor by J.G.S. Brinson in V.C.H. Essex, iii.
- 29. For West Ham see V.C.H. Essex, vi. 43f.
- 30. Quoted in Essex Rev. xxi, 132f.
- 31. D.N.B. s.v. Newcourt, Ric. (d. 1679).
- 32. D.N.B. s.v. Newcourt, Ric. (d. 1716). See Plate I.
- 33. Repertorium, i, p. i.

- 34. Presumably meaning 'the private collection of Mr J. Ouseley.'
- 35. Essex Rev. iii. 33, 256-7; xxi. 133.
- 36. Repertorium, ii. 75.
- 37. Ibid. 37.
- 38. Morant, Essex, ii. 449.
- 39. V.C.H. Essex, i. 510.
- 40. Cf. P.N. Essex, 470: 'Beorn's farm'.
- 41. Repertorium, ii. 250.
- 42. Hist. Essex, ii. 115.
- Historic Towns in Essex (1983), ed. M.R. Eddy and M.J. Petchey, 91.
- 44. Repertorium, ii. 407.
- 45. Ibid. 447.
- 46. Ibid. 452.
- 47. Ibid. 461.
- 48. Repertorium, i, p. ii.
- 49. D.N.B. s.v. Hutton, Matt. (1639-1711); D.C. Douglas, English Scholars, Index.
- 50. Repertorium, ii. 629-30.
- 51. Ibid. 352, 585, 637.
- Ibid. 36 (Barling); 43 (Belchamp St. Paul); 72 (Boreham);
 141 (Chigwell); 147 (Chingford); 328 (Heybridge); 433 (Navestock); 492 (Rickling); 509 (Runwell); 599 (Tillingham); 658 (Wickham St. Paul).
- 53. Ibid. 67, 354, 535, 562.
- 54. Ibid. 518,
- 55. Taylor's history was published by Samuel Dale in 1730.
- 56. Repertorium, ii. 168.
- 57. Ibid. 116-7.
- 58. Ibid. 103n.
- 59. Ibid. 191.
- 60. Marks of the ornamental ironwork were recorded in 1923, but no skin was mentioned: R.C.H.M., Essex, iii. 77.
- 61. D.N.B.; V.C.H. Essex, vi. 216.
- 62. Repertorium, ii. 229.
- 63. APPENDIX.
- 64. Cf. G.E.C., Complete Baronetage, ii. 80.
- V.C.H. Bibliography (1959), 17; Bibliography Suppl. (1987), 10.
- 66. H. Smith, op. cit. 233-321.
- Essex Rev. xxviii. 15; xxix. 127, 213, 219; xxxi. 170; xxxii.173; xxxiii. 80; E.A.T. N.S. xvii. 267; xviii. 102; xx. 199.
- 68. Chelmsford Cathedral Library.
- 69. Ibid. (Copies in E.R.O., T/A 547 and T/A 337).
- 70. Early Essex Clergy, 1.

APPENDIX

Printed sources used by Richard Newcourt in his Repertorium Ecclesiasticum Parochiale Londinense volume II (1710).

NOTE. Newcourt cites his sources in abbreviated form, without dates. In the following list the dates are those of editions probably used by Newcourt or his collaborators. Sources frequently cited are marked with an asterisk *. A few sources which could not be identified have been omitted.

Bibliographical references have been abbreviated as follows:

- [Blackwell] The Blackwell Dictionary of Historians, ed. J. Cannon and others. 1988.
- [Davies and G. Davies and M.F. Keeler, Bibliography of British Keeler] History 1603-1714. 2nd edn. 1970.
- [D.N.B.] Dictionary of National Biography.

BEYOND THE MORANT CANON

- [Graves] E.B. Graves, Bibliography of British History to 1485. 1975.
- [Gross] C. Gross, Sources and Literature of English History to 1485. 2nd edn. 1915.
- [Reed] C. Reed, Bibliography of British History 1485-1603. 2nd edn. 1959.

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Chronicle of the kings of England from the times of the Romans... unto the death of King James I. 1641. Later edn. 1665. [Davies and Keeler no. 279; D.N.B.]

BEDE (673-735). Historia ecclesiastica gentis Anglorum. Ed. P. Chifflet. Paris. 1681. [Blackwell p.38; D.N.B.]

BURNET, GILBERT (1643-1715). History of the Reformation in England. Vol. I (1679); Vol. II (1681). [Blackwell p.58; D.N.B.]

CAMDEN, WILLIAM (1551-1623). * Britannia. ed. E. Gibson. 1695. [Blackwell p.66; D.N.B.]

CRESSY, HUGH P. (1605-74). The Church history of Brittany, or England. Pt. 1 (only published). 1668. [D.N.B.]

DUGDALE, SIR WILLIAM (1605-86). * The Baronage of England. 2 vols. 1675-6. [Graves no. 559; D.N.B.; D. Douglas, English Scholars, Index.]

DUGDALE, SIR WILLIAM. * Monasticon Anglicanum. 3 vols. 1655-73. 2nd edn. of vol. I. 1682. [Graves no. 1147]

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ANON. [monk of Ely Abbey in 12th cent].

Liber Eliensis. [Newcourt cites this as 'Ely Bk.' He presumably used it in either Henry Wharton's Anglia Sacra (see below); or Thomas Gale's Historia Anglicanae Scriptores XV. 1691. See Graves nos. 2164; cf. 1100, 1125.]

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FOXE, JOHN (1516-87). Actes and Monuments. Popularly known as The Book of Martyrs. 1563. [Reed no. 1726; D.N.B.]

FULLER, THOMAS (1608-61). The History of the University of Cambridge. 1655. [Graves no. 7097; D.N.B.]

FULLER, THOMAS. The Church History of Britain (to 1648). 6 parts. 1655. [Graves no. 1278]

FULLER, THOMAS. The History of Waltham Abbey. 1655. [D.N.B.]

GODWIN, FRANCIS (1562-1633). De Praesulibus Anglie Commentarius. 2 parts. 1616. [Graves no. 5579; D.N.B.]

HOLINSHED, RAPHAEL (fl.1560-80). Chronicles of England, Scotlande, and Irelande. 2nd. edn. by John Hooker and others. 1586. [Reed no. 314; Blackwell p.197; D.N.B.] HUNTINGDON, HENRY OF (1084?-1155). 'Historia Anglorum': in Rerum Anglicarum Scriptores post Bedam. Ed. H. Savile. 1596. [Graves no. 1119, cf. 2904; D.N.B.]

PARIS, MATTHEW (d.1259). Vitae Abbatum S. Albani. Ed. William Watts. 1640. Later edn. 1684. [Gross no. 1830; Blackwell p.364; D.N.B.]

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SOMNER, WILLIAM (1598-1669). Antiquities of Canterbury. 2nd. edn. 2 parts. 1703. [Graves no. 5123; D.N.B.]

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SPEED, JOHN (1552?-1629). History of Greate Britaine. 1611. [D.N.B.]

SPELMAN, SIR HENRY (1564?-1641). Archaeologus in modum Glossarii... 2 vols. 1626; 1664. [A glossary of obsolete legal terms. See Oxford Companion to English Law (1980), p. 1170; D.N.B.]

STILLINGFLEET, EDWARD (1635-99). Origines Britannicae. 1685. [Newcourt's citation of 'Antiq. Brit.' (p. 65) probably refers to this work; D.N.B.]

STOW, JOHN (1525?-1605). Annals of England. 1592. Later edns. to 1631. [Reed no. 317; Blackwell p.393; D.N.B.]

STOW, JOHN. Survey of London. 1598. [Reed no. 4591]

STRYPE, JOHN (1643-1737). Historical collections of the life...of John Aylmer, lord bishop of London. 1701. [Reed no. 2215; D.N.B.]

TANNER, THOMAS (1674-1735). Notitia Monastica. 1695. [Graves no. 1150; D.N.B.]

THOROTON, ROBERT (1623-78). The Antiquities of Nottinghamshire. 1677. [Graves no. 1784; D.N.B.]

WALSINGHAM, THOMAS (d. 1422?). 'Historia Anglicana', in: Anglica... a veteribus scripta. Ed. W. Camden, 1602. Another edn. 1603. [Graves no. 1092; D.N.B.]

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[WESTMINSTER, MATTHEW OF, imaginary author.] Flores Historiarum. 1567. Later edns. 1570; 1601. [Graves no. 2871; D.N.B.]

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WOOD, ANTHONY (1632-95). * Athenae Oxonienses. 2 vols. 1692. [Reed no. 3770; D.N.B.; Douglas, *Eng. Scholars*, Index.]

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The noble household as a unit of employment: Audley End, 1755-97

by J.D. Williams

The Audley End household established by Sir John Griffin Griffin, first Lord Braybrooke and fourth Lord Howard de Walden, has previously been considered as a unit of consumption¹ and also, in part, as a unit of management.² Primarily, this paper will analyse the structure of the household as a unit of employment during most of the second half of the eighteenth century. It will examine the areas of staffing levels, remuneration, differentials, conditions of service and welfare. In touching upon the role of the nobleman as employer,³ it will be mindful of the two-way nature of the relationship, and accordingly it will tentatively consider the role of the domestic servant class in providing infrastructural support to the employer and his family.

That it is possible to consider the noble household as a unit of employment is partly due to the fact that the servant class ranked with the largest of occupational groups in eighteenth-century England.⁴ At Audley End this was partly manifested by the special attention given to the recording of data concerning servants. For as well as being recorded in the general household account books,⁵ there are also other volumes, one concerning the period 1755 to 1773,6 and an incomplete series of smaller purpose made receipt books between 1784 and 1791.7 The large volume entitled 'Receipts'⁸ is interesting not only because it tells us a little about the set up before Griffin officially became master of the establishment, but also because it provides a contrast in management methods. This volume was used at both ends: as a general account book in which transactions appear to have been hurriedly entered, with data concerning servants recorded at the back. In 1759 nine servants are mentioned; in 1760 six are named, of whom three seem to have been based at his London house;9 in 1761 there are eleven servants, and by 1762 the number has grown to fourteen. But from 1763 there is a noticeable change in the way in which this volume was kept. The hand is much neater and there is some attempt to record the data in a more methodical manner. By this time Griffin had become master of Audley End and Charles Higgins had been appointed his house steward. From this time he detailed the actual position held by each servant. By 1766 Higgins developed this method further by also itemising individual receipts of payments with each servant's signature or mark being shown.

In considering the staffing levels it has been

suggested that the size of the domestic staff was seen by contemporaries as one criterion for measuring the wealth of the master. In 1763 Sir John's domestic staff stood at sixteen and in three years it grew to twentysix. In this latter year, 1766, there were twelve female servants headed by the housekeeper and followed by Lady Griffin's woman, a cook, a London housemaid, two other housemaids, an under housemaid, a stillroom maid, a kitchen-maid, an upper and lower laundry-maid, and finally a dairymaid. There were fourteen males: after Higgins there were an under butler, two footmen, a house boy, a nurseryman, a gardener, a gamekeeper, a groom, a huntsman, two postilions, a whipper-in, and a London porter. In the following year the position of coachman reappeared and a new post of valet de chambre was recorded for the first time. By 1771/72, a groom of the chambers and upholsterer were added, and in the next year another housemaid and another postilion brought the complement to thirty. There were twelve female and eighteen male servants, and this figure would seem to represent the peak level of employment.¹⁰ Henceforth there were minor changes either involving a slight decrease in the number employed in any one year, twenty-six in 1784,11 for instance, or in terms of the male/female ratio, but usually ten or eleven females to sixteen or seventeen males. There were also some changes in the posts themselves. For example, by 1784 there is a French cook; in 1785 there is a foot boy and a house boy; and in 1786 there is a pantry boy for part of the year. At this time the two footmen are specifically named as his Lordship's and her Ladyship's, Sir John having been elevated to the peerage in 1784.

Unfortunately this series is not complete, and there is a gap between 1773 and 1784, and again after 1791. The final employment level in the first half of 1791 was twenty-eight, eleven female and seventeen male, with the actual positions remaining almost identical to the 1784 composition. Thus some twenty-eight to thirty persons, although not the same ones over the whole period, received regular employment either at Audley End or the London house or both.

This was reflected in the level of remuneration. Between 1765 and 1794 a total of £15,992 9s. $2\frac{1}{2}$ d.¹² was spent on on staff salaries and wages. This averaged at about £533 per annum, and when computed for the two missing years in the series of household volumes, and if payments made for the last five months of Griffin's life in 1797 are added, the total figure would be in the region of $\pounds 17,672$. Annually this increased from £307 7s. 7d. in 1766 to £645 14s. $5\frac{1}{2}$ d. in 1794. Until 1769, except for minor payments, the major part of the annual salaries bill was met in December, but from 1770, the arrangement for most years was to continue to pay small sums to some of the servants throughout the year, but the bulk of the cash was paid on a six-monthly basis, in June or July and in December. In the 1760s the annual payments remained below the $\pounds400$ level; in the 1770s they rose from £430 but did not reach £600; from 1786 they topped that level. Annual payments doubled over the period as a whole, but it was due to a gradual increase in expenditure and did not stem from a single event, such as Sir John's elevation to the peerage. Indeed, in the years immediately following his acquisition of titles, in 1784 and 1788, the increase was minimal. It was Charles Higgins' responsibility to actually pay the staff and for this purpose regular sums of money were drawn on his name from Drummonds, Sir John's London bankers.¹³ If literate the individual servants signed that they had received payment and if unable to write they marked a cross. On occasions these important transactions were witnessed by another senior member of staff, such as Martin Nockold, nurseryman.

But if the size of the payroll reflected the master's wealth and ability to pay, the scale of individual wages indicated an important differential within the domestic servant hierarchy. The wide range of salaries and wages not only reflected the level of responsibility but also, it has been suggested 'their social background and ease of recruitment'.14 In 1763 individual wages ranged from $\pounds 21$ per year to the coachman; $\pounds 16$ to the housekeeper; fifteen guineas to the upper postilion; £15 to the groom; £12 to the cook; £10 each to the footman and under butler; $\pounds 8$ to her Ladyship's waiting-woman; $\pounds7$ to the second postilion; $\pounds6$ to the house boy; £5 to the under housemaid; £3 16s. to the still-room maid; and $\pounds 3$ to the kitchen-maid. At the head of the household stood Higgins who was paid \pounds 40 per annum. There is an upward movement in the level of these wages, and some individual rises were quite spectacular. Charles Higgins' rose to £50 by 1766/1767, to £63 by 1784, at which it remained until 1791. The housekeeper's wages rose to $\pounds 18$ in 1768/69, to £20 in 1770/71, to £25 in 1772/73 and was at £30 in 1784 at which level it remained until 1790 when it rose sharply to $\pounds 25$ per half year. Martin Nockold, the nurseryman or bailiff as he became, was paid £25 in 1766/67, £30 in 1769/70, and a further rise in 1772/73 brought him up to £50 where it remained until 1791. A similar trend is discernible in the wages of the cook. In 1763 this position was considered to be worth $\pounds 12$ but the rate was nearly doubled by 1766/67 when it was at $\pounds 23$, rising again in 1769/70 to £25. By 1784 the male French cook¹⁵ was

paid $\pounds 50$ per year and this level was maintained until 1791. For other members of the staff the financial remuneration remained fairly constant. The valet de chambre, for example, was paid £30 per annum from 1769 to 1791, and the same applied to the groom of the chambers from 1771/72 until 1791. In other instances there was a slight drop in the level of wages in the event of a new servant being taken on. This happened in 1766/67 when the new groom was paid fifteen guineas for his first year of employment, one guinea less than his predecessor, but was upgraded to eighteen guineas in 1769/70 and upgraded further to $\pounds 20$ for 1770/71. This might well have been due to Griffin's insistence that the new man had first to prove himself. Yet on other occasions the new man might be paid considerably more than his predecessor. This happened with the post of kitchen gardener. Between 1766 and 1772 the gardener was paid f_{16} per annum, but when a new man took over in that year he immediately received £25 per year, at which level his remuneration remained until 1791. This might be explained by the fact that Griffin was either paying more for additional expertise, or perhaps the nature of the contract had changed.

In considering the conditions of service there are a number of instances where contracts¹⁶ between the master of the household and some individual members of staff have survived. On 29 June, 1763, a William Pope was engaged as the senior or upper postilion. His agreement stipulated that for fifteen guineas per annum and "no Vails¹⁷ — to find Himself in Boots Shoes & Breeches — to be cloath'd as the Rest — to have Full Livery when new are made". Or again, on 9 September of the same year, a Thomas Cutner was engaged as under butler; he was paid $\pounds 10$ per year and was to find his own boots, shoes and leather breeches. The best example, however, is with John Chapman, who was taken on as gamekeeper in 1766 at $\pounds 26$ per annum. On 13 January, 1768, new conditions were drawn up. He was to surrender all his own dogs to his master in return for an allowance and was never to have more dogs of his own. He was to find his own guns, leather breeches, boots, but was to be provided with a suit of green cloth consisting of a coat, waistcoat, and breeches annually, a hat, shooting-jacket or fustian frock and a common flannel waistcoat also on a yearly basis, and a greatcoat once in two years. His salary remained at £26 per annum. But on 25 September, 1769, another contract was drawn up.

"I, John Chapman Game Keeper am to find my Own Cloaths of all sorts entirely, and to appear in Green when out with the Honble. Sr.John Griffin or any of his Friends, and to be in Green likewise on Sundays, & on other Occasions when required, to find my own Guns of all Sorts, and to keep them in Repair at my own Expence, and Every Dog under my Care is to be my Masters Property only, and for his use, and on these Conditions promise to Serve from Year to Year as long as my master Sr.John Griffin Pleases, at the Yearly wages of Forty Guineas, without any further Demands or Alterations".

By 29 September, 1773, yet another contract was drawn up. It confirmed the previous contract and added the following clauses; 52 weeks' board and wages at 6s. per week amounting to $\pounds 15$ 12s.; a twoguinea annual allowance for the use of two horses; $\pounds 8$ 16s. for shoeing, farriery, saddles, bridles, brooms, brushes, oil, curry combs, with an allowance for two loads of straw for the litter; $f_{...,31}$ 10s. was allowed for the maintenance of the dogs, seven pointers and three greyhounds, feeding them with barley meal, milk, bread, horse flesh, and for pails, couples, collars, chains, whistles, straw, medicines, copper for boiling and firing. Amounting to f_1100 , this sum, as well as a house, was to be allowed Chapman annually. A final clause stated that all the "Dung is to be left for the use of Sr.John Griffin and there is to be no bills for dogs or Horses, or anything belonging thereto, the Keeper is to be Allow'd for Ammunition Nets etc. as is mentioned in a Paper of Particulars to About the sum of f_{13} 9s. per Ann. a Little more or Less as it may hereafter Happen". A further modification took place at Christmas 1786 when John Chapman was allowed £29 16s. for one year's allowance for the dogs.¹⁸ All four contracts were signed by Chapman. Although the motive on both sides was purely self-interest, some contemporary writers emphasised the solemnity of the contract which was intended for "mutual benefit which ought to be sacred".19

Indeed, in turning to welfare, there was what the historian of the occupational group has called an "emotional or sentimental tie binding master and servant; for it was supposed that what was in the first instance a contract would develop into a family bond".20 Although there are some examples of fairly rapid movement of staff at Audley End, five different girls held the post of lady-in-waiting between 1766 and 1770, there were many more examples to show longevity of service. Charles Higgins, as we have seen, remained there from 1763 until 1798. John Chapman, from 1766 until 1797 at least, during which time he married a local girl from Saffron Walden, and to whom at least six children were born between 1774 and 1790. Martin Nockold was nurseryman from 1766 until 1785, and bailiff from 1785 until his death in 1795. During these years he married twice having at least four sons from his first wife and he re-married a widow in 1787. It was one of his sons, Jacob, who succeeded him in 1795 and who went on to become estate steward in the early nineteenth century. Service in a great house was considered more distinguished than service with the plain gentry, and not only for social but for economic reasons, for better living conditions usually prevailed.²¹

Indeed, the welfare of the domestic servants at Audley End can be measured in a number of ways. Firstly, salaries and wages were usually supplemented by free board and liveries. It is impossible to quantify how much of the total housekeeping expenditure of £30,615 during this period was actually spent on servants' food, drink and contingencies, but it is possible to show that $\pounds 3,401^{22}$ was spent on servants' clothing. It can also be shown that Griffin's comprehensive and thorough refurbishing schemes which in part characterised his stewardship, included the servants' quarters in the great house itself, above the stables and on different parts of the estate.23 "Employers who were willing to go the trouble and expense of having their servants properly looked after in time of illness could scarcely have been indifferent to the way they were fed, clothed and housed^{0,24} Indeed, the health bill for the servants during these years amounted to $f_{1,030,25}$ But this concern over personal welfare was a two-way affair, as evidenced in one of Griffin's letters to his friend Richard Neville. In recounting a bad fall while hunting he mentioned his "Providential Escape... my Groom's attention & Resolution, was I really believe of infinite Consequence. The shock I receiv'd from ye Fall made it necessary in ye Opinion of Those that were by, that I should be blooded, he undertook It without ever having blooded a human Being before & did It well... I am now so well, that I shall feel no future ill Consequence from It".26 Nor did the master's appreciation of his servants end with his own life, for in his will²⁷ Sir John made provision for his staff, and some of them were mentioned specifically. A note in the second Lord Braybrooke's hand records over $f_{.150}$ of stock in his own account "belongs to young Chapman, son of the Audley End Keeper, it being the legacy left him by Lord Howard",28 and payments were also made for the education of the 'little postilion'.29

Thus the servant-master relationship was one which operated in more than one direction. The size and composition of the domestic staff was partly indicative of the status of the master. Their presence in an establishment was a clear demonstration of their master's ability to pay and maintain them in return for minimal or no productive work. This was particularly so with those servants whose duties were generally performed outside the house itself, such as the footman, whose chief value it has been estimated was in the "efficiency with which he advertised the extent of his master's wealth... He was in consequence one of the most vital parts of his master's equipment of display".³⁰ Among those who performed this task for Sir John were the valet, two coachmen, a porter, two footmen, groom and postilion. But servants were vital to the running of the great house and indeed, it was their competence that partly enabled their master "to combine in his person at least some of his many possible private and public functions, as politician and administrator, estate manager, agricultural improver, industrial entrepreneur and investor, patron of sports and the arts, arbiter of taste and fashion - in short enabled him to live as a true representative of the landed class, the real power and controlling force in eighteenthcentury society".31

In many ways Griffin was a true representative of the class to which he belonged and in a sense his life is a microcosm of the period in which he lived. Through his varied experiences one is reminded that he was caught up with winning of Empire, with working out of imperial problems, with radical reform, with the efflorescence of the arts, with changes in the economy and with life at more than one level at any one time. He was a soldier, politician, member of the peerage, holder of both county and local offices, lay rector and lord of more than one manor, as well as being a member of both domestic and wider social circles, engaged in extending and administering an estate, restoring both his country seat and town house, laying out his park and pleasure grounds and administering two households. He died at Audley End on 25 May, 1797, "full of years and earthly honours",32 and his widow shortly before she left her beloved Audley End chose to remember "faithfull servants to whom I owe

sincere regard".33

There appears to be sufficient evidence to show that at Audley End during this period the longevity and quality of service did play its part in providing infrastructural support to the noble family. Although essentially the household was a unit of employment, it was more than a mere "cash nexus" arrangement. Perhaps there are the beginnings of those elements in the twoway relationship of what modern personnel management might identify as a corporate culture, and a mutuality, within the concept of the household as a paternalistically-controlled extended family.

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Notes

I have kept these footnotes to a minimum, only indicating the main collection or classes of documents consulted, other than specific references and quotations.

- J.D. Wiliams, 'The noble household as a unit of consumption; the Audley End experience, 1765-1797', Essex Archaeology and History 23 (1992), 67-78.
- J.D. Williams, 'The Landowner as Manager', Essex Journal, (Winter 1980-81), 74-82.
- 3. To be treated separately in a forthcoming article.
- 4. J.J. Hecht, The Domestic Servant Class in Eighteenth Century England (1956), 1.
- 5. E R O D/DBy A196-226.
- 6. E R O D/DBv A11.
- 7. E R O D/DBy A12-14.
- 8. E R O D/DBy A11.
- 9. The first London house mentioned is at Brook Street, but in 1762 he inherited from his aunt, the Countess of Portsmouth, a house at New Burlington Street.
- E R O D/DBy A11; at Ingatestone Hall, for example, the size of the staff varied from about 34 to 37 between 1766 and 1778; see E R O D/DBy DP A167.
- 11. E R O D/DBy A12-14.
- 12. E R O D/DBy A196-226.
- 13. Drummond's Bank Ledgers, 1763-97.
- G.E. Mingay, English Landed Society in the Eighteenth Century (1963), 227.
- 15. The French cook 'ranked among the proudest possessions of wealthy aristocrats', see Mingay, op. cit., 220.

- 16. E R O D/DBy A11.
- 17. See Dorothy Marshall, 'The Domestic Servant in the
- Eighteenth Century', Economica (1929), 24.
- 18. E R O D/DBy A45/7/87.
- 19. J. Hanway, Domestic Happiness (1786), 78.
- 20. Hecht, op. cit., 74.
- E R O Littlebury Parish Registers of Baptisms, Marriages and Burials, D/P9/1/1-4; Saffron Walden Parish Church, Registers of Baptism, Marriages and Burials, 1749-93; Register of Baptism and Burials, 1794-1814. See also J. Marchand (ed.), A Frenchman in England 1784 (1933), 25-27.
- 22. E R O D/DBy A196-226.
- 23. E R O D/DBy A259.
- 24. Hecht, op. cit., 98.
- 25. E R O D/DBy A196-226.
- 26. E R O D/DBy C28.
- 27. E R O D/DBy A371.
- 28. E R O D/DBy A373/2.
- 29. E R O D/DBy A51/2/93.
- 30. Hecht, op. cit., 53-54.
- 31. Mingay, op. cit., 232.
- 32. Saffron Walden Parish Registers... 1794-1814; this was part of the tribute paid by the vicar, William Gretton, on Griffin's decease.
- 33. E R O D/DBy C6/6.

A checklist of Essex architects 1834-1914

by James Bettley

Introduction

The rise of the professions was one of the characteristics of the 19th century, and architecture was no exception. The Royal Institute of British Architects (RIBA) was founded in 1834, and in its first fifty years 1,658 architects were elected to membership as Fellows or Associates.¹ The reasons for this rise were primarily professional, to raise standards by ensuring that members were (as far as could be judged) competent to practise as architects; from 1892, a system of examinations was introduced to strengthen this ideal. The reasons were also social. In the 18th century, architects tended to be amateurs or to be builders and developers as well; by creating a new profession, architects were proclaiming that they were gentlemen and not tradesmen.

This checklist of 380 architects or architectural practices giving an address in Essex in a number of directories² published between 1839 and 1914 throws some light on the way in which the profession developed in the county. At this stage it is necessary to point out the limits of the list. It is not, for example, a list of architects working in Essex, of architects who designed buildings in Essex, although it might become one.³ It does not, therefore, include an architect like Joseph Clarke (1819-1888) who, as diocesan surveyor of Essex for Rochester and then St Albans, designed or altered a large number of churches or schools in Essex but was based in London. Nor does it include Ernest Geldart (1848-1929), who trained as an architect and, likewise, designed or otherwise worked on a number of Essex churches but did so while he was Rector of Little Braxted and who features in no architectural directories. The list will include a number of architects (like John Davies) who retired to Essex from London; or who probably worked in London, in another architect's office, but used their home address in the directories; or architects who left Essex early in their careers and made their name elsewhere (such as the cinema architect George Coles). Others are clearly passing through: George Topham Forrest, for example, who was County Architect 1914-1919 but otherwise practised outside the county, and Major Bale of the Royal Engineers who was briefly stationed at Colchester.

What is immediately clear is that the number of Essex architects grew dramatically during the years in question; this is no surprise, given the general rise in the population of Essex during the 19th century and the rapid expansion both of London, on one side of the county, and Southend on the other. In 1886, for example, there was just one architect practising in Southend (none in 1868); by 1910 there were ten, with a further four in Westcliff.⁴ There were no architects in Ilford in 1886, but nine in 1910. On the other hand, Colchester boasted ten architects in 1886, but only eight in 1910. In Pigot's Directory of 1839 there are twelve architects listed for the whole of Essex; in the 1868 Architect's, Engineer's, and Building-Trades' Directory, there are fourteen. In Kelly's Directory of 1914, there are 118 architects listed. Although we cannot be sure how many of those were what we would now call architects, this means that, on the face of it, in 1914 there were nearly ten times as many architects in the county as there were in 1839.5 Taking RIBA membership as a more accurate definition of an architect (although it should be borne in mind that, in the early years, London architects were more likely to join than those outside the capital), between 1834 and 1868 just seven RIBA members gave an Essex address, at least one of those (John Davies) being retired. By 1886, there were still only three RIBA members, but in 1914, no less than 89 RIBA members gave an address in Essex.

Many of these architects are shadowy figures and are likely to remain so. Who, for example, was Mr Lea of Romford, recorded in the 1868 Directory? Is James Medows Roberts of Dedham (1886) the same as James Mackenzie Roberts (1868), and are they both (or either) the same as plain James Roberts (1883)? Many of those on the list possibly built nothing under their own name, but spent all their working lives as an assistant in another architect's office. Others, upon closer examination, turn out to be calling themselves architects when they were really practising as surveyors or estate agents, something which was possible then but which was stopped by the Architects (Registration) Act of 1931. (A conspicuous example is Theo Davey, who, unusually, advertised in Kelly's Directory of 1886 as 'auctioneer, architect, surveyor, valuer, house and estate agent'.) A number worked for local authorities, ranging from George Topham Forrest, County Architect, to John Thomas Bressey, District Surveyor of Wanstead. A few were civic dignitaries: when Chelmsford became a borough in 1888, Frank Whitmore was nominated provisional Mayor and was actually Mayor from 1892 to 1893; Frederic Chancellor held that same office no less than seven times from 1888.

A London architect, W.A. Forsyth, was moved to write in 1897 that 'the goddess of Architecture... has shunned modern Essex.²⁶ The question of how good these architects were as architects is the most difficult matter to assess and, of course, impossible from a bare list. For what it is worth, only eighteen of the architects on the list designed buildings or monuments included in Pevsner's Essex,7 although any user of that volume will be aware of its shortcomings. Not many of the names are well known in national terms; in addition to George Coles and George Topham Forrest, whose best work is outside the county, those architects whose reputation stands highest are probably Frederic Chancellor and George Campbell Sherrin.8 But it is obvious that other architects had long-established offices of some size, and trained pupils and handed their practice on to their sons or partners. These include, besides Chancellor, Thomas Henry Baker, Charles James Dawson, and Charles Pertwee. Between them these men must have been responsible for a great number of buildings and, whatever the quality of their work, their industry and the effect they had upon their surroundings needs to be recognised. Of William Arnold Moull, on the other hand, it was said at his death that he 'had gifts but no ambition, and could not be induced to start practice on his own account; in these circumstances there is nothing worth record'.9

The checklist does not set out to give detailed biographical information on these architects nor to provide a list of their works. What is does try to provide is an authoritative form of the architect's name, with birth and death dates, as far as can be established from the sources consulted.¹⁰ The addresses given in the various directories are listed;¹¹ and family and professional relationships are given (where known), with professional qualifications. More important, an indication is given of sources of further information. References are given to obituaries in the architectural press, and the existence of a biographical file at the British Architectural Library (BAL) is indicated.¹² The directories have been supplemented by information held on the BAL's database 'British Architectural Biography 1834-1900'.13 The nomination papers of all those elected to membership of the RIBA are also kept at the BAL and may be consulted there; these papers include details of the candidate's education and professional training and, very often, a list of buildings they had designed.14

There are two reasons for publishing this checklist as it now stands. The first is that, even in its infant state, it is useful as an authority and as a guide to the whereabouts of further information. The second is that readers may be inspired to contribute to the development of the list. It no doubt contains many errors (it is clear that many of the directories themselves do); certainly, there are questions and uncertainties and gaps to be filled. As a next step, biographical information can be added, and lists of buildings; many of these will be obscure (not to mention demolished) and poorly documented. The question of who should be included needs to be addressed: should it include architects who worked in Essex (even if on only one building), but lived elsewhere, and should it exclude architects who lived in Essex but built nothing in the county? Should the lists of buildings include those outside Essex, or only those within it? Corrections and additions to the list as it now stands, comments and suggestions as to how it might develop, and any further relevant information, would all be welcome.¹⁵

Notes

- 1. Franklin, J., 'Victorian Patterns', RIBA Jnl, Aug. 1989, pp. 36-39.
- 2. Most of the references are to architectural directories, on the grounds that these are not widely known or available. Other directories, notably Kelly's, have also been consulted, but references to these are only given where they contain significant additional information such as a new address, or extend the known dates of activity, and not if they merely confirm information already known.
- The model here is clearly the Dictionary of Architects of Suffolk Buildings 1800-1914 (1991).
- 4. Norman Evans, for example, moved to Southend in 1911 from Manchester; no doubt he thought that he would thereby improve his prospects. Three of the Southend architects in 1910 also had offices in Westcliff.
- For comparison, the population of the whole county increased by a factor of 3.15 between 1841 and 1901; the population of Prittlewell (which included Southend and Westeliff) by a factor of 11.67; and that of Ilford by a factor of no less than 138.84 (Victoria County History, *Essex*, ii (1907), pp. 344, 345 & 351).
- Forsyth, W.A., 'The Porch of South Benfleet Church', Architecture, ii (1897), p. 208. His enthusiasm for this structure was shared by Thomas Goodman of Southend, whose drawing of it was published in The Architect, v (1871), p. 104.
- Pevsner, N., Essex (2nd ed., 1965). Included in the 18 is Edward Barr whose identity, however, is far from clear. In the section of the introduction devoted to the Victorian age (pp. 49-52), not one of the buildings mentioned is by a local architect.
- These two (together with Ernest Geldart) are the only architects named in the Essex section of the 'Blue Guide' Victorian Architecture in Britain (1987), pp. 123-126, who were local.
- Letter written by Arthur Young to the Secretary of the RIBA, 22 Feb. 1940, in response to a request for information on Moull's career (BAL biographical files).
- 10. 'Floruit' dates are only given when the first or last years of known activity go beyond the dates of the sources cited. When a birth date is given as, for example, 1846/7, this is because an obituary records the death of 'So-and-so at the age of such-and-such', without specifying the year of birth.
- No attempt has been made to follow architects after 1914, but if they moved before that date the list indicates where they moved to (usually London).
- 12. The names have also been checked against the BAL's Periodicals Names Index and Avery Obituary Index of Architects (2nd ed., 1980). These and other sources can be consulted at the British Architectural Library, Royal Institute of British Architects, 66 Portland Place, London W1N 4AD.
- A printed version of this database, The Directory of British Architects 1834-1900, is to be published by Mansell Publishing in November 1993.

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- 14. The Nomination Papers for the years 1834-1900 are available on microfiche from Emmett Publishing. The information they contain, with the exception of the lists of works, is included in the Directory of British Architects 1834-1900.
- 15. Anyone who would like to contribute to or collaborate on this project is invited to write to the author at The Old Vicarage, Great Totham, Maldon, CM9 8NP.

British Architectural Biography 1834-1900

	Name & qualifications	Address & notes	Source
	Aberdour, James C LRIBA 1910	fordon 34 New Fillebrooke Rd,	
		Leytonstone	R1910
		do.	R1914
		do.	W1914
	Adams & Sparks	32 High St, Romford	A1907
		Weston Chambers,	111901
		Weston Rd, Southend	A1907
		do.	A1910
	Adams, Stephen Is		
		Ravenhurst, York Rd,	
		Southend, & Stanford-	
		Le-Hope	K1899
	Adams, W.	High Se Maldan	V 1044
		High St, Maldon	K1866
	Alexander, Horace	Augustus [London]	B1834 [*]
		do.	A1868
		5 Globe Terrace,	
		Forest Lane, West Ham	K1870
	Algar, Samuel Johr		
		3 Dumbarton Cotts,	
		Ham Frith Rd, Stratford	K1870
	Allam, Edwin Clar MSA 1884	k [or Clerk] (fl.1870-1896)	B1834 [,]
		Clyde Villas, Eastern Rd,	
ĺ		Romford Oakleigh, Western Rd,	K1870
		Romford	A 1003
		South St, Romford	A1883 D1886
	Allardyce, Henry V	Villiam (-1953)	
	LRIBA 1911	Punr of C.J. & H.H. Dawson	
	FRIBA 1927	Obit: Br, 1953 Oct 13, p568	
		Wilmar Cottage,	
		Lonsdale Rd, Southend	R1914
		do.	W1914
	Allen, H. Hughes	55 Meath Road, Ilford	A1907
i			
	Allen-Lodge, Alber ARIBA 1913	t Robert (1876-1948)	#
		Gunton, Westminster	
		Drive, Southend	K1914
		[London]	W1914
	Andrews, Arthur G		N - + -
	LRIBA 1910	Town Hall, Colchester	R1914
		do.	W1914
	Armitage, William	• • •	
		Connaught Ave, Frinton	K1914
	Ascroft, Henzell		_
	LRIBA 1911	117 Bergholt Rd, Colchester	R1914
ĺ		do.	W1914
	Ashbee, William N		#
	ARIBA 1881 FRIBA 1890	Obit: RIBAJ, v25, 1918/19, p164	B1834*
	I 171177 1090	Rose Valley House, Brentwood [Gt Eastern Rwy Co, Liverpool St]	R1895 W1914
		· · · · · · · · · · · · · · · · · · ·	

	Entern Person Programmy 1000 1 1900
P1839	Pigot & Co.'s Directory, 1839
A1868	The Architect's, Engineer's, and Building-Trades'
	Directory (1868)
A1883	The British Architect, 2 Feb. 1883, pp. i-viii (based on
	Kelly's)
D1886	Kelly's Directory of the Building Trades (5th ed., 1886)
R1886	RIBA Kalendar (1886-87)
R1890	RIBA Kalendar (1890-91)
C1894	The Architects', Surveyors' and Engineers' Compendium
	and Complete Gatalogue (1894)
R1895	RIBA Kalendar (1895-96)
C1898	The Architects', Surveyors' and Engineers' Compendium
	and Complete Catalogue (1898)
R1900	RIBA Kalendar (1900-01)
R1905	RIBA Kalendar (1905-06)
A1907	The Architects and Surveyors Directory and Referendum
	(1907)
E1909	Essex in the Twentieth Century: Contemporary
	Biographies series, ed. W.T. Pike (1909)
A1910	The Architects and Surveyors Directory and Referendum
	(1910)
R 1910	RIBA Kalendar (1910-11)
R1914	RIBA Kalendar (1914-15)
W1914	Who's Who in Architecture (1914)

K followed by a date indicates Kelly's Directory for the year

Abbreviations

Sources B1834

A&BN	Architect and Building News
ARIBA	Associate of the Royal Institute of British Architects
Art	Articled
Asst	Assistant
Bldg	Building (successor to The Builder)
Br	The Builder (changed name to Building, Mar. 1966)
FRIBA	Fellow of the Royal Institute of British Architects
LRIBA	Licentiate of the Royal Institute of British Architects
MSA	Member of the Society of Architects
Obit	Obituary
p	page
Ptnr	Partner
RIBAJ	Journal of the Royal Institute of British Architects
v	volume

indicates that there is a biographical file on the architect at the British Architectural Library

* after a reference indicates that the source referred to contains more information about the architect than his name, qualifications and address

ESSEX ARCHITECTS 1834-1914

Ashford, William I LRIBA 1911	Harry 9 Essex Terrace, Essex Rd, Leyton do.	R1914 W1914
Austin, Frank H.	Church Hill, Epping	
Baars, Francis Van LRIBA 1910	Gladley, Ronald Pk Ave, Westcliff do. do.	R1910 R1914 W1914
Badock, John Barl FRIBA 1876	ow (1831/2-1912) Obit: Br, v102, 1912 May 10, p561 Hill Crest, Leigh on Sea do. do.	B1834* R1900 R1905 R1910
Baker & May	Head St, Colchester do.	C1898 A1907
Baker, Howard Le LRIBA 1910	Head Gate Court, Colchester Barton House, 118 Wanstead Pk	# R1910
	Ave, Wanstead do.	R1914 W1914
Baker, Humphrey	3 & 4 North Hill, Colchester Public Hall, High St & North Hill,	B1834* A1868
	Colchester	A1883
Baker, Thomas He LRIBA 1910 FRIBA 1928	see also Baker & May Ptnr of E.E. May, W.H. Wrightson, & D.J.M. Burton (who succeeded to the practice)	#
	Obit: Br, 1934 Nov 23, p880 Clacton on Sea Leicester Lodge, Clacton on Sea,	B1834* D1886
	& Head St, Colchester Town Hall, Clacton on Sea Leicester Lodge do. 5 Headgate Court, Colchester Head Gate Court, Colchester do.	C1894 C1898 A1907 A1910 A1910 R1914 W1914
Bale, Major John I ARIBA 1880	Edward [Sierra Leone] Colchester	B1834* R1886
Ball, Joseph Henry ARIBA 1884	7 (1861-1931) Rolls Pk, Chigwell (1883) [London]	B1834* W1914
Banks-Martin, Rol MSA 1899	pert (1869-) 105 East St, Barking 121 Plashet Grove, East Ham	A1907 E1909*
Barr, Edward	Newport, Bishop's Stortford	K1878
Bartholomew, Ben ARIBA 1909	jamin Vincent 21 East Ave, Walthamstow [Durban, South Africa]	R1910 R1914
Bartleet, William (ARIBA 1858 FRIBA 1869	Sibbs (1829-1906) Herne Villa, Brentwood (1857-68)	# B1834*

Barton, Alfred	Market Pl, Romford	K1899		
Beadel, Son & Ch	ancellor Duke St, Chelmsford	K1859		
Beaumont, Percy I MSA 1905	Munro (1861-1918) Maldon do. do. Danescroft, Maldon	C1898 A1907 A1910 W1914*		
Beckwith & Goody	vay Station Road, Clacton	A1907		
Beckwith, E.R.	10 Trinity St, Colchester	A1907		
Bentley, Arthur Fr LRIBA 1911	ederick Collins (1877-1958) Dial House, Balgores Lane, Squirrel's Heath do.	# R1914 W1914		
Benton, William	Aveley, Romford Grays Thurrock	K1878 K1878		
Berry, Arthur	152 North Rd, Southend	K1914		
Bird, Hugo Ritchie LRIBA 1910	Asst to C.J. Dawson	# D1924*		
FRIBA 1930	Obit: Br, 1958 Feb 14, p314 St Thomas Gate, Brentwood, &	B1834*		
	Corn Exchange Bldgs, Romford St Thomas Gate	A1907 A1910		
	do. do. do.	R1910 R1914 W1914		
Bissell, George Err LRIBA 1910	nest The Hollies, Mile End, Colchester [Brisbane, Australia]	R1910 R1914		
Boston, Edward T	homas Grove Rd, Waltham	K1870		
Brannon, Philip	Walton Naze Pk, Walton on the Naze	D1886		
Bray, T.	New Bridge St, Chelmsford	K1859		
Bressey, John Tho FRIBA 1877	mas (1843-1912) District Surveyor of Wanstead Obit: Br, 1912 Nov 29, p661 & Dec 13, p732; RIBAJ, v19,	#		
	1911/12, p724 The Cottage, Wanstead	B1834* A1907		
Brinson, Samuel Pierpoint LRIBA 1911				
	99 The Hill, Leigh on Sea 6 Carlton Terrace, Leigh on Sea	R1914 W1914		
Brockbank, Percy	see also Greenhalgh & Brockbank 13, 14 & 15 County Chambers, Weston Rd, Southend	K1914		
Bromiley & Sames	-	K1914		

ESSEX ARCHAEOLOGY AND HISTORY

Brown, Edward				2 High St, Chelmsford	D1886
	Frith Cottage, Ham Frith Rd,			High St, Chelmsford	C1894
	Forest Gate	K1878		do.	C1898
				74 Duke St	A1907*
Brown, F.G. Vind	ent see Vincent-Brown, F.G.			do. Cheimsford	A1910*
				Chelmsford	R1914 W1914
Brown, J.	16 Starbara Odra Dfard	A1910		Chemiskora	W 1914
	16 Stanhope Gdns, Ilford	A1910	Changellan Engla	wie Wetrehamer (1965-1045)	
Browne, F. Anste	ad (-1941)		FRIBA 1907	ric Wykeham (1865-1945) Son & purr of above. Diocesan	#
LRIBA 1912	Principal Asst, Architectural		1 KIBH 1907	-	
FRIBA 1925	Dept, Essex County Council;			Surveyor Obit: Builder, v170, 1946 Jan 4, p4;	
	Cheshire County Archt			RIBAJ, v53, 1946 Feb, p143	
	Obit: Br, 1941 Sept 5, p217			Chelmsford [& London]	R1914
	73 Duke St, Chelmsford	R1914		[London]	W1914
	do.	W1914			
			Christy, A.E.		
Browne, Robert I			,	Market Bldgs, Market Rd,	
	Tower House, High St, Brentwood,			Chelmsford	K1899
	& Ingatestone	A1907			
	do.	A1910	Clare & Ross		
	Ingatestone	K1914		5 Station Parade, Westcliff on Sea	A1907
D				do.	A1910
Bull, Walter Willi LRIBA 1910	am 8 Vaughan Gdns, Ilford	R1914			
LKIBA 1910	do.	W1914	Clare, George Ed	ward (1868-1953)	#
	40.	W 1514	MSA 1899	see also Clare & Ross	
Burles & Harris				Obit: RIBAJ, v60, 1953 Jun, p348	
	Clarence St, Southend	C1898		66 Duke St, Chelmsford	C1898
	Clarence Bldgs, Clarence St	A1907		74 Duke St (with W.G. Ross)	A1907*
	do.	A1910		Westcliff-on-Sea	A1907
				do.	A1910
Burles, David He	nry (1866-1942)	#		[Leicester]	W1914*
	see also Burles & Harris				
	Ptnr of H.A. Harris, later joined by		Clark, Duncan W	alter (-1958)	#
	J.S. Collings of Thorpe Bay		ARIBA 1907		
	Obit: Br, v163, 1942 Nov 6, p399		FRIBA 1936	3 High St, Colchester	R1910
				do.	R1914
Burton, Dudley Ja	ames McPherson (1890-1961)			do.	W1914
	Successor to T.H. Baker		Clark, James (or J	obn) William	
	Obit: RIBAJ, v68, 1961 Oct, p464	B1834*	Ciark, James [01]	Church St, Coggeshall	C1898
				do.	A1907
Butcher, Charles	Edward	D1024+		do.	A1910
MSA 1888		B1834*		do.	K1914
	High St, Brightlingsea, &	01000			
	3 Queen St, Colchester	C1898	Cley, Edward		
	do. do.	A1907 A1910		58 North Hill, Colchester	P1839
	d o.	AI910		-	
Cabuche, H.L.			Cobb	see Ebbetts & Cobb	
MSA 1903	Ptnr of P.G. Hayward				
101011 1903	Queen's House, Hamlet Court Road,		Cobham, Charles		
	Westcliff on Sea	A1907		3 Shakespeare Villas, High St, Grays	C1894
	do.	A1910		do.	C1898
	40.			do.	A1907*
Caston, Ernest				do.	A1910*
	99 Claremont Rd, Forest Gate	K1914		000 1071	
	-		Colbeck, Henry (1		в
Cayton, Arthur				see under Ley, A.S.R.; Moore-Smith, J.	K.
	3 Grosvenor Place, Marine Parade,		Coles, George (-1963)	#
	Southend on Sea	C1894	MSA 1909	Cinema architect	π
	Mozart Villa, Clarence Rd, Southend	C1898		Obit: Br, v204, 1963 May 10, p915	
				18 Lytton Rd, Leytonstone	A1910
Chancellor, Frede		#		[London]	W1914
ARIBA 1864	see also Beadel, Son & Chancellor				
FRIBA 1870	Chelmsford from 1846, in punrshp		Collings, J.S.	see under Burles, D.H.	
	with Beadel & Son (to 1860). Father				
	& purr of F.W. Chancellor. Ecclesiastical		Collins, W.H.		
	Surveyor to the Diocese of St Albans			Netherton, Loughton	A1907
	Obit: Br, 1918 Jan 11, p42;				
	RIBAJ , v25, 1917/18, p89-90, 121	B1834*	Cook, Charles	• • •	
	Chelmsford	A1868*		Southminster	A1868

ESSEX ARCHITECTS 1834-1914

Cook, S.	Burnham	A1868	Ci
Cooke, Charles [&	Sonl	Ì	
(Tower Bldgs, High St, Southend	A1907	
	do.	A1910	C
	do.	K1914	M
Cormish, P.			
	715 High Rd, Leytonstone	K1914	
.			
Cottage, Alfred	Chalmaford Dd. Waadfard	D1994	
	Chelmsford Rd, Woodford do.	D1886 C1894	C
	do.	C1094	FI
Cotton, Percy Paor	ach (1872-1960)	#	
ARIBA 1895	Kii (1872-1900)		
	East Mersea	R1910	
	do.	R1914	
	do.	W1914	
			C
Coverdale, Frederi	-		
	Land agent to Lord Petre		
	Ingatestone Hall, Ingatestone	A1907	C
	do.	A1910	
a ·			
Cowie, Alexander ARIBA 1898	Detined from DIDA 1046	B1834*	
ARIDA 1090	Retired from RIBA 1946 Strathmore, Station Rd, Chingford	R1905	
	Glenmore, Gordon Rd, Chingford	R1910	\mathbf{D}_{i}
	do.	R1914	
	do.	W1914	D
			2
Cowley, Herbert R	eginald		
ARIBA 1913	Bank Chambers, 26 High St,		
	Southend	R1914	\mathbf{D}
	do.	₩191 4	
Coyne, Harold Ge			
LRIBA 1910	Rosebery Lodge, Monkham's Lane, Woodford Green, Woodford	A1907	
	do.	A1910	
	[War Office, London]	W1914	D
	[+,]		IJ
Creed, Richard (18	346/7-1914)	#	Fl
FRIBA 1882	Obit: Br, 1914 May 15, p599	B1834*	
	Little Bardfield Hall	E1909*	п
			D
Cressall, Walter TI	homas (1865/6-1925)		
ARIBA 1891	Nephew of, art to (1881-4) & ptnr of		
	J.F. Goodey	D ungat	
	Obit: Br, 1925 Feb 13, p254	B 1834*	
	2 Victoria Chambers, West Stockwell St, Colchester (with		D
	J.F. Goodey, from 1891)	C1894	
	do.	R1895	
	do.	C1898	D
	do.	R1900	
	do.	R1905	
	do. Se Branch Chambarry High St	A1910	
	St Peter's Chambers, High St	R1910	
	do. do.	E1909* R1914	
	do.	W1914	-
			D Li
Cressy, Thomas A	lfred		
	The Cedars, Colne Rd, Clacton		
	on Sea	K1886	Ď
	đo.	C1894	\mathbf{F}
	đo.	C1898	

Cropper, Horace J	ohn	
	Yew Tree Villa, Ilford	C1898
	6 Argyle Road, Ilford	A1907
	do.	A1910
Cubber Fam. AN		
Cubin, Edward No MSA 1886		C1904
M3A 1680	7 High St, Brentwood 6 Victoria Grove, Brentwood (1896)	C1894 B1834*
	6 High St	C1898
	do.	A1907
	do.	A1910
	13 High St	W1914
	_	
Cubitt, James (183	6-)	#
FRIBA 1891	In purship with G.F. Collinson &	
	H.J. Manchip	B 1834*
	Loughton	C1894
	Cotsall, Loughton	C1898
	do.	A1907
	do.	A1910
Cundy, Henry Isaa		K1914
	10 Sylvan Rd, Wanstead	K1914
Curtis, Robert Lea	bon (1842-)	
	Art to father, Robert Leabon Curtis;	
	ptnt from 1865 (R.L. Curtis & Son)	B1834*
	Richmond St, Plaistow	K1866
	· · · · · ·	
Dales, S.P.		
	79a South St, Romford	K1914
Dalton, Frederick		
	5 Albert Terrace, Hermon Hill,	
	Snaresbrook	K1886
D 1 D 1 D 1	Jaho	
Dampier, Edward		
Dampier, Edward	Diocesan Surveyor	A1883
Dampier, Edward	Diocesan Surveyor 33 Head St, Colchester	A1883 D1886
Dampier, Edward	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester	A1883 D1886 C1894
Dampier, Edward	Diocesan Surveyor 33 Head St, Colchester	D1886
-	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do.	D1886 C1894
-	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967)	D1886 C1894
Dannatt, Arthur R LRIBA 1911	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98	D1886 C1894 C1898
Dannatt, Arthur R	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham	D1886 C1894 C1898 R1914
Dannatt, Arthur R LRIBA 1911	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98	D1886 C1894 C1898
Dannatt, Arthur R LRIBA 1911 FRIBA 1956	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do.	D1886 C1894 C1898 R1914
Dannatt, Arthur R LRIBA 1911	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888)	D1886 C1894 C1898 R1914 W1914
Dannatt, Arthur R LRIBA 1911 FRIBA 1956	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt	D1886 C1894 C1898 R1914 W1914 K1859
Dannatt, Arthur R LRIBA 1911 FRIBA 1956	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester	D1886 C1894 C1898 R1914 W1914 K1859 A1868*
Dannatt, Arthur R LRIBA 1911 FRIBA 1956	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt	D1886 C1894 C1898 R1914 W1914 K1859
Dannatt, Arthur R LRIBA 1911 FRIBA 1956	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883
Dannatt, Arthur R LRIBA 1911 FRIBA 1956	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester Sorts	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester 17 Head St, Colchester	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester Sorts	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester 17 Head St, Colchester	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester 17 Head St, Colchester Landport Villa, Manor Rd, Colchester	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester 17 Head St, Colchester Landport Villa, Manor Rd, Colchester Crown Chambers & 2 Western Rd,	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870 D1886
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester 17 Head St, Colchester Landport Villa, Manor Rd, Colchester	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester 17 Head St, Colchester Landport Villa, Manor Rd, Colchester Crown Chambers & 2 Western Rd, Romford	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870 D1886 C1894
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester 17 Head St, Colchester Landport Villa, Manor Rd, Colchester Crown Chambers & 2 Western Rd, Romford do.	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870 D1886 C1894 C1894 C1898
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W Davey, Theo.	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester 17 Head St, Colchester Landport Villa, Manor Rd, Colchester Crown Chambers & 2 Western Rd, Romford do. do.	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870 D1886 C1894 C1894 C1898 A1907
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W Davey, Theo.	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester 17 Head St, Colchester Landport Villa, Manor Rd, Colchester Crown Chambers & 2 Western Rd, Romford do. do. do.	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870 D1886 C1894 C1894 C1898 A1907 A1910
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W Davey, Theo.	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester Landport Villa, Manor Rd, Colchester Crown Chambers & 2 Western Rd, Romford do. do. do. 14 St Alban's Rd, Woodford Green	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870 D1886 C1894 C1894 C1898 A1907 A1910 R1914
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W Davey, Theo.	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester 17 Head St, Colchester Landport Villa, Manor Rd, Colchester Crown Chambers & 2 Western Rd, Romford do. do. do.	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870 D1886 C1894 C1894 C1898 A1907 A1910
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W Davey, Theo. Davidson, John LRIBA 1911	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester Landport Villa, Manor Rd, Colchester Crown Chambers & 2 Western Rd, Romford do. 40. 14 St Alban's Rd, Woodford Green do.	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870 D1886 K1870 D1886 C1894 C1894 C1898 A1907 A1910 R1914 W1914
Dannatt, Arthur R LRIBA 1911 FRIBA 1956 Darken, Horace (I Darken, Robert W Davey, Theo. Davidson, John LRIBA 1911	Diocesan Surveyor 33 Head St, Colchester Head St, Colchester do. do. do. ichard (1873-1967) Obit: Bldg, v212, 1967 Feb 17, p98 Great Waltham do. 821-1888) West St, Harwich, & at Dovercourt 40 North Hill, Colchester Crouch St, Colchester 24 Crouch St, Colchester Landport Villa, Manor Rd, Colchester Crown Chambers & 2 Western Rd, Romford do. do. do. 14 St Alban's Rd, Woodford Green	D1886 C1894 C1898 R1914 W1914 K1859 A1868* A1883 D1886 K1870 D1886 C1894 C1894 C1898 A1907 A1910 R1914

ESSEX ARCHAEOLOGY AND HISTORY

Dawson, Charles I LRIBA 1912	Ford Son of C.J. Dawson; succeeded him as Surveyor to Barking UDC,	#		do. do. do.	A1910 R1914 W1914
	1899-1923; Bristol, 1923-34		Ebbetts & Cobb		
	Ilsenburg, Longbridge Rd, Barking do.	R1914 W1914	Eddelis & Cobb	1 Church St North, Colchester	K1878
				do. Culver St, Colchester	A1883 D1886
Dawson, Charles J FRIBA 1889	ames (1850-1933) Father of C.F. & H.H. Dawson;		The weather the	-	
	ptnr of H.W. Allardyce		Ebbetts, Walter Ja FRIBA 1882	see also Ebbetts & Cobb	
	Obit: Br, v145, 1933 Jul 28, p 136; RIBAJ, v40, 1932/33, p815	B1834*		Obit: Br, 1922 Nov 17, p728	B 1834*
	East St, Barking	R1890	Egan, Edmund [E	dmond] (1840-1899)	
	do. East St & Queen's Rd, Barking	D1886 C1894	ARIBA 1880	In Loughton from 1871	Dicast
	East St	R1895		Obit: RIBAJ, v6, 1898/99, p350 Holmdale, Loughton	B1834* D1886
	do. 7 Bank Bldgs, High St, Ilford	C1898 C1898		do.	C1894
	East St	R1900		Loughton Holmdale, Loughton	R1895 C1898
	do. do.	R1905 A1907*		Hommane, Loughton	C1070
	7 Bank Bldgs	A1907*	Eslick & Co.		
	16 Cambridge Rd, Barking	A1910		194 Hamlet Court Rd, Westcliff	K1914
	11 Cranbrook Rd, Ilford East St, Barking	A1910* R1910	Evans, John		
	do.	R1914		11 Southchurch Beach, Southend	K1914
	do.	W1914	Evans, Norman (1)	880-)	#
Dawson, Henry H	olmes (-1964)		LRIBA 1911	Of Manchester; came to Southend,	
LRIBA 1911	Son & ptnr of C.J. Dawson; ptnr of			1911, as ptnr of B.R. Parkes	
FRIBA 1939	H.W. Allardyce Obit: Bldg, v206, 1964 Apr 3, p696			26 & 27 County Chambers, Weston Rd, Southend	R1914
	Wykeham House, Barking	R1914		24 Seaforth Rd, Southend	W1914
	do.	W1914	E W7:11:		
Dawson, Noel Joh	n		Evans, William LRIBA 1912	6 Longfield Gdns, Romford	R1914
ARIBA 1907	Chief Asst to F. Whitmore			do.	W1914
FRIBA 1924	1 Fairfield Rd, Chelmsford 17 Duke St, Chelmsford	R1910 R1914	Frank Franksick	Q	
	do.	W1914	LRIBA 1912	George (1863-1945) Obit: Br, 1945 Dec 7, p459	#
Dean, John March			FRIBA 1926	76 Cranbrook Road, Ilford	A1907
Dean, john march		B1834*		do. do.	A1910 R1914
	Estate Office, Grove, Stratford	K1862		do.	W1914
	The Grove, Stratford	A1868			
Deckman, Harry A			Fearn, Stanley W.	Murray House, Loughton	A1910
LRIBA 1912	St Brelade's, Marine Ave, Leigh on	Diala		Munuy House, Loughton	
	Sea do.	R1914 W1914	Fenn, John	The Hall Ardleigh Colchester	41007
				The Hall, Ardleigh, Colchester	A1907
Dennison, John W ARIBA 1864	illiam (-1924) Obit: Br, v127, 1924 Dec 5, p 888	B1834*	Fenton, James (c. 2		
FRIBA 1871	Wakefield Lodge, East Ham	R1895		Conduit Sq, Chelmsford; house, Springfield	P 1839
Donaldson Selby	Thomas Tyssen Grey				
LRIBA 1911	39 Finchley Rd, Southend	R1914	Ferris, Alfred	Station Drive, Wickford	K1914
					N 1714
D'Oyley, William		B1834*	Ferry, Ernest Frani LRIBA 1912	. ,	# D1014
	Loughton	K1859	LNDA 1912	134 Capel Rd, Forest Gate do.	R1914 W1914*
	do. do.	A1868* A1883			
		A1605	Field & Field	Tower Bldgs, High St, Southend	A1907
Dunford, James W	• ·				
MSA 1890	Linda, Pembroke Rd, Walthamstow (1896)	B1834*	Field, Andrew Alfr	ed York Chambers, Southend on Sea	C1004
	1990) 19 St Mary's Rd, Walthamstow	C1898		Tower Bldgs, High St, Southend	C1894 C1898
Dunn	see Verly[c]k & Dunn				
Dunn, Edwin Tho	mas	Í	Fincher, Percy Rob	ert 49 Broadway, Leigh on Sea	K1914
LRIBA 1910	7 Roding St, Ilford	A1907		Broadway Chambers, Leigh on Sea	W1914

ESSEX ARCHITECTS 1834-1914

Firman, Woolmer I	Robert Belchamp Walter, Sudbury	D1886	Goodman, Herbert ARIBA 1892	RIBA membership lapsed 1911 37 Forest Drive West, Leytonstone	# B1834* R1895
Fitch, F.	Old Hall, Steeple Bumpstead	K1859		do. Cranfield, Woodford Green	R1900 R1905
Forge, Arthur Jame ARIBA 1894	es (-1897) Obit: RIBAJ, v5, 1898, p112		Goodman, Thomas	s (fl.1871-1883) 9 Prittlewell Sq, Cliff Town, Southend	A1883
	Oakleigh, Claremont Grove, Woodford Green	B1834*	Goodway	see Beckwith & Goodway	
Forge, Frederick L LRIBA 1911	indus (1874-1948) Obit: RIBAJ, v56, 1949 Mar, p244 Orchard Terrace, George Lane,	#	Gordon, Robert Cl LRIBA 1911	ifford Turner 395 Romford Rd, Forest Gate do.	R1914 W1914
	Woodford Archway House, Genge Lane, Woodford	C1898	Gould, George Har ARIBA 1908	rry Bertram (1879-1952) Obit: RIBAJ, v60, 1953 Feb, p163 Hurlingham House, Station Rd,	#
	do. [London]	A1910 W1914		Clacton do.	R1914 W1914
Forrest, George To LRIBA 1911 FRIBA 1919	opham (1872-1945) County Architect 1914-1919 Obit: Br, 1945 Apr 13, p287 Shire Hall, Chelmsford	# B1834* R1914	Gratton, Frederick ARIBA 1881 FRIBA 1893	Montague (1858-1918) Obit: RIBAJ, v25, 1918, p120-1 8 Guelph Terrace, Albert Rd, Walthamstow	B1834*
	do.	W1914		[China from 1882]	
Foster, Reginald C ARIBA 1909 FRIBA 1922	harles (1884-1970) Art to & ptnr of H. Tooley Obit: Bldg, v219, 1970 Aug 31,	#	Green, George H.	3 Sea View Rd, Leigh	K1914
	p34, 42 9 The Broadway, Woodford Green 'Casa', Monkhams Lane, Woodford Green, & Council Offices,	B1834* R1910	Greenhalgh & Broo	ckbank Bank Chambers, High St, Southend, & 52 Hamlet Court Road, Westcliff on Sca	A1907
	Buckhurst Hill	W1914		Bank Chambers, Southend (also Westcliff on Sea)	A1910
Francis, Horace Ho		0 1 and	Greenhalgh, J.F.		
	Allards Grove, Loughton Beechwood, Loughton (1905) do. do.	C1898 B1834* A1907 A1910		see also Greenhalgh & Brockbank; Thompson, James, & Greenhalgh 247 Leigh Rd East, Southend	K1914
French, C.			Griffin, Reginald P		
rienca, C.	Grays	K1859		Weston Chambers, Weston Rd, Southend	K1914
Frost, Robert Char	les (-1939) Obit: A&BN, v157, 1939 Mar 17, p32 Alpha House, Branch Rd, Hadleigh,	3	Grover, George Fr LRIBA 1931	ederick (1871-1934) Obit: RIBAJ, v42, 1935, p458 Burges Estate Office, The Broadway,	#
	Rayleigh	K1914		Thorpe Bay	K1914
Gardiner, George	11 Marine Parade, Clacton do.	A1907 A1910	Hamilton, George LRIBA 1910 ARIBA 1939	Douglas (1869-1952) Obit: RIBAJ, v60, 1953 Apr, p253 16 The Drive, Walthamstow [London]	# K1914 W1914
Gladwell, James M		Diala	Harrington & Ley		
LRIBA 1912	Doric Lodge, Hawkwell, Hockley do.	R1914 W1914		Royal Academy exhibitor, 1898-99 71 South St, Romford	A1907
Glover, Alexander	Keatle Bast Hill, Colchester	P1839	Harrington, Ley &	Tompkins Frinton Estate Offices, Frinton on Sea	A1907
Goldsmith, Cassius	s 1 Castle St, Saffron Walden	P1839	Harrington, Harry		#
Goodey, James Fre	derick (1834-1910) Uncle & ptnr of W.T. Cressall		ARIBA 1894 FRIBA 1913	see also Harrington & Ley; Harrington, Ley & Tompkins Prnr of A.S. Ley by 1900; with Wm Ev	
	West Stockwell St, Colchester 2 Victoria Chambers, West	D1886		c. 1929. Royal Academy exhibitor, 1890	B1834*
	Stockwell St (with W.T. Cressall) do.	C1894 C1898		71 South St, Romford Corn Exchange, Romford	A1907 A1910
	do. (Goodey & Cresswell [sic])	A1907 I		[London]	W1914

ESSEX ARCHAEOLOGY AND HISTORY

Harrington, Wilfre			Hilliard, George E.
MSA	Words Cottage, Pilgrims Hatch, Brentwood	W1914	Habbies William Vo
	dred Lodge (1864-1924)	#	Hobbiss, William Ye
ARIBA 1887	Commenced practice Chelmsford, 1889	B1834*	
	Pioneer in use of concrete	D1 034	Hogwood, Arthur
	Obit: RIBAJ, v31, 1923/24, p651		1
	3 Mayence Villa, New London Rd, Chelmsford	R1890	
	75 High St, Chelmsford	C1894	Homer & Co.
	do.	R1895	
	[Manchester]	W1914*	
Harris, H.A.	see Burles & Harris		1
Hart, Thomas Geo			Hook, John (1873-1)
MSA 1895	Victoria Bldgs, High St, Epping do.	A1907 A1910	LRIBA 1910
	do.	W1914*	1
Hay & Co	New Town, Colchester	D1886	Hooper & Lewis
Hayne, William	Connaught Ave, Frinton	A1907	Hooper, James Drun
	do.	A1910	:
			Hooper, W.F.
Hayward, Charles ARIBA 1855	Forster (1830-1905) Obit: Br, v89, 1905 July 15, p72	B1834*	1100pc1, w.1.
FRIBA 1861	166 High St & 2 St John's Terrace,	DIGJA	-
	Colchester, & at 8 Adam St, London	K1859	Hope, Joseph
	[London]	A1868*	,
Hayward, Henry H	Iammond (1785-1862)		Horney & Cham
	Father & punr of H.W. Hammond		Horner & Sharp
	Bank Bldgs, High St, Colchester Lexden	P1839 K1859	í.
	Leaden	K10,79	Horser, Cotterell Wa
Hayward, Henry W	Vinnock (1825-1893)	#	LRIBA 1911
	see also Pye & Hayward		•
	Son & ptnr of H.H. Hammond, later ptnr of G.G. Pye	B1834*	Hudson, A.
	Bank Bldgs, Colchester;	21051]
	residence, Lexden Heath	K1859	
	3 Bank Bldgs, Colchester	A1868	Hudson, John (1821) ARIBA 1865
Hayward, Percy G	eorge		
MSA 1904	Ptnr of H.L. Cabuche		5
	Queen's House, Hamlet Court Rd,		Hudson, Miles W.
	Westcliff do. [also London]	A1910 W1914	fiduson, miles w.
			T T A5 (7).
Hider, Ernest Jame			Iles, Henry William
	Huxter's Estate Offices, Bank Chambers, Clacton on Sea	C1898	-
	chambers, chacton on oca	01070	Ingleton, William Ric
			MSA I
Higgins, Percy Alex	xander		
Higgins, Percy Alex	xander 4 Eaton Villas, New Rd, Leigh	K1899	Ingram, Herbert Cla
	4 Eaton Villas, New Rd, Leigh	K1899	Ingram, Herbert Clar LRIBA 1911
Higgins, Percy Ale: Hill, Edwin Arthur ARIBA 1893	4 Eaton Villas, New Rd, Leigh	K1899 B1834*	÷ -
Hill, Edwin Arthur	4 Eaton Villas, New Rd, Leigh Oakfield Lodge, (Warley Rd,)	B1834*	LRIBA 1911 I Jackson, Charles Edv
Hill, Edwin Arthur	4 Eaton Villas, New Rd, Leigh Oakfield Lodge, [Warley Rd,] Brentwood	B1834* R1895	LRIBA 1911
Hill, Edwin Arthur	4 Eaton Villas, New Rd, Leigh Oakfield Lodge, (Warley Rd,)	B1834*	LRIBA 1911 I Jackson, Charles Edv
Hill, Edwin Arthur	4 Earon Villas, New Rd, Leigh Oakfield Lodge, [Warley Rd,] Brentwood do. do. 75 Westbury Rd, Brentwood	B1834* R1895 R1900 R1905 R1910	LRIBA 1911 I Jackson, Charles Edv MSA 1884 2 [
Hill, Edwin Arthur	4 Earon Villas, New Rd, Leigh Oakfield Lodge, [Warley Rd,] Brentwood do. do.	B1834* R1895 R1900 R1905	LRIBA 1911 I Jackson, Charles Edv

	Chelmsford	A1907
Hobbiss, William	Yendall 57 High St, Southend do.	C1898 A1907
Hogwood, Arthur	Deepdene, Eastwood Rd, Woodford	K1914
Homer & Co.	[? Edward Charles Homer (1845-1914): see Br, v108, 1915 Apr 2, p312-3 (obit)] see also Tom[p]kins, Homer & Ley Estate Office, Station Rd, Frinton	K1899
Hook, John (1873 LRIBA 1910	-1933) 62 Elmfield Rd, Walthamstow do. do.	# R1910 R1914 W1914
Hooper & Lewis	Woodford Green	D1886
Hooper, James Dr	ummond Woodford Wells, Woodford Snake's Lane, Woodford Green	A1883 K1899
Hooper, W.F.	London Rd, New Wanstead	K1866
Hope, Joseph	3 Lion Walk, Colchester 6 St John's Terrace, Colchester	K1866 A1883
Horner & Sharp	Fourth Ave, Frinton do.	A1907 A1910
	us.	111/10
Horser, Cotterell V LRIBA 1911	Walter (1865-1935) 65 Cleveland Rd, South Woodford do.	# R1914 W1914
	Walter (1865-1935) 65 Cleveland Rd, South Woodford	# R1914
LRIBA 1911	Walter (1865-1935) 65 Cleveland Rd, South Woodford do. London Rd, Lexden, Colchester	# R1914 W1914
LRIBA 1911 Hudson, A. Hudson, John (18)	 Walter (1865-1935) 65 Cleveland Rd, South Woodford do. London Rd, Lexden, Colchester 21/2-1897) Obit: Br, v73, 1897 Dec 18, p524 Stratford Green Stansted 	# R1914 W1914 A1907 B1834* A1868
LRIBA 1911 Hudson, A. Hudson, John (18: ARIBA 1865	 Walter (1865-1935) 65 Cleveland Rd, South Woodford do. London Rd, Lexden, Colchester 21/2-1897) Obit: Br, v73, 1897 Dec 18, p524 Stratford Green Stansted 8 Harpenden Rd, Manor Pk 	# R1914 W1914 A1907 B1834* A1868 R1895
LRIBA 1911 Hudson, A. Hudson, John (18: ARIBA 1865 Hudson, Miles W.	 Walter (1865-1935) 65 Cleveland Rd, South Woodford do. London Rd, Lexden, Colchester 21/2-1897) Obit: Br, v73, 1897 Dec 18, p524 Stratford Green Stansted 8 Harpenden Rd, Manor Pk n Billericay 	# R1914 W1914 A1907 B1834* A1868 R1895 K1914
LRIBA 1911 Hudson, A. Hudson, John (18: ARIBA 1865 Hudson, Miles W. Iles, Henry William Ingleton, William	 Walter (1865-1935) 65 Cleveland Rd, South Woodford do. London Rd, Lexden, Colchester 21/2-1897) Obit: Br, v73, 1897 Dec 18, p524 Stratford Green Stansted 8 Harpenden Rd, Manor Pk n Billericay Richard Pilcrofts, Old Rd, Great Clacton 	# R1914 W1914 A1907 B1834* A1868 R1895 K1914 K1914
LRIBA 1911 Hudson, A. Hudson, John (18: ARIBA 1865 Hudson, Miles W. Iles, Henry William Ingleton, William MSA Ingram, Herbert C	 Walter (1865-1935) 65 Cleveland Rd, South Woodford do. London Rd, Lexden, Colchester 21/2-1897) Obit: Br, v73, 1897 Dec 18, p524 Stratford Green Stratford Green Stransted 8 Harpenden Rd, Manor Pk n Billericay Richard Pilcrofts, Old Rd, Great Clacton Clavell (1877-) Highwood, Chelmsford do. [& London] 	# R1914 W1914 A1907 B1834* A1868 R1895 K1914 K1899 R1914

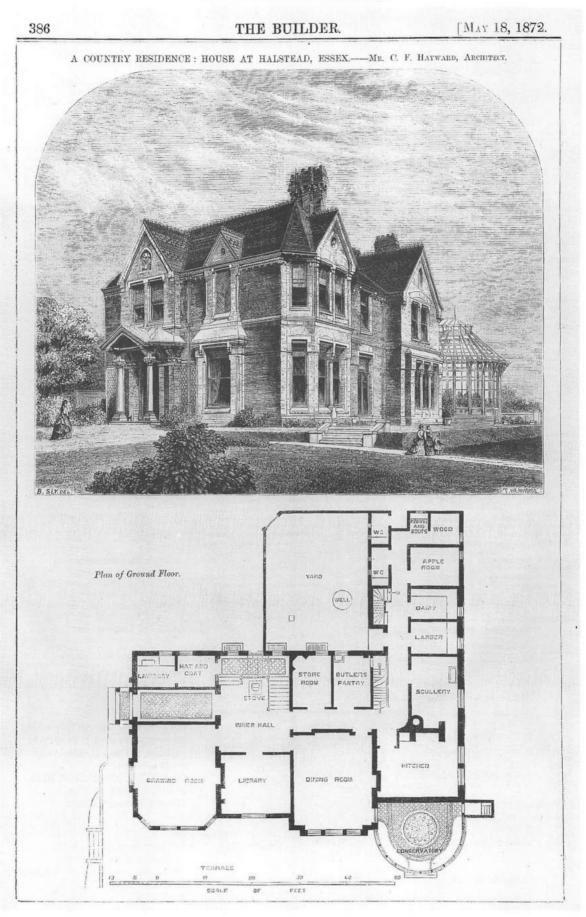


Fig. 1 'A Country Residence: house at Halstead, Essex', designed by Charles Forster Hayward. The house was built of local bricks of yellowish white colour, with some moulded stone dressings. The work was carried out by J. Sudbury jun. of Halstead at a cost, including fittings, of about £3,000. (*The Builder* xxx (1872), pp. 384 & 386; British Architectural Library, RIBA, London.)

ESSEX ARCHAEOLOGY AND HISTORY

		1	Louis Locark Comonton	
Jackson, Samuel	674 Romford Rd, Manor Pk	K1899	Lewis, Joseph Carpenter Red Lodge, Chelmsford Rd,	
	51 Gordon Rd, Wanstead	K1914		K1878
			Chelmsford Rd, Woodford A	A188 3
James, Samuel Th				
MSA 1896	'Holmhurst', Frinton	B1834* C1898	Lewis, William Arthur (1870-1955) #	ŧ
	Frinton on Sea	C1898	ARIBA 1894 Obit: Br, v188, 1955, p516;	
Inning Emest				31834* R1895
Jennings, Ernest	3 Cross St, Saffron Walden,			W1914
	& at Thaxted	K1914		
			Ley, Algernon Sydney Richard (1872-1950) #	¥
Johnson, Ernest N	Jelson		MSA see also Harrington, Ley & Tompkins;	•
LRIBA 1910	31 Gordon Rd, Chingford	K1914	LRIBA 1911 Tom[p]kins, Homer & Ley; &	
	[London]	W1914	under Moore-Smith, J.R.	
<u>-</u>			Ptnr of H. Harrington & Tompkins;	
Johnson, Frederic	k Henry Church St, Saffron Walden	D1886	of A.H. Ley from 1926 & H.C. Colbeck	
	do.	C1894	from 1943 Royal Academy exhibitor, 1911	
	do.	C1898	• = .	31834*
				W1914*
Josling, Arthur				
	High St, Maldon	A1868	Linseli, James	
			George Lane, Woodford E	D1886
Kelf, J.J.				
	179 Hoe St, 26 High St & 22 St Marrie Bridge Welthematow	C1898	Long, Charles	
	St Mary's Bridge, Walthamstow Queen's Rd, Leigh on Sea	A1907	Hill St, Saffron Walden K	K1862
	Queen's Ru, Leigh on Sea	111901		
Kempster, Fred			Longmore, William Alexander (1824/5-1907)	
LRIBA 1910	Chalgrove, Ingatestone Rd,		FRIBA 1892 Practised in Walthamstow from 1869;	
	Wanstead Pk	R1910	opened London office 1875 Obit: Br, v93, 1907 Nov 30, p591 B	31834*
	do.	R1914	Bridge Chambers, Hoe St,	51654"
	do.	W1914		C1894
	1 (1057		do. C	C1898
Kent, George Nat LRIBA 1911	521 Barking Rd, Plaistow	R1914	13 Prospect Hill, Walthamstow R	R1905
Ettini 1911	do.	W1914*		
			Low, James Bartlett Hyde	
Knight, John M.				A1907
	Bushwood, Wanstead	C1898	do. A	A1910
	do.	A1907	Lauren Bardariak	
Lacey, Arthur En			Lowry, Frederick LRIBA 1911 24 Broadway, Leigh on Sea R	R1914
Lacey, Arthur En	Woodstock, Hillside Crescent,			W1914
LIGHTIM	Leigh on Sea	R1914	; 	
	62 Lymington Ave, Leigh on Sea	W1914	McDoneil, George (fl.1879-1908)	
				31834*
Lamb, George			Sunnyside, Romford Rd, Strafford K	K1878
	70 East St & 82 Longbridge Rd,			
	Barking	C1894	Mann, Henry William (-1918)	
	do. 76 East St, Barking	C1898 K1899	ARIBA 1914 Art to F. Chancellor & Son; stayed	
	To Last St, Darking	K1099	on as assistant until 1912; Chief	
Lea, -			Assistant to Essex County Architect (F. Whitmore)	
	St Edward's Sq, Romford	A1868	Obit: RIBAJ, v25, 1917/18, p123,	
			168, 174 (killed in action)	
Lee, Francis Good	dall (fl.1868-1886)		Chignall House, Witham R	R1914
		B1834*		
	[London] North St, Romford	A1868 K1870	Martin, Alfred Jackson	
		1/10/10	-	31834*
Lee, Philip F.				R1895 C1898
	Oaklands, Woodford	A1907		R1900
-				1907
Lello, Thomas Sta	• •	A1010		
MSA 1909	High Road, Chadwell Heath do.	A1910 W1914*	Martin, James William	
	40.	W 1713	Station Chambers, Station Rd, Clacton K	\$1899
Leutchford, Georg	ge Harry			
	Athelston Rd, Harold Wood, Romford	K1914 i	Martin, R. Banks see Banks-Martin, Robert	

ESSEX ARCHITECTS 1834-1914

Massa, Thomas (fl.	1868-1886)	
	Ivy Lodge, Balaam St, Plaistow do.	B1834* A1868 K1878
Matheson, Kenneti ARIBA 1911	n William (1884-1955) Ilford Borough Council	#
	26 Spratt Hall Rd, Cambridge Pk, Wanstead do.	R1914 W1914
Marrie - 1 8 Car		
Mawhood & Son	17 Market Rd, Chelmsford	K1914
Mawhood, Richard		
	2 Market Rd, Chelmsford do.	C1894 C1898
	do.	A1907
	do.	A1910
	89 Rose Valley, Brentwood	K1914
May, Edward Erne	see also Baker & May	
	Ptnr of T.H. Baker	
	Obit: Br, v154, 28 Jan 1938, p196 10 Head St, Colchester	A1910
Merson, John Bruc		
LRIBA 1910	Ilford UDC 4 Pk View, Brisbane Rd, Ilford	R1914
	do.	W1914*
Migotti, Alphonzo ARIBA 1888	(1860-) Resigned from RIBA 1934	B1834*
AIGBA 1000	Eusemere, Castle Rd, Clacton	R1914
Miles, Frank Mont LRIBA 1912	ague Forest Lane, Chigwell	R1914
LINDATIME	do.	W1914
	~	
Moore [or More],	George 3 Lansdown Terrace, Gurney Rd,	
	New Town, Stratford	K1870
	3 Harley Terrace, Gurney Rd,	
	Forest Gate	K1878
	267 Romford Rd, Stratford	K1886
Moore, Theodore ((1863-1935)	
ARIBA 1887	Whipps Cross, Walthamstow	B1834*
Moore-Smith, John MSA	(fl.1868-1900) Father of J.R. Moore-Smith	B1834*
Man	2 Surinam Terrace, Stratford,	01074
	& at Romford	K1862
	Robert (1856-1945)	
ARIBA 1896 FRIBA 1902	Art to father, J. Moore-Smith; asst, 1885-90; ptnr of H. Colbeck, 1919-32;	
1100011/02	then amalgamated with Ley & Son	
	as Ley, Colbeck & Pinrs	B1834*
	46 Clova Rd, Forest Gate	K1914
	[London]	W1914
More, George	see Moore, George	
Morey, Charles Wi	illiam	
	81 Osborne Rd, Forest Gate	K1914
Morris, Frederick I	Evelyn	
-	West Stockwell St, Colchester	D1886
Morris Gaorna E	[? George Ford Morris, d.1960]	
Morray Ocorge P.	Madeira, Cambridge Pk, Wanstead	A1907

Mortimer, W., & Se	0n	
	Broadway Chambers, Romford	A1907
	do.	A1910
Moull, William Arn	old (1858-1940)	#
ARIBA 1889	(1050 1710)	 B1834*
	Brentwood	R1890
	do.	R1895
	do.	R1900
	do. do.	R1905 R1910
	do.	R1914
	do.	W1914
Mundy, William		D1024+
	[London]	B1834* A1868
	Leytonstone	K1870
Newman, John The		
FRIBA 1886	Obit: RIBAJ, v3, 1895/96, p223	B1834*
	Stopford Rd, Plaistow Kelvedon Hatch, Brentwood	K1870 R1890
	Kelvedon Hatch, Brentwood	K1090
Noble, George Rich		
	Woodford	K1859
	Selway Hill, Woodford	A1883
Noble, John		
	St Alban's Lodge, Woodford	A1883
	do.	D1886
	Woodbridge Bridge, Woodford	C1894
Nockolds, Alfred G		
Hockolas, filled G	Saffron Walden	A1907
	do.	A1910
Nockolds, Martin		
	Probably father of A.G. Nockolds Saffron Walden	A1907
	do.	A1910
Nunn, Frank Regin		
LRIBA 1912	86 Maldon Rd, Colchester	R1914
	do.	W1914
Nunn, Fred J., & C	Co.	
	The Estate Office, Walton-	
	on-the-Naze; & Town Hall Bldgs,	
	Clacton	K1899
New Course F		
Nye, George E.	64 Argyle Rd, Ilford	K1914
	· · · · · · · · · · · · · · · · · · ·	
Oliphant, Frederick		
ARIBA 1881	In office of F. Chancellor from 1876; expelled from RIBA 1896	B1834*
	Chelmsford	R1886
Ormes, J.E.	D. K. M. D. Mar	11050
	Bradford St, Bocking	K1859
Orwin, James Barcl	ay	
LRIBA 1911	Llanwrst, Stornoway Rd, Leigh on Sea	
	do.	W1914
Ough, Henry (fl.18	68-1907)	
	<i>,</i>	B1834*
	[London]	A1868
	9 Maryland, New Town, Stratford,	TF. 1 -1
	& at Charing Cross	K1870

-		
	Surveyor to Tendring RDC	A 1007*
	Dovercourt do.	A1907* A1910*
	45.	A1710
Page, George Henr	у	
	Trinity Chambers, Colchester	D1886
	do.	C1894
	Trinity Chambers, Culver St	C1898
	do.	A1907
	do.	A1910
Parker, Charles A.		
	Woodham Mortimer Place, Maldon	A1907
	do.	A1910
Parkes, B.R.	see under Evans, N.	
Darbina Harry		
Parkins, Henry	Military Rd, Colchester	P1839
	Miniary Ru, Connector	11079
Pavitt, William S.		
-	Rettendon, Chelmsford	K1899
Payne, James Alfred		B 1010
LRIBA 1910	5 Rectory Rd, Walthamstow	R1910
	27 Stanhope Gdns, Ilford do.	R1914 W1914
	uo.	W 1914
Pearson, Thomas		
	Elgin Lodge, Chadwell Heath	K1878
Pease, C.E.		
•	10 South St, Romford	K1914
Penrice, John (fl.18		
	13 Crouch St, Colchester	P 1839
Pertwee, Charles (1	832/3 1005)	
	In office of F. Chancellor until 1862	
ARIBA 1881		
ARIBA 1881 MSA 1885		
MSA 1885	Ptnr of W.H. Pertwee	
		B1834*
	Ptnr of W.H. Pertwee Surveyor to Local Board of Health	B1834* A1868
	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford	A1868 R1886
	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford	A1868 R1886 D1886
	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford	A1868 R1886 D1886 R1890
	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers	A1868 R1886 D1886 R1890 C1894
	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa	A1868 R1886 D1886 R1890 C1894 R1895
	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers	A1868 R1886 D1886 R1890 C1894 R1895 C1898
	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900
	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers	A1868 R1886 D1886 R1890 C1894 R1895 C1898
	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907
	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do.	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907
MSA 1885	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. lart (-1928) Ptmr of T.J. Hart in London; in	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910
MSA 1885 Pertwee, William H	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. Mart (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910
MSA 1885 Pertwee, William H	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. (art (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert Obit: RIBAJ, v35, 1927/28, p535	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910
MSA 1885 Pertwee, William H	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. (art (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910 wee A1907
MSA 1885 Pertwee, William H	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. art (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford do.	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910
MSA 1885 Pertwee, William H	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. (art (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910 wee A1907
MSA 1885 Pertwee, William H MSA 1885	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. Mart (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford do. Chelmsford	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910
MSA 1885 Pertwee, William H	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. Mart (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford do. Chelmsford	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910
MSA 1885 Pertwee, William H MSA 1885	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. fart (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford do. Chehmsford	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910
MSA 1885 Pertwee, William H MSA 1885 Peters, Charles Rud	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. (art (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford do. Chelmsford ddick Aldum Lodge, Cann Hall Rd, Leytonstone	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910 wee A1907 A1910 W1914 K1886
MSA 1885 Pertwee, William H MSA 1885 Peters, Charles Ruc Pipe, Frederick Daa	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. (art (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford do. Chelmsford ddick Aldum Lodge, Cann Hall Rd, Leytonstone	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910 wee A1907 A1910 W1914 K1886 #
MSA 1885 Pertwee, William H MSA 1885 Peters, Charles Rud	Ptnr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. (art (-1928) Ptnr of T.J. Hart in London; in Chelmsford from 1900; ptnr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford do. Chelmsford ddick Aldum Lodge, Cann Hall Rd, Leytonstone hiel (1875-1949) 103 Henley Rd, Ilford	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910 wee A1907 A1910 W1914 K1886 # R1914
MSA 1885 Pertwee, William H MSA 1885 Peters, Charles Ruc Pipe, Frederick Daa	Ptmr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. (art (-1928) Ptmr of T.J. Hart in London; in Chelmsford from 1900; ptmr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford do. Chelmsford ddick Aldum Lodge, Cann Hall Rd, Leytonstone	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910 wee A1907 A1910 W1914 K1886 #
MSA 1885 Pertwee, William H MSA 1885 Peters, Charles Rud Pipe, Frederick Dat LRIBA 1911	Ptnr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. Claremont Villa Bank Chambers do. (art (-1928) Ptnr of T.J. Hart in London; in Chelmsford from 1900; ptnr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford do. Chelmsford kdick Aldum Lodge, Cann Hall Rd, Leytonstone hiel (1875-1949) 103 Henley Rd, Ilford do.	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910 wee A1907 A1910 W1914 K1886 # R1914
MSA 1885 Pertwee, William H MSA 1885 Peters, Charles Ruc Pipe, Frederick Daa	Ptnr of W.H. Pertwee Surveyor to Local Board of Health Obit: Br, 1905 Mar 25, p330 New St, Chelmsford Chelmsford Bank Chambers, New St, Chelmsford Claremont Villa, Chelmsford Bank Chambers Claremont Villa Bank Chambers Claremont Villa Bank Chambers do. Claremont Villa Bank Chambers do. (art (-1928) Ptnr of T.J. Hart in London; in Chelmsford from 1900; ptnr of C. Pert Obit: RIBAJ, v35, 1927/28, p535 Bank Chambers, New St, Chelmsford do. Chelmsford kdick Aldum Lodge, Cann Hall Rd, Leytonstone hiel (1875-1949) 103 Henley Rd, Ilford do.	A1868 R1886 D1886 R1890 C1894 R1895 C1898 R1900 A1907 A1910 wee A1907 A1910 W1914 K1886 # R1914

Point, William John		B 1834*
ARIBA 1881 Porter, Henry Arth	Queens Rd, Buckhurst Hill ur	D1054"
ARIBA 1907	High View Ave, Grays Danesbury, Squirrel's Heath Ave,	R 1910
	Gidea Pk	R1914
Poston, Henry (184	Obit: Br, v94, 1908 May 9, p551	B1834*
	Belle Vue, Earlham Grove, Forest Gate	K1886
T		
Pratt & Woods	Town Hall, Brentwood	K1886
Preston, Archibald	Frederick	
LRIBA 1910	86 Warren Rd, Leyton	R1910
	do. do.	R1914 W1914
Price, W.J.		
1 11003 W (J)	35 Airlie Gdns, Ilford	K1914
Pulford, William Ja	mes (1883-)	
MSA 1908	Art to P.M. Beaumont	
	5 Queen St, Maldon	A1910
	[Shrewsbury]	W1914*
Punnett, William H	lenry (fl. 1883-1914)	#
	62 Disraeli Rd, Forest Gate	K1914
Pye & Hayward	3 Bank Bldgs, Colchester	A1883
Pye, George Gard		
ARIBA 1871 MSA 1889	see also Pye & Hayward	D1024#
M3A 1009	3 Bank Bldgs, Colchester	B1834*
Rainford, Henry		
	Station Estate Office, Wickford	K1914
Reis, Victor Cinatti	Batalha	
ARIBA 1910	2 King Edward's Ave, Colchester	R1914
D		
Riches, Herbert	Norfolk House, Grove Rd, Wanstead	C1804
	Wallwood, Church Green, Wanstead	C1898
	do.	A1907
.		
Roberts, James	Heath Cottage, Dedham	V1950
	do.	K1859 A1883
Roberts, James Ma	ckenzie (fl.1854-1886)	#
	Pupil of H.A. Hunt Heath Cottage, Dedham	B1834* A1868*
	Tradi Collage, Dedilam	11000
Roberts, James Me		
	Dedham	D1886
Robinson, Martin (atlin .	
roomson, iviarini v	Trout Hall, Wendens Ambo,	
	Saffron Walden	K1914
Rogers, John Russe		R1000 *
	6 High St, Maldon	E1909*
Ross, Walter Gray	(fl.1899-1959)	
ARIBA 1899	see also Clare & Ross	B1834*
	74 Duke St, Chelmsford	
	(with G.E. Clare)	A1907

ESSEX ARCHITECTS 1834-1914

	72 Hamlet Court Rd, Westcliff			RIBAJ, v17, 1909/10, p176	
	[& London]	R1910		105 Moulsham St, Chelmsford	K1878
Destroll William				Chelmsford (1881)	B1834*
Ruffell, William	Queen St, Colchester	P1839	Shiner, Christophe ARIBA 1895	rr Mitchell (1857-1944)	
Runnacles, Charles	i		AKIDA 1095	Obit: Br, 1944 Jan 7, p23 Orsett Rd, Grays (1907)	B1834*
,	Earls Colne	K1914		[London]	W1914
Bushworth Tom	Sadler (1880/81-1916)				
ARIBA 1913	Worked in LCC Housing Dept		Shiner, J.M. [i.e. C		
	Obit: Br, 1916 Oct 20, p 243;			Orsett Rd, Grays	A1910
	RIBAJ, v23, 1915/16, p340				
	Sheering, Harlow	R1914	Shiner, J.W. [i.e. C	Orsett Rd, Grays	A1907
Russell, Arthur Ch	atles			oracti mi, orașs	111907
MSA	128 Pembroke Rd, Ilford	A1910	Shiner, Lawrence A	Alexander David	
	[London]	W1914	ARIBA 1910	Blackshott Lodge, Little Thurrock	R1914
0.				do.	W1914
Salter, Edward Jan	3 Bartholomew Villas, High Rd,				
	Loughton	K1886	Sidwell, Alfred G.	TTU A. TPUL. There is a loss threads into	171014
	Loughton			Hilda Villa, Thundersley, Rayleigh	K1914
Sames	see Bromiley & Sames		Sidwell, Henry Th	-	
	4		LRIBA 1910	Gondola Villa, Rayleigh	R1910
Sansom, W.S. Ven	n			do.	R1914
	71 East Hill, Colchester	A1907		do.	W1914
Caul House Albert	(1860, 1072)	#			
Saul, Henry Albert ARIBA 1892	(1809-1933) Obit: Br, 1933 Apr 28, p704;	#	Simpson, William		TT 1 0 0 0
FRIBA 1915	RIBAJ, v40, 1932/33, p27	B1834*		St Mary Hall, Belchamp Walter	K1899
	Perryvale, Walwood Rd, Leytonstone	R1895			
	[London]	W1914	Sinfield, Robert Jo	n The Cedars, Colne Rd, Clacton	A1907
				do.	A1910
Scargill, Walter (18	329-1909)	#			
	[London]	B1834* A1868*	Slade, James H.		•
	Essex Hall Road, Colchester	D1886	- •	Upminster (near), Romford	A1907
	-			do.	A1910
Scott, C.J. [? Cecil	James Scott, 1889-1959]	W1014			
	92 South Ave, Southend	K1914	Smart, Henry Cha MSA 1895	ries (1860-1948)	# B1834*
Scrivener, Frank			FRIBA 1925	Selworthy, New Wanstead	K1914
ochivenet, Flank	66 Sherrard Rd, Forest Gate	K1914		[London]	W1914
Seddon, Joseph			Smee, Frank Edwa		#
ARIBA 1909	Hoarwithy, Risebridge Rd, Gidea Pk	K1914	MSA 1894	Surveyor, Leigh on Sea UDC,	
	[London]	W1914	FRIBA 1907	1897-1907 Obit: Br, v162, 1942 Apr 17, p345	B1834*
Sergeant, George				Seacroft, Leigh	K1899
Sergeant, George	Queen St, Colchester	P1839		Thornton, Grand Parade,	
	10 North Hill, Colchester	K1859		Leigh on Sea (& London)	W1914*
	TT A A				
Sharp	see Horner & Sharp		Smith, Frank Willi		DI
Shears, Reginald		1	ARIBA 1911	Borough Engineer's Office, Municipal Southend	R1914
ARIBA 1912	38 Anerley Rd, Westcliff on Sea	R1914		do.	W1914
	do.	W1914			
	_		Smith, Hugh		
Sheldrake, Robert		D1930		51 Rainsford End, Chelmsford	A1907
	53 North Hill, Colchester	P1839	~ ~ • • • • •		
Shenton, Harold A	bbis		Smith, John Moor	e see Moore-Smith, John	
	Lyndhurst, Baxter Ave, Southend	K1899	Smith John Daha	1 see Moore-Smith, John Robert	
Chambre Chambre C			Şımın, John Kobel	I see WOULC-SHITTIN, JUIH ROOCH	
ARIBA 1882	ampbell (1843-1909) In office of F. Chancellor as managing	#	Smith, Walter		
FRIBA 1898	assistant for 10 yrs; own practice from		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Field Rd, Forest Gate, West Ham	K1870
	1877. Royal Academy exhibitor,			-	
	1880-89		Smith, William		
	Obit: Br, 1909 Dec 18, p678;	I		Kirkdale, Leytonstone	K1870

ESSEX ARCHAEOLOGY AND HISTORY



Fig. 2 'Seaside House at Dovercourt', designed by George Campbell Sherrin, standing on a prominent site on the sea front. This was one of a number of sketches of recent buildings — which also included Sherrin's Alexandra Hotel, Dovercourt — drawn by T. Raffles Davison on an 'East Coast Ramble'. (British Architect lx (1903), p. 442 & supplement; British Architectural Library, RIBA, London.)

Spackman, Adria	n Elmy (1860-1936)		Stibbards, Williar	n John	
ARIBA 1891	Obit: RIBAJ, v43, 1936, p668			Hadleigh, Rayleigh	K1899
	Oakes Cottage, Maybank Rd, South			Cedar Hall, Thundersley, Rayleigh	K1914
	Woodford				
	[& Gt Eastern Rwy, Liverpool St]	B1834*	Stimson, Edwin	Charles (fl.1878-1913)	
			ARIBA 1882	Grove, Stratford	K1878
Sparks	see Adams & Sparks			Cambria House, The Grove,	
				Stratford (1881)	B1834*
Spencer, Arthur	George				
1	Old Bank House, Clacton	A1907	Stockdale, Freder	ick George	
	do.	A1910	ARIBA 1906	31 Cotswold Rd, Westcliff	R1910
	Beaumanor, Alton Rd, Clacton	K1914		[Belfast]	R1914
				31 Cotswold Rd, Westcliff	W1914
Spooner, Thomas					
opconer, monia	19 Avenue Rd, Forest Gate	K1886	Street, William C	harles (1835-1913)	#
	1) Include Fully Forest Gate	101000	ARIBA 1880	Obit: Br, v104, 1913 May 23, p603	
Spratt Eldridge I	Frederick Augustus		FRIBA 1891	Essex Lodge, Walton on the Naze	B1834*
Spratt, Eldnuge I	Hillworth, Thundersley	A1910			
	Fillworth, Thundersley	AI910	Sturdy, Francis Io	ohn (fl.1881-1926)	
			ARIBA 1882	Art to J. Hudson	B1834*
Stanford, Charles			FRIBA 1907	Surinam, Hollybush Hill, Leytonstone	
	23 High St, Colchester	A1907			
			Sudbury & Son		B1834*
Stair, Walter (185	· · · · · · · · · · · · · · · · · · ·			Halstead	A1868
MSA	Ridgeway Rd, Chingford	K1899		Tubleud	111000
	Ridgeway, Chingford (1905)	B1834*	Surridge, Joseph 3	Smith	
			o annage, jouepri .	Coggeshall	A1907
Start, Joseph Will				do.	A1910
	5 Head St, Colchester	D1886			0.000.000.000
	Cups Chambers, Colchester	C1894	Swan, James Hen	ry (-1937)	
	do., & West St, Harwich	C1898	LRIBA 1911	Borough Surveyor, Walthamstow	
	Pier Ave, Clacton, Cups Chambers,		FRIBA 1921	Obit: Br, v152, 1937 Apr 9, p770	
	High St, Colchester, & West St,			& Apr 23, p875	
	Harwich	A1907		Town Hall, Walthamstow	K1878
	Cups Chambers	A1910		[London]	W1914
Stephens, D.S.			Sworder, Hugh		
	11 High St, Romford	A1907		High St, Epping	A1907

Sykes, Arthur (186		#
ARIBA 1888	Obit: Br, v158, 1940 Mar 15, p332	B1834*
FRIBA 1906	Mendip, Carnarvon Rd, Clacton	R1910
	[London]	W1914
Tallboy, F.J.		
	4 Kensington Gdns, Cranbrook Pk,	
	Ilford	A1907
	do.	A1910
Tanner, Joseph		
FRIBA 1863[-186	8] The Ferns, Buckhurst Hill	B1834*
Tonn Anthur		
Tapp, Arthur	Southend on Sea	A1907
	Southend on Sea	LI 901
Taylor, William Pe	pole	
	18 Water Lane, Manbey Pk, Stratford	K1870
Theobald, Henry		
	Cleveland Rd, South Woodford	C1894
	19 Cranbrook Gdns, Ilford	C1898
	do.	A1907
Thomason Iter	(1862)	#
Thompson, James	(1802-) see also Thompson, James, &	**
	Greenhalgh	B1834*
	103 Broadway, Southend, &	D1024"
	39 Hamlet Court Road, Westcliff	
	on Sea	A1907
	do.	A1910
	14 Preston Rd, Westcliff on Sea	E1909*
	do.	K1914
Thompson, James,	, & Greenhalgh	
	Bank Chambers, High St, Southend	C1898
Tighe, Arthur		41007
	Holland Rd, Clacton	A1907 A1910
	do.	AIVIO
Tompkins	see Harrington, Ley & Tompkins;	
- • • • • • • • • • • • • • • • • • • •	Tom[p]kins, Homer & Ley	
Tom[p]kins, Hom	er & Ley	
	The Estate Offices, Connaught	
	Avenue, Frinton	K1914
Tasler Urter (1944 1050)	#
Tooley, Herbert () ARIBA 1889	Purr of R.C. Foster	# B1834*
FRIBA 1907	Obit: Br, 1958 Jun 13, p1087	D1004
1 141011 1907	2 Belmont Villas, Albert Road,	
	Buckhurst Hill	R1890
	do.	R1895
	Council Offices, 3 Victoria Terrace,	
	Queen's Rd, Buckhurst Hill	C1898
	2 Belmont Villas	R1900
	Council Offices, Queen's Rd	R1905
	do.	R1910
	do.	R1914
Tom William II	(1042)	
Town, William He ARIBA 1888	enry (-1942)	B1834*
ANDA 1000	4 Duke St Chambers, Chelmsford	R1905
	10 Wellesley Rd, Colchester	A1910
	do.	R1910
	do.	R1914
	do.	W1914
Trevor, John		
	Ballingdon, Sudbury	K1886
Tumor Hereld C		
Turner, Harold G	CO18C	
	43 Heath Drive, Gidea Pk	K1914

Tyas, F.C.		
	Survey & Estate Office, Walton on Naze	A1907
Upson, Frank M.	Bull Farm, Pitsea	K1914
Verlander, R.C.	75 Leigh Rd, Leigh on Sea	K1914
Verly[c]k & Dunn	2 Adelaide Terrace, Ilford	C1898
Verlyck, George Lo LRIBA 1911	ouis Marie see also Verly[c]k & Dunn Adelaide Chambers, Ilford do. The Pines, Becontree Heath, Romford do.	A1907 A1910 R1914 W1914
Vincent-Brown, Fr	ank George Station Rd, Epping 6 Orwell Terrace, Dovercourt & West Ave, Clacton	A1910 K1914
Wallen, J. & F.	High St, Romford	K1866
Wallis, Frank W.	6 Claremont Villas, Grays Thurrock	K1886
Ward, Edmund Joł MSA LRIBA 1911	บา 265 High Rd, Ilford do.	R1914 W1914
Watkins, H.	20 Cliff Town Rd, Southend	K1914
Watkins, Peter	Grove Villas, Great Ilford 1 Clevelands Villas, Ilford	K1886 K1899
Weaser, L.T.	132 High St, Southend	K1914
Webb, James	Springfield Lane, Chelmsford	P1839
Webb, Stephen (18	305-1871) Guy Harlings, Chelmsford New London Rd, Chelmsford	K1859 K1870
Wesley, J.F.	277 Romford Rd, Stratford	K1886
Westerman, Freder	rick T. Carisbrooke, Pretoria Rd, Romford	K1914
Westwood, Percy J ARIBA 1904	ames (1878-1958) Of Westwood, Sons & Pinrs; architects to Austin Reed; formerly pinr of J. Emberton Obit: Br, 1958 Jan 31, p228; RIBAJ, v65, 1958 Apr, p212	#
	26 High St, Grays Thurrock [London]	R1905 W1914
Weymouth, G.	Stone House, Clacton	K1878

ESSEX ARCHAEOLOGY AND HISTORY

White, Horace (18	76-1954)	#		do.	A1907
ARIBA 1903	Art to E. Egan			do.	A1910
FRIBA 1911	Obit: RIBAJ, v61, 1954 May, p295			do.	K1914
	High Rd, Loughton	R1905			
	do.	A1907	Woods, Arthur Th	omas Gunnell	
	do.	A1910	MSA 1888	see also Pratt & Woods	
	Loughton	R1910	•	New Rd, Brentwood	C1894
	High Rd, Loughton	R1914		Town Hall, Brentwood (1896)	B1834*
	do.	W1914		New Rd, Brentwood	C1898
	uo.	W 1714		do.	A1907
Whiteware East	(1850 1820)			do.	A1910
Whitmore, Frank (•			do.	W1914
	Architect to the County Council			u 0.	W 1714
	Mayor of Chelmsford, 1892-3			(8.1000.1003)	
	Obit: Br, 1920 Feb 13, p186	Diani	Woollard, Benjami	n (ff.1889-1907)	D1024
	21 Duke St, Chelmsford	D1886	ARIBA 1889		B1834*
	do.	C1894	FRIBA 1904	Ilford	C1894
	do.	C1898		The Chalet, Balfour Rd, Ilford	C1898
	17 Duke St	A1907*		do.	K1899
	do.	A1910*			
	Maltese House, Chelmsford	E1909*	Wright, Edward		
				Alexandra St, Southend	D1886
Wickenden, Arthu	r Fred (1879/81-1956)	#		61 High St, Southend	C1894
ARIBA 1907	Council Surveyor, Ilford			3 Queen Anne Villas, Whitegate Rd,	
	Obit: Br, v191, 1956 Oct 5, p582	B1834*		Southend	C1898
	Town Hall, Ilford & 186 Coventry Rd	W1914*		Western Road, Southend	A1907
				western Road, Soumena	A1907
Wilson, James			Wrightson, William	Hanny	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Broomfield, Chelmsford	P1839	LRIBA 1910	Ptnr of T.H. Baker	
			LKIDA 1910		
Winter, Frederick	Joseph [?1877-1956]			Town Hall, Clacton	R1910
MSA 1908	37 High St, Southend	A1910		do.	R1914
1410A 1900	2 Heygate Ave, Southend	W1914		do.	W1914
	2 Reygate Ave, Southend	W1914			
W/			Wyles, John Walter		
Winter, James	B I V E -	Dissi	LRIBA 1911	Shortlands, Woodford Rd, Woodford	A1907
	Dane Lodge, Epping	D1886		[London]	W1914
	do.	C1898			
			Young, James		
Wood, R.J.			LRIBA 1912	74 Pk Road, Ilford	R1914
	Ashleyville, Southend	A1907		do.	W1914
Wood, T.			Young, John (1830	-1910)	
	2 Wellington Pl, Lexden Rd,		ARIBA 1860	Obit: RIBAJ, v17, 1909/10, p702	B1834*
	Colchester	K1859	FRIBA 1892	Guildford [sic] Lodge, Brentwood	C1898
	~~~~~~		- MIDA 1072	Guilford Lodge, Brentwood	
Wood, Walter Jam	<b>4</b> 0				R1905
wood, watter jalli	26 Alexandra St, Southend on Sea	C1804		Guildford [sic] Lodge	A1907
	-	C1894		do.	A1910
	do.	C1898	1	Guilford Lodge	R1910

Author: James Bettley, The Old Vicarage, Great Totham, Maldon CM9 8NP.

# Work of the Essex County Council Archaeology Section, 1992

edited by A. Bennett

This annual report enables the Section to publish notes on a number of watching briefs and chance finds made during the year, as well as final reports on a number of smaller excavations. Summaries of larger excavations, evaluations and intensive watching briefs can be found elsewhere in this volume (pp. 195-210).

Reports are arranged in chronological order or, in the case of multi-period sites, under the principal period represented. The Section is grateful to all who have undertaken work on its behalf, especially those providing specialist reports and museums who have allowed finds to be published here. The illustrations are by the following: Paul Bloxham (Fig. 3), J. Brett (Figs 1 & 2), and Stuart MacNeil (Fig. 4).

Full details of all sites can be found in the County Sites and Monuments Record.

### Rivenhall, Colemans Farm (PRN 8419) Hilary Major

A small ovate hand-axe of the Middle Palaeolithic period was found on the ground surface by Mr S. Brice and reported to the Archaeology Section. Identification by R.M. Jacobi (Nottingham University) and Nick Ashton (British Museum).

Find: in private possession.

### Helions Bumpstead (PRN 9932)

Mark Germany

A Neolithic flint axe has been found in the gardens of a house in Helions Bumpstead. The axe is made from flint with inclusions, and is light grey in colour (Type A-A1, Adkins & Jackson 1987; identified by Hazel Martingell). It has straight sides which taper towards the butt and a cutting edge which is worn and slightly curved. The profile is slender and the cutting edge and butt are symmetrically opposed. It is 165mm long, 52mm wide and 22mm thick. The butt, cutting edge and both sides are damaged.

Find: in private possession.

### Henham (PRN 9866)

### J.R. Brett

Mr J.R. Brett reported the find of a flint arrowhead, similar in form to British Oblique type e. It measures

c. 30mm along the base and 20mm base to tip, made from a flake of flint very similar to the type of flint found locally. There is some plough damage to the edges and the tip is broken. The base is shaped to facilitate attachment to the shaft of an arrow (Fig. 1).

Find: in private possession.

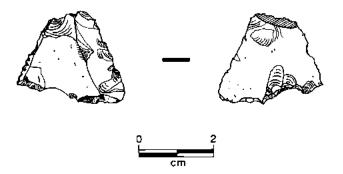


Fig. 1 Neolithic flint arrowhead from Henham.

### Quendon and Rickling (PRN 9954) J.R. Brett

Mr J.R. Brett reported the find of a flint blade, 35mm wide by 32mm wide at its top edge. The flint is white with some orange-russet brown staining. One edge shows evidence of retouching, and another edge possibly. Denticulation appears to be present on one edge. This blade may be the tip of a larger blade (Fig. 2).

Find: in private possession.

### Maldon, 2 Spital Road (PRN 9955) Mark Atkinson

A watching brief was carried out on the machine excavation of foundation trenches for an extension. The site was located in close proximity to the postulated line of the Saxon *burh* defences. The rears of the long thin garden plots at the upper end of the west side of Spital Road all use the remains of the *burh* bank as their boundary, suggesting that the ditch runs through the gardens. This was confirmed by excavations at 20 Spital Road by Maldon Archaeological Group in 1985-6. At the rear of 2 Spital Road, the slope of the bank is discernible, though obscured by a modern brick wall built on its line.

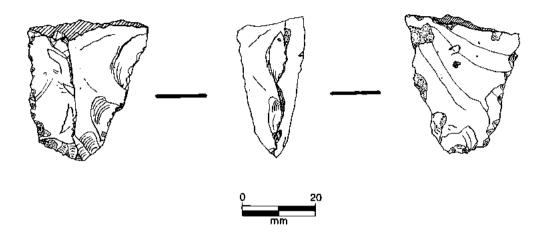


Fig. 2 Flint blade from Quendon and Rickling.

The foundation trenches were located to the north of the house and lay an estimated 20m from the top of the surviving bank remains. Unexpectedly, a total depth of 'soft' deposits of up to 2.0m were revealed. Natural was encountered at a depth of 1.4-1.6m in Section 2, but 0.6m depth in Section 1 (Fig. 3).

Above the natural was a massive accumulation of dark grey-brown silt containing abundant rounded flint stones and very occasional small tile, charcoal, oyster shell and animal bone fragments. Towards the centre of the trench, there were suggestions of more complex stratigraphy with a possible slightly browner pebbly silt overlying a thin clay band close to, or on top of, the natural gravel. Due to the depth and insecure nature of the machine cut, these could only be observed from outside the trench. The sections were further obscured by shoring, however, all deposits excavated by the machine were scanned for finds. All the material recovered appears to be post-medieval in date.

A large deep feature (002) with rounded sides and maximum depth of 2.0m cut the deposits (001) and was visible in both sections. Its lowest fill (003) was a friable and loose grey-brown sandy silt loam, c 0.9m thick, containing frequent pebbles and moderate tile, brick and shell fragments. This was overlain by brickwork (004), also within 002. Although disturbed by the machining, the brickwork was coursed to a depth of two courses and bonded with yellow sand-rich mortar. The bricks were red unfrogged and measured 1109mm wide by 53mm thick; their length could not be ascertained. Many were vitrified on some faces, hinting at reuse in their present context. Samples were collected.

Overlying the bricks and seeming to extend over 001 was a dark grey, friable silt loam 0.4m thick, containing frequent rounded pebbles, tile and brick fragments. The topsoil above was similar to 005 but contained fewer pebbles and yielded 19th-century glass, china and clay pipe as well as brick and tile.

The deposits exposed in the foundation trenches

were all post-medieval in date with no features or finds of earlier date being identified. It would seem that the natural slope down from the burgh, towards Spital Road, had been levelled or terraced at this late date. Only the higher lying natural, recorded in Section 1, was at its probable original and undisturbed level. However, the total lack of earlier residual finds, within 001 in particular, indicates that there was probably no earlier occupation of the vicinity. 002 appears to be a pit cut after the terracing of the slope and may be some kind of soak-away of 19th-century date.

The large cut feature, 002, clearly cannot be identified with the *burh* ditch. The groundworks were probably situated too far to the south-east of the bank to encroach upon it. It seems likely that the ditch passes under the garages some 8-10m to the rear of the house. Its lower portions should survive as the ground is higher and possibly unaffected by landscaping and terracing than further toward Spital Road.

### Abberton, Church of St Andrew (PRN 11430-1)

D.D. Andrews and Steve Wallis

Large cracks in the wall of the chancel meant that trenches were dug around its foundations as part of the repair process. The R.C.H.M. (RCHM 1922, 1) states that the main fabric of the chancel is modern (i.e. probably 19th century), on 14th-century foundations.

Although these trenches were potentially a major threat to surviving stratigraphy around the church, it was found that:-

- (i) on the north side of the chancel, the present trench largely cut the trench of a drain of recent origin, which ran beside the wall.
- (ii) on the south side, only topsoil was disturbed.
- (iii) the east side was the only side where stratigraphy was present. Here, about 28cm of topsoil overlay a layer of medium brown silty clay with inclusions of

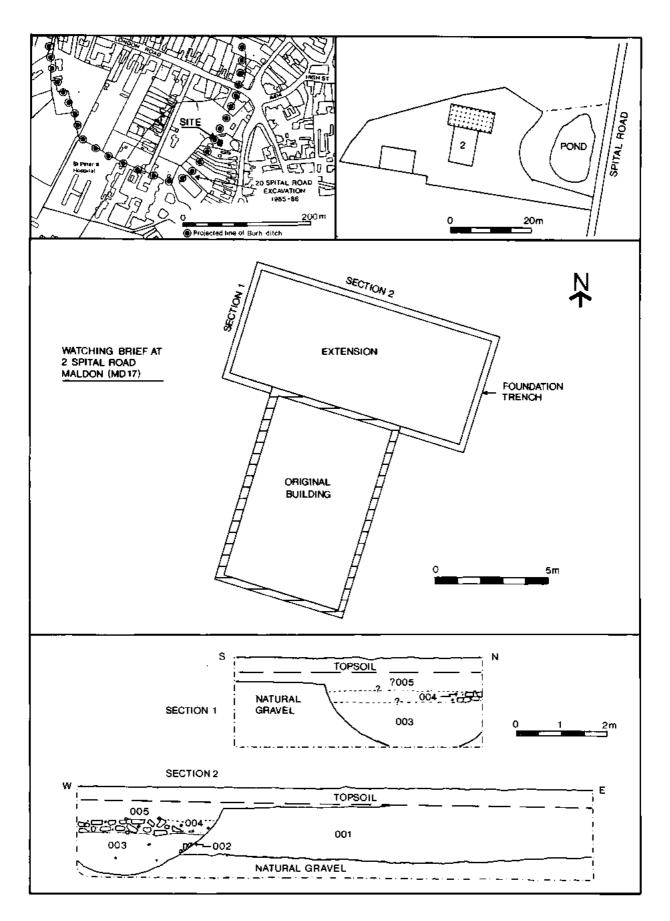


Fig. 3 2 Spital Road, Maldon.

stones (mostly flints), unfrogged bricks, and white, cream and orangy mortar. Two iron nails were found in this layer (not kept). The layer was about 25cm deep. It overlay the natural subsoil, which was orangy-brown, slightly silty sand with frequent stones, mostly flints.

Unstratified finds from the trenches were a small fragment of red-painted window glass, dated to the 14th/15th centuries by D. Andrews, and five fragments of bone, two of which were recognisable as pieces of human skull.

The exposed foundations of the outside of the chancel were examined. Those on the north side were examined in detail. It was found that the 'modern' brick wall rested on three stone courses, of 23cm total thickness. Many stones were waterworn - a few bricks were also present. The stones were c. 8cm across. They were in a white cementitious mortar, similar to that of the brick wall above. Beneath a 6cm offset were two further courses in a white lime mortar, 25cm thick. The upper was 15cm thick, and consisted largely of stones, of maximum size 15cm by 7cm. Many of these were laid in herringbone fashion. A single Tudor brick, 10cm by 5cm, was also present; it did not appear to be a later insertion. The lower course was of more haphazard construction. It is suggested that all these courses were the levelling courses for the 'modern' wall.

Beneath was about 30cm of rubbly construction, which was in patchy cream mortar. Beneath these foundations, six stones, offset by 6cm, rested on the subsoil. Two were rectangular, the others appeared to be unworked. What appeared to be packing around the rubble contained peg-tile. The rubble and the offset stones must be the 14th-century foundations referred to by the R.C.H.M.

The 14th-century foundations were also noted on the south side of the chancel, but could not be found on the east side. This may indicate that the east wall was repositioned when the chancel was rebuilt.

Finds: ECC Archaeology Section.

### Aveley, Church of St Michael (PRN 9957-9) D.D. Andrews

This is an attractive medieval church comprising chancel, north chapel, nave and aisles, and west tower. Most of the building dates from the 12th and 13th centuries, apart from the tower which is 15th century (RCHM 1923, 5-6). In 1992, the parish decided to insert a mezzanine floor over the clergy vestry situated at the west end of the north aisle where this flanks the side of the tower. The groundworks involved constructing four concrete ground beams about 400mm wide set in trenches 600mm deep north-south across the width of the aisle to take the self-supporting structure of the mezzanine which was not to be attached in any way to the fabric of the church.

The existing flooring consisted of woodblock laid on a concrete screed, on about 200mm of hardcore (chalk, flint, a very little reused stone and brick). This overlay a sandy loam varying in colour from brown to dark brown. The subsoil locally is apparently sandy. Close to the tower, what seemed to be undisturbed sand was detected at a depth of about 500mm. There were no obvious traces of earlier floors. From the pier bases, it looks as if the floor in the church was lowered by about 6 inches in the 19th century. No *in situ* burials were noted, but there were many small fragmentary bones in the soil beneath the floor. They seemed to be of infants or adolescents. The north wall of the aisle seemed to have foundations only about 400mm deep.

The RCHM noted that the west end of this aisle was an extension, dating it to the 15th century. Evidence for this comprises the existence of a plinth on this side of the tower, something which is normally only an external feature, and the clear change in roof construction to the west of the point at which the plinth terminates on the side of the tower. The foundations of the original west wall of the aisle appeared in this position beneath the floor. They were rather poorly defined, being represented by a concentration of large flints and pieces of chalk. It is possible that this western extension of the aisle served as a chantry chapel.

### Bentley, Moorside, Mosslane (PRN 571) Richard Havis

Following a report that several mounds had been levelled on the area of the Mores Plantation, a visit was made to the site.

The present occupiers of Moorside (Mr and Mrs Jeffrey) allowed access on to their property and gave a tour around the garden area. The garden apparently consisted of woodland and dense brambles until 1986. When this was cleared between 1986-1991 a series of linear earthworks and a central mound became visible. The mound stood approximately 3m in height, a large part of one side and the centre had been quarried away. A circle of mature trees was visible around what was interpreted as the original dimensions of the mound. Lengths of bank to the north-east of the mound still remain, in places up to a height of 2.50m. Other lengths of bank had been levelled during the clearing of the scrubland; these are still barely visible as ridges close to the perimeter of the property. The only finds made during the clearing and earthworks operations were either modern or old bottles and earthenware.

The most plausible interpretation of this site is that it represents the remains of a small motte and bailey, or possibly two adjoining baileys to the central motte.

It is possible that this is the site visited by Stukely in 1725. He had given the series of earthworks the name of the "alat temple of the Druids". There however appears to be some confusion about this identification as he also recorded a mound at the western end of 'The Mores' wood, and it is not entirely clear which is the so-called 'temple'.

### **Birdbrook**, Church of St Augustine of Canterbury (PRN 6971) Richard Havis

A local resident kindly alerted the Archaeology Section to works being carried out in the churchyard. An extension to the church had already been constructed but a linear trench through the churchyard was still open, partly filled with gravel and a pipe laid within it. The trench was c. 40cm wide, and ran from the entrance to the church yard to the new extension.

Two domed brick coffins were visible in either side of the trench showing that the machine had cut trough the centres of them. In addition several pieces of human skeleton were visible on the spoil heap. The contractors stated that one of the skeletons had been in full armour, and iron plates located on the ankles and arms of the individuals.

A third burial had also been cut, the grave cut being visible in the side of the trench. Apparently this also had a brick domed coffin, but this was not visible.

### Chipping Ongar, Sewage Scheme (PRN 4099) Maria Medlycott

The construction of Phase 2A of the Chipping Ongar Sewage Scheme from Banson's Lane to the Fire Station, parallel to the medieval High Street, necessitated the undertaking of an intensive archaeological watchingbrief. Eight visits were made over a three-week period.

It had been hoped that the trench would cut the medieval town's boundary ditch, which is known to have been three to four metres deep. No traces of this structure were found. However, the degree of postmedieval disturbance in the area was quite considerable. The pipe-line ran parallel to the High Street along the line of the 1937 pipe-line, between the rear of the properties fronting the High Street and the Cripsey Brook, this area consisted of the properties' back-gardens. The build-up was chiefly made up of clinker and ashes from coal fires (possibly laid down to form garden paths), and brick and tile rubble laid down so as to raise and level the ground surface. Four post-medieval ditches (0.50-2.m deep), were noted in the trench section, these ran at right angles to the High Street and were probably part of the original property boundaries. There was also a small 2.5 x 2.5m foundation for a brick-built structure, probably an outside toilet, this was of Victorian date. No features earlier than the eighteenth century were found.

It is suggested that this phase of the sewage scheme did not in fact cut the medieval town boundary or that all traces of it were obscured by the subsequent postmedieval disturbance.

### **Great Chesterford**, Church of All Saints (PRN 4951-2) D.D. Andrews

Repairs to the cement render of the tower and south elevation made it possible to observe the fabric of the walls in these areas. The nave and chancel are dated by the RCHM (RCHM 1916, 113) to the 13th century, but are much rebuilt. The tower, according to the same source, has a complex history. It fell in the 14th or 15th century, destroying the two western bays of the nave. The tower and west wall of the nave were then built in their present position. The tower again fell in the 18th century and was rebuilt in 1790. It was further altered when the church was restored in 1842.

The north side of the tower is built of large reused ashlars somewhat irregularly laid, with brick infill (including pinkish and white flooring bricks) between them. The north-west buttress is mainly of flint with stone dressings, and is a later addition because it makes a straight joint with the tower, is built with different mortar, and includes later-looking larger bricks with horizontal pressure marks. The main build of the tower presumably dates from 1790, and the buttress from 1842. The buttress has more recently been repaired in flettons.

The west wall of the south aisle is largely of brick  $(230 \times 105 \times 65 \text{ mm})$  with horizontal pressure marks, including some thin white bricks, probably flooring bricks. The blocking of the two-centred arched window looks of one build with the wall, i.e. it looks as if it was built as a feature, with the round window in the blocking original but probably derived from elsewhere. The south-west buttress seems of one build with the wall but has been largely reconstructed in flettons. The bricks in this wall are probably more consistent with 1842 than 1790, but this observation should not be seen as firm evidence that this is when the wall was rebuilt.

# Great Sampford, St Michael's Church Raph Isserlin

The earliest part of this church is the south chapel, which dates from the late 13th century. The rest of the church was rebuilt during the 14th century (RCHM 1916, 133).

Renovation work inside the church included the removal of several of the wooden pew platforms, which entailed some disturbance of the archaeological deposits. Rapid cleaning below the old wooden floor revealed traces of earlier medieval features. The evidence took the form of lines of flint rubble, indicating walls that had been demolished when the piers of the present nave were built in the fourteenth century. Glazed floor tiles of the thirteenth century were found (Fig. 4).

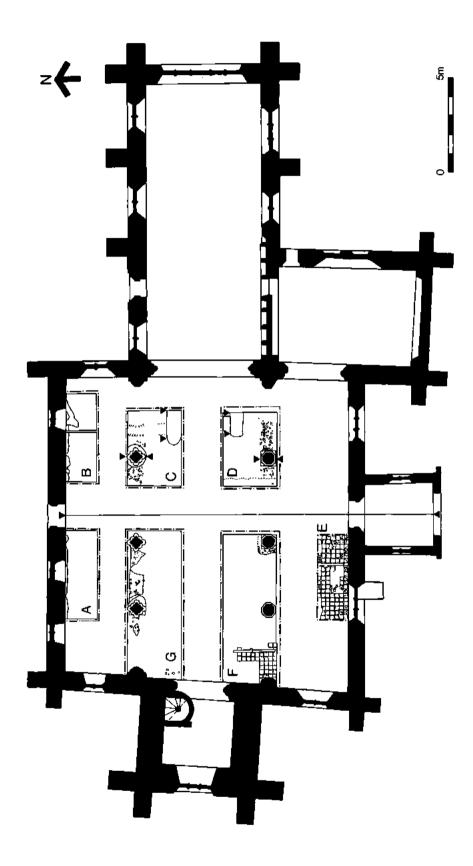


Fig. 4 Church of St Michael, Great Sampford.

### Hadstock, Church of St Botolph (PRN 4808-9) D.D. Andrews

Shingle-filled channels had been re-excavated along much of the south side of the church. In addition, a new soakaway had been excavated on the north side, to the north-west of the porch.

Examination of the soakaway showed it had been excavated to a depth of 900mm. It revealed an undifferentiated rather stony brown clay loam containing a moderate amount of human bone i.e. a typical graveyard soil. A possible grave cut was evident on one side of it.

The shingle-filled channel was about 750mm deep, and had been lined with two courses of slate against the church to act as a damp-proof membrane. Removal of the upper one exposed the base of the south walls of the nave and the tower, and the west wall of the south transept. A plinth at the bottom of the transept wall had a projecting offset foundation in flint which seems to be bonded with medieval mortar and is therefore probably original. This does not continue round the diagonal buttress, which may be a 19th-century addition. Offset foundations were also observed for the tower and south-west buttress, but these had been damaged and cut back by the digging of the channel.

Under the shingle, a brown grey clay was observed. On the north side of the churchyard, natural appears to be an orangy-brown silty clay. The natural is either very variable or the brown grey clay may be some sort of packing for the foundations. The foundation of the large buttress which butts the south-west corner of the nave and the tower stair turret could be seen to be a separate build to the foundations of the tower.

The ground level outside the nave is much higher than inside the church, and the channel revealed only wall face. The bottom of the nave wall is offset, and of two phases. The lower part is built of neatly coursed roughly dressed stones, with hard mortar between, and may represent a 19th-century reinforcement or repair of the base of the wall. The top of the offset is made with modern looking cement and forms a rather crude plinth. This may be contemporary with the slate dampproofing. It clearly butts up against the offset foundation of the transept and the foundation of the buttress at the south-west corner of the nave.

A drainage trench dug on the east side of the transept apparently revealed no signs of the apse which Rodwell argues existed there. This is probably because it was not deep enough to expose old foundations, and the ground level is higher here. About 6.3m from the south transept, and 4.25m from the south wall of the nave, a drain run encountered a well about 1.2m in diameter. It had been filled with a chalky-looking clay deposit, and sealed with a part dome neatly capped with a circular block of stone cut to a conical section, which lies only just below the topsoil. The shaft is made with red bricks, some of a type which indicate a 19th-century date and are unlikely to be much earlier than the late

18th century. The partial dome was in similar brick. A sherd of modern white glazed china was noted in the fill. This well may have been relatively short-lived, perhaps dug in the 19th century and filled in the present century. Some of the local people are aware of its existence. It cannot be excluded that what was seen was the relining of the shaft of an earlier feature. If so, then this churchyard is well provided with water, there being a spring in its north-west corner.

### Hatfield Broad Oak, Lancasters (PRN 4341) Richard Havis

A watching brief was undertaken on the construction of an agricultural building, which lay adjacent to and to the south of a moated enclosure. The construction technique consisted of a series of rectangular pits approximately 1.5m square dug by machine and finished by hand for the upright supports.

Natural consisted of chalk and boulder clay. The construction pits on the southern side of the new building all showed evidence of a buried soil approximately 0.50m below the ground surface. This could represent soil removed from the moat and spread evenly over this area.

A construction pit at the western end revealed a layer of burnt daub at its base, 1.5m below the surface. This may predate the moat and indicates the likelihood of further features in the area.

### Helions Bumpstead, Boblow (PRN 1607) Mark Germany

The machine clearance of the moat has revealed a number of finds, all of a post-medieval date. They suggest that the moat was either constructed or cleared of its earlier contents at some point during the 18th century. The moat was up to 1.5m deep and was filled by a black, silty mud which preserved a number of finds. These finds included two spoked wagon wheels and an 18th-century 'Black' glass wine bottle, complete with its original cork still in place. Other finds from the moat included one sherd of English stoneware tavern mug, one sherd of Nottingham/ Derby stoneware, three sherds of Yellow ware, two sherds of Ironstone ware and one sherd of postmedieval red earthen ware. All finds are of 18thcentury date or later.

Finds: in private possession.

# Little Dunmow, Little Dunmow Priory

(PRN 1244) Louise Austin

A watching brief was undertaken on the construction of a drainage sump to the north of the only upstanding part of the Priory buildings, the Lady Chapel, which is now the parish church.

A rectangular pit was hand dug, 1.4m north-south by 1.2m east-west, to a depth of c. 1.2m. This was located to the north-west of the vestry, 6.5m to the north of the north wall of the church. The plan of the priory buildings, which resulted from the excavations in 1913-14, indicates that the trench was situated within the main body of the church.

The trench cut through 10cm of worm-sorted topsoil which overlay 45cm of dark brown humic soil with occasional flint and red-brick fragments. Beneath this was the natural, chalky boulder clay. It had been cut through east-west by a pit or ditch which was filled with compacted gravel in a sand matrix. The workmen who excavated the trench said that fragments of red brick had been found within the gravel although no trace was noted during the visit. This may be the infilled remains of a robbed-out foundation trench, relating to the original north wall of the presbytery/quire.

The 1913-14 plan of the priory layout indicates a line of twelfth century, conjectural piers separating the presbytery/quire from the north aisle. The position of these have been inferred from the upstanding remains of the twelfth century from the south side. If the cut discovered during the works relates to the original foundation trench of one of the twelfth-century piers in the north wall then its position on the 1913-14 plan lies at least 0.5m too far to the north. It is possible that the cut relates to another episode of construction, either previous and located between piers, or later construction, but due to the size of the trench and the lack of dateable material this can not be verified.

An area of brick flooring situated c. 2m to the north of the north-west corner of the vestry covers an area of approximately 2.5m north-south by 2m eastwest. None of the flooring was taken up but it appeared to be constructed from rectangular well-fired red bricks rather than tiles. These are believed to be post-dissolution in date.

### Sutton, All Saints' Church (PRN 9601-2) Steve Wallis

The nave of the church has a north doorway of 12thcentury date, with a 15th/16th-century door. The doorway is disused, and is now a small cupboard. The present watching brief was occasioned by the decision to keep a safe in this cupboard, which would require a concrete base.

The digging of the footing took place on the morning of July 8th 1992, and was watched by the author. The floor of unfrogged bricks had already been removed. The footing trench was 0.8m (east-west) by 0.5m, and was 0.5m deep, and was centrally positioned in the cupboard.

The trench was cut entirely through a layer of what appeared to be disturbed subsoil. This was a light brown fine sand, slightly silty at the top, becoming clayey towards the bottom. It included rare small fragments of chalk. Several ragstones were presumably from the church fabric. Several pieces of glass and tile, some certainly post-medieval, were also noted. A bodysherd of Mill Green-type ware (dating from the late 13th to 14th century or later — identified by H. Walker) was recovered from a depth of about 0.4m.

On the outside of the door are two concrete steps. The subsoil disturbance may have taken place when these were constructed.

### Coggeshall, King's Mill Development,

### West Street

### Maria Medlycott

A watching-brief was undertaken at the King's Mill Development, Coggeshall, in January 1992. The development, by Melville Homes, covers an area of approximately three hectares. It is sited on the western edge of the medieval town of Coggeshall, and lies immediately to the north of the Roman Road known as 'Stane Street' (A120).

Three drainage trenches were examined. The sections revealed a considerable quantity of post-medieval and modern disturbance. The sub-soil was a greybrown silty sand, which sloped steeply to the southwest. Over this were layers of brick, concrete and other rubble, apparently laid down to level the ground surface. It is possible that this slope is the eastern side of the valley of Robin's Brook which flows along the westem side of the property into the River Blackwater. This was capped by the modern yard surface, which is made up of bricks, mortar and tarmac. Two cellars of postmedieval date were cut, both with a black silty-loam fill. One fill contained modern plastic debris and must have been of a relatively recent date. The other fill was of a post-medieval/modern date. These cellar fills were capped by the remnants of the old yard surface, which was made up of bricks, mortar and tarmac.

### Stock, Pottery House

#### Katherine Reidy

A well was brought to the attention of the Archaeology Section by the owner Mrs Norris. A brief visit was therefore made to the site when the location, dimensions and structure of the well were recorded.

The well, of brick construction, was situated on the north-west side of the house, about 2m from the exterior wall. The depth of the well was 4.1m and, when recorded, contained water to a depth of 3.25m. It is unknown whether this was the original depth of the shaft. The top 0.85m of the shaft was a dome shape with a circular opening (diameter 0.54m) curving down to a diameter of 1.34m at its base. Below this, the circular shaft continued vertically down.

The area around the well had been paved over so it was not possible to determine if there had been any super-structure, such as winding gear, around the wellhead. A photograph of 1962 in possession of the owner shows the remains of a kiln in the back garden. Bricks from this area of the garden are of the same type as those in the well (David Andrews, pers. comm.), and indicate that the well and kiln were contemporary with one another, probably dating from the second half of the l9th century, and considerably later than the original l7th-century construction of the house.

### Aerial survey 1992

### North-west Essex

### Caroline Ingle

This survey continued with two flights undertaken in June, but the inclement weather meant that cropmarks were poorly developed. Despite this, several possible new sites were discovered. These are described below but the features were generally too faint to allow accurate plotting. These sites will be examined again in the future.

### Birdbrook

Two sides of a possible rectangular enclosure with indistinct cropmarks in the corner which may represent settlement features.

### Hatfield Peverel

Cropmarks of a trackway and possible ring ditches with other vague features. The field containing these cropmarks lies between three other fields already known for their cropmarks of ring ditches, trackways and linear features (PRN 6139 & 6174).

### Ridgewell

Cropmark of a curvilinear or D-shaped enclosure with a large pit apparently adjacent to one edge. A possible ring ditch is situated to the west of the enclosure.

### Shalford

Cropmark of a trackway and other linear features heavily masked by geological marks. Finds of an Iron Age bowl and Roman pottery (PRN 6235 & 6236) came from a gravel pit adjacent to the fields containing these cropmarks.

### Aerial survey of the Essex coast Steve Wallis

In 1991, a local boat owner, Mr. Ron Hall, reported the discovery of a substantial complex of timber structures at Collins Creek in the Blackwater estuary (Clarke, this vol. p. 209). This discovery highlighted the potential for survival of such structures in other parts of the intertidal zone. Many of these areas were

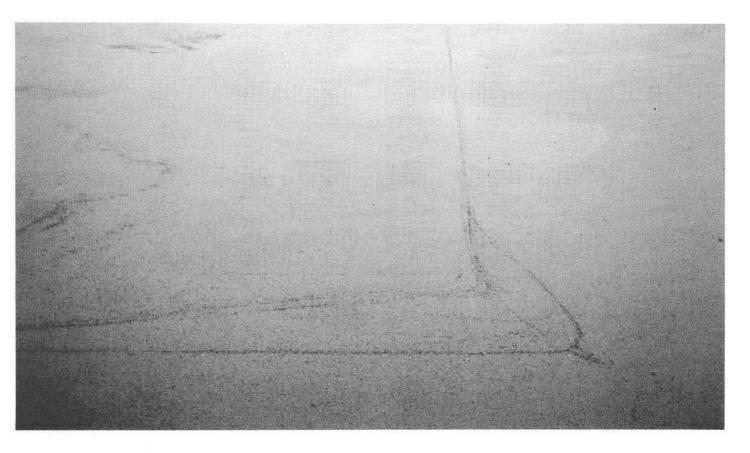


Plate I Kiddle off Mersea Island.



Plate II Kiddle off Sales Point, Bradwell-on-Sea.

inaccessible from land, and would thus not have been investigated by earlier surveys, e.g. the Hullbridge Survey (Wilkinson and Murphy, forthcoming).

To investigate these areas, an aerial survey was carried out by the Essex County Council Archaeology Section, funded by the Royal Commission on the Historical Monuments of England. Three flights took place in February and March 1992, taking advantage of some of the lowest spring tides to search wide areas of mudflat. Most of the Essex coast was overflown on these flights. However, since the spring low tides occur in the early morning, light levels were poor. Therefore, two further flights were made at low tides in May and September, to obtain clearer photographs. The two most important results were:-

- (i) The discovery of a V-shaped timber structure, several hundred metres in length, off Mersea Island (Plate I). This is interpreted as a kiddle, a type of fish-trap, once common off the Essex coast (Crump and Wallis 1992).
- (ii) The recording of another kiddle off Sales Point, Bradwell-on-Sea (Plate II). In the 1960s, this feature had been photographed at ground level by a local resident, Mr. Kevin Bruce (PRN 2055).

Both structures are close to the mouth of the

Blackwater estuary and are only fully exposed at the very lowest tides. One piece of dating evidence is the find by Mr. Bruce of a medieval pot close to the Sales Point structure.

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# Archaeology in Essex 1992

# edited by P.J. Gilman

This annual report, prepared at the request of the Advisory Committee for Archaeological Excavation in Essex, comprises summaries of archaeological fieldwork carried out during the year. The longevity of many projects often results in a lengthy postexcavation and publication process. The publication of these summaries therefore provides a useful guide to current archaeological research, and the opportunity to take an overview of significant advances. This year 68 projects were reported to the County Archaeological Section (Fig. 1).

Sites are listed by category of work and alphabetically by parish; the directors of excavations, organisations involved and information regarding the location of finds and places of final report are listed, where known. Projects continuing from previous years are indicated by reference to previous summaries in the relevant 'Excavations in Essex 19 '.

Contributors are once more warmly thanked for providing information. The illustrations are by: Roger Massey-Ryan (Figs 1, 3), Barry Crouch (Fig. 2) and R.H. Moyes (Fig. 4).

The original reports have been added to the County Sites and Monuments Record held by the Archaeology Section at the Essex County Council, Planning Department, County Hall, Chelmsford. For details of sites in the London Boroughs, contact the Passmore Edwards Museum, Stratford.

## Progress in Essex archaeology 1992

Introduction

The number of summaries (68) is greater than the previous year (63), reflecting the continued high level of archaeological activity in Essex. Even more noticeable is the increase in evaluations, from 14 to 36. It is likely that this is due to a greater recognition, especially by planning authorities, of the importance of such exercises. On the other hand, the reduction in actual excavations is probably due to the general economic recession and the lack of business confidence. One consequence of the heightened awareness of archaeology amongst developers and their agents has been an increased incidence of competitive tendering. Several contracting archaeological agencies can be found amongst the authors of these summaries, alongside the local authority-based or supported units.

The greater number of evaluations makes it difficult to assess archaeological progress in the county. The often limited impact on archaeological features, especially for fieldwalking, can lead to more provisional conclusions than for major projects. Furthermore, evaluations are often only one stage in the planning process and it is not always known whether further work will follow. Only those evaluations which produced some positive results, or where negative results were surprising (e.g. 13), have been included in this report. Reports on other, negative evaluations have been incorporated into the relevant Sites and Monuments Records.

Also noticeable for 1992 is the reduction in the number of reports from amateur organisations. This is, to an extent, inevitable, given the increased emphasis on developer funding, competition, and the need for projects, especially evaluations, to be carried out swiftly. There are other areas where local groups have much to contribute, for example fieldwalking and building surveys. Hopefully, next year's report may see an increase in the number of summaries for these types of work.

### Prehistoric

The earliest finds from fieldwork during 1992 consist of Palaeolithic and Mesolithic flints (14, 45). The earliest occupation remains date from the Neolithic, including settlement evidence, at Rainham (45). For the Bronze Age, the most interesting discovery was that of a Late Bronze Age enclosure, at Boreham (6) to add to the total already known from the Chelmer Valley. Its location is of interest, being surprisingly close to the Springfield Lyons enclosure. Late Bronze Age settlements were also investigated at Maldon (44) and Upminster (49). Turning to the Iron Age, the rural settlement at Birchanger (37) was a surprise find. The latest phase recorded at this site, together with the spectacular discoveries which continue to be reported from Stanway (47), promise to greatly enlarge knowledge of Late Iron Age burial and ritual practices.

#### Roman

The most promising site investigated from this period is that of an extensive Roman rural settlement at Boreham (38), where excavation commenced late in the year. Several evaluations also produced evidence for Roman rural sites (e.g. 15, 29). One of these sites, at Sible Hedingham (46) was excavated, producing evidence of rural industry, perhaps associated with a villa. The excavation at Bradwell-on-Sea (39) was somewhat disappointing, since the site appears to have been on the periphery of the extramural settlement north of the Saxon Shore fort. The few discoveries to report from

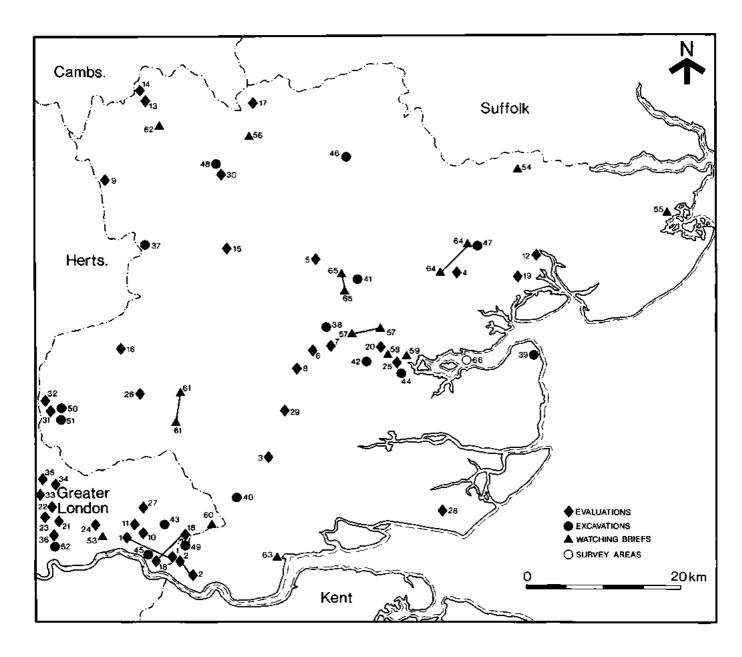


Fig. 1 Locations of archaeological projects in Essex 1992.

Roman towns include interesting observations from Chelmsford (8), and Great Chesterford (14).

### Saxon

Results for this period are normally conspicuous for their rarity. 1992 may prove an exception with the commencement of the survey of an extensive series of timber alignments in the Blackwater Estuary (66). Two radio-carbon dates suggest that these structures may be Saxon in origin, although their function is uncertain. A possible Saxon site was found at Southendon-Sea (28). The absence of Saxon finds at Bradwellon-Sea is frustrating, in view of the proximity of the site to the Saxon Chapel of St Peter-on-the-Wall. The course and nature of the Maldon *burh* remain something of a mystery, despite several opportunities for investigation during 1992 (25, 58).

#### Medieval

Evaluation and watching briefs have added useful information about the development of the monastic complex at Waltham Abbey (32, 50, 51). There is very little work to report from the county's medieval towns, apart from the observation of the line of the defences at Saffron Walden (62), and interesting, albeit inconclusive, results from Thaxted (48). Rural settlements were more numerous, including continued work at Cressing (41), as well as new sites at Boreham (7) and near Thaxted (30). The results from the watching brief at St Mary's Church, Maldon (59) show the value of these limited exercises.

### Post-medieval

The few post-medieval sites examined in 1992 included interesting work on the layout of the 18thcentury landscaped park at Thorndon Hall, near Brentwood (40), and the examination of a miller's house at West Ham (52).

### **Evaluations**

### 1. A13 Dagenham to Wennington

(TQ 488 837-TQ 547 806)

P.A. Greenwood, P.E.M.

A desk-top study and fieldwalking survey were carried out of the gravel terrace and marshlands south of the present A13 from Dagenham Heathway and Fords car works to the interchange with the old road at Wennington. As none of the land along the new route was cultivated, the fieldwalking team was only able to record changes in topography and to locate features such as former stream channels and dykes. The borehole survey carried out by the Department of Transport was a very informative transect from the gravel terrace to the alluvium and peat deposits and back up onto the terrace. Two phases of peat deposition were recognised, but are yet to be examined. Further work is anticipated.

#### 2. A13 Wennington to Mardyke

(TQ 548 803-TQ 572 798)

M. Germany, E.C.C.

The second and final phase of the fieldwalking evaluation of this route was completed, bringing the total area walked to 6.12 ha. Scatters of prehistoric worked flint and sherds of medieval and post-medieval pottery were found, but insufficient to indicate the presence of a site. Roman pottery and a few Roman tile fragments were recovered from a previously suspected Roman site at TQ 567 794.

Previous Summaries: Gilman (ed.) 1992, 100. Finds: E.C.C.; to go to T.M.

### 3. Billericay, r/o 108 High Street (TL 6738 9444) M. Atkinson, E.C.C.

Four trenches were excavated in an area adjacent to a findspot of Roman burials and which may have been within the medieval town. All trenches encountered extensive post-medieval and modern disturbance. A few post-medieval post-holes and pits may be associated with the 17th-century building which occupies part of 108 High Street. The lack of medieval features may suggest that this area lay outside the medieval town.

### 4. Birch, Maldon Road (TL 923 196)

C. Crossan, C.A.T.

Fieldwalking in advance of a proposed extension to the Birch pit recovered Roman brick, roof-tile and 1st- to 4th-century pottery in concentrations indicating the presence of one or more Roman buildings. Further evaluation work is anticipated, possibly leading to fullscale excavation.

Finds: C.A.T.; to go to C.E.M.

### Black Notley, Great Notley Garden Village (TL 737 203)

H. Brooks, H.B.A.S.

Fieldwalking in advance of major residential and business development commenced with a 20 ha block at the southern end of the development area (north of Great Slamseys Farm, and south and west of Stanstrete Farm). Although prehistoric, Roman, and medieval finds were recovered, none of this material was in sufficient concentrations to be considered a 'site'. Post-medieval and modern pottery and tile were more plentiful, and showed a manure-spreading pattern radiating out from Great Slamseys Farm. More fieldwalking is planned for the rest of the development area.

Finds: H.B.A.S.; to go to Bt.M.

6. Springfield, A12 Interchange (TL 739 089) P.T. Allen and N.J. Lavender, E.C.C.

See this volume, pp.211-14.

Finds: E.C.C.; to go to Ch.E.M.

7. Boreham, Buxted Chicken Factory (TL 753 099) N.J. Lavender, E.C.C.

Three trenches were excavated in advance of proposed development at the former Buxted Chicken processing factory, revealing evidence of occupation from the Early Iron Age to the 17th century. Much of the prehistoric pottery was heavily abraded, suggesting that it was, in fact, residual in later features. The latter included 10th-11th century property boundaries and a post-medieval gully and post-holes.

Finds: E.C.C.; to go to Ch.E.M.

### Chelmsford, 21 Grove Road (TL 7087 0619) R.M.J. Isserlin, E.C.C.

Recording of contractor's trial-pits to the rear of this property revealed the uppermost strata related to the Roman *mansio* (Drury 1988), within whose area the site is located. There was clear evidence of the levelled platform on which the *mansio* was built, and probable evidence of a wall line, but floor surfaces did not appear to have survived.

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### 9. Clavering, Moat Farm (TL 439 319) H. Brooks, H.B.A.S.

Moat Farm is a double-moated site (previously Coldhams Farm) and a Scheduled Ancient Monument

(Essex County Monument 161). The moats comprise a rectangular moated area, which is unoccupied, and an adjacent circular moat containing an 18th-century house. Two trial trenches were excavated in advance of a proposed extension to this house, within the Scheduled Area. One was dug against the edge of the unscheduled area in such a way as to give a section of the scheduled area itself. No deposits earlier than the 18th century were identified. Following the granting of consent for the extension, a watching brief was maintained on the groundworks. No archaeological deposits were observed, nor was any pre-18th century material recovered.

Finds: H.B.A.S.; to go to S.W.M.

10. Dagenham, Crown Street, Ferry House (TQ 5007 8461)

K. MacGowan, P.E.M.

An evaluation revealed seven phases on the site, six of which produced evidence of human activity. The earliest feature was a medieval drainage ditch, containing a lead fleur-de-lys, with a possible agricultural layer. A later ditch truncated this feature. The next phase comprised a post-hole and a large stepped feature containing one timber for shoring. The following phase consisted mainly of post-medieval rubbish pits and the final phases were modern.

Finds: P.E.M.

11. Dagenham, Wood Lane, Merry Fiddlers (TQ 4901 8677)

K. MacGowan, P.E.M.

Trial trenches in the car park of the former public house revealed one or more pre-19th century post-hole or stake-hole structures beneath two layers of ploughsoil. There was also a 19th-century cess-pit. Two ditches and several post-holes may denote the presence of 19th- and 20th-century property boundaries and/or drainage ditches.

Finds: P.E.M.

12. East Donyland, Rowhedge, High Street

(TM 0314 2180)

C. Crossan, C.A.T.

This 3.8 ha site extends east from Rowhedge High Street and Marsh Crescent to the bank of the River Colne. Exploratory trenching in the southern part of the area revealed substantial 19th- and 20th-century deposits overlying gravelly layers of uncertain significance. Excavation in the accessible parts of the High Street frontage yielded no evidence of pre-18th century structures, but the investigation here was less extensive than desirable. To the north, stratigraphy in the area adjoining Marsh Crescent was found to be relatively shallow and devoid of early features.

Finds: C.A.T.

13. Great Chesterford, London Road, Waelas Dene and Lyndene (TL 5063 4238)

M. Germany, E.C.C.

Trial trenching to the south of the Roman 'small town' in advance of proposed residential development located no archaeological features.

# 14. Great Chesterford, Vintners (TL 5028 4273)

P.E. Dey, G.C.A.G. The line of a Roman road observed in 1991 was confirmed by trenching. Extensions were also found to the stony layers observed in 1991. These appear to have slumped into a deep ditch, filled with damp, dark soil mixed with large amounts of Roman pottery, bone, oyster shell, iron slag, and other rubbish. Much of the material was 1st-2nd century in date, including one 1st-century brooch, but a few sherds of 4th-century pottery were found near the bottom. Other Roman features were also investigated, including a pit or gully which produced 4th-century pottery. Prehistoric flints were also recovered from the site, including two handaxes.

Previous Summaries: Gilman (ed.) 1992, 105-106. Finds: G.C.A.G.

Final Report: Essex Archaeol. Hist.

15. Great Dunmow, Buildings Farm (TL 6180 2230) M. Atkinson, E.C.C.

An area of c. 47 ha was fieldwalked prior to housing development. A concentration of Roman tile and pottery was located at TL 6190 2210 about 100 m north of the A120 (Stane Street). The site appeared to measure c. 100 m east-west by 60 m north-south. (This site was to be excavated in 1993.) There was also a spread of flints across the central and southern part of the survey area, and a slight concentration of medieval pottery in the north-east corner.

Finds: E.C.C.; to go to S.W.M.

16. Harlow, Church Langley (TL 472 097) M. Atkinson, E.C.C.

In advance of construction of a supermarket, fifteen trial trenches were excavated to the west of a known Late Bronze Age site (Gilman (ed.) 1992, 106). A concentration of prehistoric features in the south-east of the site is thought to represent the edge of the Late Bronze Age site. Two possible Roman features were also found in this area, one probably a quarry truncating prehistoric features. The northern two-thirds of the site was crossed by a series of post-medieval field boundaries and associated drainage features. The presence of a pit containing large amounts of 17thcentury kiln waste suggests that the area of pottery manufacturing based at Potter Street extends this far north.

Finds: E.C.C.; to go to H.M.

## 17. Helions Bumpstead, The Old Post Office (TL 6517 4166)

M. Germany, E.C.C.

Excavation of an L-shaped trench, in advance of residential development, demonstrated that land to the immediate east of the parish church of St Andrew's was subjected to large-scale disturbance, possibly from quarrying, in the late post-medieval period. Sherds of Roman, Late Saxon, and medieval pottery were also found.

Finds: Bt.M.

# Horndon to Barking gas pipeline (Upminster to Dagenham section), (TQ 562 838-TQ 539 810) P.A. Greenwood, P.E.M.

The route of the Horndon to Barking Power Station gas pipeline was surveyed from Chafford Heath crossroads (TQ 562 838) to the A13 (TQ 539 819) by fieldwalking and geophysical methods. This route is known to pass through an area rich in archaeology. The section from the Rainham Silt Lagoons (TQ 530 812) to Fords' car works (by the power station) was augered at 25 m intervals. This survey located some peat deposits. Fieldwalking produced few finds, which ranged in date from prehistoric to Roman, medieval and post-medieval. Most of the material was postmedieval, especially modern. This area had been used for pasture and market-gardening, and has only recently come under some arable cultivation.

Air photographs and the general density of archaeological sites in the area indicate that the pipeline may cut archaeological sites. Further work is anticipated.

Finds: P.E.M.

# Langenhoe, Fingringhoe Road (TM 009 189) C. Crossan, C.A.T.

Trial trenches in advance of a proposed housing development located and confirmed the medieval origin of a broad trackway recorded on Chapman and André's map of 1777. Although no adjacent structures were found, pottery and domestic refuse suggested the presence of roadside occupation from the 13th century onward.

Finds: C.A.T.; to go to C.E.M.

### 20. Langford, Old Waterworks site (TL 825 094) H. Brooks, H.B.A.S.

The old waterworks site lies in an area of cropmarks and, prior to proposals for redevelopment, a field evaluation was carried out, in three stages. First, fieldwalking of the 4 ha field north of the waterworks (centred TL 828 094): second, fieldwalking of a 6 ha field east of Ulting Lane, and on the road frontage of the present waterworks (centred TL 833 091); and third, two trial trenches cut through the short axis of two of the proposed buildings in the area behind the old waterworks. This had been covered with sludge pumped out from the old filtration tanks, and was therefore unsuitable for fieldwalking.

The fieldwalking did not detect any concentrations of archaeological material, and in fact the background scatter of all materials was quite low. The trial trenching showed that slightly more than half of the old land surface had survived beneath the pumped sludge beds. Several features had been cut into this surface, including two pits, and a trench or ditch, all of which contained Middle Iron Age pottery. Two ?post-holes may also belong to this period. A few Late Neolithic-Early Bronze Age worked flints were also found during the trial trenching.

Finds: H.B.A.S.; to go to C.E.M.

### 21. Leyton, Cathall Road Estate (TQ 3905 8625) P. Moore, P.E.M.

Observation of engineers' test pits showed that much of the site was disturbed by 19th- and 20th-century activities. However, towards the south of the estate two areas were shown to have undisturbed strata. Further work is anticipated.

Finds: P.E.M.

### 22. Leyton, George Mitchell School (TQ 3787 8724) P. Moore, P.E.M.

Three evaluation trenches revealed much modern disturbance over medieval to post-medieval ploughsoil. Beneath the ploughsoil several plough marks cut a concentrated group of pits, post-holes and stake-holes belonging to the prehistoric period. Prehistoric finds included pottery, flint flakes, burnt flint and a hammer/ pestle stone.

Finds: P.E.M.

### 23. Leyton, Oliver Close Estate (TQ 3745 8665) P. Moore, P.E.M.

A watching brief on engineers' test pits showed that the north and south of the site were heavily disturbed by modern activity or too deeply buried beneath modern build-up for earlier deposits to be visible. Pre-19thcentury deposits were, however, observed in the southeast of the site. In the north-west of the site in the area of a playing field, alluvial deposits contained prehistoric pottery, burnt flint and one retouched flake. Further work is anticipated.

### Finds: P.E.M.

### 24. Loxford, Buttsbury Estate (TQ 447 853)

F.E. Meddens, P.E.M.

Post-medieval wall and floor remains and cut features associated with Loxford Farm were identified. Additionally, multi-period, Roman and earlier prehistoric remains were uncovered, including circular features, post-holes, and pits. Work is to continue on this site.

Finds: P.E.M.

25. Maldon, Gate Street, EEV Site (TL 848 072) M. Medlycott, E.C.C.

Five trial pits and trenches were excavated in advance of development proposed along the line of the late Saxon *burh* (Bedwin 1992). They revealed a number of features, interpreted as either ditches or pits. The earliest of these can be ascribed to the late medieval period, that is the 14th-16th centuries. The majority, however, are either late 18th-century to modern in date, or undated. Whilst a number of ditches were found on the projected route of the *burh* ditch itself, only one is a likely candidate as a defensive ditch. Although only part of one edge was found and the only dating evidence was post-medieval, ground conditions were very poor and the ditch had been badly disturbed.

Finds: E.C.C.; to go to C.M. Final Report: E.C.C. Archive Report

### 26. North Weald Bassett/Stanford Rivers,

Ongar Radio Station (TL 500 030) I.M. Greig, S.E.A.S.

An evaluation was carried out in advance of a Planning Enquiry for development of a site, whose boundary is almost entirely coincident with that of the northern part of Ongar Great Park, which may be of Anglo-Saxon origin. Documentary evidence has been researched and collated relating to both the park and the Essex Redoubt. The latter is one of a series of fortifications built towards the end of the 19th century as a defensive ring round London, and is a Scheduled Ancient Monument. The earliest mention of the park may be a reference to a deer enclosure in the will of Thurstan, written between 1043 and 1045.

Landscape survey noted a few potential archaeological features, including traces of the agger of the Roman road between Chigwell and Dunmow, and a possible small, robbed-out round barrow. Two trial trenches were excavated by machine across the projected line of the road. One of these revealed a gravel spread on the predicted alignment, which is probably the remains of the metalling of the road, though no side ditches were found nor dating evidence recovered.

Fieldwalking of the arable parts of the site had to be fitted in with a prolonged ploughing programme, and was only completed in mid-January. The results have not yet been analysed in detail, but preliminary observations suggest a general absence of medieval finds, commensurate with use as a deer park. A few medieval sherds were found at the northern end of the site, adjacent to the present main road. There was a thin spread of post-medieval sherds over much of the area (use as a park had ceased by about 1640), with concentrations of 19th- and 20th-century material close to present buildings and tracks. No Roman occupation is indicated. Prehistoric occupation also appears to be largely absent, though there is a concentration of burnt flint at the north end of the site. This is close to the medieval sherds, and it is not known whether this is a coincidence or not. The soils are generally heavy and prone to waterlogging, and may have been unattractive to early settlers.

Finds: Inst. Arch.

### 27. Romford, Crow Lane, Romford Gasworks (TQ 506 878)

P.A. Greenwood, P.E.M.

A small evaluation produced a few small pits of probable prehistoric date, containing only calcined flint.

### 28. Southend-on-Sea, Southchurch, Fox Hall Farm (TQ 900 875)

J. Ecclestone, E.C.C.

Fieldwalking and metal-detector survey of 77 ha prior to golf-course construction located four probable sites, two prehistoric, one Saxon and one medieval. A later prehistoric site was indicated by a dense scatter of burnt flint, worked flint and prehistoric pottery at TQ 906 880. A general scatter of pottery and burnt flint in the south-western part of the site may represent another site. The Saxon site is evidenced (at TO 9057 8804) by a single large unabraded sherd of Saxon pottery with fresh breaks, apparently recently disturbed from a feature. A small but distinct concentration of medieval pottery and metalwork around TQ 901 880 (near the farmhouse) indicates a site dating between the 11th and 14th centuries. Scatters of finds at the periphery of this location are indicative of manuring. Later in the year topsoil stripping was monitored, confirming the existence of a prehistoric site at TQ 906 880. A dense cluster of post-holes, gullies and pits was found, as well as a large amount of apparently Early Iron Age pottery in the lower ploughsoil. (This site was excavated early in 1993.)

Finds: E.C.C.; to go to S.M.

### 29. Stock, Crondon Park (TL 691 004) M. Germany, E.C.C.

Fieldwalking evaluation in advance of a proposed golfcourse located six new archaeological sites. They included a concentration of burnt flint centred on TL 6895 0065 which may represent a ploughed-out prehistoric burnt mound. A second site, centred on TQ 6905 9994, may be a settlement site. A small Late Iron Age site was located at TL 6834 0052 and seems to have developed into a small but long-lived Roman farmstead. A second Roman farmstead was also found on the opposite side of the valley at TL 6910 0076. Sherds of early Saxon pottery were found to the immediate south of this site at TL 6920 0066. Very few sherds of medieval pottery were found during the survey. This, together with the evidence from documentary and cartographic sources, suggests that the land had reverted to open woodland as a deer park at some point prior to the early medieval period. The discovery of 15th- and 16th-century pottery and a small, but dense, concentration of post-medieval tile at TL 6876 0038 may mark the site of a keeper's or hunting lodge. In the 17th century the survey area reverted to farmland, as evidenced by widespread scatters of post-medieval pottery. In particular there were many sherds of the locally-made post-medieval red earthenware, including sagger sherds from the kilns at Stock. Large amounts of post-medieval material were also found around the site of the old hunting-lodge at TQ 6904 9980.

Finds: C.E.M.

30. Thaxted, Goddards Farm (TL 610 325)

J. Ecclestone and M. Medlycott, E.C.C.

The results of a fieldwalking evaluation in advance of construction of a golf-course suggest the presence of five archaeological sites. They comprise one prehistoric, one medieval, and three post-medieval sites. Although little prehistoric pottery was found, the distribution of burnt and worked flint indicates the presence of a prehistoric site at TL 608 313. Although much evidence for Roman activity has been recovered from the surrounding area, little was found from this survey. A medieval site is indicated by a concentration of material in the south-west of the area along the Thaxted to Saffron Walden road. Tile and pottery in the south-east of the area is evidence for a building recorded on a map of 1706 and called 'Armitage Yard and Barne'. This was probably built of wood, as no brick was found. Post-medieval brick was recovered from the rest of the area and probably derives from the construction of Goddards Farmhouse in 1580-90 and from subsequent additions and alterations in the 17th century.

Finds: E.C.C.; to go to S.W.M.

31. Waltham Holy Cross, Romelands (TL 380 007) N.J. Lavender and A.J. Wade, E.C.C.

Trial-trenching in advance of proposed residential development found no evidence for occupation or other use of this site prior to the 19th century. Over most of the area, modern disturbance lay above and cut into the flood-plain deposits of the old River Lea. A small trench on the street frontage between the library building and High Bridge contained no archaeological deposits and it is likely that these had been completely destroyed by modern building work. Nevertheless, medieval stratigraphy may survive below the library building itself.

### 32. Waltham Holy Cross, Vicarage Garden

(TL 3812 0066)

P.J. Huggins, W.A.H.S.

A long trench was dug, in three sections, northwards

from the north wall of the Abbey church at bay 2, to evaluate a possible site for a new parish centre. The wall of a long narrow building along the north side of the church dates to c. 1250. A deep ditch and an associated external bank are taken to represent the curtilage to the 7th-century timber church, but possibly not dug until the first half of the 8th century; the ditch was re-cut possibly for the first stone church of c. 790.

The most rewarding discovery, coupled with the evidence found in 1969 (Huggins 1976), was that the ancient ground level, i.e. the turf and underlying loam, had been removed over a north-south distance of at least 50 ft (15 m), and an east-west distance of at least 15 ft (4.7 m). It is this very missing material which was taken to have been used for the construction of a turfwalled hall, of c. 1020, just to the north and seen in 1969-71. This suggestion was much criticised but the evidence never fitted any other interpretation. With this new realisation (which could, with more insight, have been arrived at 20 years ago), the interpretation is very greatly strengthened. This was a classic case of how pottery found in the walls of a building cannot be used to date it; rather the material had collected in the turves over the preceding 34 centuries. As a result some other so-called ground standing buildings in England, with wide foundation trenches, need reconsideration.

Finds: W.A.H.S. Final Report: Archaeol. J.?

### **33. Walthamstow**, 312 Forest Road (TQ 3678 8970) P. Moore, P.E.M.

Three phases of ditches were found associated with a post-medieval farmstead on Forest Road. Unfortunately, there were no stratified finds although the latest ditch, which was filled with oyster shells, was probably 19th century in date.

Finds: P.E.M.

## 34. Walthamstow, Boundary Road Estate

(TQ 3684 8828)

P. Moore, P.E.M.

Several undated post-holes and gullies were found cut into natural gravel beneath a medieval and post-medieval ploughsoil which lay beneath modern allotment deposits. A generator shed for World War II barrage balloons was recorded. Further work is anticipated.

Finds: P.E.M.

35. Walthamstow, former Sidney Chaplin School (TQ 3634 9103)

P. Moore, P.E.M.

Evaluation trenches revealed areas of severe disturbance but also laid brick floors associated with a 19th-century brick kiln, together with a series of clay extraction pits.

Finds: P.E.M.

### 36. West Ham, Stratfod Market Depot (North) (TQ 3880 8370)

David Wilkinson, O.A.U.

A second phase of evaluation took place on an Iron Age and Roman site discovered in 1991. A dense area of features (pits, post-holes, hut-gullies, ditches) cut into the clay subsoil has been shown to cover an area of at least 0.6 ha on the east bank of the Channelsea River, and would seem to indicate a multi-phase settlement. A number of more widely-spaced ditches on the east side of the site probably formed part of a field system. The main time-span represented by the finds is from the Late Bronze Age/Early Iron Age to the 4th century AD; there are concentrations from the Middle Iron Age, the Late Iron Age to the 1st century AD and from the late 3rd to 4th centuries AD. Residual finds also attest to earlier use of the site from the Mesolithic period onwards. There is further evidence for the religious/ritual element of the site - another crouched inhumation and several possible animal burials have been identified, but not yet excavated. Evaluation work is to continue.

Previous Summaries: Gilman (ed.) 1992, 109. Finds: O.A.U.; to go to P.E.M.

### Excavations

37. Birchanger, Woodside Industrial Park

(TL 507 218)

M. Medlycott, E.C.C.

An archaeological watching-brief of the topsoil stripping phase of construction work revealed a number of pits and ditches. As a result a rescue excavation of the site was undertaken.

The site had been first occupied in the Early Iron Age (c. 700-500 BC) with occupation continuing on into the Middle Iron Age period (c. 500-250 BC). The settlement consisted of three round-houses, and a number of rubbish-pits which contained a large number of animal bones, pottery sherds, daub and ash. Examination of the snails from these pits suggests that they once contained decayed vegetable matter. The pits averaged a depth of about two metres, and analysis of the snails suggests that the pits had become intermittently filled with stagnant water. It was evident from examining the sections of the pits that they had been filled or partially filled with domestic refuse layered with bands of sub-soil. A sondage was cut across a complex of intercutting pits. The deepest of these was not bottomed due to water being reached; it contained a layer of chalk boulders at the bottom, which has been tentatively interpreted as possible back-filling of a well. With regard to the other pits, it is thought that they served as a form of compost-heap, with their decayed organic contents being periodically dug out and used as fertiliser; the bands of sub-soil probably helped keep the smell and flies down. Also dating to the Early-Middle Iron Age were a number of ditches, one of which contained part of a child's skull. This does not appear to have been a formal burial but rather a deposition of remains from elsewhere. None of the ditches were defensive in nature, and the settlement appears to have been unenclosed. The quantity of pottery found dating to the Early-Middle Iron Ages is of particular importance to the study of prehistoric pottery, both for the period as a whole and for Essex-Hertfordshire in particular.

The site appears to have been abandoned for a while, as the next phase of activity occurred in or around the period of the Roman Conquest. The topmost layer of each of the rubbish-pits consisted of Late Iron Age/Early Roman debris in a black silty loam. It is thought that the fill of the rubbish-pits had slumped during the period of desertion leaving a number of muddy hollows on the site which had been filled with the newcomers' rubbish. One of the ditches was also re-cut in this period. The most significant find of this date, however, was the burial of a cremated individual. The corpse had been burnt and the ashes placed in a jar imported from northern Gaul, together with two brooches. Accompanying the burial were a further seven bowls, jars and plates, two more brooches and a number of pig bones. One of the vessels would have originally been used for the storage of liquid, probably wine. One plate still contained the bone from a leg joint of pork. A cleaved pig skull placed underneath all the vessels had been split lengthwise from snout to crown and deposited in the grave with the flesh still in place. Cleaved pig skulls have been found in graves of this period at Stansted Airport, about a mile away from Woodside, as well as at St Albans in Hertfordshire. It is known that the pig played a significant role in the culture and mythology of the Later Iron Age, and its presence as a grave-offering probably reflects this. With the burial the occupation of the site appears to have come to an end.

Finds: E.C.C.; to go to S.W.M. Final Report: Essex Archaeol. Hist.

**38. Boreham**, Great Holts Farm (TL 7515 1190) C. Scull and M. Germany, E.C.C.

Following discovery of a Roman site by fieldwalking and geophysical survey, excavation in advance of gravel extraction began in November 1992. However, topsoil stripping was seriously delayed by bad weather and as a result only limited excavation was possible. This revealed Romano-British ditches (enclosure or field boundaries) and seven unurned cremations, as yet undated. Excavation of probable buildings and other features identified from aerial photographs and by fieldwalking was to continue through the first half of 1993.

Previous Summaries: Gilman (ed.) 1992, 100. Finds: E.C.C.; to go to Ch.E.M.

# 39. Bradwell-on-Sea, Othona Community Site (TM 030 084)M. Medlycott, E.C.C.

An archaeological evaluation at the Othona Community site, Bradwell-on-Sea, Essex, in 1991, confirmed the existence of an extramural late Roman settlement to the north of the Roman Saxon Shore fort. Some evidence was also forthcoming for occupation during the Saxon and early medieval period. The site appeared to have been abandoned by the late 12th century AD.

Excavation in advance of development has revealed a number of Roman features, including a series of parallel shallow ditches which have been tentatively identified as property divisions. Spot-dating of the pottery has ascribed the period of Roman activity to the 3rd and 4th centuries AD, i.e. contemporary with the fort.

### Finds: C.M.

Previous Summaries: Gilman (ed.) 1992, 100.

# 40. Brentwood, Thorndon Country Park (TQ 631 898)S. Godbold, E.C.C.

Trial trenches were excavated within the Octagon garden enclosure in Thorndon Country Park South, to establish the plan of the interior (Fig. 2). In particular, the work was aimed at confirming whether the layout conformed to any of the plans of Thorndon Park known from the 18th century. These include a design

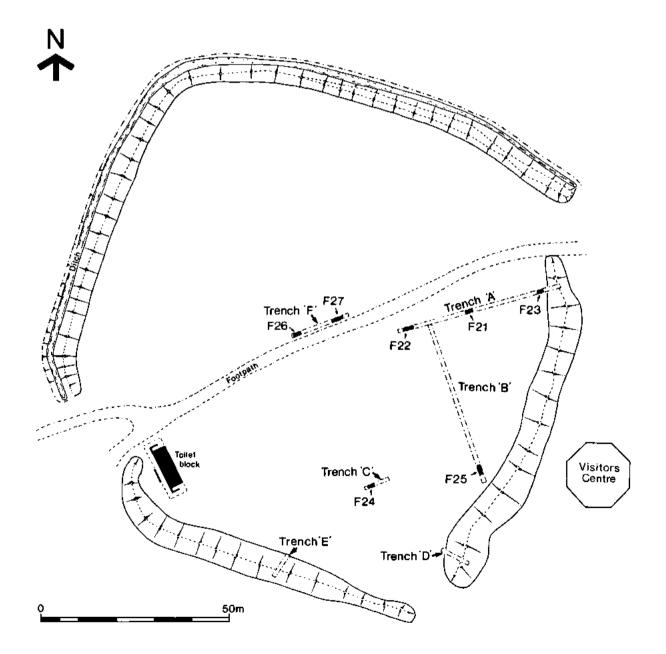


Fig. 2 Brentwood. Plan of the Octagon and excavation trenches at Thorndon Park.

drawn up in c. 1733 for the eighth Lord Petre by the French Surveyor, Bourginion. In fact, the alignment and orientation of the paths found in the excavation, indicate that the interior was laid out in the style of plans made between 1778 and 1808. No trace was detected of Bourginion's design but it is known that other garden features on Bourginion's original plan were not completed.

### **41. Cressing**, Cressing Temple (TL 799 187) T. Robey, E.C.C.

Five new trenches were excavated in the walled garden (Fig. 3). CT11 and CT12 confirmed the 18th-century layout of the garden, with parallel east-west planting trenches across the southern half, whilst the entire northern half of the enclosure was dug over to the natural clay, possibly for planting a crop or an orchard.

The Bronze Age gully found in CT2 in 1989 continued westwards to CT12, where it was enlarged in the Iron Age. CT13 was dug into a large medieval feature, a pit 4.2 m across and 1.7 m(?) deep, and backfilled with clay and silt from a pond or moat-scouring. Further excavation in CT1 revealed a 16th- or 17thcentury brick drain, the north-east corner of the chapel foundations and part of a medieval inhumation to the north of the chapel. Another, decapitated burial was found in CT8, with the head placed between the feet. This inhumation was cut by a 15th-century feature and may be either medieval or Romano-British.

An excavation at the north-west corner of the Barley Barn was aimed at recovering evidence of the original 13th-century outer wall of the building before its reduction in size. Two large post-holes were located, aligned with the main cross-frames, with traces

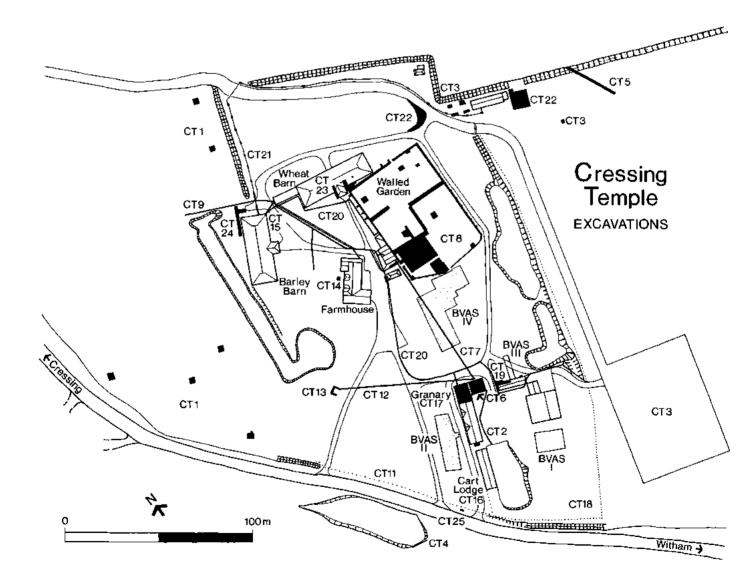


Fig. 3 Cressing. Plan of excavation trenches at Cressing Temple.

of a beam slot between the two. No trace of the northern end of the barn was found. These results tend to confirm that the original structure was larger when first built, but suggest an unusually complex method of construction. The detailed interpretation is being examined by members of the E.C.C. Historic Buildings and Conservation Section.

Earlier in the year, limited excavation in the Wheat Barn found that modern levelling had obliterated all recognisable traces of early floors. The bases of three shallow post-holes beneath the present sill beams have been interpreted as the result of repair work, perhaps carried out when the present studs and brick nogging were inserted.

Other work during the year included limited excavation for a concrete hard-standing and a lime storage pit in the north-western corner of the Dovehouse Field, which revealed a cluster of small Romano-British and prehistoric features. In addition, watching briefs were carried out on a number of holes excavated for posts, and for tree planting near the car park and main road. One Romano-British feature and a postmedieval wall footing were revealed.

Previous Summaries: Gilman (ed.) 1989, 161-2; 1990, 130-1; 1991, 153; 1992, 103; Brown and Flook 1990. Finds: E.C.C.

Final Report: Essex Archaeol. Hist.

42. Danbury, Danbury Camp (TL 779 052) M. Medlycott, E.C.C.

The excavation of the proposed meeting-house extension at Danbury Church, within the hillfort of Danbury Camp, found nothing which pre-dated the 19th century.

### 43. Hornchurch, Maybank Avenue, Elm Park (TQ 533 851)

P.A. Greenwood, P.E.M.

A multi-period site was excavated in advance of housing development. Finds recovered from the topsoil included Roman material and a Late Neolithic tranchet arrowhead. Minor excavated features included a World War II pillbox and a Late Saxon or early medieval ditch. The main period of use of the site was a phase of the Middle Iron Age, probably early in the period. The major feature was a roundhouse, apparently rebuilt or altered three times. Adjacent to the roundhouse were a pair of parallel ditches, possibly belonging to a droveway or track. A number of prehistoric pits produced a few finds but none were closely datable; they may relate to the Middle Iron Age roundhouse.

Finds: P.E.M.

### 44. Maldon, Brick House Farm (TL 8535 0563) M. Atkinson, E.C.C.

Limited excavation prior to development uncovered

two phases of land-use, the earliest dating to the Late Bronze Age. Features include post-holes and pits and a curving gully to the east of a large field boundary ditch. A Roman field boundary ditch was also found, cutting across the prehistoric ditch.

Finds: E.C.C.; to go to C.M.

### 45. Rainham, Brookway Allotments (TQ 5233 8180) P.A. Greenwood, P.E.M.

This multi-period site, with deposits ranging from gravel and sand to peat and alluvium, lies on a spur of gravel at the interface between the gravel terrace and the alluvial deposits.

A small number of microliths points to at least some Mesolithic activity. At least one flint implement appears to be later, probably early Bronze Age. The earliest occupation on the site is Early Neolithic with pottery of the plain bowl tradition including some Mildenhall-style wares. There is an abundant flint industry and much flint-knapping debris. A piece of worked wood was found in a deep pit. Neolithic features include pits, post-holes, a gravel surface and a hearth. There is good evidence for a post-hole structure, possibly a building. A pollen core of all the levels on the site should enable the relation of the Neolithic levels and those above and below to the samples, thus producing a long pollen sequence.

A ditch in the southern part of the site, and debris on the peat, appear to be early Roman. Pieces of wood have been recovered from the peat. There is no evidence for the use of the site between the Roman and medieval periods. Pits and traces of a timber building are datable to the early medieval period, c. 1200. The most recent evidence consists of post-medieval pits.

Previous Summaries: Greenwood 1992 Finds: P.E.M. Final Report: P.E.M. Monograph.

### 46. Sible Hedingham, (TL 786 348)

N.J. Lavender, E.C.C.

Excavation of a site evaluated earlier in the year in advance of construction of an Anglian Water source works recorded four small ovens of unknown date and purpose. Two of the ovens cut, and therefore postdate, a 4th-century ditch. Other Roman features included small, narrow ditches, some aligned northsouth, some east-west, and some large post-holes.

Finds: E.C.C.; to go to Bt.M.

### 47. Stanway, Stanway Hall Farm (TL 9545 2258) P. Crummy, C.A.T.

Excavations continued in advance of gravel extraction with the result that two secondary graves were discovered in Enclosure 3 (Fig. 4), both dating to the period c. 43-60. The largest grave measured 2.0 x 2.6 m in area and was over 1.0 m deep. The other

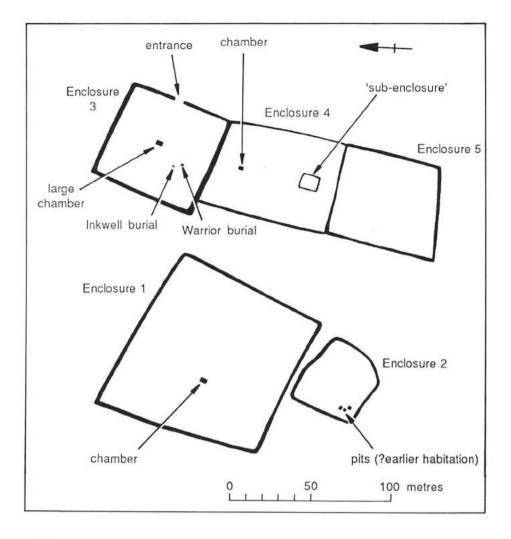


Fig. 4 Stanway. Plan of enclosures at Stanway Hall Farm.



Plate I Stanway. Amber-coloured glass bowl (Italian) from Stanway Hall Farm.

grave was of a similar depth but was only 1.6 m square. Although both were box-like in shape, there were no indications that the pits had contained wooden chambers.

The richest and largest of the graves, the so-called 'warrior burial', contained over twenty vessels of pottery, metal and glass, nineteen glass gaming counters, a possible gaming board, a small wooden casket or box, two brooches, woollen textiles, a large blue and white glass bead, a copper-alloy armlet, a spear, a probable shield, a large wooden box, and a possible grid-iron. The objects, including cremated human bone, had been carefully placed on the floor of the graves and then some of the pots seem to have been deliberately broken *in situ*. The vessels included a jug and a handled pan, both of copper alloy, two glass phials and an unusual amber-coloured glass bowl (Plate I). Practically all of the vessels seem to have been imported.

The smaller grave produced comparatively few finds, consisting of a brooch, a pottery flagon, a possible bucket, and a pottery inkwell.

Previous Summaries: Priddy (ed.) 1988, 270; Gilman (ed.) 1989, 168; 1990, 135; 1991, 159; 1992, 108; Crummy 1992, 1-5. Finds: C.A.T., to go to C.M. Final Report: to be decided.

### 48. Thaxted, rear of 23 Town Street (TL 612 308) M. Medlycott, E.C.C.

Excavation ahead of construction work in the garden of No. 23 Town Street, Thaxted revealed a number of archaeological features. The site was divided into two areas (A and B); Area A was underneath the outbuildings of the old Maltings which bordered the property; Area B was within the garden itself.

A ditch in Area B was dated to the 15th century and is interpreted as a property boundary, running parallel to the modern property boundary. At right-angles to this, at the western end of Area B, were five parallel linear features which are thought to be horticultural in origin. Those that contained dating evidence were attributed to the 15th/16th centuries, and it is thought that the others are also of a similar date. The eastern half of Area B consisted of shallow layers containing domestic and industrial debris, again dating to the 15th and 16th centuries. A cess-pit in Area A was also dated to this period.

It appears that the excavated area must either be located within the gardens of the Manor House or in the backyard of one of the commercial properties on the street. The presence of bone-working waste, admittedly not in any great quantity, suggests that the site was part of the backyard or garden of a cutlery workshop. The cess-pit in Area A probably belonged to the adjoining property, but its presence strengthens the interpretation of the site as the backyard or backyards to properties with a street-frontage.

Finds: S.W.M.

Final Report: Essex Archaeol. Hist.

**49. Upminster**, (London Borough of Havering) Hunts Hill Farm (TQ 566 831) P.A. Greenwood, P.E.M.

Continued excavation in advance of gravel extraction produced traces of a Late Bronze Age settlement with ditches, pits and post-holes. One curving alignment of paired post-holes may be the slight remains of a ploughed-out structure or enclosure. Some features, such as a six-posted structure, appear to belong to the Middle Iron Age.

Previous Summaries: Gilman (ed.) 1991, 159; 1992, 108. Greenwood 1986; 1992. Finds: P.E.M.

Final Report: P.E.M. Monograph

50. Waltham Holy Cross, Abbey Mead (TL 3813 0078)

P.J. Huggins, W.A.H.S.

A hole dug by hand for the foundations of a statue uncovered natural alluvial strata where terrace deposits had been expected. The first occupation was not until the beginning of the Augustinian period at the end of the 12th century. Even a tiny excavation such as this yielded unexpected information showing that any opportunity for excavation on the Abbey site should not be missed.

Finds: W.A.H.S.

### 51. Waltham Holy Cross, Grange Yard

(TL 3817 0078)

P.J. Huggins, W.A.H.S.

Ground collapse led to a small excavation at the northeast corner of the 18th-century Abbey Farmhouse. The collapse was due to a poorly filled brick-lined waste-water cistern. The brick walls of the farmhouse were on chalk foundations of some antiquity. The foundations may have supported the walls of the royal stables mentioned in 1294 and 1544. Parchmarks plotted in 1989 showed that the building was 6 roods long, probably large enough to have stalled the 30 horses held here by Elizabeth I in 1587.

Finds: W.A.H.S.

# 52. West Ham, Three Mills, Miller's House (TQ 3829 8278)

K. MacGowan, P.E.M.

Archaeological work prior to the building of a visitor centre on the site of the Miller's House revealed that ground floors in two rooms were of stone in a chequered pattern and wood elsewhere. The brick walls were built on horizontal planking supported by horizontal wooden cross-beams laid across vertical pine piles driven into the clay. Evidence of a previous brick-walled structure was also found.

The clay of the island was found to have been stabilised by a system of vertical wooden piles and horizontal wooden tie-backs. An earlier wooden waterfront face was also located showing that the island was extended northwards prior to the construction of the Miller's House in the 1770s. Tree stumps were found in situ, indicating that the excavated area of the island was undeveloped for a time before the construction of the Miller's House.

### Watching briefs

**53. Barking**, C. of E. School (TQ 4407 8395) K. MacGowan, P.E.M.

A watching brief was maintained during ground works for the construction of a raft for an extension to the school. 15 cm of topsoil was removed and a cut dug for a locating beam, revealing a layer of medieval roof tile and chalk rubble. This is likely to have been part of a demolition layer attributable to the Abbey within whose precincts the school lies.

Finds: P.E.M.

54. Boxted, Parsonage Hill (TM 003 329) C. Crossan, C.A.T.

A watching brief was maintained on an Anglian Water pipeline renewal project. Finds from fieldwalking following ploughsoil stripping over a 300 m length of the route included a Neolithic arrowhead, three Neolithic/ Bronze Age flint tools and a total of eight flint flakes and cores.

Finds: C.A.T.; to go to C.M.

55. Great Oakley, Bramble Island (TM 2102 2625)

M. Atkinson, E.C.C.

A watching brief was kept on construction of a new sea wall. A few burnt flints and some retouched flints, including a scraper and a blade, were found prior to topsoil stripping. However, no significant archaeological features were revealed.

Finds: E.C.C.; to go to C.M.

56. Great Sampford, St Michael's Church (TL 6422 3535)R. Isserlin, E.C.C.

See this volume, pp.189-90.

Finds: S.W.M.

# 57. Hatfield Peverel to Witham Pumping Main

(TL 786 109-TL 827 138)

M. Medlycott, E.C.C.

An intensive watching-brief was maintained during the topsoil stripping phase of the construction of the Hatfield Peverel to Witham pumping main. The pipeline crossed or ran close to a number of areas of archaeological interest, including Hatfield Priory, and several cropmarks. Very few archaeological features were, however, observed. Two pits were recorded in parkland around Hatfield Priory House, containing small fragments of post-medieval brick and tile. In addition, one larger feature with a dark silty fill was tentatively interpreted as a pond. Only a small number of surface finds was recovered from the route, including one sherd of Saxon pottery.

Finds: Bt.M.

58. Maldon, 2 Spital Road (TL 8475 0694) M. Atkinson, E.C.C.

See this volume, pp.185-7.

59. Maldon, St Mary's Church (TL 8070 0675) O. Bedwin, E.C.C.

A watching brief on the building of an octagonal extension to St Mary's church revealed the footings of the north and south walls, and a north buttress of a former chancel. These footings consisted of flint-rubble, c. 600-650 mm thick, in a lime mortar. They imply that the church was at one time at least 4 m longer to the east. No evidence was forthcoming as to the date of these footings.

Finds: E.C.C.; to go to C.M.

### 60. North Ockendon, 2 Hall Farm (TQ 587 848) P.A. Greenwood, P.E.M.

A watching brief on footings for a rear extension revealed a silty deposit which showed evidence of at least two cut depressions, possibly ditches or moats. A limited photographic and structural survey of the extant buildings and ditches was also completed.

Finds: P.E.M.

### 61. Ongar Sewage Scheme

(TQ 546 998-TL 551 031) M. Medlycott, E.C.C. See this volume, p.189.

Finds: E.F.D.M.

## 62. Saffron Walden, Swan Meadow (TL 534 384)

N.J. Lavender, E.C.C.

A watching brief was maintained during groundworks for a new car park and access road. During very limited ground disturbance the surface of a ditch, c. 8 m broad, was found running north-south in the eastern part of the site. The surface yielded only recent and modern finds. Because of its location and alignment this is almost certainly the mid-13th-century town defences, the 'Battle Ditches' or 'Magnum Fossatum'. These have been identified at various points around the town (Bassett 1982). The ditch was not excavated since it would not be disturbed by the development.

### 63. Stansted-le-Hope, St Clere's Hall (TQ 683 816) M. Atkinson, E.C.C.

Landscaping works during golf-course construction were observed, but only one area contained significant archaeological features: two tile hearths of 13th- to 14th-century date. Although no other associated features were found, they may relate to occupation along Butts Lane which is an ancient roadway. Elsewhere, a general scatter of worked and burnt flint attested to prehistoric activity across the area. A few sherds of Late Bronze Age pottery and baked clay were also found. Further work is expected in the vicinity of St Clere's Hall itself.

Finds: E.C.C.; to go to T.M.

### 64. Stanway-Messing water main

(TL 9013 1960-TL 9583 2232) C. Crossan, C.A.T.

Results of a watching brief on this Anglian Water pipeline included the discovery of a probable prehistoric site at Copford (TL 930 222), observation of a section of the Grymes Dyke ditch at Maldon Road, Stanway (TL 9579 2231) and the recording of sequences of road deposits at intervals along the course of a putative Roman road at Easthorpe (TL 9098 2142- TL 9210 2161).

Finds: C.A.T.; to go to C.M.

# 65. White Notley, Anglian Water pipeline renewal (TL 7786 1883-TL 7834 1854)M. Germany, E.C.C.

The remains of a badly disturbed Roman cremation burial were located at TL 7813 1862. The feature had a diameter of 0.5 m and was 0.15 m deep with a flat base and gently sloping sides. It contained the occasional piece of burnt flint and burnt bone and sherds from three pottery vessels which date the cremation to the late 1st century AD.

Finds: Bt.M.

# Survey

66. Collins Creek (TL 945 075) C.P. Clarke, E.C.C.

The discovery of an extensive complex of timber posts within the inter-tidal zone of the Blackwater Estuary was reported to the County Archaeology Section by Mr Ron Hall in 1991. A survey of this site began in 1992, funded by English Heritage, and aimed at defining the extent, nature and date of the complex. Survey work has been conducted as allowed by the infrequent and narrow inter-tidal windows when the site is not submerged.

The survey involves a combination of aerial and terrestrial prospection. The site was flown at a height of 2000 feet in October 1992 after the positioning of a series of physical control points over the site. The aerial photographs were then digitised on a photogrammetric work station by staff at the University of East London. Plots of the timber alignments were produced, as well as a digital file for loading onto the Archaeology Section's CAD system. Verification of the plots was then undertaken by GPS (Ground Positioning Satellite) survey. This work established that the complex covered an even larger area than supposed, and is now known to cover at least 3 km east-west by 0.7 km north-south.

Photography and detailed sample planning was undertaken both by conventional 1:20 drawing and photogrammetry. A broad categorisation of the alignments has been achieved. The complex had initially been considered to be a series of fish-traps. The most recent interpretation is that it may be a 'lost island' with the more substantial timber alignments forming revetments at the island's edges. There is a strong indication that wattling previously observed and thought to have derived from vertical panels associated with fishtrap structures was in fact originally laid horizontally, and held in place by the posts. The 'lost island' hypothesis will be tested by probing. Evidence for fishtraps, or 'kiddles' is present, but appears to represent a second phase of activity, perhaps making use of a relatively stable area in the centre of the estuary when rising sea levels or other factors had dispensed with the original function of the area. Two radiocarbon dates of 640-675 and 882-957 AD (calibrated) appear to relate to the revetment phase. It is hoped that a series of 30 dendrochronological samples will prove suitable for refining the chronology of the site.

67. Essex coast aerial survey S. Wallis, E.C.C.

See this volume, pp. 193-4.

68. North-west Essex aerial survey C. Ingle, E.C.C.

See this volume, p. 193.

# ESSEX ARCHAEOLOGY AND HISTORY

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### Abbreviations

Bt.M.	Braintree Museum	
C.A.T.	Colchester Archaeological Trust	
C.M.	Colchester Museum (formerly Colchester and Essex	
	Museum)	
Ch.E.M.	Chelmsford and Essex Museum	
E.C.C.	Essex County Council	
E.F.D.M.	Epping Forest District Museum	
G.C.A.G.	Great Chesterford Archaeological Group	
H.B.A.S.	Howard Brooks Archaeological Services	
H.M.	Harlow Museum	
Inst. Arch.	University of London, Institute of Archaeology	
O.A.U.	Oxford Archaeological Unit	
P.E.M.	Passmore Edwards Museum	
S.E.A.S.	South-Eastern Archaeological Services	
S.M.	Southend Museum	
S.W.M.	Saffron Walden Museum	
W.A.H.S.	Waltham Abbey Historical Society	

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Crummy, P. 1992	'Royal Graves', The Colchester Archaeologist 5,		No. 7, 171-5.
	1-5.	Greenwood, P.A.	'Archaeology in Havering 1991-92 - the
Drury, P.J. 1988	The mansio and other sites in the south-eastern sector of Caesaromagus, Chelmsford	1992	Highlights', Havering History Review 13, 46-8.
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	Brit. Archaeol. Res. Rep. 66.	1976	Hall and 14th-century rooms at Waltham
Gilman, P.J.	'Excavations in Essex 1988', Essex Archaeol.		Abbey, Essex, 1969-71', Medieval Archaeol.
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(ed.) 1990	Hist. 21, 126-39.	1988	Hist. 19, 260-71.

# Shorter Notes

# A Late Bronze Age and a medieval site near the A12 Interchange, Springfield, Chelmsford

P.T. Allen and N.J. Lavender

### Introduction

In July-August 1992 two settlement sites, of Late Bronze Age and medieval date, were located by a field evaluation in advance of a proposed development (Fig. 1, TL 739 089). The presence of these sites was initially suggested by fieldwalking survey (Lavender 1992), and was subsequently confirmed by trial trenching (Fig. 2; Allen 1993). A large-scale follow-up excavation is planned for April 1993. The site archive and finds will be deposited at the Chelmsford and Essex Museum under the site codes CV92 (fieldwalking) and CV1 (trenching).

The layout of trenches in Area A was designed to investigate a specific concentration of medieval pottery, while the layout in Area B was more widespread to investigate the less concentrated clusters of prehistoric material. The Late Bronze Age site was identified in the central three trenches of Area B, and the medieval site in the south of Area A; the two sites were quite distinct from each other. Trial trenches in Area C in the extreme south of the site, which could not be fieldwalked, produced largely negative results.

### Late Bronze Age site (10th-9th centuries BC)

In the north of the site (Fig. 3), two lengths of ditch apparently defined an entrance. They contained large quantities of pottery, burnt flint, animal bone, shells, and carbonised plant remains, strong evidence of settlement in the immediate vicinity. Rubbish pits, again containing a large amount of artefacts, lay to the southeast. By contrast, a small ditch further to the south contained hardly any artefacts and was not securely dated to the Late Bronze Age. The good survival of both artefacts and environmental remains suggests that future excavation has a high potential for detailed understanding of the settlement.

### Medieval site (13th century AD)

The medieval site (Fig. 4) consisted of a series of boundary ditches and drainage gullies, with the main alignment running nearly east-west across the south of the area, possibly defining a trackway. Three hearths (H on Fig. 4) lay either side of the main ditch alignment. One was very large with a clay and flint cobble base; the other two were smaller and sunken, but equally well constructed with clay and flint cobble linings. These hearths most likely represent the sole surviving evidence for timber houses founded on ground beams rather than earth-fast posts. Significantly, it is now argued that from the 13th century (the date of the site), even peasants' houses were being constructed more durably, making use of timber-frame construction carried wholly above the ground (Dyer 1986). Despite the absence of structural remains, therefore, the most likely interpretation is of a group of houses and their plots, set in a field system. Unlike the Late Bronze Age site, artefacts other than pottery were rare, and there is no potential for environmental sampling.

### **Topographical conclusions**

The sites lie in an area of the middle Chelmer valley, which has been densely settled from prehistoric times onwards, and which has seen extensive archaeological investigation. The soils on which the sites lay were relatively light and well-drained, and the land was probably under agriculture from an early date.

The Late Bronze Age site is contemporary with the high-status defended enclosure at Springfield Lyons less than 1 km to the south-west (Buckley and Hedges 1987). A number of other Late Bronze Age sites in the area have either been excavated or are known from aerial photographs (Atkinson *et al.* forthcoming). Further excavation could make a valuable contribution to understanding Late Bronze Age occupation of the area in general.

The medieval site lies close to the parish boundary between the medieval villages of Springfield and Boreham, and is distant from both settlements. The evidence most likely represents an outlying hamlet set in an open field system. (Further excavation took place in the summer of 1993.)

#### Acknowledgements

The authors would like to thank all those who took part in the fieldwork and the preparation both of this interim and the field evaluation reports, especially the following: David Driver & Son (machining), Grattan Glendinning (EDM surveying); Nigel Brown (prehistoric pottery); Helen Walker (medieval pottery); and Nick Nethercoat, Miranda Bedwin and Ian Bell (illustration).

We would also like to thank Countryside Commercial PLC, who commissioned and funded the field evaluation, especially Jason Dalby; and their consultants, Andrew Blackwell of Andrew Martin Associates and David Rudling of South-Eastern Archaeological Services, for their help and co-operation. Finally, we would like to thank Nigel Brown of the Essex County Council Archaeological Advisory Group for his advice throughout.

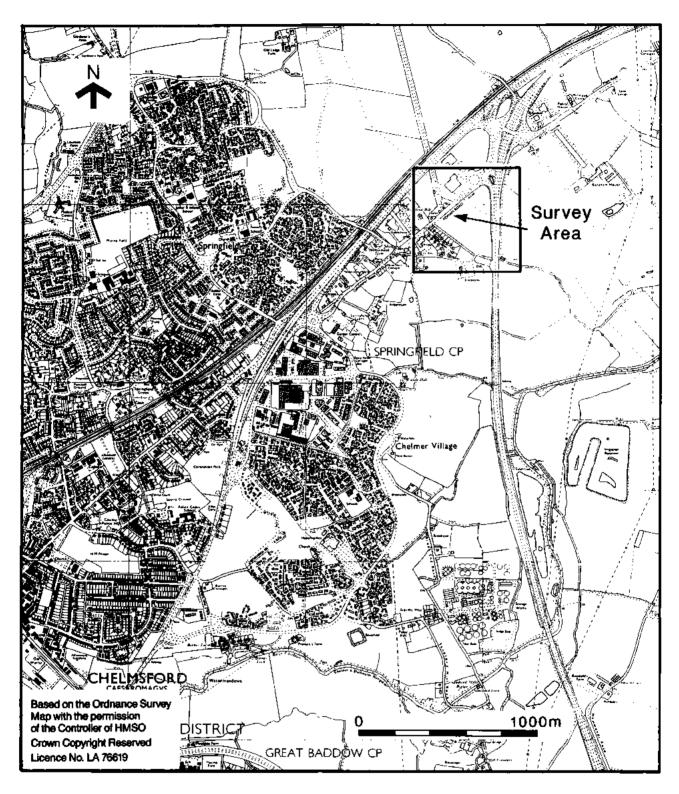


Fig. 1 Location of site.

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Baddow. Broomfield and settlement in the	Lavender, N.J.	Boreham A12 Interchange, Chelmsford, Essex
Chelmer valley", Proc. Prehist. Soc.	1992	Archaeological assessment: fieldwalking, Essex County Council report.
	Phase II archaeological evaluation: trial trenching, Essex County Council report. "Later Bronze Age enclosures at Great Baddow. Broomfield and settlement in the	Land at A12 Interchange, Chelmsford, Essex.       Hedges, J. 1987         Phase II archaeological evaluation: trial       trenching, Essex County Council report.         Trenching, Essex County Council report.       Dyer, C. 1986         "Later Bronze Age enclosures at Great       Lavender, N.J.

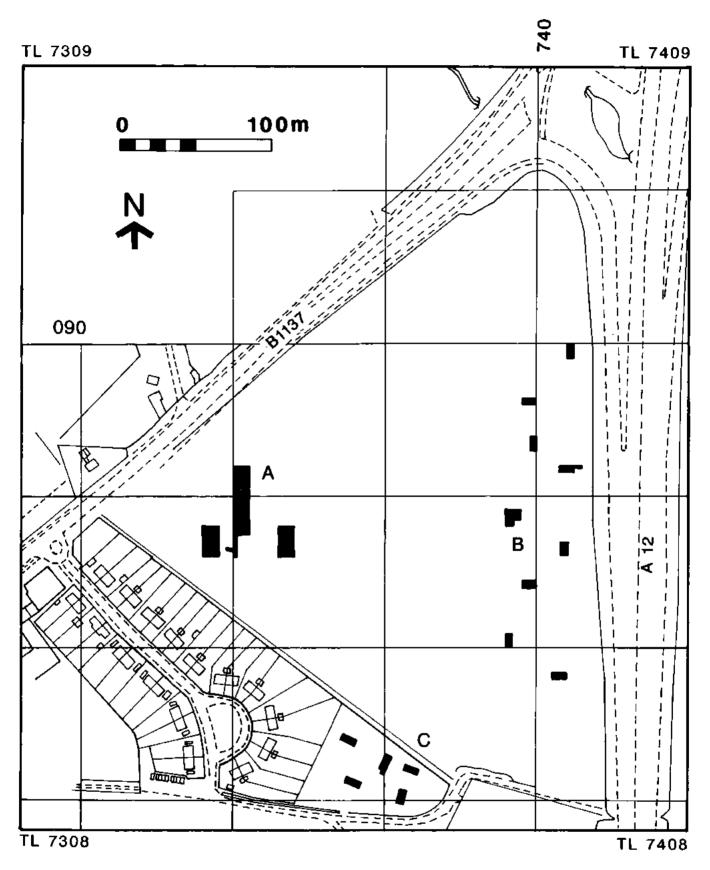


Fig. 2 Location of site and Areas A, B and C.

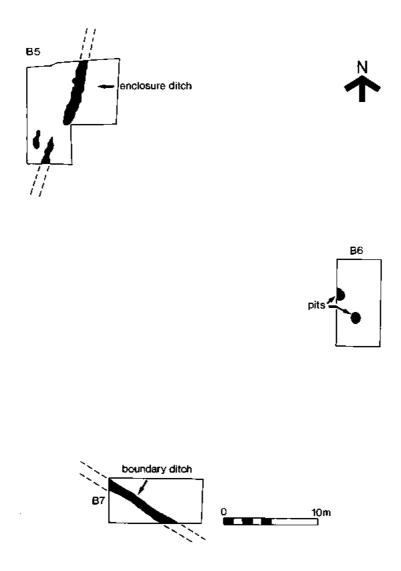


Fig. 3 Overall layout of Late Bronze Age site (Area B).

## The investigation of cropmarks at Church Lane, Stanway, Colchester J. Partridge

## (Colchester Archaeological Trust)

In the autumn of 1991, the Colchester Archaeological Trust investigated a series of cropmarks in a field to the north of Church Lane, Stanway (OS grid reference TL 943 240) where ARC Southern Ltd were planning to extend their existing sand and gravel quarry.

Aerial photographs (Pl. 1) revealed a droveway or track in the form of a pair of parallel ditches. One end of the droveway lay within that part of the site where the ditches splayed sharply outwards to form the sides of a large enclosure into which the droveway appeared to lead. The droveway can be traced as a cropmark for at least 320 m westwards. At the western boundary of the site there are some cropmarks which indicate the presence of a sub-rectangular enclosure associated with the droveway. The cropmark of the enclosure is the clearest in the field adjacent to the site although, even here, its spatial relationship with the droveway is obscure, since it is uncertain how far south the enclosure extended. The eastern and northern sides of the enclosure on the quarry site itself are even more difficult to locate from the cropmarks. Unfortunately excavation provided little useful evidence in this respect.

## The droveway

Several trenches were excavated across the line of the droveway with varying results (Fig. 5). Only traces of the ditches were uncovered in Trenches B and F, with the more conclusive information coming from Trenches C and D. In Trench C, the northern ditch (F4) was 1.1 m wide and 0.3 m deep; the southern ditch (F5) was of similar dimensions. The ditches here were 7 m apart, with a layer (L7) of tightly-packed

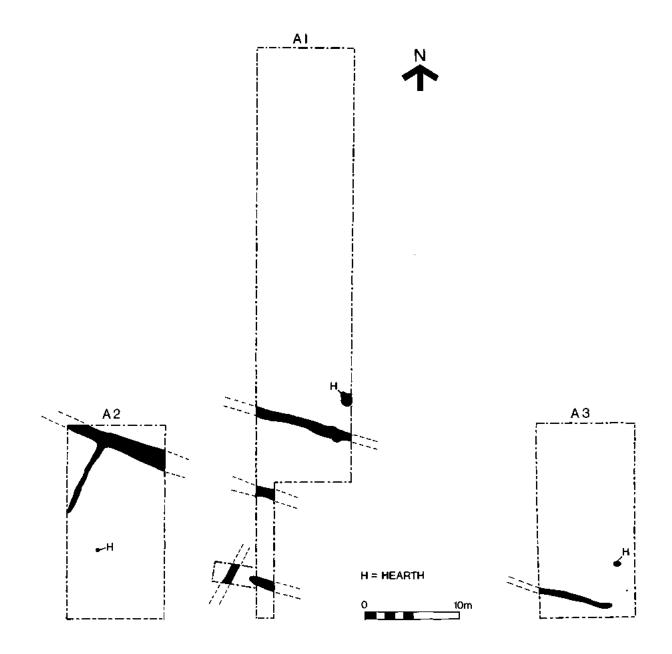


Fig. 4 Overall layout of medieval site (Area A).

small stones in between which was presumably the remains of metalling. The ditch sections showed only a single cut, with a single uniform fill in each case. Trench D was sited where the two ditches diverge sharply outwards. Here the southern ditch (F10) was better-defined than the northern ditch (F15). Only a short section of the latter survived, the predicted turning-point being disturbed by two shallow features (F14 and F18).

Analyses of soil samples from two of the ditch fills (F11 and F13) did not provide any evidence of pollen spores, seeds or vegetable matter. No animal bone survived in prehistoric contexts in the droveway or elsewhere.

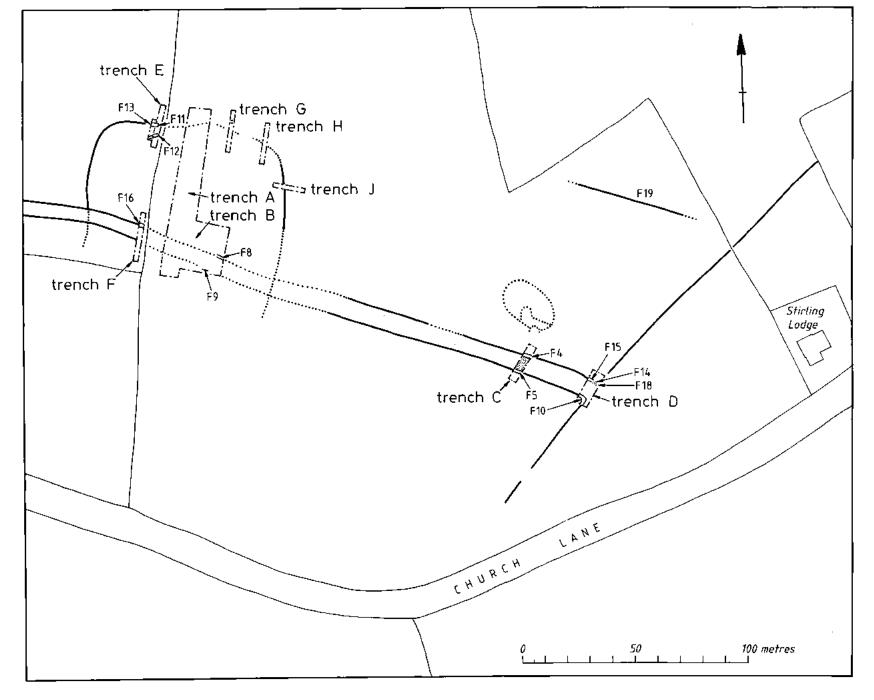
## The sub-rectangular enclosure

The photographic evidence of the sub-rectangular enclosure is difficult to interpret; it may represent a sub-rectangular enclosure  $45 \times 90$  m in area lying on the north side of the droveway. Alternatively the enclosure could have been roughly square in shape and had straddled the droveway in such a way that it measured  $90 \times 90$  m.

Trenches were sited to assess the shape and size of the enclosure, but unfortunately little evidence of the enclosure remained to the east of the modern western field boundary. There was some disturbance in the section of Trench G, but this lay just to the north of the projected enclosure ditch and in itself was



Plate I Cropmark photograph. © RCHME Crown Copyright.



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Fig. 5 Site plan.

inconclusive. Trench E, to the west of the field boundary, did provide evidence of the enclosure ditch. In a section cut adjacent to Trench E, the ditch (F13) was found to be 2.7 m wide and 0.7 m deep, but in Trench E itself the ditch (F11) terminated in a butt end. The terminal was 1.8 m wide and 0.6 m deep. Like the ditches of the droveway, the ditch fills of F13 and F11 were simple, suggesting a gradual accumulation of material.

Another possible ditch (F12) was excavated 3 m to the south of ditch F11. Feature 12 was 1.4 m wide and 0.5 m deep. The feature was problematic as only a small part of it was investigated and no finds were recovered. Very few archaeological features were uncovered inside the enclosure within the excavation Trench A, and all were recent. Even the evidence for the parallel ditches of the droveway in Trench B was poor; a series of modern plough-marks visible in the subsoil indicated the extent of modern agricultural activity close to the field boundary and that most of the archaeological features in this area had been destroyed.

#### Other evidence of activity

The aerial photographs did indicate cropmarks other than those of the enclosure and droveway; the most visible of these were the recently-removed field boundary ditches, and a possibly ancient ditch (F19) parallel to the droveway but 90 m to the north. There were some barely-discernible cropmarks which might indicate other prehistoric activity in the area. None of these cropmarks was examined.

Field-walking failed to provide significant clusters of material. There was a Neolithic waste flake and some medieval sherds and pieces of peg(?)-tile, all of which were widely dispersed. A single Anglo-Saxon grass-tempered sherd was found in the fill of the ditch F10; this sherd was probably not residual as it was not abraded.

Records of previous finds include a Roman coin (Antonia August, minted c. AD 41-64) from the Church Lane area.

## Discussion

The most likely explanation for the site is that the parallel ditches represent an enclosed droveway, along which stock was driven. The animals were prevented from straying off the desired course by the ditches. The divergence of the ditches to the south-east represents the northern ditch of a large enclosure which was presumably used for grazing.

The sub-rectangular enclosure was poorly preserved; its shape, size and function remain largely unknown. The ditch terminal (F11) could indicate that the enclosure extended eastwards no further than the present western field boundary, which itself may mark the eastern ditch of the enclosure. Despite the excavation, indications on the aerial photographs that the enclosure may have extended substantially further eastwards still cannot be discounted. Whether this small enclosure was a settlement site with dwellings, or a corral for rounding-up animals, or even a combination of both, remains unknown.

The ditches of the droveway and enclosure contained very little pottery; much of the pottery which was recovered is characterised by small abraded sherds, mostly without diagnostic features such as rims. The most significant pieces come from F4 (the northern ditch of the droveway), which may be Early Iron Age in date, and F11 (a butt end of the ditch of the sub-enclosure), which are typically Middle Iron Age. This may correctly reflect the temporal relationship between the droveway and enclosure, i.e. that the former predates the latter. A Roman amphora rim and a piece of Roman *tegula* from the ditch on the north side of the droveway (F14 and F5 respectively), and an Anglo-Saxon sherd in the other ditch (F10), suggest that it may been in use for some considerable time.

The investigation of the land to the north of Church Lane took place before any major stripping of topsoil in preparation for the quarry excavations. The intention is to monitor closely the future removal of topsoil to ensure that all the major archaeological features are suitably recorded.

The finds and site archive are deposited in the Colchester Museums along with the data sheets for the pottery.

## **Prehistoric** pottery

#### N. Brown

Very little pottery was recovered from the excavation (29 sherds weighing 124 g). It was recorded using a system devised for prehistoric pottery in Essex.

The pottery was of small sherd size and mostly quite abraded. This, together with the general absence of rims or other diagnostic pieces, makes dating difficult. Indeed, the general range of pottery present is not closely datable within the prehistoric period. The small rim and range of fabrics (E, F, and B) recovered from F4 may be of Early Iron Age date, while the sherds of Fabric J from F11 are typically Middle Iron Age. However, even in these cases the condition of the sherds must make them of doubtful value as dating evidence for the feature from which they derive.

#### Acknowledgements

The archaeological work was commissioned and funded by ARC Southern Ltd. The Trust is indebted to Mr R. Lane of ARC and the landowner Mrs Jansma for their support, and to Mr N. Brown for his pottery report. The soil analysis was kindly undertaken by Anita Jackson of the Department of Biology, Essex University.

## **Roman pottery from Little Baddow** N.P. Wickenden

In September 1990, the author was called to 'Water Hall', Little Baddow by the owner, Mr D. Attwell, upon the discovery of Roman pottery during the mechanical excavation of foundations for a new barn 20 metres east of the house (TL 7615 0721). The pottery

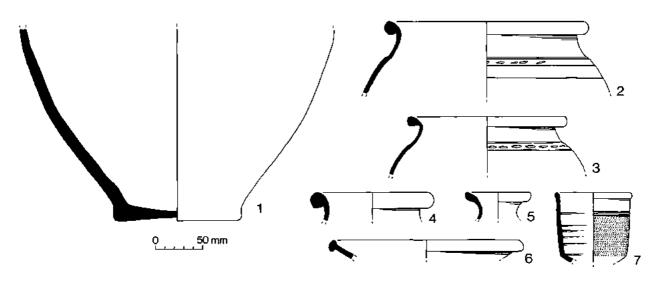


Fig. 6 Roman pottery from Little Baddow.

came from the remains of a shallow Roman pit, c. 0.7 x 0.5m, cut c. 0.2m into natural sand. It was filled with sticky, compact light grey clay, heavily flecked with charcoal, and a quantity of Roman pottery. The base and lower portion of a large, sandy greyware jar (Fig. 6, no.1) lay in situ against the sides of the pit, whilst the upper portion of another vessel, its rim and shoulder, decorated with a zone of stabbing between two grooves, lay crushed in situ on top (Fig. 6, no.2). The pot was underfired, with a red core, and was extremely friable. A quantity of other greyware Roman pottery was also recovered from the pit, and included storage jar, a plain-rimmed dogdish, another jar similar to the main vessel but harder fired (Fig. 6, no.3), and a fine greyware cup decorated with all over rouletting (Fig. 6, no. 7). The date of the group was probably later 3rd century-4th century, based on a few fragments of a folded greyware beaker body and the presence of Rettendon ware. No other fabrics or fine wares, or any other finds or organic remains were found. The total weight of the assemblage was 4.6 kg.

The pottery has been deposited in the Chelmsford and Essex Museum (CHMER 1992:125).

### Catalogue (Fig. 6)

Form and fabrics are based on the typology in Going (1987).

- Footstand base and lower body of storage jar, light greybrown core, underfired, spalled dark grey surfaces. Fabric 47.
- 2 Partly undercut everted-rimmed jar with flat cordon with thumb-nail decoration; underfired, orange-brown core, grey surfaces. G24. Fabric 47.
- 3 Jar with flat cordon with thumbnail decoration; well-fired, orange and dark grey sandwich, with crushed fine sand tempering. G24. Fabric 48.
- 4 Narrow-necked jar (G35), light grey core, grey margins. Fabric 47.

- 5 Narrow-necked jar (G40), soft brown-grey fabric, abraded grey surfaces. Fabric 47.
- 6 Small hammer-headed platter rim, or lid. Sandy grey ware. Fabric 47.
- 7 Fine greyware cup with all over rouletting below a plain zone. Dark grey core, soft light grey margins, dark grey surfaces. Fabric 39.

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## Summary of finds reported to Chelmsford and Essex Museum 1988-92 N.P. Wickenden

This is the first of what it is hoped will become a regular series of articles on finds made and reported to Chelmsford and Essex Museum. The majority of these have been made with the use of metal detectors. The museum is willing to identify such finds, providing that the finder is equally willing to be forthcoming about their provenances. The finder is encouraged to record the exact position of findspots to the best of his ability. An attempt is also made to ensure that the finder always has the landowner's permission to be detecting, and that no infringement of the law has occurred, such as illegal detecting on a scheduled ancient monument. Details are regularly passed to the Sites and Monuments Record maintained by the Essex County Council Archaeology Section.

If objects are of interest, and from the museum's collecting area, the museum would be happy to accept them as donations; it does not generally purchase material. One concern is the fate of the collections of

detectorists upon the demise or loss of interest of the collector. The museum often suggests to owners that museums might be named as the recipient in their wills.

I am grateful to all the finders for their permission to publish their finds, and to the Essex County Council Archaeology Section for the illustrations, by Ian Bell and Nick Nethercoat. Nigel Brown kindly provided the note on the copper ingot fragment, and Hazel Martingell commented on the flints from Danbury. I am also grateful to David Jones of Chelmsford and Essex Museum and Keith Cullum of the Essex Numismatic Society for the identification of the *miliarense* of Gratian.

#### Catalogue

#### **Copper ingot fragment**

by Nigel Brown

Fig. 7.1 Edge fragment of plano-convex copper ingot; one edge shows some columnar gas cavities, the other has large rounded cavities. All surfaces show signs of corrosion. Weight 130 gms. Found by Mr N Fearney at St Andrews Farm.

Found by Mr N. Fearney at St Andrews Farm, Latchingdon.

#### Discussion

Fragments of plano-convex ingots form a major component of many Late Bronze Age Ewart Park phase hoards, e.g. Boreham and Little Baddow (Buckley *et al.* 1986). Some hoards consist entirely, or almost entirely, of ingot fragments (Brown *et al.* forthcoming). Although metalwork is not commonly found on Late Bronze Age settlements, a range of small objects does occur on such sites, and these include ingot fragments (Needham 1980; Wymer & Brown forthcoming). Therefore it is uncertain whether this fragment derives from a dispersed hoard or a settlement site.

Bronze Age finds are relatively uncommon in the Dengie Peninsula, although there is a concentration of Early-Middle Bronze Age finds in the Southminster area (Couchman 1980, figs 15-17), and a number of submerged later Bronze Age sites are now known from both the Crouch and Blackwater estuaries (Wilkinson & Murphy 1986; Wilkinson & Murphy forthcoming).

#### Flint

identifications by Hazel Martingell

- Fig. 7.2 Scraper on bulbar end of the ventral surface of a blade, struck from both ends; complete, good quality light grey flint. Mesolithic/Neolithic transition. Found by Mr Nightingale on Danbury Common, with Fig. 7.3 below.
- Fig. 7.3 Blade flake, possibly from the same core as Figure 7.2 above; retouched on the left lateral edge; cortex surviving on right edge. Mesolithic/Neolithic transition. Found with no. 2 above.

### Coin

identification by Keith Cullum, Essex Numismatic Society

Silver miliarense, good condition (incomplete), of Gratian, AD 367-383, RIC26e (Trier), Rev 4130.

[DN GRATI]ANVS PF AVG. Diademed, draped, cuirassed facing rt.

VIRTVS EXERCITVS. Gratian standing, holding labrarum and leaning on shield.

Mint TRPS

Found by Mr C. Frewin at Ramsden Heath outside Meephole Wood (TL 704 951) along with Fig. 7.4.

#### Objects of Roman date of copper alloy

- Fig. 7.4 Abraded two-piece Colchester brooch, spring missing, broken loop on top of head, foot missing. Remains of decoration on bow and on the extra wide wings; mid 1st century AD. Found by Mr C. Frewin at Ramsden Heath outside Meephole Wood (TL 704 951) along with the silver miliarense.
- Fig. 7.5 Disc brooch, gilded; very worn; abraded projections on underside for pin and catchplate. There are two slight raised concentric mouldings on the upper surface, between which is a band of stamped circles. A separate element comprises a ring with six lugs surrounding a central conical boss; the lugs are in imitation of claws holding a 'stone'. This whole element has been riveted on to the disc; the copper-alloy rivet head is visible in the centre of the plain underside. Diameter 20mm. Found by Mr J. Rock at Tillingham.
- Fig. 7.6 Possible military strap end or belt tag with moulded ?zoomorphic decoration, and the remains of a rivet hole at the top; poor condition. Probably Antonine in date (c.f. Oldenstein 1976, Tafn 36, 66, 67; Allason-Jones & Miket 1984, 608). Found by Mr R. Rand at Debden Cross (TL 580 321).
- Fig. 7.7. Fleur-de-lis key handle. A fairly common Roman find, with examples known from Essex at Braintree (Drury 1976, fig. 12.19); Wickford (Couchman 1979, fig. 15.7); Chelmsford (Wickenden in prep; Colchester (Crummy 1983, fig. 142.4161). Found by Mr J. Rock at Chelmer Village, off Sandford Mill Road (TL 7275 0695).
- Fig. 7.8 Miniature votive axe with knob terminal; otherwise plain, and somewhat abraded. For the type, see Green 1975, figs 2-3; Green 1981, fig. 2. Found by Mr J. Rock at Tillingham.
- Fig. 7.9 Object comprising a bar tang, with two mouldings at the base, splaying into a wide terminal, marked on each side with V-shaped nicks, alternating so as to produce a zig-zag effect on the end face. Almost identical to an example from Norfolk, published (erroneously) as a tile comb (de la Bedoyere 1989, 59.b). The Norfolk example has a similar moulding at the top end of the tang. Light green patina, some corrosion. The object has the feel of a miniature, in the series well published by Green (1975, 1981), though Henig has suggested (pers. comm.) that it may be a stamp to produce a wavy line effect as often seen on small items of jewellery such as finger rings and bracelets. Found by Mr P. Ashmore (January 1991) at Great Waltham (TL 695 136), on Walthambury Farm. Two Roman coins came from the same field. Subsequently donated to Chelmsford and Essex Museum

(Accession no CHMER 1991.155).

#### Roman pottery and building materials (unillustrated)

Roman pottery, including storage jars, greyware incipient flanged bowl rims, a Nene Valley mortarium sherd and colour-coated ware, brought in by Mr A. Rawlings. Also a piece of mosaic floor on a backing of *opus signinum* plaster, comprising 37 *tesserae*, approximately 10mm square and 8mm deep. Most of the *tesserae* are covered by a thin film of sandy mortar. All appear to be of a creamy-coloured hard chalk, which outcrops in North Essex. Similar *tesserae* have been found on the *mansio* site at Chelmsford (Drury 1988), and also at Chignall Roman Villa in small quantities (Phil Clarke pers. comm.); they were often used with black limestone *tesserae* for decoration.

The group was said to have been found by Mr M.J. Campen c. 1980 during the last phase of building of the housing estate at Small Gains, Chignall Road, Chelmsford (TL 685 087), adjacent to Brickbarns Farm. It is known that Mr Campen also found barbarous radiate coins, samian and other material nearby, and Dr Rodwell has

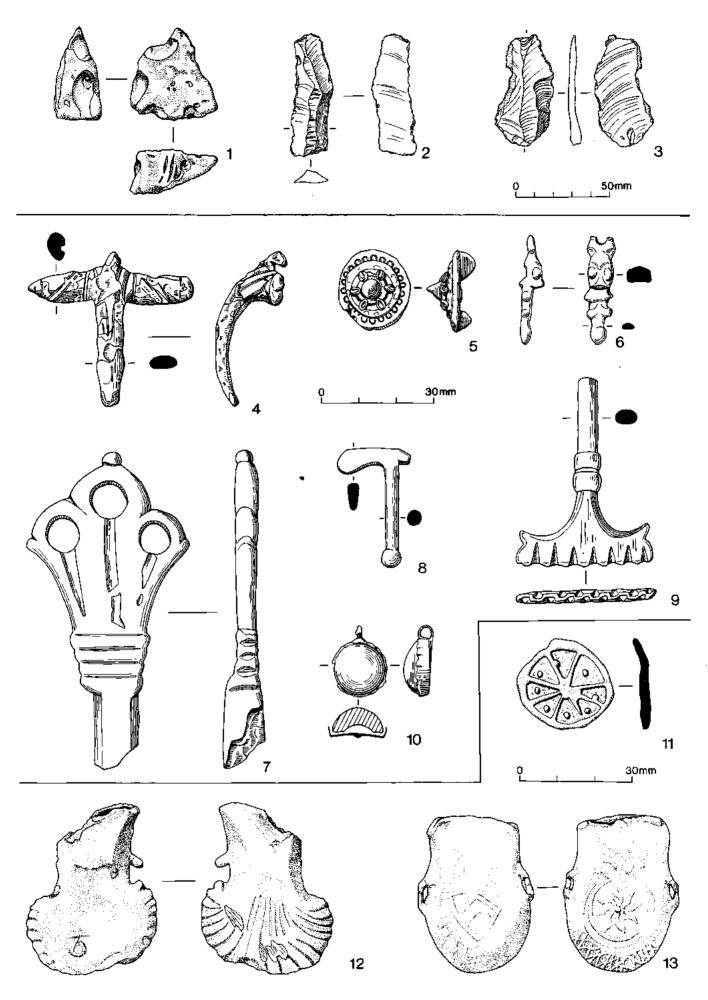


Fig. 7 Recent finds reported to the Chelmsford and Essex Museum.

suggested that the site may have been a pottery kiln (Rodwell 1982, 65-6, kiln v). This material may well be some of the lost finds from there. If the mosaic findspot is genuine, it may well indicate a villa of some pretension, although it is surprising there is no record of any quantity of Roman tile from the area. The pottery and coins would suggest a date in the 3rd-4th centuries, rather than earlier.

## Objects of post-Roman date

Silver

Fig. 7.10 Small silver-gilt pendant, comprising a circular disc, 14mm diameter, with a raised scalloped edge, clasping a hemispherical 'stone' of opaque olive green glass paste, with a concave back, partly filled with a black substance. The reverse of the disc has a central rat tail dividing it in two — a continuation of a simple soldered strip loop, almost worn through at the top. Medieval. Found by Mr M. Arnill in the field west of Bolford Street, Thaxted in October 1992 (TL 607 309).

#### Token

Fig. 7.11 Lead token, one plain face; the other is divided by raised radiating lines into eight segments, each containing a pellet. Found at Little Waltham to the south of Waltham Lodge by Mr M. Cowell.

#### Lead alloy

- Fig. 7.12 Ampulla; the rim is partly missing and has been pinched tight. Obverse, scallop shell (*c.f.* Spencer 1990, figs 170, 174-8). Reverse now largely plain and dented but with traces of a raised pattern including part of a ?fleur-de-lys. The stub of one handle survives. 13th century. Found by Mr A. Rawlings at Great Baddow, in a field off Maldon Road (July 1990).
- Fig. 7.13 Ampulla, with rim flattened; both handles bent but intact. One side is decorated with an eight-pointed 'sun' with wavy rays within two concentric circles. Below the motif the background has been filled in by light, irregular crosshatching. On the other side is an heraldic shield with two chevrons. 13th century.

Found by Mr M. Arnill in a ploughed field at Begrums Farm, Mountnessing (TQ 632 9705).

#### Copper alloy

Fig. 8.14 Saxon split-end strap end with incised interlace decoration; plain reverse. This is a typical example of a later ninth-century strap end of elongated, almost parallelsided, form. Below the two rivet holes is a trefoil zone (incomplete); the main front area is decorated with Trewhiddle-style zoomorphic interlace, fairly worn and now faint. Though worn there are signs that the decoration lay within a narrow beaded border. The terminal is in the form of a stylised animal's head, as seen from above, comprising two crudely-incised round ears, a snout, slightly raised by hammering on the reverse, and two inset eyes, of which only one rémains. These were probably made of a red enamel, now discoloured black (not analysed). In the hole of the missing eye is a light purplish corrosion product. L 39mm.

There is some indication that the grooves in the decoration, in both the interlace and animal ears, was filled with a light brown substance, turned black in places, possibly niello or an enamel (not analysed).

There are many parallels for this genre of strap ends, see for instance Webster & Backhouse 1991, 233-4, nos 191-2; Waterman 1959, fig. 10; Hinton 1974, nos 31, 37. For a discussion of the Trewhiddle-style and related strap ends see Wilson 1964, 24-9, nos 13,144 & 114.

The corpus of mid-Saxon metalwork from Essex is pitifully small, and this is a welcome addition to that corpus of an example of what would have been a fairly common class of artefact. Found at Goddards Farm, Thaxted (TL 613 323) by Mr M. Arnill in October 1992.

- Fig. 8.15 ?Leaded copper-alloy figurine of Christ crucified. No features are evident on the face, but shoulder-length hair is indicated with parallel incisions. The chest is bare, and faint incisions mark the ribs and possibly a diagonal spear wound. A cloth is draped around the waist and falls down the left thigh. Folds of the drapery on the reverse are indicated by further light parallel incisions. The legs are crossed at the ankles where the figurine is broken. The arms are outstretched but only appear as short stubs. The piece is simple and poorly executed. For another example of the same genre, captioned as a 13th-century tourist souvenir from Bermondsey Abbey, see *Current Archaeology* 124, p. 178. Found at Little Waltham, to the south of Waltham Lodge, by Mr M. Cowell.
- Fig. 8.16 Upper half of a Madonna and Child figurine, gilded; poor condition. The metal is corroded to a deep brownish purple, perhaps indicative of a silver alloy. The back of the Madonna's head is flat and covered with a white metal plating, possibly a solder. Below this area, the back of the figurine, as well as the top of the head, is hollowed out. The Madonna is diademed, and wearing a long headdress. Found at Begrums Farm, Mountnessing (TQ 637 972) by Mr M. Arnill in November 1992.
- Fig. 8.17 Cast miniature barrel padlock with iron corrosion filling the square barrel, which is decorated with curvilinear punched nick on all four faces. Good condition. 13th-14th century (cf Goodall in Biddle 1990, fig. 313.3666 for an example from Winchester, decorated on underside only). Found by Mr Pennick of Little Totham.
- Fig. 8.18 Dagger quillon, perfect condition with very dark olive green, almost black patina; decorated on both faces with pecked marks, and with transverse grooving opposite the axe-like projection. The terminal of each bar is decorated with an incised cross. Original file marks are visible on the inside of the blade hole. ?14th century. Found by Mr P. Ashmore at Great Waltham (TL 692 138), January 1991.
- Fig. 8.19 Worn circular heraldic device with a flange or seating, pierced by four rectangular cut-out shapes. Traces of red enamel survive in the design (four quadrants with lions facing left), as well as on part of the flange, where traces of gilding also survive. Diameter 28mm. Found by Mrs Stewart in the garden of Valley House, Langham.
- Fig. 8.20 Unusual, openwork socketed object, possibly a holy water sprinkler, reminiscent of larger Saxon tower-shaped censer-covers (c.f. Wilson 1964, pls 12-14, 27). The square socket is pierced on opposite sides for attachment (broken on one side through the nail-hole). The multifaceted polygonal body comprises four diamond facets forming a pyramidal top, four vertical diamond facets, and four smaller diamond facets sloping inwards to meet the socket. There are a number of small worn round projections or knobs on all nodal points and in the centre of each edge. Each facet comprises an openwork cross except for two of the top diamonds which include extra 'branches' forming a 'tree' pattern. Ht 40mm, greatest width 24mm, width socket 7.5mm. Found by Mr G. Crace in the churchyard at Wickham Bishops.
- Fig. 8.21 Finger ring, incomplete, with semi-circular sectioned hoop, and expanded bezel. Patchy, very dark olive-green patina. The bezel is chip-carved with a Lombardic letter T, surmounted by a crown (c.f. for examples, Saunders & Saunders 1991, fig. 12. 19,21). Late 15th-16th centuries. Found at Little Waltham by Mr M. Cowell.

## SHORTER NOTES

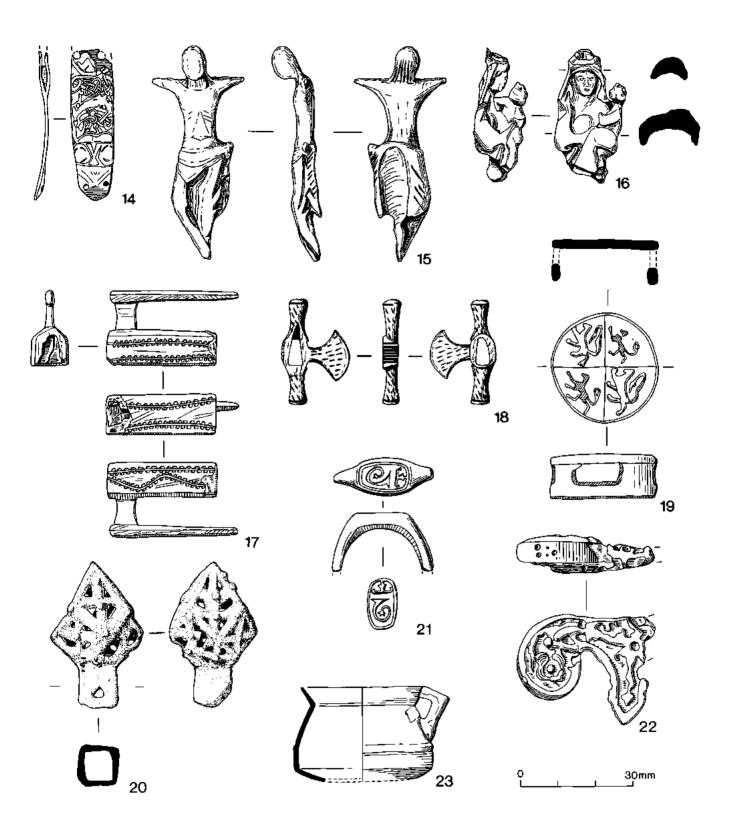


Fig. 8 Recent finds reported to the Chelmsford and Essex Museum.

- Fig. 8.22 Fragment of multilobate fitting with recessed decoration. There is a possible rivet hole in the centre of the round terminal. Use and date unknown. Found by Mr N. Fearnley in a ploughed field at Mundon Hall.
- Fig. 8.23 Part of a small measuring bowl with sharply everted rim

and cast angular handle. Below the handle is an uneven horizontal ridge. Flat base. The bowl has been patched twice with small infilled areas of metal. The interior generally has a scoured and marked appearance. Found at Thaxted Windmill (TL 609 308) by Mr M. Arnill in September 1991.

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## King John's hunting-lodge, Writtle: excavations 1991

# J. Ecclestone and K. Reidy **Summary**

A small-scale excavation on the moat edge uncovered the western wall of the "great chamber" excavated by Rahtz in 1955-7 and a small attached structure, the function of which is uncertain. Dating evidence suggests a fifteenthcentury origin and that it was therefore part of the final phase of building on the site.

## Introduction

The site of King John's Hunting Lodge lies within the grounds of Writtle Agricultural College, Essex (TL 6758 0678). It is a moated site situated immediately to the south of a stream which is connected to the moat by a channel in the north-west corner. There are several springs in the area, one of which feeds a channel running into the moat in the south-west corner. The natural stratigraphy includes a range of clays, sand and gravel.

The site has long been known to be of archaeological importance. Excavations by Rahtz from 1955-57 (Rahtz 1969) revealed three phases of medieval settlement within the moat and immediately outside it. The sides of the moat, however, had never been excavated so when the Agricultural College decided to clear the moat to create a "landscaped amenity feature", staff from Essex County Council's Archaeology Section observed the work, primarily in order to ascertain whether evidence for a palisade (as mentioned in contemporary documentary evidence) and revetment existed (Rahtz 1969, 10). To the same end, machines were used to dig two trenches on the western edge of the enclosure. This position was chosen as it appeared on Rahtz's plans to be the least eroded and had not been previously excavated, so had the potential to reveal original features (Fig. 9).

## Excavation

Initially two small trenches were opened up in the south-west corner of the enclosed area. Trench B was 6m long and 2m wide; it ran down the inside of the moat. It contained no features. Trench A, 11m by 4m ran along the western edge of the moat platform. This trench was extended down the side of the moat and along it in a northerly direction to meet up with Trench B, due to the discovery of brick features along

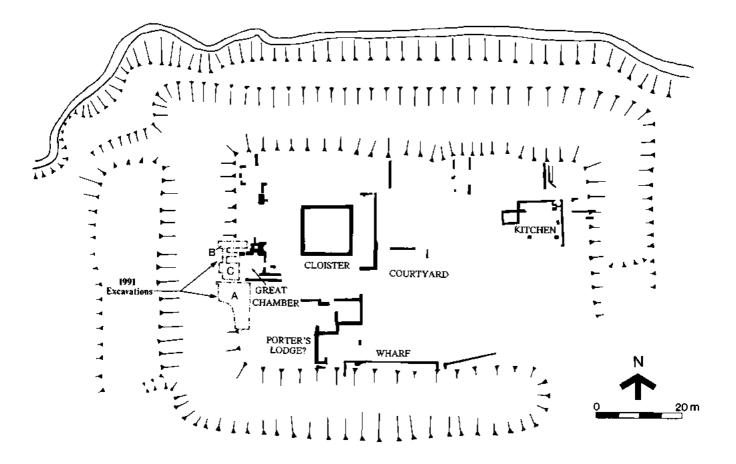


Fig. 9 Showing position of 1991 excavations in relation to Rahtz's third phase of building.

the moat edge. The features from Trench A can be divided into six groups.

Group 1 consisted of a levelling layer composed of redeposited natural, between 5 and 10cm thick. Through this and the underlying natural was cut a large construction trench (10), also in group 1, about a metre deep. This made a step in the edge of the moat platform in which were laid the foundations of several brick walls.

These walls are part of group 2 and represent the first phase of the building (Fig. 10). The interpretation of walls 117, 122, 123, and pillars 100A and 117A was complicated by erosion of the moat edge, causing slumping of the building. The north-south walls and pillars now stand at an angle of approximately 30 degrees to the vertical (Fig. 11).

Wall 122 exhibited staggered English bond in its upper courses, while wall 123 had English bond in its upper courses. The east-west walls 122 and 125 had been keyed into the north-south wall and then subsequently pulled away. At the west end of 122 six courses, each four unmortared bricks wide, seem to have been placed under the wall to support it. Wall 123 starts at the same level as the bottom of the unmortared bricks but was only keyed in to the mortared courses of 122.

Wall 117 and 122 have not been keyed into each other but were mortared together, which could suggest they are of different phases. However the construction cuts are similar enough to suggest that the construction took place in one phase of building. Pillar 117A abutted 117 and had a course of bricks overlying both structures at contemporary ground level. Pillar 100A in this phase was free standing, its size, method of construction and positioning suggest that it was built at the same time as pillar 117A.

It is thought that the foundation cut (10) was then infilled, possibly creating a floor level at the height of the original top of the moat. This infilling was a silty clay and contained frequent small flecks of tile mortar and charcoal; also 21 sherds of pottery dated variously from the thirteenth to the fourteenth and fifteenth centuries.

There were problems in the interpretation of this structure as no surfaces which could be identified as floors were found. However the L-shaped pillar 100A may have formed responds for a wooden structure such as a wall or perhaps a staircase leading to the main building. East-west walls 122 and 125 were found to be a continuation of Rahtz's walls 1290 and 1302 which form the south and north walls of his "great chamber".

Group 3. This consists solely of the construction of wall 100, which ran north-south between wall 122 (which it abutted) and 100A to which it was bonded by bricks being laid over the top of the earlier pillar structure. Its shallow construction cut was made into the group 2 infilling and had a mortary fill. The bricks were a darker red than those in the group 2 walls and the construction technique was different. The outer facing bricks were continuous headers, but the internal bricks were small, broken pieces with no particular order. This wall suggests a change in use of the structure which can not be dated.

Groups 4-6 contain features which cannot be linked to the group 2 structures. They lie on the most platform to the east of wall 100.

Group 4 contains the earliest feature on the site: a shallow pit, containing abundant charcoal. It underlies the levelling layer in group 1, but unfortunately contained no dating evidence.

Group 5 includes the levelling layer also included in group 1. Into this layer were cut two shallow pits containing charcoal, one lay directly above the earlier pit and cut into its fill, while the other lay to the east and was cut by a straight-sided rectangular cut which was filled with a dense mortary material, suggesting an earlier robbed out masonry structure. Again no dating evidence was found in these features.

Group 6 includes the destruction debris of all the group 2 and 3 walls and the stratigraphy above groups 3 and 5. There was no sign of any further building activity in this group.

## Discussion

Rahtz excavated the moat platform between 1955 and 1957. His findings provided the basis for a five-period chronology, dating from the Iron Age to the early sixteenth century. The moat and the building activity within it began in the early thirteenth century, and was divided into three construction phases, each of which represents rebuilding and reconstruction of the site. Documentary research, outlined in Rahtz (1969), revealed information about construction, maintenance and layout of the site, and also reinforced the dating of the buildings. Briefly, the construction phases were as follows.

*Phase I.* 1211-c. 1306. Main buildings were chapel, hall and kitchen, situated to the north of the enclosed area. They were built of timber, the chapel however having foundations partly of stone and flint.

*Phase II. c.* 1306-*c.* 1425. Represented by changes in building materials: tile was now used for foundations and roofing. The basic layout was retained, despite a short period of disuse between these two periods.

Phase III. The layout was substantially changed, most of the buildings now occurring in the north and west of the site. To the south were offices including a porters lodge, ewry and counting house. Brick was used for construction for the first time, although probably only in foundations and supports, as a survey of 1521 records the buildings as being "of grooce tymber." Activity on the site had ceased by the time this survey was made, and the site was described as decayed.

The pottery from the 1991 excavations dates the group 2 structures to the fifteenth century, which is contemporary with Rahtz's construction phase III.

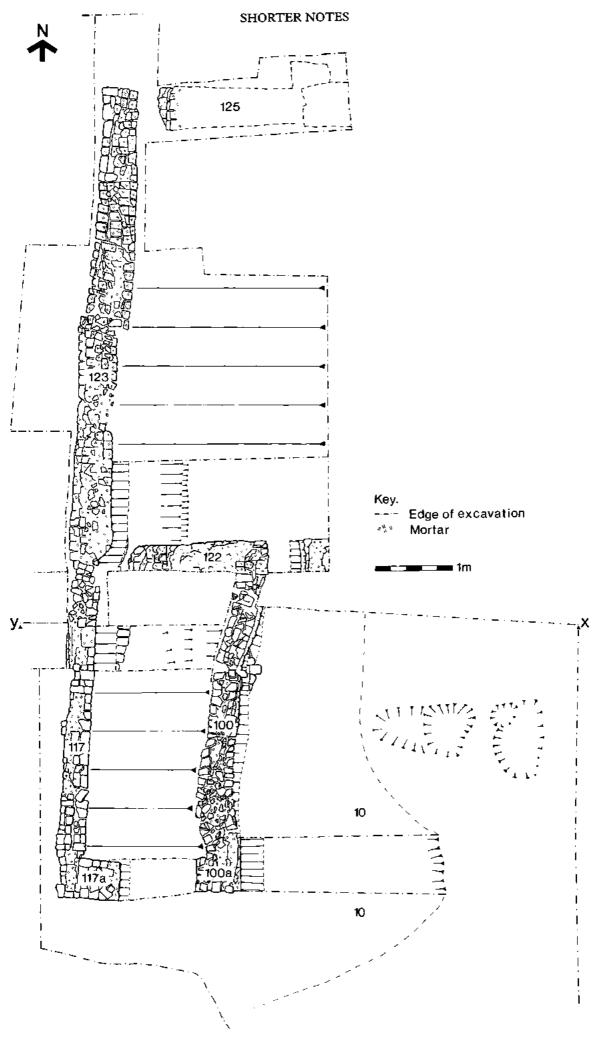
The phasing of the walls in groups 2 and 3 was established largely by the comparison of material in construction cuts, the appearance of the walls (width, bonding patterns, the shape of the bricks), and the level at which they had been built. This last point is unreliable however because of the slumping which has taken place, and also because of the likelibood that the western walls were built on the edge of the moat slope.

The proximity of this structure to the water's edge may have prompted the use of deep brick foundations. Walls 117, 123, and 122 foundation depths of 0.7m, 0.7m and 1.03m respectively, and the north-south walls 117 and 123 have their lowest courses approximately six courses below that of 122, despite being keyed in higher up. This suggests that they were in fact being built down the moat slope, and that the levelling suggested by the initial large cut only provided a base for the structures aligned east-west. The north-south running walls may therefore have formed a brick waterfront facade. The functions of this may partly have been cosmetic, but it would also have formed revetments for that stretch of moat.

No definite floor level has been identified. The bonding of the bricks in wall 122 becomes more regular 5 courses from the top surviving course, which may indicate a point at which the foundations rose above ground. Also the top course of wall 125, which shows at the top of the moat slope has a layer of large offset bricks; those below being half, or broken fragments. As timber was still the predominant building material it is likely that these walls were simply low linear supports for a timber superstructure: a progression from timber ground sills.

A clay loam infilling of 0.5m thick which reaches to c. 0.2m below the top of the walls formed the level on which the phase three wall (100) was built on. This may have been a level surface upon which a floor was constructed, although there is no evidence of such a structure.

These phase 2 structures form the west end of a



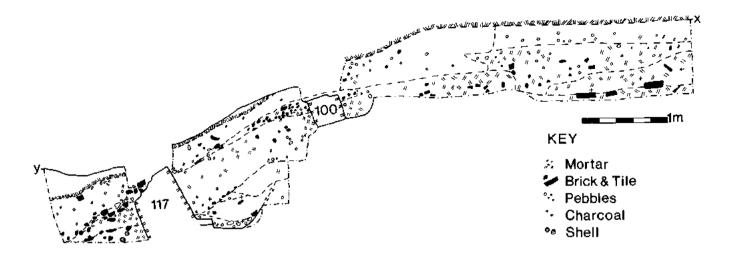


Fig. 11 South-facing section of Trench A. (Position of section shown in Fig. 10.)

room (synonymous with Rahtz's "great chamber"; walls 1290 and 1302) and a structure bonded (but not keyed in) to the south. The southern structure consisted of a north-south running wall, extending from wall 123, and to the south two pillars, enclosing the space on three sides. The eastern side appears open, and there is a gap between the two pillars on the southern side. This may be interpreted in various ways. This group of structures may have been an ante-chamber, with the south and east sides constructed upon timber ground sills rather than brick foundations; the depth of the eastern pillar is unnecessary if this was the case however. The wall built in phase 3 along the eastern side would then render this side similar to the others, presumably being half-timbered. There is no evidence for a doorway or access between these two rooms, but because a floor level has not been determined we cannot be certain of having reached an appropriate level to encounter doorways.

Alternatively, it is possible that these structures were the support framework of a staircase leading to the upper floors of the "great chamber". The 1521 survey states that "for the conveyance to the Great Chamber there is a stately stair". (Rahtz identified this building as the great chamber by a process of elimination, and also because it has the most massive brick foundations, presumably because it was of two storeys.) The construction would have been of timber (there is no evidence of this however): the later addition of the eastern wall could be seen as footings for timber supports. The lack of access between the south and north structures may be explained by this theory.

#### Acknowledgements

The excavations were funded by Writtle Agricultural College, whose staff were helpful throughout the excavation. The college have decided to keep the walls uncovered, and permanently on display as a reminder of the historic nature of the site. They have received a grant from the Farm and Countryside Initiative allowing them to fund further exposure of the structure by Essex County Council staff, and costly conservation work to be carried out by Baker's of Danbury. The area around the walls is to be landscaped, grassed over and an information plaque erected. The College represented by Dennis Neate have done everything they can to ensure the smooth running of the excavation and later conservation work; their interest and co-operation was greatly appreciated.

Thanks are due to D. Smith and A. Wade for their excavation, planning and recording, and to H. Major, P. Ryan and H. Walker for their specialist finds reports.

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## Stondon Massey, St Peter and St Paul D.D. Andrews

This typical small Essex church comprises a nave and chancel datable to the 12th century, a medieval timber belfry, and a 19th-century north vestry and chapel. To eliminate damp in the chancel, the render was stripped in 1992 from the east wall and the south wall east of the door internally and externally to a height of about six feet. In so doing, a number of features were revealed which are significant for the history of the development of this end of the church, notably several different types of masonry, traces of a stone altar in the east wall (Fig. 12), and an aumbry at the east end of the south wall (Fig. 13).

Externally, a vertical straight joint was exposed 2.48m from the end of the church. To the west of this, there were quoins made of a hard limestone and the masonry consisted of flints in a firm somewhat sandy lime mortar. In other words, it looked as if the chancel had once terminated at this point, or else there had been an offset in the wall beyond which it had stepped inwards to the north.

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The east end was otherwise of two main builds, the lower half of the wall being medieval and the upper half, above a height of 7-8 feet (in the east wall above a course of chamfered brick), in brick. The medieval masonry comprises coursed flints and occasional roughly squared stone blocks with levelling courses of Roman brick. It is bonded with a material which probably consists of little more than a sandy brickearth with an admixture of lime. As far as it was possible to determine, this medieval fabric was of one build, for the flint courses could be traced continuously along the wall face. There were points where the masonry seemed interrupted but on further examination showed these to be related to settlement cracks, of which there are a number internally and externally.

The bricks in the later build measure  $230 \times 115$ -120 x 60mm. They are regular in shape, laid in English bond and set in a whitish lime mortar. They look late

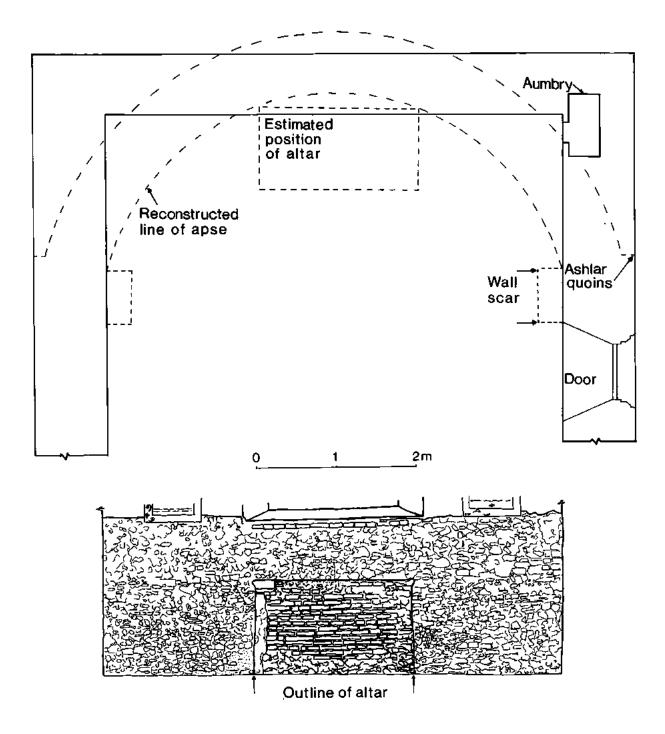


Fig. 12 Plan and elevation of the east wall of Stondon Massey church, with a suggested reconstruction of the position of the apse and altar.

18th or early 19th century in date. At the south-east corner, there are a few different bricks resembling those round the aumbry inside and which seem to be quoining for this corner contemporary with the aumbry. Immediately below the brickwork in the south wall, there are a few courses of ashlar which are probably of the same date as the brickwork.

Inside, the straight joint did not appear in the south wall. Instead, it was possible to detect a slight difference in the wall immediately to the east of the door. This was cleaner and more uneven-looking than the rest of the wall which is characterised by large areas of muddy-looking brickearth. It could be postulated that there was northward return here about 2-3 feet wide, corresponding with the position of the quoins externally.

The aumbry in the south-east corner of the chancel is made of bricks measuring  $230 \times 110 \times 65$ -70mm, these bricks being present round it forming an extensive patch in the wall. The opening for the aumbry is 225mm wide and had a trefoiled top made of a pair of rubbed bricks, of which only one survives. Inside its

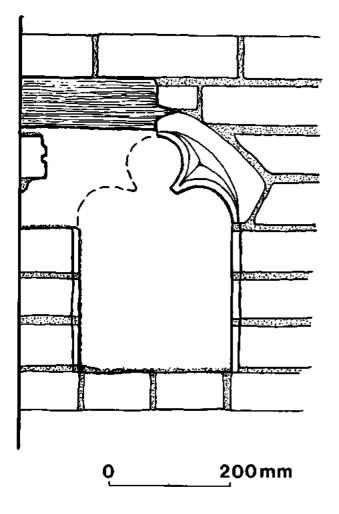


Fig. 13 Elevation of the aumbry found at the east end of the south wall of the chancel.

dimensions are remarkably capacious, about 2ft 6in wide by 1ft 4in high. It is plastered internally, and is roofed with a large piece of oak. The aumbry had been blocked with a variety of different types of brick, mostly Tudor in type but including a frogged one like those in a modern patch nearby in the south wall which probably marks the position of a former monument or other fitting. (These bricks are regular in shape with square arrises and smooth faces, and measure  $224 \times 110 \times 63$ mm.)

In the centre of the east wall, there is a rectangular area of different masonry 1.22mm high and 2m wide, delineated by straight joints. The masonry seems to be coursed flintwork, but much of the feature is occupied by a brick patch which seems to be a refacing probably only half a brick thick. The bricks measure 115 x 50-55mm, and look 16th or 17th century in date. They are mostly fragments set headerwise, and are bonded with brickearth and pointed up with a mixture of brickearth and lime. The top corners of this feature are made of flat stones with their edges cut to a hollow chamfer. The south side of it is plastered; the masonry of the east wall butts against it and must be later than it. On its north side, the feature is made of stone; the adjacent masonry of the east wall looks plastered and therefore earlier in date. This is probably an illusion, the earth bonding of the wall having failed to key into the stone side of the feature and having moved away retaining a flat 'plastered' face.

Its position and shape at once suggest this feature was a masonry altar. Altars were originally of wood, but in much of Europe from the 6th century, and in England from the 11th century, stone was the only material allowed (Heales 1881, 4). The Stondon Massey altar can be reconstructed as consisting of coursed flintwork cased in dressed stone, of which only a block on the north side and the two blocks at the top corners have survived. The structure would have been surmounted by a single stone slab. Such altars were destroyed from the Reformation onwards, orders for their removal and replacement with wooden tables being issued in 1550, 1559, and 1643 (Heales 1881; Benton 1944-49). The altar slabs were often set in the church floor where they can sometimes be seen today. One in Purbeck marble can, for instance, be found in the floor of the south porch of St Osyth church.

It remains to try and tie these features together in a reconstruction of the development of the east end of the church. Instead of having been built against the east wall of the chancel, the altar seems to have lain partly within the thickness of that wall and to have been butted by it, something which implies it is earlier than the wall. This is probably to be explained by the altar having been associated with an earlier apsidal east end. The RCHM (1921, 226) notes that the foundations of an apse have been seen at the east end of the church. No detailed record of this seems to exist. In his very full account of the history of the parish, the Revd

#### SHORTER NOTES

E.H.L. Reeve takes the existence of an apse as a premiss in his account of the development of the church, but offers no more detail than a reference to a 'round east wall, the foundations of which may no longer be traced' (Reeve 1914, 8). There seems no reason to doubt this observation, as such apses are regularly found when small churches of this type are excavated. The quoins exposed in the south wall must mark the position of an offset at the beginning of the curved apse wall. The quoins do not look 12th century: at that period they are more likely to have been formed in Roman brick. Instead they are probably a renewal of the 13th or 14th centuries. The masonry in a superior mortar to the west of them presumably represents a contemporary refacing.

It can be argued therefore that the altar was an integral feature of the apse. In the accompanying figure, it has been shown as such in the reconstructed ground-plan of the east end of the church. On this plan, the apse has a rather shallow arc, something which seems typical of small churches, comparable for instance to that recently found by excavation at Asheldham (Andrews and Smoothy 1990).

When the east end was squared off, the altar was retained and partially incorporated in the chancel wall. The aumbry seems original to the rectangular east end, its brickwork suggesting a late 15th- to early 16thcentury date. Its trefoil arch made of rubbed bricks resembles the corbel tables which occur on early brick chimney stacks of that period (Stenning 1989). Bricks similar to those round the aumbry occur in the east wall, and at the bottom of the east window which is 15th century in form though a modern rebuild. This interpretation, that the aumbry dates the squared-off east end to the 15th century, is supported by the evidence of the crown-post roof. A joint in the wall plate coincides with the internal wall scar and the external straight joint. The nave and chancel roof are one construction which Hewett (1982, 131) deems 'early but not datable'. However it is dated, it provides a relatively late terminus post quem for the squaring off of the east end. The altar and the aumbry must have fallen victim to the 16th-century reformers. The aumbry was blocked up, and the altar was demolished, the scar left by its position being tidied in brickwork.

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## A Tudor outbuilding at Copped Hall, Epping

## D.D. Andrews

The 18th-century house of Copped Hall, ruinous since a fire in 1917, was the successor to a Tudor mansion which stood about 250m to the north-west of it. The site of this mansion was pin-pointed by excavation and survey in 1984 (Andrews 1986). Of it, nothing survives apart from a tiny fragment of the loggia. However, one of a complex of outbuildings shown on the well-known Farmer view of Old Copped Hall has escaped destruction, being incorporated into a Victorian barn in the now largely deserted farmyard to the south-east of the mansion and to the north of the 18th-century house (Andrews 1986, fig. 2). What follows is a description of this building, which is neither listed nor scheduled.

The building forms the northern of three ranges of farm buildings which in general appearance date from the 19th century. Despite alterations and accretions, it does not take much more than a second glance to reveal that it is constructed substantially of Tudor brickwork to the level of the first floor (a height of about 3.5m), above which it was rebuilt in 1891, as a plaque in the east gable proclaims. At the same time, it cannot be pretended that the building is well preserved (Fig. 14). Its north side is masked by a brick lean-to, and its southern one by a series of wooden ones. A farm building, now removed, was formerly attached to its west end, as limewashing, joist holes and a gable line clearly show. Its interior was used in recent times for keeping livestock (?pigs), and has concrete floors with metal pens. The first floor was a hay loft. The walls are obscured by the remains of plaster, and many layers of limewash and filth. Nonetheless, some original features remain identifiable.

The building measures 7.19x25.60m externally. At the base of the walls, to a height of about 1.5m, there is a plinth about 140mm wide. The bricks typically measure 222x105x55-60mm. Some original plaster can still be found inside; rather less survives outside, but sufficient to leave no doubt that the exterior was plastered too. The east gable wall has the appearance of a Victorian farm building, with very little early brickwork visible. The west gable end is rather better preserved, because of the building that once adjoined it. The door here is a later insertion, but an original feature, which is more readily detectable internally than externally, is a central window about 3.20m wide

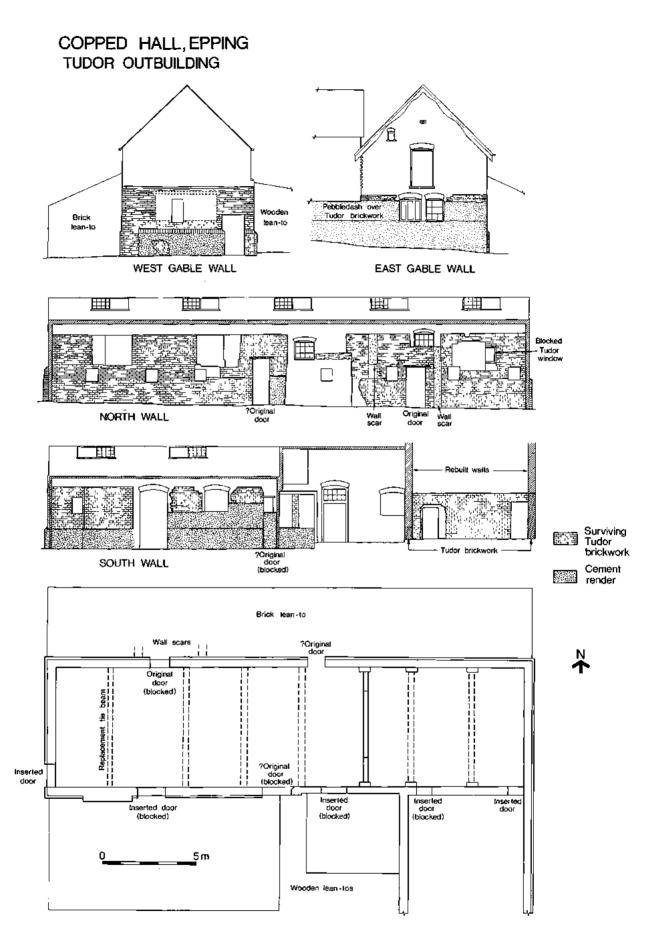


Fig. 14 Plan and elevations of the Tudor outbuilding converted to a barn in the 19th century, showing the extent of the surviving original brickwork and other features.

by 1.38m high. A later vertical window, itself now blocked, was set in the blocking of this.

At the west end of the south wall, there is a wide shallow buttress which has been reduced in height with the rest of the Tudor fabric and provided with 19thcentury coping bricks. A blocked 19th-century doorway about half-way along this wall has internally a splayed reveal on one side, and may therefore be an enlargement of an original door. There are otherwise no original features in this side of the building.

The north wall is more interesting. At its west end, there is a blocked original window, similar in dimensions to that in the west wall, with splayed plastered reveals. To the east of this, the scars are just detectable where two adjoining walls have been removed. Between them is an original door 1m wide, now blocked. The rather thin wooden lintel has cut marks on it as a keying for plaster, something which also occurs on the lintel of the window in the west wall. A door of similar proportions further east is also probably original.

The framing of the first floor incorporates most of the original tiebeams, which divided the building into eight bays. Of these, the westernmost has been replaced, the third from the east end has been substituted by a partition wall, and the easternmost badly damaged in a recent fire. These beams are about one foot square. The mortices cut in them show that the common joists were narrow section, 80-100mm in width, with pegged soffit tenons. The second tiebeam from the west has lamb's tongue chamfer stops.

The building is clearly the central one in the row of north-south aligned structures located to the east of the Tudor mansion in the Farmer view published in 1735 (Fig. 15). Its main axis is aligned in the right direction, and the wall scars on the north side are identifiable with the projecting unit represented on the engraving. The window on the north-west corner is not indicated on the engraving, perhaps in error or else because it was already blocked. A door east of the projection on the engraving is probably that which survives today, whilst a window further east raises the possibility that the blocked ones in this side represent enlargements of originals, subsequently blocked and replaced with smaller vertical ones (themselves now blocked).

Unfortunately, there is no internal evidence as to the use of the building. The projection on the north side was presumably a stair tower. The buttress on the south wall looks as if it may have been for chimney stack, but no chimneys are shown on the engraving. That the building has been uniformly reduced in height to the top of the ground floor might possibly be explained by the first floor and attics (as represented in the engraving) being timber framed with brick cladding. No doubt the ground floor had a utilitarian function, and the upper storeys provided accommodation for the servants employed at the mansion and on the estate.

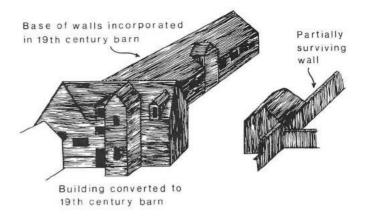


Fig. 15 Detail enlarged from the Farmer view of 1735 to show the original appearance of the Tudor outbuilding.

The range that leads off at right angles from the south side of the east end of this building also has Tudor brickwork in the lower part of its walls, and therefore can be identified with the building shown in this position on the Farmer view. The two doors which link this building with that described above are both recent, dating from when this building was also used as an animal shed with an inserted hay loft above. Originally, there was no access from one building to the other, no doubt because on the engraving this one looks like barn with a midstrey, and would therefore have served quite a different function to the building to the north.

#### Postscript

In the gales of January 1990, a pine tree in the overgrown gardens to the west of the derelict farmyard, and to the north of the ruined mansion, was blown over. In its rootstock and in the hole left by it were the footings of a north-south wall in Tudor brick 500mm wide.* This can be identified with the west wall of the enclosed eastern part of the formal gardens north of the mansion shown on the Farmer view. It should be pointed out that the east wall of this enclosed garden partially survives today, forming the boundary between the farmyard and former gardens. Butting this wall are the stubs of the side walls of the small building adjoining it depicted on the Farmer view.

#### Acknowledgements

The recording of this building was carried out by Steve Godbold and Martin Smoothy of the Essex County Council Archaeology Section, and funded by Epping Forest District Council. The discovery subsequent to the 1990 gales was brought to my attention by Andy Robinson, formerly of Epping Forest District Council.

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# The excavation of a lift shaft at Colchester Castle

J. Partridge

(Colchester Archaeological Trust)

A programme to improve the facilities of the Castle Museum at Colchester involved the insertion of a lift shaft to allow access for the disabled. Colchester Borough Council commissioned the Colchester Archaeological Trust to investigate the remains of the Roman podium (the raised base of the Temple of Claudius) as well as the overlying deposits, which were to be removed during the course of digging the shaft for the base (Figs 16 and 17).

## The Roman podium

The trench indicated that the remains of the Roman podium lay 2.5 m beneath the present floor surface (27.8 m AOD). An area of 2.4 x 2.3 m was exposed. It was composed mainly of septaria with some flint pebbles bonded in light yellow mortar. The podium had been extensively robbed leaving the core exposed as an uneven surface. In profile the podium rose in height as a step from east to west. The surviving surface was level on the east side of the trench where there were pieces of horizontally-bedded Roman tile/brick. The incorporation of tile close to the outer edge of the podium is reminiscent of the town wall which is an

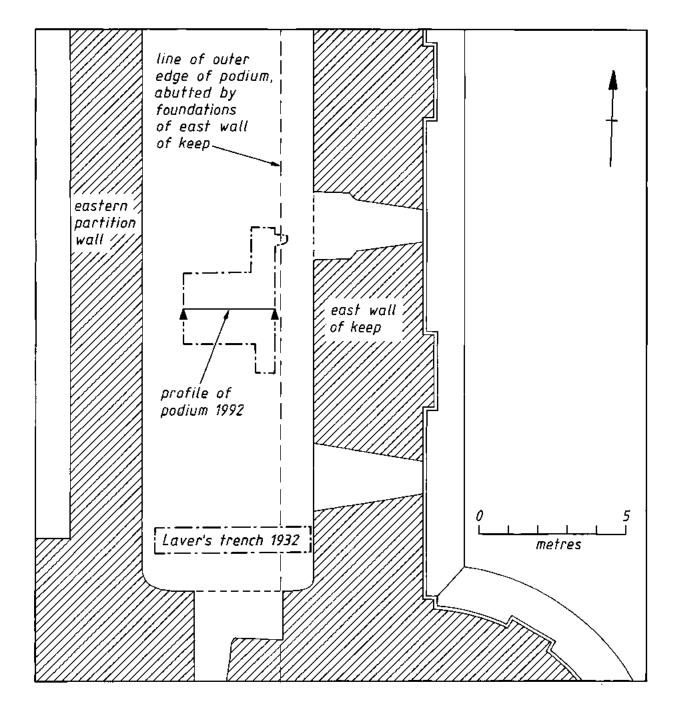


Fig. 16 Plan showing the location of the 1992 trench in relation to the Roman podium and the castle.

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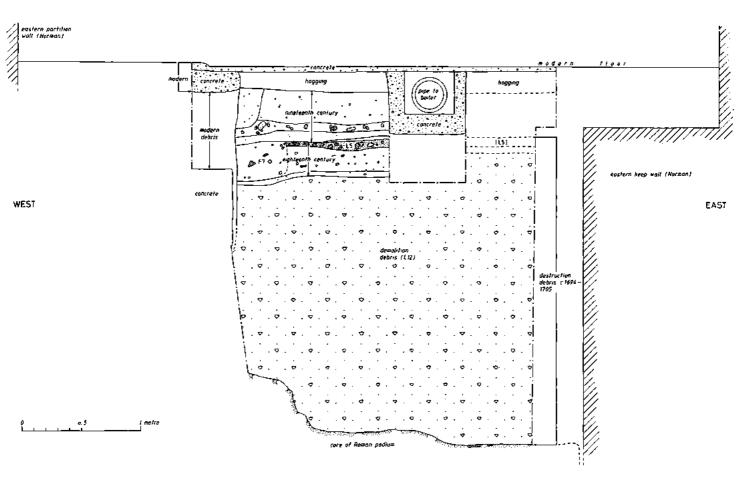


Fig. 17 Section.

ashlar construction, where the inclusion of tile courses appears to have had a structural or levelling function.

## The medieval period

There were no features or structures of Norman or medieval date found during the excavation; however there were some finds of pottery of this period. These finds were residual, all coming from later contexts.

## The post-medieval period

Written sources mention three owners of the castle who deliberately demolished parts of the building; Charles, Lord Stanhope (1649), Sir James Norfolk (1656), and John Wheely (1694/5). The robbing of material from the Roman podium seems to have taken place solely during the ownership of John Wheely, as pieces of clay pipe dating between 1670 and 1700 were found immediately above the core of the podium indicate.

John Wheely bought the castle in 1683 as an investment, and later in the 1690s he began to demolish it, using some of the stone to build bridges in 1697 and 1698. Demolition apparently proved to be unprofitable, and in 1705 he sold the ruin to Sir Isaac Rebow.

The podium was robbed to acquire building stone rather than just rubble because the robber trench was

filled mainly with crushed and broken lumps of mortar, and chippings and splinters of stone. The material is clearly debris left after cleaning individual stones in readiness for reuse as building material elsewhere. The quantity of the debris generated in this way indicates that a great deal of energy and expense must have been spent in this operation.

The depth and uniformity of this debris show that the robber trenches were neatly backfilled. Sealing this material was a layer of mortar (Layer 5), tightly packed to form a level surface. The surface does not seem to have been meant as a floor because it was uneven and showed no signs of wear or trample. It seems to have been exposed for only a brief period before being covered by a gradual accumulation of soil. Layer 5 contained a few datable finds of which none post-date the 17th century.

Although the excavated area was small  $(3 \times 2.5 \text{ m})$ , a relatively large number of features cut into Layer 5 suggests that people were still making use of the ruined castle soon after it had been disposed of by Wheely. In c. 1727 the castle had come into the ownership of Charles Gray, who set about consolidating the decaying building as well as converting the south side into a private residence.

There were a number of later features, many of

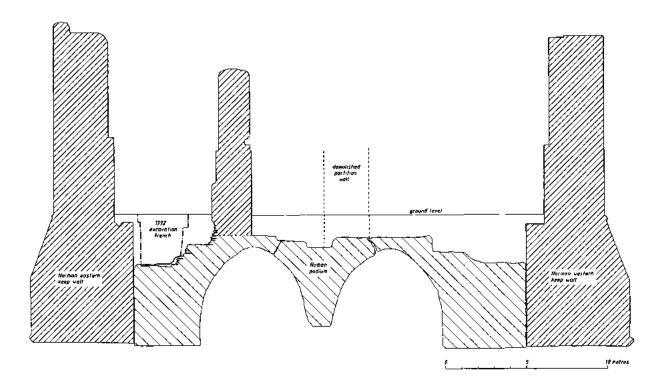


Fig. 18 The 1992 trench profile compared with Hull's 1932 composite section across the castle and Roman podium.

which can be attributed to the time of Charles Gray's ownership. These features include several small post holes and a narrow trench. As the scale of the excavation was small, no clear relationships between the features could be discerned. None of the later features are illustrated here apart from F7 (Fig. 17).

## Conclusions

The results of this excavation match, but add little to, the body of information collected by the earlier researchers P.G. Laver and M.R. Hull. In profile (Fig. 18), the depth and shape of the surviving remains of the podium closely fits the relevant part of the profile Hull proposed for the east-west axis of the whole building (Hull 1958, fig 84, 165). John Wheely's enterprise appears to have been on a relatively large scale and well organised; the core of the podium was systematically quarried whilst the stone was carefully prepared before it was sold.

#### Reference

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## The Manningtree whodunnit

## D.D. Andrews

In 1991, a trial trench was dug on the site of a proposed house at the bottom of the garden of a property on the north side of Manningtree High Street. Surprisingly, several burials were found, of no great antiquity, the deceased having been interred in coffins and being relatively well preserved, though this was attributable partly to the waterlogged state of the subsoil. It was concluded that the burials had been redeposited, or else that the site had been used as an otherwise unrecorded Quaker burial ground. Arrangements were made for the Essex County Council Archaeology Section to excavate any more burials that might be found during the construction of the house. More burials were indeed found when work started in 1992. These too were unpleasantly well preserved, and building came to a halt as questions were asked about how the graves came to be there, and what should be done about them.

What had been overlooked the previous year was the significance of existence on the opposite side of the High Street of the former St Michael's parish church, which had been pulled down in the 1960s. All that remains of it is a ruined wall with a plaque identifying it. It seemed obvious to link the burials with the parish church, especially as the development site was in the garden of what had been the vicarage. However there was no indication of there having been a burial ground on the first edition O.S. map of 1875 (Fig. 19), on which the development site is depicted as part of the vicarage garden. It all seemed very puzzling, and the archaeologists, the developer, the contractors and the local authority environmental health department were at something of a loss.

A short search in the Essex Record Office soon

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shed light on the mystery. In 1633, a certain Richard Edwards bequeathed his tenement called Harkesteades between Cornhill and Quay Street to the chief inhabitants of the town of Manningtree, the tenement to serve as a curate's house and the land 'to be sett apart from all prophane uses and to be consecrated and dedicated for a Chapell yarde and for a buriall place for the towne and inhabitants of Mannyngtree aforesaid for ever'.¹ This house was clearly the vicarage, and it is just as clear that its garden was used as a burial ground. Indeed, although this fact seems to have been already erased from living memory, it was still known in 1960. In that year a letter was written by Mr F.G. Bright of the Chelmsford Diocesan Dilapidations Board to Mr G.G. Hartwright of the Chelmsford Diocesan Registry saying that they had decided to sell

the parsonage house at Manningtree, but questioning the legality of such a sale as both the house and the garden were situated on what had been a graveyard, as was evident amongst other things from some surviving headstones in the garden.² Mr Bright ended by asking whether the matter should be referred to the Chancellor of the Diocese. There seems to be no record to show whether that august personage was consulted, but whatever the case the vicarage was sold with the not entirely unforeseen consequence that the peace of some of the former inhabitants of the town came to be disturbed thirty years later.

The point of Mr Bright's query was that graveyards are normally consecrated ground and as such subject to the faculty jurisdiction of the Church of England. It is not normally permitted to build on consecrated

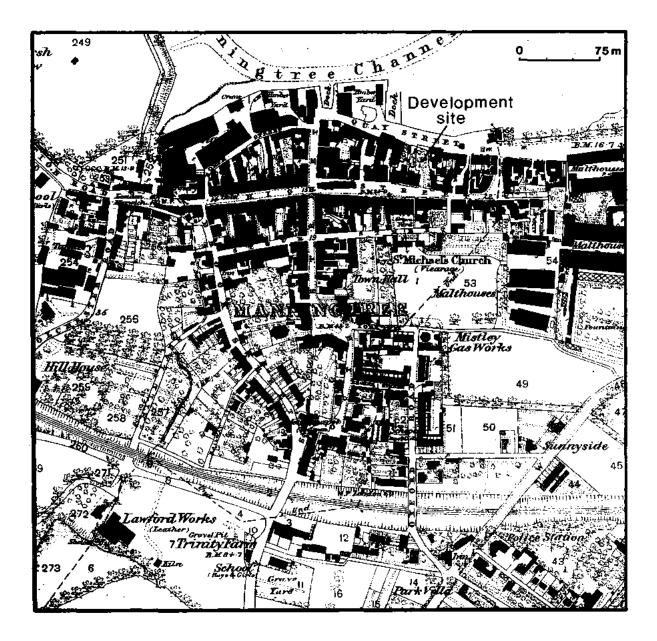


Fig. 19 The centre of Manningtree from the first edition O.S. map of 1875 with the development site indicated.

ground unless the structure to be erected is a church or part of a church. This is true of both closed and open churchyards. In 1992 the matter was referred to the Chancellor who concluded that the land had never been consecrated. However, the 1633 bequest contains the implication that the land was to be consecrated, and it is difficult to imagine the parishioners of sufficient means as to be able to afford coffins and headstones opting to be interred in unconsecrated ground.

The ecclesiastical geography of Manningtree is complex. The town, apparently a new foundation of the 13th century, was situated in the parish of Mistley and therefore its church was only a dependent chapel of ease. Mistley has had three churches on three different sites, and Manningtree two churches on as many sites. Initially the chapel at Manningtree stood on the south side of the town, but in c. 1616 it was transferred to the site in the High Street. Richard Edwards' bequest of his property is to be seen in that context, providing a nearby graveyard and a convenient residence for the curate. Shortage of space in the town's burial grounds led to other pieces of land being set aside for that purpose. In 1960, the incumbent, the Revd A.J. Morley, lamented that he had seven burial grounds in two parishes. Requiescat in pace?

Notes

- Essex Record Office DCP 12/2A. This bundle includes a transcript made by the Revd. A.J. Morley of part of Richard Edwards will.
- 2. Essex Record Office DCP 12/2A.

## **Book reviews**

The temple and other sites in the north-castern sector of Caesaromagus, by N.P. Wickenden, Chelmsford Archaeological Trust Report 9, C.B.A. Research Report 75. 149 pages, 10 plates, 69 figures, 21 tables. Price  $\pounds 22$ .

Apart from Roman Bath (Aquae Sulis), Roman Chelmsford is rapidly becoming one of the more extensively-excavated and published Romano-British 'small towns'. Such academic claims to local pride and fame rest on knowledge of a mansio, of its potterysupply and now of an elaborate temple — though not so imposing as Bath's. What the town's fame to claim was in antiquity is anyone's guess — its Latin name (*Caesaromagus*) holds a sphinx-like fascination which the tangible remains rarely match. Fortunately, the subject of this monograph is an exception to such a rule.

This report will be most useful for its account of the late Roman octagonal stone temple (Site K, pp. 16-43), and for its bone report by Luff (pp. 116-124). Several other minor sites are best understood in their context, which a synthesis does by analysing topography and such themes as trade and industry (pp. 125-141). A pottery report by Going is a supplement to his earlier work, while a series of reports on copper-alloy, lead, silver and other objects shows that finds received the careful attention of an expert. One fundamental question which this report (and many others) prompts one to ask in connexion with publication of finds is; why is it relevant to quantify coins, bones and pots, while other material (such as brooches), published as entries in a catalogue for their interesting or diagnostic features (p. 73), is not quantified? Valuable information on the ebb and flow of religious belief (more votive brooches in this century, less votive wool-combs in that) lurks in archive, and though it is not possible or desirable to publish every single strap-end, a few extra tables would greatly help intra-site comparison. This is however a very minor quibble.

Activity in the area begins with Flavian-Hadrianic industry on the fringes of a putative fort. Contemporary with quarrying was an enclosure surrounding hollows, perhaps trees for a sacred grove (*nemeton*). Ritual objects deposited include a unique snake-pot. An enigmatic structure with an apse may be an early temple, with a Jupiter-column standing in the precinct. Sheep were sacrificed here in quantity. Sporadic activity continued into the 3rd century when the famous octagonal temple was built (the closest British cult-parallel is Mercury's temple at Uley, Gloucestershire; architectural parallels exist in both Britain and Gaul). The stone building was thoroughly robbed after A.D. 390, and it is worth remembering that only extensive area excavation could recover its plan. A fragment of peculiar 3rd- to 4th-century structure tantalises (p. 45): what sort of large building was being erected alongside a robbed temple so late in the lifetime of the province?

Other information recovered includes stretches of road excavated in plan and in section (rare in urban excavations). Such gains are considerable, and so are the losses which the construction of an Inner Relief Road caused. Data from small but competent watching-briefs are published, making it clear that financial resources were quite unequal to the task (pp. 57-62).

Two aspects of the place of Chelmsford's temple in the local religious scene are striking. There are now three Essex sites with Jupiter-columns: Chelmsford, Witham (Turner, forthcorning) and (first noted by that venerable progenitor of Romano-British studies, John Horsley) Great Chesterford (Brailsford 1964, p. 55). Chelmsford is an early provincial example (further afield, Cirencester may be the latest such: R.I.B. 103). These features, more usually found in Gaul or Germany, supplant sacred trees (Green 1986, pp. 61 ff.) - Wheeler inferred a sacred grove at Harlow's temple (in 1928!; France and Gobel are over-cautious: 1985, pp. 23, 137). So evidence for a nemeton at the beginning of Chelmsford's Roman sequence by the author is particularly pleasing. The nature of religious activity other than sacrifice is worth a thought. Consulting oracles was fashionable, scrutinising the innards of dead animals to foretell the future. Perhaps as well as sacrifice, such divination went on at Chelmsford: quantities of animal bones survived, which the bone-report suggests were mostly young, and so healthy, ensuring favourable omens. Mercifully the relevant organic material has long-since decomposed (as has any sacred snake that dwelt in the snake-pot). Is a bizarre 'knuckle-duster'-like enamelled belt-slide (Fig. 39.1) part of a priest's attire (other bits and bobs such as priestly crowns are wellknown in East Anglia)?

This is rescue archaeology in more than one sense: a site rescued from the backlog of excavation archives and from destruction. The rewards described above more than repay the hard effort of excavator and author.

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France, N.E. and Gobel, B. 1985	The Romano-British Temple at Harlow, Essex West Essex Archaeological Group.
Green, M. 1986	The Gods of the Celts.
Wheeler, R.E.M. 1928	'A 'Romano-Celtic' Temple near Harlow, Essex, and a note on the type', Antiquaries Journal VIII (1928), pp. 300-326.

Raphael M.J. Isserlin

Deferrences

Essex in Domesday Book, by W. Raymond Powell, Essex Record Office Publication 103 (Chelmsford 1990). £7.50.

In 1903, J.H. Round published with his translation of the Essex Domesday text in the first volume of the Victoria County History of Essex a map of the county as it existed in 1086, when the survey was compiled. On it were marked rivers, the boundaries of most of the county's hundreds and half hundreds, and the administrative centres of 440 of the estates described in Domesday, indicating those that belonged to the king, to ecclesiastical institutions and to Count Eustace of Boulogne. While Round had identified the whereabouts of 440 of the holdings described in the county folios, there were an additional 400 whose locations he could not fix. During the years that followed the appearance of Round's magnum opus a number of scholars, including Round himself, succeeded in locating a further 180 estates, and these, with Round's original 440, have been plotted on this new map of Domesday Essex compiled by Ray Powell, using material which he brought together in an article published in these pages in 1986 (EAH 16, 40-47).

Powell clearly sees his map as a new edition of Round's, and although approximately one and a half times the size of its predecessor, it contains limited additional information beyond the all-important 180 previously unmapped holdings. The routes of the principal Roman roads have been included, as have the extents of the marshland and, less happily, the woodland of Essex in 1086. The map is accompanied by a 32-page booklet, containing an introductory essay on 'Essex in Domesday Book', an editorial note and brief bibliography, an index of Domesday manors, a list of manors not mapped, and a note on 'Essex Woodland in 1086'.

It is important to pay tribute to Powell's considerable achievements, not only as an identifier of Domesday estate names himself, but also as a gatherer and codifier of the work of others. In mapping the centres of these previously uncharted estates he has performed a valuable and lasting work of scholarship. It is, however, unfortunate to note that the same amount of effort that was expended in locating these holdings has not been devoted to a consideration of the larger administrative areas into which the county was divided. While it is a pleasure to welcome the half hundreds of Thunreslau to the map of Domesday Essex, the continued absence of the hundreds of East and West Uttlesford and East and West Dengie is difficult to explain. Not only is it clear from the Domesday text itself that these large hundreds were divided in 1086, but their histories, by R.C. Fowler, have been available since 1922 (TEAS xvi n.s., 183-6). The few liberties which existed within Domesday Essex are likewise poorly documented on the map and in the accompanying booklet. The latter helpfully explains that Havering was not a separate liberty in 1086, and although the liberty of the Sokens is marked on the map, the Bishop of London's soke in Colchester is neither mapped nor remarked upon in the booklet, and neither is there any mention of the fact that three Essex hundreds — Clavering, Rochford and Winstree — were in private hands in 1086.

Once we move beyond the technical skill with which an abbreviated Latin version of an English name can be identified with a later holding, differences of opinion are likely to arise over the inferences and interpretations that can be placed upon the distribution of the administrative centres of the holdings described in Domesday. In particular, Powell's decision to represent on the map the extent of woodland in Domesday Essex is a topic which demands more detailed comment than is normal in a review, in the light of Rippon's recent paper (EAH 21, 46-60). It is clear that Round had contemplated mapping the extent of the Essex Domesday woodland (VCH Ex i, 375-7) and devised a formula to calculate the 'woodland density quotient' of each parish. This was the result of dividing the number of pigs that could be fed in the woodland of an ancient parish by a hundredth of its acreage. Notwithstanding Darby's criticism of this formula (Domesday Geography of Eastern England 3rd ed., 1971, pp16, 235-9) and the fact, admitted by Powell himself (p31), that it is impossible to calculate the amount of woodland in a parish in 1086 because Domesday 'itself is not concerned with parishes', he proceeds to colour green on the map those parishes which have density quotients of 8 or more. While the approximate accuracy of this method seems to be endorsed by the high quotients in areas where 'substantial remnants of the medieval forest (sic) of Essex survive today', the fundamental flaw in Round and Powell's argument is clearly demonstrated by the cited example of Lawling, an estate whose woodland lay some miles' distance from its centre.

It must be stated plainly that information from Domesday Book cannot be used to plot the distribution of woodland — because as Powell says, 'we have no record of the manorial boundaries in 1086'. Domesday records the names of estates (many of which, *contra* Powell, were not described as manors in Domesday) and lists certain of their assets and resources. It does not normally say where these were situated, and the fact that an estate centre took its name from a parish does not necessarily mean that all of the land of which it was comprised lay either within or near it. While it is possible to plot the distribution of the estates that had woodland, the resulting map would not necessarily indicate which were the most densely-wooded parts of the county.

If Powell's interpretation of the incidence of woodland in Essex at the time of Domesday is to be dismissed, how was this valuable economic resource distributed across the county in 1086? Rippon has

performed a valuable service by pointing out that it is possible for areas of managed woodland (which is surely what is described in Domesday) to exist in a planned landscape (pp52-53) and taking this view with the fact that most of the estates recorded in the Essex Domesday text included some woodland, it is likely that small areas of it were a common feature across the countryside, perhaps with concentrations in certain districts. It is precisely this type of distribution that is to be seen on Chapman and Andre's Map of the County of Essex (1777). Without pushing the evidence of this much later source too far, it shows that in late eighteenth-century Essex there were many regular, isolated 'fields' of woodland, as well as larger concentrations of tree growth — for example to the north, west and east of Hadleigh. While there were doubtless many trees in late eleventh-century Essex, most of the county's area was probably given over to ploughed fields.

There can be no doubt that both present and future generations of scholars and students will be indebted to Ray Powell for this map of Domesday Essex. However, that will not prevent some of them, like this reviewer, from arguing over how the information on it — in common with the data of Domesday Book itself — is to be interpreted.

Peter B. Boyden

Thomas Twining 1734-1804: The Record of a Tranquil Life. A selection of his letters edited by Ralph S. Walker. The Edwin Mellen Press, Lampeter, Dyfed. Wales SA48 7DY 1991. ISBN 0 7734 9789 7. Hardback, 2 volumes,  $f_49.95$  each.

(50% discount available to individual purchasers, postage  $\pounds 2.50$  per volume, by 'phone to 0570 423 356. Also in paperback for orders of 10 or more.)

Vol. I contains Introduction pp.1-21 and Letters no.1-172 (1761-1795) pp. 27-438. Vol. II contains Letters no. 173-306 (1795-1804) pp.439-701, Notes pp. 702-835, and General Index pp. 837-845.

The late Professor Ralph Walker of Toronto and Cambridge spent many years on this edition of the letters of the Rev. Thomas Twining, curate at Fordham near Colchester for twenty-five years, and then rector of St Mary-at-the-Walls in the town for fifteen, dying in 1804. They have now been seen through the press by his son of the same name. A selection of 306 letters from the 500 or more in the British Museum Add Mss 39929-36, it aims "to bring the best of them within reach of a large body of readers." They are so entertaining that one hopes they will soon abound in paperback. Like those of Mme de Sévigné, or Horace Walpole, or Sydney Smith, or Lewis Carroll, they were treasured, even when replies were impossible.

If their importance has already been recognised, that has been mainly in relation to Charles Burney and

his history of music. Twining knew much more about its early times. Hence these letters have been notably attended to in Roger Lonsdale's "Dr Charles Burney; a Literary Biography" (Oxford, Clarendon Press, 1965, paperback 1986) and in the same press's correspondence of Burney, which, in the ultimate of scholarly editions by Alvaro Ribeiro, S.J. reached Vol. I in 1991.

But in truth this curate of Fordham was also a formidable scholar, especially in Greek. In 1778 he wrote to his beloved half-brother Richard, who ran the famous tea-firm, "Why am I always correcting the MSS of others?" So he intends "a translation of Aristotle's Poetics, with notes that will be a treasure of erudition, taste, criticism, &c. &c. But you need not advertise this vet." As for his aim; "I want to set an example of unidolatrous editorship. It is time to talk of the Ancients rationally and fairly." A further problem was a thoroughly corrupt text. The French editor Dacier thought it a duty to see nothing amiss. Twining found in sixteenth-century Italians like Victorius, Madius, and Robertelli, more good sense, and as translators, Castelvetro was "acute" and Piccolomini (1572-5), a man with whom he constantly agrees.

The letters record how such authors were difficult to come by. The reader who goes to Twining's complete work will find the polyglot commentary infinitely entertaining. Though only the translation itself is still in common use, much said in the notes is also in his letters. Aristotle wrote good sense about the plays etc. of his day. In his day Twining can point out that Dryden's Virgil is unreadable, and Pope's Homer better poetry than Cowper's, though Cowper is the better Grecian. Dr Johnson, including quite worthless ones in his "Lives of the Poets", disgraces himself by attacking Thomas Gray, from not liking him personally. (Incidentally it was Gray who, loving Pergolese above all, encouraged Twining's undergraduate interest in music.)

Indeed this musical side of his life is most striking all through his letters, and the numerous outlets it had. In Colchester a group of amateurs met regularly to play, George Wegg Esq., attorney, being their host at East Hill House. But (writes Twining in 1773), "the best joke is that Music tires Mr Wegg to death", and having bought a harpsichord and a mass of music (of which some survives), "he is regularly plagued once a fortnight with a concert that he cannot stop." However, most of Twining's excussions involved musical treats elsewhere and in 1800 he could note that in thirty years he had hardly missed one of Mr Bramston's New Year parties at Skreens near Chelmsford.

James Fisin was a local musician whom he begged Burney to help. Employment in London much improved his talents, and when he came back, he was leader of the band in numerous concerts in Colchester and Ipswich. Ipswich had Miss Marshall, a fine musician Twining much admired. In garrison times in the 1790s Twining came out of his shell considerably. In 1796 he held concerts with a Mrs Baker, wife of a colonel, "no unmusical, or half-musical hearers" being invited, lest "worse music" had to be played for popularity. To the great Handel Commemorations in Westminster Abbey he'd not go, but performed in one in 1790 in Colchester, when Nancy Storace was the star singer. He was avid to know more of Haydn, whose adventurous music shocked the Rev. William Jones of Nayland. When Jones wrote a book on music (printed by Keymer in Colchester), Twining made sure that it was severely reviewed. He could not bear a man whose ears were "corked up with prejudices". Though new prejudices might be mistaken, they were better than old. But such was his love of old music, from Josquín de Prés onwards, that when in London in 1780 a Miss Harrop sang arias from Pergolese, Leo and Hasse, which he thought forgotten, it gave him "some faint idea of meeting one's departed friends in heaven."

Wide receptiveness gave Twining great joy. "Painting is my concubine" he said, and returned from Houghton in Norfolk with Walpole's Poussins "stored in the picture gallery of my memory." The spire at Grantham had a "Parmigiano slimness", perhaps better even than Salisbury. Ruins delighted him, the more ivied the better; it shocked him at St Osyth Priory to see how carefully it was removed. But best of all were the hilly landscapes of Yorkshire and North Wales. And "Oh! the flatness of Essex where it is accounted a sublime thing to look over one hedge and see another."

But these letters are also full of politics. The comet-like transit through Colchester of Samuel Parr, as master of the Grammar School, provided him with a correspondent to whom he sent his liveliest accounts of the often unsavoury activities of Frank Smythies, Town Clerk as well as being Twining's brother-in-law. After Thomas's death, his brother Richard tried to recover these letters for publication, but sadly Parr was unwilling to look them out.

Then came the French Revolution, for Twining as for many others at first a blessing, but ending in shock. For a time he was an avid reader of the "Logographe", verbatim reports of debates in the National Assembly. But war was hateful, save in self-defence. When, after the Mutiny at the Nore in 1798, Horne Tooke claimed that the revolution had begun here too, Twining did not believe it would be violent: "We have not so great a change to make."

In truth these letters are so interesting on so many topics that they have defied the making of a good index. The reader would be well advised to make his own notes, even of felicitous phrases, as he goes along. That is what this reviewer did with great pleasure.

Nevertheless, one question may well arise. Was Twining a good incumbent in what the next century could refer to as "the dozing days of the establishment"? (D.W. Coller; *The People's History of Essex*  1861, p.421 on the neglected chancel at Wethersfield once used as a school.) For all his love of musical excursions and travel Twining was not an absentee. Fordham registers show him taking 84 of 94 marriages in his day. Neighbouring clergy took the rest, and he similarly obliged. But two-thirds cannot sign their name, and most of the others only just. It was left to the Countess of Huntingdon to build a chapel with schoolmaster attached, soon after Twining's remove to Colchester. Once installed at St Mary-at-the-Walls he was soon Treasurer of the Sunday Schools established by the humane efforts of his great frined and fellow Grecian, Dr Nathaniel Forster of All Saints. Such schools were the Church of England's reply to Methodism, and Forster's most remarkable sermon was entitled "Grace without Enthusiasm."

This does not mean that in his unawoken days in Fordham Twining was not respected. In the Twining papers published in 1887, his brother Richard, visiting North Wales, sees parishioners lining a churchyard to receive their rector, and recalls the same at Fordham. In 1782, grumbling that the Bishop has invited him to preach at a Visitation, he says "I have never in my life been used to preach but to clowns", which suggests much simpler and sincerer homilies on a Sunday.

As for what Twining believed, he admires Bishop Butler's Analogy above all else. Paley is delightful. His response to David Hume's doubts about miracles is to tell his brother Richard that "no *thinking man* will embrace the Gospel because of them, but will admit them for the sake of the Gospel." He would probably have been described as as a Latitudinarian, thinking that Heaven was open to various persuasions. Meeting a poor Mahometan stranded in London, he gave him half-a-crown, and being salaamed "at a great rate", salaamed back, as he could not speak English.

Happily the often miserable position of curates, which arose when so many clergy had two livings, was a problem Twining, with private means and inexpensive tastes, did not have to meet. But he was also Vicar of White Notley near Chelmsford, and only mentions two visits there, in 1778 to collect £100 in tythes from "some four and twenty farmers" duly feasted, and twenty years later for £110, partly spent on recompensing his curate for repairs to the parsonage.

The registers show that his first curate, Angel Silke, also served Faulkbourne close by. Later, when curate at Stebbing, his incumbent the Rev. Thomas Bland of Mile End, Colchester never visited him at all. When Silke died, a widower, in 1796, it was left to his eldest daughter to bring his large brood Colchester to subsist as best they could. (One may hope that Twining helped them, but that is not the sort of thing he usually put in his letters.)

It remains for me to say that in the 1960s Dr Ralph Walker often consulted me about Colchester matters. Sometimes I have known better later. The Mayor from whose feast Twining fled in 1791 was Gibson a taylor, not Swinburne a tanner. The Mr Halls who speaks in favour of peace with France in 1795 (Twining was against) was not the Rev. John Halls of Grey Friars, but his nephew James, disrespectful opponent of Frank Smythies. There is an amusing account of one such occasion in the early memoirs of Henry Crabb Robinson.

This James also had a son, John James, said to be named after Jean-Jacques Rousseau, who painted many excellent portraits of the Twinings, including Thomas', which sadly is badly reproduced as a frontispiece in these letters. But Parr supplied a long Latin epitaph for St Mary-at-the-Walls, fully bearing out the inscription he put in his presentation copy of Twining's Aristotle: "The gift of the author, whom I am proud and happy to call my friend, because he is one of the best scholars now living, and one of the best men who ever lived. — July 7, 1790."

When a copy was bought for the Colchester Castle Book-Society of which Twining was a member, he doubted if three could read it. But his letters are such that they will surely bring a continuing pleasure to the "large body of readers" the editor hoped for, and more as they become more widely known.

There is so much in Twining that resembles his brother's favourite young maid, Charlotte, whose smile was "like sun breaking from a cloud", and all were sad when her young man let her down. He asked a friend in 1773: "Tell me if you like Dr Goldsmith's last comedy" (*She Stoops to Conquer*). "I do; for I think there is an abundance of strong irresistible comic humour in it, and the improbabilities I care not a farthing for. But does it therefore follow that a sentimental comedy must be good for nothing? Sentiment may be guindé, and unnatural, and then it is certainly bad: but is it not pleasant to be *touched*, because it is pleasant to laugh?"

John Bensusan-Butt

Essex Heritage: Essays presented to Sir William Addison as a tribute to his life and work for Essex history and literature, edited by Kenneth Neale. xxx and 352 pp. 1992. Leopard's Head Press, Oxford.  $\pounds 9.75$ . ISBN 0 904920 23 2.

This volume of essays appeared a few weeks before Sir William Addison's recent death, and so has become a tribute to his memory as an author of works on Essex. He was also a former President of this Society (1963-66). Mr. Neale's account of his life and work is a fitting introduction to this book, a compilation of several Essex historians.

Dr. Janet Cooper's essay on the Victoria County History describes its origins and change of emphasis over the 92 years since publication of the first (Hampshire) volume. She also mentions the work of her predecessor as Essex editor, Mr. W.R. Powell, who set the standard for many of the Essex volumes so far published.

Professor Geoffrey Martin's paper on 'Medieval Essex Gilds' traces their origin to pagan practices, with the Church adapting to 'a social institution which it could not suppress.' The gild, an association of both men and women, could include 'any purpose that needed the co-operation of others.' Gilds in towns such as Braintree and Colchester were connected with civic life. For those who did not hear Professor Martin's lecture at this Society's Annual General Meeting in 1991 this is a valuable paper; for those who did, it is a welcome reminder of that occasion.

Dr. Jennifer Ward's 'Elizabeth de Burgh and Great Bardfield in the fourteenth century' depicts a noblewoman's household, which appears to have little effect on the small borough of Bardfield. The demesne was kept in hand and its expansion continued. By the nature of the accounts, on which much of this essay is based, the emphasis is on the general administration of this, only one of the de Burgh estates; an interesting example of what can be gathered from the accounts of the ministers of a great estate.

Dr. Arthur Brown's stimulating essay on 'The Essex Country Parson, 1760-1815' throws light on the attitudes of the clergy to their parish responsibilities, primarily through their replies to periodical diocesan enquiries. Dr. Brown discusses pluralism and the subsequent absenteeism of many incumbents as principal causes of neglect of pastoral duties and so of decline in church attendance, particularly of the 'lower orders', originating from the 'gentility' of the clergy, but an educated clergy was necessary both to exert some influence over the upper classes, and to have a pastoral influence on the poor. (A recent reviewer of a study of The Diocese of Llandaff in 1763, ed. J.R. Guy, in Archives, xx, vol. 88, p.338 (Oct. 1992), draws somewhat different conclusions on the effects of nonresidence.) May it be suggested that the verses quoted, by William Cowper, that gentle and pious writer of hymns, were a rollicking set of rhymes sent jokingly to his friend, the rector of Stock?

Mr. H. Hope Lockwood's 'Claybury and the survival of the Golden Woods' on part of Hainault Forest, traces its history from the Saxon era to its recent use, with the woodland still standing, as a 19th-century asylum 'for Pauper Lunatics'. The author has succeeded, by patient research, in tracing the woodland areas both in documents and on the ground. The maps and photographs provide clear illustrations of this.

The late John Rayment's paper 'In the beginning there was Genealogy' is an enthusiastic account of the developing functions of family history societies, particularly the Essex Society for Family History, which he founded, as much more than a society for study of genealogies.

Mr. W.R. Powell's 'John Round of Danbury Park; a biographical sketch of John Round (1783-1860), follows on Mr. Powell's paper in Essex Archaeology and History, (vol. 23 (1992), 79-90), on the historian, J.H. Round, a grandson of John Round. The present paper on this Essex family is also of interest for the history of the house built by John Round at Danbury Park and later used by the Bishops of Rochester when Essex was in that diocese.

'Essex Quarter Sessions and its Chairmen, 1760-1815,' by Miss Nancy Briggs, is a necessarily brief account of the men responsible for government of the county during a time of rapid change. The plan for enlarging the county gaol at Chelmsford was the occasion of faction among the county magistrates; its eventual resolution by adding to the existing site led also to the building of a new Shire Hall (described in another work by Miss Briggs). This is an enlightening treatment of local government.

Dr. F.G. Emmison's 'Wills of Elizabethan Essex Clergy' summarises the wills of 22 clergy, an example of what can be gleaned from wills. These, proved in the Prerogative Court of Canterbury, are wills of the more affluent clergy, and a useful source for local studies. (On p. 187, the 'present rectory' at Ashdon was sold in 1976.)

The subject of Mr. Frank Salisbury's 'Ham House Estate, Upton, West Ham and its People' is a house now demolished, the grounds being a public park. Although within the London administrative area, it is, refreshingly, included here as once part of the Essex heritage. Owners of the house are described, including Dr. John Fothergill, 18th-century botanist, and members of the Gurney family, all being Quakers, and Dr. Fothergill as having connections with prerevolutionary North America.

'The Haddocks of Leigh' by A.C. ('Gus') Edwards, whose death sadly occurred in 1992, traces this former Essex family's careers in the Royal Navy under the Commonwealth and into the 18th century. As always with family letters, from which most of this paper is drawn, there is an immediacy which contributes, with the author's enthusiasm, to a lively account of a service in its heyday.

Mr. Robert Mitchell's 'Epping Forest' recalls Sir William Addison's books on the same subject. The present paper, by a Verderer, treats the forest as a living organism through four millennia, by means of pollen analysis. From the Saxon forest up to dedication to public use a century ago, he continues its history to the modern return to traditional methods of management.

'The Essex Landscape in Morant's Time and Today' by Dr. Oliver Rackham is adapted from his Morant Lecture of 1990, so that those who missed it now have another opportunity. More than threequarters of Essex still has the same settlement pattern as when Morant published his history of Essex (1763-8). The types of woodland mentioned are of more than local interest; common woods were also a feature of Berkshire agriculture and no doubt of other counties also. The disappearance of heaths in Essex is perhaps unavoidable; some still remain around Colchester and Tiptree.

'Mythmakers of the Landscape of Essex' by Mr. and Mrs. Liddell is a selection from writers whose works were set in Essex, from the Battle of Maldon to the present day. The quotation from Norman Lewis unaccountably moves Long Crendon to Essex from Buckinghamshire.

Mr. Victor Gray's paper on 'The Dunmow Progressives' is a social and literary treatment of the early years of this century, exemplified at Little Easton just before the first world war. Lady Warwick fostered the talent of H.G. Wells and other writers who settled near the village, and also provided a reading room and club for the indigenous villagers, one of her many local projects on the extensive Maynard estates.

Mr. Ian G. Robertson's "The Merit of Conspicuous Bravery' on Essex holders of the Victoria Cross, an apt choice for the Director of the National Army Museum, is a biographical survey of the five holders of the V.C. born in Essex and awarded the decoration before 1914.

Mr. Kenneth Neale's concluding essay, 'Some thoughts on the heritage', relates the historical heritage to present-day Essex.

This is a well-produced book, although the illustrations of documents unfortunately do not approach the standards of those of the Essex views reproduced. An enjoyable work, it has something for all those interested in the county and its people.

Angela Green

## Essex bibliography

## Bibliography of Journal literature on Essex archaeology and history at February 1993

Both monograph and periodical literature are included; articles published in journals which are devoted exclusively to Essex (e.g. Essex Journal) are not included. Items which have been overlooked in earlier bibliographies are added for completeness of coverage. For new books on Essex history see the regular lists published in the Society's Newsletter.

Riley, J.C. 1989 "The sickness experience of the Josselins' children", *Journal of Family History* 14, 347-63. [From the diary of Ralph Josselin of Earls Colne, Essex]

Bishop, M.C. 1991 "Soldiers and military equipment in the towns of Roman Britain" in V.A. Maxfield and M.J. Dobson (Eds) *Roman Frontier Studies* 1989. Proceedings of the XVth International Congress of Roman Frontier Studies, 21-7.

[Presence of soldiers at three Essex sites from 2nd- and 3rd-century military equipment]

Emmison, F.G. 1991 "Elizabethan Essex Wills", Family History 15, 359-69.

Hammerow, H.F. 1991 "Settlement and the 'Middle Saxon Shift': rural settlements and settlement patterns in Anglo-Saxon England" *Anglo-Saxon England* 20, 1-17. [Discusses Mucking, Essex] Lavender, N.J. 1991 "A Late Iron Age burial enclosure at Maldon Hall Farm, Essex: excavations 1989", *Proceedings of the Prehistoric* Society 57 (2), 203-9.

Barker, R. 1992 "Whitby and Harwich: demographic contrasts", Local Population Studies 46, 32-8.

Carrick, M. 1992 for 1991 "More Hertfordshire wall paintings — a connection with those in Essex and possible attribution to printed sources", *Archaeological Journal* 148, 296-7.

Needham, S.P. 1992 for 1990 "Middle Bronze Age ceremonial weapons: new finds from Oxborough, Norfolk and Essex/Kent", *Antiguaries Journal*, **70**, 239-52.

Niblett, R. 1992 "A Catuvellaunian chieftain's burial from St. Albans", Antiquity 66, No. 253, 917-29. [Comparison with royal burials at Stanway, Colchester]

Crummy, P. 1993 "Aristocratic graves at Colchester", Current Archaeology 132, 492-7.

Andrew Phillips Paul Sealey

#### **Notes for Contributors**

1 Contributions should be sent to the Editor, The Manor House, The Street, Pebmarsh, Halstead C09 2NH.

2 The closing date for the receipt of material is 1 January. Publication date is usually in October.

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4 Footnotes should also be typed double-spaced and submitted collectively.

5 Bibliographical references should be given according to the Harvard system, i.e. in parentheses after the text, giving: author's surname; date of publication, page, figure or plate number; e.g.:

(Hawkes and Hull 1947, fig. 33 and p.201).

(Hewett 1962, 241).

Where it is inappropriate to identify a work by an author (e.g. Victoria County History) an abbreviated title and volume number should be given, e.g.:

(Essex, iii, 171).

The expanded bibliography should appear at the end of the text, arraanged in alphabetical order:

Hawkes, C.F.C. and Hull, M.R. 1947 Camulodunum, Society of Antiquaries.

Hewett, C.A. 1982 'The Timber Belfries of Essex', Archaeol. Journ., cxix, 225.

Victoria County History, 1963 Essex, iii.

Names of books and journals should be underlined (and will appear in italics); titles of articles in journals should be in inverted commas. Abbreviations of works cited should be in accordance with the annual *Archaeological Bibliography*, published by the C.B.A.

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